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Titel | Title

Context matters.

Exploring the contexts of citizen participation in sustainable mobility transition projects in rural areas of Austria.

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Johanna Singer BSc BA

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Abstract

Based on the need for transformation in the mobility sector, this master's thesis deals with sustainable mobility in rural regions of Austria. Citizen participation is now used in many planning processes, including sustainable mobility projects. In addition to more efficient implementation and greater legitimacy of solutions, the aim is also to strengthen democratic values. Not only the design of participation processes plays a major role, but also the respective context. In order to examine the significance of context more closely, this master's thesis explores the question of under which contextual conditions citizen participation contributes to the successful implementation of sustainable mobility transition projects in rural regions of Austria. To answer this question, a catalogue of contextual factors was developed based on literature. Ten projects on demand-responsive transport, tourism mobility, multimodal mobility, car-sharing and corporate mobility with varying degrees of citizen participation were selected for guided expert interviews with project stakeholders. These were analysed and compared with each other based on the context factors.

The following contextual factors proved to be relevant for the majority of projects: (1) financial support from a higher administrative level, (2) strong local or regional actors and (3) a history of working on citizen participation processes and (4) sustainability transitions. However, additionally relevant for the effectiveness of participation in sustainable mobility projects were the timing of citizen participation in the project and the specific question or task that was handed over to the participation process. Even before a project can be launched, the question arises as to what problems, needs and solution ideas exist for the future development of the mobility system locally or in the region. This open question is suitable for finding better answers through a citizen participation process, as important information and perspectives can be gathered. Once it has been finally decided which mobility solution is to be implemented, the question of how the respective solution can be improved and adapted to local conditions and needs is once again suitable for contributing to successful implementation through citizen participation. This research result is intended to help regional managers, local politicians and mobility consultants to make targeted use of citizen participation and thus drive forward the mobility transition in rural regions.

Zusammenfassung

Ausgehend von der Notwendigkeit einer Transformation des Mobilitätssektors beschäftigt sich diese Masterarbeit mit nachhaltiger Mobilität in ländlichen Regionen Österreichs. Bürger:innen-Beteiligung wird mittlerweile in vielen Planungsprozessen eingesetzt, auch bei nachhaltigen Mobilitätsprojekten. Neben einer effizienteren Umsetzung und einer größeren Legitimität von Lösungen soll auch die Stärkung demokratischer Werte erreicht werden. Eine große Rolle spielt nicht nur das Design von Beteiligungsprozessen, sondern auch der jeweilige Kontext. Um diese Bedeutung des Kontextes genauer zu untersuchen, geht diese Masterarbeit der Frage nach, unter welchen Kontextbedingungen Bürger:innen-Beteiligung zur erfolgreichen Umsetzung nachhaltiger Mobilitätswendeprojekte in ländlichen Regionen Österreichs beiträgt. Zur Beantwortung dieser Frage wurde ein Variablenkatalog an Kontextfaktoren auf Basis von Literatur entwickelt. Zehn Projekte zu Mikro-ÖV, Tourismusmobilität, Multimodale Mobilität, Car-Sharing und betriebliche Mobilität mit unterschiedlichen Graden an Bürger:innen-Beteiligung wurden ausgewählt, um mit Projekt-Akteur:innen leitfaden-gestützte Expert:innen-Interviews zu führen. Diese wurden anhand der Kontextfaktoren analysiert und miteinander verglichen.

Folgende Kontextfaktoren stellten sich als relevant heraus für eine Mehrheit der Projekte: (1) finanzielle Unterstützung seitens eines höheren administrativen Levels, (2) starke lokale oder regionale Akteur:innen und (3) Erfahrung mit Bürger:innen-Beteiligungsprozessen und (4) Nachhaltigkeitstransformationen. Als zusätzlich relevant für die Wirksamkeit von Beteiligung bei nachhaltigen Mobilitätsprojekten stellte sich jedoch der Zeitpunkt im Projektverlauf heraus, an dem Bürger:innen-Beteiligung angewendet und welche Frage oder Aufgabe konkret an den Beteiligungsprozess übergeben wird. Noch bevor ein Projekt gestartet werden kann, steht die Frage, welche Probleme, Bedürfnisse und Lösungsideen für die zukünftige Entwicklung des Mobilitätssystems vor Ort oder in der Region vorhanden sind. Diese offene Frage eignet sich, um durch einen Bürger:innen-Beteiligungsprozess zu besseren Antworten zu kommen, da wichtige Informationen und Perspektiven gesammelt werden können. Steht dann schlussendlich fest, welche Mobilitätslösung umgesetzt werden soll, ist die Frage, wie die jeweilige Lösung verbessert und an lokale Gegebenheiten und Bedürfnisse angepasst werden kann, erneut geeignet, durch Bürger:innen-Beteiligung zu einer erfolgreichen Umsetzung beizutragen. Dieses Forschungsergebnis soll Regionalmanager:innen, Gemeindepolitiker:innen und Mobilitätsberater:innen helfen, Bürger:innen-Beteiligung zielgerichtet einzusetzen und so die Mobilitätswende in ländlichen Regionen voranzutreiben.

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List of abbreviations

BMIMI	"Bundesministerium für Innovation, Mobilität und Infrastruktur" (federal ministry for innovation, mobility and infrastructure)
CP	citizen participation
DRT	demand-responsive transport
KEM	"Klima- und Energiemodellregion", climate and energy model region (Austrian climate change mitigation programme for regions)
KlimaTicket	one year public transport pass for one province or whole of Austria
LEADER	EU programme for regional development and cohesion
ÖBB	"Österreichische Bundesbahn", Austrian federal railways
ÖROK	"Österreichische Raumordnungskonferenz" (Austrian conference on spatial planning)
PT	public transport
VCÖ	association "VCÖ – Mobilität mit Zukunft" (mobility with future)
VVT	„Verkehrsverbund Tirol", traffic association Tyrol (provincial public transport provider)

1. Introduction

The thesis begins with an outline of the problem, an overview of the research area and its objectives. The introduction then presents the research question and the design of the empiric research, before closing with an overview of the thesis's structure.

1.1. Problem definition

Concerning climate change mitigation, the need for action is especially urgent in the Austrian mobility sector, as it accounted for 28,9% of Austria's greenhouse gas emissions in 2023 and it is the sector with the biggest increase in greenhouse gas emissions since 1990 (UBA 2025, p. 94f). Whilst the policies for decarbonizing transport in urban areas are quite developed, the challenge in rural areas largely remains (Poltimäe et al. 2022, p. 2). The combination of a low population density and a high reliance on car ownership makes the transition to sustainable mobility difficult. Local and regional mobility transition projects were installed over the past years such as carsharing, demand-responsive transport (DRT) and ridesharing services. Their spread as well as their success varies across Austria (Mobyome 2024).

The literature identifies citizen participation (CP) as a method that fosters bold ecological policies and increases the acceptance as well as the effectiveness of such policies (Newig et al. 2018, p. 289; Scott 2015, p. 559). In addition, the concept of collaborative governance, which involves non-state actors in public and deliberative decision-making processes, has gained traction in recent decades. (Ansell and Gash 2008, p. 544). After the communicative turn in urban planning, the participation of citizens has become a standard in planning processes and is also an objective of such processes (Kamaci 2014, p. 15). As a result, CP is now frequently used in sustainable mobility transition projects as well (Knobloch 2022, p. 103).

The range of CP is thereby very broad and ranges from methods that are rather non-participatory to informing or consulting the citizens concerned to methods that actually give the power of decision making to citizens (Arnstein 2019, p. 26). What they all have in common is that CP is very context specific (Bryson et al. 2013, p. 24; Kamaci 2014, p. 5). Such context may include the involved actors, stakeholders and institutions, the governance landscape, the regional characteristics and economic circumstances. Additionally, the context of the spatial arrangement becomes relevant as rural areas are often perceived as peripheral, in a status of crisis or exclusion that is reflected in a lack of infrastructures and insufficient provision of services (Arora-Jonsson and McAreavey 2023, p. 772; Halonen and Kattilakoski 2018, p. 305).

Research shows that if sustainable mobility policies are implemented without prior consultation of the affected citizens, the latter may face the risk of mobility poverty as the costs of the transition are passed on to them when it only consists of switching to electric private vehicles (Flipo et al. 2023, p. 138). This shows the necessity of including citizens to guarantee just transitions on the one hand and the potential of CP especially in rural areas where sustainable mobility services are especially lacking on the other hand. However, if not applied adequately, CP can have undesired outcomes such as overburdened or disappointed citizens when too much or too little responsibility is assigned to them (Marzouki et al. 2017, p. 211). This again highlights the case specificity of CP and the need to apply it carefully.

1.2.Research area

The process of CP has already been studied intensively and criteria have been developed that render a CP process successful for everyone involved (Bryson et al. 2013, p. 24; Maibach et al. 2014, p. 27ff). Due to the context dependence of CP, it is also important to step one step back and have a look on what happens before and around a CP process (Bryson et al. 2013, p. 24; Kamaci 2014, p. 5). Furthermore, there is a lack of research on sustainable rural mobility (Poltimäe et al. 2022, p. 2). This is especially true for the social aspect of mobility transitions (Ryghaug et al. 2023a, p. 757). This thesis explores CP in the specific landscape of sustainable mobility and rural areas. The focus thereby lies on passenger mobility only and the transport of goods is not covered.

1.3.Objectives

In my thesis, I want to look at CP in sustainable mobility transitions in rural areas in Austria. More specifically, I want to shed light on the context dependence of CP and find out under which circumstances CP contributes to the successful implementation of sustainable mobility transitions and when it does not. A transition to sustainable mobility can be considered successful if it is accepted and used by citizens. As CP is also widely used in the field of mobility, I want to raise the question if it is always the appropriate method. For this purpose, I look at CP as a means to achieve a goal – sustainable mobility transitions in this case – and I do not understand CP as an objective itself. Based on the research gap identified above, I want to investigate which context factors and constellations support a CP process in such a way that it contributes to the goal. Possible context factors might be for example certain constellations

of actors, the amount of available funding, individual engaged citizens that drive the process, prior experiences with participatory processes, the involvement of external facilitators, certain regional dispositions and so on.

The motivation for this topic is to better understand the interplay of citizens and responsible project actors as well as their embeddedness in the contexts of institutions, stakeholders and regional characteristics. This should in the long run contribute to a more sustainable mobility system in rural areas. The outcome of the thesis should inform responsible project actors, such as regional development actors, sustainable mobility consultants, mayors and local councillors, about the context factors that allow CP processes to support the implementation of sustainable mobility projects. In particular, these actors should gain an understanding of the circumstances in which CP can make a valuable contribution and those in which it cannot.

1.4.Research question and design

The presented research objectives lead to the following research question:

> *In which contexts does citizen participation contribute to the successful implementation of sustainable mobility transitions in rural areas in Austria?*

The hypothesis is that context factors have a strong influence on whether CP is a useful means of achievement or not. Under certain constellations of context factors CP processes enhance, hinder or have no influence on the successful implementation of sustainable mobility transitions. I consider a sustainable mobility transition to be successful when the introduced service, infrastructure or policy is accepted and used and thus has the potential to contribute to climate change mitigation. I answer the research question by applying a mixed methods approach with document analysis and guideline expert interviews. This results in the categorisation, analysis and comparison of sustainable mobility transition projects in Austria based on different context factors. The winners of the VCÖ mobility award, the main annual award for sustainable mobility in Austria, serve as a database for sustainable mobility transition projects (VCÖ 2025). After developing the set of context factors, I categorise the sustainable mobility transition projects based on project documents. From these 55 projects, I select ten projects with different degrees of CP and project foci. The next step is the conduction of semi-structured guideline expert interviews with relevant stakeholders from the selected projects. Interview partners are for example regional development agents, municipal authorities and sustainable mobility consultants. Finally, the ten projects are analysed and compared according to the context factors.

1.5.Structure of the thesis

This thesis is structured as followed: After this introduction, the research background of CP, sustainable mobility, rural areas and the Austrian context is presented. It is followed by the explanation of the method. The results are presented afterwards, consisting of the project screening, the overview of the analysed projects and their context factors. The analysis and comparison of the examined projects take place in the discussion. Finally, the conclusion provides a summary of the thesis, reflections on its limitations and an outlook to further research potentials.

2. Research background

The following chapter provides an overview of the three research areas relevant for this thesis: CP, sustainable mobility and rural areas. To end the chapter, short introductions are given on how each of the research areas unfolds in Austria.

2.1.Citizen participation

CP or public participation has already been researched extensively. This chapter involves an overview of the different types of participation, the reasons and purposes for and details on how to design participation processes. This is complemented by indicators against the use of CP and critical remarks about it. Finally, the role CP plays in (local) sustainability transitions is explained.

2.1.1. Definitions and typologies of citizen participation

"Participation of the governed in their government is, in theory, the cornerstone of democracy" (Arnstein 2019, p. 24), wrote Sherry R. Arnstein, chief advisor for CP at the US Department of Housing and Urban Development at this time, 1969 in her influential work "A Ladder of Citizen Participation" (Gaber 2019, p. 189). In that, she describes eight different types of CP structured as different rungs of a ladder ranging from no to significant influence of citizens (Arnstein 2019, p. 25). Broadly speaking, the range goes from non-participation where participation is only seemingly desired, to different degrees of tokenism where citizens do get heard but are not able to exercise power, to the third category with different degrees of citizen power (Arnstein 2019, p. 25). Overall, the issue of CP as Arnstein defines it, is that "nobodies" become "somebodies" by having the power to render measures, institutions, programs, etc. responsive to their opinions

and needs (Arnstein 2019, p. 25). In the latest consequence, the aim is to equalize power, which is why Arnstein's ladder is also perceived as provocative (Gaber 2019, p. 199). Furthermore, by implicitly assuming the more power citizens can exercise the better, the analytical tool of the ladder with its eight categories has a normative dimension as well, which can be criticised (Fung 2006, p. 67). However, Arnstein also mentions arguments against citizen control, which is the highest rung of the ladder, as for example less efficiency, less professionalism and new polarisations (Arnstein 2019, p. 33). Additionally, information and consultation, both forms of tokenism, can be legitimate parts of CP as long as they are combined with other forms where citizens actually can exert some influence (Arnstein 2019, p. 28).

Several scholars have invented typologies to cluster different forms of CP with all spanning a range from pseudo or passive participation to genuine or active participation (Kamaci 2014, p. 7). These typologies constitute a way of defining participation with different graduations on a continuum. Other categorisations of participation look at the direction of communications flows, on the theoretical basis of normative or pragmatic participation or on the objective for which a participation process is used (Reed 2008, p. 2419). Yet another way to analyse CP asks who participates, how do the participants communicate and make decisions and lastly what actions or influence can they exert (Fung 2006, p. 67). Differently spoken, the three dimensions of stakeholder representation, communication design and power delegation to the citizens span a three-dimensional space in which forms of CP can be located (Newig et al. 2023a, p. 2). This contrasts with the one-dimensional typology of Arnstein because a high intensity on one dimension does not necessarily correspond to a high intensity on the other dimensions. Another differential criteria is whether public decision-making processes are initiated top-down by public officials or bottom-up by citizens or civil society organisations (Newig et al. 2018, p. 272). CP in public governance decisions is also called participatory governance and means the involvement of actors from the private sector, the civil society or citizens in broad in public decisions where they are usually not part of (Newig et al. 2018, p. 273). A similar term, collaborative governance, is about deliberative and consensus-oriented decision-making between state and non-state actors on public decisions (Ansell and Gash 2008, p. 544). Participatory governance, more commonly used in Europe, can also include non-collaborative forms, in contrast to collaborative governance which is more applied in North America (Newig et al. 2018, p. 272).

2.1.2. Why and when applying citizen participation

Although CP is not a clearly defined and demarcated concept, it is widely used (Kamaci 2014, p. 14). After the communicative turn in the 1980s, participatory planning approaches became dominant in the area of urban planning (Kamaci 2014, p. 15). CP in environmental decision-making is seen as a democratic right and increasingly being used, as stated by scholars in 2008 (Reed 2008, p. 2418). Moreover, the scope of participation has grown and includes policy areas like health, fiscal issues, challenges of diversity in and questions of scientific development (Fung 2015, p. 514). When new technologies are introduced, participation can enhance their legitimacy and empower actors in using them (Matern et al. 2020, p. 2069). In the field of mobility, the participation of all relevant stakeholders is regarded as an important factor for the successful implementation of mobility solutions (Schabka et al. 2022). The same could be observed for mobility projects in rural areas (Knobloch 2022, p. 103). Overall, CP is seen as fundamental of contemporary democracy (Kamaci 2014, p. 14). The widespread use and mainly positive perception of participation, based on normative and effectiveness claims, has, however, led to the notion of a "participation panacea" (Reed 2008, p. 2418).

Indeed, a distinction must be made between participation as a method and participation as an objective (Kamaci 2014, p. 3). Public participation can be a potential solution to democratic challenges and is not only a good in itself (Fung 2015, p. 514). The legitimacy, justice and effectiveness of policies can be enhanced through participation processes, although all three may not necessarily be achieved simultaneously, as certain process designs favour one or the other (Fung 2006, p. 74). Yet in environmental decision-making, democratic legitimacy and effectiveness are closely linked (Newig et al. 2018, p. 289). CP can also improve accountability and transparency, give way to alternative solutions and help to increase the place-specificity of solutions (Ianniello et al. 2019, p. 39). Citizens have a great potential to solve wicked problems as they can provide important knowledge and resources for framing the problem, discussing trade-offs, gathering information and engage directly with the solutions (Fung 2015, p. 517). When it comes to urban planning, CP is not only seen as a tool but as a main goal (Kamaci 2014, p. 15). For solving planning problems about equality and diversity, participation can support in including diverse concerns, enhance solutions as well as the probability of implementation (Kamaci 2014, p. 15). Especially inclusive participation processes can be used to include heterogenous participants and engage with differences productively (Bryson et al. 2013, p. 29). CP is also used to promote well-being, enhance social inclusion or, respectively, prevent social exclusion (Halonen and Kattilakoski 2018, p. 304).

Despite its attributed numerous positive implications, a participation process is not automatically legitimate (Bryson et al. 2013, p. 27). On the contrary, it must be clear that a participation process is needed (Bryson et al. 2013, p. 24). Reasons for applying CP are: meeting legal requirements, following democratic ideals, informing the public, enhancing the understanding of problems and the quality of solutions, generating support for decisions, managing conflicts and strengthening collective capacities for ongoing problem solving (Bryson et al. 2013, p. 25). When designing and applying CP, the context plays a major role: "Participation processes must fit the context in which they are taking place" (Bryson et al. 2013, p. 24). It is also because of this context dependence that there exists such a large number of different forms of participation (Kamaci 2014, p. 5). The place sensitivity of certain policies and governance strategies also adds on to the need of careful consideration of the context in participation takes place (Schabka et al. 2022).

2.1.3. Design of citizen participation processes

The main components of a participation process are informing, building support, and collecting input to influence decision-making (Kamaci 2014, p. 4). The design of a CP process should start with an assessment of the context and the purpose, then the necessary resources should be allocated, and the participation process must be managed (Bryson et al. 2013, p. 24). The latter includes the involvement of participants, the creation of rules and structures as well as handling questions of power, inclusiveness and legitimacy (Bryson et al. 2013, p. 24). Finally, the participation process should be evaluated and continuously redesigned (Bryson et al. 2013, p. 24). The outcomes of participation can be on the individual, group or community level, process- content- or user-oriented and can unfold in the short-, medium- or long-term (Bryson et al. 2013, p. 30).

Several research endeavours have sought to determine success factors for CP and came to similar results but also showed that many details have to be considered (Ianniello et al. 2019; Kurkela et al. 2024; Reed 2008). In summary, a successful participation process depends on the adequate adjustment of institutions, participants, resources and the design of the process itself. Regarding *institutions*, CP must be included timely and throughout the process, contextual factors have to be considered, a supportive organisational culture is necessary as well as the institutional embeddedness or institutionalisation of participation (Ianniello et al. 2019, 34f; Kurkela et al. 2024, p. 136; Reed 2008, p. 2426). The management of participation, particularly of administrative and operational aspects is key, therefore political leaders and public managers are important enablers for CP (Kurkela et al. 2024, p. 135). *Participants* and stakeholders must

be systematically represented, thereby favouring diversity (Ianniello et al. 2019, 34f; Reed 2008, p. 2426). In meetings open to the general public, participants are self-selected, meaning that those who want to and are able to participate also do so, which are often those in a better economic position (Fung 2015, p. 515). Another role is that of intermediary stakeholders, such as technicians, who can provide important expertise and thereby exercise influence but also trigger concerns of representativeness (Flipo et al. 2023, p. 141). Relevant *resources* are highly skilled facilitators, tailored methods, local and scientific knowledge, financial resources and sufficient personal (Ianniello et al. 2019, p. 35; Kurkela et al. 2024, p. 136; Reed 2008, p. 2426). Digital tools can support participation processes but must be applied carefully (Stein et al. 2022, p. 260). With regards to the *process*, the objectives must be clear and agreed upon by the participants, process factors such as group dynamics and the quality of collaboration have to be considered, the rules must be made transparent and the whole proceedings must be designed accordingly (Ianniello et al. 2019, 34f; Reed 2008, p. 2426). Leaders should look for short-term gains within a long-term strategy and a mixture of new ideas and refinements, avoid hierarchical arrangements and too much bureaucracy and should involve participants also in research (Ianniello et al. 2019, p. 35). Underpinning values of participation processes should be equity and diversity, trust, learning and reflexivity, empowerment as well as responsibility (Chilvers and Kearnes 2020, p. 369; Reed 2008, p. 2426).

2.1.4. Challenges of and critique on citizen participation

A main challenge for CP is its use as a means to support decisions that were already taken (Marzouki et al. 2017, p. 211). In fact, participation processes without some redistribution of power maintains the status quo with the only difference that those in power can claim that they gave citizens the possibility to participate (Arnstein 2019, p. 24). In other words, if neither legitimacy, justice or effectiveness are advanced through the participation process, it is trivial and can create disappointment among the participants (Fung 2015, p. 521). If CP is only done for ticking the box, its potentials cannot be yielded (Ianniello et al. 2019, p. 27). Especially short-term and negligent participation is unlikely to have successful outcomes (Ianniello et al. 2019, p. 39). Furthermore, a lack of public consensus on the role of CP in democratic institutions and a lack of systematic leadership for participation constitute challenges to the proliferation of successful public participation (Fung 2015, p. 520).

The benefits of CP are mostly considered as given and on top of that, there is little research on its challenges (Ianniello et al. 2019, p. 22). Problematic CP passes on too much responsibility and, with it, also problems, onto citizens (Knobloch 2022, p. 122). For example, the

responsibility for sustainability transitions is passed onto citizens when car- or ride-sharing in car-dependent regions is being promoted under the frame of citizen empowerment instead of offering more PT services (Flipo et al. 2021, p. 16). The complexity of the issue at stake can diffuse political responsibility and obscure the possibilities of participation (Flipo et al. 2023, p. 140). The normative assumptions about CP are hardly ever questioned and its potential and downsides often remain unclear (Ianniello et al. 2019, p. 22). However, not critically reflecting its underlying assumptions reduces its efficacy (Chilvers and Kearnes 2020, p. 368). One major asymmetry in CP processes exists when their goals are limited to that of the organisers (Ianniello et al. 2019, p. 27). Another failure of participation lies in the way experts understand interactions with the public: the problem is seen as a lack of knowledge and consequently, information transfer for raising awareness is seen as the solution (Cook and Melo Zurita 2019, p. 57). In this constellation, also called the "deficit model", experts focus on one-way knowledge transfer and are unable to overcome their own assumptions and boundaries (Cook and Melo Zurita 2019, p. 62). A strong focus on building relationships between the managers of participation processes and participants can be a way to overcome the deficit model (Cook and Melo Zurita 2019, p. 63). Another problem is framed as the "residual realist trap" and refers to the adherence of pregiven norms and assumptions about participation (Chilvers and Kearnes 2020, p. 368). By seeing the public as something natural or pregiven, the heterogeneity and ambiguity of participation gets played down (Chilvers and Kearnes 2020, p. 350). How participatory practices are constructed and performed is shaped by and shapes social, political and technoscientific orders (Chilvers and Kearnes 2020, p. 354). A different way of viewing participation is the "co-productionist" perspective that also looks at exclusions and effects that are part of participation and regards them as matter of collective reflection and responsibility (Chilvers and Kearnes 2020, p. 355). To allow transformational change, expert authority needs to be challenged and opened up to local, cultural and experimental expertise (Cook and Melo Zurita 2019, p. 62).

2.1.5. Citizen participation in sustainability transitions and local contexts

Whether participation supports or hinders successful sustainability transitions is a matter of research with mixed results. Effective governance is an indicator of success, which means governance arrangements that are "capable of solving the substantive problems that they are set to address" (Fung 2015, p. 517). Environmental decisions are measured against a business-as-usual scenario with a scale ranging from worst to best case (Newig et al. 2023a, p. 5). CP does improve the quality of environmental decisions, but this strongly depends on the quality of the decision-making process (Reed 2008, p. 2421). The more participation, the more sustainable

and innovative are the outcomes (Newig et al. 2018, p. 270). Another finding observed that the more and dialogical the communication with the participants, the better are the environmental outcomes (Newig et al. 2023a, p. 6). It is also stated that delegating power in decision-making to the participants improves the environmental effectiveness of the outcomes (Newig et al. 2023a, p. 6). An extensive analysis concluded that the collaborative governance of environmental resources led to better ecological outcomes and did not worsen it by any of the analysed indicators (Scott 2015, p. 559). However, other scholars found little evidence that CP improves the efficiency and effectiveness of decision-making in general (Ianniello et al. 2019, p. 39). A meta-analysis of 305 case concluded that CP does not significantly improve environmental outcomes (Newig et al. 2023a, p. 9).

A reason for applying CP particularly in local and regional contexts is that there is room for experimentation at these levels; for instance it is possible to find out to which extent citizens are willing to engage in public affairs (Sommermann 2015, p. 12). Another value of CP for local governments is that it challenges their self-image, asks for whom public institutions are created and thereby sheds light on their legitimacy (Kurkela et al. 2024, p. 135). To be influential, CP should not only be seen as a single activity but, also be entrenched in the entire local governance system (Kurkela et al. 2024, p. 136). When it comes to urban planning, all theoretical schools of the contemporary era regard CP as essential (Kamaci 2014, p. 11). Smart village initiatives, which are currently playing a key role in rural development planning, do involve participation as well as mobility as key topics (Bokun and Nazarko 2023, p. 16).

2.2.Sustainable mobility

This chapter explores approaches and strategies for sustainable mobility as one major sustainability transition. First, sustainable transitions in general and in their demarcation to transformations are explored. Then, sustainable mobility transitions in general are presented, followed by a detailed view on sustainable mobility in rural areas, as this is the spatial focus of this thesis.

2.2.1. Sustainability transitions

The terms transition and transformation are often used interchangeably but have different meanings and stem from different strands of research (Hölscher et al. 2018, p. 1). The evolvement of the concept of sustainability transition is linked to the Dutch policy context, and has the normative goal of achieving sustainability (Chappin and Ligtvoet 2014, p. 716).

Transitions emerge out of changes in different interlinked fields and include technological, economic, institutional and cultural changes (Auvinen and Tuominen 2014, p. 345). Transformation in contrast, refers to changes and developments on the macro-level of society and includes but is not limited to sustainability (Chappin and Ligtvoet 2014, p. 721). The dynamics of the observed processes in transitions and transformations show similar patterns like complexity, uncertainty, path-dependency and thresholds and involve multiple actors (Hölscher et al. 2018, p. 2). Whereas transitions aim at enabling the switch to a sustainable system state, transformations investigate how safe and just societies can look like (Hölscher et al. 2018, p. 2). Transitions can be approached from different angels which led to the differentiation of socio-technical, socio-institutional and socio-ecological transitions, with the first one constituting the beginnings of transition studies (Loorbach et al. 2017, p. 609ff). Characteristics of socio-technical transitions are a multilevel perspective, path-dependencies, the management of niches and a focus on technological innovations (Loorbach et al. 2017, p. 612). Especially the multilevel perspective with its notion of regimes as dominant and stable configurations of societal subsystems was popularised and provides a perspective on how these configurations are influenced by external landscapes and challenged by innovations and novelties that emerge out of niches (Loorbach et al. 2017, p. 605). It helps explaining path-dependencies and lock-in effects as optimisation, sunken investments and benefits of scale further stabilise regimes which only reconfigure shock-wise through external pressure and breaking-through novelties (Loorbach et al. 2017, p. 606). Mobility is one field of socio-technical transitions, besides others such as energy, water and waste management (Loorbach et al. 2017, p. 613). Socio-technical transitions are part of demand-side solutions – as opposed to end-use-efficiency – that exist in various sectors such as mobility, buildings, food and manufacturing and are said to have great climate change mitigation potentials (Creutzig et al. 2018, p. 262). However, transition and transformation studies got closer to each other in the past years due to their shared interest in desirable societal change (Hölscher et al. 2018, p. 2). As this thesis deals with one specific socio-technical arrangement that is to be transformed towards more sustainability, the term transition is used throughout the thesis.

2.2.2. Sustainable mobility transition

The terms transport and mobility – or "Verkehr" and "Mobilität" in German – are often interchangeably used but have slightly different meanings (Manderscheid 2024, p. 262ff). Transport focuses on vehicles, infrastructure and the engineering work carried out so people can cover a distance as fast as possible whereas mobility is about the activity and possibility of being mobile, as opposed to being immobile, and is seen as a social phenomenon that goes

beyond the mere activity of physical transportation (Manderscheid 2024, p. 262ff). Additionally, mobility studies have gained more attraction in the past years and have influenced traditional transport planning (Pucci and Vecchio 2019, p. 1). Ways how these strands of research can be fruitful for each other are being explored (Pucci and Vecchio 2019, p. 10). In another comparison, sustainable mobility is said to focus on accessibility (see also the definition of accessibility and its importance in the rural context in the next chapter 2.2.3.) instead of transport, as the conventional transport planning approach does; more on the social instead of the physical dimension and on reasonable and reliable travel time instead of travel time minimisation (Pucci and Vecchio 2019, p. 6). Pointing towards a similar direction, scholars also call for a greater inclusion of social sciences and humanities studies in mobility research and planning, emphasising the socio-technical nature of the mobility transition (Ryghaug et al. 2023a, p. 757). Tackling the challenge of transforming the mobility system into a sustainable one requires a change of the whole system which only can be understood when the technologies in use are seen in connection with other non-technological factors (Auvinen and Tuominen 2014, p. 345). A mobility system can be broken up into the components infrastructure, vehicles or means of mobility, users and governance (Auvinen and Tuominen 2014, p. 346). Similarly, also mobility innovations can be seen through the interplay between technologies, governance structures and users (Schabka et al. 2022, p. 3).

A sustainable mobility system can be characterised by its economic efficiency, an improved regional connectivity, social equity through enhancing access for various societal groups and the reduction of its negative externalities, as for example pollution, noise, safety risks and so on (Vreeker and Nijkamp 2005, p. 508). Kammerlander et al. (2015) draft a "Vision of a sustainable mobility in Europe", where "being mobile is not about travelling fast and frequently anymore, but about travelling patiently, advisedly and sustainably" (Kammerlander et al. 2015, p. 3). Urban spaces will be greener and designed for walking and cycling, people will largely have changed their mobility behaviour and will have shorter commuting distances, electric cars will complement PT in rural areas and rail will be the standard for international European travel (Kammerlander et al. 2015, p. 3f). The sustainable mobility transition requires the reduction of the number and length of trips, the shift to sustainable modes and an increased efficiency of the mobility system (Banister 2008, p. 75). These principles are summed up under the widely used framework of "avoid-shift-improve" (Creutzig et al. 2018, p. 262). Avoid-measures are for instance compact cities and teleworking, shift-measures refer to mode shift from car to PT, cycling and walking and finally improve-measure include electric vehicles, eco-driving as well as smaller and lighter vehicles (Creutzig et al. 2018, p. 262). This framework is also used in the

German discourse on mobility transitions as “vermeiden-verlagern-verbessern” and constitutes also the guiding principles of Austria’s Mobility Master Plan 2030 (BMK 2021) (see also chapter 2.4.2.). Furthermore, it indicates that the mobility transition cannot be solved within the area of mobility alone. Especially the aim for trip length reduction involves the area of spatial planning to build more dense and concentrated settlement areas designed for mixed uses and encouraging sustainable mobility behaviour (Banister 2008, p. 79). Other key elements for sustainable mobility policies include the best use of technologies, regulations and pricing as well as clear information for raising awareness and creating acceptability (Banister 2008, p. 78f). Furthermore, investments in sustainable mobility infrastructures, eco-design directives for product standards, research, development and innovation (RDI) and the use of information and communication technologies (ICT) for managing intermodal mobility are policies for implementing the sustainable mobility transition (Kammerlander et al. 2015, p. 8).

A common perspective on sustainable mobility policies for mode shift is the distinguishment between push and pull measures: policies that make it more attractive to use sustainable mobility on the one hand and policies that make it more unattractive to use unsustainable mobility (Batty et al. 2015, p. 111; Kammerlander et al. 2015, p. 7). Regarding the mode shift to urban PT, improving the quality of the PT network is considered a pull measure, parking regulations, congestion charging and the pedestrianisation of streets are considered as push measures (Batty et al. 2015, p. 111ff). The careful and coordinated adjustment of push and pull measures in packages is one strategy to promote the public acceptability of sustainable mobility policies, which can be considered as crucial for their implementation (Banister 2008, p. 78). Other measures for enhancing public acceptability are information, public involvement, the highlighting of benefits, adopting controversial measures step by step, consistency between different measures and the adaptability of policies (Banister 2008, p. 78f).

The social aspects of the mobility transition are reflected in the concept of mobility justice. Mobility justice comes, for example, into play when sustainable mobility policies focus mainly on low- or zero-emission-vehicles, because they only target those who can afford to buy and run a car (Mullen and Marsden 2016, p. 110). In a broader conceptualisation of mobility justice, the everyday mobility gets connected with the global mobility of tourism and migration and looks at the various forms of injustice that occur in relation to gender, ethnicity, class, disabilities, and so on: on the individual level people have different possibilities and restrictions to move, on the street level, infrastructures create a certain hierarchy of different mobility modes and cities, suburban or peripheral areas are equipped differently with mobility facilities (Sheller 2018, p. 24f). Going further, nations organise and restrict mobility that happens at their

borders and finally on a planetary level, the effects of climate change and thus also those of mobility externalities are distributed unevenly (Sheller 2018, p. 25). Mobility justice can also be seen in a spatial context. Here, scholars call for a greater place-sensitivity when designing sustainable mobility policies (Ryghaug et al. 2023a, p. 764).

2.2.3. Sustainable mobility in rural areas

There is a big difference in mobility practices and cultures between urban and rural areas: While more and more urban households are car-free and use PT and active mobility instead, car ownership in rural areas still increases (Ruhrort 2023, p. 133). A key concept of rural mobility is accessibility, which is also the basis for social inclusion (Farrington and Farrington 2005, p. 2). Accessibility can be defined as "the ability of people to reach and engage in opportunities and activities" (Farrington and Farrington 2005, p. 2). Mobility is an important tool to establish accessibility, however, besides the spatial there is also a structural dimension of economic, physical, care-work related and other individual constraints that influence accessibility (Farrington and Farrington 2005, p. 2). A similar conceptualisation of accessibility links the geographical and physical accessibility of destinations and of transport services to the capabilities of people to access these destinations and services (Smith et al. 2012, p. 93). However, accessibility can never be a clear-cut concept, as there is no definite answer of what a person must be able to access, so the level of accessibility is an individual measure (Farrington and Farrington 2005, p. 3f). Consequently, increasing the number of mobility opportunities is only one way to alleviate what is called the poverty of access, meaning a lack of accessibility (Farrington and Farrington 2005, p. 3). Related to that is a case study in Ireland where transport poverty is conceptualised as a composite measure of transport affordability, accessibility and mobility, the latter being the ability of a person to move and use transport (Kelly et al. 2023, p. 3). The analysis revealed distinct spatial patterns of risk, with a high prevalence in rural areas, though not exclusively there (Kelly et al. 2023, p. 15).

Because rural mobility often means using the private car, inequalities can be further exacerbated when those who do not have access to a car are excluded from services. Often, especially those who would need access to welfare services such as healthcare or job centres are the ones who do not have access to a car and thus are further marginalised (Camarero and Oliva 2019, p. 5). Not to forget that a high reliance on automobility produces high amounts of CO_2 emissions and other external costs. However, the reasons for introducing PT in rural areas are mainly derived from urban areas and thus focus on population density and number of passengers (Flipo et al. 2023, p. 141). Yet this logic does not work in rural areas, as PT quickly becomes economically

inefficient due to the long distances and the missing critical mass caused by a low population density (Poltimäe et al. 2022, p. 2). This missing critical mass can be partly replaced by tourism, but only to a certain extent as the destinations interesting for tourists are not necessarily important in the residents' daily life (Flipo et al. 2023, p. 139). The lack of PT services in rural areas is one component of what has been framed as the rural gap: due to a low and dispersed population, which is often in the process of ageing and decline, inhabitants of rural areas have less access to economic development, welfare state services and PT in comparison to urban citizens (Camarero and Oliva 2019, p. 2). A somewhat vicious circle is produced: a declining population renders PT more inefficient which can lead to a reduction of the offered mobility services which then means reduced access to basic infrastructures and can lead to an increased migration to cities (Camarero and Oliva 2019, p. 5). A major problem of PT in rural areas are the first and the last mile: people often have to cover long distances to get from their home to a PT station which does not favour the use of PT (Bauchinger et al. 2021, p. 4). Key solutions for sustainable rural mobility involve DRT services which can cover the first and last mile and are more likely to be economically sustainable as they operate on demand (Mounce et al. 2020, p. 7). DRT can serve as a complementary mobility that operates additionally to existing PT services and bridges the gaps (Bauchinger et al. 2021, p. 5). Other key solutions are sharing mobility where either a ride or a mobility asset are shared, and the integration of the different mobility services so that multimodality can be easily performed (Bauchinger et al. 2021, p. 6).

Although different solutions exist, a comprehensive vision of how a sustainable mobility system for rural areas could look like is missing (Ruhrort 2023, p. 135). Throughout the European Union, very few policies for rural mobility exist and clear objectives with measurable targets are completely absent, as it was shown by an analysis from 2020 (Mounce et al. 2020, p. 5). Also, local policymakers lack effective measures for implementing sustainable rural mobility services, as the focus largely has been on cities (Flipo et al. 2021, p. 3). The same is true for the research area where a low attention for sustainable and inclusive rural mobility services could be observed (Poltimäe et al. 2022, p. 2). The lack of visions and narratives for such a mobility system in rural areas hinders gaining a broad public support for the mobility transition and has the potential to increase the urban-rural divide (Ruhrort 2023, p. 134). Despite all the differences, the mobility challenges in rural and urban areas are interrelated since mobility has precisely the task of connecting different areas (Bauchinger et al. 2021, p. 2). Going beyond the urban-rural dichotomy and seeing the urban and the rural as co-constitutive leads to a focus on mobility infrastructures that influence the flows of resources and people between urban and rural areas, thereby shaping them and their relationships (Gutierrez-Velez et al. 2022, p. 6f).

2.3.Rural areas

In the following, I will give an introduction to rural areas in order to gain an understanding of the specialities of the spatial context this thesis is situated in. Starting with various definitions of rural areas, the perspectives of demographic changes as well as processes of peripheralisation and marginalisation show important characteristics of rural areas. Finally, the wide policy field of regional rural development, its different approaches and action fields give insights into the practical realities of governing and developing rural areas.

2.3.1. Definition of rural areas

The EU's statistics service Eurostat categorises regions into predominantly rural, intermediate and predominantly urban regions on the level of NUTS3 – small regions with a population size ranging from 150.000 to 800.000 inhabitants – which is based on the EU's nomenclature of territorial units for statistics (NUTS) (Eurostat 2024a, 2024b). If more than half of the population within a region lives in rural areas, the region is considered as predominantly rural, although adjustments are being made if a city is present (Eurostat 2024b). A rural area is defined as 1 km^2 with less than 300 persons per km^2 (Eurostat 2024b). When classifying rural areas, a common characteristic is, that not being urban is the defining criterion for rural areas (Stein et al. 2022, p. 261). Rural areas are not defined by their own qualities but through the absence of urban ones (Danson and Souza 2012, p. 7). This way, rural areas are seen and defined as the residual that remains after having defined cities and urban areas (Halseth et al. 2019, p. 5). To overcome the difficulty of defining rural areas, a different approach takes the hybridity of rural and urban areas into account: due to the manifold intertwining, rural attributes can be found in urban areas and vice versa (Matern et al. 2020, p. 2065). Consequently, the borders between urban and rural areas are dissolved in supra-regional cooperations which focus on the relations between these areas and the involved actors (Matern et al. 2020, p. 2065). This points to the fact, that what is peripheral and what is central is rather socially constructed through existing or non-existing social relations and networks (Stein et al. 2022, p. 260). Scholars also argue to focus on actors that co-produce, what is then termed, a region instead of a techno-centric view on physical and digital infrastructures (Matern et al. 2020, p. 2071). Also to note is that the focus on urban-rural differences can be used for policies that pit different geographical areas against each other and thereby reinforce urban-rural disparities (Stein et al. 2022, p. 260).

2.3.2. Perspectives and research on rural areas

Low population densities are a defining criterion for rural areas, though this is often further exacerbated through depopulation processes. Centralization dynamics and the growth of cities

on the one side has led to peripheralisation dynamics and the creation of left behind regions on the other side (Kühn 2015, p. 367). Rural areas in the past and in the present are characterised by out-migration to cities, mainly due to economic and cultural reasons (Halfacree 2020, p. 51). Additionally, these migration dynamics have a gender aspect: in peripheral rural areas especially of Northern and Southern Europe, significant more women than men aged between 20 and 35 leave their home region (Johansson 2016, p. 292). Consequently, rural population is affected by ageing and a surplus of men among the young (Camarero and Oliva 2019, p. 3). A significant female out-migration does not only mean a loss of economic potential but does also shape long-term spatial imaginaries (Wiest 2016, p. 289). The general out-migration trend is contrasted by a smaller counter-urbanisation trend, which is typically led by economically better positioned people and can lead to processes of gentrification at the rural sites, especially around cities, where the rural site is mainly for recreational purposes and the city remains the place for work and education (Little 2015, p. 796). However, migration processes do not follow constant patterns over time and need to be seen in relation to economic conditions and prevailing livelihood arrangements (Dax and Copus 2022, p. 941).

Rurality can be understood as interplay of rural localities, representations of the rural and the lives of the rural population (Halfacree 2020, p. 49). Representations of the rural are often based on stereotypes of backwardness, rural idyll and oversimplified, focusing on male, middle-aged white farmers (Halfacree 2020, p. 55f). Strong gender roles for men and women as well as a clear dominance of heterosexuality are part of the construction of rurality and shape social relations in rural areas (Little 2015, p. 797). The social exclusion or the notion of not fitting in the rural society stems from the cultural construction of what the rural is and is upheld through performing rurality by the inhabitants themselves and pop-cultural representations (Little 2015, p. 797).

Research on rural areas is often carried out with the notion of crisis in mind (Arora-Jonsson and McAreavey 2023, p. 772). The discourse on rural areas tends to approach them from a perspective of marginalisation (Halonen and Kattilakoski 2018, p. 305). Peripheralisation and marginalisation are often used interchangeably in the context of rural areas but contain nuanced differences: marginal is used in a functional sense and focuses more on social and economic powers and structures whereas peripheral is mostly used in a geographical sense (Danson and Souza 2012, p. 9f). While periphery is a static concept and refers to an area that is far away from the centre, peripheralisation has a process-oriented view and focuses on the social relations and their spatial consequences (Kühn 2015, p. 368). A decreasing population and especially a loss of those age cohorts that actively participate in the labour market is a key symptom of

peripheralisation (Wiest 2016, p. 288). Peripheralisation processes are based on interrelated economic, social, political and communicative processes that change regions (Kühn 2015, p. 374). Explanatory theories contrast a strong and innovative centre with a poor and powerless periphery but focusing too much on causality obscures regional variations and the possibility of reversed developments (Kühn 2015, p. 371). Significant initial impact could be observed through the neoliberal restructuring at the beginning of the 1980s which led to a withdrawal of the welfare state and a decline of services and infrastructures also in rural areas (Halseth et al. 2019). The situation is especially pronounced in Eastern Germany where major processes of deindustrialisation and a restructuring of agricultural industries took place and created a vicious circle of job loss, migration, decreased demand and supply in remote rural areas (Wiest 2016, p. 281). Because economies of scale cannot be applied in rural areas due to low population densities, rural areas do not rank high when cost-benefit-analyses are applied and are rather treated as minorities (Flipo et al. 2023, p. 137). The rationality of cost efficiency has led to a centralization of services, for example in the health care sector, which means a low supply rate for rural areas or the dependence on the private car due to a low prevalence of PT in the area of mobility (Bock 2016, p. 557).

A decline in population size means also a decline in electorate size, which results in a diminished political power, and a decline of social capital, which is especially important in today's knowledge economy (Camarero and Oliva 2019, p. 2). Power relations play an important role when it comes to peripheralisation: "the relation of centre and periphery is less a spatial fact than a social configuration resting on unequal power relations which lead to uneven spatial development" (Kühn 2015, p. 375). The rural gap is not only about a lack of services, infrastructures and political representation, but also about a lack of social cohesion, leading the focus to social inequalities (Camarero and Oliva 2019, p. 2). For the further development of rural areas, the need for investments is acknowledged but expertise on where and how to invest as well as coherent policies are missing (Halseth et al. 2019). A different research interest around rural regions is the focus on the positive impacts of nature and the question how landscapes enhance wellbeing (Little 2015, p. 799). Such a focus leads away from the notion of crisis and gives way to the resources rural areas endow. Digitalisation and remote work, sustainable agriculture and local food-chains, new rural lifestyles and touristic potentials are opportunities for rural areas (Ahlmeyer and Volgmann 2023, p. 12). Such rural regeneration processes focus on positive revitalisation and reinvention instead of simply reversing negative developments (Ahlmeyer and Volgmann 2023, p. 4).

2.3.3. Regional rural development

In 2021, the EU Commission published its "Long term vision for rural areas: for stronger, connected, resilient, prosperous EU rural areas", serving as a guideline for the policy period 2028-2034 and with the aim of achieving it by 2040 (European Commission 2021). This represents one of the latest developments in a long history of regional rural policymaking in the EU. Starting in the 1970s, the initial objective was to compensate geographically disadvantaged regions with measures strongly focusing on agriculture (Dax and Copus 2022, p. 939). Yet as the objective of economic competitiveness became more important, a trade-off with the intentions of cohesion policy to reduce inequalities arose (Heintel et al. 2018, p. 519). A new focus on bottom-up initiatives, communities and place-specific needs was introduced through the LEADER program in the 1990s and exists until today under the label of community-led local development (CLLD) (Dax and Copus 2022, p. 939). In 2024, the EU spent around 20% of its budget, 52 billion Euro, on "economic, social and territorial cohesion" (European Commission 2025). European rural development aims at alleviating inequalities in infrastructures and services and at the same time looks for strategies to make use of place-specific resources and exploit the regions' endogenous potential (Ahlmeyer and Volgmann 2023, p. 13). The EU's Territorial Agenda 2020 seeks for polycentric development which should help to avoid polarisation between cities, medium-size towns and rural areas (Kühn 2015, p. 375). In recent years, a policy shift could be observed at least on the national level caused by ongoing depopulation of rural areas: the well-being of inhabitants and rural societies came into the focus of policymakers on the expense of growth-orientation and strengthening of regional competitiveness (Dax and Copus 2022, p. 952). This shift is also reflected in strategic documents on the EU level but not yet in policies (Dax and Copus 2022, p. 950). Exemplary for the focus on well-being and the provisioning of services is the concept of mobility justice which considers the individual level and the design of services, ensuring that the right to mobility is met (Flipo et al. 2021, p. 15).

Different approaches guide rural regional development: exogenous, endogenous and neo-endogenous development, relational place-making and social innovations (Bock 2016, p. 563f). In the perspective of exogenous development, the role of rural areas is to produce primary resources for urban economies, whereas endogenous development is based on local initiatives and enterprises that harness local resources (Bock 2016, p. 563f). Neo-endogenous development, in contrast, takes external resources and influences into account and assigns the state the role of a facilitator (Bock 2016, p. 563f). Additionally, neo-endogenous development emphasises that global dynamics such as climate change, pandemics and conflicts need to be

addressed by regional initiatives as well (Georgios and Barraí 2023, p. 200). Finally, relational place-making focuses on reconstructing relations and creating a sense of belonging to the respective place and rural social innovation aims at fostering local citizen cooperation and innovation, also stepping in where public services are missing (Bock 2016, p. 563f). The shift from government to governance in state administration gave way to the emergence of neo-endogenous rural development and social innovations (Georgios and Barraí 2023, p. 194). Both approaches emphasise citizen engagement and entrepreneurialism (Bock 2016, p. 569). Nonetheless, critique on social innovations highlights that the emphasis on social innovations is shifting responsibilities from the state to citizens and thereby individualising rural development and neglecting structural causes (Bock 2016, p. 569). Consequently, scholars call for a rural development that focuses on infrastructures, basic services and the social aspect of living, which is currently not sufficiently covered (Stojanova et al. 2021, p. 21f).

Rural dynamics are increasingly influenced by urban developments (Dax 2014, p. 62). The urban-rural dichotomy has lost explanatory character, instead the notion of a post-urban world came to the forefront (Westlund and Borsekova 2023, p. 720). It is characterised by (1) re-urbanisation, that is urbanisation not so much based on rural out-migration but on international migration, (2) the densification of suburbs creating large metropolitan areas, (3) the region enlargement due to improved PT that gives way to longer commuting distances, and (4) the importance of networks of city-regions, meaning cities and their urbanised surroundings (Westlund and Borsekova 2023, p. 720). Consequently, rural areas need to develop in interaction with cities and policies that strengthen rural-urban networks are needed, as for example through improved PT and digital infrastructure that allows for teleworking also in remote rural areas (Westlund and Borsekova 2023, p. 724). Because of the importance of PT for urban-rural interlinkages, it needs to be planned in an integrated and collaborative way (Bauchinger et al. 2021, p. 20). Regional development is a cross-cutting issue that is addressed on multiple levels, from bottom-up processes and local initiatives to public administration, services and infrastructures to policy-making on national and supra-national levels (Heintel et al. 2018, p. 516). Consequently, regional development means a lot of communication between different actors, levels and interest groups (Heintel et al. 2018, p. 517). This is also true for the governance of sustainable rural mobility where different institutions need to work together (Flipo et al. 2021, p. 15).

There is a significant digital divide in Europe as digitalisation unfolded differently in rural areas regarding access and participation (Clercq et al. 2023, p. 11; Stein et al. 2022, p. 259). Through digital solutions, physical distances lose importance (Matern et al. 2020, p. 2066). Yet

digitalisation should be viewed as a tool and not an end in itself and a problem-oriented view that considers specific spatial requirements instead of a techno-centric one is needed (Matern et al. 2020, p. 2067f). Also, to realise the potential of digitalisation, accompanying infrastructure such as PT and other fundamental services are needed so people are able and willing to live in rural areas (Ahlmeyer and Volgmann 2023, p. 12). Digitalisation found its way into regional development concepts under the name of smart region or smart village: it is about technical infrastructures but also about participation, networks and capacity building to generate an understanding for new digital approaches (Matern et al. 2020, p. 2067).

2.4.Citizen participation, sustainable mobility and rural areas in Austria

In the following, the three main topics of CP, sustainable mobility and rural areas will be examined in the context of Austria, as the spatial focus of this thesis. For this section, I have not only studied research papers but also looked at policy papers and reports.

2.4.1. Citizen participation in Austria

The Austrian federal chancellery understands CP as the opportunity for all affected and/or interested people to represent or express their interests or concerns in public projects (BKA 2025a). A differentiation is made to public participation, which means the participation of interest groups like chambers or NGOs (BKA 2025a). The department on civil service and governance innovation at the federal chancellery sees participation as an essential part of a proactive and citizen-oriented administration in order to enhance the quality and transparency of decisions and to increase trust in politics and administration (BKA 2025b). It gives advice on the creation of participation processes within the political-administrative policy-cycles and provides guidance on whether CP should be applied or not (BKA 2025b). Besides representative, direct-democratic and demonstrative forms of participation, also deliberative forms such as citizen and public participation are part of the Austrian democratic system (Lange et al. 2023, p. 11). Regulations for deliberative participation exist for spatial planning and environmental issues (Lange et al. 2023, p. 12). The federal ministry of agriculture and forestry, climate and environmental protection, regions and water management operates the webpage “partizipation.at” where extensive information on the practice of CP in Austria is collected and presented (ÖGUT 2025b). As one field of application mobility is mentioned, as the measures for more sustainable mobility have direct impact on the daily lives of everyone and are therefore often perceived controversially (ÖGUT 2025a). It is often about conflicts, for example regarding big mobility infrastructure projects, re-distribution of space in cities and

strengthening the position of users in PT (ÖGUT 2025a). The Austrian guidelines and regulations for the road sector ("Richtlinien und Vorschriften für das Straßenwesen – RVS") also mentions the use of participation because of its contributions in terms of content and democratic values and its ability to increase the acceptance of results (FSV 2013, p. 9). Recent examples of participation in Austria cover a broad variety: projects on citizen science, a citizen council on democracy, a community-based supermarket and municipalities and regions that want to discuss their future development with their citizens (ÖGUT 2025c). Austria's federalism is seen as a laboratory for innovations in direct democracy and CP, which could be observed in the province of Vorarlberg where an amendment to the state constitution institutionalised the province's history and experience with citizens' councils ("Bürger:innenräte") (Bußjäger 2015, p. 229). In this format, usually 12 to 15 randomly selected citizens meet for 1,5 days to discuss a topic of local or regional societal importance, supported by skilled facilitators, and draft a joint statement which is afterwards discussed publicly and in resonance groups also with the concerned politicians so the participants get feedback on the uptake of their ideas (Büchel Kapeller 2021, p. 93f). Since 2006, more than 40 local and regional citizens' councils were held in Vorarlberg (Büchel Kapeller 2021, p. 94). This practice is considered a fruitful approach to close the gap between politicians, administration and citizens, strengthen the citizens' capacities of self-organisation and identification with the place, provide new solutions and make people feel heard (Bußjäger 2015, p. 228; Büchel Kapeller 2021, p. 93). In 2018, a province-wide citizens' council on mobility was held in Vorarlberg, initiated by the provincial government, which tried to answer two questions: "How can we contribute to a positive development of mobility and transport in Vorarlberg?" and "What do we need for this and what developments do we want to counteract to continue to guarantee a high quality of living for future generations?" (Kutzer 2018, p. 4). The results consist of measures on awareness-raising, mobility policies, the use of new technologies, logistics and corporate mobility (Kutzer 2018, p. 7ff). Concerning the choice of different mobility modes, the prioritisation of PT is recommended, as well as facilitating multimodality, the promotion of biking, turning away from fossil-powered cars and the valuation of walking (Kutzer 2018, p. 8). Another example of CP in Austria is the participatory budgeting for climate change adaptation in Vienna, initiated in 2022 ("Wiener Klimateam") (Ahn et al. 2023). Ideas from citizens were developed in a co-creation process and carried out, though due to the self-selection of the participants, a bias towards more advantaged groups is likely (Ahn et al. 2023, p. 409).

2.4.2. Sustainable mobility in Austria

Comparing Austria's total greenhouse gas emissions per capita in 2022 to other EU member states shows that with 8,1 tons per capita, it is slightly higher than the EU average of 7,5 tons (UBA 2024a, p. 100). Nevertheless, Austria's total greenhouse gas emissions decreased per 6,4% in 2023 compared to the previous year (UBA 2024b, p. 5). Generally, the development of emissions in the last years was characterised by a decrease due to lower industrial production, higher energy prices and lower transport, mainly because of the Covid pandemic, the Russian war in Ukraine as well as climate protection measures (UBA 2024a, p. 83). 2023 was the second year in a row where the greenhouse gas emissions in the mobility sector decreased in Austria, mainly due to a decline in fuel export caused by increased fuel prices (UBA 2024b, p. 9). The mobility sector is the second biggest greenhouse gas emitter accounting for 28,3% of all emissions in 2022 after the energy and industry sector (44,8%) and before agriculture (11,3%) and buildings (10,1%) (UBA 2024a, p. 84). Mobility is also the sector with the sharpest increase in greenhouse gas emissions since 1990, namely almost 50% (UBA 2024a, p. 84). It is mainly caused by an increase of road mileage (UBA 2024a, p. 138). The per capita mobility emissions rose in all Austrian federal states since 1990, except for Vienna (UBA 2024a, p. 94). A comparison of the modal split between 1990 and 2022 shows only small changes, however, the total passenger transport capacity increased by 34% in this time (UBA 2024a, p. 151f). 60% of all mobility emissions are caused by road passenger transport, 39% by logistics and 1% by train, ships, national aviation and military transport (UBA 2024a, p. 138). The car occupation rate decreased from 1,4 in 1990 to 1,14 in 2022 (UBA 2024a, p. 146). Of all climate-damaging subsidies, around 60% are targeted towards the mobility sector, thereof 75% for road transport, such as commuting, and 25% for aviation (UBA 2024a, p. 79). The Covid pandemic led to a decrease in PT use which was also visible in the years after (ÖROK 2024a, p. 84). The latest data on the mobility behaviour of the Austrian population from 2013/2014 shows that men travel more often by car and less often by PT than women and also use the bike slightly more often than women, whereas young and elderly people are more frequent bike users than adults and young people use PT more often than all other age cohorts (HERRY Consult GmbH 2016, p. 3). There are also significant differences between urban and rural areas regarding the modal split: the share of all trips made by car ranges from one third in Vienna, to one half in all other cities, to two thirds in central areas and 70% in rural areas (HERRY Consult GmbH 2016, p. 3). The share of PT use shows the opposite picture with almost 40% off all trips in Vienna and only 8% in rural areas, and around 15% in all other areas (HERRY Consult GmbH 2016, p. 3).

In 2021, the federal ministry for climate action, environment, energy, mobility, innovation and technology (BMK) published "Austria's 2030 Mobility Master Plan" which followed a back casting approach to reach climate neutrality in the mobility sector by 2030 (BMK 2021, p. 8). Based on the strategy of avoid – shift – improve (see also chapter 2.2.2.), the goal is to keep the passenger transport volume nearly constant until 2030, which means a slight reduction per person due to the population growth (BMK 2021, p. 21). Passenger mobility should shift strongly with a doubling of the passenger kilometres travelled by PT and active mobility and a drop by a third of the distances travelled by private motorised transport by 2040 compared to 2018 (BMK 2021, p. 12). Furthermore, all newly registered cars should be on a zero-emission standard by 2030 and all buses by 2032 (BMK 2021, p. 36). In rural areas, accessibility should be enhanced and dependence on private motorised vehicles decreased, also through rural mobility nodes with station-based sharing vehicles (BMK 2021, p. 29, 52). The introduction of the "KlimaTicket Österreich", a single ticket for all PT in Austria, in 2021 is seen as a success story, which more than 300.000 people were using in September 2024 (BKA 2024).

A study by the Austrian conference on spatial planning ("Österreichische Raumordnungskonferenz" ÖROK) analysed the accessibility of regional and supra-regional centres in 2023/2024: almost 100% of the Austrian population could reach a regional centre in 30 minutes by private motorised transport and 90% a supra-regional centre in 50 minutes (ÖROK 2024a, p. 82). However, the picture for PT is quite different: the accessibility of regional centres in 30 minutes is given only for 72%, with the lowest values of under 30% in northern Upper-Austria and southern Styria (ÖROK 2024a, p. 82). The accessibility of supra-regional centres by PT in 50 minutes is even worse with an average of two thirds and no accessibility at all for some regions in inner-alpine areas, the Waldviertel, southern Burgenland and the Außerfern (ÖROK 2024a, p. 82). Car ownership shows yet another picture: on average, 565 cars were held per 1.000 inhabitants in 2023, with the lowest figures in cities and the highest in the northern and south-eastern bordering regions (ÖROK 2024b). The trend shows a significant reduction in Vienna, a below-average increase in other cities, their surroundings and in Vorarlberg and a strong increase in peripheral regions (ÖROK 2024b). The challenges for rural mobility lie in the lack of accessibility which is followed by economic disadvantages, depopulation and housing sprawl which hampers the complete roll-out of PT, and in finding solutions for sustainable commuting (ÖROK 2024a, p. 85). Several pilot and research projects try to develop solutions for sustainable mobility in rural areas, including SAMO in Salzburg on sustainable tourist mobility, GO-MOBIL in Carinthia - a public-private partnership transport offer in regions with insufficient PT, and the DRT service GUSTmobil in Styria (Harris 2019,

p. 7). DRT services can substitute private cars in rural areas and enhance accessibility, which could be shown by an analysis of two services in Salzburg (Gkavra et al. 2023, p. 13). The webpage "mobil-am-land" offers an overview of all DRT and sharing services in Austria and currently counts 288 DRT services ("Mikro-ÖV") that cover 825 municipalities, 116 carsharing services in 308 municipalities and 9 ridesharing offers (Mobyome 2024).

An analysis of frameworks for sustainable mobility across European countries concluded that Austria has only few policies for rural mobility but the services work effectively (Mounce et al. 2020, p. 6). The lack of policies together with ambiguities in the organisation of PT hampers the development of joint strategies for sustainable mobility, especially in city regions where different administrative bodies have to collaborate (Schantl 2021, p. 12). The financing of PT is an aggravating effect due to its complexity: usually, the federal provinces are responsible for the regional and local PT, with some municipalities contributing to it and cities mainly paying for the urban PT (Schantl 2021, p. 12). The majority of novel local mobility services in rural areas, such as car- and ride-sharing, DRT and autonomous systems for the first and last mile, gets implemented by municipalities, whether alone or in cooperation (Schabka et al. 2022, p. 2). As the governance structures in Austria differ from region to region, the implementation and success of sustainable mobility projects is highly dependent on the local requirements (Bauchinger et al. 2021, p. 17). In the examples of GUSTmobil and REGIOtim in the metropolitan area of Styria, the regional management acts as an intermediary institution and coordinates the different stakeholders as well as balances the different needs of the involved rural, peri-urban and urban areas (Bauchinger et al. 2021, p. 17). These two projects, the first one being a DRT service and the second one offering various sharing services, operate as part of the existing PT network and are an essential part of the region's plan to become a pilot region for mobility as a service (MaaS), where different transport services can be accessed via one single platform (Bauchinger et al. 2021, p. 18). A very recent project is the introduction of rural mobility labs financed by the federal ministry for innovation, mobility and infrastructure (BMIMI), as for example in the Lower-Austrian region of Amstetten and Waidhofen/Ybbs, where solutions for sustainable mobility services are being researched in close relation to practice (Anderluh 2024).

2.4.3. Rural areas in Austria

As surveyed by Statistics Austria, in 2021, 54% of the Austrian population was living in urban centres, 26% in rural areas, 15% in rural areas in the surroundings of centres and 5% in regional centres (Saul 2021, p. 25). According to the prognosis by the ÖROK for 2050, the trends of

population development will continue with further population growth in cities and their surroundings, especially along the east-west-axis and in the southern agglomerations with the biggest increase in Vienna and its surroundings (ÖROK 2024a, p. 68). This expected population growth is mainly due to international migration but also because of internal migration from rural areas to cities; therefore strategies to render rural regions attractive to immigration will become more important (ÖROK 2024a, p. 67). The second big trend is the population decrease especially in inner-alpine regions, northern and southern bordering areas (ÖROK 2024a, p. 66). The share of population in the working age will generally decrease with greater manifestation in rural regions, which will be characterised by an ageing population (ÖROK 2024a, p. 71). Both the population growth in one and the population decrease in other regions pose significant challenges for the provision of infrastructure, public services and mobility services (ÖROK 2024a, p. 66).

The ÖROK divides Austria in city regions of provincial capitals, city regions of rural agglomerations, axis-regions along high-ranking transport infrastructures, rural tourism regions and rural regions with low population density (ÖROK 2021, p. 17). Austria is characterised by a large number of small municipalities: of all 2.093 municipalities, 88% have a maximum of 5.000 inhabitants, further 8% between 5.001 and 10.000 inhabitants and only 6 municipalities have more than 100.000 inhabitants (Wessely 2024). In other words, around half of the population is living in the 96% of municipalities with not more than 10.000 inhabitants (Statistik Austria 2024). Regional politics has no legal definition in Austria, it is rather based on a system of cooperation and coordination between different policy areas and actors (ÖROK 2024a, p. 165). An important role play the various regional development agencies that were founded in the course of transitioning from top-down regional politics to a multi-governance approach at the end of the 1990s (Steiner and Schelnast 2012, p. 247). An important specificity of Austrian regional development is its institutionalised cooperation with adjacent regions in neighbouring countries (Steiner and Schelnast 2012, p. 260). However, the regional governance organisations are based on traditional structures which also hinder an increase of female representation (Oedl-Wieser 2016, p. 238). There is a too narrow focus on how to achieve funding and on agricultural issues and a lack of future-oriented topics and substantive content (Heintel et al. 2018, p. 524). With regards to social and equality issues, regional development programmes consist of hardly any transformative measures (Oedl-Wieser 2016, p. 240). Regional development has very seldom gender equality on its agenda because it is perceived as a gender-neutral field (Oedl-Wieser 2016, p. 230). At most, gender equality is handled as a social topic, but in fact it is very important for social cohesion and economic activity in rural

regions, especially as female participation in the labour market has increased (Oedl-Wieser 2016, p. 231). Also for sustainable development and climate change mitigation, municipalities lack capacities, resources and know-how, especially the small and rural ones, thus external guidance is important (Feichtinger et al. 2021, p. 195). Projects are mostly initiated by a few local key actors and are targeted towards quick results instead of structural change (Feichtinger et al. 2021, p. 195). Nevertheless, in 2018, 71% of all municipalities participated in sustainable development and/or climate change mitigation programmes (Feichtinger et al. 2021, p. 192). Concerning peripheral regions, Austria has vast experience in regional development projects, but this is not the case when it comes to urban regions and rural-urban interlinkages (Heintel et al. 2018, p. 519).

The ÖROK, founded in 1971, is a permanent institution which officially coordinates spatial planning between the federal government, the provinces and municipalities (Steiner and Schelnast 2012, p. 248). The 17th report on spatial planning in Austria states that a reorientation of regional politics is needed to support and initiate territorial transformations towards sustainability, with the main challenges in raising awareness, building capacity and transforming existing structures towards the goal of prosperity, resilience and sustainable competitiveness of regions (ÖROK 2024a, p. 196). In 2021, the ÖROK published a strategy for the Austrian spatial development until 2030 under the leitmotiv "Raum für Wandel" ("Space for Change") which aims to contribute to climate change mitigation and the protection of natural resources, pursue the transformation towards a post-fossil society and an economy with a high quality of living for all spatial areas as well as achieve the energy and mobility transition (ÖROK 2021, p. 6). The goal is a climate-compatible, sustainable and common-good oriented and just spatial development (ÖROK 2021, p. 10). Concerning mobility and participation, the challenges in all spatial areas are to establish shared digital platforms which combine several mobility services, enabling commuting by PT and bike, creating frameworks for autonomous driving, choosing spaces for important transport infrastructures, creating attractive public spaces and ensuring a qualitatively high planning process necessary due to CP and complex demands (ÖROK 2021, 19). Touristic regions are additionally faced with the challenge of increased traffic due to more multi-local forms of living and regions along high-priority transport axis must reduce the development of industry, production and logistics sites that are dependent on private motorised transport and instead create accessibility by PT and active mobility (ÖROK 2021, 19). Part of the action plan is to ensure climate-neutral accessibility through a shift to PT and active mobility, dense and multifunctional settlements with short

distances as well as PT axes and nodes as the basis for further settlement development (ÖROK 2021, p. 32).

3. Material and Method

To answer the research question *"In which contexts does citizen participation contribute to the successful implementation of sustainable mobility transitions in rural areas in Austria?"*, I chose a mixed methods approach to complement different sources of evidence and strengthen the validity of the results (Yin 2018, p. 128). (1) First, my research is based on literature research to derive context factors of CP processes. Thereof I developed a criteria catalogue. (2) In order to select interview partners, I run a screening of sustainable mobility projects as a second part of my research. (3) Thirdly, I conducted ten expert interviews using an interview guideline. The criteria catalogue of context factors provided the basis for the interview guideline as well as the interview analysis. I decided to use expert interviews because experts gain their knowledge not only through their profession but also through their active involvement in decision-making and on-the-ground action, for example in governance processes, and have therefore privileged access to specific information (Meuser and Nagel 2009, p. 470). This can be either operational or contextual knowledge of the processes and actions they are part of – which in my case both were of interest (Meuser and Nagel 2009, p. 471). (4) The fourth and final part consists of research of secondary data from statistical databases and grey literature such as project documents that provided content for the context factors. Finally, the result of my research is the juxtaposition of the previously defined context factors of the ten selected sustainable mobility transition projects from rural areas in Austria that used none or different degrees of CP. In the following, I present the material and methods of the four different pillars of my research.

3.1. Literature research and criteria catalogue of context factors

The literature on which chapter 2 is based provided the theoretical foundation for the criteria catalogue of context factors. The literature research was conducted using the Web of Science and the University of Vienna databases, as well as the snowball principle and keywords based on the covered issues (Clarivate 2025; Universität Wien, Bibliotheks- und Archivwesen 2025). The main source for the criteria catalogue of context factors was Newig et al. 2023a who conducted a meta-analysis of 305 cases from 22 Western democracies to investigate whether

stakeholder participation improves environmental governance (Newig et al. 2023a, p. 1). It fits my research question well due to its examination of environmental decision-making in Western democracies, with cases on mobility included, and its focus on sub-national governance processes. Furthermore, the empirical research also involves "contextual conditions" such as "problem features, spatial aspects, governance structure, history of collaboration and conflict" (Newig et al. 2023a, p. 3). The supplementary data provides a list of all 20 context factors that were considered (Newig et al. 2023b). Additional papers that considered context factors in their analysis and thus provided input for my catalogue of context factors were Ianniello et al. 2019 and Ansell and Gash 2008. The first one is based on a systematic literature review of English-published articles on the difficulties of implementing CP and concluded that among others context factors, information asymmetries or deficits and the attitude of public officials towards CP, are impacting the effectiveness of CP (Ianniello et al. 2019, p. 21). The second one is a meta-analysis of literature on collaborative governance across different policy sectors to develop a "contingency model of collaborative governance" (Ansell and Gash 2008, p. 543). The identified indicators for the pre-existing conditions that influence the success of the collaborative process are asymmetries regarding power, resources and knowledge and the prehistory of cooperation or conflict (Ansell and Gash 2008, p. 550). After summarising and adapting these context factors, I developed the criteria catalogue for my research case, which is enlisted in table 1 together with the corresponding sources or reasoning of the context factor. The main part consists of 14 context factors as independent variables. Two variables ("population development" and "facilitator") are added because of their relevance for rural areas, as elaborated in the research background. Additionally, dependent variables are also part of the criteria catalogue. These are, first, the form of citizen participation where I differentiate between stakeholder participation, active and passive CP. To cover the whole range of participation, I decided to analyse the participation of non-state actors beyond citizens as well. Second, the variable "acceptance" determines the goal of "successful implementation of sustainable mobility transitions" described in the research question. The last column of the table indicates whether the information for this variable is gathered through research of grey literature or secondary data (R) or expert interviews (I) or both.

Table 1: Dependent variables and independent context factors

Description of variables			
Name	Description	Reference	Source
Dependent variables			
Non / passive / active participation	The project is implemented without any cooperation with non-state actors / citizens get informed or consulted / citizens are partners and can influence decision-making	Kamaci 2014	R+I
Acceptance	To which extent the project is accepted and used by the citizens		I
Context factors: Challenge-related aspects			
Relevance and complexity	Perceived relevance and complexity of the project and the challenge it should solve	Newig et al. 2023b	I
Potential impact	The project's potential to contribute to the mobility transition and to enhance accessibility	Newig et al. 2023b, Farrington and Farrington 2005	I
Conflict or win-win potential	The project's potential to provoke conflicts or to be beneficial for all stakeholders	Newig et al. 2023b	I
Context factors: Spatial aspects			
Spatial scale	Local / regional / provincial	Newig et al. 2023b	R
Rural area	Rural area / rural area surrounding centres, presence of tourism	Newig et al. 2023b, ÖROK 2021	R
Population development	Declining population is a key element of peripheralization, characterizing rural areas	Wiest 2016	R
Context factors: Governance aspects			
Governance level lead actors	Local / regional / provincial, involvement of regional development agencies	Newig et al. 2023b	R+I
Facilitator	Presence of an external actor that facilitates the process	Feichtinger et al. 2021	R+I
High-order support	Policy and/or financial support from provincial, national, EU level	Newig et al. 2023b	R+I
Incentives to participate	For other stakeholders and citizens	Ansell & Gash 2008, Ianiello et al. 2019	I
Asymmetries	Between the different actors, regarding e.g. information, expectations, power, resources	Ansell & Gash 2008	I
Context factors: Prior experiences			
History of participation and/or conflict	If the actors or the region has a longer history of CP or if there is a prevalence of conflicts	Newig et al. 2023b, Ansell & Gash 2008	R+I
Participation attitude	What public officials think about participation	Ianiello et al. 2019	I
Green culture	Prior experience with sustainability projects	Newig et al. 2023b	I

3.2.Project screening and selection

As I am interested in the implementation of mobility transition projects, I focused on practice projects in the search for possible projects for the context analysis. This led me to the mobility projects database by the Austrian NGO "VCÖ - Mobilität mit Zukunft" (VCÖ - mobility with future) (VCÖ 2025). Every year, in cooperation with the Austrian Federal Railways (ÖBB) and the BMIMI, the NGO hosts the VCÖ-Mobilitätspreis (VCÖ-mobility award), which they claim to be Austria's biggest competition for sustainable mobility and transport, where national as well as a few international sustainable mobility projects get awarded (VCÖ 2024). In 2024, 383 projects were submitted and winners in twelve categories and in each federal province were selected by an expert jury (VCÖ 2024). The project database contains all submitted projects since 2015 (VCÖ 2025). I limited the listed projects to Austria and the category "Mobilität in der Region" (mobility in the region) due to my spatial focus and to those awarded or highlighted by VCÖ to reduce the number of projects. This resulted in 202 projects which I screened based on the short project descriptions provided in the database. Only a few clearly mentioned CP, therefore I searched for the keywords "Beteiligung" and "Partizipation" (both meaning participation) among all Austrian projects of the category "mobility in the region" and included the results. This led to a total of 231 projects for the screening of mobility transition projects. I excluded projects which were not on passenger mobility, not yet implemented, did not take place in rural areas (according to the definition by Statistics Austria, see chapter 2.4.3. for further explanation) and not directly contributing to the mobility transition (defined by contributing to the avoid-shift-improve strategy, see chapter 2.2.2. for further explanation). These exclusions are justified by the focus of my research question on the practice of sustainable passenger mobility transition in rural areas and led to a total of 91 projects. Furthermore, I excluded projects that also take place at the provincial or national level or that also span across urban areas, to only capture projects specifically targeted at rural areas, which led to a total of 62 projects. Subtracting projects that were mentioned more than once, usually due to submissions in more than one year, led to the final number of 55 projects that constituted the basis for the following analysis. I clustered the projects based on their project focus which are listed in table 2. The frequently mentioned project foci reflect the main topics of rural sustainable mobility which are also present in the literature, as for example tourism, DRT services and car-sharing.

Table 2: Project screening

Project focus	Number of projects	Share of total number of projects
Tourism	11	20%
DRT	9	16%
School	8	15%
Multimodal mobility	7	13%
Car-sharing	5	9%
Corporate mobility	5	9%
E-mobility	3	5%
Strategy + awareness	3	5%
Biking	2	4%
Public transport	2	4%
Total	55	100%

For the selection of the projects to ask for an interview, I took the most frequently mentioned project types except for "school". I did so because the literature I consulted for the research background did not mention the participation of children. However, it was not mentioned either that there are major differences between the participation of adults, youth or children. Most of the projects in the schools-cluster were on raising awareness for the mobility mode used to commute to school. As my main research interest lies in governance processes, I decided against further investigating projects focused on schools. My aim was to interview two projects from each of the top five project types (tourism, DRT, multimodal mobility, car-sharing, corporate mobility): one that used participation and one that did not, or, at least, did not mention it in the project description. I attempted to select projects in each project type that were comparable in terms of other factors like year, governance level and type of rural areas. However, due to non-responses this was not always possible and resulted in the selection of three DRT and one corporate mobility project.

3.3.Expert interviews

I conducted ten interviews with experts from the chosen projects. Expert interviews are the most frequently used method of empiric social sciences, either as a single method or as part of a mixed methods approach (Meuser and Nagel 2009, p. 465). The main reason for conducting an expert interview is to acquire knowledge not everyone in the field knows (Meuser and Nagel 2009, p. 467). Traditionally, experts got their knowledge through their profession but critique on this elitist understanding widened the definition of experts and includes now also people that are actively involved and thereby gain specific knowledge as for example volunteers or activists

(Meuser and Nagel 2009, p. 468). As experts also possess implicit knowledge, the use of an open guideline interview is suitable (Meuser and Nagel 2009, p. 472). I developed the guideline for the expert interviews based on the criteria catalogue of context factors, only adding some introductory words to give the interviewee a short overview of my research project. The interview guideline can be found in the supplementary material. I adjusted the interview guideline during the interviews as expert interviews are not a standardised process and the flexible use of the interview guideline while focusing on the *how* of decisions and actions is essential (Meuser and Nagel 2009, p. 474). I conducted ten online interviews from January 16th to February 21st, 2025. The interview partners were directly involved in the examined projects, except for the case of Zell am See due to the availability of interview partners, and often hold a leading position of the main participating organisation. A list of all interview partners can be found in table 3. For the transcription I used the AI transcription software TurboScribe (TurboScribe 2025). The transcripts are not included in the thesis due to data protection reasons but can be made available upon request. The translation from German to English was done with the support of the AI software DeepL (DeepL SE 2025). The analysis of expert interviews follows the topics of the interviews, rather than the chronological order and comparability is given through the interview guideline (Meuser and Nagel 2009, p. 476). In my case, the analysis followed the criteria catalogue of context factors.

Table 3: List of interview partners

	Project	**Name of the interviewee**	**Position, background**
1	Fuschlsee-Mondsee	Stefanie Mayrhauser	LEADER + KEM manager
2	Jenbach	Theresa Rössler	Working on DRT at VVT
3	Lengau	Erich Rippl	Mayor of Lengau
4	Wilder Kaiser	Lukas Krösslhuber	Manager of tourism association Wilder Kaiser
5	Zell am See	Stephan Obenaus	Consultant for sustainable tourism + mobility
6	Gratwein-Straßengel	Christoph Stangl	KEM manager, municipal councillor
7	Krenglbach	anonymous	Project actor
8	Vulkanland	Karl Puchas	Manager of regional energy and development agency
9	Thayaland	Renate Brandner-Weiß	Manager of regional development agency
10	East Tyrol	Reinhard Lobenwein	Manager of regional development and economy agency

3.4. Additional research

I used additional sources to gather information on every project I chose to interview. Such sources were the project descriptions from the VCÖ database (VCÖ 2025) as well as media articles, webpages from regional management agencies and information on the municipalities' webpages. Secondary data was provided through the statistical databases from Statistics Austria and the ÖROK Atlas (ÖROK 2024b, 2025; Saul 2021, p. 23; Statistik Austria 2024). After every interview, I filled out the criteria catalogue of context factors based on the interview and my research. This process took place in an iterative manner with constantly going back to the interview material and the research to guarantee the validity of the results (Meuser and Nagel 2009, p. 477).

4. Results

In this chapter, the results from the expert interviews and the additional research are presented. First, the ten examined projects and the respective interviewees are described. The main part consists of the context variables of each project. Summarising tables can be found in the supplementary material 2 in tables 4 to 7.

4.1. Overview of the analysed projects and interview partners

In the following, each project is described, including the dependent variables of CP and acceptance.

4.1.1. DRT service: Fuschlsee-Mondsee

The project from 2023 is about info campaigns to promote a DRT service in the region "Fuschlsee-Mondseeland" which consists of several municipalities in the North of Salzburg and the South of Upper Austria. I talked to a person from the regional management, who works 50% for the regional development programme LEADER and 50% for the national programme climate and energy model region (KEM Klima- und Energiemodellregion). The two programmes are closely linked and overlap content-wise. The project was initiated by LEADER and carried out in cooperation with KEM, the municipalities, the tourism association, a regional technology centre, other regional development associations and the Postbus Shuttle as the mobility service provider. No active participation was involved. The DRT service was developed and afterwards a large information event was held to which the civil society was

invited and where 80 people from the region attended. After the implementation, the population was repeatedly involved to express their needs and wishes, which were passed on to the mobility service operator Postbus who incorporated them when possible. Following repeated rumours that the DRT service would be discontinued, a few residents got together and went to the mayor to express their support for the service. Some people now depend on the service as they have given up their (second) car. After some years of operation, the service is now accepted and needed. At the beginning, more negative than positive feedback was expressed yet this is seen as natural part of the implementation. Furthermore, the figures of usage were good right from the start and increased in the second year. The service also has improved continuously.

4.1.2. DRT service: Jenbach

The project from 2024 is about a DRT service provided by the provincial PT provider VVT (Verkehrsverbund Tirol – Transport association Tyrol) with four electric vehicles that run in three different areas of Tyrol. Ordering and ticketing works via app or phone calls. One vehicle runs in the area of Wattens since 2022, two in the basin of Reutte since 2023 and one in the municipality Jenbach since 2024. In the analysis, I focused on the service in Jenbach as it is the most rural service area. I talked to an employee of VVT who is responsible for the planning, implementation and ongoing support of the association's last-mile offers such as on-demand transport, bike sharing and bike boxes. The project was initiated by the transport association which approached the province of Tyrol with the idea. The service in the municipality of Jenbach was initiated by the municipality. Other project actors are software partners and taxi companies that take over the driving. The project was launched as an innovation project and is now part of the scheduled services. Passive participation and active stakeholder participation can be seen in the project. The municipality of Jenbach was heavily involved in the planning details of the service. It was also engaged in a marketing campaign before the start of the service that included mailing, social media campaigns and a public information event. However, citizens were not directly involved as the municipality claimed to be aware of the inhabitants' needs. Subsequent adjustments were made due to displeasure among citizens and a citizens' initiative in the municipality. The municipality and most passengers are very satisfied with the flexible service and perceive it as a major improvement of the mobility situation.

4.1.3. DRT service: Lengau

The project from 2024 is about one electric DRT bus which is driven by volunteers, free of charge and targeted especially for seniors, families and kids. It runs only within in the municipality of Lengau, which is located in the South-West of Upper Austria and bordering

with Salzburg. I interviewed the mayor of the municipality who is acting for 22 years but will be resigning in 2025. He also acted as a regional councillor in Upper Austria for twelve years. During this time, he was very committed to the expansion and improvement of PT. The mayor is the main initiator and organiser of the project. Around 20 voluntary drivers are running the service, each person driving once per month. The volunteers are mainly sprightly older people who have been recruited personally by the mayor. The bus is very well received, and inhabitants can identify with it. The elderly users in particular are very happy about it and, together with municipal care services, it contributes to a high quality of living for them. As the bus only runs within the municipality, it supports local suppliers and restaurants.

4.1.4. Tourism mobility: Wilder Kaiser

The project from 2022 is about the free use of DRT services and e-bikes for tourists if they arrive by PT. It is located in the region "Wilder Kaiser" which consists of four municipalities in the districts Kufstein and Kitzbühel in the East of Tyrol. I interviewed the managing director of the region's tourism association. He has been in this position for 14 years and is working on sustainable mobility in tourism since several years. The project was initiated by the tourism association. Additional actors are hotels in the region. CP was not involved in the project, only communication measures to inform the guests about it. In recent years, new services have been tried out, such as DRT services, but they have not attracted a lot of users. The interviewee thinks that the guests were overwhelmed by the number of available mobility services. For the development of the region's tourism strategy residents participated actively. Apart from a few complaints, the organisers received very positive feedback for the service. Even though there is still a high proportion of people arriving in their own cars, PT on site is used very well.

4.1.5. Tourism mobility: Zell am See

The project from 2024 is about a shuttle for tourists for the trip between the train station and their hotel in the municipalities Zell am See and Kaprun, located centrally in the province of Salzburg. I talked to a person from the tourism management field, who is self-employed in the field of sustainable tourism communication for twelve years, with a focus on tourism mobility for the last five years. He acted as a project manager for several regional development projects on sustainable mobility and currently on tourism acceptance of residents in tourist regions, where mobility also plays a major role. The shuttle service is run by the Austrian Federal Railways (ÖBB), the local tourism agency and a taxi operator. The project does not involve CP, only active stakeholder participation. The interviewee thinks that a public participation process in advance might have led to a different mobility solution as the service is targeted towards

tourists only and residents cannot access it. Within the tourism acceptance project, an online survey among the residents of the region has been carried out. Among several predefined topics, one is mobility which received a large number of responses. The organisers see this as a clear mandate to take action on mobility. The introduced shuttle was well received during the winter season. Generally, the use of PT in winter works well as the connection to Zell am See is good and renting sports equipment on site is already a common practice, unlike in summer holidays. Local tourism mobility is also much more centralised in winter than in summer.

4.1.6. Multimodal mobility: Gratwein-Straßengel

The municipality developed an overall sustainable mobility strategy in 2018 with e-carsharing, DRT and the planning of a bike path network and a mobility hub. The aim was to create a holistic mobility strategy as part of the local spatial planning concept. The municipality is located in the north of Graz, Styria. I talked to a member of the municipal council who is also professionally working in the field of regional management. The project was initiated by the mayor and the chairman of the expert committee who were very motivated and open to the topic. Other actors were transport and spatial planning professionals. With regards to the development of the biking concept, active CP was applied, and citizens had their say which influenced decisions. The mobility services were well received with positive reactions from the users, especially on the DRT service, the car sharing and the higher frequency of the PT buses. The improvements with regards to biking were less well-received. Further development and more awareness are needed, according to the interviewee.

4.1.7. Multimodal mobility: Krenglbach

The project from 2019 is about a local association that operates a DRT-service and e-carsharing in a municipality in the central area of Upper Austria. I talked to a member of the association. The initiators of the project also work professionally in the area of sustainability and the municipal sector and are active in local politics. The whole maintenance of the project is done by a few people on a voluntary basis. The project involves active CP as it was developed bottom-up. Many conversations were held before the project started by the initiators with elderly inhabitants and different opinion leaders from the municipality. The DRT service has been very well received and is supported by the community. The carsharing service is slowly becoming more popular, but it is a rather arduous business, according to the interviewee.

4.1.8. Carsharing: Vulkanland

The project from 2017 consists of the development of a regional carsharing service in the South-East of Styria. However, the service is not active anymore for about two years. I talked to the

managing director of an energy agency, also acting in regional development. The interviewee managed the project and was also the spokesperson for the Styrian carsharing initiative for 1,5 years. The project was initiated by the regional management association together with municipalities and businesses. There was no CP applied within the project. However, there were discussions with several mayors from the region in advance. Each municipality organised their own marketing activities. There were no reactions from the public about the new carsharing service. A small group of convinced people still uses it, yet this takes place in a rather informal setting. There was also no great disappointment when the service stopped operating. However, the project helped to spread the use of e-cars in general, as many people were able to test them at a time when hardly anyone owned an e-car. The charging infrastructure was also expanded through the project.

4.1.9. Carsharing: Thayaland

The project from 2017 is about the introduction of e-carsharing with six cars, co-financed by citizens, in the region "Thayaland" which is part of the region of "Waldviertel", in the North of Lower Austria. I interviewed the managing director of the regional management company which is the operator and organiser of the project. Besides that, she mainly works as a self-employed mobility and energy consultant. The project was initiated by the municipalities of the region and got supported by the regional KEM. It involves active financial participation. The aim was to create a service that is independent from municipal policy, as municipal support can be transient. 60% of the service's share capital comes from citizens via private loan agreements and 40% from the participating municipalities. The financing is a rolling system: when contributions are repaid, new ones must be paid in. The regional management company organises the financing and owns the cars or leases them. The carsharing service is relevant for around 50 people, for whom it makes ecological and affordable mobility possible. Yet the service is not as widely used as the organisers would like it to be. According to the interviewee, carsharing is not a sure-fire success because of dropouts and someone is needed that constantly makes sure there are enough users.

4.1.10. Corporate mobility: East Tyrol

The project from 2019 consists of a strategy and measurements for corporate mobility in the whole region of East Tyrol, district Lienz, in Tyrol. I talked to the managing director from a regional management company who previously worked at the Chamber of Commerce in the district for over 20 years. He was co-responsible for the project, which was initiated by the Chamber of Commerce. Other stakeholders were ten companies of the region, the regional PT

association, the VVT and the provincial government. The project involves passive participation and active stakeholder participation. A survey was conducted among the employees on their needs and wishes regarding commuting routes, first and last mile, personal mobility situation and care duties. Presentations were held in the companies to inform about the project. The strategy included awareness-raising measures and the development of role models among the employees. The workers' council was also involved in the conduction of the survey as there was initially some agitation about it. The participating companies supported the project as they need good commuting options for their employees. Yet the project failed due to insufficient funding, as the companies are not able to fund it on their own and the public sector has no possibility to contribute financially sufficiently. This led to disappointment among the project partners. However, they are willing to continue working on it if there is a binding commitment from the public sector to create new PT services.

4.2.Context factors of the analysed projects

The context factors of each project are described in the following chapter, with some context factors grouped together.

4.2.1. Challenge-related aspects: Relevance and complexity

In the Fuschlsee-Mondsee region, extensive urban sprawl is present and "cars are essential to get from A to B" (Interview 1). The challenge was to cover the first and last mile, not only for the residents but also for seasonal tourists. A feasibility study on sustainable mobility, carried out in the course of a LEADER project, created the basis for all subsequent implementations of mobility solutions, which was a fruitful approach. In Jenbach, the VVT saw the potential for DRT services in the region, especially as the project area has compact settlement structures. The challenge was to supplement existing PT, close gaps in terms of space and time and cover the first and last mile. In Lengau, the municipality had built a seniors' day centre. This led to the question of how the seniors should reach the place independently. The municipality is divided into three main settlement areas with the main centre and the train station in different areas. In the Wilder Kaiser region, tourism demand is considered to be very good and stable thanks to attractive offerings and a favourable geographical location. In 2017, tourism actors began to think about goals beyond growth as they did not believe that further quantitative growth is needed or wanted. The challenge therefore was to develop tourism and the quality of living in the region simultaneously which includes mitigating negative aspects of tourism, with traffic being one of the main issues. In Zell am See, the challenge was to reduce emissions from

tourist travel, with arrival and departure having the biggest impact. The municipality of Gratwein-Straßengel consists of several settlement areas, also due to a municipal merger in 2015, which range from very peripheral areas with high car dependency to a densely populated and well-connected centre. The merging of municipalities was a long and conflict-laden process, therefore counter measures were necessary. In Krenglbach, urban sprawl is prevalent. The aim was to use the synergies of DRT and car-sharing as the DRT service can be used to reach the car-sharing stop. The DRT service was of high relevance from the interviewee's personal perspective as it enables elderly people to travel independently again and participate in the municipality. In the region of Vulkanland, e-mobility was a major focus of the regional development as the region also had an "energy vision". The awareness that "something had to be done" was present in the region with having one of Austria's highest car per capita densities (Interview 8). Therefore, car-sharing was an interesting prospect, and it did not yet exist in the region. The region of Thayaland was for a long time restricted by the Iron Curtain. The centrifugal forces are strong in the region, but it also has a certain tradition of focussing strongly on endogenous regional development. The region of East Tyrol is an exclave without any common border with North Tyrol. 30% of the employees do not live in the region but commute from Carinthia and South Tyrol (Italy). The region is very poorly served by PT, also because mobility is organised within administrative rather than economic areas, which makes it challenging.

4.2.2. Challenge-related aspects: Potential impact

In Fuschlsee-Mondsee, several improvements of the mobility situation had already been achieved: better bus synchronisation, expansion of the e-charging infrastructure, and the creation of several car-sharing systems. The desire arose to develop something comprehensive and complementary, and the topic of micro-PT was addressed. In Jenbach, there has been a year-long dissatisfaction with the mobility situation among the population as for many it was difficult to get to the train station due to the hillside location. Consequently, there was a great need for an additional service. The project in Lengau aims to improve accessibility and to enable elderly people to live in the municipality as long as possible. The region of Wilder Kaiser is compact and can be served very well by PT in terms of topography. There is no railway station in the region but two in the vicinity which are well served by international long-distance trains. Yet 90% of the guests arrive by car. Zell am See is well connected to long-distance trains and tourism has developed around the railway station. There are also bicycle rental systems and car-sharing in place. PT away from the centres still needs to be expanded and communication about sustainable mobility options is lacking. The project in Gratwein-Straßengel has a possibly high

impact due to the holistic approach and the coverage of several mobility modes, addressing different target groups. In Krenglbach, the car-sharing replaced the second and third cars in some households. The DRT service is more a social than an ecological project, as it improves accessibility for the elderly. As the region of Vulkanland is highly car-dependent, there is a huge potential for car-sharing. Furthermore, there is a bit of tourism present which could also create use cases. The region of Thayaland has a high car-dependency as well, posing also economic burdens on its residents. The nearest major railway station in the area is across the border in the Czech Republic and the train connections to the cities of St. Pölten or Vienna are relatively long. The idea of the project in East Tyrol was to have more people commuting by PT and then using it for private journeys as well as they got a seasonal PT ticket.

4.2.3. Challenge-related aspects: Conflict or win-win potential

In Fuschlsee-Mondsee, the provincial border complicates matters. The PT association from Salzburg operates some routes that end in Upper Austria. For PT timetables and passes like the KlimaTicket, the encounter of two provinces is a point of discussion and a source of contention between the municipalities. The project in Jenbach has a high win-win potential as there was a clear need for such a service expressed in the municipality. However, it is also a financial burden for the municipality. The project in Lengau was not confronted with any opposition. The municipality purchased the bus on its own but also had the financial capacities for that. For the project at Wilder Kaiser, addressing mobility is a way in which the local population can benefit directly from tourism, either by reducing traffic or by creating mobility services that are accessible for locals as well. For the transformation to a more sustainable tourism, avoiding motorised private transport is a major lever. In Zell am See, the mobility service that has been created is only open for tourists, not for residents. PT services aside from the centre are limited. The region is not yet affected by unbalanced tourism, but the issue is emerging. In Gratwein-Straßengel, the construction of new biking lanes came with high costs while it was not perceived as necessary by many citizens. However, the construction was also well subsidised. The success of the project in Krenglbach was very much associated with the opposing political party which created local political tensions. The project in Vulkanland had to deal with delivery delays of the car-sharing vehicles and difficulties with the software which weakened the whole project. Furthermore, creating a behaviour change towards car-sharing was very difficult. In Thayaland, the goal was to have a car-sharing vehicle in all 15 municipalities of the region. However, now only six cars are operating. For some people the project is financially attractive as maintaining a car comes with high costs, yet it is needed to get around. In East Tyrol, a labour market study revealed that 1,300 employees will leave the workforce in the next ten years if no counter

measures are being taken. As a result, the pressure is high to secure employees and employers do not want to remove employee benefits such as company cars. Nevertheless, improved accessibility can contribute to the companies' attractiveness for employees.

4.2.4. Spatial aspects: Spatial scale, Rural area, Population development

The project in Fuschlsee-Mondsee is regional, with municipalities belonging to two different provinces. The municipalities are categorised as rural area and rural area surrounding centres. One municipality is categorised as touristic. More tourism is present south of the region. The population development is positive and around 9%. The project in Jenbach is local with influence from the provinical level through the mobility provider VVT. The municipality of Jenbach is categorized as rural area. The population development is positive and around 10%. The project in Lengau is local and the municipality is categorized as rural area without the presence of tourism. The population development is positive and around 15%. The project at Wilder Kaiser is regional, as it concerns four municipalities, with influences from the provincial PT provider VVT. All four municipalities are categorized as rural area with the presence of tourism. The population development is positive and around 4% or 13%, depending on the district. The project in Zell am See is local as there are only two neighbouring municipalities involved. The municipality Zell am See is categorized as regional centre and the municipality Kaprun is categorized as rural area. Both municipalities are considered as touristic. The population development is slightly positive and at 2%. The project in Gratwein-Straßengel is local but influenced by regional developments, especially by the very close neighbouring municipality. The municipality is categorized as rural area surrounding centres without the presence of tourism. The population development is positive and at 16%. The project in Krenglbach is local and the municipality is categorized as rural area surrounding centres without the presence of tourism. The population development is positive and around 16%. The project at Vulkanland is regional. There is one regional centre within the region with all other municipalities being categorized as rural areas. Tourism is present in two municipalities. The population development of the region is negative and at minus 5%. The project at Thayaland is regional, with influences from the local level, respectively the municipalities. The municipality of Waidhofen/Thaya and the neighbouring municipality are categorized as regional centres. All other municipalities of the region are categorized as rural area. There region is considered as non-touristic. The population development is highly negative and at minus 14%. The project in East Tyrol is regional. The municipality of Lienz and surrounding municipalities are categorized as urban centre. Some municipalities are categorized as rural areas surrounding centres. All other municipalities of the region which make the majority of the area are

categorized as rural areas. Tourism is present in the North and the South of the region. The population development is negative and around minus 8%.

4.2.5. Governance aspects: Governance level lead actors, Facilitator

In the Fuschlsee-Mondsee project, the project management was done by LEADER and KEM. On the regional level, a tourism and a development association were involved as well. A mobility expert who advantageously lived in the region carried out the initial analysis. On the local level, the municipalities are important as they had to finance the mobility service almost entirely on their own. The mobility service provider, Postbus Shuttle, is an external actor that operates on a national level. The interviewee did not mention that there was an external facilitator involved. In the project in Jenbach, actors from the local level are the municipality and the transport company that operates the service. As a service provider and project organiser, VVT was involved from the provincial level. No external facilitator was involved. In the project in Lengau, all actors come from the local level and no external facilitator was involved. In the project at Wilder Kaiser, the main actor is the tourism association on the regional level, who works in close cooperation with the four municipalities of the region and the funiculars, which are the main tourist destinations. The tourism association and the municipalities are also in the process of founding their own cooperative which will approach mobility planning, among other topics, from a holistic perspective. An external facilitator was involved that moderated the CP events. In the project in Zell am See, the two participating municipalities are involved on the local level and the mobility service provider ÖBB on the national level. As far as the interviewee could answer the question, there was no external facilitator involved. The main actor of the project in Gratwein-Straßengel is the municipality on the local level. The municipality usually engages professional moderators for CP events. For the development of the biking strategy, the mobility planner conducted the participation process. In the project in Krenglbach, the main actors are people from the municipality on the local level. No external facilitator was involved, as the actors "had academic background and were able to carry out the project study themselves" (Interview 7). The project at Vulkanland operates on the regional level, as the main actor is a regional management organisation. Municipalities and businesses were involved on the local level. Hardware and software were provided by the provincial energy provider. External facilitators were not involved. The main actors in the project at Thayaland are located at the regional level, namely regional development organisations. On the local level, municipalities were involved, and some companies took part as sponsors. No external facilitator was engaged. The main actors in the project in East Tyrol are based at the regional level, which

are a regional development organisation, companies, and the regional PT association. An external facilitator was involved as a transport planning bureau carried out the survey.

4.2.6. Governance aspects: High-order support

The project in Fuschlsee-Mondsee received little funding but much more would be needed to ensure sustainable operations. Many municipalities in Upper-Austria are affected by budgetary constraints and are not able to fund mobility services in the long run. Therefore, the long-term existence of the project is not guaranteed. The project benefits from the national programme KEM and the EU programme LEADER. The project actors advocate for more support for DRT services at the Upper-Austrian provincial government, yet they perceive it to be in vain. One main actor in the project in Jenbach is the VVT as a provincial state subsidiary. Funding from the federal level was used for buying the e-vehicles. There are no mobility strategies that played a role in the project. The project in Lengau did not receive any direct funding. Subsidies from a municipal investment programme were used to partially buy the vehicle and to build a photovoltaic system which delivers the electricity for the e-bus. The municipality was awarded the contract for an intergenerational community house by the provincial government which gave rise to the idea for the DRT service. For the project at Wilder Kaiser, higher-level strategies play a very important role when it comes to regular PT services, as the different mobility services should complement each other. The provincial level plays a major role in financing, and the federal level provides subsidies for the introduction of new mobility services. In the project in Zell am See, the municipalities are part of the regional programmes LEADER and KEM as well as the national park region, where mobility always plays a role. The provincial level finances a PT pass for tourists in the whole province. Infrastructure for e-mobility is financed by the region itself and for the analysed mobility service, the shuttle, the regional tourism association probably bears the main costs. The project in Gratwein-Straßengel received funding from the provincial level for the cycling strategy as well as funding from the federal level, the regional management for the e-car-sharing and the federal infrastructure company for the DRT service. The project in Krenglbach was half-financed by the federal level, as it was awarded a call from the climate fund for DRT systems in rural areas. Additionally, 20% were financed by the provincial level, the rest had to be provided by the organisation itself. The project at Vulkanland was part of a funding programme from the provincial level for e-car-sharing to achieve a critical mass of electric vehicles. The project at Thayaland was submitted to a call from the federal level but due to billing problems, no funding was ultimately granted. The project in East Tyrol was supported by the Governor at the beginning. However, there was no provincial or federal funding on a correspondingly large scale. The project actors have been

in contact with the responsible provincial councillor who wants to support the project. More funding was promised, yet still not sufficient.

4.2.7. Governance aspects: Incentives to participate

In the Fuschlsee-Mondsee region, every municipality possessed a detailed plan for a sustainable mobility system, based on a feasibility study carried out in depth for the whole region. Additionally, a need was given as the region has very dispersed settlements and people need a car to get around. For the DRT services from the VVT, as in Jenbach, the mobility services are subsidised by the VVT according to the municipalities' financial strength. In Jenbach, the municipality finances half of it. Furthermore, the municipalities have a say, but the VVT sets non-negotiable parameters to ensure that the service works. Overall, the offer is not very favourable for the municipalities, said the interviewee. In the project in Lengau, the voluntary drivers are sometimes invited out to dinner by the mayor and have received branded uniform clothing thanks to donations. Furthermore, the drivers take a certain pride in their work. The region of Wilder Kaiser received a sharp increase in visitor numbers between 2014 and 2016. The regional tourism association noticed that this had an impact on the region and residents were becoming dissatisfied. Therefore, a large-scale process to work on the future of the region and the tourism in the region was set up together with local authorities. Workshops with randomly selected citizens were held. Halfof the people who were contacted took part, although it lasted one entire weekday. In the region of Zell am See, an online survey was conducted among the population on the region's tourism, and the topic of mobility received many responses. The region is not yet affected by unbalanced tourism, but the issue is emerging. In the project in Gratwein-Straßengel, interested citizens and active bikers took part in the participation process on the development of the biking strategy. It was the beginning of a bigger development process, and the citizens knew that something new would be created. At the project in Krenglbach, citizens were actively asked about their opinion on the planned project and therefore had the impression of actively shaping the project. The project actors needed the assurance by the citizens that they will use the service after its implementation. In the project at Vulkanland, there was no possibility for citizens to participate. The incentive for stakeholders was mainly that it was a new project that was also supported by a regional strategy. In the project at Thayaland, the users bear most of the costs, but they are also the main beneficiaries. For their financial contributions, the users receive interest or car-sharing vouchers. In East Tyrol, one participating company provided a small bus on its own initiative to be able to pick up its employees, although it is more expansive than if it had happened as part of a joint solution. This shows the need in the region to work on corporate mobility in a collaborative way.

4.2.8. Governance aspects: Asymmetries

At the Fuschlsee-Mondsee project, it was clear that the accompanying mobility marketing is necessary, otherwise the mobility service would not have been accepted. The marketing was undertaken by LEADER; it was clear that the municipalities would not do it. Municipalities from the province of Salzburg should have joined the mobility service as well. However, the province has its own DRT mobility system and a different funding scheme. Therefore, the municipalities could not participate in the regional Fuschlsee-Mondseeland DRT service. This is "really unnecessary, given that the aim is actually to promote cross-province cooperation", said the interviewee (Interview 1). However, some networking projects work well, and the region is repeatedly cited as an example of cross-province cooperation. However, the municipalities from the province of Upper Austria sometimes feel forgotten as they are located on the fringes of the province, with many people thinking they belong to the province of Salzburg. For the project in Jenbach, the final decision was taken by the VVT, and certain parameters had to be in place for the offer of a DRT service, e.g. number of inhabitants, population density, mayor employers. Furthermore, the municipalities must contribute financially. Still, there is more demand of DRT services than the VVT can offer, as the provincial budget is very tight. In the project in Lengau, the voluntary drivers are fully insured and in the event of damage the municipality would pay the costs, so the drivers do not have to worry about any adverse consequences. Yet as the mayor is the main caretaker, a clear power imbalance exists. In the project at Wilder Kaiser, tourists can use the guest card to travel free of charge on regular services to surrounding mobility hubs or points of interest. However, this does not apply to locals. To balance that, the tourist information offices offer transferable mobility cards for the whole of Tyrol, which any local or employee can use free of charge for one day. In the project in Zell am See, the idea is that the local population chooses sustainable mobility themselves to take the pressure off the road and to create a positive atmosphere, as they are the mouthpiece and point of contact to the region for tourists who are guided by what they see. One hotel found that the use of the PT tourist pass depended heavily on who guests spoke to at the reception, whether they were car or PT users. The transfer shuttle is only available to tourists but as the tourism association presumably bears the main costs, this is legitimate. In the project in Gratwein-Straßengel, the initiative came clearly from the municipality. One expert office was involved, and citizens received information on the project and could give feedback and input. In the project in Krenglbach, a lot of knowledge was available because of the actors' profession. Good networks within the municipality existed but also minor conflicts occurred with the municipal government, which wanted to end the DRT

service, as the project was very successful but perceived as part of the opposition party. However, the residents highly approved of the DRT service. Therefore, it is now operated by the municipality and no longer by the association. In the region of Vulkanland, there was little knowledge and experience of e-cars and car-sharing among the stakeholders and the population, so pioneering work had to be done in many areas. More commitment to car-sharing from the province of Styria would have been desirable. For the project at Thayaland, the municipalities should be on board but are not a decisive stakeholder, as 60% of the funding comes from the citizens. Yet the development work for the project was financed at the federal level (KEM) which was important. For the project in East Tyrol, ideally, funding should be provided by the public sector, companies should take advertising and awareness-raising measures in coordination with the VVT and the PT planning association. Yet the VVT did not have sufficient drivers to be able to realise the additional bus routes that resulted from the analysis, which reduced the companies' motivation for the project. In addition, labour became scarcer during the project, which made the employers hesitant to implement major changes. Municipalities experienced budget problems, reducing their interest in financing PT, from which the companies would have largely benefited.

4.2.9. Prior experiences: History of participation and/or conflict

The region of Fuschlsee-Mondsee developed a strategy for the region's future development. During that process, CP workshops were held on various key topics with mobility being one of them. This worked well and people expressed their wishes and project ideas, among others also for sustainable mobility projects. The project in Jenbach was already the third DRT project by the VVT, so the actors could benefit from the experiences of the previous ones. In Lengau, there are many people in the municipality who are engaged on a voluntary basis, for example in the neighbourhood help association. The seniors' community centre provides activities and events for elderly citizens, was created through a municipal development process and is mainly run by women, while the volunteers of the DRT service are mainly men. The creation of a photovoltaic system and several biodiversity projects also involved CP. In the Wilder Kaiser region, a CP process was set up to develop a strategy for the future development of the region and its tourism. Randomly selected citizens participated in workshops which were successful and produced good results, as the interviewee said. Also, mutual understanding between people working in the tourism sector and other citizens was generated. In the region of Zell am See, several CP formats took place in the municipalities that were well received, such as surveys and citizens' initiatives on certain topics. The municipality Gratwein-Straßengel has a lot of mixed experience with CP as well as an own committee for CP and local development. A positive

experience was the development of the biking strategy with several workshops. Interested people participated and provided valuable input on which the transport planner developed the bike path network. Yet the interviewee thinks that CP on a single bike path would not work as the high costs would be in the foreground and the necessity questioned. The municipality wanted to develop a technology park, yet only people who opposed the project participated in the CP process and the project failed due to the residents' opposition. However, the municipality took up the problems raised during the process and developed measures against them. In the municipality of Krenglbach, there have been community development processes. However, according to the interviewee, the municipality's residents are more accustomed to make their private lives beautiful as many also have the financial means to do so and do not want to get involved. Local civil associations that have been around for longer work well but newer ones struggle to maintain themselves. In the region of Vulkanland, the experience with CP varies and depends on the approach of the municipality and the mayor. An important political figure is the chairman of the regional development association who has been developing the region for more than 30 years. According to him, the municipality's role is to set a good example, demonstrate and motivate so that citizens want to participate of their own accord. Additionally, broad information and awareness-raising processes should accompany this engagement. The region of Thayaland has a certain tradition of CP. There are energy companies that issue registered shares or a shoe manufacturer that issues vouchers for financial participation. The regional development agency was very much engaged and has developed the region over decades. This tradition still has an impact. From the outside, the region of East Tyrol was mainly seen as a nature and recreational area. The region itself did not want to accept this attribution and developed a joint mission statement with all region's major players and citizens from 2013 to 2015. The local population widely participated in this process and many issues had been raised, for example young people clearly signalled dissatisfaction with the offered mobility services, as did the business community.

4.2.10. Prior experiences: Participation attitude

For the project in Fuschlsee-Mondsee, the interviewee said that "the decisive factor in the project was the conviction that it was necessary, and that the population would accept it anyway" (Interview 1). The organisers did not want to include public participation, as they believe it would have turned into a wish list. It had already been agreed upon with the inhabitants that mobility is a major concern during the process of creating a regional development strategy. More of a challenge was to convince and involve all municipalities. The interviewee from the project in Jenbach thinks that "basically, it is very, very important to

involve the citizens" (Interview 2). This is mainly the task of the municipality which then acts as a mouthpiece for the mobility provider VVT. The communication and coordination with the municipality is extremely important. The interviewee from the project in Lengau thinks that "you have to approach people personally" (Interview 3). A clear organisation is very important and according to him, once a month everyone likes to do something voluntary. Enough volunteers are necessary, so it is not too much of an effort for every single person. Furthermore, a care-taking person is needed that brings everything together. For the project at Wilder Kaiser, the interviewee thinks that "citizens really need to get involved in the implementation process" (Interview 4). Because many citizens are involved in the tourism sector, they also function as multipliers. According to the interviewee, it is important to create a good mobility offer but it is at least as important to provide information about it. To make this as easy as possible, the inhabitants need to get involved and, if they themselves set the best example and use sustainability mobility options, then that helps even more. The interviewee for the project in Zell am See thinks that it makes sense to involve citizens when working on issues that the local population should support. Changing tourism works better when the local population exemplifies what is expected from tourists. The interviewee believes that "CP is a format that cannot be ignored in today's world because you get lots of ideas from the population as well as support when something is implemented" (Interview 5). According to him, CP brings advantages in the long run because it creates understanding for both sides. The interviewee from the project in Gratwein-Straßengel thinks about the use of CP that "it really depends" (Interview 6). According to him, often only people who are interested anyway come to information events, also because certain terms evoke strong opinions and polarisation as for example cycling. People who are satisfied users of a certain offer have less personal drive to participate. When conducting surveys, it is important to reach those who actually use the offer or to cover everyone. CP on a larger scale with a broad range of participants works better. The problem with events is that even professional moderators often fail to enable a balanced discussion due to strong opinion leaders. The interviewee's opinion has changed over time from "it is definitely important to involve citizens" to "it depends on the form and the specific question" (Interview 6). He thinks that it is passed on without reflection that CP is absolutely necessary. The interviewee from the project in Krenglbach is ambivalent towards CP because it is often the same people that are involved. According to him, it is very much individuals who are driving the transformation, and it is very difficult to conduct surveys on the wishes of the population as "people cannot imagine new things" (Interview 7). Therefore, change has to be tangible. There is also too little expertise on sustainable, local mobility in the municipalities.

The interviewee from Vulkanland tries to get citizens on board. His approach is to "make sure that we get the train moving and that the population can then jump on this moving train" (Interview 8). The interviewee from Thayaland thinks that "CP can work particularly well in regions where car-sharing is hardly an issue as car-sharing has a very small-scale focus" (Interview 9). According to her, it is logical to finance it in the region if it is also used in the region. Additionally, a very low-threshold approach could work in rural areas in particular. According to the interviewee from East Tyrol one can only approach employees and think about involving and convincing them when there is an offer, otherwise disappointment would be created and "they think we are incapable" (Interview 10). When it comes to building new infrastructure, it takes courage to make decisions.

4.2.11. Prior experiences: Green culture

The tourism association in Fuschlsee-Mondsee is focused on sustainability and climate protection as it is a climate alliance business partner and wants to become eco-labelled as well. The municipality of Jenbach provides lots of information on sustainable mobility on its website. The VVT wants to make PT increasingly attractive to achieve climate and environmental protection goals. The municipality of Lengau received the provincial prize for sustainability in 2024 among all municipalities of the district because of new buildings in timber construction, energy saving, biodiversity and mobility projects. In the Wilder Kaiser region, there has been a greater focus on car-free mobility for ten years, to minimize the number of cars in the region and their negative impacts. The issue of car traffic as a source of pollution is very present, according to the interviewee, yet he said that "we, the locals, are still very car-focused and it will take another half a generation for that to change" (Interview 4). The tourism region of Zell am See is in the process of obtaining the eco-label for destinations. Also, the number of eco-label certified businesses has increased in recent years. For many years, there has been a tourist PT pass that allowed guests staying for one night or more to use all PT services in the region for free. This offer has now been extended to the entire province of Salzburg. The project in Gratwein-Straßengel has a longer history and was initiated by the mayor who has a political focus on sustainability. The municipality of Krenglbach has a relatively strong green party. The region of Vulkanland has no prior experiences with local sustainable mobility but with projects on energy and soil protection. In the region of Thayaland lies the district Waidhofen/Thaya which has the highest motorisation rate in Austria with around 760 cars per 1000 inhabitants and the surrounding districts of Zwettl, Gmünd and Horn have motorisation rates above 700. In East Tyrol, only 9% of the area is permanent settlement area and one third is under nature conservation, so space is very limited and needs to be used consciously.

5. Discussion

This chapter provides a juxtaposition of the results and their relation to the research background presented in chapter 2. First, the analysed projects are compared based on the context factors. Then, these results are discussed in their relation to the research question and to the overarching topic of sustainability transitions.

5.1. Comparison of the analysed projects and their relation to the literature

The context factors from each project are compared according to their project focus: DRT services, tourism mobility, multimodal mobility, car-sharing and corporate mobility. At the end of this subchapter, further aspects of all projects across different project foci are discussed.

5.1.1. DRT projects: Fuschlsee-Mondsee, Jenbach and Lengau

The three DRT projects are quite different regarding scale, actors and form of CP, yet all projects turned out to be successful as they are accepted by the users. The project in Lengau shows that on a small scale and with a specific target group in mind, a service can run with a high degree of CP, with the drivers being voluntary citizens in that case. The context factors of *conflict or win-win potential* (no opposition), *incentives to participate* (community and pride) as well as *history of participation* (many citizens that are engaged voluntarily) and *green culture* (municipality received a prize for sustainability activities) showed to be favourable for the active participation of the citizens and subsequently for the implementation for the project. However, with regards to *asymmetries*, it remains unclear how much of a say the volunteers have in the design and development of the mobility services, as the mayor is the main caretaker and organiser. Power delegation was found to have the strongest effect on improving environmental outcomes (Newig et al. 2023a, p. 6). The interviewee from the Lengau project highlighted, that a caretaker is necessary for running the mobility service (Interview 3). This brings up the question to what extent a group is able to organise itself and work with distributed power which leads beyond the topic of CP to issues of collaboration and community organisation. Regarding its impact, the project in Lengau greatly improves accessibility yet the contribution to the ecological sustainability remains limited. While also running on a local scale, the setup in Jenbach is very different: it is not aimed at a specific target group but the whole population and it is run by the provincial PT provider. Furthermore, only passive CP was involved. Regarding the challenge-related aspects, the *relevance* of the project was clear: as the train station was difficult to reach due to the municipality's topography and the relatively low

motorisation rate, the need was clearly expressed to supplement existing PT. Presumably, this leads to the municipality taking on the financial burden and also accepting the technical obligations, as the *incentives* for the municipalities *to participate* in the PT provider's DRT service are not very high. Yet the municipality also has a strong *green culture*. In conclusion, the project seems to be successful also without active CP due to the elaborated mobility service design by the mobility provider, previous experiences with such projects and the clear need for such a service. The third DRT project in Fuschlsee-Mondsee took place on a regional scale and involved passive participation. The interviewee argued this decision with her conviction that active CP would have produced a wish-list of features for the mobility service which would have been unable to fulfil (Interview 1). Indeed, if a participation process neither enhances legitimacy, justice or effectiveness, it loses relevance and can create disappointment among the participants (Fung 2015, p. 521). Strong regional management actors are present in the region which have led a longer process of regional development and transforming the region's mobility system. For the development of this strategy, active CP was applied (*history of participation*). This existing basis was an *incentive to participate* for the municipalities. Looking at the acceptance of the service, this approach proved to be successful. An additional context factor is that of a *rural area* with tourism and that the tourism association was on board as well. Still, with high sprawl, almost no train connections and the situation as a provincial border region, the starting situation was difficult (*relevance and complexity*, *conflict or win-win potential*). Like the project in Jenbach, a PT provider was part of the project and brought expertise. It will be interesting in the future how the project will continue as the long-term financing is not guaranteed, yet there have already been citizens protesting against the alleged stop of the service. The SMARTA project, an EU project on rural mobility, recommends for the governance of rural mobility services the cooperation with urban centres to ensure mobility services especially in commuting areas and the horizontal cooperation between several municipalities or regions (Ambrosino et al. 2020, p. 27). The latter might be a long-term strategy for the Fuschlsee-Mondsee region as difficulties in the collaboration between the two concerned provinces of Upper-Austria and Salzburg exist, yet the cooperation with the nearby city of Salzburg could be a way forward in the near term.

From a mobility perspective, the question for all three projects remains, which size a local or regional DRT service can reach in a rural area. Their role in the mobility transition is mainly to serve as a complementary mobility service that bridges the gaps to conventional PT (Bauchinger et al. 2021, p. 5). The SMARTA project assigned DRT services great potential as a complementary service if connected with digital technologies (Ambrosino et al. 2020, p. 16f).

However, for now, they are mostly dedicated to vulnerable users and function more as a safety net instead of a comprehensive mobility service for all (Ambrosino et al. 2020, p. 17). The Austrian research project on DRT mobility services PRIMA published a guideline on the implementation of DRT services and differentiates between the objective of creating a basic service for specific target groups such as elderly citizens, and the objective of complementing PT and thereby contributing to the mobility transition (Mobyome 2025, p. 10). The Lengau project clearly falls into the first category, the Jenbach and the Fuschlsee-Mondsee projects in the second. The DRT implementation guideline identified participation and communication as success factors throughout the whole process (Mobyome 2025, p. 22ff).

5.1.2. Tourism mobility projects: Wilder Kaiser and Zell am See

In both projects, tourism associations are the main actors. Also, stakeholder participation was involved in both projects, and they resulted in good acceptance by the users. However, there is still great potential: in the Wilder Kaiser region, the great majority of tourists continues to arrive by car, and in Zell am See, arrival by PT in the summer season is not yet an established practice. Interestingly, both areas have one of the lowest *motorisation* rates among all analysed projects, but the Western provinces of Salzburg, Tyrol and Vorarlberg generally have a lower motorisation rate than the East of Austria, except for Vienna (ÖROK 2024b). The reason for this is better availability of PT as the degree of motorisation strongly depends on the accessibility of destinations by PT and is no longer an indicator of affluence (ÖROK 2024c, p. 67). Furthermore, both projects also have a *green culture* of yearlong work on sustainable tourism. The ÖROK defined touristic *rural areas* as an extra spatial category (ÖROK 2021, p. 17). This points to the fact that such regions have specific characteristics which have to be assessed on their own. Two topics stand out in both projects: the difference between tourists and locals and the issue of so-called unbalanced tourism. Different offers for tourists and residents create *asymmetries*, while at the same time it is expected that residents act as role models for tourists in using sustainable mobility. Tourists can help to reach the critical mass for PT to be viable, yet they do not necessarily have the same destinations as residents (Flipo et al. 2023, p. 139). In any case, it is important to think about tourist and local travel simultaneously, because there are certainly overlaps regarding the destinations, also because many locals work in tourism. At the region of Wilder Kaiser, there are mobility offers open to everyone and efforts for joint mobility planning have been taken. Furthermore, both areas are under the risk of experiencing unbalanced tourism which also constituted an *incentive to participate*. Measures are being taken especially on mobility as it is easier to act on than for example on rising housing prices (Interview 4). Similarly to Fuschlsee-Mondsee, CP has been used at Wilder Kaiser to

develop a strategy for the future regional development, but the planning of concrete projects has been done without (*history of participation*). The project in Zell am See is targeted towards tourists, which creates a specific challenge for CP. According to the interviewee, a CP process might have produced a different service, one that is accessible for tourists and locals (Interview 5).

5.1.3. Multimodal mobility projects: Striegel and Krenglbach

Similarities between the two projects are the local level on which they took place, the active participation that was involved as well as the positive reactions and acceptance that they received. Others are the spatial aspects: both projects lie in *rural areas* surrounding centres and in areas that expect a high *population growth* of around 15% until 2050. Furthermore, both projects had to deal with specific difficulties of local politics. In the case of Gratwein-Straßengel, the municipality arose out of the merging of four municipalities which created discontent among the population (*relevance and complexity*). In the case of Krenglbach, the project was very much associated with the opposing political party, although it was non-partisan, and therefore received headwind from the leading political party (*conflict potential*) However, the projects worked anyway which points to the reality that local projects need to navigate challenging local political environments. Both interviewees expressed a very differentiated *attitude towards CP*. One problem they see is that often the same people are involved, and actual users are not reached. This observation of self-selection of participants in open meetings or events is also present in the literature (Fung 2015, p. 515). Indeed, the diversity of the represented stakeholders is one dimension to measure the intensity of a CP process (Newig et al. 2023a, p. 4). Interviewee 6 stated that CP really depends on the form and the specific question which points towards the conclusion that a participation process is not automatically legitimate but needs a clear justification (Bryson et al. 2013, p. 24). Such justification could be to enhance the understanding of problems and the quality of solutions or to generate support for decisions, which both played a role in the two projects on multimodal mobility (Bryson et al. 2013, p. 25). The impression of actively shaping the mobility service was the *incentive to participate* for the citizens in the Krenglbach project. According to the interviewee, it does not make sense to have CP at the beginning of a project because on the one hand, it is difficult for people that are not experienced with mobility planning to imagine something new, and on the other hand, it could turn into an unfulfillable wish list (Interview 7). Therefore, they approached the citizens with the plan to implement a mobility service, asked how it could be improved and adjusted the service accordingly. In the project in Gratwein-Straßengel, the actors had similar experiences with CP for the development of the biking path

network. This approach can be seen as an attempt to avoid problematic CP where too much responsibility and problem-solving is passed on to the citizens (Knobloch 2022, p. 122). To conclude, the two projects have great similarities regarding the setup, type of participation, outcome and the context factors. The experiences of the project actors point to the appraisal that CP is not always a useful means to achieve a desired goal but, in the course of a bigger project, it makes sense to pick out specific questions where CP can be beneficial. In the case of the respective projects, these were detailed questions on a specific mobility service or infrastructure and not on the question if the mobility service or infrastructure should be implemented or not.

5.1.4. Car-sharing projects: Vulkanland and Thayaland

Notable with these two projects are their spatial aspects and *potential impact*: both regions have projections of sharp *population decline* and a very high *motorisation* rate, yet this is not reflected in the sample of all screened car-sharing projects. Additionally, centrifugal forces are present in the region of Thayaland (*relevance and complexity*). These elements point towards processes of peripheralization, as population loss is a key symptom (Wiest 2016, p. 288). The Waldviertel region, of which Thayaland is part of, is one of Austria's regions with the lowest accessibility for regional and supra-regional centres by PT (ÖROK 2024a, p. 82). Other similarities of the analysed projects are the regional spatial scale with regional management organisations as the *lead actors*. The project in Thayaland is interesting for its model of active CP with citizens partly financing the project. The region shows that although elements of peripheralization are present, endogenous development is possible as well, as the interviewee also stated (Interview 9). Furthermore, regarding *history of participation and/or conflict*, this project builds on a long tradition of active CP in the region with other examples of citizens participating financially. Nevertheless, the project did not fully reach its goal and the project at Vulkanland failed. The latter had to struggle with difficulties during the implementation and the actors lacked experience and expertise on the topic, also because car-sharing in general was rather new at that time (*conflict potential*, *asymmetries*). With regards to the mobility mode of car-sharing, literature suggests that its potential in rural areas could not be realised yet (Poltimäe et al. 2022, p. 13).

One observation is that the project without CP failed while the project with CP could achieve its goals at least partially. Both, the *history of participation* at Vulkanland and the interviewee's *participation attitude* show a different approach to CP: strong leading actors that are followed by citizens who contribute to the actors' goals because they have adopted them. Clearly, the

power of citizens to shape decisions and actions is limited in this approach, although it is considered to be a crucial element of CP (Newig et al. 2023a, p. 2). Besides that, the approach can lead to an improved effectiveness, if citizens contribute and thereby amplify the leading actors' activities, which justifies a participation process and prevents the perception of triviality (Fung 2015, p. 521).

5.1.5. Corporate mobility project: East Tyrol

This project involved several mobility modes with the aim to improve the employees' mobility in the whole region. The project's *relevance and complexity* lie in the region's spatial specificities as a bordering region which only has limited areas available for settlements and economic activity (*green culture*). The mixture of *conflict potential* and lacking *high-order support* seems to have led to the failure of the project. Contrary to all other projects, the project's target group were employees. As an intermediary, the workers council was involved, which is an institutionalised participation body on its own. The chosen CP format was passive participation which corresponds to the expressed *participation attitude* of creating an offer first and applying participation afterwards. However, the project also involved a survey among the employees at the beginning of the project to collect data about their mobility situation and needs. Yet especially in the complex environment of a border region with a high share of commuters coming from across the border, a more comprehensive and in-depth survey could have revealed interesting results, as citizens can be a great potential to solve wicked problems by providing important knowledge about the problem, potential trade-offs and the solution (Fung 2015, p. 517). Besides that, the region has a *history of participation*: CP was used to develop the region's mission statement, yet this was targeted at citizens, not employees. The region will experience a negative *population development* until 2050, though it is trying to counteract this: The regional management runs a campaign to recruit new inhabitants and focuses strongly on its strengths and particularities in its web appearance (Vordenken Osttirol 2025).

5.1.6. Further aspects across different project foci

To begin with, all projects involved some form of participation which is in line with the widespread use stated by the literature (Kamaci 2014, p. 14). Only active CP was involved in four projects (Lengau, Gratwein-Straßengel, Krenglbach, Thayaland), only passive CP in two projects (Fuschlsee-Mondsee, East Tyrol), only stakeholder participation in another two projects (Zell am See, Vulkanland), and active and stakeholder participation (Wilder Kaiser) or passive and stakeholder participation in one project each (Jenbach). *High-order support* turned

out to be a relevant context factor. Except for two, all projects received support from the provincial or federal level, one also from the EU level, and several interviewees highlighted that this financial support was important for the realisation of the project. Due to the low occupancy, flexible mobility services are often not economically viable (Poltimäe et al. 2022, p. 13). Strategic support from a higher level played a minor role, as it was mostly the regions themselves that developed a strategy that mattered for the project. Having an external *facilitator* was not very relevant, as only three projects had one and this context factor only played a minor role in all of the interviews. However, literature identified the inclusion of an external and skilled facilitator as an important practical recommendation for successful CP processes (Ianniello et al. 2019, p. 35; Kurkela et al. 2024, p. 136). Most of the analysed projects organised the CP process themselves and project actors stated that they had the required expertise in house. Of course, contracting an external facilitator also comes with additional costs which might have an influence as well. Another observation is the importance of knowledge and experience on the respective mobility service, covered partially by the context factors *green culture*, *asymmetries* and when mobility providers were among the main actors. In general, expertise, experience and research are still lacking when it comes to rural sustainable mobility (Flipo et al. 2021, p. 3; Poltimäe et al. 2022, p. 2). The projects in Jenbach and Vulkanland exemplify how the presence or the absence of expertise on the mobility service can render the implementation successful or not. With regards to the *governance level of the lead actors*, strong local or regional actors were present in all projects, especially regional management organisations, municipalities and tourism associations. According to the literature, it is often skilled and motivated officers that initiated such projects and drive change (Flipo et al. 2021, p. 14). This was reflected in the empiric research. To conclude the governance aspects, the context factors *incentives to participate* and *asymmetries* played out very differently in the projects and had varied influence.

All projects have a *history of participation*, with only one project also having a *history of conflict* (Gratwein-Straßengel), thereby proving this context factor to be relevant. These repeated CP processes are a positive development, as CP has to be an integral part of the whole local governance system and not treated as a singular activity to be influential (Kurkela et al. 2024, p. 136). Furthermore, a public consensus on the role of CP in democratic institutions and processes contributes to their successful proliferation (Fung 2015, p. 520). However, a notion that was present in several interviews points to the deficit model of discourses (Cook and Melo Zurita 2019, p. 62). According to this, the experts or powerholders in projects see the problem in citizens' lacking knowledge and therefore, information transfer to raise awareness is the

solution (Cook and Melo Zurita 2019, p. 57). Several *participation attitudes* showed elements of the deficit model with statements that citizens have to be convinced about a certain mobility service, that citizens have to be brought on board or that a lack of knowledge about mobility services is the problem. The context factor of *green culture* was present in almost all projects and turned out to be relevant as it provided a fertile ground for sustainable mobility transition projects to take place.

Accessibility is a key concept of rural mobility and was pursued by most of the analysed projects, reflected by the challenge-related aspects *relevance and complexity* and *potential impact*. Especially the increase of accessibility for target groups with reduced mobility options, such as elderly, advances social inclusion and mobility justice (Farrington and Farrington 2005, p. 2; Mullen and Marsden 2016, p. 109). In general, as the majority of projects focuses on collective instead of individual solutions, political responsibility for mobility justice is taken over and not passed on to the citizens (Flipo et al. 2021, p. 16). However, the analysed projects also showed examples of unsecure long-term funding and a lack of political support, suggesting that the mobility transition itself and less so a just transition is not guaranteed. More *conflict* than *win-win potentials* were present in the projects and had relevant impact in a few cases. In general, the influence of the challenge-related context factors was varied due to the heterogeneity of the projects.

With regards to the spatial aspects, all projects that failed took place in areas with negative *population development*. While these findings have to be seen in their respective project environment, they point to the fact that population loss exacerbates the difficulty of low population density in rural areas. The different configurations of *spatial scale* and *rural area* influenced the respective project and actor set up yet did not reveal strong influences beyond that.

5.2. Consolidation of the results, their relation to the research question and to sustainability transitions

The analysis of all projects and their context factors revealed some that positively influenced the implementation of the mobility transition projects: (1) *high-order support* in form of financial support from the provincial, federal or European level, (2) strong *lead actors* on a local or regional *governance level*, (3) a *history of participation* and (4) a *green culture*, which also involves expertise and experience on the respective mobility service. These aspects can be seen as prerequisites for a CP process on a rural mobility transition project to take place and be

successful. Looking more specifically at the contexts of the analysed participation processes, additional factors beyond the analysed context factors turned out to be highly relevant. These are the timing of and the specific question for the CP. The literature reflects these aspects partly by emphasising that CP must be included timely and throughout the process (Reed 2008, p. 2426). In several projects, as for example at Fuschlsee-Mondsee, Wilder Kaiser or Gratwein-Straßengel, active CP was applied for the creation of the region's development strategy or vision. Issues that need to be addressed or objectives that should be pursued were identified in these processes. In the next step, regional management actors decided which mobility service, infrastructure or improvement will be implemented and how it will be designed. Passive participation was then used to inform citizens about the mobility solution and to further enhance it. In summary, citizens were not asked *if* mobility solution should be implemented, which would be a yes-or-no-question, but *how* it could be improved and adjusted to their needs. Additionally, before taking these steps, the question of *what* are the citizens' concerns and ideas for the future is relevant and suitable for a participation process. The *what* question identifies needs, collects knowledge about the problem, potential trade-offs and solutions. A good representation of stakeholders can bring specific needs to the forefront. This contributes to the goals of public participation, namely efficacy, legitimacy and justice (Fung 2015, p. 514). Involving citizens for the development of a strategy before decisions are taken avoids using CP as a means to create legitimacy for already taken decisions which is a main threat of participation (Marzouki et al. 2017, p. 211). Furthermore, not handing over the *if* and *design* question to citizens avoids overloading citizens and passing on responsibility, which is a misuse of participation (Knobloch 2022, p. 122). Finally, the question of *how* a planned or existing mobility service can be improved and adjusted again uses the potential of local knowledge and takes citizens on board without tapping into the deficit trap, since it works on the assumption that citizens possess relevant knowledge for the further development of the mobility service and do not simply have to be convinced to use it (Cook and Melo Zurita 2019, p. 62). The crucial factor for project actors is then at which point and for which specific question of the whole project planning and implementation process it is beneficial to integrate CP. However, the question to which extent the citizens are limited in their participation to the goals of the organisers remains, which is one mayor asymmetry in participation processes (Ianniello et al. 2019, p. 27). To enable transformational change, the authority of experts needs to be challenged and complemented by local, cultural and experimental expertise (Cook and Melo Zurita 2019, p. 62).

The examples of Lengau and Thayaland show that in local contexts and with rather specific target groups and intensive communication between project actors and citizens, active CP that goes beyond the articulated questions of *what* and *how* can also contribute to the successful implementation of mobility transition projects. Yet another use case are mobility services for tourists or tourists and locals. In this specific context, the one main user group, the tourists, is hard to reach for participation processes. Locals have a specific role as they are affected by the positive and negative impacts from tourism, should act as role models and often also work in tourism. Tourist and local mobility are overlapping but not in all cases, yet CP can be a tool to explore opportunities of planning mobility services for multiple purposes. Integrating tourist and local mobility does not only enhance efficiency but it also creates more interaction between tourists and locals and increases the probability that tourists spend money locally and beyond touristic hotspots (Poltimäe et al. 2022, p. 12).

The presented approach to CP in rural sustainable mobility transitions requires project organisers and often also political actors that take the decision to develop strategies and plan mobility solutions that contribute to this objective. Although this is not always the case, handing over these questions to citizens instead is not a panacea as there is mixed evidence on the question whether CP improves environmental decisions (Newig et al. 2018, p. 270; Newig et al. 2023a, p. 9). What is needed, as identified above, is expertise on mobility solutions, which is still lacking when it comes to rural mobility (Flipo et al. 2021, p. 3). A strong multi-level perspective is present in all analysed projects, as they are carried out on the local or regional level but are always connected to the provincial and/or federal level. At all levels, political actors that are in favour of the project are required, especially at the supra-regional level, from which financial support is needed. The PRIMA research project emphasises the collaboration of the local, regional and provincial level (Mobyome 2025, p. 18). Researchers framed this complex governance of rural mobility also as institutional "layer cake" (Flipo et al. 2021, p. 15). Cooperation, trust and shared values between different stakeholders have been identified as key success factors for sustainable rural mobility (Poltimäe et al. 2022, p. 13). Rural regions are very diverse, as also the diversity of the analysed projects has shown. One-size-fits all-solutions do not work, instead many customised regional solutions are required. A network of regional solutions with linkages to the supra-regional PT network and accessible to visitors as well can be a way forward to bring regional mobility solution out of a niche and influence the socio-technical regime of rural mobility, in reference to the multi-level perspective on transitions by Geels (Geels 2012, p. 474).

6. Conclusion

This thesis explored the field between CP, sustainable mobility and rural areas. With its focus on CP, it highlighted the social aspect of the socio-economic and socio-technical mobility transition and contributed to answer the call for a greater inclusion of social sciences in mobility research and planning (Ryghaug et al. 2023a, p. 757). Starting with the observation of the context dependent nature of CP, the thesis followed the hypothesis that context factors have a strong influence on whether CP is a useful means for the implementation of successful sustainable mobility transitions or not (Bryson et al. 2013, p. 24; Kamaci 2014, p. 5). Only sustainable mobility services that are accepted and used by citizens have the potential to contribute to climate change mitigation. I conducted semi-structured guideline interviews with actors from ten selected projects and analysed them based on a set of context factors derived from the literature. Relevant factors that stood out are (1) financial support from a higher administrative level, (2) strong local or regional actors and (3) a history of working on citizen participation processes and (4) sustainability transitions. Yet what turned out to be an additional relevant factor is timing. When in the process of realising a mobility transition project, it is key to consider which CP format to apply. In order to utilise the potential of CP and avoid negative impacts, a clear and defined need for participation is required (Bryson et al. 2013, p. 24). Before the start of a project, the question of what problems, needs and solutions citizens see for the future of mobility in their region is suited to be discussed in a CP process. Thereby, important insights and data can be collected that inform the following steps. Afterwards, the decision for and the design of a specific mobility service, infrastructure or solution is placed best in the hand of skilled and experienced officials. Finally, the question of how the service can be improved and adjusted to the local needs shortly before and after its implementation can greatly benefit from citizens' input. To sum it up, project actors should engage with the public rather on the question of *what* and *how* rather than *if* a mobility solution should be implemented.

Conducting the interviews gave me very interesting and specific insights into the efforts being made in Austria's rural areas to transform the current mobility system. Each project was different, but all focused on shifting the mobility behaviour to collective and sustainable modes of transport. They ranged from a DRT service with voluntary drivers and citizen financing their own car-sharing, to PT providers offering flexible services and projects in tourism regions that also aim to improve the relation between tourists and locals. The different mobility modes that were explored are car-sharing with electric or combustion-engine vehicles, DRT services, shuttles, and cycling. Furthermore, different geographical areas were covered with central and peripheral regions in Upper Austria, central regions in Styria and Tyrol, tourism regions in

Salzburg and Tyrol, peripheral regions in northern Lower Austria and in South-East Styria as well as the exclave of East Tyrol. This diversity is at the same time the greatest limitation of this thesis, as it limits the explanatory power of the conclusions beyond the context of this empiric research. Having spoken about the context specificity of CP throughout this thesis, the results also have to be seen in their embeddedness in the context of the analysed projects. Furthermore, mainly pull measures that promote more sustainable mobility modes were covered, yet these should be complemented by push measures which render non-sustainable mobility modes less attractive, as for example increasing parking fares or introducing pedestrian areas, to fully unfold the mobility transition (Kammerlander et al. 2015, p. 7). The method was suitable to cover the context factors, yet with more interviews, more empiric data on the contexts of CP in sustainable mobility transition projects in rural areas could have been collected. This would have been especially beneficial to accentuate the specificities of the different spatial contexts and different mobility modes more. More empirical research to test the conclusion of this thesis in the context of other mobility transition projects or rural regions would be a very interesting continuation of this thesis.

In 2021, 41% of Austria's population lived in rural areas (Saul 2021, p. 25). Yet several scholars stated a lack of research on sustainable rural mobility, and a lack of tools and policies (Flipo et al. 2021, p. 3; Mounce et al. 2020, p. 5; Poltimäe et al. 2022, p. 2). Therefore, this thesis must conclude with a call for future research on this topic. Possible questions are about the impacts of automated mobility and enhanced connectivity on spatial differences or how stakeholder participation can improve the integration of freight transport into city planning (Ryghaug et al. 2023b). Besides research, knowledge transfer is needed to advance the mobility transition. A recent initiative is the ongoing EU project DREAM_PACE which explores, among others, a better coordination among existing DRT services in East Tyrol (Interreg 2025). Other examples are the Austrian mobility living labs which now also have projects in rural areas, or the already mentioned guideline on implementing DRT services (BMIMI 2025; Mobyome 2025). Finally, the European Commission adopted a recommendation on how to tackle transport poverty in May 2025, which plays a role especially in rural areas (DG MOVE 2025).

My aim with this thesis was to better inform especially regional development actors, mobility consultants and municipal officers working on sustainable mobility about the potentials and downsides of CP in this field, and to enable them in conducting precise and targeted CP. By highlighting the importance of timing and identifying the optimal stage in a project cycle for CP, I hope this thesis contributes to an enhanced implementation of sustainable mobility projects in rural areas. Additionally, this thesis adds to the substantial body of literature on CP

and provides a specific perspective on enabling and hindering context factors. Especially in an environment of tightened budgets, heated debates on climate change mitigation and societal polarisation, interactions between citizens and institutional actors that are beneficial for both sides are needed.

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Supplementary material 1: Expert interview guideline

Expert Interview Guideline	
Topic	Question
Beginning	
Intro	[Presentation of myself, short introduction to my thesis, what the interview is about]
Interview conditions + consent	[Explaining the context of the interview + getting consent]
Main part - general	
Opening question	To start, can you please explain me in brief what your job is about and what role you had in the respective project?
Location: context	What characterizes the location/region and how is the mobility situation here?
Location: mobility	How is mobility managed in the location/region? What are the experiences with sustainable mobility?
Prior experiences	What were the past experiences with participation? Were there any conflicts?
Participation attitude	Do you think participation is a useful means to counter the mobility challenges you experience in the region?
Main part – project related	
Project challenge + potential	What was the goal of the project? What did you wanted to solve with it?
Initiators + actors	Who were the initiators and involved actors? Was an external facilitator involved?
Asymmetries	Which role and task had the different actors? Were there significant differences?
High-order support	Where there any policies or funding opportunities that influenced the project?
Citizen participation	Was citizen participation part of the project and if yes, to what extent?
Outcome	How was the project received by the population? Would you consider it successful?
Ending	
Open question	Anything else important that I forgot to ask?
Closing part	[thank you for the interview, further process]

Supplementary material 2: Summarising tables of the results

See the following pages.

Table 4: Results 1 – Project factors and dependent variables

	Project factors			**Dependent variables**	
Project	**Focus**	**Description**	**Main actors**	**Participation**	**Acceptance**
Fuschlsee-Mondsee	DRT	DRT service and info campaign for promotion	Regional management, mobility provider, municipalities	Passive participation	After some years of operation, the service is accepted and needed
Jenbach	DRT	DRT service provided by VVT	Municipality, mobility provider	Stakeholder + passive participation	Municipality + most passengers are very satisfied
Lengau	DRT	DRT service driven by volunteers	Mayor, volunteers	Active participation	Service is very well received and known
Wilder Kaiser	Tourism	Free use of DRT services + e-bikes for tourists when arriving by PT	Tourism association	Stakeholder + active participation	Positive feedback, still high proportion that arrives by car
Zell am See	Tourism	Shuttle for tourists between train station + hotel	Tourism association, mobility provider	Stakeholder participation	Well received especially during winter season
Gratwein-Straßengel	Multi-modal mobility	Sustainable mobility strategy (DRT, car-sharing, cycling)	Municipality	Active participation	Positive reaction from users, not so much for biking projects
Krenglbach	Multi-modal mobility	Local DRT-service + car-sharing	Local association	Active participation	Well received + supported by the community (DRT more than car-sharing)
Vulkanland	Car-sharing	Regional car-sharing	Regional management, municipalities	Stakeholder participation	Project was stopped due to insufficient uptake, only a small group still uses it self-organised
Thayaland	Car-sharing	Regional car-sharing financed by citizens	Regional management	Active participation	Accepted but not as widely used as planned
East Tyrol	Corporate mobility	Development of sustainable corporate mobility strategy	Regional management, companies, mobility provider	Passive participation	Project failed due to insufficient funding

Table 5: Results 2 – Challenge-related and spatial aspects

	Challenge-related aspects				**Spatial aspects**		
Area	**Relevance and complexity**	**Potential impact**	**Motorisation**	**Conflict or win-win potential**	**Spatial scale**	**Rural area**	**Population development**
Fuschlsee-Mondsee	Cover first/last mile, sprawl, border region	Existing sustainable mobility services, high coverage	660,1 (Vöcklabruck) 625,2 (Sbg Umgebung)	Provincial border that complicates	Regional	Rural area, rural area surrounding centres, 1 touristic municipality	+8,1% (Vöcklabruck) +10,8% (Sbg Umgebung)
Jenbach	Supplement existing PT	Train station difficult to access	565,5 (Schwaz)	Need was expressed, financial burden	Local	Rural area	+9,5% (Schwaz)
Lengau	Independence for elderly	Improved accessibility	661,6 (Braunau/Inn)	No opposition	Local	Rural area	+15,3% (Braunau/Inn)
Wilder Kaiser	Mitigating negative impacts of tourism	Topography fits well for PT	563,2 (Kufstein) 582,9 (Kitzbühel)	Local population benefits	Regional	Rural area, touristic	+13,2% (Kufstein) +3,8% (Kitzbühel)
Zell am See	Reduce emissions from tourist travel	Well connected to long-distance trains	558,8 (Zell/See)	Service is only for tourists	Local	Regional centre, rural area, touristic	+2,0% (Zell/See)
Gratwein-Straßengel	Municipal integration	Holistic approach	662,9 (Graz-Umgebung)	High costs and perceived as unnecessary	Local	Rural area surrounding centres	+16,1% (Graz-Umgebung)
Krenglbach	Use synergies	less car-ownership, more accessibility	691,9 (Wels-Land)	Project associated with opposition party	Local	Rural area surrounding centres	+15,7% (Wels-Land)
Vulkanland	High motorisation rate	High car-dependency	714,5 (Südost-steiermark)	Problems during implementation	Regional	1 regional centre, rural areas, 2 touristic municipalities	-5,1% (Südoststeiermark)
Thayaland	Counteract centrifugal forces	High car-dependency	759,5 (Waidhofen/ Thaya)	Financially attractive, goal was not achieved	Regional	Regional centres, rural areas	-14% (Waidhofen/Thaya)
East Tyrol	Bordering region	Spill-over effects from commuting behaviour	593,9 (Lienz)	Pressure to secure employees	Regional	1 urban centre, rural areas, partially touristic	-7,5% (Lienz)

Table 6: Results 3 – Governance aspects

	Governance aspects				
Area	**Governance level lead actors**	**Facilitator**	**High-order support**	**Incentives to participate**	**Asymmetries**
Fuschlsee-Mondsee	Regional development organisation	No	Little from the provincial level, support from federal + EU level	Feasibility study existed	Different rules + subsidies in the 2 provinces
Jenbach	Municipality + PT provider	No	Federal level	Financial and technical obligations for the municipality	Mobility provider decides about offering the service
Lengau	Municipality	No	No	Community, pride	Voluntary drivers are insured, mayor as main caretaker
Wilder Kaiser	Regional tourism association	Yes	Provincial + Federal level	Shaping strategy for future development, express dissatisfaction	PT guest card only for tourists, different offer for locals
Zell am See	Local tourism association	No	To some extent provincial level	Emerging issue of unbalanced tourism	Residents should act as role models for tourists
Gratwein-Straßengel	Municipality	Yes	Provincial + Federal level	Something new was created	Initiative was at the municipality
Krenglbach	Local association	No	Federal + Provincial level	Actively shaping the project	Knowledge due to professional background, successful project perceived as threat by municipal government
Vulkanland	Regional development organisation	No	Provincial level	New project, supported by regional strategy	Little knowledge + experience
Thayaland	Regional development organisation	No	No	Interest or vouchers for financial contribution	60% of the funding comes from citizens
East Tyrol	Regional development organisation	Yes	Provincial level but promised support was not delivered	Need for a solution, financially attractive	Employer – employee relations, insufficient budget

Table 7: Results 4 – Prior experiences

	Prior experiences		
Area	**History of participation and/or conflict**	**Participation attitude**	**Green culture**
Fuschlsee-Mondsee	CP at development of region's future strategy	Decisive was that actors knew citizens would accept the project anyway	Tourism association focuses on sustainability + climate protection
Jenbach	Previous experience with similar projects	It is very important to involve the citizens, municipalities as intermediary to mobility provider	Municipality provides extensive information on sustainable mobility
Lengau	Many citizens that are engaged voluntarily	Citizens must be approached personally; a clear organisation is necessary	Municipality received a prize for sustainability activities
Wilder Kaiser	CP at development of region's future strategy on tourism	Citizens need to get involved in the implementation process	Focus on car-free mobility for ten years
Zell am See	Several CP formats on different topics	CP cannot be ignored, brings ideas and support	Region is in the process of obtaining an eco-label
Gratwein-Straßengel	Positive + negative experiences with CP	It really depends on the form and the specific question, actual users are often not reached, polarisation is a problem	Mayor has a political focus on sustainability
Krenglbach	Community development processes, citizens not used to participate	Ambivalent; often the same people are involved; difficult for people to imagine new things	Municipality has a strong green party
Vulkanland	Varied experience with CP, municipalities set good examples to motivate citizens	Trying to get citizens on board of running projects	No experience with sustainable mobility but with renewable energy and soil protection
Thayaland	Tradition of CP present in the region	CP can work on small-scale projects; low-threshold approach is important	District with the highest motorisation rate in Austria
East Tyrol	CP at development of regional mission statement	Involve employees when a convincing offer is available	Permanent settlement area is very limited, large nature conservation areas