



# Demonstration of an Energy Community: Co-Creation and Implementation

Deliverable No. D5.7

Date of submission: 30.09.2024 (M24)

Date of resubmission: 06.11.2024 (M26)

Lead Beneficiary: TUM

Dissemination Level: PU - Public

Grant Agreement No.: 101080052

Project Duration: 01.10.2022 – 31.03.2025

Grant Agreement No. 101080052

Project Duration: 01.10.2022 – 31.03.2025

Project Coordinator: Dr. Sylvia Pintarits

City of Munich, Department of Urban Planning & Building Regulations,  
European and International Affairs (MUC)

E-Mail: NEBourhoods@muenchen.de

Phone: +49 (0) 89 23326997 / Mobile: +49 (0) 1525 6808634

## DELIVERABLE NO. D5.2

Deliverable Title	Demonstration of an Energy Community: Co-Creation and Implementation
Work package Number	WP 5
Lead Beneficiary	TUM
Deliverable Type	D5.2
Dissemination Level	PU – Public
Due Date Month	24 / 26
Authors of this report	Serena Keller
Date of submission	30.09.2024
Date of resubmission	06.11.2024

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>6</b>
1.1	OVERVIEW OF THE PROJECT	6
1.2	OBJECTIVE OF THE ACTION ENERGY COMMUNITIES	6
1.2.1	NEB Action Team	7
1.3	OBJECTIVE OF THIS DELIVERABLE	8
<b>2</b>	<b>DEMONSTRATION OF AN ENERGY COMMUNITY .....</b>	<b>9</b>
2.1	CO-CREATION	11
2.1.1	Subject Fields and Timeline Workshop	14
2.1.2	Foundation, Strategy and Timeline Workshop	18
2.1.3	Communication Workshops	21
2.1.4	Governance Structure Workshop	31
2.1.5	Business Model Workshop	33
2.1.6	Financial Model Workshop	35
2.1.1	Statutes and Rules of Procedure Workshop	38
2.2	IMPLEMENTATION	40
2.2.1	Foundation Assembly	41
2.2.2	Foundation Audit	43
2.2.3	Events	45
<b>3</b>	<b>CONCLUSION .....</b>	<b>49</b>
3.1	KPIS ACHIEVED TO DATE	50
<b>4</b>	<b>OUTLOOK.....</b>	<b>51</b>
<b>5</b>	<b>SOURCES .....</b>	<b>53</b>
<b>6</b>	<b>APPENDIX .....</b>	<b>54</b>
6.1	WORKSHOP MATERIALS	54
6.2	SURVEY COMMUNICATION WORKSHOPS	68
6.3	MANIFEST COMMUNICATION WORKSHOPS	72
6.4	DUTIES AND RESPONSIBILITIES OF BOARDS	74
6.5	INSTRUCTIONS SOLAR BAG	79

## LIST OF TABLES

Table 1 Overview of workshops and events .....	13
Table 2 Schedule Workshop Subject Fields (small group (2 – 20 participants)).....	17
Table 3 Schedule Workshop Subject Fields and Timeline (large group (> 20 participants)).....	17
Table 4 Schedule Workshop Foundation, strategy and timeline.....	20
Table 5 Answers to WHY?.....	24
Table 6 Categorisation of answers WHY? .....	24
Table 7 Manifesto (short version) original in German .....	25
Table 8 Manifesto (short version) translation to English .....	25
Table 9 Schedule Communication Workshop I.....	25
Table 10 Name and claim original .....	26
Table 11 Schedule Communication Workshop II.....	27
Table 12 Grid for communication priorities .....	29
Table 13 Schedule Communication Workshop III.....	29
Table 14 Schedule Workshop Governance Structure.....	32
Table 15 Additional chapter for the Business Model.....	34
Table 16 Schedule Workshop Business Model .....	35
Table 17 Schedule Workshop Financial Model.....	37
Table 18 Schedule Workshop Statutes and Rules of Procedure .....	40

## LIST OF FIGURES

Figure 1 Founding members Energiegemeinschaft München eG.....	11
Figure 2 Subject Field signs .....	15
Figure 3 Subject Fields with Task Fields .....	16
Figure 4 Tasks Fields with Tasks in Timeline .....	16
Figure 5 Milestone and Resource Cards .....	19
Figure 6 Milestone and Resource Cards in Timeline .....	20
Figure 7 Golden Circle .....	22
Figure 8 Components of the communication strategy .....	22
Figure 9 Poster „Belly feeling“.....	23
Figure 10 Poster “Belly feeling“ with results .....	23
Figure 11 Brainstorming name and claim .....	26
Figure 12 Visit from EU Commission President Ursula von der Leyen .....	26
Figure 13 Communication grid with results .....	28
Figure 14 Communication tool Information panels .....	30
Figure 15 Board Position and Resource Cards .....	32
Figure 16 Poster with collected adaptations to the pre-filled Business Model Canvas. Poster based on .....	34
Figure 17 Financial model workshop results .....	37
Figure 18 Live Editing Workshop Statutes and Rules of Procedure .....	39
Figure 19 Signing the founding documents, statutes and protocols .....	43
Figure 20 Solar bag (200W) with storage (680Wh) .....	46
Figure 21 Solar bag with storage.....	46
Figure 22 SolarCaffee Event .....	47
Figure 23 SolarIce Event.....	47
Figure 24 Visit to PV installation at Messe München.....	48



## VERSION

Version	Date	Author	Organisation	Description
1.0	01.09.2024	Serena Keller, Thomas Auer	TUM	First draft Structure
1.1	22.09.2024	Serena Keller, Thomas Auer	TUM	Revision draft
1.2	25.09.2024	LS	TUM	Editorial remarks
1.3	27.09.2024	Sylvia Pintarits	MUC	Editorial remarks
1.4	30.09.2024	Simone Wiegand	BYF	Editorial remarks
1.5	30.09.2024	Serena Keller, Thomas Auer	TUM	Final draft
2.0	06.11.2024	Serena Keller, Thomas Auer	TUM	Revised version according to the comments in the rejection letter from 31.10.2024. Editorial remarks for chapter 1.2.1 NEB Action Team;  Minor update in 1.1 Overview of the Project.

## GLOSSARY

<b>EC</b>	European Commission
<b>EU</b>	European Union
<b>M</b>	Project Implementation Month
<b>NEB</b>	New European Bauhaus
<b>NEBourhoods</b>	Creating NEBourhoods Together
<b>NGO</b>	Non-governmental Organisation
<b>NPL</b>	Munich Neuperlach
<b>OA</b>	Open Access
<b>T</b>	Task
<b>WP</b>	Work Package
<b>Organisation Name (Consortium)</b>	
<b>MUC</b>	Landeshauptstadt München
<b>AGM</b>	Architekturgalerie München e.V.
<b>BYF</b>	Bayerische Forschungsallianz Bavarian Research Alliance GmbH
<b>GC</b>	Green City e.V.
<b>HM</b>	HM Hochschule München University of Applied Sciences
<b>MGS</b>	MGS Münchner Gesellschaft für Stadterneuerung mbH
<b>SCE</b>	Strascheg Center for Entrepreneurship
<b>STR</b>	Str.ucture GmbH
<b>SAAD</b>	Studio Animal-Aided Design GmbH
<b>SSR</b>	Studio   Stadt   Region Forster Kurz Architekten und Stadtplaner Partg Mbb
<b>TUM</b>	Technische Universität München
<b>UTUM</b>	UnternehmerTUM GmbH
<b>MS</b>	UnternehmerTUM MakerSpace GmbH
<b>Organisation Name (in Cooperation with)</b>	
<b>MER</b>	Münchner Ernährungsrat e.V.
<b>MIN</b>	Münchner Initiative Nachhaltigkeit
<b>OTH</b>	Ostbayerische Technische Hochschule Regensburg
<b>Organisation Name (Associated Partners)</b>	
<b>ByAK</b>	Bayerische Architektenkammer, Körperschaft des öffentlichen Rechts
<b>BYD</b>	Bayern Design GmbH
<b>BDA</b>	Bund Deutscher Architektinnen und Architekten e.V.
<b>BDA-By</b>	Bund Deutscher Architektinnen und Architekten Bayern e.V.
<b>PV</b>	Photovoltaics
<b>AM</b>	Active Member
<b>I</b>	Investor
<b>S</b>	Surface
<b>BMC</b>	Business Model Canvas
<b>D</b>	Deliverable

## 1 INTRODUCTION

### 1.1 OVERVIEW OF THE PROJECT

"Creating NEBourhoods Together" is one of the six lighthouse demonstrators of the New European Bauhaus funded by the EU to address climate, environment, and health challenges. The aim is to collaborate on the European Green Deal to create more sustainable, inclusive, and beautiful living environments across the EU. The project focuses on Munich-Neuperlach (NPL), one of Europe's largest post-war urban expansion areas. NEBourhoods, together with citizens and stakeholders from culture, science, and business, implement ten NEB Actions from all fields of urban development. Combining co-creation and entrepreneurship, placing culture and creativity at the core of the transformation process, the project delivers accessible and empowering solutions to make the EU Green Deal beneficial for all in Munich-NPL and beyond.

Combining co-creation and entrepreneurship while placing culture and creativity at the core of the transformation process, the project is delivering accessible and empowering solutions, providing roadmaps and kickstarting actions to make the EU Green Deal beneficial for all in Neuperlach and beyond. With meticulous care, the district is being cultivated to become a resilient urban innovation landscape. Over this two-year period, we have been creating NEBourhoods together, demonstrating how circular thinking and acting in society and the economy can be realised, how the green transformation in construction, mobility, energy, food and health can be activated and how public spaces can be enhanced.

### 1.2 OBJECTIVE OF THE ACTION ENERGY COMMUNITIES

The NEB Action Energy Communities is one of the ten NEB Actions of the NEBourhoods project. Energy communities offer the opportunity to support the energy transition envisioned by the European Green Deal. These communities aim to decentralise energy production, enhance social cohesion, and involve citizens actively in sustainable energy practices. The European Commission intends for consumers to be at the core of the energy markets and provides an enabling framework for energy communities (EU/2018/2001; EU/2019/944). Energy Communities can operationalise governance and bear the potential to become a standard model for neighbourhood energy systems in particular and for a decentralised energy system in general.

With NEBourhoods, we demonstrate how an energy community can be established in the neighbourhood of Munich-NPL and built through a co-created design. The NEB Energy Community will provide access to the production, consumption, storage, and selling of solar electricity for citizens. It will reduce energy costs and promote the full utilisation of solar and energy efficiency potential to achieve climate neutrality goals. Specifically, the NEB Energy Community in Munich-NPL is designed as a prototype and visible flagship to demonstrate the feasibility, profitability, and societal benefits of local renewable energy production and

consumption. Meanwhile, the NEB Action explores the barriers and challenges of its implementation. The approach involves two key steps reflected in NEBourhoods Deliverable D5.2 and D5.7.

The first Deliverable D5.2 describes the step: Development of an *Energy Community: Design, Governance, and Business Model*, focusing on creating an initial framework for the energy community, including the designs, governance structures, and a business model tailored to local conditions. This forms the basis and content for the implementation methods. The second deliverable D5.7 includes the *Demonstration of an Energy Community: Co-creation and Implementation*, which builds on the initial framework by developing and implementing the NEB Energy Community in a real-world setting, using a "Living Lab". D5.2 contains models and methods to lay the foundation for establishing the community. The basic design, governance, and business model are being readapted and refined through co-creation with local residents based on practical experiences and community feedback.

The goal is to implement an energy community within a Living Lab with the core values of social inclusion, innovation, and transparency. The energy community is a role model and demonstrates best practices while pioneering, developing, and implementing new approaches. Citizens will be empowered to create solutions for sustainable neighbourhoods. Based on our pilot energy community, they can establish new climate-friendly routines in everyday life or new energy communities. With this NEB Action, we aim to create a replicable model for other urban areas in Munich, Germany, and across the European Union. The governance and business models follow EU directives; however, different geographic, technological, demographic, cultural, institutional, and regulatory conditions in other European countries may require adaptation.

### **1.2.1 NEB Action Team**

The project team of the NEB Action Energy Community consists of Serena Keller and Thomas Auer from Technical University Munich (TUM), Chair of Building Technology and Climate-Responsive Design.

The team is supported by the NEBourhoods' TransitionHub team (Munich University of Applied Sciences and City of Munich's Team of Excellence for the Cultural and Creative Industries) and creatives for the co-creation of transition, by MGS (Münchener Gesellschaft für Stadterneuerung mbH) for replication, by Architekturgalerie München e. V. for communication, by UnternehmerTUM for entrepreneurial thinking and the City of Munich (MUC) as a central stakeholder for advice and support.

The team is advised by the Energy Communities Repository of the European Commission in an online twinning with Bündnis Bürgerenergie e.V. and fei Bürgerenergie eG and

Furthermore, the work is supported through the implementation in the following study formats: the TechChallenge at UnternehmerTUM ("Hacking Neuperlach"), the social

entrepreneurship practice project at Munich University of Applied Sciences, the statics seminar paper at TUM (Chair of Timber Construction and Building Design), as well as the ProPENS project lab at TUM (Chair of Renewable and Sustainable Energy Systems).

### **1.3 OBJECTIVE OF THIS DELIVERABLE**

This deliverable provides a guide for establishing an energy community based on NEB values, focusing on both the co-creation process and the practical implementation steps. Documenting the experiences of creating the demonstrator energy community in Munich-NPL shows how the key concepts, governance structures, and business models can be developed in a co-creative process. The methods presented are tested and further developed based on the experiences gained.

This deliverable offers a replicable framework that can be adapted to different contexts and needs. It includes process descriptions, including the workflows, documents, and tools necessary for setting up an energy community. While the methods and strategies are designed within the prototype, they are intended to be flexible and customisable for other communities with different local requirements. The deliverable emphasises the importance of community involvement throughout the co-creation process, ensuring that the energy community reflects its members' values, needs, and priorities.

Essential materials, such as templates for workshop supplies and foundational processes, are provided within this document, making it a practical toolkit for others who aim to replicate the process of co-creation and implementation of energy communities. Further reference documents, such as the NEBourhoods Energy Community's founding documents, will be available for download on the project's website, [www.nebourhoods.de](http://www.nebourhoods.de) and [stadt.muenchen.de/infos/nebourhoods-neuperlach](http://stadt.muenchen.de/infos/nebourhoods-neuperlach) at the end of the project duration.

## 2 DEMONSTRATION OF AN ENERGY COMMUNITY

To demonstrate the feasibility and practical implementation processes required to build and sustain energy communities, the *Energiegemeinschaften München eG* was established as part of the NEBourhoods Action. The demonstrator highlights how community-driven initiatives can be integrated within the New European Bauhaus (NEB) framework, promoting citizen involvement in sustainable energy production at the neighbourhood level.

Two essential phases were followed to demonstrate the energy community. Since this deliverable only presents the second phase, which builds upon the first, the contents of the first phase are summarised below. Further details can be found in Deliverable D5.2.

1. The first phase involved developing the foundational elements required for implementing an Energy Community. This started with a detailed analysis of the potential and current situation in Munich-NPL (D5.2, Chapter 2.1). A comprehensive stakeholder analysis (D5.2, Chapter 2.2) helped map out key participants, including potential members, property owners with roof space for photovoltaic (PV) installations, and local actors interested in supporting or investing in the energy community. Several key models were developed during this phase to provide a sustainable operational framework. First, the business model (D5.2, Chapter 2.3) established the financial and operational structure necessary for long-term success. The governance structure (D5.2, Chapter 2.4) was designed to define the roles, responsibilities, and decision-making processes that would guide the community's operations. These governance models ensured that the energy community could function democratically, with transparent decision-making and fair participation. Marketing and outreach efforts (D5.2, Chapter 2.5) were crucial during this phase, helping to engage local citizens and attract participants. Digital and print media were used in the Munich-NPL neighbourhoods to recruit interested individuals and secure rooftop spaces for solar energy projects. The outreach campaign was particularly important for building a base of interested community members, gaining their input, and ensuring the successful implementation of the co-creation and community-building process. This marketing effort also included support from NEBourhoods Workpackage WP2: *Co-Creating Transition*, which laid the groundwork for mapping stakeholders and recruiting participants. In parallel, feasibility studies were conducted for potential PV projects, focusing on dimensioning the available roof spaces (D5.2, Chapter 2.6). These studies ensured that the community's solar projects would be economically and technically viable, paving the way for further implementation. The results of these preparations were captured in NEB Deliverable D5.2, summarising the foundational work needed for co-creation.

2. In the second phase, the foundational work was implemented. The community collectively reviewed and adapted the predefined models using collaborative methods to fit local needs. A series of workshops were conducted in a Living Lab environment in Munich-NPL. In these sessions, stakeholders and participants had the opportunity to provide input, shaping the energy community's structure to reflect the priorities and needs of its members. This co-creative process ensured the energy community was sustainable and aligned with its local participants' values and objectives.

The result of this process is the establishment of the *Energiegemeinschaften München eG*, founded in the legal form of a cooperative. The cooperative legal structure was chosen because it promotes cooperation, shared responsibilities, and democratic decision-making, with each member having an equal vote. The cooperative is founded by eight founding members, shown in Figure 1 and governed by two management board members and four supervisory board members, ensuring balanced oversight and management. The pluralised name, *Energiegemeinschaften München*, reflects the interest in collaboration between multiple initiatives, already including the *Energiegemeinschaft München-NPL* and the *Academic Energy Cooperative* at TUM. This model facilitates active participation by allowing citizens to join existing energy projects or develop their initiatives in other neighbourhoods. It draws on the community's shared resources while building a distinct identity for each project. The cooperative collaborates closely with educational and research institutions and translates scientific knowledge into practical energy applications. Practical tasks are implemented in teaching, and a portfolio of innovative solutions is developed. The energy community's primary goals are decentralising energy production, strengthening social cohesion, and actively engaging citizens in sustainable energy practices. The cooperative is committed to transparency and strives to create an inclusive community that ensures no one is excluded. While the Energy Community focuses on social and environmental sustainability, the cooperative also emphasises economic resilience, providing the community's long-term viability. Members are enabled to participate in the generation, consumption, storage, and sale of energy, furthering the community's sustainability goals. The first photovoltaic (PV) installation will be placed on the roof of *Perlacher Herz*, a neighbourhood centre in Munich-NPL known for its integrative and intergenerational projects. This installation marks a significant step in the implementation and serves as a model for the Energy Community. The cooperative is dedicated to developing adaptable and scalable energy solutions that can be replicated in other urban areas, ensuring that all citizens can participate and benefit from the community's sustainable practices.





Figure 1 Founding members *Energiegemeinschaft München eG*

Another result is the development of co-creative methods for implementing the NEB Energy Community. These methods demonstrate how the energy community was structured and implemented, providing a replicable framework for establishing an energy community similar to NEBourhoods. This Deliverable (D5.7) summarises these methods, outlines the workflows, and provides materials for replication. The methods and models of this deliverable are outcomes of the NEB Actions implementation in Munich-NPL. Challenges and barriers were identified during this process, and solutions were tested. The *Energiegemeinschaften München eG* demonstrates how establishing and implementing an energy community can be successfully carried out in the neighbourhoods under current conditions. With the following chapters, readers can follow the steps to replicate the founding of an energy community as it was done in NEBourhoods.

## 2.1 CO-CREATION

To implement an energy community, a series of targeted workshop formats have been developed and tested across various thematic fields, covering the entire process from the initial idea to the foundation. The methods and models have been developed to implement the NEB Energy Community in the Living Lab. The TransitionHub facilitated the workshops (as part of NEBourhoods Workpackage *WP2: Co-Creating Transition*), providing implementation support. The workshops were always led by two facilitators (Action Lead and



TransitionHub support), and the number of participants ranged from 5 to 36. For the location, the NEB pavilion in Munich-NPL provided by the project was used, visible in Figure 1.

Each workshop is designed to address a specific aspect of the energy community's development, encouraging active participation and practical outcomes. The primary goal of the workshops is to engage the local community in a collaborative co-creation process, ensuring that solutions are tailored to the community's needs and likely to be accepted and sustained by the members. The workshops are designed to provide a comprehensive framework for establishing and operating an energy community, starting with an overarching perspective on the project's subject and gradually moving towards more detailed and specific topics, such as the foundation, strategy, and resource planning. Each workshop builds upon the previous one, ensuring participants gain a broad understanding and in-depth knowledge necessary for the community's development.

The following chapter outlines the workshop formats, including their specific objectives, structure, and key activities. Each workshop is refined through feedback from the implementation phase and concludes with a schedule and required materials for easy replication. Visual aids enhance understanding of concepts, while essential documents are provided in the appendix for further use. Results from the completed workshops are available on the NEBourhoods projects website for reference or basis.

Table 1 lists all workshops and public events held in Munich-NPL so far. For reference, each includes the date, day of the week, and time used during the implementation of the NEB Energy Community. Collecting feedback on participation options and experimenting with different days and times is recommended to find the most effective scheduling, minimising exclusions and maximising attendance. Workshops are marked in a darker purple, while public information events are highlighted in a lighter shade for easy distinction. The public information events were organised in parallel with the workshops developing the energy community to attract interested stakeholders. Detailed information on the marketing of the NEB Energy Community is described in Deliverable D5.7 in chapter 2.5. Further design methods for information events are presented in 2.2.3 *Events*.

Table 1 Overview of workshops and events

				Public info events
Aug 26	2024	Mon	17:00 – 18:30	Workshop - Financial Model
Aug 12	2024	Mon	14:00 – 16:00	Public event – SolarIce
Aug 8	2024	Thur	16:00 – 17:30	Q&A session
Aug 1	2024	Thur	10:30 – 11:30	Workshop - Financing Model
Jul 18	2024	Thur	10:30 – 12:00	Workshop - Communication
Jul 16	2024	Tue	17:00 – 19:30	Public info event - Surfaces
Jul 4	2024	Thur	13:00 – 18:00	Founding Assembly
Jun 21	2024	Fri	11:00 – 12:00	Public excursion – Messe München
Jun 14	2024	Fri	16:00 – 18:00	Workshop - Communication
Jun 6	2024	Thur	15:30 – 17:00	Public info event
May 15	2024	Wed	16:00 – 17:30	Workshop - Rules of Procedure
May 8	2024	Wed	16:15 – 17:45	Workshop - Strategy and Timeline
May 2	2024	Thur	15:15 – 17:15	Workshop - Business Model
Apr 24	2024	Wed	19:00 – 20:00	Public info presentation
Apr 24	2024	Wed	16:00 – 18:00	Workshop - Statutes
Apr 16	2024	Tue	10:00 – 12:00	Workshop - Communication
Apr 10	2024	Wed	16:00 – 18:00	Workshop - Statutes
Apr 3	2024	Wed	16:00 – 17:30	Workshop - Statutes
Mar 27	2024	Wed	16:00 – 18:00	Workshop - Statutes
Mar 20	2024	Wed	16:00 – 17:30	Workshop - Statutes
Feb 7	2024	Wed	16:00 – 18:00	Workshop - Foundation, Strategy and Timeline
Jan 30	2024	Tue	17:00 – 20:00	Workshop - Subject Fields (and Timeline)
Dec 1	2023	Fri	16:30 – 18:30	Workshop - TUM Subject Fields and Timeline
Oct 25	2023	Wed	17:30 – 19:00	Event for tradespeople
Oct 17	2023	Tue	18:00 – 19:00	Public info event
Sep 24	2023	Sun	11:30 – 12:30	Visit PV site - Curch
Sep 19	2023	Tue	15:00 – 16:00	Visit PV site -Perlacher Herz
Jul 21	2023	Fri	15:00 – 17:00	Public event - SolarCoffee
Jul 1 Jun 30	2023 2023	Sat Fri	11:00 – 19:00	Public event - Neighbourhood festival

### 2.1.1 Subject Fields and Timeline Workshop

The workshop *Subject Fields and Timeline* aims to provide participants with a structured overview of the project's content and responsibilities. The main objective is to break down the project's complexity into categories: **subject fields**, **task fields**, and **specific tasks**. This approach helps create a comprehensive and manageable understanding of the project's scope. The workshop can be conducted either in person or digitally, and while it includes foundational aspects, the focus is primarily on the operational elements of an energy community. To design the workshop, the content is first analysed, summarised, and structured using the following categories:

- **Subject fields** refer to broad thematic areas within the project, encompassing key domains such as engineering, legal, and management. These fields cover the overarching components of the energy community's operation.
  - **Task fields** represent subcategories within each subject field that organise related tasks. These fields help structure responsibilities and ensure clarity in task allocation.
    - **Tasks** are specific activities or actions required to fulfil the objectives of each task field. They provide concrete steps for implementation.

The establishment and operation of an energy community are divided into relevant subject fields and then associated with fundamental task fields that clarify the specific responsibilities and actions required. The necessary tasks can then be categorised into the defined task fields. Responsibilities can be assigned to subject and task fields, dividing them structurally among the members. These fields are flexible and can be expanded or adjusted as needed. The possibilities for subject and task fields for energy communities are as follows, with further details available in Deliverable *D5.2 Development of an energy community: Design, governance, and business model*.

- **Engineering**
  - System Design and Configuration
  - Construction and Installation
  - Maintenance and Safety
- **Marketing & Public Relations**
  - Branding and Communication
  - Member Recruitment and Engagement
  - Public Outreach and Media
- **Legal**
  - Compliance and Risk Management
  - Contractual Agreements and Documentation
  - Regulatory and Legal Affairs
- **Management & Organisation**
  - Financial Planning and Management

- Administrative and Operational Coordination
- Partnership and Stakeholder Relations
- **Energy Projects**
  - Recruiting, Initiation and Planning
  - Execution and Management
  - Monitoring and Evaluation
- **Education, Research & Development**
  - Knowledge Transfer and Capacity Building
  - Research and Innovation
  - Strategic Development and Implementation

These subject and task fields are visually presented to conduct the workshop on signs distributed around the room. One method is placing the signs on the walls, which is effective for smaller groups as it encourages interaction and discussion. Participants move between the signs, discussing each subject field as a group to define specific tasks and generate new ideas. They are collected around the subject field by placing post-its. This collaborative process helps to build a sense of community and shared purpose among participants.

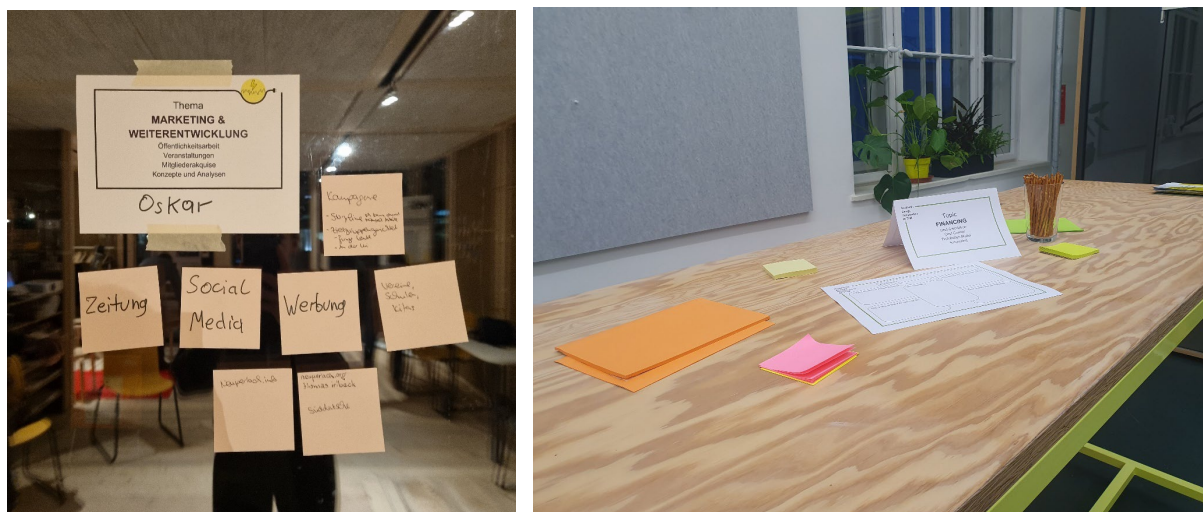


Figure 2 Subject Field signs

Alternatively, the signs can be placed on separate tables around the room. In this case, participants form smaller working groups, each focusing on a specific subject field. This method allows for more in-depth exploration and task definition. However, interest levels may vary across different fields, and additional steps may be needed to regroup the defined tasks into broader task fields to ensure consistency. The first step is to collect and discuss specific tasks with the group, which are then summarised in task fields, as shown in Figure 3. After the group discussions, participants present their findings to the overall group, encouraging feedback and clarification. At this stage, initial responsibilities for the subject fields and tasks can be assigned if appropriate.

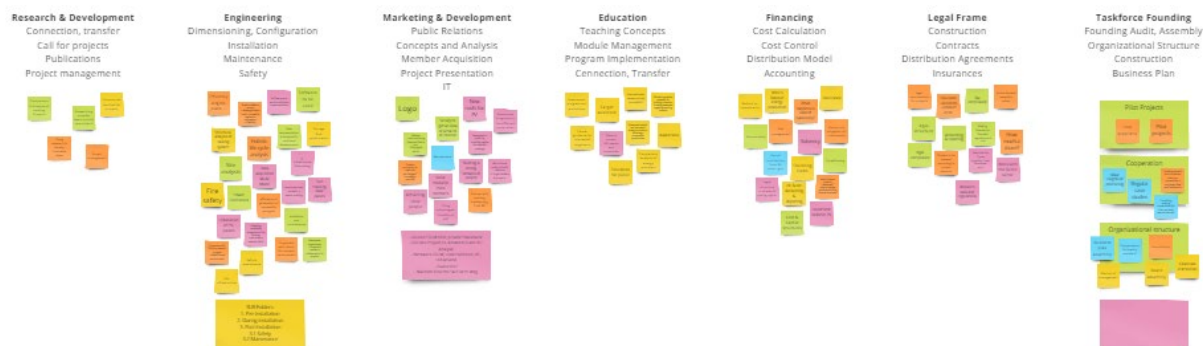


Figure 3 Subject Fields with Task Fields

The workshop concludes with creating an initial work plan, where the tasks and grouped task fields are mapped onto a timeline, as demonstrated in Figure 4. This helps estimate the time requirements and set preliminary deadlines for task completion. Alternatively, the topics can be transferred to a timeline in another workshop to minimise intensity. Therefore, the task areas and tasks that have been developed are presented at the beginning to reconnect to the topic. The tasks are then sorted into the timeline, and responsibilities can be distributed among the participants.

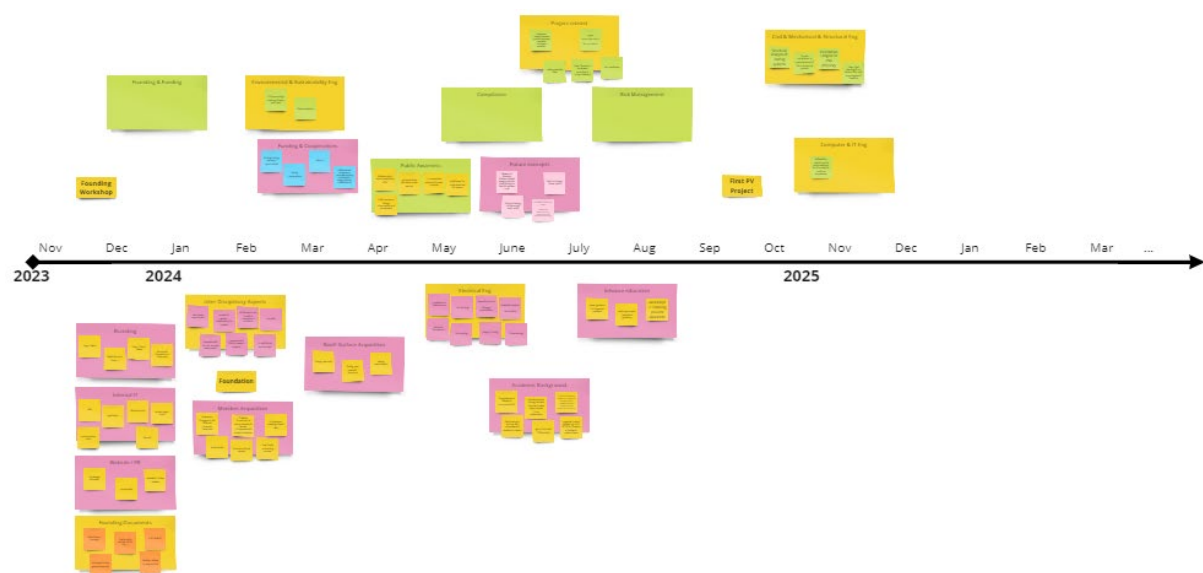


Figure 4 Tasks Fields with Tasks in Timeline

*Table 2 Schedule Workshop Subject Fields (small group (2 – 20 participants))*

Duration	Programm	Material
1 0:15	Welcome and introduction Input about the basics with the current status Collect questions on Post-Its for Q&A	Presentation Post-It Pencils
2 0:10	Get to know each other: Who lives where in the project area or neighbouring districts? Position in the room according to direction and distance. Brief introduction of everyone	
3 0:10	Presentation of the subject fields with task fields: What is needed for the foundation?	
4 0:60	Subject fields are distributed on signs around the room Walk through the fields, collect tasks, discuss, brainstorm If possible, cluster individual tasks into task fields Who is interested in which subject or has knowledge in the field? Assign	Signs for task fields Post-Its Pencils
5 0:15	Break	
6 0:20	Cluster individual tasks into task fields Who is interested in which subject or has knowledge in the field? Assign	Larger Post-Its Pencils
7 0:10	Fill out the registration form (print/digital)	Registration form
8 0:10	Next steps, thanks and conclusion	
2:30		

*Table 3 Schedule Workshop Subject Fields and Timeline (large group (> 20 participants))*

Duration	Programm	Material
1 0:15	Welcome and introduction Input about the basics with the current status Collect questions on Post-Its for Q&A	Presentation Post-It Pencils
2 0:10	Get to know each other: Who lives where in the project area or neighbouring districts? Position in the room according to direction and distance. Brief introduction of everyone	
3 0:10	Presentation of the subject fields with task fields: What is needed for the foundation?	
4 0:30	Subject fields on signs on tables distributed around the room The group is divided according to interest and knowledge between the subject fields. Collect tasks, discuss, brainstorm. Who is interested in which subject or has knowledge in the field? Assign	Signs for task fields Post-Its Pencils
5 0:15	Break	



6	0:20	Cluster individual tasks into task fields Who is interested in which subject or has knowledge in the field? Assign	Larger Post-Its Pencils
7	0:45	Presentation of the tasks with subject fields and jointly arranging them in the timeline. Who is interested in which subject or has knowledge in the field? Assign	Timeline on poster, board or projection
8	0:15	Break	
9	0:10	Fill out the registration form (print/digital)	Registration form
10	0:10	Next steps, thanks and conclusion	
3:00			

### Key Outcomes:

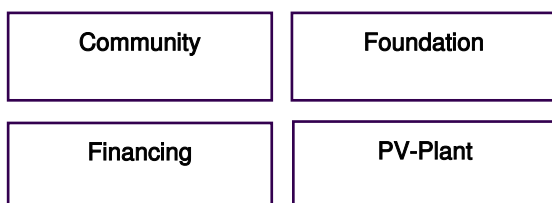
- ➔ Clarifies the scope priorities and contributes ideas
- ➔ Promotes community building and collective engagement
- ➔ Requires a high level of focus and concentration
- ➔ Follow-up rework of content is important
- ➔ The timeline provides direction but should remain flexible

### 2.1.2 Foundation, Strategy and Timeline Workshop

While the previous workshop, *Subject Fields and Timeline workshop*, provides a broad overview of the project's scope and breaks down the main subject fields and tasks, the workshop *Foundation, Strategy, and Timeline* workshop delves deeper into the specific steps required for establishing the energy community. Following the community's establishment, this workshop format can be repeated to support further operational phases. It overviews upcoming steps, summarises the necessary effort, and helps develop a comprehensive roadmap. Additionally, it clarifies interdependencies between tasks and assigns responsibilities among participants.

The complexity of the tasks and steps is broken down using **milestone cards** and **resource cards**. The milestone cards outline key stages (e.g., Community, Foundation, Financing, PV Installation), while the resource cards represent the necessary inputs (e.g., Space, Time/Expertise, Money, Community, PV, Sun, Electricity). By placing the milestone cards in sequence, participants form distinct sections on the timeline, representing major phases of the project. The milestones, as well as the resources, can be extended and personalised.

## Milestone cards



## Resource cards



Each milestone represents a significant step in forming the energy community and can be changed and adapted as needed. Resource cards are utilised to define the requirements for each milestone. Different resource cards, each symbolising a specific element necessary for success. These cards help participants visualise the resources needed, ensuring that the required elements are realistic and achievable. Participants can add specific details to the cards, such as the quantity of a resource or the duration needed, helping to create a more detailed and actionable plan.

As illustrated in Figure 5, the group collaboratively sets the milestones, discusses their significance, and makes adjustments as necessary. The resource cards are then assigned to the appropriate milestones, specifying the resources required at each stage. The path between the milestones is defined and shaped by resource cards, potentially causing the spacing to be adjusted in the process. Participants engage in discussions about the feasibility of these milestones and their related resources, with adjustments made throughout the process. Specific strategic questions, such as allocating time, expertise, and financial resources, often arise and require group decisions. These discussions clarify the path forward and encourage collaboration and collective problem-solving.

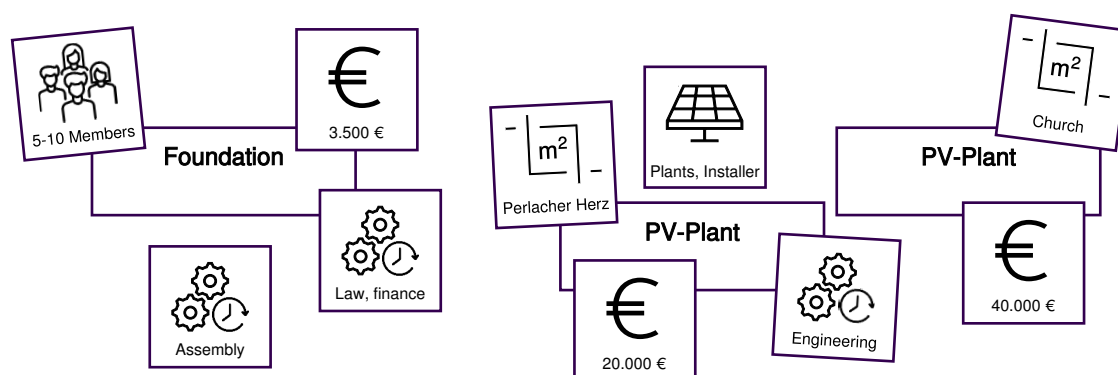


Figure 5 Milestone and Resource Cards



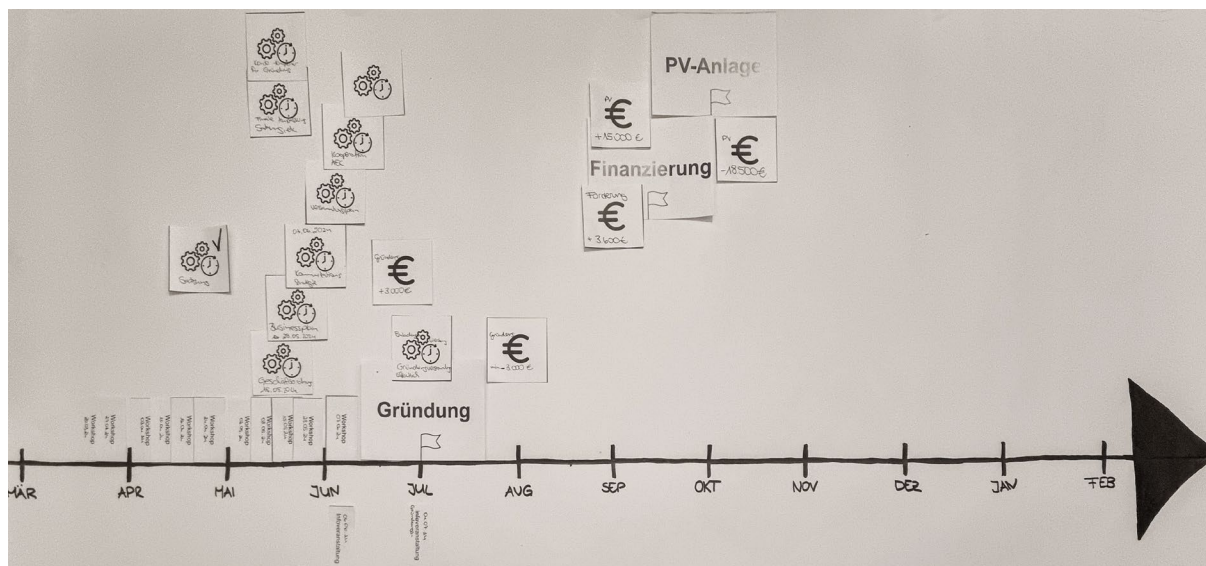


Figure 6 Milestone and Resource Cards in Timeline

As the workshop progresses, the group continuously refines the milestones and the resource allocations. This iterative process allows flexibility and responsiveness to emerging issues or new insights. The session culminates in a shared understanding of the following steps, including the necessary actions and resources, providing all participants with a clear overview of the strategy and timeline for establishing the energy community.

Table 4 Schedule Workshop Foundation, strategy and timeline

Duration	Programm	Material
1 0:10	Welcome and introduction Input about the basics with the current status Collect questions on Post-Its for Q&A	Presentation
2 0:10	Get to know if needed	
3 0:45	Project planning by collecting milestones (community, foundation, financing, PV system) Define the content of the milestones using resource cards Arranging the milestones and filling the space between Determine dependencies, define responsibilities	Milestone cards Resource cards Pencils
4 0:10	Break	
5 0:30	Continue project planning by arranging milestones with resources on the timeline.	Timeline (poster or digital with beamer)
6 0:10	View results and organise teams Is it clear who is working on what and by when?	Post-It Pencils
7 0:05	Thanks and conclusion	
2:00		

### Key Outcomes:

- ➔ Clear definition of milestones and resource requirements
- ➔ Strategic decision-making on resource allocation
- ➔ A shared roadmap for the establishment of the energy community
- ➔ Complexity is reduced
- ➔ Collaborative and iterative refinement of the process
- ➔ Necessary external input becomes visible

## 2.1.3 Communication Workshops

The Communication workshops consist of a series of three sessions designed to collaboratively develop the foundation for a communication strategy. The primary goal is to organise and prioritise communication content, establishing a shared vision and unified strategy that simplifies future communications. This strategy ensures that all communications share the same background and tone. The workshops were conceptualised by creative professionals Max Haarich and Mattias Schelbert as part of Work Package *WP2: Co-Creation Transition*.

The initial design for the workshop series was informed by input gathered from potential members via a survey (Appendix 6.2 Survey Communication Workshops) conducted through SurveyMonkey (SurveyMonkey Inc., n.D.). Additionally, interviews based on the same questionnaire were conducted to allow offline participation. The input provided the basis for the development of the workshop content.

### 2.1.3.1 Communication Workshop I

The goal of the first workshop is to establish the core elements of the communication strategy, including the emotional foundation or "belly feeling" of the community's identity. The session starts with a presentation outlining the method and goals using the **Golden Circle** model by Simon Sinek (Sinek, 2009). As shown in Figure 7, the model consists of three questions prioritised by their position in rings. The questions are:

- **Why?**  
The purpose, cause, or belief behind the energy community. This is not about financial goals but the core reason the community exists.
- **How?**  
The unique aspects of how the community operates.
- **What?**  
The specific products or services the community offers.

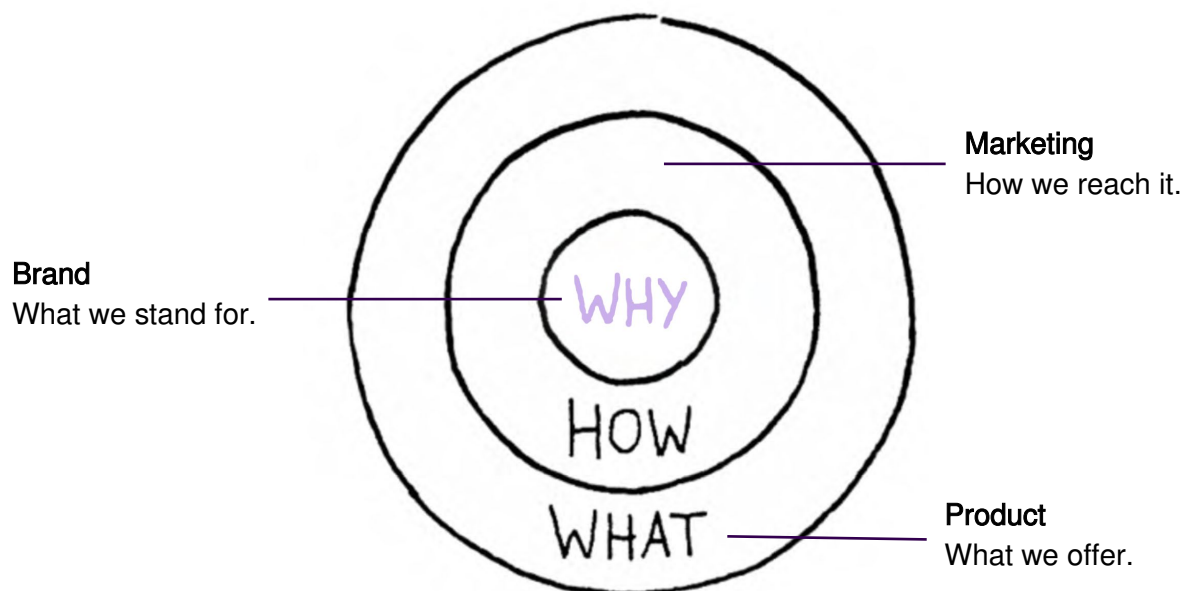


Figure 7 Golden Circle (Based on Synek, 2009)

The Golden Circle represents the emotional core of the messaging of the communication strategy. This is the foundation from which the manifesto, name, and claim are developed, providing a coherent and stable basis for all communication. Figure 8 illustrates this composition.

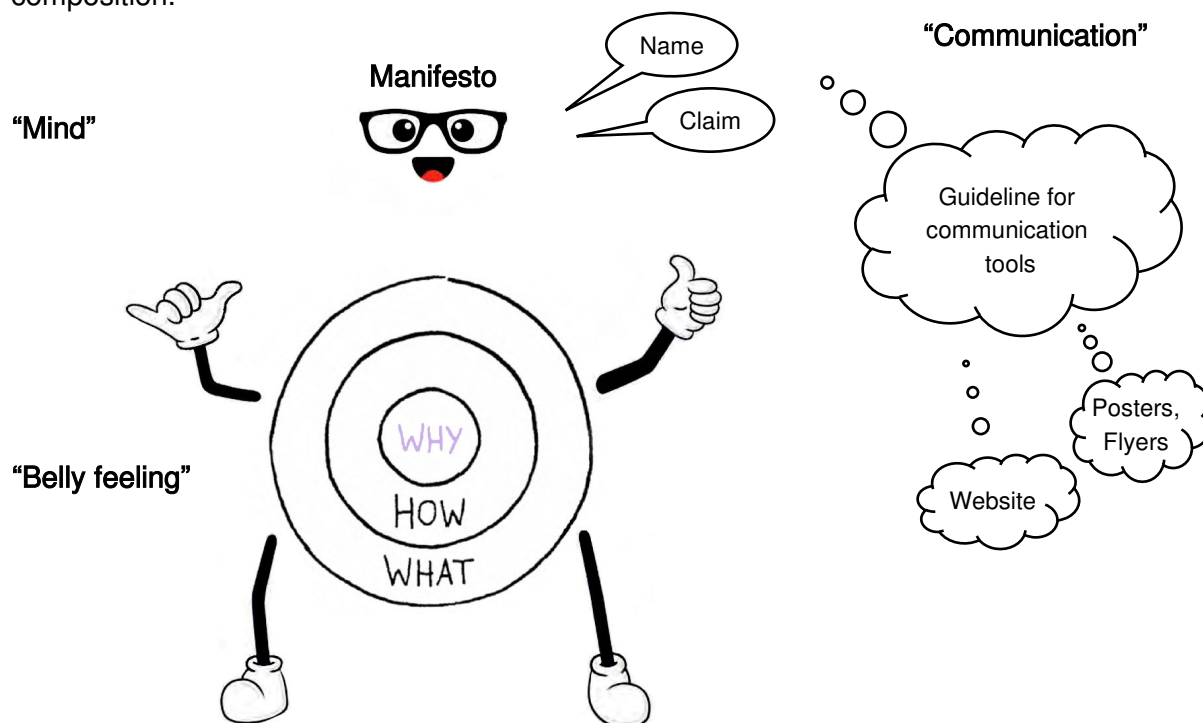


Figure 8 Components of the communication strategy (© NEBourhoods / Haarich & Schelbert)

During Workshop I, the model is projected on the wall or drawn on a large poster, as shown in Figure 9, with space in each ring to collect Post-it notes. Participants then answer the questions Why?, How?, and What?, clustering their responses in the rings, shown in Figure 10. An iterative review of the clusters helps refine the content and ensures that it accurately reflects the energy community's goals.

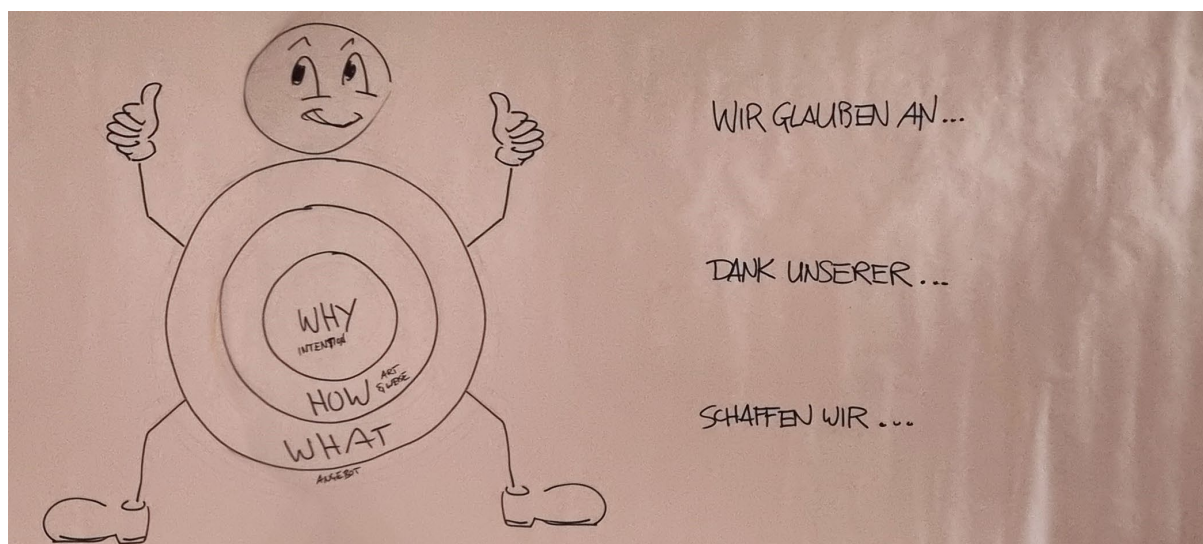


Figure 9 Poster „Belly feeling“ (© NEBourhoods / Haarich & Schelbert)

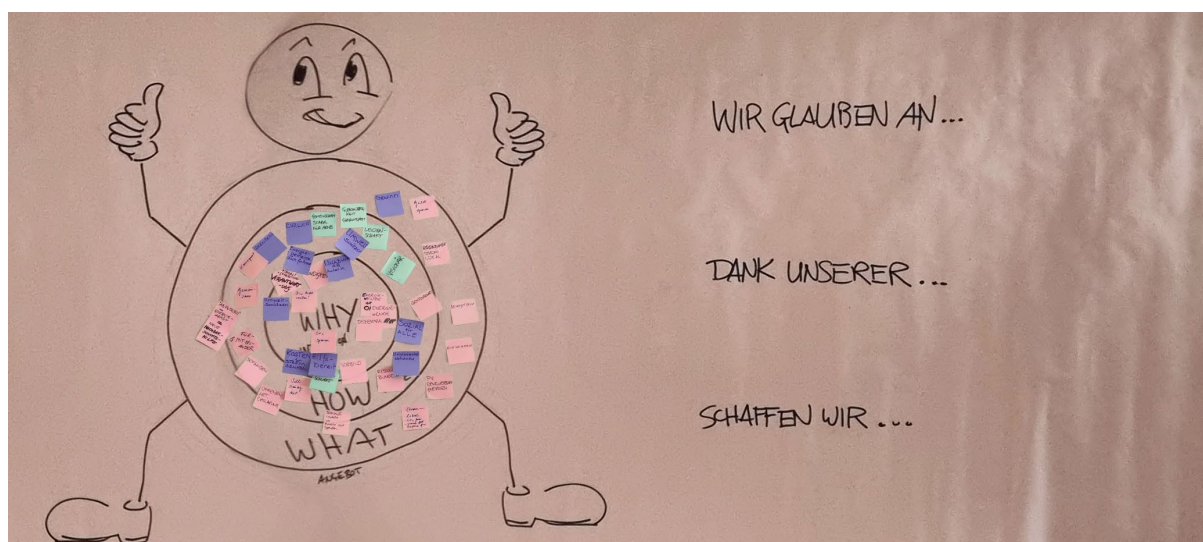


Figure 10 Poster “Belly feeling” with results (© NEBourhoods / Haarich & Schelbert)

The answers can be supplemented by the insights gathered from the pre-workshop survey. This allows participants to focus on assessing the relevance and structuring the input rather than starting from scratch. After the workshop, follow-up work is essential to process the gathered content. This can be done through a small group/ task force. As part of the post-workshop process, the collected answers are summarised and structured with key themes and topics emerging from the responses. The results are then shared with the participants. Table 6 and Table 7 provide examples of how responses to the question WHY? can be clustered and structured.



Table 5 Answers to WHY?

<b>Terms Collection WHY</b>	
Energy self-sufficiency	
Generate own eco friendly electricity	
Association management	
Environmental protection, energy transition, using potential	
Community Neighbourhood / reduction electricity costs /	
generation sustainable electricity / social project all age groups	
Ambassadors of the energy transition	
Social community	
Contributing to a solution of the climate crisis	
Power of the community	
Energy transition from the bottom up	<b>Workshop</b>
Climate and regionality	Solidarity
Energy community with a heart	Community
Community	Local community
Self-sufficient	Together
Sustainability NEBourhoods	Strong for the weak

Table 6 Categorisation of answers WHY?



<b>Community</b>	
Community Neighbourhoods	
Social project all age groups	
Sustainable NEBourhoods	
Contributing to a solution of the climate crisis	
Power of the community	
Energy transition from the bottom up	
Energy community with a heart	
Community	<b>Environment</b>
Social community	Generate own eco friendly electricity
Solidarity	Environmental protection
Together	Energy transition
Local Community	Sustainable electricity
	Contributing
	Climate and regionality
<b>Independence</b>	
Self-sufficient	
Energy transition from the bottom up	
Energy self-sufficiency	
Contributing to a solution of the climate crisis	
Strong for the weak	

Then, a manifesto that reflects the central emotional core, "Belly feeling", can be formulated based on the answers from Why?, How?, What?. The proposal for the manifesto is shared with the members, and feedback is gathered. This manifesto captures the core values and interests of the members and serves as a unified communication basis. The manifesto forms the foundation for communication tools, which must be tailored to specific target groups, events, or formats. Table 8 and Table 9 show an example of a manifesto for energy communities.

Table 7 Manifesto (short version) original in German

Wir sind eine **unabhängige Energiegemeinschaft**.  
Und stehen für eine **nachhaltige, gerechte und lokale Energieversorgung**.  
Von Neuperlacher\*innen **für München**.  
Diese ermöglichen wir durch eine **co-kreative Gemeinschaft**.  
Für einen **optimistischen Blick** in unsere gemeinsame Zukunft.

Table 8 Manifesto (short version) translation to English

We are an **independent energy community**.  
And we stand for a **sustainable, fair and local energy supply**.  
From local Neuperlach residents **for Munich**.  
We make this possible through a **co-creative community**.  
For an **optimistic perspective** on our common future.

Table 9 Schedule Communication Workshop I

	Duration	What	Material
1	0:10	Welcome and introduction	
2	0:20	Presentation of the basics of communication strategies Introduction <i>Belly Feeling</i> (Golden Circle model)	Presentation, beamer
3	0:10	Break	
4	0:40	Filling the <i>Belly Feeling</i> using Post-Its to assign topics to Why?, How?, What? Iterative process	Poster, Post-It Pencils
5	0:30	Discussion of the developed content with adjustments	Post-Its
6	0:10	Feedback, thanks and conclusion	
	2:00		

### 2.1.3.2 Communication Workshop II

The second workshop builds upon the results of Workshop I by discussing and refining the draft manifesto created from the previous session. This serves as a starting point for establishing a claim and name for the energy community. The draft manifesto is reviewed with participants, and further adjustments are made based on feedback.

The process continues with the collection of suggestions for a claim. These suggestions are visibly posted on a wall for participants to review, as shown in Figure 11. If there are numerous suggestions, participants are given three stickers each to prioritise their favourite claims. The most popular suggestions are shortlisted for further discussion. This process is repeated to select a name, developed alongside the claim, to ensure coherence. The name and the claim interact, and the name selection can lead to an adjustment of the claim. With all suggestions visible during the selection process, the decision can be iteratively reviewed.

The name and claim must complement each other. If the name conveys what the initiative is about, the claim can be more creative or abstract. Conversely, if the name is less descriptive, the claim should clarify the initiative's mission more clearly. An example of an aligned name and claim is provided in Table 10, and how it is used is shown in Figure 12.

*Table 10 Name and claim original*

Name	Energiegemeinschaften München eG
Claim	We let the sunshine in.



Figure 12 Visit from EU Commission President Ursula von der Leyen (© NEBourhoods / Patrik Thomas)

Table 11 Schedule Communication Workshop II

	Duration	Programm	Material
1	0:10	Welcome and introduction	
2	0:25	Presentation of the outcome of the workshop I with a review of the post-workshop process and categorisations Discussion about the Manifesto	Presentation, beamer
3	0:15	Break	
4	0:30	Collecting suggestions for Claim Collecting suggestions for Name	Poster, Post-It Pencils
5	0:30	Voting for Claim and Name Iteratively adjust to make them match. Discussion of the developed content	Sticker
6	0:10	Feedback, thanks and conclusion	
	2:00		

### 2.1.3.3 Communication Workshop III

The goal of the third workshop is to create a communication plan tailored to different target groups and serve as a guideline for creating communication tools. With the help of a grid, communication priorities are defined for individual stakeholders. The process is as follows:

- Analysis of the stakeholder groups
- Identification of appropriate channels
- Purpose and stakeholder-specific content creation

The workshop begins with a brainstorming session to identify the relevant stakeholder groups. These are collected and listed on a poster, whiteboard, or digitally on a table. Post-it notes are then used to assign the specific needs of each group, as shown in Figure 13. These needs represent the key concerns, desires, or interests the communication strategy should address.

Once the needs of the stakeholder groups are defined, the next step is to identify what the energy community can offer to fulfil these needs. Participants discuss the value proposition for each group - what is the specific benefit or promise that will be communicated to them? This step ensures the communication resonates with each target audience by addressing their needs and concerns.



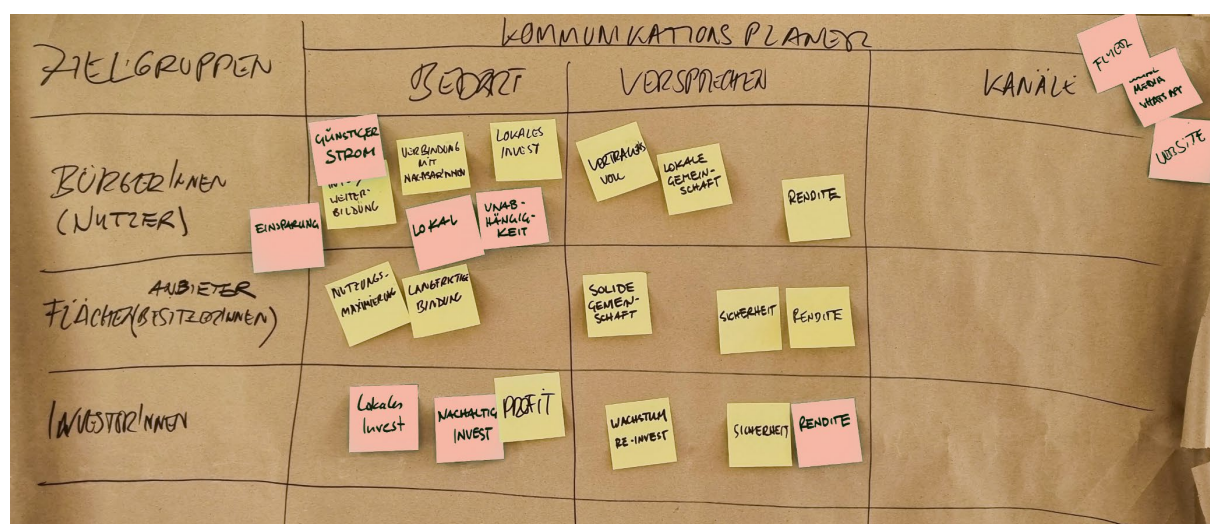


Figure 13 Communication grid with results (© NEBourhoods / Haarich & Schelbert)

Further, participants decide on the most effective communication channels to reach each group. These channels should be appropriate for the stakeholder group and the local context. Once the channels are identified, participants match them to the appropriate stakeholder groups and communication tools. Table 13 provides an example of the communication grid for the workshop.

Guiding questions for support are

- **Who is the communication aimed at?**  
e.g. at everyone or only a specific stakeholder group
- **What communication tools are appropriate?**  
e.g. flyers to distribute, posters for information, social media posts, etc.
- **What message should be communicated?**  
e.g. specific offers, information about the energy community, invitation to an event, etc.
- **What actions should the audience take?**  
e.g. visit the pavilion, visit a website, submit an application, etc.

The outcome of this process is a detailed communication guideline that tailors the core communication strategy developed in previous workshops to specific stakeholder groups. This guideline outlines which communication channels and tools are most effective for each group and ensures that the messaging is adapted to their specific needs and preferences.

Table 12 Grid for communication priorities

Target group	Needs	Our promises	Communication channels and tools			
			Flyer	Website	Social media (chat)	... ?
Citizens	Cheaper electricity Savings Knowledge/Education Local Local investment Connection with neighbours Independence	Trustworthy Local community Return on investment	x	x	x	
Surface owners	Maximisation of use Long-term commitment	Strong community Safety Return on investment	x	x		
Investors	Local investment Sustainable investment Dividend	Growth/Re-Invest Dividend	x	x		
...						

Table 13 Schedule Communication Workshop III

	Duration	What	Material
1	0:10	Welcome and introduction	
2	0:15	Collecting stakeholder groups	Poster, Pencils
3	0:30	Brainstorming and adding needs to the stakeholder groups	Post-Its
4	0:10	Break	
5	0:30	Matching promises to the needs and adding our promises to the stakeholder groups	Post-It
6	0:20	Brainstorming communication channels and tools Matching channels and tools to the stakeholder groups	
		Optional: Design of the first communication tool	
7	0:05	Feedback, thanks and conclusion	
	2:00		

As a direct application of the workshop results, an initial communication tool can be designed if there is an upcoming need to announce an event. Table 12 shows an example of a communication tool in the form of a modular signboard system designed for indoor and outdoor use. These information panels can be placed in the neighbourhoods to raise awareness about the energy community and its initiatives. For flexibility, the panels have multiple attachment options and can be moved to different locations depending on the event or message, such as a new PV installation or a community event.

The signboards consist of two main components, as illustrated in Figure 14:

- **Fixed Information:** This includes timeless content about the energy community's core principles, using material from the manifesto developed in previous workshops. It explains the community's foundation and mission, which remain constant. Furthermore, it gives insights into the background and contact information.
- **Customizable Information:** This component allows for dynamic content that can be updated for specific events or messages. It provides space for temporary details, such as dates, locations, or special offers relevant to the audience at that moment.

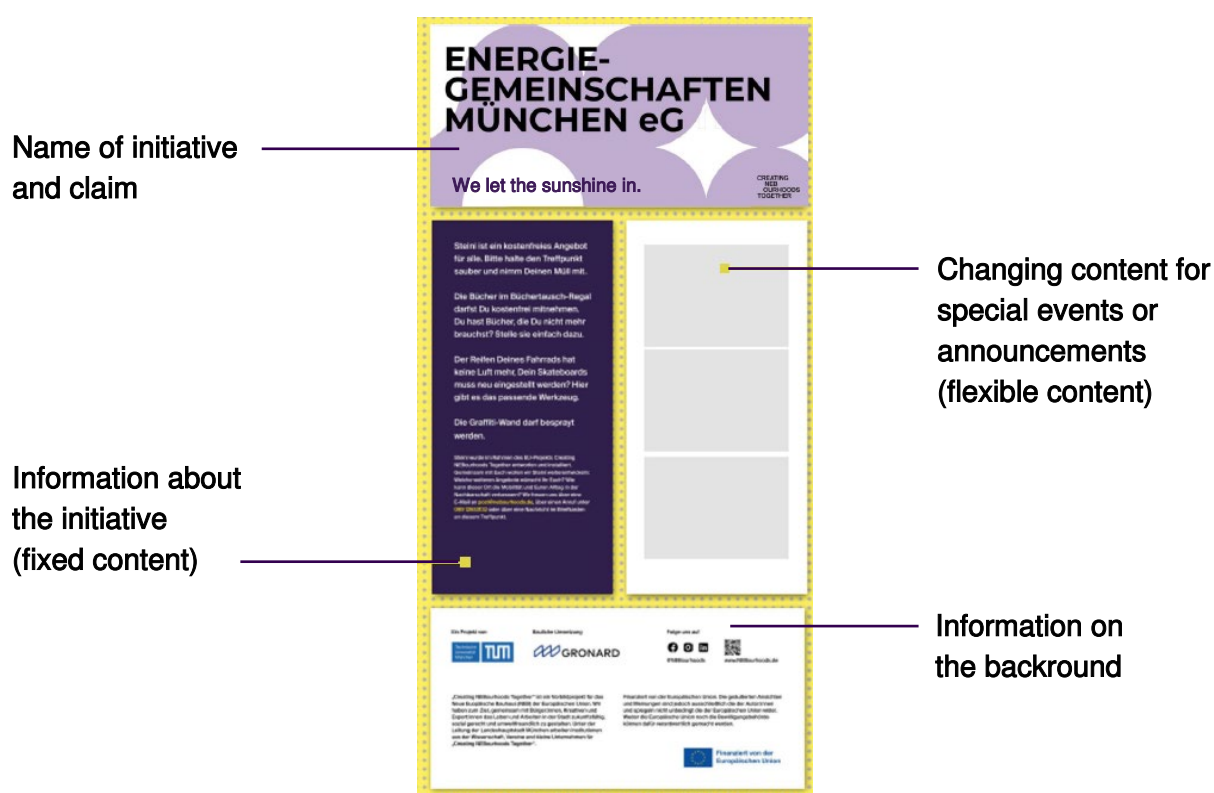


Figure 14 Communication tool Information panels (© NEBourhoods / Susana Frau)

### Key Outcomes:

- ➔ Involving participants ensured relevance and community buy-in
- ➔ Development of a shared understanding
- ➔ Standardisation of communication and marketing
- ➔ Exchange on members' motivation and goals

## 2.1.4 Governance Structure Workshop

The governance structure reflects the framework of the energy community, outlining its authorities, responsibilities, and decision-making powers. This workshop aims to understand the duties and responsibilities of the energy community and connect them with the required boards and positions. The needed boards can be derived from the statutes and the governance structure and are reviewed during this workshop. A reference to a sample statute is available on the project website, and an example of a governance structure is described in the NEB Deliverable D5.2. Additionally, there may be legal requirements to consider, such as the minimum of two board members (§24 GenG) and three supervisory board members (§36 GenG) mandated for cooperatives under German law. Board Position Cards are created and displayed for all defined roles for all participants. In the process, minimum and maximum numbers for the positions are discussed.

**How many board members should the energy community have?** Must all board members agree on every decision? What happens if one of the board members is unavailable? It is crucial to ensure that the community does not become easily hindered due to the absence of a single member.

**How many supervisory board members are necessary?** How many supervisory board members are required to provide adequate oversight? Beyond oversight, can the supervisory board take on operational responsibilities to support the day-to-day functions of the community? Should the supervisory board play a more strategic or advisory role?

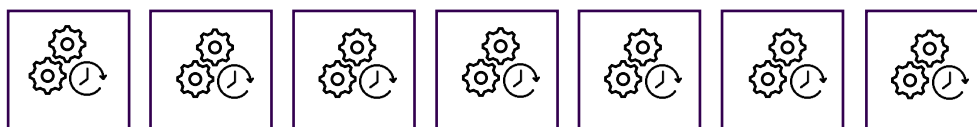
**Are additional positions required?** Are the existing roles sufficient to cover all responsibilities, or are additional positions necessary? If not, are there initiatives that would benefit from creating new positions to oversee them? These new roles could help represent specific initiatives and ensure they are appropriately managed.

### Board Position Cards



Next, the required expertise, tasks, and responsibilities are identified and transferred onto Resource Cards. A supporting basis for this exercise is a compiled list of legal responsibilities and tasks necessary for the prescribed boards. A reference is provided in Appendix 6.4 *Duties and Responsibilities of Boards*, based on the 2024 German Cooperative Law (GenG). The results from the *Subject Fields and Timeline* workshop are also integrated, drawing out broader subject or task fields added to the resource cards. It is important to avoid over-fragmentation by grouping tasks into larger areas rather than focusing on individual tasks.

## Resource Cards



Once the resource cards have been created, they are matched to board positions using the Board Position Cards, as shown in Figure 15. Participants discuss whether the current number of positions is sufficient for the operation of the energy community and make adjustments as necessary. If some responsibilities cannot be assigned to an internal role, they are marked as needing external expertise. At the conclusion of the workshop, all board positions should be clearly defined, and associated tasks and responsibilities should be assigned. This process provides a clear overview of the community's governance structure. Members can then discuss their interest in assuming a board position. If a significant gap between available members and required expertise becomes evident, marketing efforts may need to be intensified. Resources and methods for marketing the NEB Energy Community are provided in Deliverable D5.2.

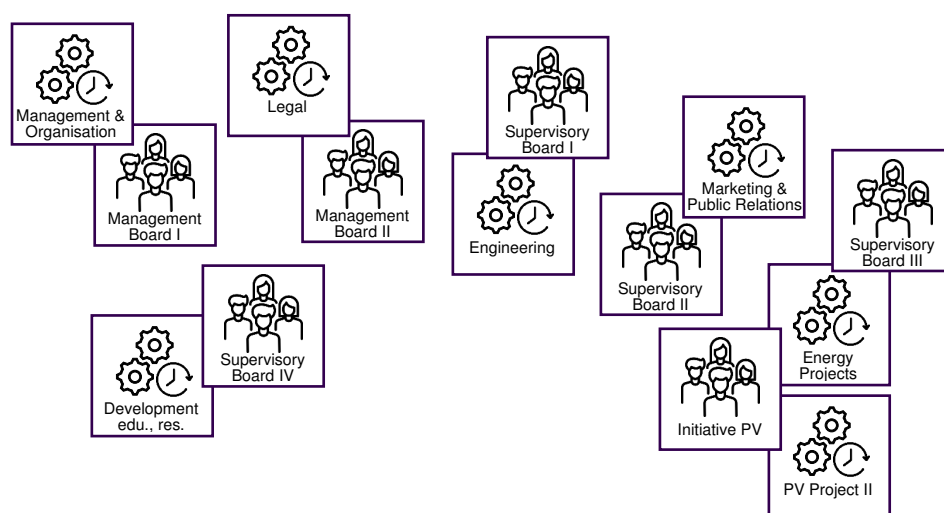


Figure 15 Board Position and Resource Cards

Table 14 Schedule Workshop Governance Structure

Duration	Programm	Material
1 0:10	Welcome and introduction Input about the basics with the current status Collect questions on Post-Its for Q&A	Presentation with
2 0:30	Understanding roles and boards by collecting board cards (e.g. Board of Management, Supervisory Board). The	Governance Structure and Statudes reference

		structure is derived from the governance structure and statutes. Discussion about the min. and max. number of board positions.	Board cards Pencils
3	0:10	Break	
4	0:30	Collecting duties and responsibilities on Resource Cards. Recapture the workshop content <i>Subject Fields and Timeline</i> and assign the subject fields to the different boards. Talk about the tasks and responsibilities of the board positions and assign them to them. Defining and documenting additionally required external expertise.	Duties and Responsibilities reference Board cards Resource cards Pencils
5	0:10	Exchanging views on the interest in running for an election. Thanks, and conclusion.	
	1:30		

### Key Outcomes:

- ➔ Overview of key responsibilities and decision-making powers
- ➔ Ensuring efficient operation of the energy community
- ➔ Clarifying the board's role in both operational and strategic support
- ➔ Building a common understanding of tasks and responsibilities

### 2.1.5 Business Model Workshop

The workshop *Business Model* is designed to develop the business model for the energy community in a participatory approach using the *Business Model Canvas* (Osterwalder & Pigneur, 2011), a framework for mapping out key components of a business. Although this workshop focuses on key areas of a business model, it is essential to note that a full exploration requires more attention and time. A pre-filled Business Model Canvas is provided in the workshop as a reference point, helping participants quickly engage with the subject matters while inspiring discussion and further development. Background information on the content of the energy communities business model is summarised in Deliverable *D5.2. Development of an energy community: Design, governance, and business model*. The reference of the pre-filled business model and the Business Model Canvas with descriptions and the poster template can be found in Appendix 6.1 *Workshop Materials*.

During the workshop, participants work through each section of the Business Model Canvas in a predefined order, discussing the categories, making adjustments, and noting changes with post-its, as shown in Figure 16. The structured format ensures that all major components are covered systematically. The categories and the order are:

1. Customer Segments, 2. Value Proposition, 3. Channels, 4. Customer Relationships, 5. Revenues Streams, 6. Key Resources, 7. Key Activities, 8. Key Partners, 9. Costs Structure



After working through the predefined sections, participants identify which categories require further exploration using stickers. Areas such as the Cost and Revenue Structure (Finance Model) and the Customer Segments (Stakeholder Analysis) often demand more in-depth analysis. The topics are addressed again in the *Finance Model* workshop in chapter 2.1.6 and the *Communication* workshop in chapter 2.1.3.

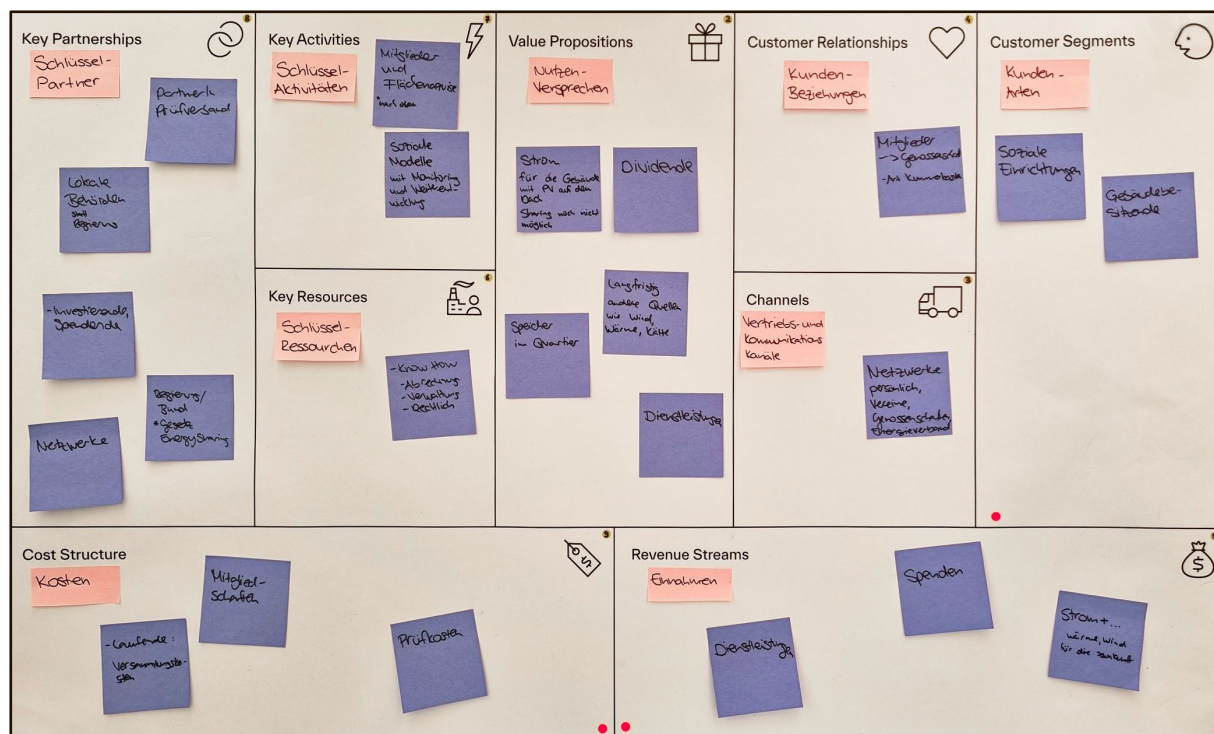


Figure 16 Poster with collected adaptations to the pre-filled Business Model Canvas. Poster based on (Strategyzer AG, n.D.)

Additional chapters, Team and Values, are discussed to reflect NEB Energy Community's focus on inclusivity and innovation. The Team chapter ensures diverse participation by defining roles and responsibilities that promote collaboration and shared decision-making. It summarises the required expertise and provides a sense of the necessary team structure. The Values chapter integrates social and ethical commitments, emphasising equity, sustainability, and community empowerment. These additions ensure that the business model aligns with the community's mission beyond operational and financial aspects. (Bundesministerium für Wirtschaft und Energie, n.D.)

Table 15 Additional chapter for the Business Model



<b>Team</b>		<b>Values</b>	
-------------	---	---------------	---

Table 16 Schedule Workshop Business Model

	Duration	Programm	Material
1	0:10	Welcome, and introduction: Explanation of the Business Model Canvas	Business Model Canvas poster and A4 printout with definitions
2	0:45	Work through the pre-filled business model canvas and collect additions/changes with post-its. Order: 1. Customer Segments, 2. Value Proposition, 3. Channels, 4. Customer Relationships, 5. Revenues Streams, 6. Key Resources, 7. Key Activities, 8. Key Partners, 9. Costs Structure	Pre-filled business model canvas Post-Its Pencils
3	0:10	Do we need more? Discuss additional chapters 10. Team, 11. Values	Post-Its
4	0:10	Prioritisation Which of the topics need more depth? Do they need to be analysed in detail? (financing, types of customers). Mark with stickers.	Stickers
5	0:15	Scheduling of the topics to be analysed in detail Assigning responsibilities	Timeline on Miro
6		Feedback, thanks and conclusion	
	1:30		

### Key Outcomes:

- ➔ Initial refinement of the business model through group collaboration
- ➔ Joint agreement on the key components of a business
- ➔ Quick entry into the subject using a pre-filled Business Model Canvas for reference
- ➔ Identification of areas that need further development through a workshop or working group

### 2.1.6 Financial Model Workshop

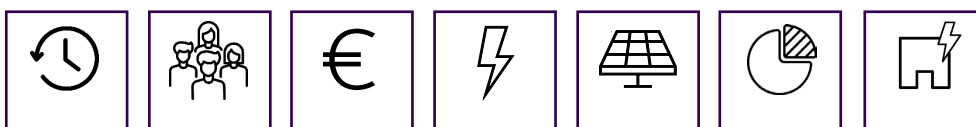
The workshop *Financial Model* focuses on developing and refining the financial planning required to support the energy community's projects, such as PV installations. This workshop uses a hands-on, interactive approach similar to the Foundation, Strategy, and Timeline workshop, utilising **milestone cards** and **resource cards** to guide participants through the financial planning process. The milestone cards in this workshop represent the various projects to be financed (e.g., PV plants). In contrast, the resource cards cover key financial and operational inputs and outputs such as Time, Community, Money, Electricity, PV plants, Shares, and Buildings. The cards can be adapted and customised to suit the requirements.



## Milestone Cards



## Resource Cards



The workshop begins with a brainstorming session, where participants identify and categorise potential revenue streams and costs. Initial insights can be drawn from the cost and revenue structures outlined in the business plan, providing a foundation for discussion. The scope of income and cost categories are written on individual cards. The cards are placed around the relevant milestone on a table, as shown in Figure 17, creating a visual map of the financial flows required to achieve the project milestones.

As the workshop progresses, participants collaboratively build a comprehensive picture of the community's financial structure by organising these income and spending cards around each milestone. For financial values that rely on assumptions, stickers mark the cards, indicating areas where assumptions must be validated over time. Participants are encouraged to research these assumptions during and after the workshop and collect reliable data. Simulation tools can be used as a source for dimensioning the PV system with the amount of electricity produced and the possible use and distribution, more in D5.2 chapter 2.6 *Dimensioning*. Over time, these assumptions will be replaced with concrete figures, leading to an increasingly accurate financial plan. This information can then be transferred to a finance plan and the statutes.

The workshop is designed to be iterative, with follow-up sessions that revisit the financial model as more information is gathered, refining the costs and revenue projections for the energy community.

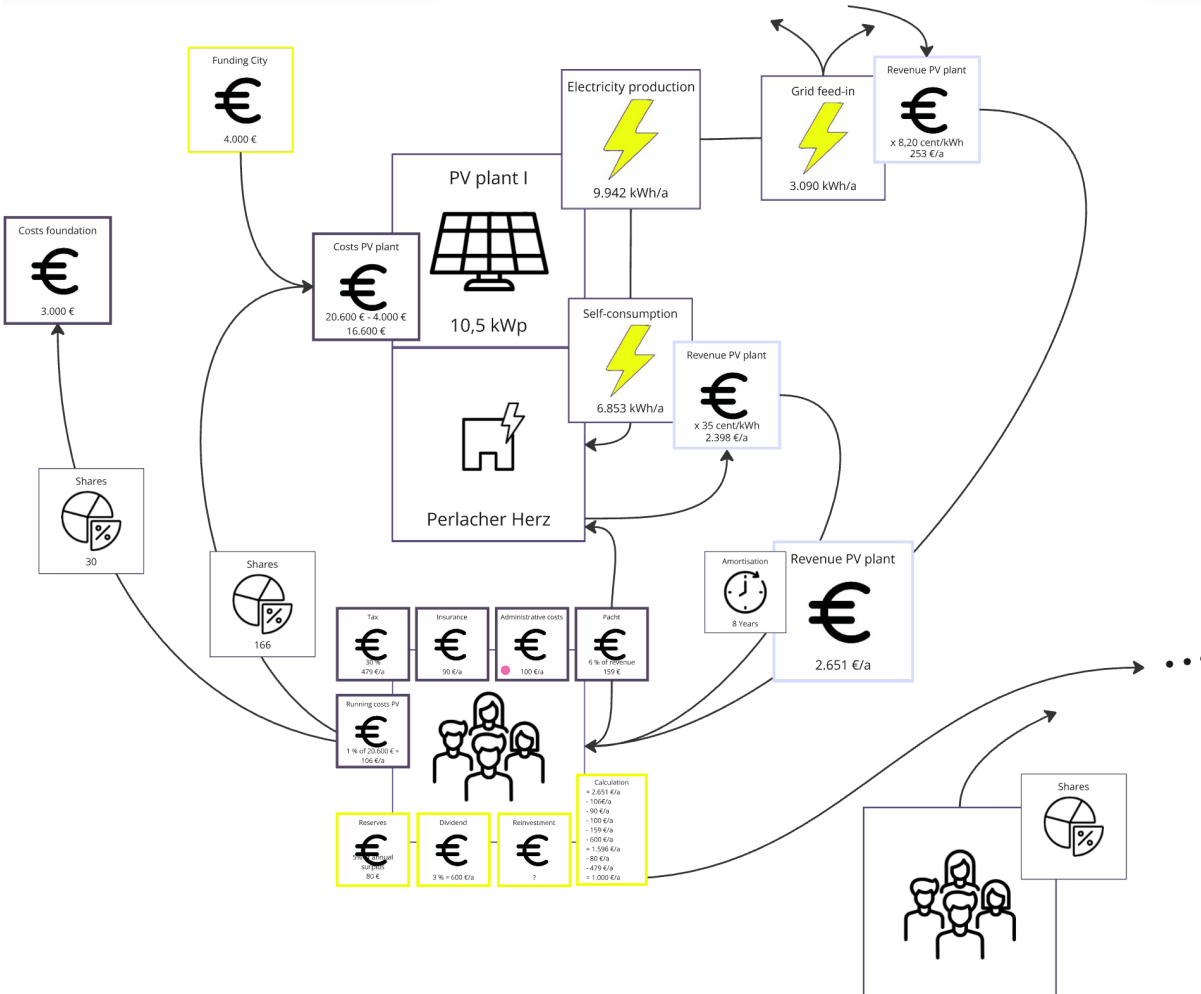


Figure 17 Financial model workshop results

Table 17 Schedule Workshop Financial Model

	Duration	Programm	Material
1	0:10	Welcome and introduction Input about the basics with the current status Collect questions on Post-Its for Q&A	Presentation
2	0:45	Project planning by collecting milestones (e.g. PV plants) Brainstorming costs and income of the milestones using resource cards. Emphasising data collection by research. Marking assumptions with stickers	Milestone cards Resource cards Pencils
3	0:10	Break	

4	0:45	Arranging the milestones and resources fills the space between with resource cards of operational costs and income. Connecting the streams. Emphasising data collection by research. Marking assumptions with stickers	Milestone cards Resource cards Pencils
5	0:10	View results, thanks and conclusion	
	2:00		

### Key Outcomes:

- ➔ Visualising and planning financial flows
- ➔ Interrelationships become visible
- ➔ Building a common understanding of the finances

#### 2.1.1 Statutes and Rules of Procedure Workshop

The workshop *Statutes and Rules of Procedure* focuses on developing and refining the legally binding documents essential for the governance and operation of the energy community. These documents define key structures such as decision-making processes, roles, and responsibilities, ensuring the community operates within a clear legal framework. Given the complexity and importance of these topics, the workshop is designed to foster active participation while maintaining a structured, legally informed approach.

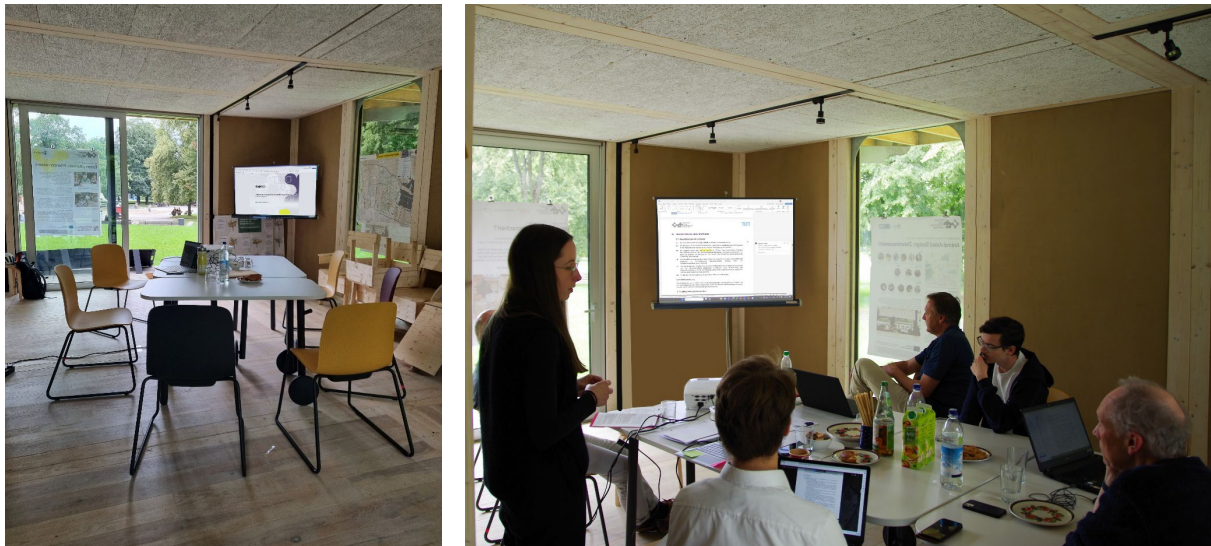
As a foundation, the governance structure provided in Deliverable *D5.2: Development of an energy community: design, governance, and business model* serves as a key resource. The governance framework can be presented and discussed at the beginning of the workshop. The introduction gives participants an overview, setting the stage for in-depth discussions and decisions. The governance structure is a valuable reference throughout the workshop, ensuring the legal structure aligns with the community's governance principles.

The workshop is conducted over multiple sessions, each focusing on specific chapters/ paragraphs of a provided draft document of statutes or rules of procedure. The German document from the NEB Energy Community on the project's website or other already established energy communities can be used as a draft. Participants are encouraged to annotate the document in advance, either digitally or on paper, bringing their suggestions and potential revisions to the session. This pre-work ensures that discussions are focused and that all participants familiarise themselves with the material in advance.

The annotated draft is reviewed step-by-step and interactive during the workshop. Live editing uses a shared document platform, allowing changes to be made in real-time as participants discuss and decide on adjustments. This method fosters a collaborative environment where everyone's contributions are visible, and the document evolves

dynamically based on the group's input. Questions, uncertainties and decision-making processes are collected as comments in the document.

Participants can form task forces between workshop sessions to address complex legal questions or uncertainties. These small groups research specific issues or sections of the statutes in-depth and report their findings during the following workshop.



*Figure 18 Live Editing Workshop Statutes and Rules of Procedure*

A guest speaker or legal expert familiar with energy communities' governance is invited to provide insights into more complex legal matters. This expert holds a brief Q&A session, clarifying legal provisions and helping participants make informed decisions about the statutes.

By the end of each session, decisions are made on revisions, and unresolved issues are noted for further discussion. The iterative structure of the workshop allows for a thorough and collaborative approach to finalising the community's foundational documents.

These documents form the foundation for the **founding assembly**, during which the founding documents are approved and signed. Following this, they must be submitted to a cooperative audit association for review; at this point, the organisation is considered a pre-cooperative. However, during this period, it does not yet have the legal protections of a fully registered cooperative. Once the review is completed, the cooperative can be officially registered. (DGRV, n.D.)

Table 18 Schedule Workshop Statutes and Rules of Procedure

Duration	Programm	Material
1 0:10	Welcome, and introduction: Presentation of news, current status and today's goal with several paragraphs	
2 0:50	Interactive review of the draft statutes Note of questions and uncertainties Discussions on adjustments and decisions with notes Review of decisions within the law (GenG) Live editing of the draft document	Draft statutes digital and prints, Beamer, Law (GenG) digital
3 0:10	Break	
4 0:40	Interactive review of the draft statutes Note of questions and uncertainties Discussions on adjustments and decisions with notes Review of decisions within the law (GenG) Live editing of the draft document	Draft statutes digital and prints, Beamer, Law (GenG) digital
5 0:10	Thanks and conclusion	
2:00		

### Key Outcomes:

- ➔ The fundamental structure is developed together and customised to suit the requirements
- ➔ All form an understanding of the fundamentals
- ➔ Emphasises the importance of clear, legally informed founding documents for decision-making and roles
- ➔ Sense of shared ownership and ensuring all voices are considered in key decisions

## 2.2 IMPLEMENTATION

The Implementation chapter outlines the formal steps necessary to legally establish and operationalise the energy community through a cooperative model. Building on the previous chapter, where co-creative workshops developed the essential documents and frameworks, this section documents the process of translating these outcomes into the legal foundation of the cooperative. The workshops provided the foundation for creating statutes, business plans, and governance structures, which are now formally approved and enacted during the implementation phase.

This chapter provides a detailed guide based on the experiences and procedures followed during the foundation of the NEBourhoods Energy Community. It highlights the legal, administrative, and organisational tasks required to ensure the cooperative's successful registration and ongoing operations. From preparing essential documents to conducting the

foundation assembly and fulfilling the requirements of the foundation audit, this chapter serves as a resource and guide for those looking to replicate the energy community model. Each step ensures transparency, inclusivity, and compliance with legal frameworks and cooperative governance principles.

### 2.2.1 Foundation Assembly

The Foundation Assembly is a crucial step in establishing a cooperative, marking the formal beginning of the energy community. It involves the approval and signing of foundational documents, the election of key governing bodies, and decisions regarding membership in an audit association. This chapter outlines the general procedure for conducting a foundation assembly, drawing from standard practices and the experiences gained from the NEB Energy Community.

#### Preparation for the Assembly

Prior to the foundation assembly, several key tasks must be completed:

- **Invitation to Members:** All founding members should be formally invited to the assembly. This can be done through formal written invitations or other agreed-upon methods and must be done at least two weeks in advance. A form for a letter of attorney can be attached to the invitation, enabling those unable to attend the assembly in person to be represented. A letter of attorney form template will be available for download on the project's website.
- **Preparation of Documents:** The essential founding documents, including the statutes and the business plan, must be drafted and ready for presentation during the assembly. These are the results of the co-creative workshops.
- **Selection of an Audit Association:** The cooperative must select an appropriate audit association to conduct the mandatory foundation audit.
- **Considerations for board members:** The founding members must elect a board of directors and a supervisory board. Therefore, interested parties who would like to stand for election are needed. The governance structure workshop can prepare for this.

#### Conducting the Assembly

The foundation assembly can be divided into several key steps. A protocol template can serve as a guide. A reference protocol from the NEB Energy Community Assembly can be found on the project's website. The procedure involves the following:

1. **Opening and Election of Roles:** The assembly begins with the election of a chairperson and a recorder. These individuals are responsible for overseeing the assembly and documenting the proceedings. The chairperson typically opens the meeting by explaining the purpose of the assembly and presenting the agenda.
2. **Presentation of the Business Plan and Statutes:** The chairperson, or a designated representative, presents the business plan and the cooperative statutes to the founding members. The statutes are the legal foundation of the cooperative, outlining



its structure, purpose, and governance. The statutes must comply with the law and are monitored by an auditing association afterwards.

3. **Approval of the Founding Documents:** After the presentation, the members discuss and approve the statutes. Once approved, the statutes are signed by at least three founding members, at which point the cooperative enters its pre-cooperative status. This is the first legal step toward complete registration.
4. **Election of the Board Members:** The foundation assembly also serves as the platform for electing the cooperative's key governing bodies. The members vote to elect the board of management and, if required, the supervisory board. The supervisory board is required from a size of the cooperative of 20 members. Who can vote and how elections are performed is defined in the statutes.
  - 4.1. **Election of the Supervisory Board:** The general assembly elects the supervisory board if required. All founding members participate in the election, with the supervisory board typically consisting of at least three individuals. The elected members of the supervisory board are publicly announced afterwards.
  - 4.2. **Supervisory Board Meeting:** Following the election of the supervisory board, a private supervisory board meeting takes place. All non-board members are asked to leave the room during this meeting. The supervisory board is responsible for electing the board of management. Once the supervisory board concludes its meeting, the general assembly is reconvened, and the results of its decisions are presented to the assembly.
5. **First General Assembly:** Immediately following the foundation assembly, the cooperative may enter the first general assembly. During this session, important administrative matters are addressed, including membership in the chosen audit association and required documents for the following founding audit.

### Required Documents for the Foundation Assembly

To formalise the foundation of the cooperative, the following documents are typically required:

- Invitation with letter of attorney
- Presentation for introduction
- Statute
- Protocols
  - Protocol for foundation assembly with the first general assembly
  - Protocol for a supervisory board meeting

The foundation assembly is the formal event that establishes the cooperative as a legal entity. The cooperative can move toward registration and the entire operation by ensuring all legal requirements are met, selecting an appropriate audit association, and electing the necessary governing bodies. It is critical that this process is well-documented and that all founding members are actively involved in the decision-making, ensuring transparency and alignment with the cooperative's mission.



*Figure 19 Signing the founding documents, statutes and protocols*

### Key Outcomes:

- ➔ Early preparation of documents and clear communication with founding members is essential. However, flexibility in timing and scheduling is equally important to accommodate different stakeholders' availability and ensure full participation.
- ➔ Having legal experts available during the preparation of statutes and the audit process helps to avoid misunderstandings and ensures compliance with cooperative laws.
- ➔ Actively involving community members in developing governance structures and documents through workshops fostered a sense of ownership and alignment with the cooperative's values. This co-creation approach proved effective in generating commitment but also required significant time and coordination.
- ➔ Clear and transparent documentation of all decisions made during the foundation process was crucial to maintaining trust within the community and ensuring a smooth process.
- ➔ Finding and selecting the proper audit association required careful consideration, as different associations had varying expertise, fees, and processes. It was important to align the cooperative's needs with the auditors' capacity and specialisation.

### 2.2.2 Foundation Audit

Before a cooperative can be officially registered, it must undergo an audit by a cooperative audit association. Selecting a suitable audit association should be a collaborative decision with the cooperative's members. To facilitate this process, a list of criteria can be developed to define the specific requirements and expectations for the audit. Several associations can be contacted based on these criteria, allowing the cooperative to make an informed decision. Essential considerations during this selection process include:

- **Location:** Should the audit association be local, offering a direct connection to the region, or is remote contact with a more distant association acceptable?

- **Expertise:** What specific expertise is required for the audit or consultation? For instance, does the cooperative need energy law, economics, or financial planning expertise?
- **Costs:** What is the cooperative's audit fee and membership contribution budget? The fee range can be free or cost several thousand euros (BusinessPilot, n.D.).

Once a suitable audit association is selected, the approved and signed documents from the founding assembly and any additional required documents are compiled and prepared. It is important to consult the chosen audit association for a specific list of required documents, as these can vary depending on the association. Below is an example of the documents needed from the foundation of the NEB Energy Community. They can be used as a reference but should be adjusted to specific audit needs. Reference documents and templates can be found on the project's website.

#### Required Documents for the Foundation Audit:

- ☐ Statutes of the cooperative signed by the founding members
- ☐ Protocol of the founding assembly with the first general assembly
- ☐ Protocols of the management and supervisory board meetings of the last 12 months
- ☐ Protocol of the first supervisory board meeting - only for cooperatives with more than 20 members
- ☐ List of attendees of the founding assembly
- ☐ Curriculum vitae (CV) of the Management Board and Supervisory Board members signed
- ☐ Recent credit report (Schufa) of all Management Board members
- ☐ Contact details of the board members
- ☐ List of members (name and surname, address, number of shares)
- ☐ Declaration of accession to the cooperative association
- ☐ Description of the business concept (1-3 pages)
- ☐ Finance plan multi-year (20 years) with net assets, financial position and performance
- ☐ Economic efficiency calculation of the systems (PV simulation, supplier)
- ☐ Declaration of completeness for the foundation audit
- ☐ Declaration of commitment about provision by the Management Board and Supervisory Board
- ☐ Proof of company from the Chamber of Industry and Commerce (IHK)
- ☐ Contract documents available (purchase, rental, supply, employment contracts contracts)
- ☐ Available expert assessments, statements and authorisations

A structured approach ensures that all necessary documents are ready for submission, allowing the cooperative to proceed smoothly through the audit and registration process.

Once all the required documents for the foundation audit have been submitted, the audit process typically takes a few months. Several important steps can already be initiated during this waiting period to prepare the energy community for full operation. Opening a bank account, as some banks offer accounts for pre-cooperatives, is a priority. This account will serve as the basis for collecting funds by selling shares and issuing member loans. Simultaneously, marketing efforts should begin to attract new members and secure the necessary financing. It is also an ideal time to plan the first photovoltaic project, ensuring that all preparatory steps are in place once the cooperative is officially registered.

Significant investments, such as purchasing PV systems, should be postponed until after the legal registration of the cooperative to ensure legal protection. After registration, the cooperative can proceed with the formal investment and move toward full operation. The upcoming chapter is an inspiration for marketing and events to build the member base, which is crucial for the success and growth of the energy community.

### 2.2.3 Events

In addition to the co-creative workshops aimed at implementing an energy community, engaging participants who will eventually become members is crucial. These members are primarily recruited through marketing efforts and a solid local presence within the neighbourhood. Visual communication guidelines, including digital and print media, can be found in Chapter 2.5 *Marketing and Outreach* of Deliverable D5.2 *Development of an Energy Community: Design, Governance, and Business Model*. Events should be tailored to the target audience and local context, with various formats available to attract diverse participants. These events can be held in person, hybrid formats, or online. Below is a list of potential event formats:

- Workshops
- Information events
- Presentations
- Excursions
- Participation in local events

Conversation starters can help connect with potential members and facilitate communication and engagement during events. An example of such a tool is a **portable solar bag**. This device can be easily brought to events, demonstrating how solar energy can be generated on-site. The solar bag visualises energy production through a display or app and can be paired with a portable battery to store the generated electricity. This flexibility allows not only energy generation but also showcasing energy consumption. Figure 20 illustrates a solar bag. The speed at which the battery charges depends on the capacity and size of the solar panel (measured in watts), and the duration for which electrical devices can be powered depends on the battery's capacity (measured in watt-hours) and its maximum output (in watts).



For example, the solar panel shown in Figure 20 can produce up to 200 watts of power under optimal conditions, such as full sunlight and appropriate temperatures (Ugreen, n.D.). In the scenario illustrated in Figure 20, the panel generated up to 180 watts of electricity. A tested smartphone (Samsung S20) consumes around 5 watts while charging, and a camera (Sony Alpha 6000) requires approximately 13 watts.



*Figure 20 Solar bag (200W) with storage (680Wh)*

The solar bag can be used during workshops and information events to power local devices with solar energy, as demonstrated in Figure 21. This setup allows participants to see how much power can be produced by the sun and the effects of shading and weather conditions. They can also compare the energy production with the consumption of various devices.



*Figure 21 Solar bag with storage*



The solar bag can also be utilised in neighbourhood-specific events to initiate discussions with interested participants. One example is a **SolarCoffee Event**, where the solar bag generates electricity and stores it in the battery, which is then used to power a coffee machine, as demonstrated in Figure 22. This flexible tool allows organisers to move between locations and illustrate the potential of solar energy. Sharing coffee provides a relaxed environment for engaging with community members and explaining the concept of the energy community.

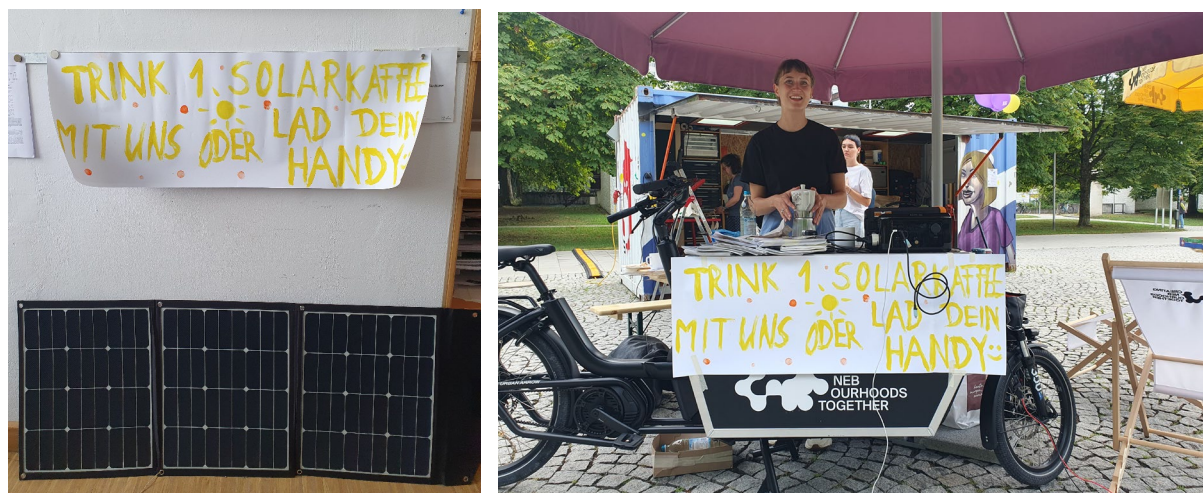


Figure 22 SolarCoffee Event

Another creative option is a **SolarIce Event**, where the solar bag powers a cooler to keep ice cream cold. The solar-cooled ice cream makes an ideal complement to a sunny day, turning the heat problem into a solution. Pre-cooled ice packs can be used in addition to the solar cooler, ensuring the ice cream remains solid throughout the event. This type of event is particularly effective for engaging families, as parents can discuss the energy community while their children enjoy ice cream.



Figure 23 SolarIce Event



In addition to information events, excursions can be valuable for attracting potential members. One option is to organise visits to existing energy installations, such as a **SolarWalk** through the neighbourhood featuring a tour of local photovoltaic systems. These excursions allow participants to see firsthand how solar energy is implemented and provide insights into the processes involved. Or specific innovative projects are toured. An example of an inspiring project is the PV installation at Messe München, illustrated in Figure 24. Installed by the Bavarian Association for the Promotion of Solar Energy (Solarnenergieförderverein Bayern e.V.) in 1997, this rooftop system was once the largest of its kind globally and remains a milestone in photovoltaic history due to its successful operation (SeV Bayern, n. D.).



*Figure 24 Visit to PV installation at Messe München*

The events outlined in this chapter are designed to inspire and attract new members for and during the implementation phase of an energy community. These examples are intended to spark ideas and encourage further initiatives. Beyond these formats, many other ways exist to engage with the community and raise awareness about renewable energy and local participation.

### 3 CONCLUSION

The NEBourhoods *Energiegemeinschaften München eG* in Munich-NPL represents a decentralised, community-driven energy model that balances social cohesion with technological innovation. Through an inclusive co-creation process and collaborative decision-making, the energy community has empowered local citizens to actively shape their energy future, aligning with the New European Bauhaus (NEB) principles and prioritising sustainability, inclusion, and beauty in urban development. The community was founded not only to address climate challenges but also to strengthen the social fabric of the neighbourhood. By involving a diverse group of stakeholders - residents, local businesses, creatives, and cultural actors - the energy community fosters a sense of belonging and ownership among its members.

The co-creation workshops have proven to be successful and of added value, with many lessons learned already incorporated into the presented methods and models. These workshops enabled local participation and ensured that the energy community's design reflected the unique needs and aspirations of the neighbourhood's residents. It became clear that providing more templates and guidelines during the co-creation process was both helpful and efficient in keeping participants focused and on schedule. The templates not only supported the process but also facilitated deeper engagement with the topics. Rather than hindering co-creation, these tools accelerated the identification of relevant and irrelevant areas, allowing for faster adjustments to meet the community's specific needs. Key areas such as governance, communication, financial planning, and community engagement were tackled in a step-by-step methodology, providing practical tools for replication in other neighbourhoods. However, while the workshops were effective, recruiting active members has proven to be a continuous challenge that requires ongoing effort.

Building the energy community was labour-intensive and demanded a lot of resources, especially during the foundation process. Parallel tasks, such as growing the community through marketing efforts, implementing energy projects with proper dimensioning, and conducting co-creative workshops, needed careful management to ensure success. Coordination was essential for balancing these parallel activities effectively. Additionally, founding a cooperative was complex and time-consuming, requiring substantial legal, financial, and operational input. The lesson learned from this experience is that instead of creating new cooperatives from scratch, it may be more practical to consolidate efforts by linking new initiatives to existing energy communities.

This deliverable provides a practical guide to founding and implementing an energy community, from the initial idea through to the foundation audit. However, there is still a need for comprehensive support, such as a centralised coordination office, to offer templates, guidance, and expert assistance to further streamline the process and reduce the complexities of establishing new energy communities.

### 3.1 KPIS ACHIEVED TO DATE

#### **Cultivate an inclusive, empowering and resilient urban innovation landscape:**

KPI 1.1: 16 Co-creation workshops of NEBourhoods for NPL

KPI 1.2: 36 stakeholders from NPL involved in Co-creation workshops

KPI 1.3: Collaboration with four creatives on the stakeholder analysis, communication strategy and communication tool.

#### **Involve entrepreneurship facilitation in urban development:**

KPI 2.1: Through the TechChallenge format of UnternehmerTUM, 11 teams worked on sustainable business ideas, resulting in the founding of 1 start-up.

KPI 2.2: We work with the start-up Otter-Energy-Trading on PV projects also within the test bed in NPL/Perlach Süd.

KPI 2.3: The Energy Community is made incubator ready to bring their service to the market

#### **Co-create diverse cutting-edge pilots in NPL:**

KPI 3.1: one demonstrator in the form of a PV plant is currently in development.

KPI 3.2: one design concept and one roadmap created for use and further development will be replicated in another district (Harthof) in Munich.

KPI 3.3: one local energy community has been initiated within NPL/existing social networks and realigned themselves according to NEB principles

#### **Deliver NEBourhoods – inspiring and replicable practices for sustainable urban development:**

KPI 4.1: Participated and organised one relevant event (Webforum at the Bauzentrum).

## 4 OUTLOOK

The NEBourhoods *Energiegemeinschaften München eG* is prepared for continued growth and expansion, with a clear potential to serve as a replicable model for other neighbourhoods within Munich and beyond. While the energy community has its roots in Munich-NPL, its structure and processes were designed to be flexible and scalable. This makes it not only possible to replicate but also to integrate other initiatives into the cooperation. The pluralised and generic name *Energiegemeinschaften München* (Energy Communities Munich) represents the collective concept of the community. It also reflects the collaboration between two initiatives, *Energiegemeinschaft München-NPL* (Energy Communities Munich-NPL) and the *Academic Energy Cooperative* at TUM. This model encourages active participation and enables citizens to join existing initiatives or develop their own energy projects in other neighbourhoods, drawing on the resources of the existing communities and creating their own identity.

The replication of the Munich-NPL model has already begun with applying similar methods in the Munich neighbourhood Harthof, supported by a parallel research project (ASCEND). This project will further investigate how the co-creation model can be adapted to the specific needs of other districts. Further development will continue with a following research project (GENDER4Power), which focuses on improving energy efficiency in energy-poor households through a gender-responsive, people-centred approach. GENDER4Power promotes the involvement of marginalized groups in decision-making and aims to enhance public acceptance and community trust, providing policy insights for scaling these solutions across Europe.

Additionally, the *Energiegemeinschaften München eG* will continue to collaborate with educational institutions to integrate new teaching formats that address real-world challenges faced by the energy community. By embedding these challenges into university curricula, the cooperative supports the development of innovative, practical solutions while providing students with hands-on experience in the energy sector.

A significant future innovation is the implementation of energy trading, which is currently in development in collaboration with the start-up *Otter-Energy-Trading*. This system will allow the cooperative to maximise the economic viability of its photovoltaic installations by enabling the trade of surplus energy within the community. This is particularly important for cases where local consumption is lower than production, ensuring that the energy produced is utilised effectively and financial returns are optimised. The introduction of energy trading will be crucial for making the energy community economically sustainable in the long term and serve as a replicable model for other districts facing similar challenges with renewable energy. It marks the beginning of a shift towards thinking about local energy solutions that benefit the neighbourhood directly.

The success of the Munich-NPL pilot shows that the co-creation approach is both flexible and effective, making it a model for urban areas across Europe seeking to decentralise energy systems and involve citizens in climate-neutral initiatives. This document provides the necessary templates and insights for cities looking to replicate this model, offering practical tools that address the technical and social challenges of building an energy community.

## 5 SOURCES

- BusinessPilot. (n.D.). Gründerplattform: *Genossenschaft gründen Schritt für Schritt* [Founders' platform: Setting up a cooperative step by step]. <https://gruenderplattform.de/rechtsformen/genossenschaft-gruenden>
- DGRV. (n.D.). *Before registration in the register* [Vor der Eintragung in das Register]. Deutscher Genossenschafts- und Raiffeisenverband e.V.. <https://genossenschaften.de/de/vor-der-eintragung-in-das-genossenschaftsregister/>
- Osterwalder, A. & Pigneur, Y. (2011). *Business model generation: Ein Handbuch für Visionäre, Spielveränderer und Herausforderer* [Business model generation: Ein Handbuch für Visionäre, Spielveränderer und Herausforderer]. Campus Verlag.
- SeV Bayern. (n.D.). *Bavarian Association for the Promotion of Solar Energy*. <https://www.sev-bayern.de/beispiel-seite/>
- Sinek, S. (2009). *How great leaders inspire action* [Video]. TED Talks. [https://www.ted.com/talks/simon\\_sinek\\_how\\_great\\_leaders\\_inspire\\_action/transcript?language=de](https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action/transcript?language=de)
- Strategyzer AG. (n.D.). *Business Model Canvas – Download the official Template*. [www.strategyzer.com/library/the-business-model-canvas](http://www.strategyzer.com/library/the-business-model-canvas)
- SurveyMonkey Inc.. (n.D.). *SurveyMonkey: The World's Most Popular Survey Platform*. <https://www.surveymonkey.com/>
- Ugreen. (n.D.). *UGREEN 680 Wh 600 W Tragbarer SolarGenerator + Gratis SolarPanel* [UGREEN 680 Wh 600 W Tragbarer SolarGenerator + Gratis SolarPanel]. <https://de.ugreen.com/collections/power-station/products/ugreen-600w-680wh-tragbarer-solargenerator-100w-solarpanel?variant=46655459688791>



## 6 APPENDIX

Further reference documents, such as the NEBourhoods Energy Community's founding documents, will be available for download on the project's website, [www.nebourhoods.de](http://www.nebourhoods.de) and [stadt.muenchen.de/infos/nebourhoods-neuperlach](http://stadt.muenchen.de/infos/nebourhoods-neuperlach) at the end of the project duration.

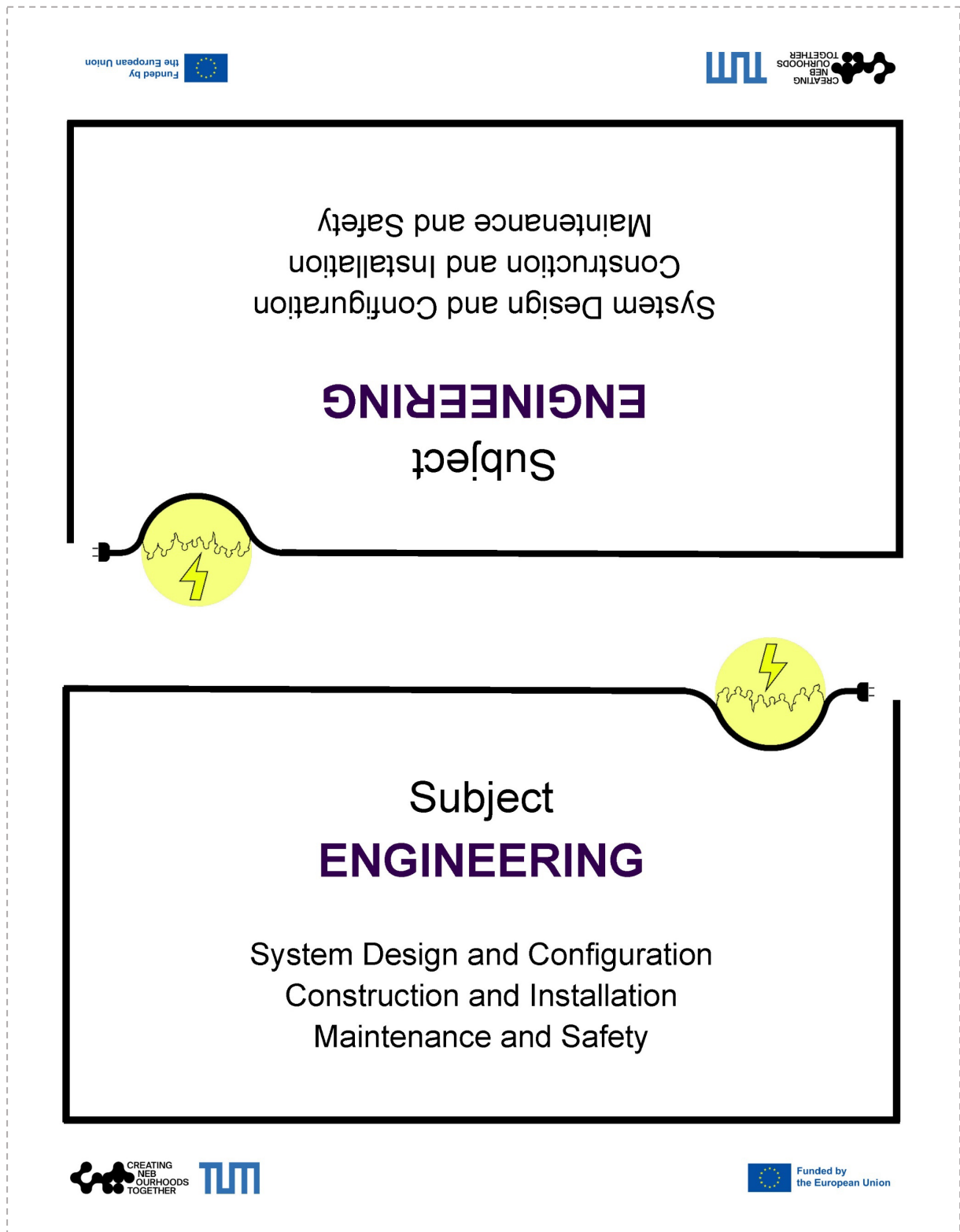
### 6.1 WORKSHOP MATERIALS

The following chapter provides templates for the materials used for the workshops. They can serve as a basis for printing or can be used in an online format. The poster templates should be printed in A1 or A0 format. All other templates work starting from A4 format. The following pages contain templates for:

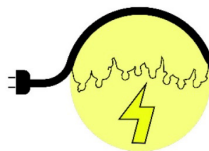
- **WORKSHOP SUBJECT FIELDS AND TIMELINE**  
Subject signs
- **WORKSHOP FOUNDATION, STRATEGY AND TIMELINE**  
Milestone and Resource Cards
- **WORKSHOP COMMUNICATION**  
Poster “Belly feeling”(Golden Circle)
- **WORKSHOP COMMUNICATION**  
Poster Communication priorities grid
- **WORKSHOP GOVERNANCE STRUCTURE**  
Resource and Board Member Cards
- **WORKSHOP BUSINESS MODEL**  
Poster Business Model Canvas  
Pre-filled Business Model Canvas
- **WORKSHOP FINANCIAL MODEL**  
Milestone and Resource Cards

## WORKSHOP SUBJECT FIELDS AND TIMELINE

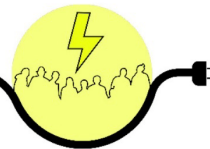
### Subject signs



Subject  
**MARKETING & PUBLIC RELATIONS**  
Branding and Communication  
Member Recruitment and Engagement  
Public Outreach and Media

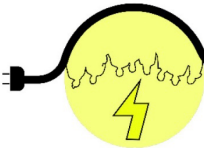


Subject  
**MARKETING & PUBLIC RELATIONS**  
Branding and Communication  
Member Recruitment and Engagement  
Public Outreach and Media



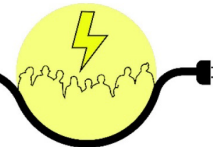
Compliance and Risk Management  
Contractual Agreements and Documentation  
Regulatory and Legal Affairs

## Subject LEGAL

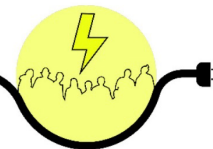
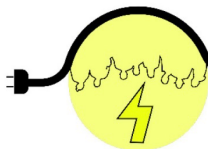


## Subject LEGAL

Compliance and Risk Management  
Contractual Agreements and Documentation  
Regulatory and Legal Affairs



Subject  
**EDUCATION, RESEARCH &  
DEVELOPMENT**  
Knowledge Transfer and Capacity Building  
Research and Innovation  
Strategic Development and Implementation



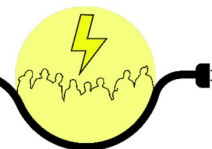
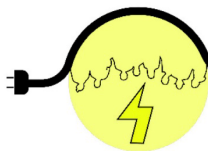
Subject  
**EDUCATION, RESEARCH &  
DEVELOPMENT**

Knowledge Transfer and Capacity Building  
Research and Innovation  
Strategic Development and Implementation



Recruiting, Initiation and Planning  
Execution and Management  
Monitoring and Evaluation

## Subject PROJECTS



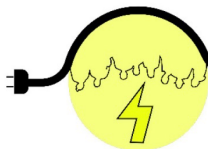
## Subject PROJECTS

Recruiting, Initiation and Planning  
Execution and Management  
Monitoring and Evaluation

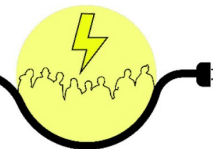




Subject  
**MANAGEMENT & ORGANISATION**  
Financial Planning and Management  
Administrative and Operational Coordination  
Partnership and Stakeholder Relations



Subject  
**MANAGEMENT & ORGANISATION**  
Financial Planning and Management  
Administrative and Operational Coordination  
Partnership and Stakeholder Relations

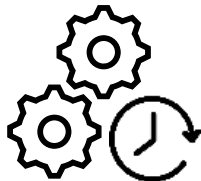



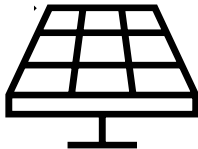
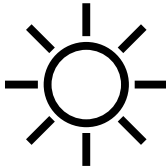
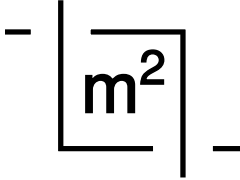


## WORKSHOP FOUNDATION, STRATEGY AND TIMELINE

### Milestone and Resource Cards

Community	Foundation
Financing	PV-Plant



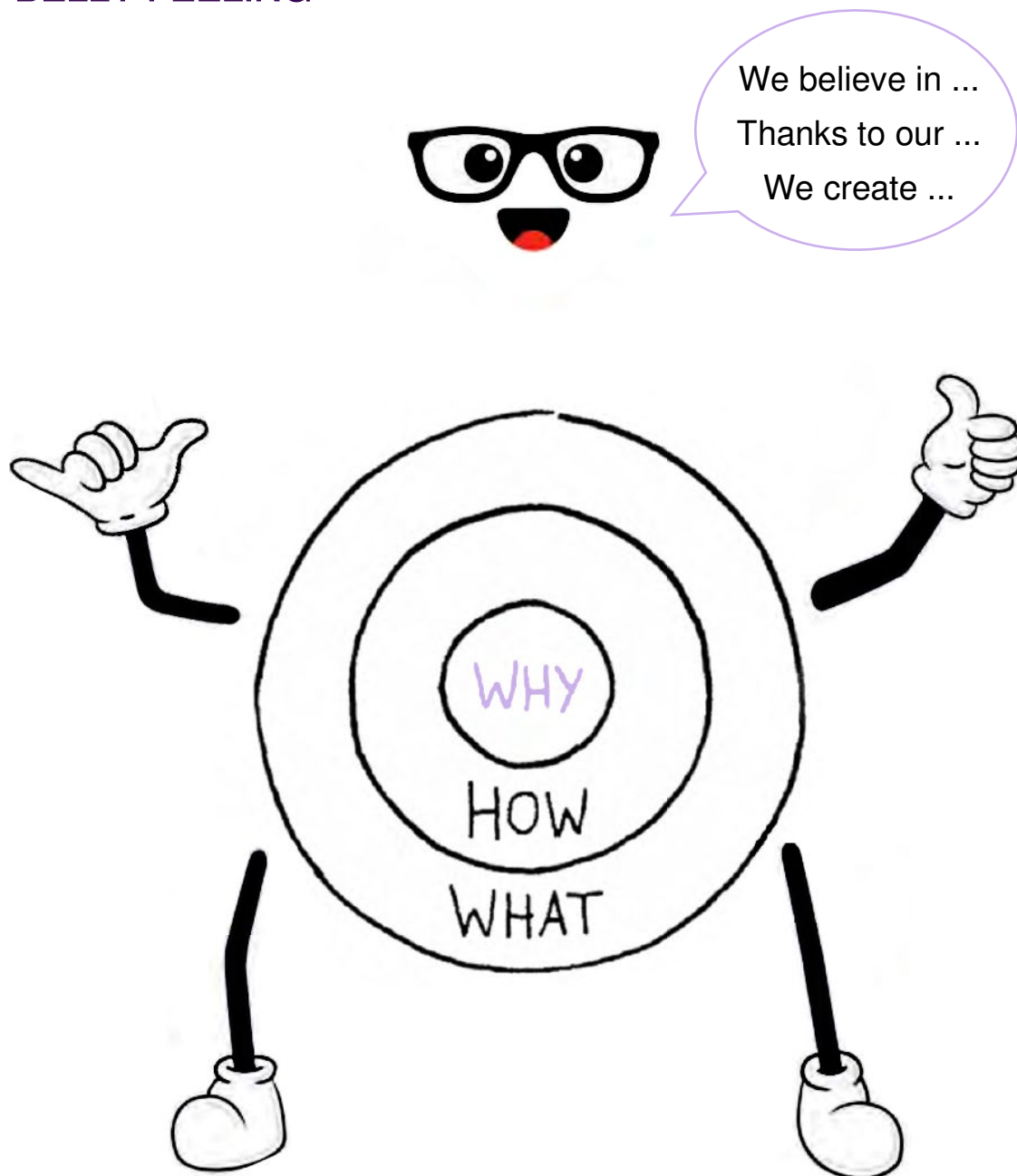
			
			



## WORKSHOP COMMUNICATION

Poster "Belly feeling"(Golden Circle) (© NEBourhoods / Haarich & Schelbert)

### BELLY FEELING



## WORKSHOP COMMUNICATION

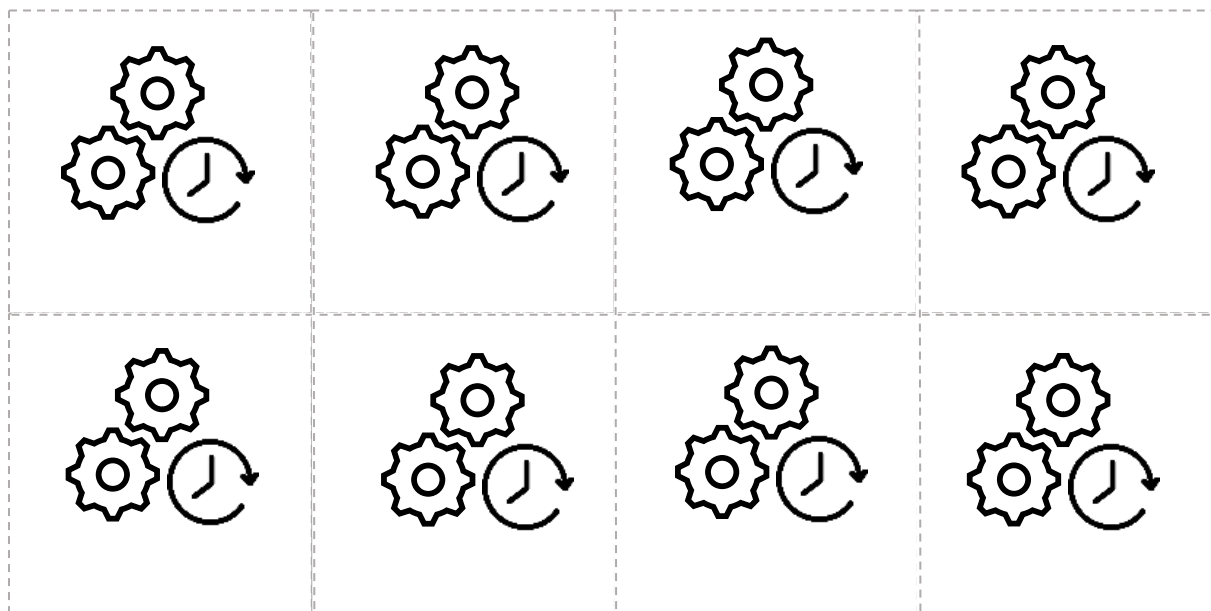
Poster Communication priorities grid (© NEBourhoods / Haarich & Schelbert)

### COMMUNICATION PRIORITY GRID

Target group	Needs	Our promises	Channels and tools

## WORKSHOP GOVERNANCE STRUCTURE

### Resource and Board Member Cards






## WORKSHOP BUSINESS MODEL

### Poster Business Model Canvas

**BUSINESS MODEL CANVAS**

<b>Key Partnerships</b>	<b>Key Activities</b>	<b>Value Propositions</b>	<b>Customer Relationships</b>	<b>Customer Segments</b>
	<b>Key Ressources</b>		<b>Channels</b>	
<b>Cost Structure</b>			<b>Revenue Stream</b>	
<b>Team</b>			<b>Values</b>	





## WORKSHOP BUSINESS MODEL

### Reference pre-filled Business Model Canvas

<b>Key-Partner</b> <ul style="list-style-type: none"><li>- Active members</li><li>- Investors, donors</li><li>- Providers of surface area</li><li>- Technical partners</li><li>- Electricity grid operators</li><li>- Partners and cooperations</li><li>- Networks</li><li>- Authorities/ Government</li><li>- Audit association</li></ul>	<b>Key activities</b> <ul style="list-style-type: none"><li>- Foundation and operation of the energy community</li><li>- Acquisition of members, surfaces, marketing</li><li>- Planning, construction and operation of renewable energy projects</li><li>- Management of energy production, distribution, consumption and storage</li><li>- Documentation, monitoring and continuous optimisation</li><li>- Continues development and innovation</li><li>- Social inclusion</li></ul>	<b>Value proposition</b> <ul style="list-style-type: none"><li>- Supply of low-cost, environmentally friendly electricity from local production</li><li>- Dividend</li><li>- Promotion of energy autonomy through local energy production and use</li><li>- Focus on social benefits through the community</li><li>- Social inclusion</li><li>- Educational opportunities</li><li>- Promotion of innovation and development</li><li>- Knowledge acquisition</li></ul>	<b>Customer relations</b> <ul style="list-style-type: none"><li>- Clear governance structure with responsibilities and tasks</li><li>- Open opportunities for participation in social inclusion</li><li>- Active involvement of members through regular meetings and decision-making processes</li><li>- Active internal exchange and transparency</li><li>- Publication of documents, templates and contracts with explanations</li><li>- Transparent and regular communication about current developments, energy production and use</li><li>- Reliable customer service for technical support and emergency response</li></ul>	<b>Customer segments</b> <ul style="list-style-type: none"><li>- Active members, investors from different social and financial backgrounds</li><li>- Households in Munich-NPL: different sizes and income classes</li><li>- Local small and medium-sized businesses interested in sustainable energy</li><li>- Public institutions: Schools, municipal buildings- Social institutions</li><li>- Building owners</li></ul>
	<b>Key resources</b> <ul style="list-style-type: none"><li>- Committed members and their expertise</li><li>- Financial resources</li><li>- Space resources</li><li>- Technical resources</li><li>- Know-how and innovation</li></ul>		<b>Channels</b> <ul style="list-style-type: none"><li>- Networks</li><li>- Information events and workshops (hybrid)</li><li>- Digital platform with access to information, data, documents</li><li>- Print publication</li><li>- Communication channel intern and extern (phone, mail, chat)</li><li>- Management Software</li><li>- Local print and digital media</li></ul>	
<b>Costs</b> <ul style="list-style-type: none"><li>- Foundation and auditing costs</li><li>- Acquisition costs for technology</li><li>- Repairs</li><li>- Ongoing operating costs</li><li>- Dividends, interest</li><li>- Lease fees</li><li>- Legal and internal reserves</li><li>- Reinvestment</li></ul>		<b>Sources of income</b> <ul style="list-style-type: none"><li>- Sale of energy</li><li>- Sale of surplus energy to the grid or customers</li><li>- Shares invested by members and investors</li><li>- Subordinated loans, credits</li><li>- Subsidies</li><li>- Donations</li><li>- Services and income from cooperation</li><li>- Research funds and grants for further development</li></ul>		
<b>Team</b> <ul style="list-style-type: none"><li>- Management and finance team</li><li>- Marketing team</li><li>- Legal team</li><li>- Engineering teams</li><li>- Development team</li><li>- Management, supervisory board and initiatives</li></ul>		<b>Values</b> <ul style="list-style-type: none"><li>- Sustainability: Focus on renewable energy sources, CO2 reduction and promotion of the energy transition</li><li>- Community: Strengthening local cohesion and promoting social integration</li><li>- Transparency: Public structure and models, open communication about the energy community, finances and decision-making</li><li>- Co-creation: members have a say in important decisions</li><li>- Education: Transferring knowledge (renewable energies, energy transition)</li><li>- Innovation: Promotion and implementation of research and innovation, energy community as a living lab</li></ul>		

## WORKSHOP FINANCIAL MODEL

### Milestone and Resource Cards

PV-Plant I	PV-Plant II





## 6.2 SURVEY COMMUNICATION WORKSHOPS

The survey served as a basis for the development of the communication workshops. It was conducted using the online survey tool SurveyMonkey (SurveyMonkey Inc., n.D.). It can serve as a reference for creating a personalised communication strategy.

Written through the Workpackage WP2: *Co-Creating Transition* by the creatives Max Haarich and Mattias Schelbert. The original document is in German, and the following version is an English translation.

### QUESTIONNAIRE FOR MARKETING AN ENERGY COMMUNITY IN MUNICH-NPL

#### A survey commissioned by the City of Munich

Conducted by Mattias Schelbert and Max Haarich as part of the EU project "Creating NEBourhoods Together."

The responses will be evaluated anonymously and formulated into a guiding idea during a follow-up workshop. The results will be used solely for marketing the energy community.

Answering the questionnaire takes approximately 30 minutes, though this may vary from person to person. Try to answer the questions intuitively without overthinking. We do not place value on fully formulated sentences.

#### WHY THIS QUESTIONNAIRE?

Our goal is to create a compelling story as the foundation for marketing. With this, we aim to reach more people for the Neuperlach Energy Community. Only those who are positioned can communicate clearly.

We want to gain new supporters—people who have not heard about the energy community and curious and courageous people like us.

What do we tell them? How can we inspire and convince them? That's precisely what this is about.

#### Link to the EU project:

<https://www.nebourhoods.de/en/news/energiegemeinschaften/>

## QUESTIONS ABOUT IDENTITY

With the following questions, we aim to discover the identity of the Neuperlach Energy Community. To do this, we need to understand your thoughts, feelings, and goals because you are the Neuperlach Energy Community.

### ABOUT YOU

Let's start with you.

1. Please tell us why you are involved and what you bring to the table.

- How did you hear about the "Neuperlach Energy Community" project?

- 
- What are your most important questions at the start of the project?

- 
- What interests you about the "cooperative" topic, and what aspects would you like to learn more about?

- 
- What interests you about the topic of "energy supply," and what aspects would you like to learn more about?

- 
- Are there any specific experiences you would like to contribute?
- 

## MOTIVATION

What is your vision for the energy community? This is about your motivation and your reasons for being involved. Try not to think about monetary incentives but rather about ideal values. What could convince your neighbours, friends, and family to follow your lead? Try to focus your answer on one or a few aspects.

2. The Vision:

---

## BENEFITS

What specific problem does the energy community solve for potential members? What needs can you meet with your offer?

3. What are the concrete advantages of your offer? These can include both material and non-material benefits.

- Wishes/goals of potential members

- 
- Concerns/problems of potential members

- 
- Benefits for potential members
- 

## IDENTITY

What personality does the energy community have? Similar to people, organisations can be characterised by certain traits. So, imagine the Neuperlach Energy Community were a person like you and me – how would you describe this person?

4. Please choose a maximum of five terms that best characterise the energy community.

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Stable          | <input type="checkbox"/> Passionate    | <input type="checkbox"/> Visionary     |
| <input type="checkbox"/> Authentic       | <input type="checkbox"/> Cheerful      | <input type="checkbox"/> Patient       |
| <input type="checkbox"/> Strong          | <input type="checkbox"/> Compassionate | <input type="checkbox"/> Gifted        |
| <input type="checkbox"/> Colorful        | <input type="checkbox"/> Clever        | <input type="checkbox"/> Extreme       |
| <input type="checkbox"/> Fine            | <input type="checkbox"/> Fresh         | <input type="checkbox"/> Educated      |
| <input type="checkbox"/> Modern          | <input type="checkbox"/> Personal      | <input type="checkbox"/> Pioneering    |
| <input type="checkbox"/> Intuitive       | <input type="checkbox"/> Versatile     | <input type="checkbox"/> Imaginative   |
| <input type="checkbox"/> Appreciative    | <input type="checkbox"/> Revolutionary | <input type="checkbox"/> Down-to-earth |
| <input type="checkbox"/> Committed       | <input type="checkbox"/> Confident     | <input type="checkbox"/> Advising      |
| <input type="checkbox"/> Independent     | <input type="checkbox"/> Masterful     | <input type="checkbox"/> Professional  |
| <input type="checkbox"/> Self-sufficient | <input type="checkbox"/> Competent     | <input type="checkbox"/> Courageous    |
| <input type="checkbox"/> Loyal           | <input type="checkbox"/> Fascinating   | <input type="checkbox"/> Honest        |
| <input type="checkbox"/> Natural         | <input type="checkbox"/> Skillful      | <input type="checkbox"/> Wild          |
| <input type="checkbox"/> Supportive      | <input type="checkbox"/> Mysterious    | <input type="checkbox"/> Funny         |
| <input type="checkbox"/> Humorous        | <input type="checkbox"/> Optimistic    | <input type="checkbox"/> Bold          |
| <input type="checkbox"/> Trustworthy     | <input type="checkbox"/> Leading       | <input type="checkbox"/> Selfless      |
| <input type="checkbox"/> Reliable        | <input type="checkbox"/> Rebellious    | <input type="checkbox"/> Creative      |
| <input type="checkbox"/> Entertaining    | <input type="checkbox"/> Helpful       | <input type="checkbox"/> Intelligent   |
| <input type="checkbox"/> Hands-on        | <input type="checkbox"/> Incredible    | <input type="checkbox"/> Adventurous   |
| <input type="checkbox"/> Humble          | <input type="checkbox"/> Powerful      |  |

## POSITIONING

We want to communicate to the world shortly and concisely what the energy community stands for. For this, we need a compelling explanation. It's not about perfect wording; bullet points are sufficient. The important thing is that the argument flows from vision to impact.

5. Please complete the following lines:

- We believe in...  
(Our promise to the world. What we aim to offer or enable.)
-

- ...thanks to our...  
(How we intend to fulfil or implement our promise.)  

---
- ...we create...  
(What is the added value beyond purely economic outcomes?)  

---

## CORE IDEA

Strong brands can be described with a single word. The goal is not to find the most unusual word but the most characteristic one.

The association comes through its meaning. It doesn't matter if it would also apply to other organisations. Try to focus on one term. Even if you want to express many ideas, concentrate on the most important aspect.

### 6. Core Idea

---

## EXAMPLE

Do you know any examples of communication from companies, associations, or brands that have particularly stood out to you, positively or negatively?

7. Please briefly explain why.
- A slogan/claim that you particularly liked and remembered  

---
  - A slogan/claim that you remembered as particularly bad  

---

## MISSING ANYTHING?

Are there any other aspects or content related to the identity of the Neuperlach Energy Community that are important to you? Have we missed anything?

### 8. Feel free to write it here.

---

## Questionnaire for Marketing an Energy Community in Munich-NPL

### THANK YOU!

It's great that you're part of this and helping to shape the Neuperlach Energy Community! We will discuss the results together in a workshop.

We look forward to it!



### 6.3 MANIFEST COMMUNICATION WORKSHOPS

The manifesto is a result of the communication workshops. Written through the Workpackage WP2: *Co-Creating Transition* by the creatives Max Haarich and Mattias Schelbert. The original document is in German, and the following version is an English translation.

Manifest of

**ENERGIEGEMEINSCHAFTEN MÜNCHEN eG**

(Who we are and what we do)

#### **Ethos: Origin – Sustainable energy production in Neuperlach**

As residents of Neuperlach, we have a solid connection to our district.

We care about the development of the neighbourhood and the city, including energy production.

The current energy supply is often socially unjust and does not meet sustainability standards.

That's why we are taking the energy supply into our own hands.

There is a lot of untapped potential in the district and throughout the city.

On the one hand, through vacant spaces for solar installations.

On the other hand, through motivated people (companies, citizens).

#### **Ethos: Personality – Community**

We focus on collaboration within a community.

We are a platform for participation.

By Neuperlach residents for Munich.

We believe in the strength of a community, especially with a local connection.

We constantly exchange knowledge with others and learn from each other.

We are helpful and creative in finding solutions.

And knowledgeable as well as competent in implementation.

This makes us empowered actors.

#### **Logos: USP – Local independence**

We are independent.

We take the energy supply into our own hands.

In our neighbourhood and for the city.

Together, energy is produced, stored, and consumed locally through solar installations.

Unlike other energy companies, we are accountable only to ourselves.

We enable a fair energy transition.

#### **Pathos: Target group**

As a cooperative, we are a community in which everyone can participate.

The Energy Communities Munich eG is for everyone who wants to work together with others for a fair energy supply.

- Neuperlach residents who use their resources for others in the district.

- Owners of unused roof or facade spaces.
- Investors.

Everyone can contribute. Gender, age, income, or background do not matter.

### **Pathos: Member benefits – Sustainable, fair, local energy supply**

We guarantee a sustainable, fair, and local energy supply.

By bringing together people who believe in change.

And who wants to work on it?

So, in the end, everyone involved benefits through dividends, lease agreements, or affordable electricity.

### **Pathos: Emotions – Optimism**

This enables independence and social justice.

As part of our community, one feels...

... hopeful,

because one can be part of change.

... proud and curious,

because one can shape the future.

The summary of the preceding points makes the communication hierarchy clear and contains all the essential characteristics of the brand.

### **Communication hierarchy: In five words**

We are an **independent** energy community.

And we stand for a **sustainable, fair and local energy supply**.

From local Neuperlach residents **for Munich**.

We make this possible through a **co-creative community**.

For an **optimistic** perspective on our shared future.

## 6.4 DUTIES AND RESPONSIBILITIES OF BOARDS

Below is an exemplary compilation of the prescribed duties and responsibilities for the legal board positions, useful for the workshop *Governance Structure*. This compilation was created based on the 2024 German Cooperative Law (GenG) and the statutes of the NEB Energy Community. The following list is a translation from German. It is intended to help better understand the roles and build confidence in taking on these positions. This compilation serves as a foundation but should be adapted to specific needs, legal requirements and verified for actuality.

### A. DUTIES AND RESPONSIBILITIES OF THE MANAGEMENT BOARD

#### 1. Representation and management of the cooperative

- a. Adopts its own rules of procedure. (§ 17 para. 8 Statutes)
- b. Authorizes and obligates the cooperative through legal transactions concluded in its name. (§ 26 para. 1 GenG)
- c. Manages the cooperative under its responsibility and must observe restrictions imposed by the Articles of Association. (§ 27 para. 1 GenG) & (§ 17 para. 1 Statutes)
- d. Plans and implements necessary personnel, material, and organisational measures in a timely manner. (§ 18 para. 2 Statutes)
- e. Reports to the Supervisory Board at least every six months or upon request. (§ 18 para. 3 Statutes)
  - i. Particularly regarding the business development of the cooperative, compliance with cooperative principles, especially the promotion purpose, the total liabilities of the collaborative, and the business plan, which mainly shows the investment and credit needs.
- f. Sets target quotas for the proportion of women in the two management levels below the Executive Board. The target quota must be clearly and understandably justified if set to zero. (§ 9 para. 3 GenG)
- g. Registers the cooperative with the court for entry into the cooperative register with the signed Articles of Association, the document appointing the Executive Board and the Supervisory Board, a certificate of admission from an auditing association, and the authority of the Executive Board members to represent the cooperative. (§ 11 GenG)

#### 2. Management, accounting, annual financial statements, and reports

- a. Reports changes to the Executive Board for entry into the cooperative register. (§ 28 GenG)
- b. Maintains the membership list. (§ 30 GenG) & (§ 18 para. 2 Statutes)

- i. Information: family name, first names, and address; for legal entities and partnerships, the company name and address; number of shares; exit from the cooperative.
  - ii. Retains the list for three years.
  - iii. Submits a copy of the membership list to the registry court upon request. (§ 32 GenG)
- c. Ensures the proper preparation of annual financial statements and management reports and submits them to the Supervisory Board and the General Assembly. (§ 33 para. 1 GenG) & (§ 18 para. 2 Statutes)
  - i. The financial statements are prepared in the first five months of the financial year for the previous financial year.
  - ii. A challenge cannot be justified by violations of the rules on the structure of the balance sheet and the profit and loss statement, nor by non-compliance with form templates if this only insignificantly impairs the clarity of the annual financial statements. (§ 33 para. 2 GenG)
  - iii. A management report is prepared if the cooperative exceeds a balance sheet total of €25,000,000, annual revenues of €50,000,000, or an average of 500 employees, or if securities are issued (§ 289b HGB). (§ 336 para. 2 HGB)
- d. Submits the annual financial statements, management report, declaration, and Supervisory Board report in German to the commercial register. (§ 339 GenG)
- e. Notifies the General Assembly if 50% of the share capital and reserves cannot cover a loss. (§ 33 para. 3 GenG)
- f. Notifies the auditing association of the conference, date, agenda, and motions of the General Assembly meetings. (§ 18 para. 2 Statutes)
- g. Consults with the Supervisory Board and obtains approval for decisions if the transaction exceeds the value of €10,000 or in cases of guarantees, joint liability, or other securities for third parties. (§ 19 para. 1 Statutes)
- h. Attends Supervisory Board meetings when necessary and not excluded. (§ 20 Statutes)

### 3. Duty of care and responsibility

- a. Applies the care of a prudent and conscientious cooperative manager when conducting business. (§ 34 para. 1 GenG) & (§ 18 para. 1 Statutes)
  - i. There is no breach of duty if the Executive Board member could reasonably assume, based on appropriate information, that they were acting in the best interest of the cooperative in making a business decision.
- b. Maintains confidentiality regarding confidential information and secrets of the cooperative, particularly business or trade secrets, that they became aware of through their duties on the Executive Board. (§ 34 para. 1 GenG) & (§ 18 para. 1 Statutes)

- c. Must not breach duties that could cause damage. The Executive Board is jointly and severally liable, and the burden of proof applies. If the Executive Board works without compensation, this must be considered. (§ 34 para. 2 GenG)
  - i. The Executive Board must not, contrary to the GenG, payout share capital, grant interest or profit shares to members, distribute cooperative assets, make payments that lead to insolvency, or grant loans. Otherwise, they are liable for damages. (§ 34 para. 3 GenG)

## **B. DUTIES AND OBLIGATIONS OF THE SUPERVISORY BOARD**

### **1. Supervisory function**

- a. Supervises the management of the Executive Board. (§ 38 para. 1 GenG) & (§ 22 para. 1 Statutes)
  - i. Requests information for this purpose.
  - ii. Examines and audits the cooperative's books and records and the cooperative's cash holdings, securities, and goods.
- b. Reviews and adds remarks to the annual financial statements, management reports, and proposals for allocating the annual surplus or covering the annual loss. (§ 38 para. 1 GenG) & (§ 22 para. 1 Statutes)
- c. Reports to the General Assembly on the audit results before approving the annual financial statements. (§ 38 para. 1 GenG) & (§ 22 para. 1 Statutes)
- d. Reviews non-financial reports. (§ 38 para. 1 GenG)
  - i. These are prepared if the cooperative exceeds a balance sheet total of €25,000,000, annual revenues of €50,000,000, or an average of 500 employees, or if securities are issued. (§ 289b HGB)
- e. Convenes General Assemblies when necessary in the interest of the cooperative. (§ 38 para. 2 GenG)
- f. Consults with the Executive Board and must approve resolutions of the Executive Board when requested. (§ 19 para. 1 Statutes)

### **2. Authority to represent the cooperative in relation to the Management Board**

- a. Represents the cooperative in legal and non-legal matters against Executive Board members. (§ 39 para. 1 GenG) & (§ 22 para. 4 Statutes)
- b. May provisionally suspend Executive Board members from their duties until the General Assembly convenes. (§ 40 GenG)
- c. Elects a Chairperson. (§ 23 para. 1 Statutes)
- d. Adopts its own rules of procedure. (§ 23 para. 2 Statutes)
- e. Holds meetings at least quarterly and convenes them with an agenda. (§ 23 para. 5 Statutes)
- f. Records decisions with numbering and the Chairperson's signature. (§ 23 para. 6 Statutes)



- g. Set target quotas for the proportion of women on the Supervisory and Executive Board. The target quota must be clearly and understandably justified if set to zero. (§ 9 para. 3 GenG)

### **3. Duty of care and responsibility**

- a. Applies the care of a cooperative's prudent and conscientious Supervisory Board. (§ 34 para. 1 GenG)
  - i. There is no breach of duty if a Supervisory Board member could reasonably assume, based on appropriate information, that they were acting in the best interest of the cooperative in making a business decision.
- b. Maintains confidentiality regarding confidential information and secrets of the cooperative, particularly business or trade secrets, that they became aware of through their duties on the Supervisory Board. (§ 34 para. 1 GenG)
- c. Must not breach duties that could cause damage. The Supervisory Board is jointly and severally liable, and the burden of proof applies. If the Executive Board works without compensation, this must be considered. (§ 34 para. 2 GenG)
  - i. The Supervisory Board must not, contrary to the GenG, payout share capital, grant interest or profit shares to members, distribute cooperative assets, make payments that lead to insolvency, or grant loans. Otherwise, they are liable for damages. (§ 34 para. 3 GenG)
- d. Reports to the auditing association if deficiencies are identified in the audit report. (§ 18 para. 2 Statutes)

## VOTING AND ELECTIONS (§ 32 STATUTES)

- (1) Voting and elections are conducted by a **show of hands or by ballot**. They must be conducted in **secret** if the Executive Board, the Supervisory Board, or **at least 25 %** of the valid votes cast in a resolution request this.
- (2) Only the valid votes cast are counted when determining the voting ratio; **abstentions and invalid votes are not considered**. In the event of a tie, a motion is deemed rejected; in elections, a tie is decided by drawing lots.
- (3) If a show of hands conducts an election, a **separate vote** is required for **each mandate** to be filled. The person who receives the **most valid votes** is elected. In the event of a tie, a runoff election is held. If no more candidates are proposed than there are mandates to be filled, a block vote may be conducted unless voting members representing 25 % of the votes present object.
- (4) If an election is conducted by **ballot**, each eligible voter has **as many votes as** there are **mandates** to be filled. The voter **marks on the ballot the candidates** to whom they wish to give their vote; only **one** vote can be cast **per candidate**. The candidates who receive the **most votes** are elected. The vote is invalid if a voter casts more votes than mandates to be filled. If a voter casts fewer votes than there are mandates, the vote is still valid.

## MEMBERSHIP APPLICATION (§ 15 GENG)

- d. A copy of the current Articles of Association must be available (online or in print).
- e. A written, unconditional membership application must include an express commitment to pay the required contributions to the share capital and any other defined payments (§ 15a GenG).
  - i. The cooperative approves the membership application.
- f. Immediate entry into the membership list with notification to the member.
- g. Notification and return of the membership application in the event of rejection.

## 6.5 INSTRUCTIONS SOLAR BAG

Below is a description of how to use a solar bag with a battery. The solar bag is a foldable solar panel (200 W), and the battery is a PowerRoam Battery (600 W, 680 Wh) from Ugreen Group GmbH (Ugreen, n.D.).



CREATING  
NEB  
OURHOODS  
TOGETHER  
BEI TOGETHER


**Energiegemeinschaften München eG Neuperlach**

We let the Sunshine in



### How to solar bag

Position, connect and place in the sun. Produce electricity to take with you or on the go. Ideal for events.









### Display battery

How much electricity do we produce?  
Between 0 - 200 watts

↓

How charged is the battery?

↓

How much electricity do we consume?  
Between 0 - 600 watts

↓

IN

0000 Watts  
000.0 Hrs










100 %

OUT


0000 Watts  
000.0 Hrs

**Full battery** (capacity 680Wh, charging time approx. 6h) **PV panel** (200 W, 23% efficiency)

=

 <b>58</b> Mal Telefon (10Wh)	 <b>72</b> Std. Licht (8W)	 <b>14</b> Std. Mini-Kühlschrank (40W)	 <b>41</b> Mal Kamera (14Wh)	 <b>5.5</b> Std. Fernseher (105W)	 <b>14</b> Std. CPAP (40W)
 <b>11</b> Mal Laptop (50Wh)	 <b>57</b> Std. Router (10W)	 <b>14</b> Mal Drohne (40Wh)	 <b>16</b> Mal Lauter (35W)	 <b>4</b> Std. Luftpumpe (130W)	 <b>20</b> Std. Lautsprecher (28W)





 **Funded by  
the European Union**

Page 79 of 80

D5.7 rev. Energy Communities 2 • 06.11.2024