

The Role of Umbrella Organizations in Facilitating Sustainability Transition

The Diffusion of Energy Cooperatives and Community-supported Agriculture in Europe

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Master Thesis Series in Environmental Studies and Sustainability Science,
No 2023:037

A thesis submitted in partial fulfillment of the requirements of Lund University
International Master's Programme in Environmental Studies and Sustainability Science
(30hp/credits)



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Submitted May 09th 2023

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Abstract:

Umbrella organizations of grassroots innovations can play important roles in facilitating sustainability transitions. This thesis examines such roles by studying national and regional umbrella organizations of energy cooperatives and community-supported agriculture in Europe. Embedded in the *Multi-Level Perspective*, it applies frameworks on *Intermediary Roles*, *Intermediary Levels* and *Collective Diffusion Pathways*. Based on eleven semi-structured interviews with key umbrella organizations, my results show that umbrella organizations fulfil multiple roles to support their affiliates. Whereas energy umbrella organizations engaged more in replicating and scaling practices of the affiliates, agriculture umbrella organizations assimilated their niche status by focusing on the stabilization. The thesis discusses three main findings that (1) intermediary roles are diverse and dynamic, (2) umbrella organizations foster collective diffusion, but they have diverging interpretations of the role of professionalization, and (3) umbrella organizations can accelerate their diffusion potential by engaging more with regime actors to facilitate sustainability transition.

Keywords:

umbrella organizations
energy cooperatives
community-supported agriculture
intermediary roles
collective diffusion
sustainability transition

Word count: 11.980

Acknowledgements

This section is dedicated to all the people and privileges that made this thesis possible. And it is a reminder that behind every academic writing, there is person, who is part of a social and environmental system. So, I want to take a moment (one page) to show my gratitude and give thanks to those who supported me on this journey.

First, I would like to give thanks to all my interviewees, who took the time to share their experiences and insights with me. If they would not have been willing to talk to me, there would not have been this thesis – I hope it was worth it. A special shout-out also goes out to my preliminary interview partners, who were patient and informative in explaining their expertise in the field of transition research to a newcomer like me.

Next, a big thank you is directed to the “Ecological Economy Research Institute” (IÖW) in Berlin, and especially to Christian Lautermann, who provided me with an empirical entrance point by including me in their research project “Teilgabe”. Their support and guidance were instrumental in the success of this thesis.

Another person without whom this thesis would have looked different is my supervisor, David Harnesk. He always said he is just helping me to write the thesis I want to write, but literally he got out the best of the situation and me.

Now I come to the emotional thank-you’s, aka the poetic part:

I want to thank all people, who did not only take the time to review my thesis but were also an emotional support in time(s) of crisis: Karolina, Valeska, Marvin, Niklas, and Celina.

My best friends in Lund, who did not only support me through this thesis-time, but have made this experience so valuable, that it is hard to leave Lund. What started out as a Moral Support group, became housemates, best friends, and a big Lund family. I have a hard time expressing the gratitude I feel for all of you: Matias, Gino, Yuichi, Eda, Valentina, Julian, Jon, Mollie, Julius, Max, Jana and Mirthe.

Also, I want to send a thanks to my partner, Christian, who – besides writing his own law state exam – coped with my emotional roller-coaster. His helpfulness and understanding were bottomless, and I am incredibly grateful to have him by my side.

And finally, I want to thank my family, who always supported my ideas, regardless of how crazy they seemed in the beginning. I would not be in this situation if you would not have always supported me (financially and) emotionally. You have worked so hard to be able to give me these opportunities, and I am forever grateful for the chances I got: to be able to study, to move abroad and to hand in this thesis. Your endless anchorage, love, and faith in me has given me confidence to pursue all of this.

And now: back to the serious stuff. Have fun reading my thesis.

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1. Introduction

1.1 Sustainability Transitions and Grassroot Innovations

The abatement of greenhouse gas emissions from the energy and agricultural sector remains a significant factor towards achieving the European climate goals (European Environment Agency, 2021). This is translated into an exigent need for sustainable transitions (Ara Begum et al., 2022). Accordingly, grassroot innovations are attributed an transformational potential to deliver socio-technical changes (Fladvad, 2021; Hermans et al., 2016; Honneth, 2017; Seyfang & Smith, 2007). Such grassroot innovations can constitute different forms (Sengers et al., 2019), for instance energy cooperatives or community-supported agriculture (Bonfert, 2022a, 2022b; de Bakker et al., 2020; Klagge & Meister, 2018; M. Rommel et al., 2021; P. Volz et al., 2016). They are often presented as a counter-model to capitalist, profit-oriented business models, evolving bottom-up from civil society (Elsen & Walk, 2016; Klagge & Meister, 2018; Vincent & Feola, 2020). With the integration of environmental sustainability and social empowerment components, they adopt a comprehensive and systemic approach, encompassing regenerative and renewable production practices, while actively involving the local community (Fomina et al., 2022; Huybrechts & Mertens, 2014; Mert-Cakal & Miele, 2020; M. Rommel et al., 2021; Soutar, 2015; Vicente-Vicente et al., 2023; Yildiz et al., 2015). Through citizen ownership and participation, along with a production and consumption approach segregated from the traditional commercial market, these grassroot innovations can pave the way for a profound transformation in both technological and social systems (Mert-Cakal & Miele, 2020; J. Rommel et al., 2018; Yildiz et al., 2015). For transforming the energy and agriculture sectors, energy cooperatives and community-supported agriculture could either become competitive and replace market-based conglomerates (fit-and-conform) or disrupt and transform current regime practices (stretch-and-transform) (Seyfang & Smith, 2007). The scaling up of such grassroot innovations could therefore alter power dynamics between state influences, market forces and the civil society (Mert-Cakal & Miele, 2020).

However, both energy cooperatives and community-supported agriculture currently remain niche innovations (Bonfert, 2022a; Hossain, 2018; Mert-Cakal & Miele, 2020; Oteman et al., 2014; Warbroek et al., 2018). To fulfill their transformational potential and to contribute to a sustainability transition of both sectors, these niche projects need to be scaled up – to challenge commercial competitors in the regime

(Bonfert, 2022b; Proka et al., 2018). Research shows that umbrella organizations in transition processes can help diffuse these models by facilitating development, networking, and expansion of individual cooperatives (Braunholtz-Speight et al., 2021; Ortiz & Peris, 2022). They can incorporate an intermediary function to link affiliates from the same niche, and with actors outside their sphere (Rohe & Chlebna, 2022; Sovacool et al., 2020). The need for such organizations is also expressed by energy cooperatives and community-supported agriculture themselves (Braunholtz-Speight et al., 2021; Degens & Lapschieß, 2023; Holstenkamp & Degenhart, 2014; Meister, 2020; Müller et al., 2015; Ortiz & Peris, 2022). However, umbrella organizations remain understudied, which motivates this thesis.

There is a research gap as regards how umbrella organizations as an example of intermediaries of community-supported agriculture and energy cooperatives (can) support their affiliates to move from being niche initiatives to deliver socio-technical change on the regime level. This thesis attempts to respond to this research gap by enhancing comprehension of how umbrella organizations as intermediaries, (may) support the collective diffusion of energy cooperatives and community-supported agriculture projects.

1.2 Research Aim and Research Questions

The aim of my research is to understand the potential roles of umbrella organizations of energy cooperatives and community-supported agriculture as agents in sustainability transitions by examining how they support their affiliates and facilitate diffusion of niche innovations into more widely established alternative models. In this thesis, I will answer two research questions:

1. How do umbrella organizations *as intermediaries* in sustainability transitions support their affiliates through the services provided?
2. In what way do umbrella organizations foster a sustainability transition through *collective diffusion* of grassroots innovations?

These research questions are embedded in the Multi-Level Perspective (Geels, 2019) and informed by frameworks on Intermediary Roles (Warbroek et al., 2018), Intermediary Levels (Kanda et al., 2020) and Collective Diffusion Pathways (Cairns et al., 2023). To answer the research questions, I conduct semi-structured interviews with representatives from umbrella organizations of energy cooperatives and community-supported agriculture projects in European countries. My study has an interpretivist and

qualitative approach, departing from frameworks within transition theory to interpret themes from my interview material.

1.3 Contributions to Sustainability Science

The main contribution of this thesis to sustainability science is its support for knowledge development to enable sustainability transitions in two unsustainable supply sectors. Specifically, this contribution is made by focusing on cooperative models that can challenge social power dynamics in primarily capitalistic economies. Hereby, these grassroots innovations solicit environmental sustainability and social empowerment, by combining citizen inclusion with sustainable energy supply and agricultural production (Huybrechts & Mertens, 2014; Mert-Cakal & Miele, 2020; Müller et al., 2015; M. Rommel et al., 2021; Soutar, 2015; Vicente-Vicente et al., 2023; Yildiz et al., 2015). As such, energy cooperatives and community-supported agriculture represent not only instances of technological alternatives, but can also catalyze for social change, by providing a conjunction of production and consumption outside the conventional commercial market (Mert-Cakal & Miele, 2020; J. Rommel et al., 2018; Yildiz et al., 2015). The comprehension of how umbrella organizations can facilitate the development of niches enables an effective support and expansion of such niches, thereby presenting feasible substitutes to the presently unsustainable regime.

1.4 Thesis Outline

The thesis is divided into seven sections: after the context of the research has been introduced, the theoretical conceptualization and a method section follow, in which the main features of the study are presented. Subsequently, the results are presented, and three main findings are discussed, before the summing up with a conclusion.

2. Energy Cooperatives and Community-supported Agriculture and their Umbrella Organizations

The research focuses on umbrella organizations of grassroot innovations for sustainability transitions. Hence, the purpose of this section is to concretize the terms "energy cooperatives", "community-supported agriculture", and "umbrella organizations".

2.1 Energy Cooperatives and Community-supported Agriculture

2.1.1 Energy Cooperatives in Europe

Energy cooperatives are “citizens groups” that follow the goal of a citizen-led energy transition (Soeiro & Dias, 2019, p. 2). Through decentralized energy production, they are considered to be a form of *community energy* (Lode, Coosemans, et al., 2022; Lode, te Boveltdt, et al., 2022). Energy cooperatives do not only contribute to a renewable energy-based sustainability transition, but they also empower citizens for ownership, participation, and responsibility, which can lead to deeper transformation. Hence, energy cooperatives combine social and environmental factors for providing a holistic alternative to the current dominant energy market players (Huybrechts & Mertens, 2014; Soutar, 2015; Yildiz et al., 2015).

However, energy cooperatives face various obstacles. Common *intrinsic challenges* of energy cooperatives are their reliance on volunteer’ commitments, lack of professionalism and legitimacy, access to capital and missing structural support (Hossain, 2018; Huybrechts & Mertens, 2014). *Diffusion challenges*, like institutional obstacles, the pressure of current regime actors, access to sites add onto this (Besio et al., 2022; Hossain, 2018; Huybrechts & Mertens, 2014; Oteman et al., 2014; Warbroek et al., 2018).

These common challenges try to be resolved by energy cooperatives in different ways. Besides the development of more complex business models (Ehrtmann et al., 2021; Klagge & Meister, 2018), cooperation with other actors can help overcoming forthcoming difficulties (Müller et al., 2015; R. Volz & Storz, 2015). Hereby, other energy cooperatives, partnerships with energy companies, or cooperation with municipalities and NGOs are seen as potential collaboration groups (Besio et al., 2022; de Bakker et al., 2020; Hargreaves et al., 2013; Meister, 2020). Moreover, the establishment of and accession in an umbrella cooperative structure is seen as a solution (Holstenkamp & Degenhart, 2014; Meister, 2020; Moldenhauer & Blome-Drees, 2020; Müller et al., 2015). They can pool resources to achieve economies

of scale and compensate for individual difficulties (Herbes et al., 2021). In a study for envisioning the future for community energy in the United Kingdom, a particular interest in an umbrella organization, or so-called Community Energy Confederations, was articulated (Braunholtz-Speight et al., 2021).

2.1.2 Community-supported Agriculture in Europe

Community-supported agriculture is a localized, decommodified food production (McGreevy et al., 2022; Vicente-Vicente et al., 2023). This means a relationship between the farmer and members based on solidarity, disconnecting the production of food from its financial value (Galt et al., 2019; Sulistyowati et al., 2023). It can improve “community-based agri-ecological resilience” by building up and giving space for community processes (King, 2008, p. 111). Moreover, it often follows organic practices, which reduces climate change impacts, and supports ecosystems and biodiversity (Fomina et al., 2022; Mert-Cakal & Miele, 2020; M. Rommel et al., 2021; Vicente-Vicente et al., 2023). Community-supported agriculture combines therefore social and environmental benefits to find a holistic alternative to the current food production system (Mert-Cakal & Miele, 2020; Vicente-Vicente et al., 2023).

Individual community-supported agricultures face various *challenges*. For instance the diversification of their harvest, high production costs, difficulties in securing finances, and member and employee recruitment make it difficult for community-supported agriculture to scale up (Bonfert, 2022a; Galt et al., 2019; Mert-Cakal & Miele, 2020; Sulistyowati et al., 2023).

Other studies have pointed to two ways for addressing these challenges. First, knowledge exchange can be a potential step in order to scale up community-supported agriculture (Nicol, 2020). Here, Ortiz & Peris attributed an important role to umbrella organizations in ensuring socio-technical transformations. Second, Bonfert identified an effectiveness and outreach potential (from niche to regime) by collaborating with different stakeholders (2022a). He attributes the expansion and strengthening of community-supported agriculture to the involvement in an umbrella organization (2022b) – although these are poorly understood (Bonfert, 2022b; M. Rommel et al., 2021).

2.1.3 Commonalities

Energy cooperatives and community-supported agriculture therefore share various commonalities. Not only are they small-scale alternatives to the predominant production system in their respective sectors

and voiced an interest in umbrella organizations to overcome their individual challenges, but they also both have a cooperative ownership model.

Energy cooperatives and community-supported agriculture comply with the four cooperative principles: *identity, member-supporting, democratic and solidary* (Beuthien & Hanrath, 2012; Klemisch & Flieger, 2007; Moldenhauer & Blome-Drees, 2020; Zerche et al., 2016). First, the *identify principle* constitutes the dual relationship of the members in the cooperative, as they are customer and owner in the same time (Beuthien & Hanrath, 2012). Second, the *member principle* defines economic success as a means towards supporting their own members through collective self-help, self-administration and self-responsibility (Beuthien & Hanrath, 2012; Moldenhauer & Blome-Drees, 2020). Third, the *democratic principle*, assures democratic self-organization (Zerche et al., 2016) and fourth, the *solidary principle*, relates to the corporate culture of cooperative-specific values, attitudes and behaviour (Klemisch & Flieger, 2007). To sum up, the purpose of cooperatives consists in the improvement of life circumstances of its members, by giving opportunities for action and participation (Blome-Drees et al., 2021).

These cooperative characteristics are not necessarily determined by the choice of a legal form of a cooperative. Instead, it finds expression in the purpose of the enterprise and the basic principles of cooperative management (Klemisch & Boddenberg, 2012; Moldenhauer & Blome-Drees, 2020), by integrating solidarity, democratic, civil society and life-world concerns into their economic activity (Blome-Drees, 2018).

2.2 Umbrella organizations

Umbrella Organizations have been requested by both energy cooperatives and community-supported agriculture farms. Consequently, a theoretical introduction is provided, followed by a discussion regarding their affiliation.

Umbrella organizations are alliances of multiple small organizations of a similar kind, aiming at providing support to their affiliates (Beuthien & Hanrath, 2012; Menzani & Zamagni, 2010). Common characteristics among umbrella organizations are: voluntary membership and engagement, subsidiary governance approach, collectivistic decision-making, and long-term partnership (Beuthien & Hanrath, 2012; Blome-Drees, 2009; Blome-Drees et al., 2015; Fehl, 2003). Umbrella organizations may be established top-down, when financed and managed by local governments or social enterprises, or bottom-up, like a cooperative meta-organization with loose connections and strategic alliances (Bertrand et al., 2020). In research,

umbrella organizations are also referred as networks (Bonfert, 2022a; Degens & Lapschies, 2023; Provan et al., 2007) or a kind of intermediary (Hoare, 2019; Lode, te Boveldt, et al., 2022).

Collaboration through an umbrella organization were found to provide various advantages for the affiliates. It can reduce the investment risk, improve the position in the market, give access to expert knowledge and can coordinate strategies (Braunholtz-Speight et al., 2021; Joshi & Smith, 2002). Umbrella organizations can support the establishment and development of their affiliates through technical assistance (Ortiz & Peris, 2022).

However, the participation in umbrella organizations can also have detrimental side-effects. Since the development of own competencies might be hampered (Cairns et al., 2023), the involvement can lead to dependencies and power imbalances (Blome-Drees et al., 2015). A membership in an umbrella organization can cause their affiliates to lose their autonomy, as they have to abide by certain rules set by the umbrella organization (Young, 2021). They might be restricted in their decision-making, which impairs flexibility in responding to specific contexts (Degens & Lapschies, 2023; Hargreaves et al., 2013). Henceforth, legitimacy within the network is a key prerequisite for successful cooperation to enhance member support. Hereby, embedded resources and trusted associations amid affiliates constitute vital components (Okem & Lawrence, 2013; Provan et al., 2007).

3. Theoretical Framework

The thesis employs a systemic transition research perspective and applies three frameworks, which are subsequently explained: “Intermediary Roles”, “Intermediary Levels”, and “Collective Diffusion Pathways”.

3.1 Transition Theory

The Multi-Level Perspective is used to guide this study, since it allows to analyze sustainable transformation through niche development (Geels, 2019). It proposes that socio-technical transitions in systems occur through interactions between processes at the three levels of landscapes, regimes, and niches. *Landscapes* are megatrends on a macro-level of economic, political, and cultural systems and beliefs. *Regimes* are structures of, among others, current politics, science, economies, and infrastructures. *Niches* are experiments and innovations on a small scale from pioneers within a protected space. Socio-technical transitions are shaped by dynamics within and between these three levels (Geels, 2019).

Geels argues that a sustainability transition proceeds through four overlapping stages (2019). Firstly, niche projects emerge as an *experimentation*, after which it intends to *stabilize* as a congruent niche. Having found its position within and with other experiment niche projects, it proceeds through *diffusion* towards becoming *institutionalized*, while it gets in contact with the established regime actors (Geels, 2019). The formerly known niche can become competitive in and forms part of unchanged regime settings (fit-and-conform) or the niches’ development disrupts and converts the mainstream regime structures (stretch-and-transform) (Smith & Raven, 2012). The thesis focuses on the transition dynamic of the gradual build-up of niche innovations through its improvement and increase in support (see Figure 1) (Geels, 2019, p. 190).

The Multi-Level Perspective allows me to analyze the outgrowing of energy cooperatives and community-supported agriculture from the niche sphere. In my thesis, I focus on how umbrella organizations support their affiliates (niche projects) during to the *diffusion* stage (phase 3). Hence, the Multi-Level Perspective functions as a theoretical entry point to frame my two research questions. This brings me to my specific frameworks: first, Intermediary Roles (Warbroek et al., 2018) and the Intermediation Level Framework (Kanda et al., 2020) and second, Collective Diffusion Pathways (Cairns et al., 2023), which I will use to answer my research questions respectively.

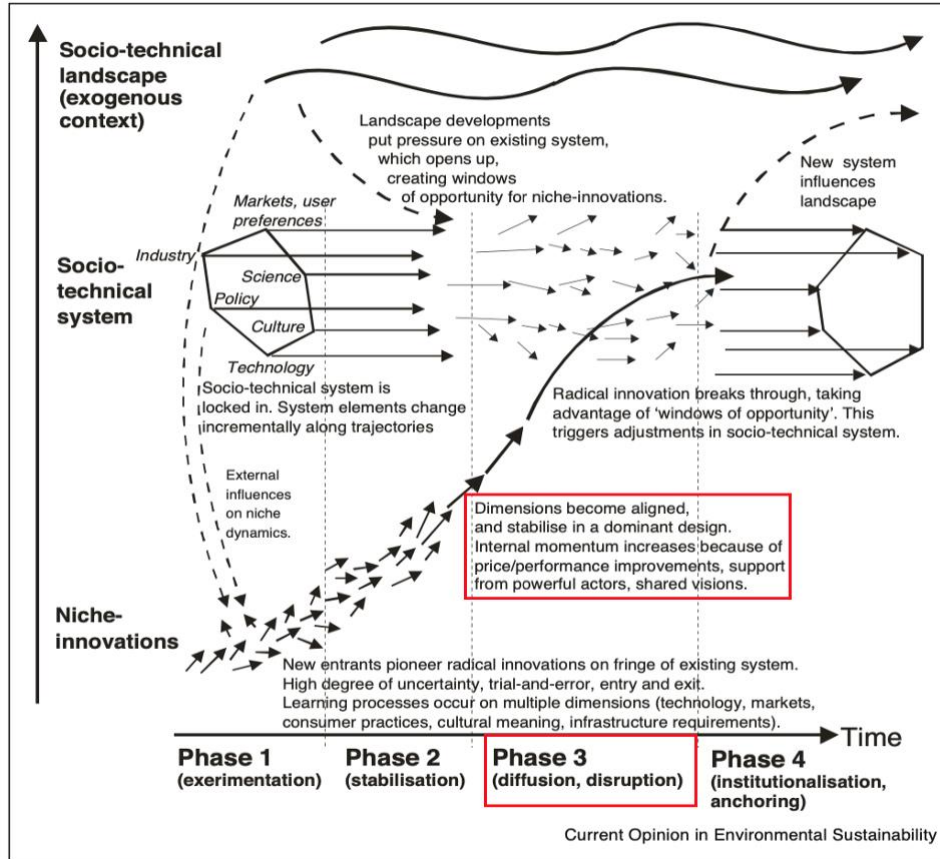


Figure 1: The Multi- Level Perspective illustrates the dynamics between niche innovations, the socio-technical regime and landscape. These interconnections can lead to a socio-technical transition through the development of niche innovations, passing the four phases of experimentation, stabilization, diffusion and institutionalization (adapted from Geels, 2019).

3.2 Intermediary Roles and Levels

In this thesis, I conceptualize umbrella organizations of energy cooperatives and community-supported agriculture as *'intermediaries'*. Intermediaries are seen as pivotal actors to actuate sustainability transitions (Kivimaa, 2014). They are defined as “organizations or individuals engaging in work that involves connecting local projects with one another, with the wider world and, through this, helping to generate a shared institutional infrastructure and to support the development of the niche in question” (Hargreaves et al., 2013, p. 870). More specifically within the Multi-Level Perspective, I conceptualize the umbrella organizations as *niche intermediaries* (Kivimaa et al., 2019). They identify issues throughout the individuals and are therefore able to “support the niche development and diffusion” by a distribution of accumulated knowledge and experience (Hargreaves et al., 2013, p.868). Various studies underline the potential of intermediaries to stabilize, diffuse and institutionalize niche projects (Bauwens, 2017; Bird &

Barnes, 2014; Bonfert, 2022a; Cairns et al., 2023; Hatzl et al., 2016; Hermans et al., 2016; Hossain, 2018; Nolden et al., 2020). Intermediary literature allows a conceptualization of networking organizations, like umbrella organizations, as intermediaries between their affiliates and towards external stakeholder groups (Rohe & Chlebna, 2022; Sovacool et al., 2020). This conceptualization helps to study umbrella organizations of grassroots innovations within a sustainability transition.

Intermediaries can support their affiliates in different ways. To identify the roles they partake, I draw upon the framework of Warbroek et al. who synthesized the findings of a literature analysis on strategies and roles of intermediaries for energy initiatives (2018). They differentiate between four strategies, which are henceforth pursued through different activities of the intermediaries. These illustrate the six different roles, which intermediaries, like umbrella organizations, can partake: (1) *Aggregation of Knowledge*, (2) *Facilitating*, (3) *Brokering*, (4) *Creating institutional infrastructures*, (5) *Configuring*, (6) *Framing and Coordinating* (Table 1) (Warbroek et al., 2018).

Table 3: Overview of the intermediary roles and activities (adapted from Warbroek et al., 2018).

Associated Roles from Literature	Activities
<i>Aggregation of knowledge</i>	Developing toolkits, handbooks, and templates, and distributing these.
<i>Facilitating</i>	Distributing financial, technical, institutional knowledge resources, providing advice, building capacities and skills.
<i>Brokering</i>	Advocacy, negotiating with other parties, representative function, lobbying, engaging with policy makers, introducing new actors configuration, and embedding in current policy frameworks. Identifying and challenging institutionalized practices.
<i>Creating institutional infrastructure</i>	Setting up a supportive environment in which local initiatives are embedded and integrated, and which governs interactions and activities.
<i>Configuring</i>	Embedding technology in the local community. Prioritizing or shaping certain uses of the technology, developing new (business) models, and engaging in pilots.
<i>Framing and coordinating</i>	Articulating demand, framing discourses, and debates, and coordinating actors in decision-making processes.

Intermediaries work in-between and in relation with actors (Moss, 2009). To understand on which scale the intermediaries operate, Kanda et al. (2020) proposed a differentiation of four different levels (Figure 2): intermediation between different entities (Level 0), between entities in a network (Level 1), between networks of different entities (Level 2) and between actors and their networks and institutions (Level 3).

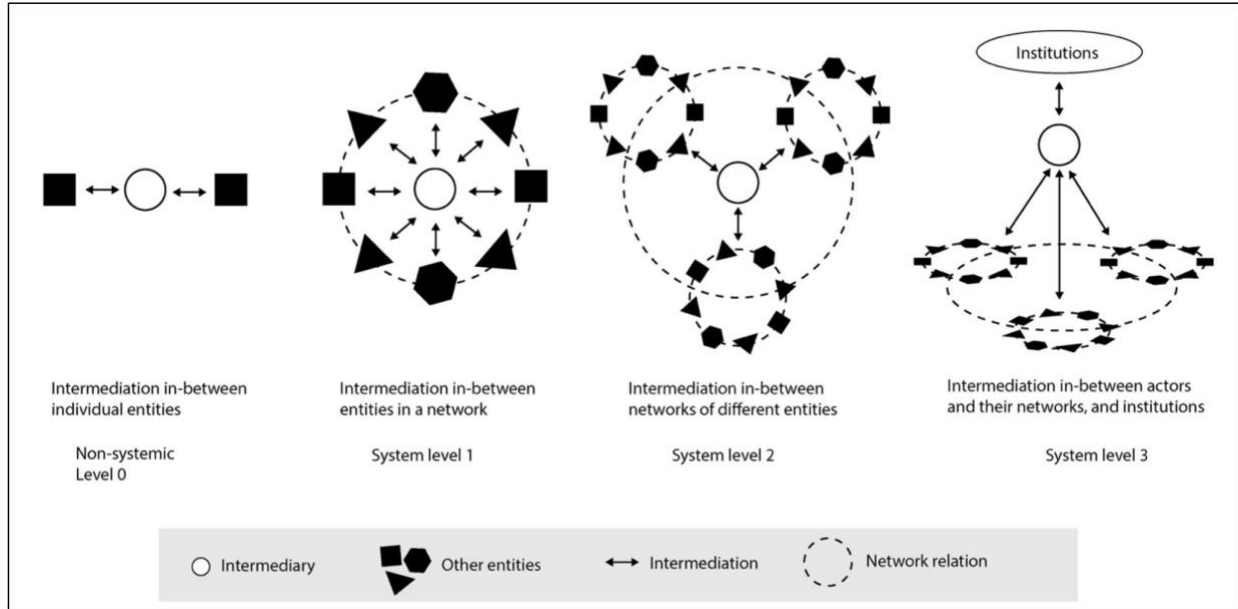


Figure 2: The Intermediation Level illustrates four different level on which intermediation conducted by the intermediary actor can take place. It diverges between non-systemic Level 0 in-between individual entities until the third system Level in-between actors of a network and institutions (Kanda et al., 2020).

In this thesis, I combine the Roles Framework (Warbroek et al., 2018) with the level differentiation (Kanda et al., 2020) to answer the first research question. This combination services to conceptualize and clarify the operational services of umbrella organizations. By that, the thesis addressed research gaps related to the knowledge on stabilization and diffusion practices in sustainability transitions (Lode, te Boveldt, et al., 2022), and the role of intermediaries (Köhler et al., 2019).

3.3 Collective Diffusion Pathway

The Collective Diffusion Pathway Framework concretizes diffusion practices conducted by an intermediary (Cairns et al., 2023). This process can be positioned in the third stage of the Multi-Level Perspective (diffusion/disruption) (Geels, 2019). The Collective Diffusion Pathway is based on grassroots innovation diffusion processes (Seyfang & Haxeltine, 2012), and describes the translation of niches (Smith & Raven, 2012), into a meta-regime level (Kanger & Sillak, 2020). The framework outlines three different diffusion pathways in achieving a transformation: *replication* (scaling up the number of projects), *individual scaling* (increasing the size of individual projects) and *collective diffusion* (confederation of projects, e.g., an umbrella organization). These pathways do not refer to procedures within the regime or interactions between the landscape, regime and niche levels as previous pathway typologies (Berkhout et al., 2004; Geels & Schot, 2007), but describe the diffusion processes of niche scaling (Cairns et al., 2023). The three

pathways can be overlapping and are to be understood complementary (Cairns et al., 2023). Cairns et al. introduced the process of *collective diffusion* in sustainability transitions for the first time, by referring to the work of Brauholtz-Speight et al., who outlined the demand for a collective diffusor of energy communities (Brauholtz-Speight et al., 2021). This *collective diffusion* entails components of replication and individual scaling (Figure 3).

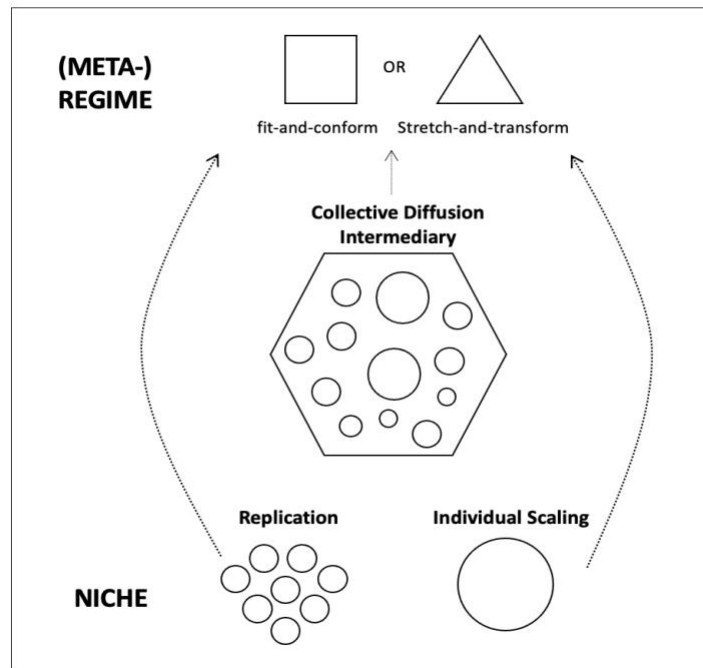


Figure 3: The Collective Diffusion Pathway Framework illustrates three diffusion practices, through which niche innovations can develop into components of the meta-regime. This transition can be organized and led by a so-called Collective Diffusion Intermediary (adapted and simplified by Cairns et al., 2023).

While Cairns et al. studied how finance supports the development of community energy throughout the different diffusion pathways, I apply the model by focusing the services delivered by umbrella organizations. The framework is used to answer my second research question. Cairns et al. concluded with a research proposition to explore the adoption of collective diffusion pathways in other countries and other sectors (2023), which I address with this thesis.

4. Methods

This chapter presents and explains the methods used to answer both research questions, which derived from the research context and theoretical frameworks. In this thesis, I employ a qualitative social scientific approach that uses theory to derive research questions and to guide my interpretation of qualitative data (Adams, 2015). The analysis follows an interpretative paradigm, allowing a close interaction with the study cases to gain a profound understanding of the social reality and perspectives of the interviewees (Flyvberg et al., 2016). All utterances are considered in the analysis, as the selection of words and statements are supposed to be made by the interviewees in the best of their knowledge and therefore be truthful (Bhattacharjee, 2019).

4.1 Data Collection

4.1.1 Data Requirements

I apply a theoretical sampling strategy (Bhattacharjee, 2019). For consideration, the umbrella organizations needed to meet six criteria factors.

- 1) The interviewed organization is classified as national-level, or alternatively, there is a national umbrella organization in the considered country.
- 2) The organization has energy cooperatives or community-supported agriculture farms as affiliates.
- 3) The affiliates have a service relationship with the umbrella organization, requesting services or using offers from the umbrella organization.
- 4) The affiliates are legally independent from the umbrella organization.
- 5) The organization is located in Europe.
- 6) The interviewee is English or German-speaking.

4.1.2 Sampling Method

I pursued multiple leads to sample my study cases. Several researchers on Lund's energy cooperatives were contacted to begin the sampling and outreach process. Afterwards, I contacted national cooperative lobby groups, researcher of earlier related studies and REScoop, the European Federation of Renewable Energy Cooperatives. This was followed by a comprehensive internet search of academic and grey literature.

Out of this, I compiled a list of umbrella organizations of community-supported agriculture and energy cooperatives in different European countries, with a focus on national umbrella organizations. Due to their limited availability and challenging accessibility, I included regional umbrella organizations in the analysis. From this collection, eleven online interviews with umbrella organizations from Germany, the Netherlands, Belgium, France, United Kingdom, Austria, and Luxemburg were conducted (Table 2). One organization declined an interview but replied to the interview guideline in a written format with one round of follow-up questions (XII*).

Table 4: Overview of conducted Interviews.

-) preliminary Interview without transcription, not subject to analysis

*) written statement on the interview guide questions.

No.	Organization	Sector
-	REScoop	Community Energy
-	Institute for Ecological Economy Research	Academia
-	Institute for Ecological Economy Research	Academia
I	Regional Umbrella Organization	Community-supported agriculture
II	National Umbrella Organization	Community-supported agriculture
III	Regional Umbrella Organization	Community-supported agriculture
IV	National Umbrella Organization	Community-supported agriculture
V	National Umbrella Organization	Community-supported agriculture
VI	National Umbrella Organization	Community-supported agriculture
VII	National Umbrella Organization	Energy Cooperative
VIII	National Umbrella Organization	Energy Cooperative
IX	Regional Umbrella Organization	Energy Cooperative
X	Regional Umbrella Organization	Energy Cooperative
XI	Regional Umbrella Organization	Energy Cooperative
*XII	National Umbrella Organization	Community-supported agriculture

4.1.3 Semi-structured Interviews

The interviews followed a semi-structured guideline approach. It constituted a frame for an open conversation, ensuring comparability of perspectives, while avoiding departing from the research questions (Adams, 2015; Kallio et al., 2016). Components of my research inquiry could have been answered with a survey or a written statement. But semi-structured interviews enabled me to effectively follow up responses with *why* or *how* inquiries and permitted flexibility for potential deviations. This research approach has been empirically demonstrated to be efficacious in similar research on intermediaries and umbrella organizations in sustainability transition (Hargreaves et al., 2013; Kanda et al., 2020; Ortiz & Peris, 2022; Warbroek et al., 2018).

I followed the five phases for developing the interview guide by Kallio et al. (2016). To understand research gaps and the current practice, I conducted three preliminary interviews with experts: one with an employee of REScoop and two with researchers from the sustainability transition literature (co-authors of one of the main papers) to inform the theoretical background and subject selection (Kallio et al., 2016).

Afterwards, representatives from umbrella organizations were interviewed for about one hour. They hold the perspective from within this sector (Helfferich, 2019), and have a specific insider knowledge from extensive personal experience (Meuser & Nagel, 2002). The interview guide consists of five sections, adjusted to the answers and experience levels of the organization itself. After explaining the research aim and informing about data security, it started with (A) an personal introduction to establish a comfortable setting (Adams, 2015; Fietz & Friedrichs, 2019; Kallio et al., 2016). This was followed by two sections for the first research question, regarding (B) the business operation (services) and (C) the cooperation between umbrella organization and its affiliates. Relating to the second research question, (D) the role of the umbrella organization in transition was addressed. The interview was (E) rounded up by giving space for additional comments from the interviewee (Fietz & Friedrichs, 2019) and the request for further case recommendations (snowballing). For almost every question, there were potential follow up questions prepared (Kallio et al., 2016). In case an interviewee raised an issue of a subsequent question, the order of the questions was rearranged (Adams, 2015; Helfferich, 2019; Kallio et al., 2016). The interview guideline was modified over the course of the data inquiry, resulting from insights gained of the preceding interviews (Adams, 2015). The consent form (Appendix 1), as well as an example of the interview guideline is attached (Appendix 2).

4.2 Data Analysis

For the data analysis, I followed different analysis guidelines. The interviews were recorded and transcribed (Adams, 2015), based on the transcription rules for computer-assisted evaluation (Kuckartz & Rädiker, 2014). First, I purged and prepared the data (Kuckartz & Rädiker, 2014). Then, I followed the coding principles and the 11 step- process of inductive category formation and deductive category application of Mayring and Fenzl (2019) to analyse the data by using the qualitative analysis tool Nvivo.

First, descriptive (first-level) coding identified topics and issues in the text by aggregating data relating to a particular issue (Goodrick & Rogers, 2015). These categories are derived *deductively* from my research questions (services, activities, roles, etc.) and the conceptual research framework presented in the theory section. Second, pattern (second-level) coding identified commonalities across the text throughout the

interviews *inductively*. Here, I identify underlining factors and connections. These were added throughout the analysis process and are terms used by the interviewees (in vivo categories) (Goodrick & Rogers, 2015). The final set of coding categories is attached (Appendix 3).

In the following sections, the interview transcripts are referred to by their roman number (Table 2), and in case of a direct quote, the line-number in the transcript, e.g.: (X: 203-205).

5. Results

Before answering the research questions, I briefly introduce the umbrella organizations to illustrate their diversity by touching upon their business model and organizational structure.

5.1 Business Model and Organizational Structure

The very existence of the umbrella organizations is directly linked to their members: “we exist for the needs of our members” (VIII: 45). They are founded to support their affiliates, hence most of their activity deals with providing various services that are relevant for their affiliates. This is different in the case of energy cooperatives, as the umbrella organizations often have their own business model in addition to supporting their affiliates (VII, VIII, X, XI). For instance, they want to become or expand on their services of an electricity supplier throughout the whole supply chain (VIII- X) or they intend to develop an auditing service for their energy cooperatives affiliates (VII).

Regarding their organizational structure, the umbrella organizations differ substantially. The legal entity for agriculture umbrella organizations diverges between an association (I, III, VI), a listed cooperative (II), and an unofficial list of people having a stake in community-supported agriculture (IV, V). The umbrella organizations of energy cooperatives are either secondary cooperatives (VII, VIII, IX, X) or federations (XI). For community-supported agriculture, the affiliates can be only the farms (IV), also their members (III) or all people having an interest in community-supported agriculture (I, II, V, VI). For energy, the affiliates are usually only the energy cooperatives (VIII, IX, X, XI), but once also external stakeholder (VII). Most umbrella organizations from both sectors require membership fees (I - III, VI - XI), a few do not (IV, V). The umbrella organizations meet their affiliates in different frequencies, depending on their size and the activeness of the umbrella organization. Some energy umbrella organizations have regular meetings, expert, and focus groups to discuss topics and projects (VII- IX). The funding of the organizations is very diverse: membership fees, public funds, sponsorship/donations, payment for services, or a combination

of those (I- III, VI- XII*). Some agriculture umbrella organizations do not have incomes at all (IV, V). Most of the umbrella organizations rely on volunteers (IV, V, XI) or have a few employees (I- III, VI, X). Only some energy umbrella organizations have up to 20 employees or even more (VII, VIII, IX).

5.2 First Research Question

To answer the first research question, I present the services, grouped by the Intermediary Role Framework. Afterwards, I elaborate on the limits of the framework by outlining additional roles and link the services and roles to the operational levels of intermediaries.

- (1) How do umbrella organizations *as intermediaries* in sustainability transitions support their affiliates through the services provided?

5.2.1 Intermediary Roles – Departing from the Framework

Based on the services that umbrella organizations provide to their affiliates, my results show that they are fulfilling all intermediary roles (Warbroek et al., 2018): (1) *Aggregation of Knowledge*, (2) *Facilitating*, (3) *Brokering*, (4) *Creating Institutional Infrastructures*, (5) *Configuring*, (6) *Framing and Coordinating*.

For the first role of (1) *Aggregation and Provision of Knowledge*, the umbrella organization collects and summarizes information from various sources (e.g., policy documents of individual affiliates), to make it collectively accessible (Warbroek et al., 2018). This role was mentioned by the interviewees as one of the most important services – e.g., by creating handbooks, layouts, toolkits, and the distribution of such material. For both, community-supported agriculture and energy cooperatives, the umbrella organizations have compiled and established knowledge bases, to be able to offer a range of learning opportunities (I- III, VI, VIII- X). For instance, they “standardize(d) procedures, steps, documents, contracts (...) and put that on (their) website” (VIII: 96-97).

For the second role of (2) *Facilitation*, the umbrella organization disseminates different forms of resources, provides advice, and engages in capacity-building initiatives (Warbroek et al., 2018). Based on the *Aggregation of Knowledge*, the umbrella organizations facilitate the transfer of knowledge on different levels and in different means. This spans from simple information providing (through e.g., newsletters) (I, II, IV- X), over education (e.g., mentoring and training programs) (I, VI- X), to individual consulting (II, VI, VIII- XI). In some cases, especially in young and un-developed community-supported agriculture networks, it was emphasized that the umbrella organizations provide the opportunity for the

first contact of farms for seeking help with simple problems (II, IV, V, X, XII*). An affiliation with the organization is then limited to a passive information delivery. In other cases, the umbrella organization has established a full range of education and consulting services, for instance on the foundation of a community-supported agriculture farm (II), or the qualification of energy experts (VIII). One agriculture umbrella organization is also planning to develop a mobile application for their affiliates, to enable easier access to knowledge and the exchange with other affiliates (XII*).

Moreover, the umbrella organization can distribute financial resources, as a means for facilitation. Although only one umbrella organization is offering funding opportunities (in cooperation with banks), it was mentioned multiple times as a desired service in the future (by both the community-supported agriculture and energy umbrella organizations) (II, IV, IX). In the one case, the umbrella organization functions as an intermediary between the bank and the energy cooperatives, offering services like back-up research and processing for the funding judgement of projects (VIII).

Another resource, which can be offered by the umbrella organization, are technical resolutions. While no agriculture umbrella organization provided these services, multiple energy umbrella organizations developed operational IT-software to organize the administration, maintenance, and memberships (VII-IX, XI): "But they all need the simple basics, they need access to capital, they need an IT-system to administrate their affiliates in their investments, they need knowledge sharing. So, all these kinds of things that that's what we take up." (XIII: 62-63).

For the third role of (3) *Brokering*, the umbrella organization is taking over the representative function through advocating, engaging with political decision-makers, and negotiating with other parties. This way, they identify and challenge institutional practices (Warbroek et al., 2018). One of the activities for brokering is lobbying, which is done by most of the umbrella organizations in a variance of intensities and levels (local to European) (I- III, V- XI). This depends on the regional or national orientation of the organization. The affiliates realized, that "if we do it individually, they do not listen, but if you start the federation, then they start to listen, because you're a group of organizations behind you" (XI: 91-92), thus the umbrella organization can "amplify voices" (II: 286). It is seen as a "gateway to national governments" (IX: 142), interacts with regime actors and gives political and legal weight to their niche affiliates.

For the fourth role of (4) *Creation of Institutional Infrastructures*, the umbrella organization conceives a supportive environment for their affiliates to facilitate interactions and activities among them (Warbroek et al., 2018). This can be translated in networking activities, which are, in all cases, aspired by the umbrella

organizations (I- XII*). They see their organization as a platform to share experience, communal support, and facilitate networking. The purpose is to “learn from each other” (XI: 103). The role of the umbrella organization is therefore to organize a continuous relationship between the affiliates. One organization surveyed their affiliates and found out, that the networking is what they enjoy the most (II). One agriculture umbrella organization put it in these words: “In this way, we try to harness the knowledge and skills of our members for the organization of community-supported agriculture” (translated) (IV: 339-341). This networking through the umbrella organization can also be done for other purposes, like a market platform to bring together community-supported agriculture farms and potential members, or other offers, like job vacancies or land seeking (I, V, VI).

For the fifth role of the framework (5) *Configuring*, the umbrella organization engages in pilot projects to shape the use of certain technology and development of new business models (Warbroek et al., 2018). This can be understood in different ways. By engaging with niches, the umbrella organizations shape and support the development of new models and certain technologies – in itself. However, I understand this role as the next step, to engage in other projects than the “normal” business model of their affiliates. Whereas the umbrella organizations of community-supported agriculture do not actively engage in any other sector, energy umbrella organizations or their affiliates expand their focus on energy-related topics like sustainable housing and mobility (IX- XI), but also agroforestry (X, XI). Hence, the umbrella organizations might develop their operational role, engaging in new projects: “So in the future, the umbrella organization might not only facilitate energy but also in activities like food, mobility, etc. But in the board, it's now the discussion what the goal of the umbrella organization is” (X: 222-224).

For the sixth role of (6) *Framing and Coordinating*, the umbrella organization can construct discourses and lead debates (Warbroek et al., 2018). Public presentation and participating in the discussion about energy and agriculture transition can bring community-supported agriculture and energy cooperatives onto the surface of people’s awareness; and therefore, shape the transition on a landscape level. By doing that, they worked for raising the awareness level of governments and other institutions, but also the general public. This is done by almost all umbrella organizations, although it was more present for community-supported agriculture than for energy umbrella organizations (I- III, V- VIII, XII*). An example would be public appearance on conferences (VIII), or the presentation of the model in private (e.g., school) settings (II). They do this by establishing and maintaining the community-supported agriculture standards and values by writing a chart for the affiliates and intriguing regular conversations about the understanding of

what is a community-supported agriculture (I-III, XII*). This way they want to protect the idea from “threats coming from regular commerce” (I: 205-206).

In sum, the umbrella organizations partake – in different intensities – all roles of the intermediary framework.

5.2.2 Intermediary Roles – Additions to the Framework

However, during the interviews, it became evident that the umbrella organizations take on more roles than described in the framework. Henceforth, I propose an uptake of the two following roles in the Intermediary Roles’ Framework to evince the multi-functionality of umbrella organizations: the (7) *Administration*, and (8) *Mobilization* role.

For their seventh role of (7) *Administration*, the energy umbrella organizations provide an administrative instance to facilitate activities outside of the scope of individual affiliates. For instance, one interviewee presented the umbrella organization as a platform not only to inform other affiliates about their experience and work (*Facilitation* and *Creating Institutional Infrastructures*), but to bring all projects of the affiliates automatically on a higher level – accessible to all affiliates (XI). Hence, the umbrella organization does not only coordinate exchange between the affiliates but gives a foundation for shared activities. This aligns with what was mentioned by one interviewee: the need for an umbrella organization to facilitate big wind energy projects initiated by the government: “*** is the new (umbrella) cooperative, who is going to participate in the big offshore wind park” (XI: 350-351). Since the affiliates could not stem the size of the project, the government requested the development of an umbrella organization. Hence, the umbrella organization can scale up the projects of energy cooperatives – those of their affiliates and in partnership with the government. This new role entails components of *Brokering* for this new project, as it “broker(s) collaborations between community energy groups and large companies and specify the terms and conditions of partnerships to safeguard community energy groups’ interests” (Warbroek et al., 2018, p. 8). However, I introduced this as a new role because the umbrella organization does not only represent the values of the energy cooperatives, negotiates and advocates with the other parties, but is an essential instance to scale up the dimension of the projects. The umbrella organization takes on the responsibility for the whole administration and appears to be one (large) cooperative with whom the government and corporate companies can collaborate. Hence, the new *Administration* role goes beyond *Brokering* for energy cooperatives.

For the eighth role of (8) *Mobilization*, the umbrella organization uses their intermediary function to bring people together within the cooperative movement or to organize the connection of affiliates and their members towards actors outside of the organization. This role goes beyond mere adherence to the cooperative movement by operationalizing its principles. Specifically, the umbrella organization can serve as a platform to promote collaboration with other actors and to mobilize the members of their affiliates to engage in public protests (I, II, X, XII*). Interviewees highlighted the close connection of the umbrella organization towards the cooperative transition movement for their sector: “the movement is already there, but we have to accelerate (it)” (X: 385). The network is therefore useful to “use that fuel, to make people really, really angry and mad, and like go in the streets and do crazy stuff to make a change” (I: 362-363). In that way, there are various potential ways to use the network for mobilization and politization purposes: “the beauty of this network is that it's plasticity, it can be used for any kind of way to celebrate what we're doing as community-supported agriculture” (I: 375-377).

5.2.3 Intermediation at Four Levels

The Intermediary Role Framework demonstrated that umbrella organizations can facilitate a variety of different roles to support their affiliates (Warbroek et al., 2018). Nevertheless, the extent of the interconnectedness of umbrella organizations with other entities and the breath of their operation remain unclear. Therefore, the Level Framework of Kanda et al. is used to specify and illustrate the roles they partake (2020). Evidence shows that the umbrella organizations intermediate on all four levels. This is illustrated in Figure 4.

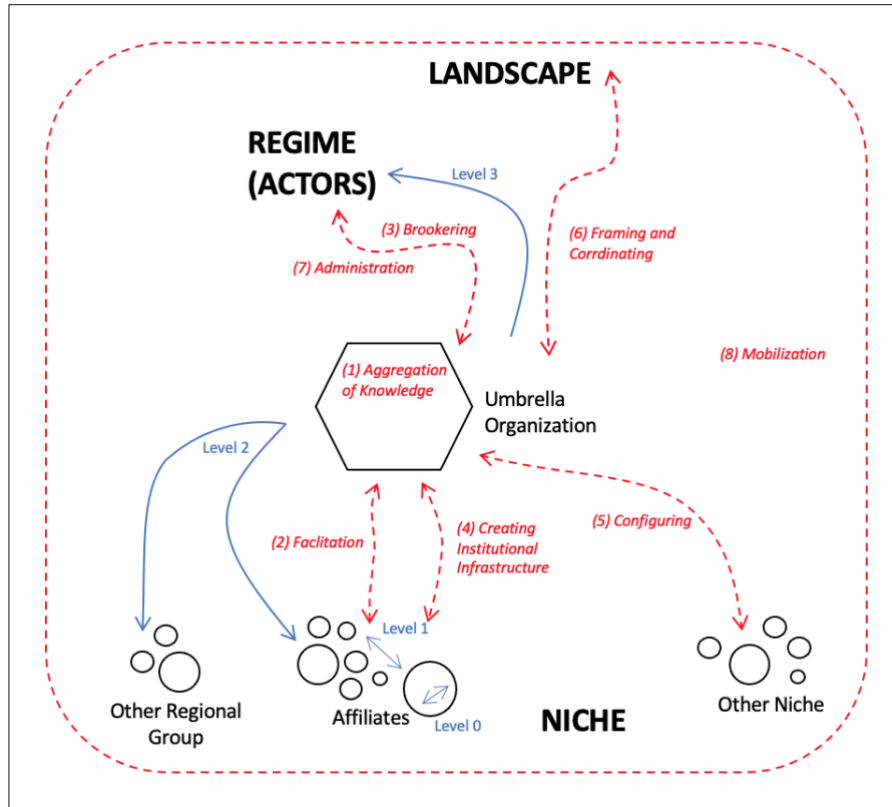


Figure 4: Own illustration of Intermediary Roles from the framework by Warbroek et al. (2018), between the umbrella organization, niche actors (own affiliates, other regional groups, and other niches), regime actors and the landscape level, complemented by the level differentiation (Level 0- 3) by Kanda et al. (2020).

On Level 0, the umbrella organization mediates between one entity to another (Kanda et al., 2020). For instance, one umbrella organization offered resolution in case of conflict between individual people in one of their affiliates. This is not listed as any official service but was mentioned a couple of times, as something the umbrella organization can provide (I, III, VII).

On Level 1, the umbrella organization facilitates intermediation in-between entities of a network (Kanda et al., 2020). This can mean between the affiliates, but also services delivered from the umbrella organization to the affiliates. Hence *Facilitating*, *Creating Institutional Infrastructure* and *Configuring* (I-XII*) can be grouped as Level 1 activities. Since most of the services delivered by umbrella organizations are connected to these roles (see section 5.1.1), it can be said that umbrella organizations as intermediaries predominantly engage on Level 1.

On Level 2, the umbrella organization is intermediating in-between networks (Kanda et al., 2020). This is not directly linked with any particular intermediation role and can happen in different ways if, for instance,

when the umbrella organization is sub-divided into regional networks (I, VI, VIII). Sometimes they offer services, like networking (*Creating Institutional Infrastructure*) between regional groups. Here, one can differentiate between the Level 1 and 2 networking in-between the affiliates or sub-groups of one umbrella organization (*Creating Institutional Infrastructures*) and Level 3 networking of affiliates with outside stakeholders (*Brokering*). This Brokering can be conducted on Level 2, with other niches, for instance other national umbrella organizations, or on Level 3, when talking to regime actors (see next paragraph).

On Level 3, the umbrella organization engages when talking to other institutions (Kanda et al., 2020). This can, for instance be done when fulfilling *Brokering* or *Framing and Coordinating* roles (I- III, V-XII*). The umbrella organization is seen as an “intermediate instance between the practice, the community-supported agriculture enterprises, the teachers and the administrations and politicians” (translated) (V: 442-443). Although most of the umbrella organizations engage on Level 1, it was highlighted by one organization, that the umbrella organization should collaborate (more) with other agricultural actors (from the regime level). They see a high potential in this communication to open up and reduce the existing scepticism and prejudices (V). Moreover, throughout most of the interviews with organizations from energy cooperatives, the benefit and importance of “long-term partnership with governments” (VIII: 457-458) are seen as one of the biggest success factors for the organization (I, VIII, IX, X). The added intermediary role of *Administration* is an activity on Level 3 and deals with actors from the regime level – governments as well as corporate partnerships (X). Hence, most of the operational work of the umbrella organizations is done on Level 1, but high potential is attributed to services on Level 3.

In-between all Levels (1-3), the overarching role, *Mobilization* can entail various expressions and is directed to influence the landscape level. Mobilization in reference to the members of the affiliates occur on Level 0. Correspondingly, Level 1 denotes mobilization of the affiliate organizations, Level 2 of the entire network of affiliates, and Level 3 when mobilizing groups or individuals outside the umbrella organization.

5.3 Second Research Question

To answer the second research question, I first elaborate on the kind of sustainability transition umbrella organizations are aspiring as well as the transformational potential of their affiliates. The application of

the Collective Diffusion Pathway Framework then allows for identifying how the umbrella organizations facilitate the transition.

- (2) In what way do umbrella organizations foster a sustainability transition through *collective diffusion* of grassroots innovations?

5.3.1 Vision of the Niches for the Sustainability Transition

In order to comprehend the objectives pursued by the umbrella organizations, an elaboration of the envisioned sustainability transition is given.

The sustainability transitions the umbrella organizations are striving for, is a manifestation and mainstreaming of the idea that their affiliates represent. The sustainability transition aspired by the umbrella organizations of community-supported agricultures pictures a self-sufficient food production close to the consumers (I-VI, XII*), with a diversification of agricultural products. Community-supported agricultures (V, VI) should therefore be an “integral part of the food system ecology” (II: 261). This should create more “food sovereignty” (II: 268), with food provision independent from the financial means of the people (IV). The sustainability transition aspired by the umbrella organizations of energy cooperatives envisions a citizen led sustainable energy transition with a junction of production, consumption and ownership means (VII-XI), creating independence from geopolitical situations (VII, X).

To achieve this transition, the umbrella organizations intend to support and use the potential of their affiliates. These are seen as a “local engine for transition”, by setting a trend (XII*: 260). The umbrella organizations are convinced that their affiliates have a transformational potential because it is based on solidarity (I- III, IV, XI). Through the network, others can see that it worked, by which they can get inspired and learn from (I, V). They all believe that the transition needs to come from bottom-up, because “you need consent from the civilians, from the society, to change the whole (...) system” (IX: 279-280). Hence, the umbrella organizations bring the transition further, “by professional guidance and promote the (...) model in our part of the country (XII*: 22-23).

5.3.2 Collective Diffusion

To answer the research question, I will present how the umbrella organizations foster (1) *growth* and (2) *replication* of the individual affiliates.

Umbrella organizations perceived the (1) *growth for diffusion* in different ways. While agricultural umbrella organizations were more reluctant to promote the growth of their affiliates (I, IV, V, XII*), energy umbrella organizations considered it as a legitimate means of diffusion (VIII- X). More concrete, multiple agriculture umbrella organizations voiced scepticism, as one of them said: “the topic of growing is so anxiety-ridden because of this crazy turbo-capitalism” (translated) (VI: 282-283). They are concerned of losing their basic community-supported agriculture principles: “are we able to keep our principles, are we almost mechanically threatened by some kind of compromise that we're going to have to make?” (I: 396-397). Especially trust and close connection between the affiliates seems to be an important success factor, which need to be protected (III- V).

Contrary, the umbrella organizations of energy cooperatives were more intrigued to foster growth for their affiliates (VIII- X). Despite the growth of individual energy cooperatives, they believed that they could conserve the grassroot nature of energy cooperatives: “I think you need scale, but you also need the local involvement of the movement because otherwise you lose the bottom-up movement” (X: 474-475). The umbrella organization goes further and link the organization’s aim to the growth of their affiliates: “the existing of the *** is because of the growth of the local initiatives” (X: 110-111). To be able to grow, the energy cooperatives need to professionalize first (VIII, IX, XI). It can almost be said that this professionalization of their affiliates is a specific aim in itself for the umbrella organization: “you cannot run an idealism forever and pensioners who do not have to make the money anymore. So, you need to become economic” (VIII: 262-263). They have experienced that governments would “work around them” (the cooperatives) because of a lack of trust in un-professional organizations (VIII: 392). Hence, the umbrella organization has the specific role of helping their affiliates to professionalize: “because the local energy communities are too small, often, to have this professionalism in their own organization and that's why we trying to be kind of incubator for them” (IX: 84-85). By hiring (more) employees in the affiliate organizations, the mentality developed into the continuous growth of the organization, because the organization need new projects to sustain itself (VIII). However, the rise in members need to go in hand with demand and access to land: “the cooperatives (can only) grow at the same speed as they can realize new projects” (XI: 328- 329).

A similar pattern can be observed for the means of (2) *replication for diffusion*. While agriculture umbrella organizations expressed some reluctance (I, III-VI, XII*), there was more support for replication among energy umbrella organizations (XIII- X). Although one agriculture umbrella organization strives to have one community-supported agriculture in every neighbourhood (II), multiple umbrella organizations are

hesitant about replication: “you cannot enforce it as a model that’s replicating everywhere” (I: 418-419). They expressed concern about an increase of affiliates in the umbrella organization (IV, XII*) and instead desired stronger collaboration: “we do not want many community-supported agriculture, but we want them to engage with each other” (translated) (IV: 221-222).

For the energy umbrella organizations, the opinion about replication was more differential. On the one side, one said that the amount of the energy cooperatives is not the most important, but the output of these energy cooperatives (XI). On the other side, a few umbrella organizations were keen to replicate the model (XIII- X). One umbrella organization intentionally engaged in improving the founding conditions and stimulating the emergence of energy cooperatives (VIII- X), by talking to the governmental institutions: “we went to our municipalities, and we said, well, when you would like to have more participative communities in the energy transition, you have to stimulate the fact that energy cooperatives can develop, to be an initiative. And then we got some subsidies to stimulate more local energy cooperatives in our region. And that's what we did.” (IX: 222-225).

5.3.3 *Instead of Collective Diffusion: Stabilization*

Besides the discussion between growth and replication, it became evident, that the umbrella organization have another function, to *foster the stabilization of their affiliates*. Instead of diffusing the community-supported agriculture and energy cooperative model, they focused on the existing affiliates: “first step in the building of this organization was first to get stronger together” (I: 87-88). The agriculture umbrella organizations were mostly founded to stabilize the existing affiliates, and only sometimes to diffuse the model by offering guidance on founding a farm (I, II, IV- VI). Therefore, most of the services they offer are more directed to the stabilization of their affiliates: “everything that is newly founded has to stabilize first, and those that develop further can do that quite well on their own (...) (our) offer is above all, I think, rather stabilizing” (translated) (VI: 293-295). And then, there is a continuous discussion about “do we want to solidify and stabilise what we already have, and make it strong, (...) or do we want to go crazy opening or making happen all kinds of new groups” (community-supported agriculture farms) (I: 438-442).

The role of the umbrella organization can also change after some time. This can depend on the needs of their affiliates. While the reason to establish an energy umbrella organization have also been the stabilization of their affiliates, these are keener to move beyond stabilization towards diffusion the model (VIII- XI). So, it remains open if and in what way the umbrella organizations of community-supported agriculture might change in future. Nevertheless, it is an important finding, that the umbrella organization

are not only engaged in diffusion the model but focusses on a previous step in the sustainability transition – the stabilization of the niche innovations (phase 2) (Geels, 2019).

6. Discussion

The aim of the thesis is to understand the potential roles of umbrella organizations for energy cooperatives and community-supported agriculture as agents in sustainability transitions by examining how they support their affiliates (*first research question*) and facilitate diffusion of niche innovations into more widely established alternative models (*second research question*). Therefore, I discuss my three main findings, (6.1) that intermediary roles are diverse and dynamic, (6.2) umbrella organizations foster collective diffusion, but they have a diverging interpretation of the role of professionalization, and (6.3) umbrella organizations can accelerate their diffusion potential by engaging more with actors outside of organization.

6.1 First Finding: Intermediary Roles are diverse and dynamic.

My first finding is that *umbrella organizations, as intermediaries, support their affiliates through different services, and take on eight diverse intermediary roles in a dynamic manner*. Despite the general broad variety of roles among all umbrella organizations, there is a sector-specific pattern recognisable between the umbrella organizations of energy and agriculture. Therefore, I elaborate on the background of umbrella organizations of (6.1.1) community-supported agriculture and (6.1.2) energy cooperatives to understand their roles. Afterwards, (6.1.3) I discuss that the intermediary roles are dynamic.

6.1.1 Roles of Umbrella Organizations of Community-supported Agriculture

Even if the agriculture umbrella organizations offer different services and therefore take on varying roles, it is recognizable that they particularly engaged with social-integrative cooperation services. These include *Framing and Coordinating* (I- VI, XII*) and *Creating Institutional Infrastructure* (I- VI, XII*), to foster the knowledge exchange and support between the affiliates (see section 5.1.1).

First, their roles can be linked with the general niche dynamics. Community-supported agriculture is a rather undeveloped niche in Europe, which firstly needs to raise public awareness (Sulistyowati et al., 2023). To make people understand what community-supported agriculture is, the umbrella organization engages in establishing and securing the values and present the idea in public (*Framing and Coordinating*).

This need was especially highlighted by umbrella organizations that are older, which gives a hint that this might be one of the first roles umbrella organizations can take on, and that this was even more needed a few years ago (I, III, XII*). Another sign that community-supported agriculture is still a young niche is that it operates in the stabilization phase of the sustainability transition (see section 5.2.3 and 5.2.4).

Second, the individual characteristics of the umbrella organization have an impact on what roles they take on. For instance, the two most recently established umbrella organization, emphasized the need to establish connection between the affiliates in the beginning for any further collaboration, and therefore took predominantly the role of *Creating Institutional Infrastructures* (IV, V). Contrary, one of the oldest and biggest umbrella organization emphasized on the creation and distribution of knowledge (*Aggregation of Knowledge* and *Facilitation*) (VI). The size of the umbrella organization complicates the close relationship with continuous meetings between the numerous affiliates, which would be necessary for regular networking (VI). So, their knowledge exchange developed from experience sharing (*Creating Institutional Infrastructures*) to formal knowledge bases and official consulting settings (*Facilitation*). Another explanation why agriculture umbrella organizations engage particularly with *Creating Institutional Infrastructures*, is that they all self-identify as a network, which is the basic service of *Creating Institutional Infrastructures* (I- VI, XII*).

6.1.2 Roles of Umbrella Organizations of Energy Cooperatives

Even if the energy umbrella organizations offer different services and therefore take on varying roles, it can be seen that they are particularly engaged with coordination and economization services like *Aggregation of Knowledge* (VIII- X), *Facilitation* (VII- XI) and especially *Brokering* (VII- XI).

First, these roles can be linked to general niche dynamics. The role of *Brokering* was mentioned multiple times as (one of) their foundation reasons, which shows the demand from the niche for the umbrella organizations (VIII, X, XI). It was for instance used by energy umbrella organizations to improve the diffusion condition for replication (IX) and can therefore be a common role for the stage of diffusion in the sustainability transition process. Moreover, it is recognizable that energy umbrella organizations are taking over the responsibility for parts of the business model of energy cooperatives, like electricity provision or IT service (VII- X). This can be explained by the technical characteristics of the energy niche and the professionalization process within the niche (Herbes et al., 2021). When asked for what they want to expand on, they mostly mentioned business operation-related services, e.g., providing funding and electricity provision services (VIII- X). Hence, the umbrella organizations do not need to frame discourses

on the public level, *Framing and Coordinating*, like the agriculture umbrella organizations, but can devote themselves to more specific needs of their affiliates. Another niche characteristic is the existence of sub-structures of the umbrella organizations, which shows that the support structures (of umbrella organizations) are already fairly well-developed. This sub-structure shapes the distribution of services and therefore roles of the individual umbrella organizations. When I interviewed regional and national umbrella organization of the same country, some roles were taken on by both umbrella organizations (*Brokering*) (VIII- X), and some were more clearly attributed to mainly the national level (*Aggregation of Knowledge*) (VIII). This can potentially lead to dispute regarding their responsibility for intermediary roles: “there's not really a straight line. Well, time after time we are checking our boundaries, where are the boundaries between the national organization and our boundary” (IX: 165-166).

Second, the individual characteristics of the umbrella organization have an impact on what roles they take on. For instance, *Framing and Coordinating* to raise awareness about renewable energy cooperatives and the energy transition, was only important for one umbrella organization, which is also the oldest (VII). This coincides with what was evident for the agriculture umbrella organization. Moreover, cultural differences, historical and political reasons can determine the services of umbrella organizations and therefore how they fulfil an intermediary role. For instance, my empirical data showed that the affiliates shape the services by demanding specific needs. However, one umbrella organization referred to a case outside of my study, for which it is completely the opposite. Here, the umbrella organization has an active role of setting the agenda: “In ***, it's the opposite. They have a strong federation and weak cooperatives. That means the umbrella organization, there are the people who are developing cooperative projects. And at the end of the development of a project, they go to the local community, and they say, we have developed a cooperative project. If you want, you can start a cooperative, and the only thing you have to do is to find members raise money, participate in the cooperative project, and pay us the umbrella organization to do the work for you” (XI: 214-219). Thus, the selection of intermediary roles taken on by umbrella organizations depend on a variety of factors, including whole sector attributes, and individual characteristics.

6.1.3 Shift in Roles

Beyond the diversity of intermediary roles, these are also dynamic and can change over time. Since niche stabilization roles precede diffusion intentions, umbrella organizations can shift from a stabilizer to a diffusor (see section 5.2.3). The umbrella organization has a “plasticity” (I: 376), to adapt to the needs of

their affiliates. In the consecutive stage (diffusion), an additional trend can be identified, namely the umbrella organizations' role can develop from being "incubator (...) towards an intermediary" (IX: 355-356). Throughout both sectors, it was recognizable that umbrella organizations started with *Aggregation of Knowledge* and *Creating Institutional Infrastructures* as their first services, to give a setting for the affiliates to get to know each other and to give access to basic knowledge to everybody (II, IV- VI, X, XI). But with more time, they expand on *Facilitation* and *Administration* services and sometimes engage with *Configuring* (VI, VIII- XI). The more recent projects or roles up-taken by the umbrella organization usually include the intermediation at Level 3 – with other institutions, like governments (VIII, IX), banks (VIII), academia (VI, IX), or other corporate competitors (IX, XI). This trend is elaborated on in section 6.3. Although this is just one possible progression and not all umbrella organizations develop in the same way, the previously outlined tendencies underline this assumption. This goes along with former research, that says that the activities and therefore roles of umbrella organizations are different, depending on their stages of development and phases in their transition (Kanda et al., 2020; Kivimaa, Hyysalo, et al., 2019; van Lente et al., 2003).

6.2 Second Finding: Umbrella Organizations can foster Sustainability Transition through Professionalization for Collective Diffusion

My second finding is that *umbrella organizations can foster a sustainability transition through collective diffusion, but they have a diverging interpretation of the role of professionalization*. While agricultural umbrella organizations were more reluctant to promote the growth and replication of their affiliates (I, III- VI, XII*), most of the energy umbrella organizations considered both as legitimate means for diffusion, as a next step for their niche development (VIII- XI). This can be traced back to the different ways of dealing with professionalization.

6.2.1 Professionalization and Loss of Grassroot Characteristics

Growth and therefore professionalization of the affiliates are seen differential. Whereas agriculture umbrella organizations are reluctant to professionalism, energy umbrella organization see it as indispensable (see section 5.2.2). This reluctance of agriculture umbrella organizations is due to the fact that, for them, professionalization goes hand in hand with a loss of civic values (I, III- V): "are we able to keep our principles?" (I: 396). However, these two elements are considered independently by energy umbrella organizations: "you have to know the chairman, (...), you have to meet him in the supermarkets, so you can discuss it with him. (...) But on the other hand, you need the professionalism to make an

impact.” (IX: 304-308). While they also want to preserve their own principles, they believe that this is possible despite growth through professionalization: “we're still doing exactly the same things as we were doing five years ago, only, faster, better, and more organized” (VIII: 268-269). Although umbrella organizations of both sectors draw different conclusions, this fear of losing their local anchorage and civil society character has been acknowledged by actors from both sectors. Within the transition literature, this dilemma is described as a balancing act between compatibility and radicalism (Ilten, 2009). To be able to initiate change through diffusion, grassroots innovations must have a certain degree of comparability, to connect to regime structures and processes. However, innovations with a local connection and radical critique of current practices will hardly fit into organizational and institutional contexts and is therefore limited in potential up-takes from the regime (Ilten, 2009). Contrary, professionalization can lead to dilution of their founding values (Young, 2021). Membership in an umbrella organization can cause energy cooperatives and community-supported agriculture businesses to lose their autonomy, which might lead to a decrease in sensed ownership and empowerment (Young, 2021). The focus of the grassroots innovation might shift from community-led, to market-driven, replacing inclusivity with efficiency (Martin et al., 2015; Ornetzeder & Rohracher, 2013). Henceforth, through any kind of professionalization, certain values might transform – but it can be a decision of the affiliates and umbrella organization to decide (together) in what way. For instance, growth might only make sense up to a certain limit to maintain a decentralised character, but with configuration options within the current regime.

6.2.2 *Alternative: Replication?*

Due to the above-mentioned argument, replication of the niche might be a better alternative strategy for agriculture umbrella organizations to disseminate their affiliates. Although most of the umbrella organizations currently do not “see community-supported agriculture as the answer to feed everybody” (II: 259-260) and are convinced, that “it is and remains a niche” despite their personal and organizational visions (translated) (V: 337), this might change when the niche has been stabilized successfully in the different countries. Contrary, replication for energy umbrella organizations is pursued, but seen differential. It was acknowledged by most umbrella organizations, but more controversial, as one umbrella organization indicates: “but the question is, what is most important, the number of energy cooperatives or the number of energy projects, which creates citizen energy that you have access to?” (XI: 268-269). This is important, because the increasing number of energy cooperatives, as a result of replication intentions of the umbrella organization, can also include “sleeping cooperatives” (XI: 271),

which do not contribute to a successful renewable energy transition. In sum, replication of affiliates can preserve the affiliates' founding characteristics, but cannot be seen as a pure success number.

6.3 Third Finding: Umbrella Organizations can advance their Potential to Facilitate Sustainability Transition

My third main finding is that *umbrella organizations can advance their potential to foster sustainability transition through collective diffusion by intermediating with other actors outside their niche*. Here, I combine the previous discussion sections and zoom out to examine the case from the wider Multi-Level Perspective. To illustrate this, I will (6.3.1) explain the current practice, and then (6.3.2) address how to use these potentials.

6.3.1 The current Practice

Umbrella organizations exist in a system shaped by dynamics within and between landscape, regime actors and niches. Hence, umbrella organizations, as collective diffusor, can shape the dynamics between the niche, regime, and landscape (see section 5.2.2). However, landscape and regime pressures do also hamper the development of the niche, despite the intentions of umbrella organizations (I, V, VI, IX, XI). For instance, the limited accessibility of (fertile/suited) land to expand on their activity was mentioned by both energy and agriculture umbrella organizations as a constraint limiting any growth and replication intentions. Through a rising demand for land by various stakeholder groups, the "pressure on land is extreme" (translated) (V: 255). Moreover, one energy umbrella organization explained this pressure by the dominance of regime actors in the distribution of access to land: "commercial developers, they have a quasi-monopoly on good spots for wind turbines in ***, they have signed contracts with all the landowners, so we cannot get access to the ground" (XI: 330-331). Here, this struggle for land demonstrates the embeddedness of any niche development in whole societal systems, and especially the linkages with regime actors from the same sector. To overcome this limitation, building up a connection to the dominant regime, is seen as a key to diffusion niche innovations (Ilten, 2009), as developments at the level of landscape and regime are decisive for the potentials of niche development (Geels, 2005).

Throughout the interviews, the dependency on governmental decisions was highlighted: "before in the past, when the regional government was left wing, and we had the power or right that enforced a certain amount of land to be converted in organic agriculture, and all kinds of legal stuff that were great. But this whole thing has been overturned by the right-wing government that's in place right now" (I: 565-568).

Therefore, they are subject to regime actors and their (political) agendas, in a negative and positive way: “we could not have done this without the partnership of governments” (VIII: 457). This dependency and potential leverage point is congruent with previous research (Backhaus, 2010; Busch et al., 2021; Hartmann & Palm, 2023; Putnam & Brown, 2021).

However, views on if and what forms of engagement umbrella organization should take outside of its network of affiliates varies. The collaboration with other parties from the regime level, especially the work towards governments, can encounter resistance within the umbrella organizations: “it's been debated inside our organization, where there's some people feel that the political aspect of it, in terms of policies, it's not a priority. It's always a fight. Who thinks it's worth it to go and talk with the regional government, or even the Ministry of Agriculture, or even the European Commission? You know, some people they're like, fuck that, like, we have enough stuff on our plates on the local level, like, we do not need this. And some people are like, yeah, if we want to really change stuff on a really big scale, that's where we need to be” (I: 603-608).

But despite such hesitation, when departing from the Multi-Level Perspective, the outcome of a niche development depends not only on the internal mechanisms within the niche, but also coincides with external processes (Kemp et al., 1998). Therefore, I see a need to further discuss how umbrella organizations could work (more) with actors outside their organization to exploit their potential to advance sustainability transformation.

6.3.2 Advancing this Potential

By recognizing this dependency and turning it into a strategic element, umbrella organizations could expand their services in influencing the current regime actors. Congruent to this, several umbrella organizations have expressed that they want to enhance their intermediate functions with actors other than their affiliates to create a broader sustainability transition: “Penta helix is actually an organization with five organizations in it, which is the government, educational organizations, on all levels from primary school to university, research organizations, local civilians, or cooperatives and normal companies. And bring them together under one organization to get more equal collaboration between them. And that's what we're trying to do” (IX: 373-377).

Moreover, further collaboration with (international) organizations was highlighted by various energy umbrella organizations as something they want to expand on in the future (IX- XI). One umbrella

organization highlighted a great potential to collaborate (more) with other agricultural actors (from the regime level). They saw this communication as a means to open up and reduce the existing scepticism and prejudices (V). Although their attempt was unsuccessful, the conviction remains that this intermediation would be an effective measure: “The exchange with the traditional family farms is something that I really see as an axis where we have not made any progress. And I think that if we see this as part of opening up family farms to more cooperation, that would be fantastic” (translated) (V: 521-523).

This outward alignment of umbrella organizations can go beyond cooperation with regime actors and link up with regional as well as global social movements. They seem to be keen to expand their reach: “organizations and networks are quite in a bubble. There's not a lot of like connection to health networks or education networks (...) we need kids in schools being taught about farming, and food in primary school, and we need health services to think about what people are eating much more than they do. So, I think there's a kind of real need for networks outside the usual bubble” (II: 288-293). This connection can play a major role in triggering movement at the landscape level (Ilten, 2009).

Henceforth, these aspirations can be translated into an expansion of their Level 3 roles - *Brokering*, *Framing and Coordinating*, and *Administration*, but also *Mobilization*. Previous research agrees that further interaction of the intermediaries with regime actors could be beneficial to enable the breakthrough of niche projects and their inclusion in the regime level (Kanda et al., 2020; Matschoss & Heiskanen, 2017). I identify this deepening of intermediary roles at Level 3 as a great leverage point and a possible future strategy of umbrella organizations to disseminate their members and thus advance the sustainability formation of their niche.

6.4 Limitations of the study

The study faces a few limitations. Among other, interviewees may not fully represent diverse views and experiences in umbrella organizations, leading to individual biases in interpretations of organizational approaches. Moreover, the comparability of the answers is impaired, as I interviewed both, national and regional umbrella organizations. The study also did not address external factors comprehensively, which presumably influences their strategic orientation, most relevant for the third finding in the discussion. For instance, these context-dependent factors make it difficult to unify the umbrella organizations of energy cooperatives and community-supported agriculture in Europe.

7. Conclusion

This thesis addresses the need for a sustainability transition in energy and agricultural sectors by examining how niche innovations that adopt cooperative ownership models can be further developed with the help of umbrella organizations, as intermediaries. Embedded within the Multi-Level Perspective, and while applying frameworks on Intermediary Roles, Intermediary Levels, and Collective Diffusion Pathways, my thesis deepened the understanding of the potential roles of umbrella organizations of energy cooperatives and community-supported agriculture.

The thesis set out with the research questions on “How do umbrella organizations *as intermediaries* in sustainability transitions support their affiliates through the services provided?”. My findings showed that umbrella organizations do not only adopt multiple, already conceptualized, intermediary roles, but introduced novel roles of *Administration* and *Mobilization*. While umbrella organizations for community-supported agriculture engage more in the *Aggregation of Knowledge, Facilitation* and *Creating Institutional Infrastructures*, umbrella organizations for energy cooperatives take on further roles of *Brokering* and *Configuring*. These roles and therefore services can shift over time depending on the needs of their affiliates and the context of the sustainability transition. The thesis showed that the umbrella organization operate on various levels; mostly connecting affiliates with each other.

The second research question asked: “In what way do umbrella organizations foster a sustainability transition through *collective diffusion* of grassroots innovations?”. The thesis shows that the different services and roles of umbrella organizations foster a sustainability transition through collective diffusion, and stabilization measurements. Hereby, a differentiation between agriculture and energy umbrella organizations was discernable, illustrating the community-supported agriculture to remain a niche innovation with fewer aspirations to diffuse, and energy cooperatives as a professionalizing niche with collective growth and replication processes.

The thesis concluded and discussed three main findings, (1) that intermediary roles are diverse and dynamic, (2) umbrella organizations foster collective diffusion, but they have a diverging interpretation of the role of professionalization, and (3) umbrella organizations can accelerate their diffusion potential by engaging more with actors outside of organization to facilitate sustainability transition. These findings are relevant for other umbrella organizations; and would suggest that further research on their interdependencies and dynamics with regime levels can help realize the potentials of umbrella organizations to foster sustainability transitions.

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9. Appendices

Appendix 1: Consent Form for the interviewees

CONSENT FORM

Name of the interviewer: Kaya Feddersen

Purpose of the study:

I am conducting this interview as part of My Master thesis on “The Role of Umbrella Organizations in Facilitating Sustainability Transformation”. The aim is to get an understanding on how umbrella organizations support energy cooperatives and community supported agriculture projects in different European countries to facilitate a sustainability transition from within the civil society. Moreover, I am collaborating with the Institute for Ecological Economy Research in Berlin, who are part of a 3-year research project. Its focus is on Germany, but my Master thesis will contribute by giving an international perspective, to be able to compare the practices of the German cases with similar European organizations.

A brief explanation about data protection and confidentiality:

I assure you that:

- I will only use the contents of the interview for the stated research purposes.
- all information will be treated confidentially in accordance with current data protection guidelines.
- I will either anonymise the information I wish to publish or ask for prior consent.
- Data will be deleted with the end of the master thesis project. You have the right to withdraw your consent at any time.

The data will be used for the above purpose. The legal basis for the processing of your personal data is that you have given your voluntary consent.

I consent to Kaya Feddersen (Lund University) for processing data from my interview in accordance with the above.

Town/city	Signature
Date	Name and Organization
Do you want to remain anonymous (state: yes/ no)?	

Appendix 2: Interview Guideline

Interview partner, organization, position: ***
 Interviewer: Kaya Feddersen
 Date and Time: ***

I am conducting this interview as part of my Master Thesis on “The Role of Umbrella Organizations in Facilitating Sustainability Transformation”. The aim is to get an understanding on how umbrella organizations support energy cooperatives and community supported agriculture projects in different European countries to facilitate a sustainability transition from within the civil society.

The Interview Guide is derived from my Research Questions:

1. How do umbrella organizations *as intermediaries* in sustainability transitions support their affiliates through the services provided?
2. In what way do umbrella organizations foster a sustainability transition through *collective diffusion* of grassroots innovations?

I am collaborating with the Institute for Ecological Economy Research in Berlin, who are part of a 3-year research project. The project aims to analyse, through theoretical reflection and interdisciplinary empirical research, how community and social enterprises (such as energy coops and CSA) operate and to what extent this can be described as promoting the common good. Its focus is on Germany, but my master thesis will contribute by giving an international perspective, to be able to compare the practices of the German cases with similar European organizations.

Before we begin, a brief explanation about data protection and confidentiality:

I assure you that:

- I will only use the contents of the interview for the stated research purposes.
- all information will be treated confidentially in accordance with current data protection guidelines.
- I will either anonymise the information I wish to publish or ask for prior consent to publish it.
- To facilitate our analysis, I would like to record this interview. I will delete the recording once I have completed my analysis, or sooner if you request it.

Do you agree to this?

Block	Question	Answer
A: Introduction	Can you tell me in a few sentences how you personally got acquainted with ***?	
	Goals: What goals does the organization pursue (1) for itself, (2) for its members and (3) for society? <i>Follow-up: Do you see your organization as contributing to common welfare and why?</i>	
	Transition: What kind of energy/ agriculture transition are you aiming for and how do your business model and organizational structure contribute to it?	

B: Business Operation	Core services: What are the main services provided by your organization to your members? <i>Follow-up: Are these also the services that are used most frequently? Please describe the process of how the member organizations use your services.</i>	
	Other services: Are there any other services offered by you to the member organizations? <i>Follow-up: How are the services you offer to the energy cooperatives supported/complemented by the services from the national umbrella organization?</i>	
	Planned services: Are there any services that have not (yet) been realised and why not? Is there interest expressed by the member organizations in a further service that has not yet been offered by you? <i>Follow-up: Do you offer a possibility for your affiliate organizations to approach you with specific needs for services? And if so, how?</i>	
	Relationship between "economising services" and "civilising services": To what extent do you see yourself as an economic enterprise? To what extent do you see yourself as a civil society organization?	
	Development: Would you say that the field of energy cooperatives/CSA has become more economic in recent years and if so, how do you recognise this and has this been at the expense of other goals and values?	
	Business model: How would you describe your business model? <i>Follow-up (Regional structures): What is the benefit from having this multi- level structure?</i>	
	C: Cooperation between Member Organization and Umbrella Organization	Integrated economy: Do you have an integrated economic business model with your member organizations (e.g., shared economic activities)? <i>Follow-up: If yes, how does it work and what benefits does it generate? If not, is such cooperation envisioned and how could it be established?</i>
Relationship between primary and secondary organizations: How would you describe the relationship between your organization and the organizations you provide services for?		

	<p><i>Follow-up: Which forms of membership do you have, how intense and frequent is the collaboration?</i></p>	
	<p>Help for the member organization: What motivates organizations to participate in your umbrella organization? What deficits does the umbrella organization help to overcome?</p> <p><i>Follow-up: To what extent does stabilization and growth play a role for membership?</i></p>	
	<p>What success factors and difficulties arise in your cooperation with the affiliates?</p> <p><i>Follow-up: How do you plan to develop this in the coming years?</i></p>	
D: Role in Transition	<p>Transformation potential of energy cooperatives: Would you say that energy cooperatives / community-supported agriculture has a transformational potential and if yes, how do you see it?</p>	
	<p>Do you see your organization in the role of strengthening and multiplying this potential? If so, to what extent and how do you do it?</p> <p><i>Follow-up: Is that something you talk about in your network?</i></p>	
	<p>Growth and professionalization of affiliates: What is the importance of (1) growth and (2) professionalization of the member organizations for the purpose of transformation?</p> <p><i>Follow-up: Do you see any potential for conflict with the regional principle or the civil society character of the member organizations?</i></p>	
	<p>Going back to the bigger picture, where the fossil fuel conglomerates are still dominating in the sector: What is still missing for this energy/agriculture transition and how do you see the role of umbrella organizations in facilitating it?</p>	
E: Conclusion	<p>Is there anything that has not received enough attention or something that I have missed out, but you would like to voice?</p>	
	<p>Is there any other organization with a similar model that yours, which you would recommend me to interview?</p>	

Appendix 3: Coding Schema for the Data Analysis in Nvivo

Cooperative services			
	Conflict Resolution		
	First Contact Person		
	Information Provision		
	Networking		
		international	
		market for...	
	Platform for Experience Sharing		
	Platform to Connect Customers and CSA or EC		
	Values - Standards		
Coordination Services			
	Awareness Raising		
	Collaboration with other Parties		
	Lobbying		
	Marketing		
	Public Relation		
Economization services			
	Consultation		
	Education		
	Financial support		
		as a service	
		in conflict situations	
	Insurance		
	Legal issues		
	Management		
	Production		
	Sale		
	Technical Solutions		
Planned Services			
Organizational Structures			
	Business Model		
		Employees Positions	

		Funding	
		Integrated Model	
		Meetings	
		Other sectors	
		Outstanding projects	
			Projects with the Government
		Payment for services	
	Difficulty Factors		
	Goals for Members		
	Reasons for Participation in UO		
	Success factors		
Transition			
	Future Development		
	Goal for Society		
	Transformational Potential		
		Remaining a Niche	
	Kind of Transition		
Umbrella Organization			
	(Regional) Sub-structures		
	Civil Society vs. Economic Enterprise		
	Goal of the UO		
	Growth		
	Locality		
	Movement		
	Professionalism		
	Role		
	Stabilization vs. Diffusion		
Quotes			
Things to be discussed			