

# **STRUCTURAL CHANGE(S) IN LUSATIA**

## **Potentials and Limits of the Just Transition in a Peripheralized Region**

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## Abstract

The transition of the energy sector from fossil resources to renewable energies has posed questions about the social and economic impact of the Green Transition on the affected regions. Lusatia, a coal region in Eastern Germany, has been at the center of the German discourse due to the drastic socioeconomic effects of the post-socialist deindustrialization and the remaining importance of the coal industry for the local economy and identity today. Ambitious German Just Transition measures, such as the German InvKG law, are meant to ease the social costs of the Green Transition but often remain contentious on the local level. Based on my empirical findings from interviews and participant observation in a municipal administration in Lusatia, I ask: What does a Just Transition mean in light of greater processes of Peripheralization? I argue that while the transition is framed as an economic issue on the national level, Lusatian actors perceive structural change (*Strukturwandel*) as a matter of de-peripheralization. Even though the InvKG has capacity-enhancing qualities, I find that its procedures reaffirm peripheralization experiences among municipal actors. Using a multi-level perspective, I finally outline continuities within the existing energy regime and portray local energy cooperatives as niches of de-peripheralization. Overall, I argue that the potentials and limits of the Just Transition in Lusatia depend on its relation to larger (de-)peripheralizing dynamics and spatial inequalities.

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## List of Abbreviations

EPH	Energetický a průmyslový holding
GDR	German Democratic Republic
GP	General Practitioner
InvKG	Investment Act for Coal Regions ( <i>Investitionsgesetz Kohleregionen</i> )
RBA	Regional Monitoring Committee ( <i>Regionaler Begleitausschuss</i> )
SAB	Saxon Reconstruction Bank ( <i>Sächsische Aufbaubank</i> )
SAS	Saxon Agency for Structural Development ( <i>Sächsische Agentur für Strukturentwicklung</i> )
SMR	Saxon State Ministry for Regional Development ( <i>Sächsisches Staatsministerium für Regionalentwicklung</i> )
SPD	Social-Democratic Party of Germany ( <i>Sozialdemokratische Partei Deutschlands</i> )

## Introduction



Figure 1: A scene from the play „Stadtflussland Berlin“

From the Lusatian Boat:

“Imagine: Here below you, below me, there would not be the Spree, but a hole in the landscape. A crater. 100 meters deep, several kilometers wide and long. At the bottom of this hole there is sand, rows upon rows of gray or light brown soil, humus-free, only sparse vegetation. No humus, no cycle, no forest, no wilderness. Huge pump systems. Sheet piles rammed into the ground. The groundwater lowered. Desert landscape. Now imagine a whole chain of such craters in the landscape, lifeless, devastated, dead sand. The opencast mines in Lusatia cover an area of 900 square kilometers, larger than the state of Berlin. This wasteland is the legacy of the city's energy hunger.”

From the Berlin shore:

“What?”

From the Lusatian boat:

„Cities are part of a large, voracious organism. Like a plant that depletes the soil in Lusatia to allow the city to flourish.”

From the Berlin shore:

“I don’t understand!”

From the Lusatian boat:

“In light and warmth, in density and energy. The Spree and its tributaries, the railway lines and the power lines are the channels of this plant. On these railways, coal is brought to the cities, its energy flows to Berlin, cement and energy-intensive goods are brought into the cities to sparkle and sparkle. To achieve this, entire villages are swallowed up, devastated and wiped out, people and their lives are torn apart and relocated.”<sup>1</sup>

- Extract from the theatre piece Stadtflussland Berlin (Nolte and Recherchepraxis 2021)

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<sup>1</sup> Translations from German, here and in all interviews cited throughout the thesis, are mine.

On a rainy December evening, a boat approaches the shores of the Spree river. It's a feeble construction: Almost looking like a glass house, a single man navigates the ship towards the choir that is waiting on the shore. In the unfolding theatre piece, staged by the Recherchepraxis Collective, the actors simulate a dialogue between Berlin's urban citizens and the German coal region Lusatia; between core and periphery. Set at the end of a century-long history of coal-extraction, they paint a version of Lusatia that has been gravely devastated and *consumed*, and yet offers possibilities and space for new things to happen. Mitigating today's urban and rural issues on the background of Lusatia's coal history, the actors invite the Berlin choir to follow them down the Spree River towards Lusatia. The play asks urgent questions about the future of a coal region which grapples with the aftermath of its resource exploitation while facing drastic changes in the face of the so-called *Strukturwandel* (structural change) induced by the phasing out of coal across Germany by 2038.

### **1. Lusatia as a Peripheral Coal Region**

As part of the global effort to combat climate change, Germany has decided to achieve de-carbonization by 2050 (BMUB 2016). This includes the coal phase-out by 2038, which disproportionately affects Lusatia as one of Europe's biggest lignite regions. Besides the Rhine Region and the Middle German Coal Reserves, Lusatia is one of Germany's three lignite regions. It is positioned within two German federal states. Within the South-East of Brandenburg, it spans across the districts Dahme-Spreewald, Elbe-Elster, Oberspreewald-Lausitz, Spree-Neiße; in the East of Saxony across the districts Bautzen and Görlitz. Beyond the German borders, the Lusatian lignite reservoirs reach into Poland and continue to fuel mining endeavors there.

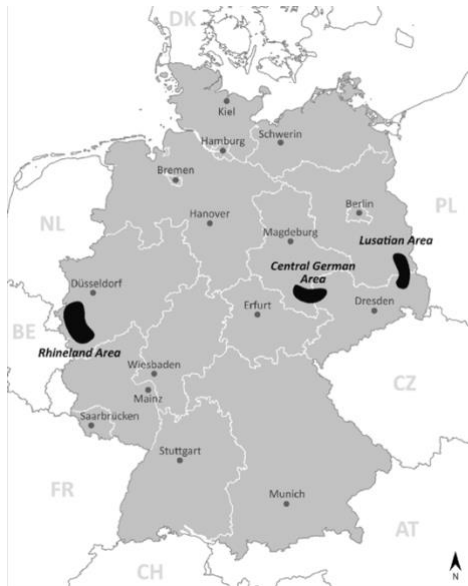


Figure 2: The German lignite regions

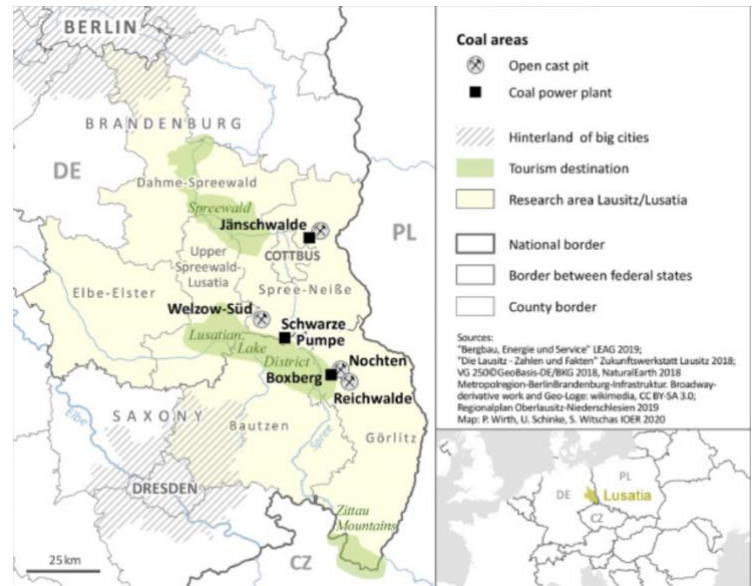


Figure 3: The Lusatian lignite region with mines, power plants, and developmental foci

Lusatia's mining history goes back to the late 19<sup>th</sup> century and massively expanded throughout the 20<sup>th</sup> century. As the only reliable energy source within the German Democratic Republic (GDR), it especially boomed during state socialist times. After the German Unification and the integration of the East into the Western German democratic capitalism and market economy, Lusatia underwent massive deindustrialization, and the economic role of coal quickly diminished. Today, roughly 3% of the working population is directly or indirectly employed in the coal industry (Frondelet al. 2018, 254). In contrast to the Rhine Region (1.8%) and the Middle German Region (0.5%), the coal phase-out therefore has the highest socioeconomic relevance in Lusatia. Positioned at the outer edge of the German state, Lusatia has long been subject to peripheralization processes that affect the concrete local circumstances. Combined with its layered history and high public visibility in the transition discourse, the region thus lends itself as a fruitful object for inquiring about the potentials and limits of the Just Transitions within concerned communities.



## 2. Theoretical Framework: Just Transitions in Peripheralized Regions

My discussion touches upon issues of the Green Transition, Just Transition, and the local understanding of *Strukturwandel* (structural change). I understand the Green Transition as the overarching pursuit of carbon neutrality. Where measures are designed to compensate affected communities for their loss within the Green Transition, I understand them as measures of a Just Transition whose focus is directed towards the social acceptability of the Green Transition. On the German level, measures structured as part of the Just Transition, as well as more general ideas of transition are discussed as *Strukturwandel*. In attempting to make sense of the Just Transition within the German context, I will employ the German term to emphasize local understandings.

The ambition to understand the social impact of the Green Transition has been approached by a growing field of Just Transition research. While the concept of Just Transition originally stemmed from US-based labor activism (Abraham 2017, 222 f. Schuster et al. 2023, 2), the need for social justice in transition processes, especially for concerned workers, was acknowledged by international actors such as the International Labour Organization (International Labour Organization 2015, 4) and the United Nations in their 2015 Paris Agreement (United Nations 2015, 2). On the European level, the European Union's "Just Transition Mechanism" (JFT) is comparatively wide in its aim to "address the social, economic and environmental costs of the transition to a climate-neutral and circular economy" (Regulation 2021/1056 (2)). Following a similar logic, the German government accompanied the coal phase-out law, which sets the latest possible end of coal extraction in Germany to 2038, with social measures. This diversity of applications is mirrored by a fragmented field of Just Transition research in which multidisciplinary approaches and different foci have created significant ambiguity (Wang and Lo 2021, 2). While Just Transition is partly discussed from a governance strategy, public opinion or socio-technical management perspective, the heart of

Just Transition research lies with explorations of justice. Most researchers have gone beyond the original focus on labor (adopted by Stevis and Felli 2015; White 2020) and instead integrated Just Transition into existing justice-related literature. Through a lens of environmental justice (Evans and Phelan 2016), energy justice (Carley and Konisky 2020; Middlemiss 2020) or climate justice (Klinsky and Dowlatabadi 2009; Schlosberg and Collins 2014; Routledge, Cumbers, and Derickson 2018), Just Transition researchers have thought with different frames of reference. However, Heffron and McCauley have rightfully pointed out that much scholarship ultimately concerns issues of distributional, and procedural justice (2018, 1). Raphael Heffron's JUST framework has in turn provided a useful tool for comparison as it separates the analysis into distributive, procedural, recognition, cosmopolitan and restorative justice (Heffron 2021). For the case of Lusatia, this concept has been fruitfully employed by Schuster et al. (2023), while Gürtler et al. (2020) worked with the same philosophical concepts without reference to Heffron.

The focus on energy transitions taken by this line of research has however failed to account for a number of external factors that shape the success and perception of energy transitions on the local level. Research has highlighted that coal-mining regions are characterized by “economic vulnerability, demographic instability, [...] increasing geographic isolation, a decrease in educational attainments, and imbalances of scale and power with respect to extractive industries” (Frantál et al. 2022, 238). This has been shown to affect coal regions even after the end of mining activity (Greenberg 2017, 149; Esposito and Abramson 2021). Beyond the energy industry per se, their spatial stratification thus affects coal regions in their future beyond coal. Additionally, Lusatia's location in Eastern Germany subjects the region to processes of inner peripheralization. Drawing upon Kühn's work, I understand peripheralization as a “multidimensional process of demotion or downgrading of a socio-spatial unit in relation to other socio-spatial units, one that can only be explained with reference to the

interaction of economic, social and political dimensions” (2015, 374). The multi-dimensional approach allows for the consideration of political power dynamics: Beyond economic deficiencies and social stigmatization, peripheralization is characterized by powerlessness and dependency in decision-making processes (2015, 375). In Germany, researchers have conceptualized the whole East as a periphery against the “centralized” West. This is exemplified by cultural stigmatization (Oschmann 2023) and class discrimination, especially toward Germany’s Eastern rural regions (Schmalz et al. 2023, 16). For Lusatia, this means that the region is both affected as a resource periphery and by broader peripheralizations attached to the entirety of Eastern Germany.

As pointed out by Gürtler (2023, 4) and Garvey et al. (2022), Just Transition literature has rarely accounted for such spatial and multi-scalar aspects. I respond to this research desire by examining the potentials and limits of the Just Transition within Lusatia as a peripheralized region. By accounting for the implications of the region’s resource exploitation history and embeddedness in the Eastern German socioeconomic landscape, approaching Just Transition through a lens of Peripheralization contributes to an understanding of justness in relation to broader questions of dependence and relationality. Within the context of spatial and socioeconomic injustices beyond coal, I therefore wonder: What can Just Transition measures actually achieve within a peripheralized region? On the basis of my empirical material, I approach this question by asking: How are the Just Transition and the so-called *Strukturwandel* perceived by political and administrative actors in Lusatia, and what hopes are attached to them? How do experiences of peripheralization relate to the local evaluation of the Just Transition and perceptions of justice in the transition process? And in what ways do path dependencies of Lusatian resource peripheralization in the energy sector reinforce existing injustices within the Green Transition?

### 3. Focus and Structure

In the first chapter, I contrast different understandings of *Strukturwandel* within Lusatia and thereby show the multiple scales on which national and local actors envision the transition. I use the case of Boxberg's planned Health Center as one concrete transition project to illustrate how the national frame of *Strukturwandel* as economic development fails to acknowledge the local complexities of transition. In pointing to experiences of peripheralization that affect Lusatian's understanding of the ongoing transition process, I argue for the analysis of Just Transition measured amidst local circumstances.

I build upon this in my discussion of the procedures inherent to the Investment Law for Coal Regions (InvKG). I conceptualize administrative actors as emotive and guided by experience. On this basis, I show how the procedures of the InvKG funding application are experienced and how they partially reinforce existing patterns of peripheralization. Procedural experiences thus have the power to recalibrate municipal actors' perception of the Just Transition and can therefore affect how measures are utilized in the long run. I argue that Just Transition research must account for such subjective dimensions of procedural justice in order to assess the impact of measures.

Finally, I look beyond the Just Transition and inquire how experiences of resource peripheralization affect Lusatians' perception of the energy transition. I question the justice of energy transitions that stay within the status quo of an ongoing peripheralizing energy regime and show local counteracting niches of energy democracy.

Within larger trends of Green Transitions and the need for radical sustainable transformations amidst concerns of social responsibility and fairness, I overall discuss the Just Transition in Lusatia as one concrete example of how transition measures play out locally. I respond to a need for ethnographically grounded approaches to Just Transition research and

thereby contribute to a more nuanced understanding of Just Transitions that calculates for regional experiences.

#### **4. Methods: Beyond an Ethnography of Policy**

This project started as an ethnography of policy through which I aimed to purposefully study the decision-making processes within the Lusatian Just Transition on the local level. I was interested in seeing how national transition measures are perceived and employed by municipal actors who end up designing the *Strukturwandel* locally. I, therefore, understand my approach as “studying through” and position myself within the “webs and relations between actors, institutions and discourses across time and space” (Shore and Wright 1997, 14).

This led me two research stays in the Görlitz district, where I was based in the city of Görlitz for two weeks in August 2023 and for seven weeks in Weißwasser and Boxberg/Oberlausitz (henceforth: Boxberg) in February and March 2024. Görlitz is one of the two Saxon districts that are entitled to InvKG funding. I chose it for its great heterogeneity: While its North is part of the heart of the Lusatian coal industry, coal has little importance for the South today. Conflicts around recognition and distribution that play out across the whole region can thereby be followed on the district level.

In August, I conducted semi-structured interviews with a purposefully diverse sample of 6 mayors, one municipality’s spokesperson, one employee of the Görlitz district administration, two employees of the Saxon Agency for Structural Development and one employee of the Saxon Ministry for Regional Development. In the interviews, I inquired about understandings of structural change, challenges and possibilities and visions for the future. Since a municipality’s size and position within the Görlitz district affects their transition experience, I spoke with municipal actors from a mix of smaller and larger municipalities across the region.

Except for one interview with a mayor and the Ministry employee which were done via Zoom, all interviews were done in person.

One of the interviews was with the Mayor of Boxberg, Hendryk Balko. Boxberg is home to 4,270 citizens and consists of 18 villages. It is part of the historically Sorbian area, even though few traces remain today. The fact that Boxberg, as such a small municipality and with its major connections to the coal industry, is tasked with the management of the consequences of the coal phase-out intrigued me, and I arranged with the Mayor to do two months of participant observation in Boxberg's administration. This observation took the form of an internship. I supported and followed the administration in their *Strukturwandel* work and worked most closely with the Mayor, the Head of Office, and the Project Manager in charge of Boxberg's main *Strukturwandel* project, the Health Center.<sup>2</sup> This allowed me to gain insights into the multi-level funding processes of the InvKG and its implications for local municipal actors. Finally, I conducted three follow-up interviews with these three core actors to discuss my observations with them.

During my stay, my focus widened beyond the mere administrative dimension. My fieldwork was enriched by informal conversations with my host families, at events and discussions or through museum visits and time spent in the Lusatian villages and landscape. Although I kept my administrative focus, public narratives of the region's history and its development have contributed significantly to my understanding of the present and will become visible in my analysis.

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<sup>2</sup> I will continue to refer to these persons by their administrative roles. While they each bring distinct characteristics to the table, I mostly experienced them as holders of their specific roles during my fieldwork, rather than in their private roles. Referring to them in this way therefore reflects the bureaucratic nature of the work.

## 1. A Health Center against the Coal-Phase-Out? Emic approaches to *Strukturwandel* in Lusatia



Figure 4: Driving into Boxberg

The Boxberg village has lived *with* and *of* coal, as locals like to say. From miles away, one could spot the characteristic cooling houses, looming up to 170 meters among the forest-covered sandy plains, with water steam rising impressively towards the sky. Be it when looking over the lake, in the village center or from the windows of the local administration's office: The cooling houses were constant companions. "I wouldn't want to miss them", a local colleague told me. "They're simply part of the place." Yet, their time is running out. With the German end of lignite mining by 2038, the cooling towers in their current form will not be needed anymore: Solar and wind energy do not need to cool down. Somewhat less noticeable are the coal mines that align Boxberg in the north and east. Up to 100 meters deep, they open like craters and span for kilometers, until they reach the next villages that have escaped the claws of the excavators just so closely. In between the multiple villages that constitute the municipality of Boxberg lies Saxony's biggest lake: a recreational area that allows for swimming, cycling and kite surfing. Up until the 1990s, this lake was a pit mine too. Two

villages and part of the village Klitten fell victim to the Bärwalde mine that constitutes the bottom of today's lake. Boxberg's people have seen coal take their homes and provide stable work; they felt pride when their coal heated their own homes and those of every other GDR citizen, and they experienced the crash of the industry during German Unification. In the early nineties just as today, they were the epitome of the transition experience often referred to as *Strukturwandel*. These experiences are partially reiterated by the Green Transition, for which the German state has provided supporting funds to negatively affected communities. How do these affected municipalities envision the change facilitated by these transition measures? In Boxberg, the administration and citizens have decided to use "the coal money" to build a local Health Center. How is this a project of *Strukturwandel* amidst the coal phase-out?

In this chapter, I construct two conflicting understandings of the ongoing transition processes called *Strukturwandel* that I encountered during my fieldwork. I contrast the economic frame employed by national actors with multi-layered and temporally wider issues of de-peripheralization envisioned by local mayors. In analyzing how these materialize in the conceptualization of Boxberg's Health Center as a concrete example, I inquire after frictions within a locally anchored Just Transition project. I ultimately argue that Just Transition processes cannot be fully understood without embedding them within local perceptions of the ongoing transitions.

### **1.1. *Strukturwandel* as Part of the German Green Transition**

At its core, current discussions of *Strukturwandel* in Lusatia concern the regional implications of a national energy transition from fossil to renewable energy as part of the global Green Transition (Doan et al. 2024). The current German climate policy can be traced back to the "Climate Protection Plan 2050" which was issued as a response to the obligations arising out of the Paris Climate Agreement (United Nations 2015). In it, the German state promised to



completely de-carbonize the national power supply by 2050. To co-evaluate economic development, *Strukturwandel*, social responsibility and climate change (BMUB 2016), the Climate Strategy foresaw the establishment of the Commission on “Growth, *Strukturwandel* and Employment” (hereafter referred to by its colloquial name “Coal Commission”). The Coal Commission, consisting of 31 politicians and researchers, as well as industry, labor union and interest group representatives, was established in 2018 and tasked with finding “a societal consensus on the design of the *Strukturwandel*” (Kommission WSB 2019, 2). Overall, the government followed the recommendations given by the Coal Commission in 2019: It decided upon a gradual coal phase-out until 2038 that is accompanied by a variety of measures aimed at contributing to the development of the region. Overall, 40 billion Euro are made available for *Strukturwandel* projects; 26 of which the national state invests itself. The other 14 billion Euro are made available to the federal states and affected municipalities for projects that “cope with *Strukturwandel* and secure employment in the course of the phase-out of lignite mining” (§ 1 II Nr. 2 InvKG) through the Investment Law for Coal Regions (InvKG). For Lusatia, these measures allow local municipalities in the concerned districts in Brandenburg and Saxony to apply for in total six billion Euro of funding in three phases until 2038 to realize projects within a legally defined framework.

These measures stand in the context of concrete vulnerabilities that are present in the German coal regions: Coal still plays an important role in the local economic structures and has massively coined regional identities (Thimm 2022). The Coal Commission especially acknowledged the collapse of the lignite industry in the Eastern German coal regions in the years following the German Unification (Kommission WSB 2019, 73). While this is not explicitly reflected in the InvKG, the funding extends to the Anhalt-Bitterfeld district whose history of coal extraction ended in the 1990s already and thereby alludes to a historical dimension. It is therefore evident that measures issued to deal with the *Strukturwandel* caused

by the Green Transition go deeper and must be seen in the context of the concrete histories of the coal regions. Among these complexities, the InvKG provides a regulated national response, which is, in its aim to address the social costs of the green transition, a typical Just Transition measure.

## **1.2. Historical Background: A Story of Coal and Constant Change**

In Lusatia, brown coal (also called lignite) was the dominant force of the social and economic changes that constituted life in the region since the 19<sup>th</sup> century. While the region's urban centers had developed with growing textile and glass industries in the 19<sup>th</sup> century (Müller and Steinberg 2020), the large countryside was mostly used for agriculture and forestry by the German and Sorbian populations. Shifting borders had manifested the partition into Upper and Lower Lusatia and had frequently put the region at the edge of greater powers: While Upper and Lower Lusatia were governed somewhat independently under the margrave of Saxony after 1635, the borders established in the Vienna Congress of 1815 positioned Upper Lusatia at the edge of the Kingdoms of Saxony and Lower Lusatia at the edge of Prussia, with the border running through the region's rural core (Lausitzer Museenland n.a.). Today, the region is still split into Lower Lusatia in today's state of Brandenburg and Upper Lusatia in today's Saxony; parts of the historic region now also lie in Poland. While coal extraction began in 1789 in Lusatia and was at first pursued through mines, the beginning of opencast mining in the 1890s made lignite extraction safer and more efficient. After Germany lost many of its more efficient hard coal reservoirs in the aftermath of the First World War, lignite became the cornerstone of the country's energy provision. Exploitation grew massively in the 1920s (Bischoff 2000, 1, 76). With the end of the Second World War and the constitution of the GDR, the Lusatian coal mines became essential for energy security in the new country. Energy policy was dominated by the political-administrative elites in Berlin, who rhetorically used the GDR's supposedly stable energy supplies from lignite to lift the socialist East above the energy-crisis-

prone West (Kahlert 1988, 5). Many people moved to the previous rural heart of Lusatia to work in the opencast mines, the energy sector, and the surrounding industries that settled around the mines. Existing small towns grew massively. Most prominently, the socialist residential town Hoyerswerda grew from 7,000 inhabitants in 1955 to 71,124 in 1981 (Wolle 2020); Boxberg increased from 400 inhabitants in 1965 to 2,875 by 1990 ('Boxberg O.L./Hamor' n.d.)<sup>3</sup>. Miners were installed with a sense of pride and social recognition: After all, the literal fueling of the republic depended on them. However, the GDR energy sector was highly cost intensive and lacked substantial investments, rendering it far less competitive compared to other nations' energy sectors (Ragnitz et al. 2021, 39).

During the privatization of the state-owned GDR enterprises that followed the German Unification of 1989/1990, many coal mines and energy plants in Eastern Germany were therefore closed. This was the start of what is widely considered Lusatia's first *Strukturwandel*. Employment in the Lusatian coal sector sank from 79,000 employees to roughly 8,000 (Greib et al. 2019, 29). Massive unemployment contributed to a fifth of the Lusatian population leaving the region in the 20 years following German Unification (Markwardt and Zundel 2017, 18), resulting in an over proportionally old population (Ragnitz et al. 2021, 43 f.). Changes in the political, economic and social system (Gürtler, Luh, and Staemmler 2020) led to experiences of loss and insecurity that remain until today (Müller and Steinberg 2020). These transition experiences of the 1990s discredited the promise of "flowering landscapes" made by national politicians in the wake of the Unification (Kohl 1990). As a response, Lusatians remain skeptical of promises of change and external experts (Staemmler 2021, 12). This grown mistrust, paired with a fragile regional identity, has eased the rise of populist narratives (Haas

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<sup>3</sup> The 1990 number includes 100 citizens of the village Sprey which was incorporated into Boxberg in 1974.

2020) which are fueled by the coal phase-out. Today, the coal industry directly provides an (exceptionally good) income to 2% of the Lusatian population.

And yet, the role of coal in Lusatia has always been two-sided: On the one hand, it has provided stable incomes, pride, and identity to its population and benefitted economic growth and energy security. On the other hand, the expansive land use has also displaced 25.000 people in 135 excavated villages (Stein n.d.) and changed the natural landscape of the region for good. Social relations in Lusatia have been heavily influenced by decisions in the energy sector, which subjected the region's development to outside forces. Today, with Germany's coal-phase out an almost irreversible decision, the region is grappling with the question: What will a future after coal look like for Lusatia? The way will be paved by the transition measures provided by the national state, and how they are implemented in the region.

### **1.3. The Boxberg Health Center as an Object of Tensions**

The German coal phase-out and its responding measures are embedded within international "Just Transition" thought (Gürtler, Löw Beer, and Herberg 2021; Gürtler and Herberg 2023; Schuster et al. 2023). In its original conception within US labor activism, Just Transition already emphasized labor rights and job security in communities affected by economic changes (Abraham 2017, 222). By now, the concept usually refers to measures of social justice adopted to protect communities affected by environmental policies and seeks to strike "a balance between economic stability, labor rights, and social and environmental justice" (Hu et al. 2024, 3). Gürtler et al. pointed out that the German discourse often refrains from the ethical dimension in its use of *Strukturwandel* over "Just Transition" terminology (2021, 2). Nonetheless, *Strukturwandel* is the closest German equivalent to "transition" and is similarly vulnerable to its own ambiguity.

Researchers have pointed out that the popularity of the transition terminology is rooted specifically in the possibility of attaching one's own meaning to it (Hendriks 2009, 346). The terminology thereby lends itself to issue framing: The process of promoting particular definitions of a problem by focusing on partial aspects of a perceived reality (Weller 2019, 229 f.). As a sense-making endeavor (Weller 2019, 300), frames break down complexity and integrate issues more neatly into existing worldviews. Frames thereby affect human consciousness and determine outcomes (Entman 1993). While framing has often been employed to study media communication, its power over meaning has a distinct political edge. In this sense, Weller has fruitfully operationalized framing for her analysis of Australian Just Transition policies (Weller 2019). She showcases the effects of framing on how an issue is approached and how this delimits the range of suitable actions. Similarly, Anderson and Johnson (2024) have argued that Illinois policymakers have used frames to promote a Just Transition at the cost of procedural justice. Understanding the differences between the narrow frame of the InvKG in contrast to the complexities of Lusatian history and present are therefore the precondition for understanding the tensions arising in this process.

In this chapter, I will explore these tensions with a focus on Boxberg's Health Center as a concrete example of a *Strukturwandel* measure. I encountered the Health Center during my participant observation in Boxberg as the municipality's main *Strukturwandel* project. Faced with the imminent retirement of the municipality's last two general practitioners (GPs), the members of the local citizens' association "Perspektive Boxberg" together with the municipal administration had developed the idea of a modern healthcare facility capable of attracting medical professionals and ensuring sufficient healthcare for the local population. The municipality hoped to gather eight to nine million euros of funding to build and equip a centrally located Health Center. After initial consultation, the administration had decided that the municipality would act as a landlord and rent the rooms to interested parties. The idea was not

just to manage current demands, but to go beyond the current status quo and create an offer that would be an asset to the municipality's aim of attracting business and new citizens. Accordingly, the drafts of the Health Center include rooms for multiple GPs, a specialist, physiotherapists, a large fitness room for sports courses, and related healthcare businesses. In an entry hall, space for a café is planned to make the Health Center a welcoming place.

#### **1.4. “Thinking Big”: Frames of Economic Development**

One way to understand the Boxberg Health Center is as an economic location factor within the overall make-up of the local municipality. In its concept for the Health Center, the municipality frames it as follows: “The municipality of Boxberg/O.L. would like to create an innovative and exemplary health center in order to create high-quality jobs in the region in the long term, strengthen and re-establish high-quality value chains and encourage an attractive influx to the municipality.” This responds directly to the aim and funding conditions of the Investment Act for Coal Regions (InvKG). Following the Agency for Structural Change's recommendation to “think big”, the Health Center was conceptualized as a project meant to facilitate and accommodate growth and therefore went going beyond existing needs.

The InvKG law itself is based on the state's competence for legislating with the aim “to balance different economic strengths and promote economic growth” (§1 I 1 InvKG). On this basis, the InvKG delimits fundable projects in §4 I InvKG: Funds can be used for investments in the economic infrastructure, especially in the areas of economically oriented investments, transport, public welfare where it contributes to the economic conditions, urban planning, digitalization, touristic infrastructure, research, sustainability and nature conservation. Projects shall be chosen according to how far they create or protect workplaces, diversify the economic structure and increase the attractiveness of the economic location. Although the law allows investments in social endeavors, they are ultimately measured by their economic impact.

Through the InvKG law, the state therefore provides a legal frame that is focused on economic development. This direction was already visible in the Coal Commission's full name being Commission for Growth, *Strukturwandel* and Employment. Its task of finding "concrete perspectives for new, future-proof jobs in the concerned regions" (Kommission WSB 2019) mirrored the focus on the protection of jobs. By mandating this concrete focus, the German Government, which has assembled the Coal Commission, had engaged in a form of agenda-setting that constitutes issue framing.

In my interviews, especially the mayors from the Northern core coal municipalities rhetorically mobilized the effects of the coal phase-out on the local economy and labor market. "For us, *Strukturwandel* is very clear," one mayor of a Northern municipality said. "The people work in the open pit mines, with the coal; They know the procedures, they're energy experts." In this sense, the energy transition posed the question of how these people will earn their money in the future. Similarly, the mayor of a second Northern municipality held that with the end of coal, the supporting pillar of the Lusatian industry will "break away". They thereby framed *Strukturwandel* as an economic issue that would be solved through the settlement of alternative industries capable of providing a similar degree of economic stability and jobs. They thereby responded to past and present instances of national framing: By appealing to the national level's concern for employment in affected regions, which was shown through the Coal Commission and the InvKG, local actors could appeal to the national level within its own frame. While I acknowledge the great concern my respondents felt for their citizens, I remained unsure of how far this focus on employment and economic development was an honest appeal. At times, I felt that by responding to the nationally set frames, mayors were strategically utilizing economic arguments to *perform* expected narratives on what Goffman called the front stage (Goffman 1965, 14). The answer most likely lies in between.

## 1.5. *Strukturwandel* as Past and Present Transitions

At the same time, the Health Center was a response to immediate current needs among the population. With the approaching retirement of the two remaining GPs, locals began to fear the imminent absence of healthcare. This lack of basic services stood however completely independent from the Green Transition and the coal phase-out. The issue at stake would have come up with or without it. Yet, it is seen as an issue of *Strukturwandel*, and thereby of what the national level considers the Just Transition. I will showcase how past and present experiences come together to constitute *Strukturwandel*, with reference to interviews with mayors and administrative stakeholders across the region who are differently affected by the Green Transition. For the Northern municipalities within the Görlitz district, coal-based energy production was an important economic force, while it played almost no role in Middle and Southern municipalities. Southern municipalities share the Northern municipalities' weak transport infrastructures; Middle municipalities are better connected to the urban center Dresden by rail and car. I thus group my interviews according to geographic criteria to account for regional diversity within the Görlitz district.

### 1.5.1. “No one wants anything good for us”

It quickly emerged that for the majority of my respondents, even in the Northern municipalities, jobs are only one piece of the puzzle of the ongoing transition. Instead, *Strukturwandel* was often employed as a response to the negative demographic trends that have developed over decades. Over and over, mayors spoke of making the region “attractive” again, meaning that young people would be able to confidently stay in their home regions instead of moving away, and that outsiders would be attracted to Lusatia. “Young families” were the frequently employed buzzword. Multiple respondents excitedly told me about newspaper reports of a single family that recently moved to Görlitz to work in the German Center for



Astrophysics, one of the biggest *Strukturwandel* measures financed by the state. In order to attract such young families, municipal actors described a variety of tools: They spoke about the necessity to bring universities into the region and to keep schools open despite rural circumstances; they spoke about an active civil society and how the support of local (sports) clubs could contribute to a local identity beyond coal; they spoke about how keeping open museums and theatres, even though costly, might make it easier for a family from Berlin to move to Lusatia and not give up that they were previously used to. Most often, they spoke about infrastructure. The press spokesman of a Southern Municipality told me:

I could actually imagine [it would be a good idea] if one were to simply say, we'll take all the money, all of it – this is really a lot of money, crazy amounts of money - and we modernize the rail network in the Görlitz district, and that's it. We couldn't apply for anything else, but we take the money and create a sustainable public transport system out of it by creating these structures.

The municipalities in the South of the Görlitz district associated infrastructure issues mostly with the lack of electrification of the rail connections Dresden to Görlitz/Zittau. They pointed out that these routes were the pathways towards Poland and the Czech Republic, especially considering that the electrification of the German-Polish route was already agreed upon with Poland 20 years ago.<sup>4</sup> The Northern municipalities were more concerned with a direct train connection between Berlin and Görlitz that would avoid the current transfer in Cottbus. Additionally, municipalities who were at a greater distance from highways also highlighted the need for better road connections. The distance from highways immediately excluded municipalities like Boxberg from certain selection matrixes for business settlements and

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<sup>4</sup> Abkommen zwischen dem Bundesministerium für Verkehr, Bau- und Wohnungswesen der Bundesrepublik Deutschland und dem Minister für Infrastruktur der Republik Polen über die Zusammenarbeit bei der Weiterentwicklung der Eisenbahnverbindungen Berlin – Warschau (Warszawa) (C-E 20) sowie Dresden – Breslau (Wroclaw) (E 30/C-E 30) [Agreement between the Federal Ministry of Transport, Building and Housing of the Federal Republic of Germany and the Minister of Infrastructure of the Republic of Poland on cooperation in the further development of the Berlin - Warsaw (Warszawa) (C-E 20) and Dresden - Wroclaw (E 30/C-E 30) rail links], 25. Juli 2003.

rendered them unattractive for commuters. Investments in transportation infrastructure that were mandated in §20 - §24 InvKG have only been rolled out slowly or have already been partially canceled.

Mayors therefore felt like the higher administrative levels did not follow through on their promises. “I think that the bureaucrats in Dresden think that East of the city, Asia begins”, the mayor of a Middle municipality expressed. Considering that their town is connected to Dresden by train, their frustrations point to a deeper, more symbolic distance between the Saxon capital and Lusatia. Respondents frequently shifted between describing positive aspects of their region, often focused on quality of life, space, and affordability, and imposed and internalized negative stories. While there are certainly negative stereotypes about Eastern Germany and Lusatia in the public sphere (Oschmann 2023), multiple interviews point to internalized and generationally transmitted narratives. “Many young people who leave school today might be locally attached,” the mayor of a Northern municipality explained, “but then the parents and grandparents start bringing up experiences from the past and typically say ‘What do you even want here?’ And then it’s difficult to motivate the youth to stay.” A District Employee described the drift as follows:

People who come from the outside often say that this is a very livable region, really great, one has lots of opportunities. But those who grew up here say: “We’re not doing that great. We’ve always been forgotten, we’re the edge of Germany [...]. We’re the edge and no one wants anything good for us.

### **1.5.2. Theorizing *Strukturwandel* as De-Peripheralization**

The interviews with mayors across the region show that, while economic development certainly is an issue, they overall engage with issues of distance, recognition and power between urban centers, such as Dresden or Berlin, and Lusatia. Together, they describe processes of peripheralization that have been surging since the German Unification. Peripheralization

literature, therefore, serves to bring together the fractured aspects of *Strukturwandel* my respondents engaged with, such as infrastructure, negative stereotypes, out-migration and power imbalances. As a larger multi-level process, understanding *Strukturwandel* as the desire for de-peripheralization allows for the inclusion of a wider temporal scale and measures that go beyond the management of the energy transition,

Peripheralization concerns processes of hierarchization between relational spaces. The concept builds on the core/periphery terminology that gained traction in the sociology of the 1960s and 1970s to understand the dynamics between industrial and developmental states. While referring to regions as peripheries implies a static state of remoteness, peripheralization refers to open processes within which peripheries are being “produced” (Kühn 2015, 369). Such dynamic processes take place on a political, economic, social and communicative level, and thereby create a “‘multidimensional process’ of demotion or downgrading of a socio-spatial unit in relation to other socio-spatial units” (Kühn 2015, 374). Peripheralization processes are thus marked by reciprocal movements: Developments in cores and the peripheries condition each other. Within this relationality, spatial dimensions reinforce the social and vice versa. Barlösius and Neu describe this as the “mutual reinforcement of social and spatial inequalities” (2008, 11), which ultimately contributes to identity formation within the framework of these conditions and stories (Golubchikov and O’Sullivan 2020, 3). Notably, peripheralization takes place along the lines of the real and the imagined (Lefebvre 1991, 101) and functions detached from material realities.

Beyond Lusatia, the whole of Eastern Germany was and remains similarly affected by the aftermath of German Unification and the effects of privatization. Having analyzed data about the economy, the labor market, education perspectives, wellbeing and health, administrative action, democratic participation and internal mobilities, Fink et al. characterized most of rural Eastern Germany as “rural regions in permanent structural crisis”

(2019) – in contrast to structurally stronger West German rural areas, which they consider “Germany’s solid middle”. These findings show that dynamics of peripheralization are still ongoing in many parts of East German rural regions, resulting in an over-proportional out-migration of especially young people.

At the same time, these economic developments were always accompanied by social narratives that reflected societal hierarchies. These are often external: While the post-unification discourse has continued to other Eastern Germans (Boyer 2005), recent election results have led to the further stigmatization as right-wing and undemocratic (Ganzenmüller 2020). Additionally, Oschmann has shown how especially Saxony, as “the East of the East”, has always been especially stigmatized for its alleged “backwardness” (Oschmann 2023, 123 ff.). Such rhetoric especially affects Lusatia with its position in the East of Saxony. Actors seemed to experience a similar stigmatization from the urban centers when they held that they expected the Dresden bureaucracy to look at them “like Asia”. Notably, this statement reflects not how the region is perceived in the state capital Dresden but shows the expectations of the Lusatian mayor. It speaks to a high degree of perceived distance that is both stemming from external sources and is highly internalized. In fighting their peripheralization, Lusatians thus have to counteract external stereotypes as well their own imaginations of external judgement in what Cooley called the “looking-glass self” (1922, 184).

Based on these peripheralization experiences, *Strukturwandel* is understood as more than the energy reaction. It is the hope attached to turning around those longer, by now structural, dynamics of peripheralization which have contributed to social devaluation, economic dependencies and political powerlessness both in Lusatia and in most parts of rural Eastern Germany. In many ways, Lusatian communities are still grappling with the effect of this first *Strukturwandel* of the 1990s which ultimately affects the economic and social make-up of the region today (Schwartzkopff and Schulz 2015; Ragnitz et al. 2021, 48 ff.).

*Strukturwandel*, on the basis of this observation, does not only refer to economic development, but to all measures capable of counteracting peripheralizing trends.

Boxberg's Health Center, even though it is narrated within an economic frame, is clearly a response to past peripheralizations. It is a concrete response to the local lack of healthcare that is the result of out-migration and decreased attractiveness. As a contribution to the social infrastructure, the Health Center is meant to improve Boxberg's spatial situation and social offers. The municipality aims to increase the quality of life through accessible healthcare and render their population more independent in their everyday lives. By taking responsibility for local healthcare, Boxberg is also trying to emancipate itself from the Saxon state and the Association of Statutory Health Insurance Physicians (KV) who are formally responsible for providing healthcare in the municipality but offered little help. The establishment of the Health Center therefore has to be seen as a form of local capacity building that Nordberg (2020, 56) has pointed out as key to spatially just developments in local communities. However, some capacity could have been more easily achieved with a smaller project that would have focused more explicitly on existing needs.

## **1.6. The Reality of Peripheralized Conditions**

*Strukturwandel* therefore needs to be understood a multi-layered term to which different expectations are attached. They differ in scope, temporality, and ultimately feasibility. Within the economic development frame, measures are naturally of an economic nature. They are targeted at the future and are overall a reaction to present-day developments, namely the Green Transition and the coal phase-out. It seems likely that in Lusatia, the InvKG and other aligning transition measures succeed in their aim to promote jobs and economic development: A recent study showed that a combination of decreasing population number and job creation measures will most likely lead to a surplus of employment opportunities in Lusatia (Berger et al. 2024,

4). This stands in contrast to the multitude of transition processes that Lusatians have undergone, and that leads to the perception of *Strukturwandel* as a broader de-peripheralizing development. The attempt to counter grown subordinations however requires a multitude of ideas. Communicative, social, economic and political inequalities all need to be addressed to change Lusatia's subordinated position in relation to urban centers and more powerful regions. Since these dynamics have grown out of the transition experiences of the 1990s, local understanding of the ongoing transition is temporally wider. *Strukturwandel* is then seen as a reaction to the past that is meant to ease the struggles of the present. It is also heavily influenced by a wider spatial dimension. Since Lusatia shares these peripheralization experiences with much of rural Eastern Germany, external moments of (de)peripheralization might affect Lusatian similarly to the coal phase-out. Given the multi-dimensional challenges posed by Lusatian reality, the local hope of achieving de-peripheralization is far more complex than mere economic development. Since many municipalities have long dealt with shrinkage (Lang 2012), the national vision of growth appear far-fetched and unrealistic to local actors: The mayor of a Southern municipality phrased it like this: "In our view, *Strukturwandel* is not just growth, but adaptation. Adaptation to structures in order to be fit for the future." There is an understanding that the Just Transition measures will have little impact on the overarching peripheralizing dynamics at place.

Boxberg's Health Center is an example of how these different understandings materialize and clash within the InvKG measures. In its current form, the Health Center is a tool focused on facilitating growth and is therefore in itself planned larger than the current circumstances would deem realistic. This has created issues in the planning process. Most immediately, it has been difficult for the Boxberg administration to attract even a single qualified doctor who would be willing to take up their practice in the Center. Such difficulties are closely related to the municipality's peripheral position. While planning the Center, the idea

of attracting multiple doctors along with other healthcare professionals appeared more and more unrealistic, raising fears of long-term empty rooms in the large Health Center among municipal actors. If the Center would have been planned smaller, as a project of adaptation rather than growth, the municipality could have avoided the reiteration of peripheralization experiences symbolized by vacant infrastructures. Boxberg would have then apply for a smaller sum of money or realized the Center within its own budget – thereby letting go of the chance to “really do something here”, as its Mayor put it. The actors themselves are torn between the hope of potential growth and the reality of working within peripheralized conditions.

I therefore conclude that the Lusatian understanding of *Strukturwandel* goes beyond the Just Transition imagined on the national level. The narrow issue frame of economic development utilized within the InvKG law and the Coal Commission fails to account for the multi-layered issues within Lusatia. Having undergone impactful peripheralization processes throughout the past 30 years, regional actors envision a *Strukturwandel* that questions existing dependencies and power dynamics beyond the economic sphere. Local actors thus mobilized a temporal frame that embeds today’s energy transition in longer peripheralization processes. Considering the multitude of peripheralizing moments that Lusatia is subject to, I wonder: In how far do Just Transition measures have any chance of fostering positive change while neglecting other powerful influences on the region that go beyond the scope of the Green Transition? My analysis has shown that the perception and implementation of Just Transition measures is heavily dependent on such local circumstances and demands.

## 2. “More complicated than you might think” – Transition Measures as Chance and Challenge

*Strukturwandel*, coal funds, investment law - that sounds like opportunities, to some extent like a new beginning. [...] And yes, the opportunities do exist, the opportunities are there, but taking advantage of these opportunities, taking advantage of funding is more complicated than you might think or see at first glance.

- Boxberg's Head of Office

Since 2020, the Investment Act for Coal Regions (InvKG), one of the main German transition measures, has moved from the conceptualization into the implementation period. Municipalities have started to work on concrete projects and funding applications within the procedures set by the InvKG. As soon as I stepped into the Boxberg administration for my internship, procedural issues began to shape how *Strukturwandel* was discussed. Within my first hour in the office, the Head of Office quickly introduced me to the Health Center and ran through the ongoing problems: Intransparency, unavailability of funds and the lack of administrative personnel all popped up in my first hour in the office. In the following seven weeks, I would experience these issues first-hand. As an intern and participant observer, I joined my colleagues in navigating between hopeful visions and dire realism under pressures from citizens, state institutions, external advisors and time. Amidst these tensions, I encountered procedures not as mere rules, but as palpable experiences. We felt them in time spent studying the regulation, in brainstorming approaches, in dedicated meetings and lunchtime conversations and in scrambling to find a free time slot in the Mayor's busy schedule. These processes of decision-making, adaptation and ultimately creative problem-solving within the procedural boundaries set by the InvKG funding law struck me as a dimension of the Just Transition process that is underrepresented within the literature. Given that procedural experiences decidedly marked how my interlocutors related to the Just Transition altogether, they are a vehicle for understanding Just Transitions as enacted through practice. They allow me to



approach the puzzle posed by Boxberg's Head of Office: How is it that the transition measures have come to be seen as a challenge rather than an opportunity?

Staying with Boxberg's Health Center as a concrete case, I approach this question by showcasing municipalities as emotive actors fueled by experience. I outline the concrete funding application rules they navigate and illustrate the multitude of procedural problems. In relating these experiences to broader peripheralization experiences on the local level, I discuss how perceptions of Just Transition measures are locally recalibrated through experience. On this basis, I argue for a need to extend Just Transition research to such procedural experiences and account for the unique context-dependent nature of Just Transition.

## **2.1. “We let ourselves be driven by desires”: Emotive Administrations**

A funding application for InvKG funds officially starts with municipal actors who decide upon a *Strukturwandel* project to be realized within their municipality and write a project proposal. In Boxberg, this started in 2020, when the citizens' initiative “Perspektive Boxberg/O.L.” and the local administration came together to discuss responses to the threatening lack of healthcare within the municipality. A key person in this process was Boxberg's Head of Office: An experienced administrator who has held his position for the past 20 years. He was well connected and could therefore render other municipalities' experiences useful for Boxberg – Forging small practical coalitions in the face of funding challenges. He had written the proposal for the Health Center and thus had a massive role in shaping the process. When he critiqued aspects of the Health Center in meetings, the Mayor would jokingly ask “Well, who wrote the proposal?” The Mayor himself had only become part of the project upon his election in 2022, and aimed to realize it as one of the core projects within his term of office. As someone who was born and raised in Boxberg, this issue was of direct relevance to him not just as a mayor, but also as a citizen of the community. He had received an education

as a civil servant in Dresden and was thus well acquainted with the wheels of multi-level bureaucracy. I met him for the first time in August 2023 for an interview, where I heard him speak passionately and knowledgeably about the coal phase-out and the challenges posed to his municipality and the region. I encountered him as an optimist despite everything. Due to the demanding nature of his duties, he was however not as involved in the daily handling of the funding application. Just like the Head of Office, he was happy to pass some responsibility of the Health Center to the newly employed Project Manager. Originally hired to deal with issues of demographic change, he was quickly tasked with also managing the issue of the prospective Health Center and its funding. Having previously worked for a private company, he took an outsider's perspective and looked at the developments with some distance. It would not be unusual to hear him say "This is tax money! We all pay for this!" in response to what he found to be an inefficient use of money. With his outside perspective, he evaluated rationality and emotionality within the conceptualization of the Health Center. "When we only think emotionally", he told me in our final conversation, "and if we let ourselves be driven by desires, we get results like we do now." He thereby pointed to the implicit desire for growth that is emotionally understandable in a shrinking community, but which did not seem realistic to him as an outsider to Boxberg. This instance illustrates that while the Boxberg administrative actors all acted within their roles, they brought distinct visions and understandings of the issues at stake to the project.

In inquiring how these understandings come into being, I join anthropologists who have argued against understanding administrations as rational actors. In her analysis of Turkish-Cypriot bureaucracy, Navaro-Yashin paints a picture of administrations as an emotive domain and argued that studies for bureaucracy must always account for affect (2006). Similarly, Dubois speaks of „[i]ndividual variations in bureaucratic practices“ (Dubois 2009, 232) in his description of the different individual approaches to the same professional role within the

French welfare system. In acknowledging how actors' actions are shaped by their past experiences and emotions, I open the analysis to understanding how Just Transition measures in turn affect experiences themselves and thus shape actors' approach towards them in the future.

## **2.2. The Procedural Framework of the InvKG**

Once the project proposal has come into place and the funding application procedures begin, the logic of the national Investment Act for Coal Regions (InvKG) shapes the working rhythms of the municipal actors in charge of the project. Through the InvKG, the German state provides financial support of up to 90% co-financing for projects that support the management of *Strukturwandel* during the coal phase-out. For the Saxon part of the Lusatian coal region, these rules were concretized by Saxon funding guidelines on the federal state level. For projects in the Saxon part of Lusatia, the Saxon state, the municipalities, and municipal associations are entitled to apply for the overall 2.4 billion euros (§2 Nr. 1 b) InvKG, §3 I Nr. 1 b) InvKG). In providing funding for projects implemented by regional and local actors, this measure is targeted at the enhancement of local financial capability. Within the framework provided by the InvKG, administrative bodies could realize ideas while only contributing a part of the overall costs. For municipalities that often have structurally weak tax income, such a measure extends the reach of their financial tools. With Kühn et al. (Kühn, Bernt, and Colini 2017), who in turn base their discussion on Stone (1989), I understand this as an extension of municipalities' "power to" act. Rather than understanding power solely as power over someone or something, focusing on "power to" accounts for local capacity that can exist within existing hierarchies. For peripheral regions, this means that even in the phase of power imbalances, local actors have a foundational agency as the power to act within their means (Kühn, Bernt, and Colini 2017, 269). While "power over" is determined by regulations on jurisdiction within the German multi-level administrative system, "power to" is inherently flexible in nature and depends on "actors,

constellations and actions” (Kühn, Bernt, and Colini 2017, 261). As a tool to expand local capacity and “power to”, the InvKG thereby holds characteristics of a de-peripheral measure.

In order to make use of these capacity-enhancing tools, regional and local administrations need to first undergo the application procedure. Municipalities start the process by submitting a proposal and a cost evaluation to the district, which are checked and submitted to the Saxon Agency for Structural Development (SAS). The SAS checks the project in-depth and refers successful projects to the Saxon State Ministry for Regional Development (SMR), which obtains opinions from all concerned ministries and issues a coordinated opinion. The project is then brought to the Regional Monitoring Committee (RBA), where projects are chosen and ranked based on a ranking by the SAS. The RBA sends a list of the ranked projects to the SMR, which again checks the projects and submits them to the national Ministry for Economic Affairs and Energy, where they are checked for compliance with the InvKG guidelines again. When the national Ministry has no objections, municipalities can finally submit their detailed application to the *Sächsische Aufbaubank* (Saxon Reconstruction Bank, SAB). Should relevant changes to the project occur up to the confirmation by the SAB, the whole procedure has to start anew.

It is in this realm between the potentials of the InvKG and the realities of the funding application that capacity and “power to” is experienced and negotiated by administrative actors. In the case of Boxberg, this takes place within the funding applications for the Health Center. While Boxberg’s Health Center might formally fulfill the InvKG requirements for funding and had already passed significant procedural milestones, its ultimate coming into being was still dependent on the last successful funding application to the Saxon Reconstruction Bank. Actors therefore still felt uncertain about the future of the project – and in many ways at the whim of external actors’ decisions.

### 2.3. “Chicken or the Egg”: Experiences of Incapacity in the InvKG Procedures

So how do local administrations experience their capacity within the InvKG measures? “*Strukturwandel*, coal funds, investment law - that sounds like opportunities”, was how Boxberg’s Head of Office framed it. This sentiment was affirmed throughout my interviews, in which most mayors considered the InvKG an opportunity for their municipalities. The actual application procedure for the money however stretched their capacities to the limit. Based on Boxberg’s Health Center, I discuss five concrete experiences in which the InvKG procedures materialized.

One experience was the handling of almost unfulfillable requirements. To prove the need for and use of the Boxberg Health Center in the funding application to the Saxon Reconstruction Bank (SAB), the administration needed to provide letters of interest from potential doctors or medical professionals interested in practicing in the center. While a local physiotherapist and a pharmacy were considering relocating to the building, there was no doctor in sight. This was, after all, why the municipality was building the Center: To have an incentive for potentially interested parties and make the location more attractive for healthcare professionals. Even though the administration was in loose contact with a few interested doctors, none of them were adequately qualified or ready to commit themselves to opening their own practice in rural Lusatia in 2026 or 2027, more than two years from then. Boxberg’s Head of Office described this as a “Chicken and the Egg” process in which the *Strukturwandel* funding was a tool to achieve a certain goal but foresaw the achievement of the goal as an application requirement. The municipality continued its funding application, but the possibility of receiving a letter of interest from doctors seemed hopeless. The fear was that current incapacities in the local healthcare landscape, e.g. the existing lack of healthcare professionals who would be able to provide letters of interest, would hinder the municipality’s chance to enhance its future capacity through the Health Center.

This was only exasperated by insecurities inherent to the funding process. Even though the Health Center had passed many important steps already, it was still uncertain whether and to what degree their funding decision would ultimately be successful. Even though the Saxon Agency for Structural Development (SAS) was tasked with advising the municipalities in this regard, my colleagues found that it acted more “like a filter - which is what it is supposed to be - but a filter that does not necessarily support the applicant.” The SAS has given what my colleagues considered to be inconsistent feedback about Boxberg’s wish to have medical equipment funded through the InvKG. For definite answers, the administration was looking to the Saxon Reconstruction Bank (SAB), the institution in charge of the final funding allotment. However, the SAB does not comment on ongoing applications. At the time I spent in the administration in spring 2024, it was also unclear whether there was funding available at all. The status quo belief was that the projects from the first, second, and third rounds of the Regional Monitoring Committee (RBA) would receive funding and the ones from the fourth to sixth only after being ranked on a prioritized list. Boxberg’s Health Center belonged to the fifth round. It was uncertain how such a prioritization would look like and what Boxberg’s chances would be. We were thus putting weeks of work into a project whose realization depended not only on the formalities of the funding application, but also on unclear availability of funding: A situation that I experienced myself as immensely frustrating.

These experiences accumulated in meetings with potentially interested parties. In the few instances that a doctor was interested in renting a space in the Health Center, the Mayor, Head of Office and Project Manager would meet them in the meeting room next to the Mayor’s office. They would present the status quo of the project and illustrate how they saw the project developing, leading to a finished building by the end of 2026. Then, the interested doctors would ask their questions; most importantly: “What would the rent per square meter be?” The administrators could not answer. The rent prices would depend on how much of the building

cost would be covered by the yet uncertain funding and how much of the cost would need to be distributed to the renters. Additionally, there was the fear that a number of units in the big project might remain empty, leading to the distribution of the common costs to a smaller number of parties. While the administration could internally handle these insecurities and adapt, they inevitably put them in an uncomfortable position in negotiations with external parties. They were incapable of making statements with the certainty and reliability that they would want to and thereby saw their own negotiation position impaired by decisions made on other levels.

Such meetings with doctors were part of an invisible workload. This was an addition to the formal workload that came with writing and further qualifying the applications. For the latter, an employee of the Görlitz district estimated that the first draft to the SAS required 40 to 50 hours of work. Working on the Boxberg Health Center put these numbers into perspective: Even after the draft met the requirements of the SAS and was presented in the RBA, the application to the SAB bank again required further work. At the same time, guidelines and legal interpretations were shifting. “What was correct yesterday had to look different again tomorrow”, Boxberg’s Head of Office described this process, “so we had to rewrite this application again and again, always adding something new, new justifications, new requirements that we had to adhere to.” The State ministry employee I spoke to relativized these workloads: Municipal administrations would be able to get support through the SAS, the regional development agency *eno* and external project managers. Boxberg used all these resources: They were in close contact with both the SAS and the *eno* in the early stages of the development, and they hired a consortium of architects and planners to create the exact plans for the health center. The first two however only supported the application during the early stages of a project. The planners, in turn, worked out suggestions, but needed to have every decision ultimately affirmed by the administration as the client. On top of that, it was increasingly clear that the lack of healthcare in the rural countryside would not be solved by

existing solutions. The municipality therefore felt the need to explore innovative approaches to rural healthcare, such as telemedicine, community nursing, or preventative care. Building such networks and expertise required time and energy and contributed to the invisible body of work.

These additional workloads weighted especially heavy in small Lusatian municipalities that are affected first by insufficient funds for hiring dedicated personnel for funding applications, and secondly a regional lack of skilled workers that left many municipal positions vacant. Especially small municipalities would often only have resources for the fulfillment of their core responsibilities. Labor-intensive funding applications, as voluntary projects, disturbed this precarious balance. They had to be managed by employees next to their main administrative duties. The way in which municipal administrators have to act as both civil servants and project managers under the projectivization of the InvKG created a clash within the roles that is typical for such New Public Management approaches (Jałocha 2018). It is certainly not a coincidence that work on Boxberg's Health Center, which had lain dormant throughout the previous months, intensified with the arrival of a new colleague with project work experience in the private sector. Notably, two respondents who explicitly considered the workload manageable both were mayors of bigger municipalities in the Görlitz district. One of them was able to hire an additional employee tasked only with the attraction and management of funding. It has been shown that municipalities with the capacity to install a dedicated funding unit for funding purposes gather more funding and apply it more efficiently (Schneider, Scheller, and Hollbach-Grömig 2017, 45). Human resources are a very direct dimension of capacity: At the end of the day, there is either someone available to work on a voluntary funding application, or not. The time these employees spend on these applications takes from other areas within the municipality that the employee would be usually responsible for. The application process, while promising an enhancement of financial capacities for a future potential project,



therefore actually decreases the workload municipalities could efficiently handle, and therefore their capacity, during the application period.

## **2.4. Reconfigurations of Just Transition Perceptions**

These experiences are not necessarily unique to Boxberg. Beyond the Lusatian coal region, municipalities encounter similar issues with regional, national or European funding programs. In Lusatia, as in other peripheralized regions, it is however necessary to evaluate them in light of existing dynamics of peripheralization.

While the measures promise an enhancement of financial capability, actors constantly work against the boundaries of their own capacity in the funding process. Be it through bringing municipal actors to the limits of their capacity with respect to time, knowledge or tolerance of uncertainty: The funding procedures in their current form perpetuate dependencies between local actors and the regional distributing bodies and bind resources on the local level that are lacking elsewhere. Throughout the whole funding process, the success of the project is ultimately at the mercy of higher instances, and municipal actors were very aware of this power imbalance. Given that many supporting bodies, such as the SAS or the *eno*, were not able to adequately provide helpful support until the end, municipal actors experienced a sense of isolation in the face of more powerful instances, such as the federal or national administrative level. “Now we’re back on our own”, said the Head of Office when describing the lack of support Boxberg experienced in making the final decisions for its Health Center. Especially when municipalities are small and take a long time to fulfill the requirements, as was the case with Boxberg, these experiences stretch across a long time. Where decisions made on the regional or national level remained opaque to the local actors, this only added to a pre-existing sense of power imbalance: As much as they tried, there were significant uncertainties that they could not eliminate within the realm of their own power. The process was thus in many

instances an experience of powerlessness, rather than empowerment, and spoke to past experiences of political powerlessness that have contributed to Lusatia's peripheralization. It affirmed the sense that other administrative levels had "power over" them, rather than speaking to their own "power to" act.

On the basis of this, my colleagues sometimes directed negative emotions against the Just Transition measures altogether. "We could have been spared the whole damned funding process", the Head of Office exclaimed when we came to a standstill with the Health Center. He had read that another municipality was building a Health Center of its own, on a smaller scale and for a fraction of the cost. While Boxberg was fighting to think large and build a Health Center as a *Strukturwandel* measure within the InvKG, it would have been equally possible to realize the project on a smaller scale with an amount of funds that the municipality could stem through its budget. In contrast to how the Boxberg administration had struggled to fulfill the funding requirements for the past years, building a smaller Health Center without additional funding suddenly seemed more attractive and more self-determined. The Mayor joined his sentiment: "It's because of this damn coal money that we have to build such a big block." This points to shifts in perception of the Just Transition measures that especially occur in moments of frustration: Suddenly, the "coal money" was no longer an opportunity, but "damned". Emotions and experiences therefore directly affected perceptions of the Just Transition measure on the local level.

Despite of its frustrations, Boxberg was committed to bringing its Health Center to fruition and benefitting from the Just Transition measures. Given that the municipal actors have grown much more skeptical of the InvKG and the obligations it imposes, it seems however likely that they would reassess its use in the future. Based on their experiences, actors have recalibrated their understanding of the InvKG and considered it still an opportunity, but one that seems significantly more challenging to use. It remains open how these recalibrations of

perceptions throughout the region will affect the use of the InvKG. Within my observations and interviews, smaller, more peripheralized municipalities seem to experience the InvKG funding applications as more challenging than larger municipalities. Should this ultimately affect both local capacity and local willingness to engage with the InvKG, this might impact the distribution of the funding in a way that counteracts the original aim of the law to support communities particularly affected by the transition

## **2.5. Experience as the Blind Spot of Just Transition Research**

Those effects of procedural experiences touch upon a dimension of Just Transition, frequently discussed as procedural justice. Procedural justice concerns the “legal process and the necessary full legal steps” (Heffron 2021, 24) of Just Transition measures. While generally concerned about the involvement of stakeholders in all stages from planning to end use (Heffron 2021, 28), Heffron places a focus on negotiation processes of transition measures: His work mostly focuses on long-term engagement of affected communities and their practices (McCauley and Heffron 2018, 4). Other authors similarly understand procedural justice as “focuse[d] on facilitating participation in decision-making processes” (Moesker and Pesch 2022, 3; similarly Schuster et al. 2023, 8; Klinsky and Dowlatabadi 2009, 93). Procedural justice is then measured by criteria such as a symmetrical selection of actors, case specificity, political leverage, a level playing field, and an ex-ante agreement on the rules of the game (Moesker and Pesch 2022, 3).

However, this understanding of procedural justice does not adequately reflect the experiences I observed in the field. Firstly, its focus on the negotiation process does not adequately transfer into the implementation phase, where participation and involvement take different forms. Since this is where the actual distribution of funds takes place, procedural justice must ask how participants encounter procedures and how they can claim the benefits

that, within the rules agreed upon, they would be entitled to. Especially where the transition measures in turn create more procedural processes, Just Transition research must follow them until the end.

Secondly, I encountered a strong subjective dimension to procedural justice. In considering administrations as staffed with affective actors with concrete sets of growing experiences, I focused on how actors experience and understand procedures. This counteracted the more objective understandings of procedural justice that are often focused on the possibility of participation and neglect factors that shape whether actors *want* to participate based on their understanding of procedural justice. Philosophical thought has pointed to how morality and ideas of justice are formed by practice and feeling in real social communities (Galvin 2019, 179). It is argued that affect influences moral impulses more than rationality (Rorty 1997), and that emotions will be based on how their holders have developed shared perspectives with the people around them. With reference to Geertz's "thick description" (Geertz 1993), Walzer describes this as "thick" morality (Walzer 1994). Lusatian actors thus approach Just Transition measures with a sense of thick morality that is highly dependent on their shared experiences. In this sense, analyzing the subjective dimension of Just Transition supports a denser understanding of what justice within Just Transition actually means. This is especially relevant in peripheralized areas where citizen's sense of justice will be shaped by unjust processes of peripheralization they have undergone.

By pointing to the experience of transition measures as a blind spot within Just Transition research, I join Nowakowska et al. (2021) in underscoring the place-based nature of Just Transitions. Such approaches account for local thick moralities and subjective experiences of justice and depart from viewing Just Transitions as an isolated and socially detached planning exercise. Given that many coal regions globally struggle with dynamics of peripheralization (as explored by Kowalik 2024 for Poland; Anugrah 2023 for Indonesia; Greenberg 2017 for the

Appalachian region in the USA), I believe that the dependencies between past and ongoing peripheralization experiences and today's Just Transition measures play out similarly elsewhere.

### 3. Challenging the Status Quo: Lusatia between Resource Periphery and Energy Democracy

A half-hour car drive away from Boxberg, through winded, single-lane forest streets and across the rails of the coal train network, the Energy Factory Knappenrode emerges as a monument of red bricks amongst the surrounding pine forests. On a rainy Saturday afternoon, I parked my car in the almost empty parking lot and failed to capture the whole width of the building on a picture. Here, the coal from the surrounding mines was processed into briquettes in a loud, hot and labor-intensive procedure. After the factory closed in 1993, the building served as a museum of the Lusatian mining history and was renovated and reopened in 2020. In the permanent exhibition, I followed the coal history of the region. The exhibition started with the Sorbian villages and culture that preceded the first discovery of coal, in a room that was pervaded by light and designed with natural elements. “Every village”, one of the plaques said, “was a finely tuned microcosm of labor in mutual dependence. [...] Many villages only produced a little more than necessary for sustenance. A cycle that existed for centuries.”

The second room showed the beginnings of the coal industry: In a darkly decorated room, warm light bulbs illuminated the exhibition pieces. Introductory texts explained how Lusatia began to grow once a train connection was built to Berlin and the markets became easier to reach. In between exhibition pieces of the coal briquets and postcards sent from the coal mines, there was an illuminated map of Berlin. It showed the growth of the metropolis since 1840, with massive expansions in the early 20<sup>th</sup> century. The information sheet on the wall was titled “Spree Chicago”. “Spree Chicago” is not Lusatia: It’s a name the author Mark Twain gave to Berlin upon his visit in 1892. The sheet told the story of the beginnings of the coal industry in Lusatia after the German-French war in 1870/71 and the purpose and use of the coal. It finished with the observation: “Lusatia was not only the energy provider for the million-

citizen city Berlin. The building materials that enabled the rapid growth of the metropolis on the Spree River also came from the brickworks and glass factories in the Senftenberg district.”

Lusatia’s history of coal, in the Knappenrode Museum, was told relationally to stories of growth in Berlin. It pointed to energy as a concrete dimension of the dynamics between core and periphery: The conditionality of condensed resource extraction in one place to benefit larger populations elsewhere. Stories like this reflect the need to think about the concrete implications of Lusatia’s coal and energy-producing history in the design of today’s Green Transition. Having previously showcased the simultaneity of multiple transitions and zoomed into the effect of peripheralization experiences on procedural justice within Just Transition measures, I seek to use the final chapter to question the concrete design and ultimately the justness of the energy transition itself. I therefore zoom into Lusatia’s role as a resource periphery to trace continuities in the energy industry, illustrate path dependencies, and inquire about more just alternatives.

### **3.1. Intertwined Histories: Lusatia as a Resource Periphery**

Within the Knappenrode Museum, three phases in Lusatia’s history of coal extraction emerged. All stand in contrast to what the Museum portrayed as the initial situation: The management of the land by small agricultural Sorbian villages. Positioned at the edge of greater powers, the exhibition described the region as an assemblage of small, independent communities. They were positioned within a spatial periphery, but within the units of their “finely tuned microcosms” not *peripheralized*.

The museum described this as changing with the first phase of large-scale resource extraction. The beginning of the 20<sup>th</sup> century was marked by the development of the coal industry, in-migration of outsiders and the establishment of economic and infrastructural ties, especially to Berlin. This was only intensified in the second major phase with the establishment

of the GDR. As the provider of the only nationally available resource for energy production at a sufficient scale, Lusatia was reframed as the GDR's "coal and energy district" (Energiefabrik Knappenrode n.d.). As the exhibition narrated, its system relevance made Lusatia "one of the most important showcases for socialism in its quest to shape the 'new man'." Due to GDR energy politics and price increases for Soviet gas, coal extraction and energy production remained at high levels until the end of the GDR in 1989. Even after the large-scale de-industrialization of the region in the aftermath of German Unification, Lusatian coal remained an important factor for German energy security. In 2023, coal-fueled energy contributed 26.1 % of the national energy mix, of which roughly 37% was produced in Lusatia in 2021 (UBA 2021, 41).

Lusatia is therefore similar to other "regions rich in natural resources located outside the economic core" (Golubchikov and O'Sullivan 2020, 2), which have been described as resource peripheries. Through resource exploitation in particular, resource peripheries are subordinated to the cores in a political-economic process (Munro 2019, 449). Typically, an imbalance of ownership over higher-value output leads to economic benefits being attained elsewhere (Golubchikov and O'Sullivan 2020, 3). Resource peripheries are marked by geographies of resource extraction (Munro 2019, 450): A very palpable phenomenon in Lusatia, where the landscape is a testimony to the extraction activities of the past and present. The geographic and social make-up has been heavily determined by the coal industry. Whole populations of villages were resettled, cities at first expanded to facilitate in-migration and later partially torn down, infrastructures built to facilitate the transport of coal and energy. Cultural testaments like the Knappenrode Energy Factory are deepening the Lusatian self-image by narrating the history of the region in relation to growth in the centers.



### 3.2. The Energy Transition amidst an existing Socio-Technical Regime

What does the energy transition with its coal phase-out mean for Lusatia's deeply entrenched identity as a coal-based resource periphery? Where development has relied on the extraction of natural resources, research has shown a prevalence of economic vulnerability, peripheralization, and power imbalances (Frantál et al. 2022, 238), which only intensify after the end of mining activity (Greenberg 2017, 149; Esposito and Abramson 2021). Just Transition measures, with their aim to account for the regional negative impacts of the Green Transition, can be seen as a response to exactly this threat of deterioration.

Part of Just Transition processes and the German Investment Act for Coal Regions (InvKG) is the development of an alternative vision for affected regions after the end of coal. In Germany, each coal region has developed a mission statement (*Leitbild*) in which the guidelines for regional development are outlined and which is attached to the InvKG. Lusatia's statement aims for increased infrastructure, an innovative economic landscape, research and healthcare, quality of life and cultural diversity. Most importantly, it foresees Lusatia as a "modern and sustainable energy region" (Attachment 1 InvKG). Building upon an existing knowledge base and existing energy production structures, Lusatian energy systems are supposed to continue to contribute to German energy security. The Lusatian energy company LEAG, which is responsible for all coal mining and coal-based energy production in Lusatia, has affirmed its commitment to the region and promised to produce seven gigawatts through solar power and wind turbines by 2030, much to the delight of regional politicians (Engels 2023).

The LEAG's core role in this transition points to continuities within the existing regime across the energy transition. Transition research has used the concept of regime to refer to deeply embedded arrangements that constitute powerful and only incrementally changeable

path dependencies (Murphy and Smith 2013, 702). Considering technology's dependency on societal use, technological developments are intrinsically linked to the social groups that (re)produce them (Geels 2002, 1259). Within a network of producers, finance, users, public authorities and research, regimes operate according to regime-specific rules and conventions and provide stability (Geels 2002, 1260; Wagner et al. 2020, 4). Through a multi-level perspective (Geels 2002), regimes are embedded in so-called landscapes which constitute the exogenous context of a regime, and which are even harder to change. Geels differentiates between incremental change, which affects regimes on a continuous incremental basis from within, and radical innovative change developed in so-called niches. In the technological sector, niches might refer to incubator-like spaces that offer protection to high-cost low-performant technological novelties (Geels 2002, 1261). Murphy and Smith (2013, 701) have, however, pointed to small-scale, locally-controlled projects of renewable energy creation in the Scottish Highlands and islands that escape the reach of the overall energy regime and similarly constitute niches. Transitions, in this sense, have to be seen at the interplay of grown path dependencies, larger societal pressures and local adaptation.

Through this lens, the Lusatian energy industry can be considered part of a grown energy regime (Wagner et al. 2020, 5) that has long been able to protect its status quo. Across Germany, the energy sector is largely dominated by a small number of big energy companies (priorly the big four, now the big five) who produce the majority of energy in dense energy regions. While it has held some characteristics of participation, the system has overall been found to be one of technocratic energy centralism (Thombs 2019, 162). The Lusatian LEAG is a prime example of such a private institution that provides energy towards a central grid with little accountability towards the public (Thombs 2019, 161 ff.). The Lusatian coal mines and energy plants have operated under the name LEAG since 2016, when they were sold to the Czech company Energetický a průmyslový holding (EPH) by their former owner Vattenfall. EPH has been

systematically buying into cheap outdated coal mines and energy production facilities to profit from capacity remuneration mechanisms (Černoch, Osička, and Mariňák 2021), and, as in the German case, compensation payments for the mandated closure of mines (Maaßen and Schiffer 2021, 148 f.). Environmental organizations and activists have criticized the company for its untransparent business model. Due to their market power, utilities such as the LEAG could, however, exert pressure upon political actors and strengthen their position by lobbying against renewable energy (Kungl 2015, 17; Apajalahti and Kungl 2022, 229).

These regimes have increasingly come under attack since the early 2000s: Firstly, increasing awareness of the environmental impact of fossil fuels and international agreements on climate neutrality shifted the overall landscape within which the energy industry is embedded (Kungl 2015, 20). Secondly, the decentralized nature of renewable energy aided the development of niches that challenged the incumbent market powers (Richter 2013, 464). Only when the energy transition began to threaten the big energy companies' existence altogether did they begin to shift their focus and expand their portfolios to renewable energies. This reaction can be seen as a move to protect their regime, fueled by the established privileged market position. It follows that even now, the five biggest utilities in Germany produce 63,5% of the national energy volume (Bundesnetzagentur 2023, 17). The LEAG's decision to invest in renewable resources must therefore be seen in this light: It offers the company the possibility to remain relevant and powerful within a shifting landscape. Their projects will naturally be large scale: Be it the plan to build the nation's largest swimming photovoltaic plant or installing 400 hectares of it on a renatured Jänschwalde coal mine (LEAG n.a.).

### **3.3. Challenges: “How much Solar and Wind Power can our Home handle?”**

Acceptance for renewable energies is however not a given. On a Wednesday evening in March 2024, I followed a panel discussion in the UNESCO heritage Bad Muskau gardens.

Amidst the tropical plants in the repurposed Orangery building, the head of the garden's foundation, a social scientist and a former Saxon state minister turned energy consultant discussed the question "How much Solar and Wind Power can our Home handle?"<sup>5</sup>. Around 17 people sat in the audience, most of them around 50 to 60 years old. Once the audience was invited to provide comments and questions, they asked questions that were informed, yet showed an emotionality that underlies their inquiries. They wondered about the negative impact that the large-scale use of renewable energies could have on regions that have just been renatured and questioned who would profit from the renewable energies. The panel responded to the worries about external profiteers. "There are fortune hunters around, just like they were after the 'Wende'", the former State Minister said. The sociologist agreed with this observation of a "Solar Rush". Especially since "the municipalities have little power to decide over local land since a lot of it was bought by externals [often Western German investors] in the 90s." After the Unification, the government property trust (*Treuhandanstalt*) rapidly privatized industrial forms for low prices (Bös 1993, 202). Eastern German land is over-proportionately in the hands of external investors. While land ownership statistics in Germany are not public, it can be determined that the 2200 large German agrarian enterprises farm 94% of their land in Eastern Germany. Of those enterprises, only 38% have their headquarters in Eastern Germany; 36% operate from West Germany, 28% from abroad (Federal Statistics Office 2021). The fear of external investors is thus based on past transition experiences that still impact the economic make-up of the region and the possibility of locals to decide regarding land use in their region.

Perspectives like this, which are frequently encountered in Lusatia, pose a threat to the acceptance of the energy transition. While the upkeep of the existing regime in its technocratically centralized form has been supported by politicians and energy companies,

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<sup>5</sup> „Landschaft und Erneuerbare – Wie viel Wind und Solar verkraftet die Heimat?“

citizens have shown resistance against the installation of (large-scale) renewables. Citizens in Spremberg collected 4,100 signatures to protest against the expansion of a wind park in the nearby city's forest (Vorreier 2024). Similarly, citizens in Schleife united against a company's endeavor to build a solar park on renatured post-mining landscape (Wiedemuth 2021, 56 ff.). Wiedemuth quoted her respondents' worries that "representatives of a big company want to make money here" (2021, 58) and that they would have to "give up areas that they could not access anymore because there's a fence around them; just like we can never go back where the open-pit mine is" (2021, 66). In my fieldwork, a member of the local citizen's organization "Perspektive Boxberg" similarly explained how their members worry about external investors in the energy sector. Just like the participants of the Bad Muskau panel discussion did, she expressed a great mistrust of external powers in the energy sector.

The role of the LEAG as a Czech-owned company is similarly doubted: Observers worry that LEAG-holder EPH will take the 1.75 billion Euro paid by the German state to compensate for the coal phase-out and bankrupt the LEAG to rid itself of its *Ewigkeitskosten* (eternity burden), meaning the obligation to manage the environmental aftermath of mining (Grüne Liga 2023, 8 f.). The LEAG's promise to invest in renewable energies and stay committed to the region has been questioned due to opaque business structures and relatively little activity (Grüne Liga 2023, 4 f.). I encountered these fears in multiple informal conversations during my fieldwork: While the LEAG provided very welcomed jobs, people suspected that it was not a reliable partner for the future of the region. This implied a fear of renewed dependency that would ultimately lead to let-down and even more socio-economic costs.

These criticisms illustrate how the energy transition in Lusatia is perceived both as a continuation of the current energy regime and as an extension of its status as resource periphery. Lusatians expect the energy system to remain as monopolistic as it currently is. As far as the

increasing use of renewable energies de-centralizes the system, Lusatian actors expect these shifts to be in favor of wealthy external elites. The energy transition, in this sense, is not an energy *system* transition. Power relations may be somewhat broadened, but do not actively involve local citizens in a participatory manner. This affects how renewable energy is understood. While renewable energies objectively interfere less with the natural landscape than the coal industry, they are nonetheless perceived as interventions. Arguably, they do not only intervene in the landscape, but with locals' sense of closure. The renaturing efforts in the course of the coal phase-out are seen as visibly giving the landscape back to the people (Wiedemuth 2021, 66), only for renewables to take it away again. While the coal industry benefitted many Lusatians directly through employment and financial contributions to local social projects, renewables are especially criticized for being predominantly held by external investors.<sup>6</sup> In turn, the protection of the natural landscape is now instrumentalized by wider societal groups than it was during the time of coal extraction. In conceptualizing nature as a resource, they extend Lusatia's status as a resource periphery into the energy transition towards renewable. It is no longer coal, but Lusatia's space and (renatured) areas that are of interest and that have the potential of characterizing the region's relationship to external centers.

### **3.4. "A finely tuned Microcosm": Energy Cooperatives as Niches**

This reinforcement of Lusatia's role as resource periphery is, however, contested on the local level through bottom-up practices. Opposed to these mentioned aversions towards renewable energies, there are examples of their fruitful realization on a small-scale local level. For example, an energy cooperative has grown out of the "Perspektive Boxberg" initiative to benefit citizens locally. In the nearby small town Weißkeißel, 120 out of 1223 locals joined the local energy cooperative upon its foundation (Larbig 2023). In their orientation towards energy

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<sup>6</sup> To which I count the LEAG.

cooperatives, Lusatian citizens are employing ideas of energy democracy. As a growing social movement, supporters of energy democracy have highlighted the social and institutional dimensions of often technologically understood energy transitions (Burke and Stephens 2017, 35). By reconceptualizing energy as a public good, energy democracy is instead seen as a question of social justice (Bloem, Swilling, and Koranteng 2021, 2). The wish for local cooperatives resonates with what Thombs frames as democratic energy decentralism in his central conceptualization: The democratization of societal institutions in which “the energy system is operated at decentralized levels [...] comprising of distributed generation, storage, and grid technologies, closely connecting production to consumption” (Thombs 2019, 162).

Energy cooperatives have long been seen as a form of niche counteracting the energy regime (Proka, Loorbach, and Hisschemöller 2018; Hargreaves et al. 2013). As small-scale, locally controlled projects of renewable energy creation, they escape the logics of the energy regime and are a vehicle for local actors’ agency within the transition process. In questioning the energy regime that is responsible for Lusatia’s resource periphery status, energy cooperatives can be seen as a tool to question this core-periphery dynamic by detaching the local from external influences and increasing local independence. Such efforts are not necessarily organized: They constitute “messy, informal transition politics” (Scrase and Smith 2009, 724). Grown path dependencies within the Lusatian resource periphery and the national dependence on energy however meant that such contestation remains limited. Energy production is so closely connected to the region that its future is automatically conceptualized as an energy region, which strategically invites investment into this sector. Since the region is supposed to generate energy far beyond its own consumption, decentral energy creation is likely to only cancel out the local demand. Larger players within the existing energy regime have far better access to resources and can thereby cater to the national market on a larger scale. This large-scale production of energy is not necessarily bad. Studies show the added value that the

energy transition can bring to Lusatia in terms of tax-income, employment and profits (Bode, Salecki, and Hirschl 2024, 79 f.).

Within a Just Transition discourse, the question could nonetheless be: Is the large-scale production of renewable energy in Lusatia by financially powerful, often external actors just? Arguably, monopolistic energy regimes in which production capacities are held by few will necessarily financially benefit the few over the many. While it has been held that democracy is not automatically just (Droubi, Heffron, and McCauley 2022, 2), Thombs has convincingly argued that it is a prerequisite for just energy systems – be it in a centralized or decentralized manner (Thombs 2019, 166). Only when energy systems offer possibilities for participation can energy production occur in concordance with local interests. The large-scale production of energy through photovoltaics or wind turbines could then be an active choice, for which the concerned citizens or municipalities would be more directly benefitted, e.g. as co-owners, rather than through the indirect contributions private actors pay through taxes. Self-determined approaches to energy production could question Lusatia's status as an energy periphery by turning it from an exploited region to one that uses its resources according to its own priorities. Notably, such visions of energy decentralization mirror the image conveyed in the first room of the Knappenrode energy factory exhibition. "Every village", one of the plaques said, "was a finely tuned microcosm [...]. Many villages only produced a little more than necessary for sustenance."

In my fieldwork, I therefore encountered energy cooperatives as accessible actions of de-peripheralization. While my respondents saw grown injustices in the continuing energy regime, and therefore in the realization of the Green Transition, energy cooperatives provided a pathway to foster independence and build local capacities. They will not significantly impact the existing energy regimes, but they provide niches in which citizens can assemble and practice de-peripheralization. Upon seeing continuities within the existing unjust energy regime, I hold



that a Just Transition must not just deal with the effects of the Green Transition on local communities but must aim to improve the Justness of the Green Transition in general.

## Conclusion

On a Monday in March 2024, Boxberg's Mayor and I made our way to Berlin. Leaving Boxberg by car, we crossed the headwaters of the Spree River and took the train from Schleife, following the Spree downstream over Cottbus to Berlin. Upon exiting the Berlin Main Station, we passed the river on a bridge and walked up towards the Paul-Löbe Haus. Nestled in a curve of the Spree, the Paul-Löbe Haus is the administrative heart of the German parliament. Together with six other mayors from the so-called "core affected" Lusatian municipalities, Boxberg's Mayor had followed the invitation by the Social Democratic Party of Germany (SPD) to discuss matters of *Strukturwandel*. The first point of the agenda: The urgent need to develop a concept for the projected lack of water after the closure of the coal mines. Since Lusatian groundwater has been pumped into the Spree since the beginning of the coal industry in the late 19<sup>th</sup> century to keep the mining area dry, it constitutes a significant part of the river's volume. The representative of the Water Cluster Lusatia Association called upon the politicians to take urgent measures: When the Lusatian groundwater would no longer be artificially led into the Spree, the river was bound to lose half of its volume, in warm summers up to 75%. The coal phase-out would render the Spree a stream rather than a river and put water security in Berlin at risk.

This question of the future of water and its implications for Lusatia is an extension of the themes I discussed in this thesis. It is similarly anchored in the specific Lusatian circumstances and path dependencies that have emerged as peripheralization processes between urban cores and the Lusatian coal region. Having analyzed how these local circumstances affect the implementation of the Just Transition, I argue for the importance of grounding Just Transition research and measures more explicitly in local contexts. The potentials and limits of the Just Transition, I have observed throughout this thesis, are intertwined peripheralization

experiences that shape how Just Transition measures are understood, evaluated, and affect the concerned communities.

In the first chapter, I show how Lusatian actors perceive the ongoing transition on a wider temporal and multi-issue scale that shapes their hopes and expectations of what Just Transition measures should achieve. Their local understanding of *Strukturwandel* is fueled by a history of peripheralization on an economic, political, and communicative level and clashes with national perceptions of *Strukturwandel* as mere economic development. National Just Transition measures therefore only respond to a part of what local perceive to be transition needs.

On the basis of this observation, I hold that local municipal actors constantly reevaluate the Just Transition measures based on their own personal experiences. While the German Investment Act for Coal Regions (InvKG) as a Just Transition measure is meant to enhance local capability, my ethnographic observations in the Boxberg municipality have shown that its procedures contribute to frequent experiences of incapability. The law's funding logics within the multi-level administrative system render municipalities subject to decisions made on higher levels. They thereby mirror sentiments of political powerlessness that perpetuate actors' pre-existing peripheralization experiences. I argue that Just Transition thought does not adequately acknowledge such local subjectivities, even though they ultimately shape whether and how transition measures are implemented.

Finally, I look beyond the InvKG as a concrete Just Transition measure to evaluate how the Green Transition in Lusatia is affected by grown path dependencies within the energy sector. Based on local narratives, I describe Lusatia as a resource periphery whose development has long been intertwined with urban cores that relied on the region's resources. Utilizing a multi-level perspective, I argue that these dynamics have led to the emergence of an energy

regime of technocratic energy centralism with the LEAG as the Lusatian key actor. Since Lusatia is envisioned to serve as an energy region in the future, I observe the continuation of this energy regime that operates with a monopolistic rather than democratic nature. In doing so, it continues to perpetuate patterns of peripheralization that leave local actors with little decision-making power over how their region will be used for energy production in the future. Local actors thus argue for more democratic energy systems and put this vision into practice through energy cooperatives – Niches of counteraction against the overarching energy regime. Energy cooperatives thus offer a tool with which citizens can take actions of de-peripheralization and foster independence. This chapter therefore shows how questions of justice within the Green Transition go beyond the narrower distribution of supporting measures. It invites to ask bigger questions about the justness of the Green Transition.

Such bigger questions become apparent in the water issue that we encountered in Berlin. The shadow of the coal industry looms large: Similarly to how Berlin has developed through resources provided in Lusatia, the abundant availability of water as a by-product of mining activity shaped the development of the city (Uhlmann et al. 2023, 24). The extent of these invisible path dependencies will become visible once the pumps are stopped in Lusatia. The Coal Commission had already held that “[b]inding regulations must be put in place to ensure that water management, particularly for the Spree, is secured in the event of an early phase-out of lignite mining. The Spree must be prevented from running dry at all costs, also with regard to tourism in the Spreewald” (Kommission WSB 2019, 72). But by whom? Based on the peripheralization experiences Lusatian actors have made, they suspect that the cost might fall to them. In the discussion in the Paul-Löbe Haus, one mayor reacted with frustration: “We’re getting one hit after the other. We’re solving the issues of the Spreewald and Berlin, and then our people have the problems.”

And indeed, most solutions for the water shortage involve the use of Lusatian lakes as reservoirs to hold water for the hot summer months (Uhlmann et al. 2023, 128). The NGO “Water Cluster Lusatia” believes that both the rehabilitation of the Lusatian water balance and a secure water supply of Berlin and the Spreewald are not possible (Arnold 2022, 25). However, key actors in Lusatia have held that water will be key to the region’s successful future. Water is necessary to stabilize the post-mining landscape through vast lakes, which in turn majorly shape the region’s tourism industry. Additionally, Lusatian municipalities and industry actors plan on attracting and expanding water-intensive industries (Uhlmann et al. 2023, 198). Lusatian industries thus stand in direct competition for water with the industries in Berlin and Brandenburg. In the face of this challenge, experiences of peripheralization immediately influence how local actors understand and narrate this extension of the coal phase-out. In Boxberg, where the Bärwalde lake is listed as a reservoir and could be used to store water for the Spree, the Mayor held: “Water is important. We would also like to have a hydrogen power plant close by, and one needs water for that. So then we’re wondering: Why should we give it away? Or should I say: Gift it?”

The water question extends Lusatia’s status as a resource periphery by forging new dependencies and power relations. Even when Just Transition measures achieve the nationally desired positive economic effects, local actors fear that those will be rendered irrelevant should Lusatia not have adequate access to and control over the water in its region. Based on the local understandings of *Strukturwandel* as de-peripheralization, the Saxon State Minister for Energy, Climate Protection, Environment and Agriculture Wolfram Günther held that the “economy needs water. In Lusatia, the success of *Strukturwandel* depends on it.” (BMUV 2024)

The water issue thereby symbolizes the core argument of my thesis: The Just Transition needs to be evaluated considering local circumstances that affect how it will play out in practice. Where local life is shaped by peripheralization, the understanding, implementation, and

ultimately success of Just Transition measures will thus depend on these pre-existing circumstances and path dependencies. For Lusatia, this means that the future of the region will be decided in relation to decisions made in the centers, especially Berlin. Considering this it is fitting that the play from my opening Vignette (Nolte and Recherchepraxis 2021) ended with the Berlin choir looking at the Lusatian boat floating off into the distance, while the Berlin choir sang:

*Łužyca! You visionary emptiness*

*Łužyca! Oh, how I yearn for you,*

*Łužyca! I lose myself in counting the scars on your skin*

*My beautiful naked bride.*

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## **Legal Texts**

### **European Union Legal Texts**

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### **German Legal Texts**

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### **Saxon Legal Texts**

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