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'The Just Transition Region Unterkärnten': Examining the
Influence of Place-Based Factors on the Implementation of Just
Transitions

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Abstract

As regions adapt to decarbonisation measures and strategies, there is an increasing focus on supporting fossil-fuel-intensive regions that are disproportionately affected so that they are not ‘left behind’. Yet, there are numerous contested conceptualisations of what a Just Transition entails and how it should be implemented. More recently, scholars have highlighted the need to move beyond a ‘one-size-fits-all’ approach and to factor in context-specificity and regional differences. In practice, however, implementation attempts remain limited and have received little empirical attention. This thesis devises a Regional Just Transition Framework that combines place-based factors (structural, instrumental, and discursive-ideational) and regional challenges with justice principles (procedural, distributive, and recognition) to expand current theoretical understandings of Just Transition towards a more regionally grounded and implementation-oriented approach. It also provides an empirical example of a Just Transition policy by examining the ‘Just Transition Region Unterkärnten’ project in Lower Carinthia, with specific emphasis on procedural justice. To this end, nine semi-structured interviews with regional stakeholders and project partners were conducted. The research findings reveal how the project was weakly aligned with place-based factors and regional challenges in Lower Carinthia. Its approach remained superficial and managerial, with limited attention given to the more comprehensive Just Transition strategy required in this context. This misalignment also contributed to the limited procedural justice of the project, as participation was selective and the inclusion of regional actors was constrained. However, a key finding is that multi-scalar institutional constraints played a significant role in restraining the project from taking a more holistic, inclusive, and long-term approach. By highlighting the need for a place-based approach, this thesis extends current conceptualisations and encourages further research on Just Transition.

Keywords: Just Transition, Place-Based Factors, Just Transition Fund, Procedural Justice, Regional Challenges, Lower Carinthia, Just Transition Region Unterkärnten

Kurzfassung

Um zu vermeiden, dass emissionsintensive Regionen bei der Dekarbonisierung ins Hintertreffen gelangen, rückt die Idee des gerechten Übergangs zunehmend in den Vordergrund. Jedoch kursieren unzählige umstrittene Konzepte darüber, was einen gerechten Wandel beinhaltet und wie dieser gestaltet werden sollte. In jüngerer Zeit haben Wissenschaftler:innen die Notwendigkeit hervorgehoben, über einen pauschalen Lösungsansatz hinauszugehen und stattdessen kontextspezifische Gegebenheiten und regionale Unterschiede zu berücksichtigen. In der Praxis bleiben Umsetzungsversuche jedoch begrenzt und haben bislang wenig empirische Beachtung gefunden. Diese Arbeit entwickelt einen Rahmen für einen gerechten regionalen Übergang, der ortsspezifische Faktoren (strukturelle, instrumentelle und diskursiv-ideelle) sowie regionale Herausforderungen mit Gerechtigkeitsprinzipien (Verfahrens-, Verteilungs- und Anerkennungsgerechtigkeit) verbindet. Dadurch wird das derzeitige theoretische Verständnis des gerechten Übergangs hin zu einem stärker regional verankerten und umsetzungsorientierten Ansatz erweitert. Zudem liefert die Arbeit ein empirisches Beispiel, indem sie das Projekt „Just Transition Region Unterkärnten“ untersucht, wobei ein besonderer Schwerpunkt auf der Verfahrensgerechtigkeit liegt. Dazu wurden neun halbstrukturierte Interviews mit regionalen Akteur:innen und Projektpartner:innen geführt. Die Forschungsergebnisse zeigen, dass das Projekt nur schwach auf die ortsspezifischen Faktoren und regionalen Herausforderungen in Unterkärnten abgestimmt war. Der Ansatz blieb oberflächlich und bürokratisch, wobei der in diesem Zusammenhang erforderlichen umfassenderen Strategie für einen gerechten Übergang nur begrenzte Aufmerksamkeit geschenkt wurde. Diese Diskrepanz trug auch zur mangelnden Verfahrensgerechtigkeit des Projekts bei, da die Beteiligung selektiv war und die Einbeziehung regionaler Akteure eingeschränkt blieb. Eine zentrale Erkenntnis ist jedoch, dass institutionelle Rahmenbedingungen auf verschiedenen Ebenen eine wesentliche Rolle bei den Einschränkungen des Projekts spielten. Diese erschwerten einen ganzheitlicheren, inklusiveren und langfristigeren Ansatz. Indem sie die Bedeutung eines ortsbezogenen Ansatzes hervorhebt, erweitert diese Arbeit bestehende Konzeptualisierungen zum gerechten Übergang und bietet einen Anstoß für weitere Forschung.

Schlagwörter: Gerechter Übergang, ortsbezogene Faktoren, Fonds für einen gerechten Übergang, Verfahrensgerechtigkeit, regionale Herausforderungen, Unterkärnten, Just Transition Region Unterkärnten

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List of Abbreviations

CAP	Common Agricultural Policy
COP	Conference of the Parties
COVID	Coronavirus disease 2019
EC	European Commission
EU	European Union
GD	Green Deal
GHG	Greenhouse Gas(es)
ILO	International Labour Organisation
JT	Just Transition
JTF	Just Transition Fund
JTRU	Just Transition Region Unterkärnten
KWF	Kärntner Wirtschaftsförderungsfonds
LAG	Local Action Group
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale
R&D	Research and Development
RQ	Research Question
SMEs	Small and Medium Enterprises
TJTP	Territorial Just Transition Plan
WKO	Wirtschaftskammer Österreich

1. Introduction

The 2019 Green Deal (GD) lays out an ambitious 55% cut in greenhouse gas emissions (GHG) by 2030, with Europe becoming the first climate-neutral continent by 2050 (European Commission, 2019). The GD is a green growth strategy that aims for the greening of the economy and the protection of the environment, as well as for a fair and prosperous Europe of tomorrow (Filipović et al., 2022; Sarkki et al., 2022). The path towards decarbonisation, however, cannot follow a ‘one-size-fits-all’ solution as the European Union (EU) deals with significant regional disparities. In 2021, regional differences in GDP per person ranged from €8,840 (Bulgaria) to €101,760 (Luxembourg) (Filipović et al., 2022). While on average 8.2% of the EU population was estimated to be at risk of energy poverty, rates were significantly higher in countries such as Bulgaria (27.51%), Lithuania (23.1%), and Cyprus (20.9%) (Filipović et al., 2022). While this does not begin to consider more micro-scale differences on the local and regional level, it does give insight into significant pre-existing socio-economic disparities in resources, living standards and socio-economic characteristics and needs. Depending on the regional economic reality, a decarbonisation of the economy will have significant impacts in the form of socio-economic restructuring. The potential costs range from unequal opportunities for new and green industries to job losses and increased social inequalities (Filipović et al., 2022). All of these are likely to disproportionately affect already vulnerable regions and communities (Filipović et al., 2022). As de Ruyter and Bentley (2024) point out, a transition towards a decarbonised economy does not equal spatially or socially just outcomes; if anything, it has the power to do the opposite.

The notion of ‘leaving no one behind’ has since gained traction to redirect the focus on regions most likely to bear the costs of transitioning towards climate neutrality (Leppänen and Liefferink, 2022). The European Commission (EC), in response, has developed a Just Transition Mechanism, providing a sectoral, territorially focused, three-pillar institutional strategy which aims to support fossil-fuel reliant or carbon-intensive sectors and regions in the transition towards decarbonisation (Leppänen and Liefferink, 2022). One of these pillars, the Just Transition Fund (JTF), provides monetary support which, according to JTF regulations, contributes to ‘enabling regions and people to address the social, employment, economic and environmental impacts of the transition...’ (European Commission, 2021). Through the JTF, the EC aims to overcome the issue of the aforementioned costs of socio-economic restructuring through supporting specific initiatives such as reskilling workers, economic diversification and

investment in the private sector, as well as research and development (R&D) to strengthen the potential for new green development (Filipović et al., 2022; Leppänen and Liefferink, 2022). To do so, member states have created Territorial Just Transition Plans (TJTP), which, based on a series of indicators, identify regions most affected by the transition which are to be supported by the JTF (Sarkki et al., 2022).

However, while the EC has conceptualised the Just Transition Mechanism to be a complementary strategic component for the GD (Leppänen and Liefferink, 2022), the actual implementation relies heavily on how the concept of a Just Transition (JT) is conceptualised, interpreted and translated into practice. With definitions of JT numerous, historical interpretations manifold, and implementations complex, the question of both directionality and regionality remains. The multidisciplinary engagement with JT within academia has led to it becoming a ‘chaotic concept’ (de Ruyter and Bentley, 2024, p. 6), encompassing various competing approaches on how to best achieve JT and what factors are considered necessary to achieve it. Further, while JT has been grounded in various strands of academic literature and has become conceptually ambiguous, empirical studies considering actual examples of implementation remain sparse (Snell, 2018; Wang and Lo, 2021). Furthermore, while the JTF highlights the need to address regional disparities, the question remains on what this entails in practice and how different geographical contexts shape the implementation of JT-oriented policies and strategies.

This master’s thesis aims to examine how JT is implemented at the regional level and how place-based factors interact with implementation policies and strategies. While there is a wide range of abstract conceptualisations of what a JT is, less attention has been paid to how JT is implemented in practice and what factors are relevant at a regional level. Nonetheless, existing research suggests that implementation of JT cannot rely on a one-size-fits-all model, and research needs to focus on regional context and how place-based factors shape transition challenges and policymaking. Thus, this thesis uses the empirical case study of the ‘Just Transition Region Unterkärnten’ (JTRU) project as an early regional JT implementation strategy to understand how place-based factors and related regional challenges influence the implementation of JT.

To do so, the first aim of the thesis is to identify place-based factors as well as related regional challenges relevant to the implementation of JT. Second, the JTRU project is analysed in terms

of process, implementation approach, outcomes, and limitations. Third, particular attention is given to procedural justice, as the focus of the thesis is on the strategic and implementation process rather than solely the outcome of the project. Thus, the project is analysed through the lens of procedural justice with a specific focus on how place-based factors influence the strategic and procedural dimensions of JT implementation.

Therefore, the following research questions (RQ) have been devised to guide the research process:

1. What are the place-based factors and related regional challenges in Lower Carinthia?
2. To what extent does the ‘Just Transition Region Unterkärnten’ Project align with place-based factors and related regional challenges?
3. How is procedural justice addressed in the ‘Just Transition Region Unterkärnten’ Project, and to what extent can this be explained by place-based factors?

In seeking a better understanding of how place-based factors shape JT implementation, this thesis provides a theoretical contribution by extending existing frameworks of JT. It also provides a significant empirical contribution, as it adds to a sparse field of academic case studies of JT implementation processes, which has the potential to act as a foundation for further research into JT strategic processes as well as policy implications for other regional implementation attempts.

The thesis draws upon Benner et al.’s (2026) place-based framework, which identifies structural, instrumental and discursive-ideational place-based factors relevant for a JT. It has, however, been modified to fit the specific research aim, that is, to highlight the relationship between place-based factors and JT implementation. Multiple layers of analysis were added to highlight resulting regional challenges based on the three-pillar place-based framework outlined above, as well as a focus on the actual implementation attempt – the Regional JT Policy. Finally, the triumvirate of tenets, as conceptualised by McCauley et al. (2013), provides specific justice principles, namely procedural, distributive and recognition justice, to evaluate implementation strategies in place. This modified place-based JT framework provides the basis for empirical data collection for which a qualitative research design was used. As the focus was

on the perspectives of key stakeholders of the region in relation to the JT implementation, semi-structured interviews with both project partners and other key actors in the region were conducted (Kallio et al., 2016).

The next chapters are structured as follows. Chapter 2 provides the theoretical foundation of the thesis by outlining the history of JT as well as specific interpretations and conceptualisations of the concept. It further gives an overview of existing implementation attempts before explaining the research gap in relation to a Regional JT Policy. Chapter 3 introduces the conceptual framework and justifies the empirical focus of the thesis. Chapter 4 contextualises the case study used for the thesis by giving an overview of international and national policy strategies before presenting both the region of Lower Carinthia and the JTRU. Chapter 5 explains the methodological approach and research design before diving into the methods used for data collection and analysis, as well as research limitations. Chapter 6 presents the research results, while Chapter 7 discusses these in light of relevant literature, draws conclusions in relation to the RQs and highlights implications for policy and interpretative limitations. Finally, Chapter 8 concludes by synthesising key insights and outlining potential directions for further research.

2. Theoretical Foundation

The following chapter is divided into two sections. The first part provides a brief theoretical background on JT by first examining the international historical background. It then considers how JT is variably interpreted and provides a comprehensive overview of current academic debates on the subject. It then defines the justice principles associated with the concept, before finally focusing on debates regarding the implementation of JT.

The second part of the chapter further narrows its focus on the implementation of JT by looking at regional JT policies, including empirical examples of implementations as well as a more detailed examination of place-based factors. Finally, it examines the research gap of understanding how a JT is implemented and what factors are relevant for this to occur.

2.1 Theoretical Background

2.1.1 A History of Just Transition

Coined by Toni Mazzocchi in his ‘Superfund for Workers’, the term ‘Just Transition’ originated in the 1970s as part of a labour movement in response to toxic waste cleanup policies (Eisenberg, 2019; Trimmel et al., 2024). Mazzocchi fought against ‘job blackmail’, as vulnerable and minority workers were forced to work in toxic environments or risk being unemployed (Cha et al., 2022). Toxic waste cleanup policies further threatened these workers as these led to large-scale displacements (Cha et al., 2022). In turn, labour unions defended these workers and their employment despite the negative environmental impact of polluting industries (Abram et al., 2022). While this created the initial yet continuously polarising narrative of ‘Jobs vs. Environment’, it also served as a key milestone for labour environmentalism, which has since then expanded globally and is featured in strategies regarding the recent shift towards a low-carbon society (Stavis and Felli, 2016). While originally a labour-oriented concept, JT has since expanded in scope and has been adopted by union movements, environmental and climate justice organisations, governments and international bodies (Avelino et al., 2024; Stark et al., 2023).

At the 16th Conference of the Parties (COP) in 2010, the need for justice for the workforce affected by the transition to climate neutrality was highlighted, with a focus on decent work

and quality jobs being created (UNFCCC, 2011). JT then became a major feature of the 2011 ITUC ‘Unions4Climate Action’, before the International Labour Organisation (ILO) created a JT framework in 2015 (International Labour Organisation, 2016). This framework was meant to facilitate policy coherence on JT measures and provide guidelines for national governments (Hägele et al., 2022). These included a strong focus on the creation of green jobs, skill development and inclusive social dialogue for strong social consensus and transformation (Hägele et al., 2022). It also recommended social protection policies to safeguard vulnerable workers and focused on technology and knowledge transfer to developing countries and regions (Hägele et al., 2022). JT continued to be a focal point in international debates with more than 50 countries signing the ‘Just Transition Silesia Declaration’ at the 24th COP, focusing on the social safety of workers and job creation (Hägele et al., 2022). Finally, the COP30 set out the path towards the Belem Action Mechanism, which aims for JT pathways at the national level and is to be finalised in 2026 (European Commission, 2025). Thus, the global institutional focus of JT has been significant and has, since the 1970s, widened in scope as well as been reshaped and repurposed to consider and empower those left behind while developing policies and interventions confronting the causes of these inequalities (Sarkki et al., 2022). However, while international focus is prevalent, questions of what a JT actually entails and where policy focus should be remain a key debate within academia and beyond.

2.1.2 Interpretations of Just Transition

Despite, or maybe because of, the recent rise of JT within academic writing, there are now multiple understandings, viewpoints and framings of what a Just Transition entails, with often considerable divergence between definitions (Arora and Schroeder, 2022; Leppänen and Liefferink, 2022). While Snell (2018) argues that JT, in simplest terms, links climate action with social fairness, more critical perspectives lead with questions of ‘who wins, who loses, why and how’ as they consider the effects and potential costs of decarbonisation (Korsnes et al., 2023). The debate surrounding JT has been carried out in a wide range of literature, ranging from energy, climate and environmental justice literature to energy access and sustainability, to the actual field of sustainability transitions (Arora and Schroeder, 2022; Trimmel et al., 2024). Wang and Lo (2021) have established four key conceptual fields in which JT has been grounded – JT as the initial labour concept, focusing on the wellbeing of workers (see Eisenberg, 2019), JT as an integrated framework of justice, rooted in environmental, climate and energy justice with efforts to create a multidisciplinary justice-based framework (see

McCauley et al., 2013), JT as sociotechnical transitions to focus on structural shifts on the micro-, meso- and macro-level (see Geels, 2019) and JT as governance strategies involving a multi-dimensional, multi-level, multi-actor governing process emphasising the role of networks and local engagements (see Huang and Liu, 2021). Depending on the interpretation, JT focuses more on the social justice side or more on the ecological. Some heavily emphasise the role of the state and civil society, while others emphasise the need for the private sector to intervene.

There are also scholars calling for a more radical interpretation of JT. Stark et al. (2023) argue that an ‘affirmative transition’ would only find remedies to existing problems, rather than radically changing the existing political economy. A ‘simple fix’ JT stays within the frame of the current neoliberal capitalist economic paradigm, rather than affecting the entire system through the transition. Thus, others call for a Just Transformation (Abram et al., 2022; de Ruyter and Bentley, 2024; Stevis and Felli, 2016). As Abram et al. (2022) argue, the word transition itself implies a bounded problem, rather than the whole system transformation it needs to be. This suggests moving from ‘going from one state to another’ to ‘fully changing shape’ (p. 1038). They argue that only with an ‘integrated, whole system perspective’ (p. 1033) can JT develop full conceptual power and differentiate itself from reductionist silo-sectoral or eco-modernist approaches (Abram et al., 2022). A more proactive, expansive version of JT considers system-wide changes to bring justice and equity (de Ruyter and Bentley, 2024; Stevis and Felli, 2016) and, importantly, considers scale to be vital as a JT affects systems on a local, national and global level (Snell, 2018). Thus, as Harris and McCarthy (2023) opine, it is vital to pay attention to a multitude of factors such as actors, geographies, ideologies and technologies as ‘they shape to what and for whom a society is transitioning’ (p. 6).

2.1.3 A Triumvirate of Tenets

To unite various perspectives, McCauley et al. (2013) argue that the original concept of JT has moved beyond a reductionist view, but rather allows for a comprehensive whole-system framework through which climate, energy and environmental justice conceptualisations are united and used to analyse fairness throughout decarbonisation processes. They argue for the triumvirate of tenets of justice to be used as key principles when considering JT (McCauley et al., 2013). Defining such a tripartite model allows for differences in analysis while still establishing common ground between various academic interpretations (Avelino et al., 2024).

The triumvirate of tenets distinguishes between three specific types of justice – distributive, procedural and recognition (McCauley et al., 2013). Distributive Justice refers to the sharing of costs and benefits of the transition fairly, considering a full range of distributive allocation, such as, but not limited to, opportunities, income, employment and primary goods (Abram et al., 2022; Gürtler, 2023; Wang and Lo, 2021). Recognition justice focuses on recognising current existing inequalities and stigmatisations of certain groups (defined by race, gender, ethnicity, etc.) and highlights how transitional policies might exacerbate these pre-existing injustices (Abram et al., 2022; Doyon et al., 2024). Thus, recognition justice ensures that the needs of all those impacted are acknowledged: they have a seat at the table (Stark et al., 2023, p. 1288). This should include indigenous groups, migrant workers and women, as these are, or have been historically, the most marginalised and underrepresented groups in the decision-making process (Stark et al., 2023). Lastly, procedural justice is concerned with those at the table having their voices heard (Stark et al., 2023). Hence, it is concerned with the actual equality of participatory opportunities as well as transparent dialogue and accountability of decision-makers to citizens (Abram et al., 2022; Doyon et al., 2024; Trimmel et al., 2024). The fairness and inclusiveness of the process are vital as it ensures the involvement of workers and community members, as well as other stakeholders, in a complex decision-making process in a multi-regime and multi-level environment (Kaljonen et al., 2024; Stark et al., 2023). This also includes access to reliable information about the JT processes, known as epistemic justice (Stark et al., 2023). Scholars have also identified additional principles of justice. Restorative justice recognises past and future harm (McCauley and Heffron, 2018). There is cosmopolitan justice, which highlights global inequalities (Avelino et al., 2024). Planetary justice draws attention to the broader earth system and the connection between social and ecological systems (Avelino et al., 2024). Finally, spatial justice recognises spatial dimensions of justice (Banerjee and Schuitema, 2023). These additional principles of justice emphasise specific scopes, scales or issues and highlight how new emerging injustices need to be identified while taking into consideration both the spatial and temporal dynamics of transitions towards decarbonisation as well as how injustices might differ and depend on different geographies (Sandmann et al., 2024).

While the triumvirate of tenets provides a conceptual base for analysis, the question remains on how these principles can actually be implemented and how this can be operationalised.

2.1.4 On Implementation

Debates surrounding a successful implementation of JT remain ongoing, with Wang and Lo (2021) pointing out that the focus has been on what should happen, rather than how it could be implemented. Even if the abstract concept of JT is turned into actionable plans, implementation might not occur or be successful (Sandmann et al., 2024). A potential reason for this might be the complexity of ‘designing’ and identifying steps, actors and pathways necessary for a JT implementation. Further, a JT ‘does not happen in a vacuum’ (p. 355) but is interwoven in the contexts of society and needs to engage with a broad set of stakeholders, all of which complexifies implementation (Galgóczy, 2022; Stark et al., 2023). A JT implementation should not be narrow or shallow but rather be transformative in nature and include a multi-goal and multi-stakeholder perspective (Cha et al., 2022; Schot and Steinmueller, 2018). This, however, is an intricate task. Weller et al. (2024) highlight the need to establish clear domains for policy action, such as managing plant closures, redeveloping the local economy, redeploying the labour force and maintaining social cohesion. However, questions of who will bring about these changes, who is involved in the planning and the direction and scale of implementation, remain. While and Eadson (2022) emphasise the key role for national and regional governments in creating initiatives for low-carbon industries, adding value to existing clusters or investing in new pathways. By contrast, White (2020) stresses the need to analyse grassroots innovations and new forms of collaboration through radical invention, innovation and dialogue. Considerations of what factors are relevant for a JT and how these are interrelated exist in a multitude. These aforementioned perspectives highlight the importance of understanding how the implementation of JT should be done and what factors are relevant. And yet, while there are myriad evolving perspectives on JT frameworks, little is written on how these frameworks are co-opted, evolve, and are shaped into practical attempts of implementation (Wang and Lo, 2021).

2.2 *A Regional Just Transition Policy*

This next part of the chapter highlights the need for JT implementation. This is done by considering existing practical examples of JT and what conclusions can be drawn from them. Finally, the importance of considering place-based factors in the implementation process is examined.

2.2.1 Empirical Examples of Just Transitions

The following section provides insight into the importance of context-specificity through several practical empirical examples of JT.

In one empirical study, Weckroth et al. (2025) examine a JTF-funded attempt at a JT of phasing out energy peat in Finland. They argue that various challenges experienced throughout the JT process are based on how to translate academic concepts into actionable initiatives, which are strained by various stakeholder interests, practical constraints, and diverse regional realities. They highlight the need for place-sensitive approaches that include place attachments. Through grounding theoretical frameworks in local knowledge, a multi-scalar science-policy concept of JT can be translated into an inclusive and transparent territorial governance process (Weckroth et al., 2025). This also allows for policy uptake from national or EU-level policies and strategies, such as the JTF, as consideration of place-based and territorial specifics and a focus on the collaboration between regional working groups and governance structures allow for a more effective policy transfer of JT principles (Weckroth et al., 2025). In another empirical study, Norris et al. (2024) in their study of Port Talbot find that there is a strong interplay between JT and place-attachment. The lack of consultation and engagement with specific communities' needs meant no effective development strategies were in place (Norris et al., 2024). Malmberg and van Veelen (2025), in their study of workers' perceptions in the Swedish steel industry, highlight how varying identities, perceptions and emotional ties to the regional industry significantly impact the resistance to a low-carbon transition. Here, the local context, both socio-cultural dimensions as well as historic dependencies, shape current-day identities and perceptions to change. Eadson et al. (2025) reinforce this by showing how powerful discursive path dependencies and cultural sensemaking affect regional decision-making in the old industrial region of South Yorkshire, England. Here, the authors illustrate how local identities, socio-cultural contextualisation and collective emotional scarring by historical inequalities are translated by policy makers across multiple domains into local frameworks for action. Regions such as the Ruhr in Germany show how key defining features of the region were economic motivation and reorientation in the first two decades of the shift beyond coal, with prominence given to distributive justice (Arora and Schroeder, 2022). Conversely, research on multiple regional and local energy-transition contexts in Germany and Austria shows less economic motivation, but rather high public awareness of environmental issues and

new green organisational structures, practices and actor landscapes (Baasch et al., 2025), which in turn leads to different regional priorities, opportunities and barriers.

These empirical examples of JT show that regional context matters. While they differ in strategies, they highlight how implementation processes are highly dependent on place-sensitive governance and practical effectiveness is shaped by regional place-based factors such as institutional conditions or socio-cultural context. Thus, JT policies need to be translated locally and adapted to specific regional realities, which makes place-based factors central to implementation.

2.2.2 Place-Based Factors

When thinking about JT in practice, regional place-based factors need to be considered. Wang and Lo (2021) stress how there needs to be a stronger focus on different geographical contexts and how transitions unfold. This, as Abram et al. (2022) argue, allows policies to be more responsive by taking local context, lived experiences and shifting realities into account (see also Suitner et al., 2025). For one, contextualisation matters in terms of specific regional conditions such as actor constellations, existing collaboration between stakeholders and pre-existing industries present (Doyon et al., 2024; Snell, 2018). Importantly, this might also include impeding actors specific to the socio-economic and work environment within a region, which act as barriers to transition (Galgóczi, 2022).

Furthermore, it is key to consider the spatial distribution of places, communities, and individuals to understand how a low-carbon economic restructuring might neglect or even reinforce pre-existing geographies of spatial inequality (While and Eadson, 2022). Regions differ in terms of geographical characteristics, access to natural resources or availability of resources such as education or transport (Banerjee and Schuitema, 2023). This complex network of resources, material realities and socio-cultural factors needs to not only be considered but actively mobilised within the implementation of a JT (Banerjee and Schuitema, 2023). It is, conversely, just as important to consider regional identities, cognitive framings and place-bound aspirations for future local development (Doyon et al., 2024; Koch and Lawhon, 2025; Suitner et al., 2025). Understanding local transitions as deeply political processes that take negotiation and reconfiguration and involve various stakeholders, and their framing of

place-specific problems, leads to long-term commitment and collaboration across multiple domains of governance (Suitner et al., 2025).

A special focus needs to be on the socio-economic realities of regions that have often been undervalued and lie at the periphery (Banerjee and Schuitema, 2023). These, often rural regions, are affected by factors that specifically (re)produce spatial injustices such as lack of opportunities for education, health services or jobs (Banerjee and Schuitema, 2023). It is especially vital to consider their regional priorities as they might often be different from urban perspectives from which non-contextualised JT policies and strategies might result (Banerjee and Schuitema, 2023). There is a need to go beyond conceptually defining a ‘one-size-fits-all’ solution for JT, but rather to understand how place-based factors firstly affect JT processes and how they can be utilised to lead to the most effective implementation of JT.

That is not to say regions are to be viewed in isolation. Both pre-existing spatial distributions, as well as the resulting restructuring that comes with decarbonisation, are interregional processes, as the ‘regions left behind’ are hit disproportionately (While and Eadson, 2022). Unjust geographies of regions that remain underdeveloped, dependent or develop new structural injustices are often limited in political power and influence on policymaking (Banerjee and Schuitema, 2023), which further exacerbates regions being left behind. A multi-scalar reality that considers the interrelatedness between the local, national and global allows for both relationality within communities and regions but also broadens the scope of cross-scalar actors and factors relevant for a JT (Doyon et al., 2024; McCauley et al., 2013; Stevis and Felli, 2016). This, however, stands in contrast with the institutional structures of the EU. While research shows how JT implementation needs to consider both the unique concerns of a region as well as its multi-scalar context, European-level strategies such as the JTF are often rigid and non-adaptive in relation to unique local concerns and transitions (Sarkki et al., 2022). JT, as conceptualised by the EC, struggles to take into consideration differences across local contexts, both in terms of experiences with JT implementations as well as expectations relative to JT itself (Sandmann et al., 2024). The tension between the multi-scalar and regional nature of JT and the constraints of EU-level strategies highlights the need to consider specifically how place-based factors are currently considered in implementation attempts and what role they play in shaping JT-oriented policies.

Thus, what would a place-based regional JT strategy look like, and what central factors need to be considered in its development? Although TJTPs are strategic implementation plans for a JT, they are limited in scope and adaptability. Moodie et al. (2021), in their study on developing three Swedish TJTPs, show how the process was largely driven by technical considerations with limited focus on spatial and socio-economic issues. They argue that a much more holistic territorial approach with a balance between technical, social and spatial elements is required for an inclusive place-based territorial approach. Thus, an understanding of which regional competencies, assets and challenges are present and translating these into a regional JT strategy is key to moving beyond sector-only, narrow and shallow implementation attempts.

To summarise, literature shows how JT has, over the last few decades, expanded beyond a purely labour-focused concept towards a broad, multidimensional approach which has been highlighted and strategised in various international institutional environments. While conceptualisation of JT has been multifaceted, a framework of three key justice principles – the triumvirate of tenets – allows for a comprehensive overview of JT analysis. Yet, the research on actual implementation attempts remains sparse. Increasingly, however, literature is asking not just what JT is but also how it can be implemented. Yet, there remains a gap between JT as a concept and JT in practice and an in-depth understanding of how justice principles are translated into implementable projects and strategies. While there are a few empirical case studies that stress the importance of regional place-based factors within the implementation process, there continues to be a research gap in understanding how place-based factors influence implementation and shape justice processes in practice. This master's thesis addresses this gap by examining a real implementation attempt and analysing JT in practice. Moreover, it examines the relationship between JT and specific justice principles and regional place-based factors, moving beyond abstract and often generic JT debates towards factors and relationships important for implementation processes within a specific region.

The following chapter develops the conceptual framework, which provides an analytical base for this thesis and will introduce key place-based factors as well as justice principles used for the analysis.

3. A Regional Just Transition Framework

The following chapter develops a Regional Just Transition Framework that links place-based factors to the implementation of JT. It will provide the theoretical foundation for the empirical research of this thesis. This thesis connects two JT frameworks, with the first being Benner et al.'s (2026) place-based framework and the second being McCauley et al.'s (2013) triumvirate of tenets.

3.1 The Framework

Benner et al. (2026) distinguish between three interrelated categories of place-based factors to provide a holistic overview of a region: structural factors, instrumental factors and discursive-ideational factors. In this context, structural factors include the economic and organisational structures prevalent in a region and include, but are not limited to, the absolute size, the market structure and interlinkages of dominant industries, as well as the organisational and institutional support structures in place. Secondly, instrumental factors include place-based assets such as natural resources, human assets such as skills and knowledge, and built infrastructure. And thirdly, discursive-ideational factors account for the actors' interpretations of the region, including historical legacies, attitudes towards industries, education and employment, but also dominant framings, narratives and imaginaries. While these pillars deconstruct the region, attention is also directed to its positionality to include inter- and transregional perspectives, as well as the multi-scalarity in regard to the national, European and global context in which the region is embedded (Benner et al., 2026).

These analytical pillars make it possible to deconstruct a region into distinct, but interrelated dimensions. This provides a contextually grounded base within which JT is to be implemented. While this thesis utilises this categorisation of place-based factors, further levels of analysis are added to understand which aspects of regional contexts are most relevant for the implementation of JT. For this, a second layer of analysis is added to identify regional challenges. Regional challenges here are understood as emerging from both specific place-based factors and their interactions. They are vital for the implementation of JT as they make it possible to determine which place-based factors are relevant for a JT and have the potential to act as obstacles but also as potential opportunities. Therefore, establishing region-specific challenges helps identify how certain place-based factors may hinder or enable JT.

Lastly, to analyse JT specifically, a third layer of analysis is added: the triumvirate of justice (as utilised in McCauley et al., 2013). A key factor in the implementation of JT is to consider to what extent regional factors can be considered assets or hindrances, thus opportunities or challenges throughout the process of a JT. Therefore, to consider how regional factors and the implementation of JT interact means understanding how these regional factors are distributed, or in other words, who benefits from them and who does not, considering distributive justice. Additionally, understanding who is involved in the strategic process of establishing what regional competencies and challenges are, as well as deciding how the process of JT should look, includes considering procedural justice. A regional JT strategy should address pre-existing socio-economic injustices faced by specific groups and highlight how decarbonisation might affect these disproportionately within the region; thus, there is a need to consider recognition justice (McCauley et al., 2013).

The framework can be utilised in two ways. First, it can serve as a foundation for a JT implementation approach by identifying key place-based factors and regional challenges to understand how these affect the triumvirate of tenets. This approach is pre-emptive in that it is forward-looking and can be applied in a strategic way to support a more context-sensitive and place-based JT implementation. By doing so, the framework enables future JT implementation attempts to go beyond a ‘one-size-fits-all’ approach, which has been heavily criticised in academic research (Abram et al., 2022; Banerjee and Schuitema, 2023; Wang and Lo, 2021). Second, as applied in this thesis, the framework helps to assess the extent to which regional place-based factors are reflected in current implementation approaches and how this shapes the justice dimensions present. This may, in turn, help strengthen current attempts by highlighting missing policy dimensions specific to the region.

Figure 1 visualises the three layers of analysis: place-based factors, regional challenges and the triumvirate of justice, all of which interact with regional JT policies.

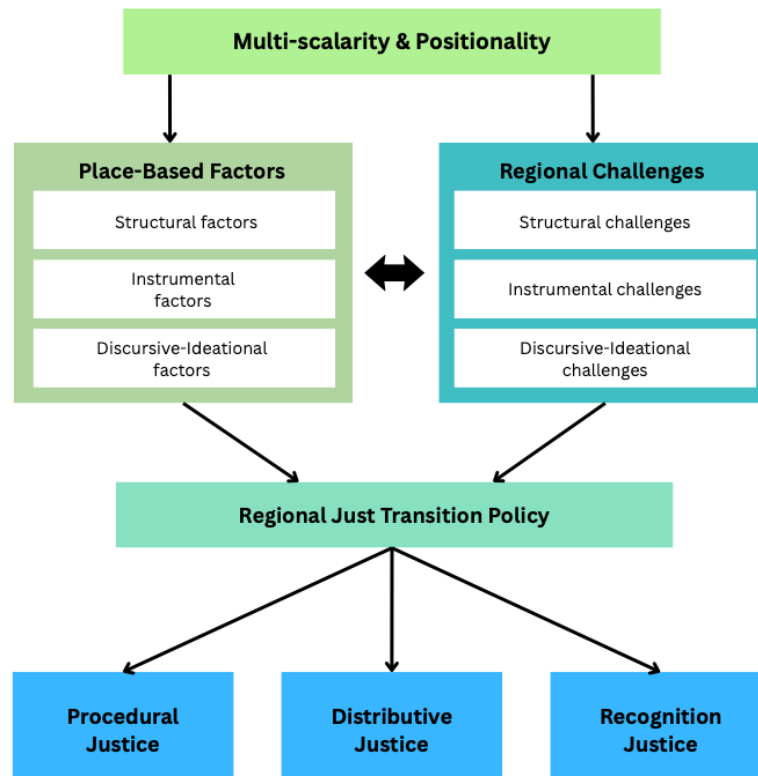


Figure 1: Conceptual Framework (adapted from Benner et al. (2026) and McCauley et al. (2013))

Note: Author's own illustration

3.2 Empirical Focus: Procedural Justice

While the conceptual framework aims to give a holistic perspective on regional JT and the consideration of place-based factors, the following empirical research will focus specifically on procedural justice, rather than considering all three justice principles with regard to the JTRU. This focus is justified for several reasons. The few empirical research examples that consider JT implementation have focused predominantly on distributive justice, as the focus has been on the 'why' of JT implementation, rather than the 'what', which is considered by procedural justice (Stark et al., 2023). For this reason, further research on procedural justice is needed. This case study examines the JTRU and focuses on the strategic process of implementation and what factors have influenced this. Procedural justice is vital throughout the implementation of JT, as ensuring inclusiveness in decision-making, participation throughout the process, and the inclusion of a wide range of relevant actors creates the necessary conditions for a successful implementation strategy (Cha and Pastor, 2022; Hägele

et al., 2022). Thus, procedural justice is not only critical in the process of creating and implementing a JT policy but also shapes its effectiveness (Galanis et al., 2025). This empirical focus allows for an in-depth analysis of how procedural justice in the process of the JTRU implementation is shaped and impacted by place-based factors.

4. Contextualisation

The following chapter gives an overview of the empirical case study chosen for this thesis. It will first consider the JTF, as established by the EC. It will then provide an overview of the TJTP for Austria, which identifies key Austrian regions supported by the JTF. This thesis focuses on Lower Carinthia, which is one of the regions identified by the TJTP.

It is important to note that the JTRU project has been developed by the Local Action Group (LAG) and is therefore funded by both the JTF and another European funding programme called LEADER. This is important, as it means the region the JTRU covers does not fully align with the JTF region outlined by the TJTP. Thus, section 4.3 gives a brief overview of the LAG, before diving into the regional development strategy and key characteristics of the region. Finally, this chapter outlines the JTRU project itself.

4.1 The Just Transition Fund

The GD, released in 2019, was a strategy created by the EC with the goal of achieving climate neutrality in both an effective and fair manner (Gouardères, 2025). To ensure that regions affected most were not negatively impacted by GD guidelines and measures, a Just Transition Mechanism was created to support those territories throughout the transition (Leppänen and Liefferink, 2022). The Just Transition Mechanism consists of three pillars: an InvestEU Programme, a public-sector loan facility, and the JTF (Leppänen and Liefferink, 2022). This fund provides monetary support primarily in the form of grants with an overall budget of 17.5 billion euros (2021-2027) (Gouardères, 2025). The goal of these grants is to actively support regions by focusing on economic diversification and modernisation, reskilling and training, and reducing emissions through new energy technologies and the regeneration of industrial sites (Gouardères, 2025). EU member states submitted TJTPs, which identify regions to be supported through a key set of indicators such as GHG emissions and employment in fossil fuel production (Gouardères, 2025).

4.2 The Territorial Just Transition Plan Austria

As part of the JTF, the TJTP for Austria has been developed, which identifies regions most likely to bear the negative impacts of the transition to a climate-neutral economy (ÖROK,

2022). This was done based on GHG emission intensity, with regions emitting at least 50% more than the national average chosen to be applicable for both funding and strategic intervention. The TJTP Austria identifies two key areas of focus to ensure a fair transition: transformation and diversification (ÖROK, 2022). Within Carinthia, five regions have been identified as eligible for funding, with 11 million euros available for qualifications and training and 14 million euros available for SME investments, R&D and start-ups (Regionalmanagement Unterkärnten, 2023). One of these JTF-supported regions is Lower Carinthia with a GHG-economy of 867,140 tCO₂-eq./a with 17,350 people employed in affected industries in 2021 (Regionalmanagement Unterkärnten, 2023).

According to the TJTP, JTF-supported regions should focus on energy- and resource-efficient production, renewable energy sources and a circular economy. Moreover, negative socio-economic effects should be dealt with through diversification, the creation of jobs in ‘green’ fields, funding into a regional innovation-oriented start-up ecosystem and the retraining and strengthening of existing competencies. The TJTP is considered a vital part of Carinthia’s regional development strategy and stresses other funding opportunities and strategies, such as the KWF Strategy 2030 for Technologies, Start-ups, Training, and Partnerships; the State Labour Market Strategy; the Carinthia Energy Master Plan; and the Carinthia Rural Areas Master Plan (ÖROK, 2022). The TJTP advocates a place-sensitive approach, which builds on regional structures and competencies, but does not provide further detail on what that process entails or how this agenda should be implemented (ÖROK, 2022).

4.3 Local Action Group Lower Carinthia

LEADER, while part of the Common Agricultural Policy (CAP) and specified by national strategic plans, is a bottom-up regional approach to rural development, which works through the establishment of LAGs made up of a variety of stakeholders such as farmers, rural businesses, regional organisations, and private individuals (Baldauf et al., 2023). The LAG aims to engage local actors in decision-making and create sustainable change in key areas such as strategic development of economic activity, climate protection and adaptation, and preserving cultural heritage (Baldauf et al., 2023).

The LAG Lower Carinthia covers 1,800 km² and 94,500 people in two political districts (Völkermarkt and Wolfsberg) (Baldauf et al., 2023) and is situated at the Austrian-Slovenian

border, embedded between the Karawanks and the Lavanttal Alps. The region has historically been characterised by GHG-intensive industrial businesses, with 43% of businesses operating in the wood and steel industry (Baldauf et al., 2023). There is also a large number of small and medium-sized enterprises (SMEs) that are economically intertwined with key leading businesses (Meltzer et al., 2023). All municipalities show below-average employment growth, as the region is expected to deal with an 11.2% decline in the working population by 2040 and an increase of 34.9% of people aged 65 and older by 2030 (Baldauf et al., 2023). Agriculturally, there is still a significant degree of self-sufficiency, and organic agriculture has increased by up to 46% between 2013 and 2019 (Baldauf et al., 2023). Energy consumption is significantly higher than the rest of Carinthia (49.05 MWh compared to 37.8 MWh). Importantly, the districts of Wolfsberg and Völkermarkt vary, as Wolfsberg focuses strongly on the paper and print industry as well as the food industry, whereas Völkermarkt is industrially less strong and deals with stagnant labour market trends and the highest unemployment rate in the entire JTF-region (Niederl et al., 2023).

The aims of the LAG Lower Carinthia are split into four fields: creating additional value, protecting natural resources and cultural landscapes, public welfare and the climate (Baldauf et al., 2023). The local development strategy aims to increase economic, social and ecological potential while considering regional developments such as the recent extension of the Koralmbahn, a railway line that now stops in various stations in Lower Carinthia and connects Graz and Klagenfurt (Baldauf et al., 2023).

4.4 'The Just Transition Region Unterkärnten' Project

The JTRU project was a one-year project from January 2023 to December 2023 and was officially funded by both LEADER, with 35,000 euros and the JTF, with 15,000 euros. The project officially belongs to the LAG's Action Field One, focusing on economic transformation and highlighting key focus points such as bioeconomy, circular economy, self-sufficiency, climate protection, and strategic land development (Baldauf et al., 2023). While the LAG is the project sponsor, the JTRU is the result of multiple project partners, including the Chamber of Commerce Völkermarkt & Wolfsberg, the Lavanttal Business Association and the Association for Regional Development in Southern Carinthia (LAG Regionalkooperation Unterkärnten, 2023). The consultancy firm Trigon facilitated the entire project process.

The goal of the project was to raise awareness, inform businesses and support them in dealing with the change towards a carbon-neutral economy, as well as initiate a range of projects and initiatives towards a comprehensive transformation of the region (Regionalmanagement Unterkärnten, 2023). Key topics that the project focused on were circular economy, recycling, renewable energy, sustainable mobility, food and additive manufacturing (Regionalmanagement Unterkärnten, 2023).

As part of the project, four regional workshops as well as a press conference were held that aimed to involve key regional stakeholders and the industry. The project also planned to develop multiple development and network programmes throughout the year. During the project, a model was created which outlined the three key pillars necessary for a JT in Lower Carinthia and explained the project's goals and pillars of action (Regionalmanagement Unterkärnten, 2023; LAG Regionalkooperation Unterkärnten, 2024):

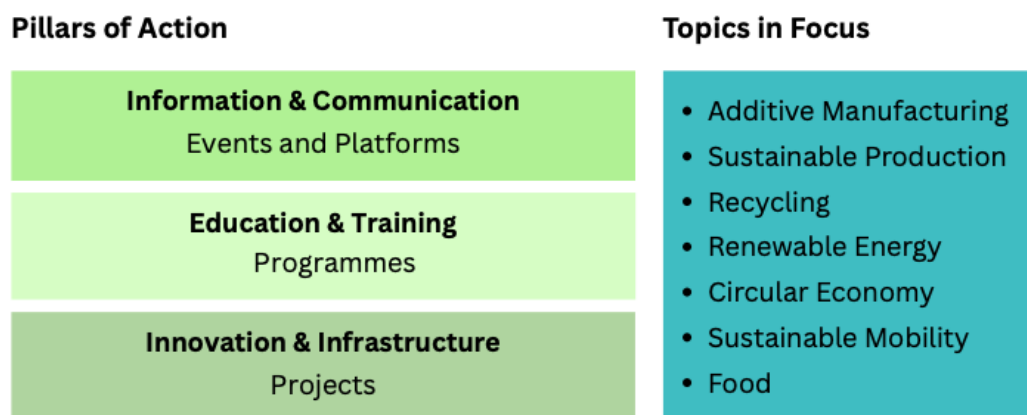


Figure 2: The Three-Pillar Model for a ‘Just Transition Region Unterkärnten’ (adapted from LAG Regionalkooperation Unterkärnten, 2024)

Note: Author’s own illustration

The Pillar ‘Information & Communication’ focuses on raising awareness for the JTF, exchanging knowledge and creating a platform for JTF-related information. Pillar ‘Education & Training’ focuses on establishing networks and providing training, and lastly, the pillar ‘Innovation & Infrastructure’ focuses on larger-scale innovation and infrastructure projects such as the establishment of the economic cluster Klopeiner See, the St. Stefan Founder’s Garages and a 3D-printing Centre Josef Ressel.

The JTRU project is a pioneering initiative across Austria for a region-specific implementation of JT and thus serves as the empirical case study for this thesis. Having established the broader context, the next chapter outlines the methods used for the empirical research process.

5. Methods

The following chapter considers the methodological stance of this thesis before presenting the method of data collection, namely semi-structured interviews, as well as the process of data analysis. It also explains the reflexive process utilised during the entire research process, as well as a reflection of positionality. Finally, it examines and reflects on research limitations apparent throughout the data collection process.

5.1 Research Design

This thesis utilises a qualitative methodology, thus focusing on the geographical inquiry of understanding the complexity of the production of place and considering a multitude of explanations for different social phenomena (Mishra, 2025). Based on the research aim, the focus of the thesis is on place-based factors and regional challenges as seen and experienced by key stakeholders of the region, as well as their opinions regarding the JTRU, making a qualitative methodology most suitable. Further, this thesis applies an interpretivist approach, which is particularly relevant when looking at social phenomena, as it considers various interpretations of how the meaning of a certain phenomenon is constructed, rather than arguing for a single objective truth (Clifford et al., 2010).

As this thesis is an in-depth study of a specific region and project, the use of a case study research design is suitable (Taylor and Healy, 2023). Here, two criteria justify using only a single case study for data collection: viability and unusualness (Taylor and Healy, 2023). This case is viable as it provides sufficient depth of data relevant to the research aim of understanding the relationship between regional place-based factors and a specific JT implementation attempt. Second, the unusualness of the case study also acts as a justification, as the JTRU was Austria's first pioneering JT initiative, thus being a suitable empirical example to study in response to the research aim. The case study research design is naturalistic as the case was analysed in its normal context, rather than in an artificial environment (Taylor and Healy, 2023). Case study research designs are predominantly rooted within qualitative research, with interviews being amongst the most common methods used, as they explore the specific perspectives and opinions relevant to the thesis (Taylor and Healy, 2023). Thus, this master's thesis will employ semi-structured interviews for data collection and use thematic coding for data analysis.

5.2 Semi-structured Interviews

As the goal of the semi-structured interviews was to understand the perspectives of key stakeholders and evaluate their understanding of both place-based factors in Lower Carinthia, as well as the implementation, limitations and procedural processes of the JTRU, two groups of stakeholders were interviewed. The first group of interviewees consisted of project partners of the JTRU, which meant they were directly involved in the strategic processes of the project and aware of JT as a concept. The second group of interviewees were key stakeholders of the region, namely representatives of industrial businesses, regional development organisations, local political figures and Carinthian governmental organisations. This second group of stakeholders was either not directly involved in the JTRU or not aware of it. Including two groups of stakeholders meant it was possible to get insight into internal perspectives of the JTRU as well as external perceptions of its regional embeddedness. Thus, this sampling strategy supported the overall research aim to understand the importance of place-based factors and how the procedural dimensions of the JTRU were both experienced internally and perceived externally.

For the sample, a mix of purposive and snowball sampling was used. Purposive sampling meant finding specific JTRU-project partners and contacting those. This was done as it was the participants' opinions and perspectives that were most relevant (Etikan et al., 2016). From there, snowball sampling led to all other interviewees (Geddes et al., 2018). Potential interviewees were contacted either via email or LinkedIn, with contacts given by recommendation of other interviewees or through online research. While there are concerns about selection bias, this was used as a form of non-random sampling where generalisation and external validity were not sought after, as it was the specific place-based factors of Lower Carinthia and the JTRU that were the sole focus of this project (Longhurst, 2010).

Table 1 provides an overview of the nine interviews conducted. While the specific positions of the interviewees are anonymised, the name of their respective organisation, as well as their involvement or awareness of the JTRU, is presented.

Organisation	Involvement in JTRU
Local Action Group Lower Carinthia	Executing Agency of JTRU
Trigon	Consulting Agency
Wirtschaftskammer Österreich (WKO) (Austrian Economic Chamber)	Project Partner of JTRU
Build! Gründungszentrum (Entrepreneur Centre)	Project Partner of JTRU
Office of the Carinthian State Government	Aware of JTRU
Kärntner Wirtschaftsförderungs Fonds (KWF) (Carinthian Economic Development Fund)	Aware of JTRU
Wech Geflügel	Not aware of JTRU
Independent Organic Farm	Not aware of JTRU
BABEG - Kärntner Betriebsansiedlungs- und Beteiligungsgesellschaft (Carinthian Company Location and Investment Corporation)	Aware of JTRU

Table 1: List of Interviewees

Note: Author's own work

The sample size was limited due to the constrained scope of this project. Here, the question of theoretical saturation, thus the point at which no new data or themes emerge (Glaser and Strauss, 2006), arises. While the interviews conducted provided a certain degree of theoretical saturation, further theoretical insights could still be collected with a larger sample or a more longitudinal approach to the project (Low, 2019). That is not to say that the insights taken from the empirical research should be dismissed, but rather to highlight that the selected sample allows for specifically tailored primary data relevant to the research aims and acts as a foundation from which further academic research may be conducted. This is reflected upon further in the research limitations in 5.4.

The method used was semi-structured interviews. As the methodological goal of this thesis was to gather the opinions and perspectives of regional stakeholders, interviews were the best methodological choice (Kallio et al., 2016). The semi-structured nature of the interviews provided a guiding structure based on the theoretical approach but was adapted to specific

circumstances with flexibility to ask spontaneous follow-up questions (Turner, 2010). Throughout the interview process, both verbal and nonverbal probing were used to get a truly holistic understanding of the specific interviewee's perspectives (Whiting, 2008). The interviews lasted between 21 and 94 minutes, and a zero-order level of communication was adopted (Kallio et al., 2016; McIntosh and Morse, 2015).

Pre-interview, all interviewees were sent an interview guide, which allowed them to get comfortable with the nature of the interview and the topics and questions. Depending on whether they were in Group 1 (directly involved in JTRU) or Group 2 (not directly involved in JTRU), the interview guide was adapted. The interview guide was created based on the Conceptual Framework as well as the RQs. Thus, the interviews were split into three parts, depending on the group of stakeholders interviewed. First, general questions about their work eased them into the interview. The second part focused on the structural, instrumental and discursive-ideational factors prevalent in Lower Carinthia. Lastly, the third section regarded the JTRU project, or, if they were not directly involved, their opinion about JT implementation in the region, with a focus on procedural factors such as the exact strategic process, who was involved and in what capacity. Both versions of the interview guide can be found in Appendix 2. During the interviews, additional questions were asked based on specific fields of knowledge, their awareness of JT, as well as their respective positions and organisations (Dunn, 2021).

All interviews were conducted online via Zoom or Microsoft Teams, which broadened the scope of interviewees due to otherwise long distances between interviewees and researcher (James and Busher, 2016). Pre-interview, all interviewees were given a consent form, which described the interview process and asked for consent to record the interview. Verbal consent was requested again at the start of each interview before starting the recording. As two interviewees did not want to be recorded, detailed field notes were taken throughout the interview, which were then turned into more detailed field notes post-interview (Tessier, 2012). For all recorded interviews, MAXQDA 2026 was used for the initial transcription, with a second polished transcription completed by hand. This was done to fully grasp dialects and non-verbal communication, as well as to interpret and summarise key themes to be used during the coding process. To ensure anonymity and confidentiality, throughout this process, interview names were changed, and anonymous interview identifiers were added (I1, I2, I3...) (Orb et al., 2001). All of the interviews were in German, which meant that, throughout my

analysis, I became both translator and interpreter. While the software DeepL was used for the first translation, translations were corrected by hand. This, as Esposito (2001) argues, is vital, as translation goes beyond face-value vocabulary to consider the individual situation and cultural context, finally reconstructing the meaning of the statement. The responsibility of translating feeds into a broader reflection on positionality below.

Once all the interviews were conducted, a coding scheme with multiple categories and sub-categories was created, which was derived from the research aim and interview guide, as well as the catalogued notes and themes already identified (Alhojailan, 2012). The coding scheme can be found in Appendix 1. After the finalised coding process, data from all key categories were used to draw key findings as presented in the results section in Chapter 6. For the write-up, a digital writing assistant (ChatGPT) was used for bibliographic structuring and referencing. It was also used exclusively for text refinement, with specific tasks being revising grammar and spelling, finding synonyms and restructuring paragraphs and sentences. Lastly, it was used for editorial assistance in the form of finding formatting errors. No generative AI was used for any thematic input, data generation or analysis.

5.3 Positionality and Reflexivity

Understanding my positionality meant taking a reflexive stance throughout the entire research process. Here, I acknowledged that knowledge is situated and partial to specific circumstances (Corlett and Mavin, 2018). As the researcher, I saw myself as a knowledge generator and thus understood the importance of considering my own role and any biases towards the research I am engaged in (Gurr et al., 2024). In this case, I was considered an outside researcher, meaning I was not part of the system studied, but rather a detached, impartial onlooker (Van de Ven, 2007). Although I speak the same language as a native German speaker, I have a different dialect from any of the interviewees, which made my status as an ‘outsider’ obvious and thus may have affected the data collected. By the time of conducting the interviews, I had never been to Lower Carinthia, and I did not share the same culture, history or traditions with the interviewees. Furthermore, my age, gender and education status may also have shaped the generation and interpretation of the data collected (Savvides et al., 2014). Acknowledging and valuing my positionality throughout this process and taking a reflexive stance throughout data collection and interpretation was therefore vital and meant considering where I stand in relation

to the interviewees and how my role and relationships with them had an impact on the results of my research (Bourke, 2014).

5.4 Research Limitations

The following section considers several research limitations which need to be considered when interpreting the results and findings. Discussing these limitations does not undermine the usefulness of the research process and findings of this master's thesis, but rather should be seen as part of a transparent research process and give suggestions for further research (Zhou and Jiang, 2025).

First, the sample was non-representative, which limits both generalisability and external validity of key findings, as well as reducing the extent to which a full range of regional perspectives was reflected in the thesis (Danie et al., 2024). Although this thesis aimed to include a wide variety of regional stakeholders, both involved and not involved in the JTRU, key business actors from the wood and metal industries were not part of the final sample. While multiple businesses were contacted several times, the low response rate meant no meeting could be arranged. This potentially created a non-response and self-selection bias, as stakeholders who agreed to participate in the interview might have been more positively disposed towards the JTRU than those who did not (Danie et al., 2024). However, in a majority of interviews, key themes regarding the role and perspectives of the industry in the region were repeated, which allowed for sufficient findings and conclusions in relation to the aim of this thesis. Nevertheless, additional research which includes key industrial players of the region would allow for further insights and perspectives.

Secondly, while the conceptual framework highlighted the triumvirate of tenets, thereby recognising the importance of the three justice principles (distributive, recognition, procedural) in the relationship between JT and place-based factors, the empirical focus was on procedural justice. This meant the focus was narrower in scope (Clifford et al., 2010), and both findings and discussion reflect on one justice principle only. However, this was seen as a delimitation, as it was an active choice to focus on one justice principle only. As justified in Chapter 3, this approach was adopted because this thesis aims to understand the strategic stages of the implementation process of the JTRU, making procedural justice the most relevant dimension for this specific empirical case study. Nonetheless, including both distributive and recognition

justice in the analysis would provide a broader and more in-depth level of analysis. However, the scope limitations of this master's thesis did not allow for further analysis. Future research should therefore examine all justice dimensions, not only in this specific case but across other case studies of JT implementation processes in order to better understand how justice principles relate to place-based factors of a chosen region.

Lastly, this thesis is only focused on one specific region. This means that, as aforementioned, generalisability and external validity are low as results are specific to the phenomena analysed and interpreted in Lower Carinthia. While it is impossible to make causal inferences from this specific case study, it allows for a first empirical undertaking of a JT implementation. It is not meant to be replicable in the exact format, and results are expected to vary from region to region as qualitative research occurs in a natural setting (Taylor and Healy, 2023). Rather, findings should be interpreted as explanatory (Clifford et al., 2010) and should be used as a starting point for further research into empirical examples of JT and understanding the relationship between place-based factors and their implementation.

The following chapter presents the research findings.

6. Results

This chapter presents key findings drawn from the empirical research process. The chapter is divided into four sections, with the first (Chapter 6.1) presenting structural, instrumental, and discursive-ideational factors in Lower Carinthia. For each category, challenges based on the aforementioned place-based factors are then identified. The second section (Chapter 6.2) positions the region through a multi-scalar lens and highlights interregional knowledge transfers, key societal discourses and the multi-scalar institutional environment in which Lower Carinthia is embedded. The third section (Chapter 6.3) focuses on the JTRU specifically, examining its process, goals and output. The fourth section (Chapter 6.4) evaluates procedural justice in the JTRU, focusing on the inclusion of actors, the form of involvement, as well as influence and decision-making processes. Lastly, the final section (Chapter 6.5) will give a summary of all the results presented.

6.1 Regional Contextualisation

The following section focuses on place-based factors in Lower Carinthia and identifies related regional challenges. To do so, it utilises the conceptual framework to structure place-based factors into structural, instrumental and discursive-ideational pillars as well as related challenges.

6.1.1 Structural Factors

Three structural factors were identified, which interviewees argued to be the dominance of the production sector, the importance of agriculture and ongoing structural investments.

All interviewees described the economic structure of the region as being composed of small-scale SMEs with the notable presence of leading businesses that make a disproportionate contribution to economic output. Across all interviews, industrial activity was not presented as high-tech, but rather specialised in established branches such as mechanical engineering and wood processing, with one interviewee explaining how ‘focus is on metal and wood, and there we have our strongest players’ (I3). Another stressed that, specifically in the Lavanttal, there is a strong production sector, with a focus on metal and wood, but also on paper production and food processing.

At the same time, interviewees consistently situated this economic structure within the wider context of the peripherality of the region. The region was described as strongly shaped by agriculture, with multiple interviewees stating how the region could be self-sufficient in terms of food production, and another highlighting how leading agricultural businesses and farms are focusing on further intensification of agricultural processes. In contrast, tourism was described as comparatively underdeveloped, with several interviewees emphasising that the region offers few tourist opportunities.

Finally, the majority of interviewees pointed to ongoing structural changes in the region. Specifically, the Koralmbahn, which connects the two urban centres Klagenfurt and Graz (see also instrumental factors), and the planned Technology Park in St. Paul were identified as developments with the potential to significantly impact the region.

6.1.2 Structural Challenges

Building on the structural factors identified above, interviewees highlighted three main structural challenges in Lower Carinthia:

Structural Challenges
Overreliance on an insufficiently diversified industrial structure
Lack of intercommunal cooperation
Lack of higher educational organisations

Table 2: Structural Challenges in Lower Carinthia

Note: Author's own research results

Overreliance on an insufficiently diversified industrial structure

The most frequently mentioned structural challenge was the region's continued reliance on a relatively narrow industrial base. While interviewees agreed that there was a broad range of SMEs, they stressed how the regional economy relied heavily on a small number of leading firms, most of which are concentrated in production-oriented sectors. This was seen as a structural vulnerability, and interviewees repeatedly argued for the need for industrial diversification. Diversification was seen as important for a region, not just economically, but also socially and demographically, with one interviewee highlighting that 'to make our region

attractive, we need a good mix of industry, so no one leaves' (I3) (see also 6.1.4). Moreover, several interviewees connected limited diversification to the weak presence of entrepreneurship and start-up activity in the region, with one interviewee noting how 'there is no density or systemic structure of start-ups or entrepreneurship in the region' (I7). Interviewees noted how the problem was not just the dependence on existing key firms, but also the absence of alternative economic structures that would have the potential to broaden the regional economy. Across the interviews, concerns were focused on limited economic potential and insufficient innovation capacity, with interviewees viewing structural diversification as central to the region's viability.

Lack of intercommunal cooperation

A second structural challenge identified in the interviews was the fragmented nature of regional governance and the difficulty, as well as the necessity, of intercommunal cooperation. Lower Carinthia was described as predominantly rural, with smaller municipalities and settlements making up the majority of the area. Interviewees stressed that with such a composition, there is a strong dependence on individual municipalities and key political figures. As one interviewee highlighted, 'you are dependent on the mayors of each municipality, and if they don't want to engage, then nothing happens' (I5). Within this broader challenge, two related patterns emerged. First, interviewees described a tendency for political actors to prioritise the immediate interests of their own municipality. One interviewee made it clear that 'as mayor or state councillor you focus on what your municipality needs more than anything and you focus on what makes it special too' (I3). They argued that local political action is often shaped by municipal priorities rather than a shared regional strategy. Second, interviewees pointed to the lack of willingness to engage politically. Interviewees argued that there were low levels of commitment, support or initiative in the region, with one interviewee arguing that 'no one is willing to stand up politically and engage. There is simply no implementation power because of this' (I1).

Thus, the challenge was not merely the existence of smaller municipalities but rather an absence of shared regional orientation and cooperation among municipal and local actors. Interviewees stressed how intercommunal cooperation is vital for regional development, particularly when challenges extend beyond small-scale localities. One interviewee argued that 'a considerable challenge is definitely intercommunal cooperation and getting the various

municipalities to work together' (I4). Conversely, all interviewees who raised this emphasised that for regional cooperation to work, it was vital to go beyond structural or communal boundaries and include a broader range of actors on all communal levels.

Lack of higher educational organisations

Lastly, a third structural challenge concerns the lack of higher educational organisations in the region. As noted above, within Lower Carinthia, there is a strong regional emphasis on vocational training and skilled labour, but several interviewees pointed to the lack of higher educational structures, which would provide support for education, entrepreneurship and R&D. This issue was presented as a missing layer within the regional knowledge infrastructure and vital for regional development. One interviewee stated that both education and R&D are lacking in the region and emphasised the need for a university, a technical college or an incubation centre. Interviewees viewed the absence of higher educational organisations as not just an educational issue but rather a barrier to regional development. While some interviewees pointed to the future collaboration between the Graz University of Technology and the planned Technology Park in St. Paul, others pointed out how this project was not yet established. Two interviewees also highlighted how a stronger focus on higher education within the region may lead to the potential development of entrepreneurship and innovation, both of which they perceived as important for regional development.

6.1.3 Instrumental Factors

Interviewees focused on two specific instrumental factors: first, built infrastructure assets, which are related to the geographical location of the region and second, the regional human asset base. In the interviews, these factors were described as enabling conditions that shape how Lower Carinthia can utilise its territorial and economic assets. Multiple interviewees described Lower Carinthia as geographically disadvantaged and argued that the topography contributes to isolation and limited accessibility in parts of the region. One interviewee, for example, pointed out how the Lavanttal is in a basin-shaped valley, which means some communities face isolation. Within this context, interviewees repeatedly stressed how the new extension of the Koralmbahn had the potential to be a key instrumental factor as it leads to improved connectivity to larger urban centres, which was seen as being able to mitigate some of the geographical disadvantages associated with the peripherality of the region. Second,

interviewees mentioned the human asset base to be an important instrumental factor. Multiple interviewees highlighted that, due to the strong production-oriented regional economy, there is a strong vocational training base and a workforce with practical skills.

However, the majority of interviewees suggested that both instrumental factors were directly linked to potential challenges, which are discussed below.

6.1.4 Instrumental Challenges

Building on the instrumental factors identified above, interviewees highlighted two main instrumental challenges in Lower Carinthia:

Instrumental Challenges
Insufficient leverage of new transport infrastructure
Reduced workforce availability

Table 3: Instrumental Challenges in Lower Carinthia

Note: Author's own research results

Insufficient leverage of new transport infrastructure

At the time of conducting interviews (March 2026), interviewees viewed the recent extension of the Koralmbahn as having considerable potential to bring significant demographic shifts as well as potential economic opportunities. Here, interviewees anticipated intensified knowledge transfer, connecting structurally weaker regions and attracting skilled workers. One interviewee highlighted the significance of the Koralmbahn as it will connect Carinthia with Styria, which has the highest national R&D rate. Thus, the Koralmbahn has the potential to 'connect two industrial regions... and intensify knowledge and technology transfer through shorter distances' (I6). In this sense, the Koralmbahn was framed not just as a transport infrastructure, but as a mechanism for stronger regional integration.

Simultaneously, interviewees saw significant challenges in the region in being able to leverage these potential benefits. While some pointed to a sense of optimism surrounding the extension, others raised doubt about whether enhanced connectivity could actually generate local development and benefit the region. One interviewee noted that people increasingly use the

Koralmbahn to travel between Graz and Klagenfurt, but rarely leave the train in the intermediate region, limiting direct benefits for Lower Carinthia. Interviewees agreed that the new infrastructure may not be sufficient, but rather the region needs to position itself as an attractive place for people to work. Further, interviewees worried that improved connectivity may not only facilitate access to the region, but also movement out of it. Two interviewees linked the Koralmbahn to fears of outmigration, with one stating that ‘you now not only get here faster, but you can also leave faster’ (I3). The Koralmbahn was thus seen both as a major opportunity for the region and a possible accelerator of demographic decline, with all interviewees stressing that the full impacts of the Koralmbahn are yet to be seen.

Reduced workforce availability

A second instrumental challenge identified in the interviews was workforce availability, specifically relating to the lack of highly qualified labour and outmigration. Interviewees argued that the region faces difficulty in securing and retaining skilled labour, with four interviewees explicitly emphasising the shortage of available workers. The issue of highly qualified labour was frequently mentioned, with one interviewee pointing out that while 44% of people within Lower Carinthia complete an apprenticeship, only 13% of people hold a bachelor’s university degree (see also Baldauf et al., 2023). In the interviews, this was associated with wider concerns of the region being able to attract highly skilled workers. Simultaneously, this issue was repeatedly connected to emigration. Another interviewee referred to a 2.5% emigration rate (see also Baldauf et al., 2023) and argued that there is a need to ‘create new jobs so that there is immigration, now that the Koralmbahn gives us this potential to become an attractive region’ (I7), further stating that ‘if there are no attractive places of employment, young people specifically will leave to go study or work somewhere else’ (I7). In the interviews, the issue of workforce availability was viewed to be part of a broader regional cycle whereby limited opportunities in education and employment (see also 6.1.2) are seen as causing outmigration and a lack of highly skilled workers.

6.1.5 Discursive-Ideational Factors

Throughout the interviews, discourses surrounding JT, ‘green transition’ and sustainability were interconnected, with predominantly negative connotations and a fear of economic decline as the key discursive-ideational factor. When asked about JT, interviewees were quick to

connect it to sustainability, which was perceived as an abstract and often criticised term. Specifically, they argued that there is no regional focus on a green future if it cannot be linked to concrete, realistic and economically viable themes. Here, interviewees emphasised that regional discourses were less focused on broader sustainability themes but rather were shaped by regional development and business viability. The focus on business viability was partly based on interviewees stressing that lead firms within Lower Carinthia play an important part in shaping regional priorities, which in turn affects the emphasis on short-term goals and economically viable themes.

6.1.6 Discursive-Ideational Challenges

Building on the discursive-ideational factors identified above, interviewees highlighted two main discursive-ideational challenges in Lower Carinthia:

Discursive-Ideational Challenges
Deprioritisation of sustainability
Limited understanding of just transition

Table 4: Discursive-Ideational Challenges in Lower Carinthia

Note: Author's own research results

Deprioritisation of sustainability

Interviewees pointed out a general deprioritisation of sustainability initiatives, arguing that people in the region were rather focused on issues that affected them directly and focused on issues such as infrastructure and production. The idea of a sustainable path for the region was, according to one interviewee, 'a topic most people in the region wouldn't understand' (I2). Another pointed out that 'most people are tired of the topic and have developed a certain kind of cynicism' (I4). They also argued that people do not see the practical relevance of sustainable initiatives and goals and view them as too abstract and far in the future to care. Rather, as another interviewee argued, the focus is on regional priorities, with key businesses focusing on expanding infrastructure or continuing production.

Limited understanding of Just Transition

In response to the question of what a JT means and how people react to this, seven interviewees pointed out the limited understanding of the term, with two interviewees not knowing what the term means, and two only having a rough idea of the term but not being able to go into detail. The interviewees who could explain the term immediately pointed out that within the region, this term is not easily understood, with two arguing that they ‘do not like the term’ (I5, I3). To exemplify, one interviewee argued that ‘the concept of JT was not graspable for the average person’ (I5), with another agreeing, stating that ‘in the region it is not widely understood’ (I3). The second trend emerging was that key industrial players in the region did not engage willingly with the concept due to both a lack of awareness of the concept in general and a general hesitation based on what it would cost them. One interviewee explained how ‘businesses are not active and have their own plans for a JT... there is a lot of groundwork to be done’ (I6). They explained why businesses are hesitant regarding the idea of JT:

‘What does a JT even mean for a producing business? Please retrain all your employees. There’s now money for that from the JTF. Retrain all your employees so that at some distant point in the future, they do not produce engines anymore. Management will not like that... will not like having to do that. So, this, at the end of the day, is hard to find businesses that want to engage in this entire process.’ (I6)

Businesses having to go through a complete retraining and the costs this would entail were mirrored by another interviewee stating how ‘if I have an employer who is already struggling and now, he has to let his employees leave to do a reskilling university course or something for two semesters, he wouldn’t like that’ (I5). This was linked to a disconnect between the idea of JT and the need for economic development. One interviewee stated how ‘we have to be careful that the economy continues to live, we need to be able to produce, we cannot really have such big limitations’ (I2) in relation to how he thinks JT would affect the region, with another agreeing stating that ‘businesses do not see the need for JT or disagree and so they are not interested in getting support to work on a JT strategy’ (I4). One interviewee linked this to the difficulty of connecting various regional players, stating that ‘it is very difficult to achieve a JT as this depends on the different players, and we do have organisations and businesses who are important’ (I5). Thus, two clear trends emerged, with interviewees either lacking a clear understanding of the term JT or disliking and distrusting the concept.

6.2 Multi-scalarity

The following section highlights the place-based factors relating to the positionality of Lower Carinthia and focuses on its embeddedness in a multi-scalar environment. Thus, the following themes are identified:

Multi-scalarity
Knowledge transfer and regional integration
Societal discourses
Multi-scalar institutional environment

Table 5: Multi-scalar factors in Lower Carinthia

Note: Author's own research results

Knowledge transfer

A number of interviewees highlighted knowledge transfer and regional integration as important enabling conditions for regional development, but argued that there is a lack of political focus on topics such as interregional collaboration within Lower Carinthia. With the new Koralmbahn, integration with neighbouring regions, specifically Styria due to its high R&D intensity and strong innovation structures, is anticipated to be further amplified. One interviewee stressed how 'having Styria as the state with the strongest R&D focus as a neighbour makes a difference' (I6). They further argued how 'with the new Koralmbahn...two economic areas are linked'. Here, the planned technology park in St. Paul is expected to be a key mechanism in strengthening knowledge transfer and is viewed by interviewees as a focal point for innovation, research and a strengthened economy, all of which they hope will lead to stronger regional integration and knowledge transfer between neighbouring states.

Societal discourses

While discursive-ideational factors and challenges allude to the region's specific framings and narratives, four of the interviewees highlighted how larger societal discourses influence the region and its priorities. Here, two trends emerged. Firstly, interviewees highlighted how attention worldwide had shifted, partly due to the coronavirus disease (COVID) crisis and

partly due to the various crises that are currently occurring globally. Businesses within Lower Carinthia struggle and have to focus on immediate survival, rather than being able to focus on long-term visions. One interviewee pointed out how ‘that was the COVID time... businesses simply had other worries, and that was reflected in world politics and economics within the EU and beyond. Everyone got slowed down because of COVID’ (I5). Interviewees emphasised that due to global changes, since COVID, priorities had changed to focus much more on defence, rather than the GD. Here, one interviewee pointed out how this has a strong effect on the region:

‘(Becoming green) was a motivator here because it has just been so strong these past few years. But now, if we are honest, the topic has just been pushed to the back, because other topics are simply more important now. It is no secret that anything relating to defence is just more relevant, and more funding and attention go towards it.’ (I4)

Larger societal discourses were seen by interviewees as vital, as they had an immediate impact on the multi-scalar institutional environment and both political and funding priorities, which were seen to strongly impact the region of Lower Carinthia.

Multi-scalar institutional environment

Interviewees stressed how the region is largely affected by a strong mismatch between EU-level transition objectives and the practical realities of regional implementation. Interviewees stressed how the EU’s transformation agenda was seen as too ambitious and ignorant of pressures on the ground, as businesses were operating under global competitive pressure. One interviewee pointed out how, ‘at the end of the day, it is about the businesses... it is about development within a region’ (I6), arguing for a need to include economic viability in policies and agendas. Further, interviewees pointed to limiting federal structures with frameworks unclear and institutional delays reducing any time for implementation significantly, with one interviewee explaining how ‘the funding period 2021-2027 only really started in 2024 for us because regulations hadn’t been clear’ (I6) and that ‘governance is simply missing on many levels’ (I6). This was linked to the general theme of time, with interviewees emphasising the mismatch between short programme cycles and the long-term nature of a regional transformation. Here, they argued that the five-year cycle alongside political uncertainty and changing political priorities (see societal discourses) meant there was a short-term funding

logic which inhibited long-term transition. Lastly, the sheer complexity of funding structures, rules and reporting requirements led to confusion and undermined implementation, with one interviewee stating, ‘it was a jungle of regulations... You didn’t even know what you could do and what you should focus on’ (I8). This difficult-to-navigate funding landscape was made more restrictive by strict and rigid regulations related to eligibility criteria, reporting obligations and administrative structures, which prevented actors from accessing support. One interviewee criticised how ‘you are dangling a giant carrot in front of our faces..., but behind rules and structures are preventing the whole thing’ (I5). Thus, interviewees were critical of the multilayered institutional environment. Specifically, they highlighted the difficulties of translating ambitious agendas into realistic, implementable options amid short-term political cycles and the complexity of funding regulations, which they identified as the largest inhibiting factors.

6.3 Project Evaluation

This section shows key findings regarding the JTRU and examines how interviewees evaluated the project in terms of project output and implementation capacity:

Key Findings
Limited project output
Weak implementation capacity

Table 6: Project Evaluation of the JTRU

Note: Author’s own research results

Limited project output

Interviewees described the project as limited in success, with multiple themes emerging regarding the output and success of the project. First, there was low participation at workshops and related events, which interviewees interpreted to be due to limited stakeholder engagement. One interviewee explained how ‘the echo...it was very limited... sometimes we were seven people there’ (I5), which meant that ‘you could already tell that it wasn’t really catching on yet’ (I5). Second, interviewees perceived the project’s main successful outcome to be raising awareness, with no implementable projects realised. They argued that the project managed to

increase awareness of available options and highlighted JT, with one interviewee stressing that ‘a lot happened in terms of awareness’ (I6). This, however, was met with significant dissatisfaction as interviewees argued that the project did not lead to any kind of mobilisation and did not generate any concrete, fundable projects, with interviewees stating how ‘two or three projects should have emerged’ (I6) and ‘there is a certain amount of dissatisfaction’ (I9). While a few viewed the establishment of a JTF office at the WKO as a successful outcome of the project, several of the interviewees argued that this was a short-term success, with the overall project being limited in scope. Thus, while it informed and sensitised a small number of regional actors, it did not create broad uptake or generate fundable transition projects.

Weak implementation capacity

Interviewees described a mismatch between the short funding cycles by which the JTRU was driven and the long-term visions needed for JT to be implemented. Interviewees explained how the strict criteria and long waiting times meant funding had to be committed quickly, and ‘time simply ran out’ (I6). Interviewees stressed how this led to visible outputs being prioritised, while also agreeing that it was not within the project’s scope to encompass long-term change in education, industry and regional development. One interviewee stressed how ‘if I want to focus on impact, I need a longer period of time.... Economic systems need at least a decade to change’ (I6). Rather, interviewees agreed that better support structures and local opportunities would have been needed to help overcome the superficiality of the JTRU. The limited scope of the project, therefore, meant not only that it was too restricted to support an actual JT, but also that more groundwork, stronger institutional support and more locally embedded opportunities would have been necessary for the JTRU to succeed. One interviewee even argued that ‘we would have needed a problem-driven approach... maybe even a 10-year project’ (I9). Thus, interviewees argued that the project was limited in scope, which led to a weak implementation capacity. This was reinforced by a temporal mismatch as the project focused on short-term funding logic, which, as the interviewees argued, did not align with the long-term project that would have been necessary for a realistic JT in Lower Carinthia.

6.4 Procedural Justice

The following section considers the procedural process of the JTRU and examines procedural justice by considering the inclusion of actors, the form of involvement and influence and decision-making.

Key Findings
Inclusion of actors
Form of involvement
Influence and decision-making

Table 7: Procedural Justice Factors

Note: Author's own research results

Inclusion of actors

Interviewees argued that participation was selective, which led to procedural shortcomings in who was invited and who was represented. Here, interviewees argued that participation extended little beyond the project partners, with one remembering ‘40 people were invited, but only 15 came... and I would have preferred the others who cancelled’ (I6), meaning that ‘the more relevant ones were not there’ (I6). This meant wider regional involvement was limited, as only the ‘core stakeholders were present’ (I9). This was linked to interviewees questioning the legitimacy of the project leadership, as a key issue was who decided who the project was for and who should be included. Here, interviewees criticised the WKO formally acting as a representative of SMEs in the region and argued that ‘in the end this doesn’t work’ (I9). A key conflict was presented between the WKO and the Lavanttal Economic Association, as the WKO represented over 4,000 firms, whereas the Lavanttal Economic Association argued to focus on larger lead firms, as they have a greater emissions impact. Interviewees alluded to how they, in the end, ‘did not take everyone along’ (I3), but rather concentrated on larger companies (see also influence and decision-making). Some interviewees stressed that key actors, including governmental bodies, such as the Land Kärnten (Province of Carinthia) or municipalities, were either not comprehensively involved or fully absent. Hence, interviewees suggested that actors were only included selectively, which led to a contested representation of stakeholders and further weakened participation.

Form of involvement

Interviewees described the involvement throughout the JTRU to be shaped mainly by meetings and workshops and questioned whether this format was sufficient. While workshops were meant to involve a broader range of stakeholders, participation mainly took place in the shape of working meetings between project partners. One interviewee criticised the format and argued that ‘it is not enough to have a world café style... You won’t achieve anything’ (I9), and as they argued, ‘you need other practices actually to achieve transition’ (I9). Interviewees defended the limited form of involvement by arguing that the one-year timeframe reduced the possibility of building broader participation and a more sustainable collaboration, including participation through other formats. A continued criticism about the JTRU was the recognised need to move beyond discussion-based formats and sensitisation for businesses, which significantly limited the output of the project.

Influence and decision-making

Interviewees were quick to point out the lack of clarity on who was responsible for decisions regarding the inclusion of stakeholders, the format and the outcome. While the WKO was seen to be a contact point for businesses in the region, interviewees criticised a lack of action in involving SMEs and allowing businesses to have influence in decisions made regarding JT in Lower Carinthia. Here, one interviewee questioned, ‘Who decides all this and what is the impact?’ (I9) with another stating that without including regional stakeholders in the decision-making process, ‘all the major firms and smaller businesses are sitting there and saying okay, and what now?’ (I6). The lack of engaging stakeholders in decision-making was also attributed to the role of regional management, as the LAG Lower Carinthia was quick to pass on responsibility and move on. Interviewees criticised this and argued that it is the role of regional management to ‘include businesses in decisions made regarding those businesses’ (I5). The lack of leadership of the LAG meant tensions rose between project partners about who was in charge, how the problem was framed and who should be included, which led to a lack of collaboration. One interviewee pointed out how ‘one would have had to set one’s pride aside’ (I9) and collaborate. Thus, interviewees agreed that decision-making was exclusive to project partners, yet fragmented and interrupted by differing interests and priorities, a lack of leadership and issues surrounding trust and collaboration.

6.5 Summary of Results

To summarise the key findings, place-based factors and challenges in Lower Carinthia can be categorised into three pillars. Structurally, the peripheral region is divided into smaller municipalities with little intercommunal cooperation. While it does have selective economic strength, there is a dependence on leading firms, with economic activity predominantly limited to the production sector. Higher educational facilities, including organisations for R&D as well as start-up and innovation incubators, are rare, which limits the region's potential to diversify economically and attract high-skilled workers. This is linked to the instrumental challenges, as there are new infrastructural opportunities, such as the Koralmbahn, which are not yet instrumentalised to their full extent. There is a demographic decline, accompanied by a lack of high-skilled labour, which is attributed to structural weaknesses that limit the region's attractiveness. Finally, as the general focus is on the economic attractiveness and viability of Lower Carinthia, discourses surrounding sustainability are predominantly critical, with long-term future visions neglected. JT is either viewed as too abstract, disliked or seen to be misaligned with the relative challenges of the region. Considering the positionality of the region, there is potential for knowledge and skills transfer, but the focus on collaboration and interaction with other regions is limited. Societal discourses are seen to be changing post-COVID, with a focus on economic viability and survival, rather than long-term vision. The multi-scalar institutional environment reflects these changing political ambitions, and short-term political cycles create a complex-to-navigate landscape of regulations.

When evaluating the project, findings highlight the limited output of the project with no significant implementation capacity and no concrete outcomes, other than raising awareness and sensitising businesses. The short-term nature and superficiality of the project's process are also reflected in the procedural justice, which was limited throughout the JTRU. Here, the selective inclusion of regional stakeholders, the low participation rate and a discussion-based format of involvement meant the project was unable to achieve inclusive and influential procedures for JT implementation.

The next chapter will discuss the aforementioned findings and consider to what extent the JTRU aligned with place-based factors, how procedural justice reflects this and finally, what conclusions can be drawn.

7. Discussion

This chapter discusses the preceding research findings, which relate to both the conceptual framework adopted and the RQs. Thus, the chapter will first focus on RQ1 and discuss the place-based factors and regional challenges in Lower Carinthia. It will then answer RQ2 by examining to what extent the JTRU aligned with place-based factors and regional challenges present in Lower Carinthia, before explaining potential reasons for the mismatch in scope and translation. It will then consider to what extent procedural justice was met throughout the implementation process of the JTRU and how place-based factors might have affected such procedural limitations, thus answering RQ3. It will also provide a synthesis of findings before discussing policy implications. Finally, it will consider interpretative limitations that need to be taken into consideration.

7.1 Place-based Factors in Lower Carinthia

This section first focuses on RQ1 and considers the place-based factors and regional challenges prevalent in Lower Carinthia. Structurally, the region is characterised by multiple smaller municipalities, which contribute to localised and individualised political decision-making. As a result, political priorities are often shaped by the immediate concerns of local politicians, rather than by a coordinated approach to regional development. While there are attempts in Lower Carinthia to coordinate intraregional cooperation, it remains localised, infrequent and limited in comparison to the intraregional cooperation advocated for by the interviewees. This, as stated by Dax and Oedl-Wieser (2010), is a common occurrence in peripheral regions in Austria, as communal and political work in smaller, rural municipalities is often done part-time and with few resources, which leads to a lack of implementation power. Furthermore, Dax and Oedl-Wieser theorise that smaller rural municipalities have few professional management structures and political decisions are made based on informal processes. Considering this, Cha and Pastor (2022) point out that the lack of political will and power continues to be a key inhibiting barrier to regional cooperation and intercommunal collaboration. As is coherent with the research findings, Snell (2018) highlights that for regional cooperation to work, it is vital to go beyond structural or communal boundaries and include the majority of regional actors on all communal levels. This is a key challenge in Lower Carinthia, which is seen by interviewees to inhibit further regional development. Beyond intercommunal collaboration, findings suggest intersectoral cooperation also remains limited. Economic strength within Lower Carinthia is

selective, with a few big players focusing on the production sector, but the remaining SMEs are dispersed across the region, reducing the capacity for intersectoral regional collaboration. This is further constrained by the lack of higher educational organisations, which, through R&D, a focus on innovation and entrepreneurship opportunities, might enhance intersectoral cooperation between the key industrial players and public entities (Bianchi et al., 2024; Gibbs and O'Neill, 2017). Without a focus on diversification of industry and strengthened institutional capacity, the region continues to struggle to instrumentalise its existing assets and strengthen its regional attractiveness. To exemplify, the Koralmbahn is perceived as a major infrastructural opportunity, yet its benefits and potential impacts for the region depend on whether the region is able to build local capacity and attractive opportunities around it. Similarly, the loss of human assets through demographic decline and emigration is considered to be a significant regional challenge. Yet, current regional limitations constrain Lower Carinthia's ability to retain its existing workforce and to attract further skilled labour, even with additional opportunities created by the Koralmbahn. This again relates to structural regional limitations, such as the lack of diverse industry or higher educational organisations, as the quality of social and economic infrastructure can limit the ability to attract and absorb an increased workforce (Briggs et al., 2022; Dax and Oedl-Wieser, 2010). This, in turn, again reflects the need for an integrated, cross-sectoral, intercommunal regional strategy that needs to identify the interrelations between structural and instrumental challenges, as well as reflect the region's overall priorities and aims (Abram et al., 2022; Dax and Oedl-Wieser, 2010).

Regional discourses and future visions play a significant role in this as they affect how problems are framed and what solutions are focused upon (Benner, 2025). Within Lower Carinthia, regional discourses surrounding sustainable initiatives were critical, with stakeholders predominantly prioritising economic viability. Arora and Schroeder (2022), in their empirical research of the Ruhr Region, find similar results, as a majority of their interviewees show a lack of willingness to acknowledge environmental issues and disregard sustainability as a concept to be relevant to them. To explain, Weckroth et al. (2025) opine that future visions towards a desirable local future go hand in hand with the current economic status of the region and aspirations of local economic development, which, in the case of Lower Carinthia, is driven significantly by the production industry. Relating to this, Suitner et al. (2025) point out how interest in economic processes affected how a sustainable future is anticipated, which in turn has a significant impact on regional development initiatives. A second key finding relates to the discourse surrounding JT, as the concept is disregarded and

the concept of JT itself is viewed to be too abstract, confusing or simply unrealistic. This is mirrored in Cha and Pastor's (2022) research, as they illustrate that, while understandings of JT differed regionally, there was a general opposition to the term, specifically relating to who was affected by JT. They argue that it was the so-called 'policy elites' (p.3) that were familiar and enthusiastic about the term, whereas those actually experiencing the transition were more critical. This is reflected by the empirical results, as key industrial actors were less familiar with the term, while those working in the public sector knew it well, yet, importantly, still predominantly disliked it. Thus, the findings show how discourses surrounding visions for the future, regional priorities, and, in this case, connotations towards JT, played a role in how regional strategies, such as the JTRU, are created and implemented.

To synthesise, place-based factors show how Lower Carinthia has uneven economic capacity and little inter-sectoral and communal collaboration to identify overarching regional needs, assets and strategies. While there are assets such as the Koralmbahn, which offer potential for the region, structural weaknesses limit the extent to which these assets can be effectively instrumentalised. Organisational thinness, specifically regarding the lack of higher educational organisations, as well as institutional thinness, such as the unwillingness to engage in JT, has a significant impact on the ability of the region to develop (Zukauskaitė et al., 2017). Key findings suggest that there is a strong need to consider these regional characteristics and challenges through a cross-sectoral, intercommunal collaborative strategy to identify overall regional goals and focus on making the region more attractive as well as maintaining or even strengthening economic capacity.

7.2 The JTRU and Place-Based Factors

This section focuses on RQ2 and discusses the alignment between the JTRU and place-based factors. While the JTRU did recognise a few place-based factors in its project aim and strategic process, alignment remained superficial and ineffective. To illustrate the existing alignment, the JTRU placed the focus of the project on industrial players, specifically in relation to sensitising businesses to JT and how businesses can use current funding and support opportunities. Here, the project was aware of the lack of willingness and awareness in relation to a JT and responded to regional discursive-ideational limitations by raising awareness and sensitising businesses. Further, one of the aims of the JTRU was to encourage businesses in the region to utilise opportunities to train and reskill current workers. Here, the project drew

on instrumental challenges of utilising human assets and a lack of high-skilled workers. Lastly, while there were no concrete projects finalised, the JTRU, in theory, focused on innovative projects such as the Founder's Garages. This suggests an awareness of structural limitations with the region needing further opportunities within innovation, R&D and economic diversification to be able to utilise instrumental assets such as the Koralmbahn. Here, the findings suggest that a limited effort was made to align with regional place-based factors and challenges, as seen in Table 8:

JTRU Aims and Outcomes	Place-Based Factors
Raising awareness	Lack of awareness (<i>discursive-ideational</i>)
Training & reskilling	Utilising human assets (<i>instrumental</i>)
Projects in innovation (no actual outcome)	Industrial diversification (<i>structural</i>) Educational organisations (<i>structural</i>) Built infrastructure (<i>instrumental</i>)

Table 8: Alignment between JTRU and Place-Based Factors

Note: Author's own illustration

However, the project did not respond effectively to the region's more embedded challenges, such as the weak coordination between sectors and municipalities, the need to create long-term training in skilled labour and focus on higher education and an uneven awareness of JT with low focus on SME engagement. The project was not convincing in conceptualising a JT approach and focused on managerial strategies limited in depth. It was reductionist in its approach in that it oversimplified JT to be a managerial issue to be managed through sensitisation, disregarding the necessary steps for a broader JT to be achieved (Abram et al., 2022). Rather, the JTRU would have needed to move beyond financial compensation schemes towards a broader understanding of transition on a regional level, including the use of holistic, yet targeted policies and strategies (Galgóczy, 2022; Weckroth et al., 2025). Thus, the JTRU was only partially and superficially aligned with place-based factors and regional challenges, as it did not conceptualise the complex, interrelated, long-term regional challenges and needs of Lower Carinthia.

However, the multi-scalar institutional environment played a significant role in contributing to the limited scope and superficial nature of the JTRU. Here, specifically, the JTRU was

constrained by rigid funding structures, short funding cycles and little time to react and conceptualise JT for the region. This led to a mismatch between regional challenges and needs and programme logic, as the JTRU is limited by EU-level policy decisions. Moodie et al. (2021) present similar findings in their study on JT implementation in Sweden by arguing that regional and local actors are constrained by political asymmetries of power. Here, as Sarkki et al. (2022) argue, there is a paradox between the EU making prerogative decisions regarding the funding structures of the JTF and the need for regions to be able to consider the needs and concerns of their region and people. The EU-level understanding of what a JT entails, what industries and territories will be funded, how they will be supported and in what time span, leads to a disconnect with what challenges are faced by communities (Sandmann et al., 2024). Thus, while the JTF is portrayed to be focused on regional needs, in reality, a guided, top-down approach prevents effective on-the-ground delivery of regional JT policies (Banerjee and Schuitema, 2023; Cha et al., 2022; Weckroth et al., 2025). Consequently, external constraints of the institutional environment on the EU level limited the JTRU's capacity to achieve a holistic alignment with place-based factors.

7.3 Procedural Justice and Place-Based Factors

This section considers RQ3 and examines procedural justice throughout the JTRU. Findings show that procedural justice was uneven, in terms of inclusion of actors, participation and influence and decision-making. While there was an initial effort to encourage participation through workshops, information events, and stakeholder meetings, participation throughout the project was selective, both in the project's conceptualisation as well as in the implementation stages. This meant the JTRU's aims on how to implement a JT were not based on multiple different perspectives and desired outcomes of regional stakeholders (Cha and Pastor, 2022). The lack of differing perspectives, especially concerning those most affected, affected the way in which the project framed both the problem and solutions towards a JT (Abram et al., 2022). This constrained the implementation capacity of the JTRU, as project partners defined the project's concrete measures and desired outcomes, which focused on sensitisation and awareness-raising only (Galanis et al., 2025). This also meant that there was a power imbalance throughout the implementation process, as not all stakeholders were equally involved or had access to the resources of the project (Stavis and Felli, 2016). Tensions between project partners based on clashing interests led to a lack of trust and further hindered the design and outcome of the JTRU (Cha et al., 2022; Sandmann et al., 2024). Meaningful dialogue,

democratic decision-making and the effective coordination of leading parties and regional actors would have helped strengthen procedural justice (Banerjee and Schuitema, 2023; Hägele et al., 2022). Conversely, the procedural justice of the JTRU remained selective and limited in depth.

Place-based factors and challenges of Lower Carinthia had a significant impact on the low procedural justice of the JTRU, which in turn highlights their significance in the implementation process of JT. First, as explained above, the region is fragmented in terms of local governance and a political dependence on small municipalities, which often struggle with a lack of resources and time, alongside a lack of intraregional collaboration. This has implications for procedural justice in terms of participation, including who should be involved in the project and whose interests should be represented. Moodie et al. (2021) come to similar conclusions, as the lack of cooperation between different sectors and parties hinders governance of JT significantly. Here, it is both the complexity of involving all municipalities and sectors within a region and the administrative process and coordination that it would require, as well as the question of leadership, that suggest the process requires a comprehensive, holistic regional strategy (Moodie et al., 2021). Thus, specifically in a fragmented region such as Lower Carinthia, a focus on varying local contexts and municipalities and stakeholder knowledge and agency needs to be included to create just procedures (Abram et al., 2022). The JTRU, however, did not sufficiently achieve this.

Further, within the region, there is a lack of higher educational organisations and limited institutional capacity. This has the potential to reduce inclusive participation processes, as public educational organisations allow for knowledge practices to meet and bring invention, innovation and JT into dialogue (Avelino et al., 2024; White, 2020). Conversely, part of the lack of participation might be attributed to the lack of understanding or interest in JT. Here, multiple place-based factors contribute to such disinterest, with the regions' uneven economic capacity forcing SMEs to focus on economic viability as well as current regional discourses dismissing JT, which limit regional actors' degrees of participation in a project such as the JTRU (Suitner et al., 2025). As identified previously, the JTRU's alignment with place-based factors was limited, which is reflected in the inadequate elaboration of the procedural justice. However, again here, the multi-scalar institutional constraints play a role, as complexities surrounding funding conditions and delayed decision-making processes on an international

level make governance, as well as meaningful and substantive participation, significantly harder to achieve (Sandmann et al., 2024).

Procedural Justice Limitations	Place-Based Factors
Lack of leadership and participation	Lack of intercommunal cooperation (<i>structural</i>)
Lack of knowledge transfer and social dialogue	Lack of educational organisations (<i>structural</i>)
Exclusion of regional actors	Lack of intercommunal cooperation (<i>structural</i>)
Limited participation and interest in JTRU	Limited understanding of JT (<i>discursive-ideational</i>)

Table 9: Relationship between Procedural Justice Limitations and Place-Based Factors

Note: Author's own work

Thus, procedural justice was uneven and lacked depth. While the project did plan for participatory inclusion, it did not manage to provide clear leadership, inclusion of actors or continuous inclusive processes of decision-making and participation. Significant here is the interaction between the regional place-based factors and the multi-scalar institutional environment. Place-based factors limited procedural justice because they shaped the regional capacity and willingness of regional actors to engage. As the JTRU's overall alignment with place-based factors was low, there was a mismatch between regional priorities and challenges and the project's aims, which meant participation was constrained by such misalignment. The multi-scalar institutional environment acted as an external limitation, as short implementation windows, delayed regulations, and complex funding criteria made meaningful participation harder to achieve.

7.4 Why Place-Based Factors Matter

Place-based factors matter because they allow for implementation policies to reflect and focus on context-specific priorities and capacities for JT. Regional limitations, such as limited transitional capacity or critical framings of JT, may need specific attention within JT initiatives to allow for a conceptualisation and implementation of JT that is feasible within a specific

region. Rather than treating the region as a generic implementation site, identifying place-based factors allows for a JT implementation that is connected to regional priorities and challenges and embedded within the socio-economic context of the region (Banerjee and Schuitema, 2023; Eadson et al., 2025). In this case study of Lower Carinthia, key structural, instrumental and discursive-ideational challenges include the limited capacity to utilise existing assets, the region's attractiveness, workforce loss, and critical discourses of JT. By identifying and understanding these, JT strategies may be aligned with the context-specific priorities and thus become more just in their implementation (Abram et al., 2022). To exemplify, Lower Carinthia's fragmented governance complicated the inclusion of actors significantly, as was seen in the JTRU, but made it all the more important, as there is a need for intraregional, inclusive and holistic collaboration. Greater attention to these regional limitations would have meant a focus on measures to improve meaningful participation, inclusion of actors and clear hierarchies and guidelines for leadership and decision-making processes. However, in the case of the JTRU, this was made extremely difficult by external constraints of the multi-scalar institutional environment, as that had a significant impact on the scope, timeframe and implementation process of the project. Thus, alignment with the regional context is only possible if national and, specifically, international funding structures allow for flexibility to include place-based factors in the implementation of JT. Thus, the following key implications for policy may be considered.

7.5 Implications for Policy

Key implications can be drawn for further JT implementation. The findings of this thesis suggest that place-based factors impact what a JT may look like in a specific context and what factors would need to be considered in attempting to implement such a JT. Conversely, the findings also show how the multi-scalar institutional structures and environment in which a region is embedded influence whether those context-specific place-based factors and regional challenges can be recognised and acted upon. Thus, two key implications for policy are to be considered. Future regional JT policies and strategies should focus on first recognising and identifying place-based factors and regional challenges, as well as prioritising those throughout the policy creation and implementation process. By considering the region and its challenges, the concept of JT is translated and anchored within the regional context, which has the potential to significantly increase just processes throughout the transition (Sandmann et al., 2024; Weckroth et al., 2025).

As alignment with place-based factors might currently be hindered by multi-scalar constraints, a second implication at the EU-level needs to be considered. Here, short implementation windows as well as rigid funding structures limit regional policy effectiveness and make consideration of place-based factors significantly more difficult (Sarkki et al., 2022). Additionally, as seen in the case of the JTRU, funding provided by the JTF was channelled through another EU programme, LEADER, which meant strategies were limited by LEADER's priorities and goals towards bottom-up regional development, rather than concretely and holistically considering an approach for JT. As the JTF does not currently provide a regional governance structure through which JT policies can be regionally embedded, current JT implementation attempts are constrained by external programme structures and limitations (Salchner, 2018). Thus, for JT implementation attempts to be able to align with place-based factors and holistically reflect regional needs, there is a need to move beyond a purely monetary funding programme, such as the JTF. Rather, focus should be on creating platforms and multi-scalar structures that support and embed JT implementation at a regional level.

7.6 Interpretative Limitations

While conclusions may be drawn from this research, there are interpretative limitations which should be recognised. This is done to ensure a transparent, rigorous academic process and may strengthen further research, specifically as empirical examples of JT remain sparse (Zhou and Jiang, 2025). First, the findings of this thesis are context-specific and therefore cannot be generalised to other regions or JT policies and strategies. However, one key finding of this thesis is that place-based factors matter and need to be considered in relation to a region's unique characteristics and challenges (Abram et al., 2022; Weckroth et al., 2025). Thus, the point of this thesis is not to provide generalisation, but rather to act as an example for understanding the relationship between JT and place-based factors. The conceptual framework aims to establish a path towards structuring place-based factors and examining the relationship between JT and the regional context. Specific findings relating to Lower Carinthia and the JTRU should thus not be generalised but seen as exemplary. A second interpretative limitation, as already aforementioned, concerns the limited sample size with key industrial players' perspectives missing. This means existing findings can only be based on interviewees' perceptions and might thus be extended by industrial stakeholders' opinions (Danie et al., 2024; Longhurst, 2010). Third, given that the JTRU only ended at the end of 2023, project-specific

outcomes continue to develop and should therefore not be seen as a final evaluation of the JTRU. Here, outcomes related to awareness-raising initiatives may continue to have an impact on the region, and new outcomes may emerge, which have not yet been identified (Low, 2019). However, the findings of this thesis should not be seen as a final evaluation, but rather an examination into how, at the time of writing, the project has aligned with place-based factors and the conclusions that may be drawn from this alignment. Lastly, while this thesis provides a place-based framework considering the triumvirate of tenets, empirical findings place the focus on procedural justice specifically, which means perspectives on other justice principles, such as distributive or restorative justice, might provide new findings relating to the JTRU, procedural justice and the relationship to place-based factors in Lower Carinthia. However, in summary, these limitations do not undermine the findings of this research. Rather, they provide a foundation for further research aimed at strengthening the conceptual framework by examining other implementation attempts and other regions and their respective place-based factors.

The following chapter will conclude this thesis.

8. Conclusion

What a JT is and what it should encompass has been continuously conceptualised within academic literature (Leppänen and Liefferink, 2022), yet the understanding of how a JT unfolds across geographical contexts remains limited (Wang and Lo, 2021), with empirical implementations underdeveloped and understudied (Sandmann et al., 2024; Snell, 2018). With the EC implementing the JTF to provide monetary support for regions most affected, understanding what factors shape the implementation of a JT is vital (Sarkki et al., 2022). Thus, this thesis examined an empirical example of a JT policy and considered the role that regional place-based factors play in the implementation process. To do this, it used the case study of Lower Carinthia, more specifically, the ‘Just Transition Region Unterkärnten’ Project. To understand the relationship between place-based factors and JT, a Regional Just Transition Framework was created, which combined Benner et al.’s (2026) place-based framework with McCauley et al.’s (2013) triumvirate of tenets to connect justice principles with a categorisation of place-based factors. A further analytical layer of regional challenges was added to move beyond descriptive place-based factors towards understanding their relevance in relation to JT.

The empirical focus was on procedural justice, as this thesis was concerned with the strategic and implementation process of the JTRU. The thesis specifically examined how Lower Carinthia is structured as a region, how the JTRU aligned with regional realities and what role place-based factors played in procedural processes. Methodologically, this thesis used a qualitative case study design as the aim was to understand the perspectives and opinions of regional stakeholders in one specific region and project (Taylor and Healy, 2023). To do so, semi-structured interviews were conducted, whereby two groups of stakeholders were interviewed, which helped to consider both internal project perceptions and external regional attitudes and thus provided a more holistic understanding of the region and the project.

The first RQ focused on what the place-based factors in Lower Carinthia, as well as related regional challenges, were. Here, structural factors highlighted how the region is fragmented by small municipalities and a general peripherality, which is interrupted by large industrial players in the production sector. Structural challenges were based on weak intercommunal cooperation, limited economic diversification and a low density of higher educational organisations. Instrumentally, the region has important assets such as the Koralmbahn, which are yet to be mobilised. Instrumental challenges included a shortage of human assets, workforce shortages

and demographic decline. Discursive-ideational factors considered the local concerns to prioritise economic viability, jobs and the attractiveness of the region. Here, discursive-ideational challenges included the criticism of and limited awareness of JT and long-term future visions. Finally, positionality and multi-scalarity highlighted the potential for interregional knowledge transfer with neighbouring regions, Lower Carinthia's embeddedness in both larger societal discourses regarding a shift away from long-term transition goals, as well as multi-scalar institutional constraints.

RQ2 focused on the alignment between the JTRU and place-based factors. The JTRU was perceived to be a managerial project predominantly aimed at sensitising and raising awareness. No other significant projects or outcomes emerged. Alignment with place-based factors was partial and superficial, as it did not sufficiently address issues such as the fragmented governance, the weak intercommunal cooperation or the limited educational support structures. Rather than a broader regional transformation strategy, the project was limited both in scope and time. This, however, was also affected by multi-scalar institutional constraints such as complex funding structures, delayed implementation timings, and short-term political thinking.

Finally, RQ3 focused on how procedural justice was addressed in the JTRU and to what extent this can be explained by place-based factors. Overall, procedural justice was limited with little participation, low stakeholder involvement, and a lack of democratic decision-making processes. Regional actors, many of whom did not attend, were informed and consulted, but had limited influence on the project and the actual direction of JT. Place-based factors such as fragmented governance, a lack of intercommunal cooperation, limited institutional capacity and critical discourses all affected the procedural choices and limitations of the JTRU and thus played a role in the limited depth of procedural justice. Again, the multi-scalar institutional environment acted as a further constraint, as in-depth considerations of procedural justice were inhibited by short project timeframes and difficulties in implementing a more inclusive, long-term project.

Thus, identifying place-based factors in a region allows for JT to be conceptualised and implemented based on the assets and challenges of a region. Further, understanding how place-based factors and regional challenges create both barriers and opportunities for JT helps create a regional JT policy that considers specific actor constellations and regional possibilities and limitations. Simultaneously, alignment with place-based factors is restricted by multi-scalar

institutional conditions, which prevent policies such as the JTRU from becoming holistic, long-term implementations of JT.

Thus, this thesis contributes by providing an empirical case study of a JT implementation attempt. This grounded insight into JT is needed, as within academic research, analyses of JT in practice are still rare (Snell, 2018; Wang and Lo, 2021). Further, it highlights how JT principles need to be translated, specified and conceptualised to specific contexts and regions to be implemented in practice (Weckroth et al., 2025). By using a Regional Just Transition Framework, it combines abstract justice principles with place-based factors and provides a basis for analysis on the alignment between regional contexts and JT.

Future research should be considered in light of this thesis's methodological and conceptual limitations. As the findings are context-specific to the case study of Lower Carinthia, further research should include comparative cases such as other JTF-supported regions and implementation strategies. Here, a wide variety of potential cases is relevant as future research might consider regions with no existing JT policies in place to analyse place-based factors preemptively. Simultaneously, regions with longer transition histories are also of relevance as future research might consider more long-term alignment with place-based factors. Further, the small sample size of this thesis and the lack of industrial actors as interviewees in this thesis mean that further research may focus on a broader sample to include a wider range of relevant stakeholders. Lastly, as this thesis was focused on procedural justice only, future research should analyse further justice principles to gain a more holistic understanding of how the consideration of place-based factors can support a more just implementation of JT.

To conclude, this thesis should be used as a foundation to encourage further research and attention to the practical implementation of JT. In addition to conceptualisations of JT, a focus needs to be on how these can be translated into policies and what factors are key for the process of creating and implementing them. Thus, stronger frameworks that focus on context-specificity, place-based challenges and the interaction between different institutional and governance scales are needed. Therefore, including a place-based perspective allows for a broader and more holistic idea of JT, so that conceptualisation can become implementation.

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Appendix

Appendix 1: Coding Scheme

Structural Factors	1. Economic structures 2. Institutional structures 3. Organisational support structures
Instrumental Factors	1. Natural resources 2. Human assets 3. Built infrastructure 4. Financial resources
Discursive-ideational Factors	1. Future visions 2. Just transition framings
Multi-scalar	1. Multi-scalar institutional infrastructure 2. Asset flow 3. Societal discourses and ideologies
Just Transition Region Lower Carinthia Project	1. Limitations of the JTRU 2. Key actors of the JTRU 3. Process of the JTRU 4. Relation to place-based factors
Procedural Justice	1. Inclusion of actors 2. Format of involvement 3. Influence and decision-making power

Table A1: Coding Scheme

Note: Author's own work

Appendix 2: Interview Guide

Teil 1: Vorstellung

1. Können Sie sich einmal vorstellen und erzählen, was Sie beruflich machen und welchen Bezug Sie zu der Region haben?

Teil 2: Regionale Komposition (für alle Interviewees)

1. Was sind aus Ihrer Sicht die wichtigsten Merkmale der Region Unterkärnten? (discursive-ideational factors)

2. Welche Wirtschaftsstrukturen prägen die Region am stärksten? (structural factors)
3. Welche Ressourcen und Fähigkeiten sind in der Region dominant/präsent? (instrumental factors)
4. Welche zentralen Herausforderungen sehen Sie aktuell für die Entwicklung der Region?
5. Wie wird über Themen wie Nachhaltigkeit oder Klimaneutralität gesprochen? (discursive-ideational factors)

Group 1:

Teil 3: Das Just Transition Region Unterkärnten Projekt

1. Welche Rolle spielen Sie im JTRU-Projekt?
2. Was stellen Sie sich unter dem Begriff ‚Just Transition‘ vor?
3. Inwiefern berücksichtigt das Projekt Ihrer Ansicht nach die spezifischen Gegebenheiten und Bedürfnisse der Region?
4. Kennen Sie Förderungsprogramme wie den Just Transition Fund oder den IBW/EFRE und hatten Sie damit bereits Berührungspunkte?

Teil 4: Partizipative Gerechtigkeit

1. Wer war in die Entwicklung des JTRU eingebunden?
2. Was waren die Formate und Ziele der Beteiligung?
3. Zu welchem Zeitpunkt konnten Sie Einfluss auf die Strategie nehmen?
4. Inwiefern haben regionale Strukturen, Ressourcen oder Narrative die Beteiligung beeinflusst?
5. Was haben Sie aus dem Prozess gelernt? Was ist gut gelaufen? Was würden Sie anders machen?

Group 2:

Teil 5: Sonstiges

1. Kennen Sie das JTRU-Projekt? Wie stehen Sie zu dem Projekt?
2. Was verstehen Sie unter dem Begriff ‚Just Transition‘?
3. Sind Ihnen andere regionale ‚Just Transition‘-Initiativen oder Projekte bekannt oder waren bzw. sind Sie selbst an solchen beteiligt?

4. Kennen Sie Förderungsprogramme wie den Just Transition Fund oder den IBW/EFRE und hatten Sie damit bereits Berührungspunkte?