SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2025
ORGANIZATION AND MANAGEMENT SERIES NO. 223

MANAGING ENERGY TRANSITIONS THROUGH PLACE-BASED GOVERNANCE FRAMEWORKS. A CASE STUDY OF THE SILESIA REGION

Olga JANIKOWSKA

Mineral and Energy Economy Research Institute of the Polish Academy of Sciences, Cracow;
olgajan@min-pan.krakow.pl, ORCID: 0000-0002-9920-9511

Purpose: This article examines the place-based governance as a tool for the energy transformation management.
Design/methodology/approach: This research adopts a qualitative, case study methodology, grounded in the principles of place-based governance analysis. The study integrates two main research methods: desk-based literature and policy review and focus group research.
Findings: The paper highlights that the energy transition is a complex, multidimensional process involving not only technological innovation but also deep social, economic, and political change. Central to this process is the energy trilemma—balancing energy security, affordability, and environmental sustainability. Successful transformation requires territorially-sensitive and adaptive governance. Top-down strategies, while useful for setting goals, often fail in practice. In response, place-based governance is emerging as a key approach. A focus group conducted in the Silesia region provided insights into local perceptions and stakeholder engagement. The paper concludes with recommendations for more effective and inclusive management of the energy transition.
Originality/value: This paper offers a novel perspective on the energy trilemma by foregrounding the importance of territorially-sensitive, place-based governance mechanisms in managing the inherent tensions between energy security, affordability, and environmental sustainability. Drawing on empirical findings from a focus group study conducted in the Silesia region, the paper provides original insights into stakeholder engagement and governance practices, thereby enriching the discourse on just transition. The study's context-specific recommendations enhance its practical relevance and offer valuable guidance for the design and implementation of inclusive energy transition policies.
Keywords: Energy Transition, Management, Governance, Transition Governance Models, Place-Based Governance.
Category of the paper: research paper.

1. Introduction

Energy system transformation constitutes a fundamental challenge for the years ahead, carrying profound implications for environmental sustainability, technological innovation, and policy development. With the EU's commitment to reducing carbon emissions and increasing the use of renewable energy, the transformation of energy systems has become central to achieving climate neutrality and energy security. By its very nature, the energy transformation is a complex, structural, and long-term process. It entails far more than a shift in technologies—it requires a fundamental rethinking of how energy is produced, distributed, and consumed (McGovern, 2021). This transition affects not only infrastructure and markets but also social behaviour, institutional frameworks, and political decision-making. Implementing such a transformation demands sustained effort and coordination at all levels—local, national, and international.

The shift to renewables—such as wind, solar, and bioenergy—requires not only new technologies but also new governance models and public engagement strategies. Energy transformation touches on multiple interconnected domains: energy infrastructure, climate and environmental policy, macroeconomic planning, public administration, and societal values. It requires strong intersectoral collaboration and coherent policy-making, as well as a long-term strategic vision that is both adaptive and inclusive. A transition to a low-carbon economy cannot be accomplished without public support and social acceptance (EC, 2023). Citizens must be given the opportunity to adjust—whether by adopting more sustainable lifestyles, acquiring new job skills in green industries, or adapting to regulatory and financial changes. According to the International Energy Agency (IEA), the transition could create over 13 million new jobs globally by 2030, but it could also displace millions of workers in high-emission sectors, highlighting the need for just transition strategies. Innovation is a cornerstone of the energy transition—not only in terms of technology (e.g., renewable energy systems, smart grids, hydrogen storage), but also in social organization and institutional resilience. Governments must create enabling environments for innovation and ensure that institutions remain flexible enough to respond to dynamic global developments, including supply chain disruptions and geopolitical tensions. Moreover, the ecological integrity of the transition must be carefully managed. Not all “green” technologies are environmentally neutral—for example, the production of batteries and photovoltaic panels often involves the extraction of rare earth elements and other strategic raw materials. This raises important concerns regarding resource dependency, geopolitical risks, and environmental justice, particularly in regions where mining conditions are exploitative or environmentally damaging.

In this context, effective governance of the energy transformation becomes not only a technical or economic imperative, but a strategic responsibility. Successful energy transitions require clear targets, measurable progress indicators, robust implementation tools, and support

mechanisms for vulnerable communities and industries. Transparency, public participation, and science-based decision-making must be central to this process. Only through a coherent, inclusive, and forward-looking approach can countries navigate the energy transformation in a way that ensures long-term sustainability, security, and social equity. The aim of this paper is to explore how place-based governance frameworks can effectively support energy transitions. The paper emphasizes the importance of integrating innovation, public participation, and institutional coordination in managing complex energy transformations at the regional level, aligning local efforts with broader EU climate and energy objectives.

2. Materials and methods

This research adopts a qualitative, case study methodology, grounded in the principles of place-based governance analysis. The chosen unit of analysis is the Silesia region of Poland—one of the most emblematic territories undergoing just energy transition in Central and Eastern Europe. The methodological framework is rooted in interpretive policy analysis, emphasizing the socio-institutional context of energy transition, stakeholder engagement, and regional governance dynamics. The study integrates two main research methods:

2.1. Desk-Based Literature and Policy Review

An extensive review of scholarly literature, policy documents, and EU strategic frameworks (e.g., the European Green Deal, Just Transition Mechanism, Territorial Just Transition Plans) was conducted. The purpose was to situate the energy transition within the broader context of European governance, and to identify conceptual foundations—such as the energy trilemma and polycentric governance—that inform place-sensitive policymaking.

2.2. Focus Group Research

To capture local perspectives and contextualized insights, a focus group was conducted in the Silesia region. The session was designed to assess stakeholder experiences and perceptions regarding the inclusiveness, transparency, and effectiveness of just transition governance. The method was particularly useful for uncovering power dynamics, institutional barriers, and local innovations. Participants were selected using purposive sampling, ensuring representation from key sectors: local government, academia, business, trade unions, and civil society organizations. The focus group was guided by four core questions designed to explore:

- Key elements of just transition governance.
- Challenges in engaging quadruple helix actors (policy, business, academia, and society).
- Measures to enhance local participation, and
- Strategies for embedding the place-based approach.

A case study approach was selected to enable in-depth, context-sensitive exploration of energy transition governance in a specific high-impact region. Silesia, due to its coal-dependent economy, social vulnerability, and strategic relevance in EU funding mechanisms, provides a critical lens through which to analyse the operationalization of place-based frameworks. The methodological triangulation—combining document analysis and stakeholder engagement—strengthens the validity of findings by capturing both normative frameworks and lived experiences.

3. Balancing the Energy Trilemma: Rethinking Governance for a Sustainable Transition

The energy transition represents a complex and multidimensional transformation that extends far beyond technological innovation, encompassing profound social, economic, and political change (Żuk 2023). At the core of this transformation lies the concept of the energy trilemma—a framework that articulates the inherent tensions between three fundamental and interdependent goals: energy security, economic affordability, and environmental sustainability (Tol, 2023). These pillars are central to the design and governance of contemporary energy systems, and achieving a balance among them remains one of the most critical challenges facing both national governments and international institutions. Environmental sustainability, as a guiding principle of the energy transition, involves systematic efforts to mitigate climate change by reducing greenhouse gas emissions, promoting energy efficiency, increasing the share of renewables in the energy mix, and protecting ecological systems (WEC, 2019). Within the European Union, these goals are reflected in the commitment to achieve climate neutrality by 2050, with interim targets such as a 55% reduction in emissions by 2030 relative to 1990 levels. In 2022, renewables accounted for approximately 23% of the EU's gross final energy consumption, with solar and wind energy growing at record rates (Eurostat, 2023). However, further decarbonization requires significant investment and long-term structural reforms. Energy security, the second dimension of the trilemma, refers to the availability of reliable and uninterrupted energy supply, resilience to disruptions—whether geopolitical, technological, or environmental—and strategic autonomy in energy sourcing (Kolde, Wagner 2021). The war in Ukraine has underscored the vulnerabilities of energy dependence on fossil fuel imports, particularly natural gas. In response, the European Commission's REPowerEU plan aims to reduce EU demand for Russian gas by two-thirds and accelerate the deployment of clean energy technologies (Schmieder et al., 2024). Moreover, ensuring energy security in the long term necessitates investments in grid infrastructure, energy storage, and supply chain diversification, particularly for critical raw materials. Affordability, the third pillar, concerns equitable access to energy at prices that are economically sustainable for households and businesses.

This dimension is especially important in light of growing energy poverty, which affects an estimated 35 million Europeans unable to keep their homes adequately warm (European Commission, 2022). The transition toward cleaner energy systems entails significant capital costs, which may lead to increased retail energy prices, particularly in the short to medium term. Without appropriate social policy instruments, these costs risk exacerbating inequality and undermining public support for decarbonization measures. What makes the energy trilemma particularly challenging is the tension and trade-offs between its constituent goals. For instance, advancing environmental objectives through investment in renewable energy technologies—such as photovoltaics, offshore wind farms, battery storage, and electric mobility—often requires substantial upfront expenditure (Daniel, Radu, 2024). These costs are frequently passed on to consumers, raising concerns about affordability and social equity. Likewise, strategies to enhance energy security, including domestic resource development and infrastructure expansion, may involve environmental degradation, particularly where the extraction of critical raw materials (e.g., lithium, cobalt, rare earth elements) leads to deforestation, water contamination, or biodiversity loss. Furthermore, ensuring the resilience and modernization of energy systems requires substantial capital investment in grid upgrades, digital infrastructure, and strategic reserves, which can strain public budgets and result in higher end-user costs, potentially triggering public resistance and political backlash (Kolde, Wagner, 2021). Navigating these competing priorities demands a coherent and integrative policy approach. Rather than privileging one objective at the expense of the others, policymakers must seek dynamic synergies and co-benefits (Barnes et al., 2024). This includes designing regulatory frameworks that incentivize low-carbon technologies while maintaining affordability; implementing progressive social policies that protect vulnerable populations from energy shocks; and fostering international cooperation to ensure stable access to sustainable energy and raw materials. At the same time, public engagement and participatory governance are essential to ensuring that the energy transition is both socially just and politically legitimate.

Energy trilemma underscores the need for a systems-based, long-term vision of energy policy that reconciles environmental imperatives with the practical realities of economic and geopolitical constraints. The success of the global energy transition will depend not only on technological progress, but also on institutional innovation, social inclusiveness, and multilateral coordination. Addressing the energy trilemma—the simultaneous pursuit of energy security, economic affordability, and environmental sustainability—has emerged as one of the most critical challenges in contemporary energy governance (Topaloglou et al., 2024). This complex and multidimensional issue requires a holistic and interdisciplinary approach that integrates technological advancement, socially equitable policy frameworks, and robust international cooperation. At the core of the energy transition lies the imperative for technological innovation. The rapid development and deployment of advanced energy storage solutions, including high-capacity battery systems and hydrogen-based technologies, are essential for managing the intermittency of renewable energy sources. These technologies

enable greater grid flexibility and reliability, supporting the integration of solar, wind, and other renewables into national energy systems. Equally important are smart grid infrastructures, which facilitate real-time, two-way communication between producers and consumers, enhance demand-side management, and optimize the balance between supply and demand. Emerging applications of artificial intelligence (AI) further contribute to system efficiency by enabling predictive maintenance, consumption forecasting, and dynamic optimization of energy flows. Collectively, these technological developments not only increase energy efficiency but also underpin the structural transformation of energy systems toward decarbonization. Nevertheless, the energy transition is not solely a technical undertaking. It is also a profoundly social and political process that demands inclusive and just policy design. Ensuring a fair transition involves implementing mechanisms that protect and support vulnerable populations and regions most affected by decarbonization (De Laurentis et al., 2021). These may include targeted subsidies and tax incentives for households investing in renewable energy installations, financial instruments that promote prosumer engagement, and retraining programs for workers displaced from carbon-intensive sectors such as coal mining and heavy industry (Inderberg et al., 2023). Moreover, energy poverty—still prevalent in many regions—must be addressed through comprehensive strategies encompassing building retrofitting, direct financial assistance, and public education initiatives aimed at increasing energy literacy and civic engagement. Crucially, fostering participatory governance—through meaningful public involvement in planning and decision-making processes—enhances both the democratic legitimacy and the long-term resilience of the transition (Macedo, 2021). International cooperation constitutes a third and indispensable pillar of a successful energy transformation. At the European level, this entails policy harmonization among Member States, the consolidation of an integrated energy market, and the coordinated implementation of climate targets in line with the European Green Deal and the Fit for 55 package (Westrom, 2020). Globally, it involves collaborative efforts to ensure secure and sustainable access to critical raw materials—such as lithium, cobalt, and nickel—that are essential for the manufacturing of batteries, photovoltaics, and other clean energy technologies. Strengthening international supply chains, investing in joint research and development programs, and expanding cross-border infrastructure are all fundamental to enhancing the resilience and scalability of clean energy systems (Kelly, 2024).

The energy trilemma thus highlights the necessity of adopting a systemic and long-term approach to energy policy—one that reconciles environmental imperatives with the practical realities of economic and geopolitical constraints. The success of the global energy transition will depend not only on technological progress but also on institutional innovation, social inclusiveness, and effective international coordination. (Oldenbroek et al., 2024). Moreover, resolving this trilemma requires efficient and multi-level governance of the energy transition—at local, national, and global scales. This involves not only the creation of legal and financial frameworks to support the transformation, but also continuous monitoring of progress,

the ability to respond to unforeseen challenges, and the alignment of sectoral policies (Hofman et al., 2021). Only through well-planned, adaptive, and coherent management will it be possible to balance the goals of the energy trilemma and achieve a fair, secure, and sustainable energy future.

4. Place-Based Governance as a Response to the Challenges of the Energy Transition Trilemma

Amid the intensifying climate crisis and the global imperative to reduce greenhouse gas emissions, the energy transition has emerged as one of the defining policy challenges of the 21st century. Achieving this requires not only technological advancement but also adaptive, territorially-sensitive governance mechanisms capable of managing the complexities and disparities inherent in the transition process. Centrally designed, top-down energy transition strategies—although efficient in setting overarching goals—often fall short at the implementation stage (Fischer et al., 2020). These shortcomings frequently manifest as regional disparities, limited policy effectiveness, and a lack of public acceptance, particularly in communities historically reliant on fossil fuel-based industries. In this context, the relevance of place-based governance is gaining momentum. This approach emphasizes the importance of tailoring policy interventions to the specific socio-economic, environmental, and institutional contexts of individual regions (Dobravec et al., 2021) Place-based governance is defined as a territorially embedded model of policy design and implementation, which engages local actors and mobilizes regional assets to co-produce context-sensitive solutions (Hendriks, 2008). It represents a paradigm shift away from universal, standardized policy approaches toward flexible, participatory, and place-sensitive governance (Soutaret et al., 2022). Key elements of this approach include the integration of local knowledge, responsiveness to spatial disparities, and the co-creation of transition pathways by engaging a broad array of stakeholders—ranging from municipalities and civil society to businesses and local energy cooperatives (Fujiwara, 2016).

A critical strength of place-based governance lies in its capacity to operationalize the energy transition within the realities of local conditions. This includes accounting for variations in energy potential (e.g., solar radiation, wind patterns, biomass availability), labor market characteristics, economic vulnerability, and social capital (Bedford et al., 2023). For example, while solar deployment may be more viable in southern European regions, wind power may be more feasible in coastal and northern areas. Moreover, former coal regions often require targeted interventions due to the cumulative effects of industrial decline, structural unemployment, and environmental degradation. Initiatives such as citizen assemblies, energy communities, and participatory budgeting further reinforce local legitimacy and reduce

resistance to change by fostering a sense of ownership over the transition process. To implement these principles, place-based governance relies on a diverse set of tools and instruments that enable localized action (Lennon et al., 2019). One such tool is the Territorial Just Transition Plan, mandated by the European Commission as a prerequisite for access to the Just Transition Fund. These plans require a detailed mapping of regional challenges and opportunities, including socio-economic indicators, environmental risks, and labour market data (Kelly, Mbah, 2024). Another key instrument is the creation of energy cooperatives and community energy schemes, which allow citizens to participate directly in the generation and governance of local energy systems (Anfinson et al., 2023). These models democratize access to energy, promote prosumer engagement, and strengthen social cohesion.

Further tools include local climate and energy action plans (SECAPs) developed under the EU Covenant of Mayors framework, which guide municipalities in setting decarbonization targets and mobilizing local investment. Spatial planning and zoning tools are also vital, as they determine land use priorities and enable the integration of renewable infrastructure into existing urban and rural landscapes (Kola-Bezka, 2023). Additionally, place-based innovation platforms—such as living labs and regional innovation hubs—facilitate experimentation, knowledge exchange, and stakeholder learning (Macedo, 2021). These mechanisms not only align technological pathways with community needs but also enhance the adaptive capacity of local institutions. From a theoretical standpoint, place-based governance is grounded in the fields of regional development and spatial planning. It recognizes that the effectiveness of public policy increases when it is embedded in local contexts, informed by regional specificities, and supported by decentralized institutional arrangements. It also aligns with the broader principle of multi-level governance in the European Union, which encourages coordination and subsidiarity across different layers of government. The need for territorially differentiated approaches is especially acute when viewed through the lens of the energy trilemma — the simultaneous pursuit of three interdependent but often competing objectives: environmental sustainability, energy security, and affordability (Schmieder et al., 2023). Balancing these goals requires trade-offs that are best negotiated at the local level, where the tensions are most immediately experienced (Segales et al., 2023). For example, while renewable energy deployment contributes to decarbonization, it may lead to increased costs in the short term, disproportionately affecting vulnerable households. Similarly, investments in energy security—such as grid resilience or domestic resource development—can trigger environmental concerns, particularly in resource-sensitive areas. Place-based governance offers a mechanism for managing these trade-offs in a context-sensitive, democratically legitimate, and socially just manner. The European Union has increasingly embraced place-based approaches in its climate and energy frameworks, particularly through instruments such as the Just Transition Mechanism (JTM) and the Just Transition Fund (JTF). These mechanisms allocate targeted funding to regions most affected by the low-carbon transition, with a focus on economic diversification, workforce retraining, and environmental remediation. The JTF,

with a budget of €17.5 billion for the 2021-2027 period, explicitly requires the development of Territorial Just Transition Plans, which integrate local governance structures and prioritize inclusiveness, transparency, and stakeholder engagement.

In this context, the European Commission has identified six core principles of good governance—transparency, participation, rule of law, equality and inclusiveness, efficiency, and accountability—as critical benchmarks for the success of regional energy transitions. Embedding these principles into policy implementation fosters not only procedural legitimacy but also policy effectiveness, by aligning climate action with cohesion policy and local development agendas (Young et al., 2023). The energy transition cannot be effectively delivered through technological and economic instruments alone. It requires a paradigm shift in governance—toward models that are participatory, adaptive, and sensitive to regional specificities. Place-based governance offers a strategic pathway to reconcile the goals of the energy trilemma by linking climate objectives with the needs, capacities, and aspirations of local communities (Jenkins, 2018). Through the use of tailored tools such as territorial transition planning, citizen engagement mechanisms, and spatial integration instruments, it enhances the resilience, equity, and long-term viability of the energy transition at both national and supranational levels. The European Union (EU) has developed several policy frameworks that emphasize place-based governance as a tool for facilitating the energy transition. Key documents and initiatives include:

Table 1.
EU Policy Documents and Initiatives Supporting Place-Based Governance in the Energy Transition

Title	Description	Institution/Source
Issue Paper on Place-Based Policies and Development Strategies	Highlights the importance of complementing national policies with place-based approaches. Promotes participatory methods in cohesion policy.	European Commission (2023)
ESPON – CleanEnergy4CE Project	Analyzes energy transition policy suitability across territorial levels in Central Europe. Emphasizes place-based acceleration toward climate neutrality.	ESPON (2022)
Covenant of Mayors	Supports sustainable energy policies at local level through cooperation among local and regional authorities. Aligns with EU energy goals.	European Commission (n.d.)
European Green Deal and Just Transition Mechanism	Strategic EU roadmap for climate neutrality by 2050. Just Transition Mechanism provides regional financial and technical support, tailored to local needs.	European Commission (2019, 2020)

Source: Own study.

5. Focus Group Research in Silesia Region

To support research on just transition governance and stakeholder engagement in the Silesia region, a focus group study was conducted as part of the broader investigation into the implementation of place-based approaches in energy transition policy. Focus groups represent a well-established qualitative research method in the social sciences, particularly well-suited for examining complex socio-political phenomena such as energy transition. They facilitate interactive discourse, enabling the capture of diverse perspectives, collective reasoning, and the socio-cultural meanings underlying stakeholder attitudes and behaviors. This method is especially relevant in the context of transition governance, where understanding local perceptions, expectations, and grievances is critical to designing inclusive and context-sensitive policy frameworks. Focus groups allow researchers to elicit a range of opinions without seeking consensus, instead fostering a dynamic environment where contradictions and convergences can surface (Hennink et al., 2011). This aligns with the core principles of participatory and place-based governance, which emphasize the value of local knowledge, deliberative processes, and social learning in shaping transition pathways. The focus group conducted for this study aimed to deepen understanding of how regional actors in Silesia perceive the governance of the energy transition, particularly in light of ongoing criticisms of top-down planning and insufficient stakeholder involvement. The discussion was moderated to encourage reflection on institutional trust, perceived fairness, and the extent to which local voices influence strategic decisions. Moreover, the group setting enabled observation of discursive patterns, power asymmetries, and the dynamics of inter-stakeholder interaction—adding an additional layer to the qualitative analysis. Participants (six in total) were selected via stakeholder mapping to ensure institutional diversity and relevance to the regional energy context. The group included high- and mid-level administrative officials, academic experts in energy poverty and transition studies, and a trade union representative—reflecting the interplay between policy, science, and labor that is central to the Silesian case. The session was conducted online using the Webex platform and recorded for systematic transcription and thematic coding. By applying this methodological framework, the research contributes to a more granular and empirically grounded understanding of just transition governance in one of the EU's most affected regions. It provides insights not only into individual stakeholder perspectives but also into the collective processes through which local legitimacy, resistance, and co-governance potentials are constructed in practice.

The reason for conducting the focus group research in the Silesia region, was to gain a deeper understanding of stakeholder engagement in the context of just transition governance, particularly with respect to the place-based approach (Pietrzak et al., 2021). The aim was to explore how local actors perceive and experience the governance of the energy transition and to identify challenges and opportunities for making this process more inclusive, transparent,

and effective. The research was reason to a research hypothesis that top-down governance approaches were insufficient and often disconnected from regional realities (Mrozowska et al., 2021). Therefore, the focus group was designed to "shed some further light" on how local voices could be more effectively included in the shaping of transition policies.

The specific objectives included:

1. Assessing the degree to which local stakeholders are engaged in the just transition process.
2. Investigating the extent of embeddedness of place-based governance principles in the planning and implementation of the energy transition.
3. Understanding perceptions of the effectiveness, transparency, and fairness of transition-related decision-making structures.
4. Identifying barriers to participation for different stakeholder groups (e.g., civil society, academia, business).
5. Gathering practical recommendations on how to institutionalize a place-sensitive, participatory, and equitable governance model.

During the research the following questions has been asked questions of the focus group are as follows:

1. What do you think are the key elements that should characterize just transition governance?
2. What are the biggest challenges for a sufficient quadruple helix (policy, business, academia, society) engagement?
3. What measures could be taken for a more active participation of the key local actors in just transition decision making?
4. How place-based approach could be further embedded in just transition governance model?

The aim of the study was to confirm research hypothesis that top-down governance approaches were insufficient and often disconnected from regional situations and realities. Therefore, the focus group was designed to "shed some further light" on how local voices could be more effectively included in the shaping of transition policies. The Silesia region in Poland was selected for the focus group research because it is one of the most emblematic and affected regions undergoing the process of just transition in Central and Eastern Europe (Christiansen et al., 2022). Silesia has been historically cantered around coal mining, energy production, and heavy industry. As such, it is deeply impacted by the EU's climate policies and decarbonization efforts (Tarasova, 2024). The region's economic, social, and cultural identity is strongly tied to fossil fuel industries, making it a critical case for analysing the socio-economic effects of transition. Silesia is one of the largest beneficiaries of the EU Just Transition Fund (Struś et al., 2023). It has received substantial financial allocations to support the transformation of its economy, labor market, and energy systems (Włodarczyk, Herczakowska, 2025). This makes it a priority territory for studying how place-based

governance is being implemented in practice. The region has faced public criticism for the limited transparency, inclusivity, and effectiveness of its just transition planning processes. Earlier studies and fieldwork revealed issues with centralized decision-making, insufficient civil society involvement, and limited coordination across governance levels—making Silesia a rich context for focus group analysis (Kaczmarek et al., 2022). Given the high number of jobs at risk due to coal phase-out, as well as strong trade union activity and local resistance to change, Silesia presents a complex and dynamic environment. The social consequences of transition here are more intense than in many other EU regions, underscoring the importance of investigating how local voices are being represented and integrated into transition governance. Findings from Silesia can offer transferable lessons for other carbon-intensive regions in Europe and globally. As one of the EU's "flagship regions" for transition, Silesia serves as a test case for policies aiming to balance environmental objectives with social equity and economic resilience.

5. Summary of Focus Group Outcomes on Just Transition Governance in the Silesia Region (Poland)

5.1. Key Elements of Just Transition Governance

Focus group participants from the Silesia region emphasized that just transition governance must extend beyond narrow economic or technological restructuring. It should be anchored in democratic principles, social justice, and place-sensitive planning. Several key elements were identified:

- Transparency and Participation: Participants expressed frustration over limited access to transition-related information and policy processes. They emphasized the need for transparent governance mechanisms and meaningful inclusion of a wide range of stakeholders—including trade unions, local NGOs, municipalities, and community leaders—at every stage of the transition.
- Social Justice and Equity: The governance framework must ensure protection for vulnerable populations, especially workers in carbon-intensive sectors and economically disadvantaged groups. Participants stressed that social protection and compensation mechanisms must be central to transition planning.
- Context Sensitivity (Place-Based Orientation): Uniform, top-down approaches were widely criticized as disconnected from Silesia's historical, economic, and environmental realities. Respondents advocated for regionally tailored policies that reflect the specific needs and capacities of Silesian communities.

- Integrated and Long-Term Planning: Participants called for long-term, coherent strategies that align national policy goals with regional implementation. They emphasized the need for measurable targets and sustainable funding streams beyond short-term political cycles.
- Education and Workforce Development: Upskilling, reskilling, and broader access to vocational education were seen as essential. Participants underscored the importance of aligning educational programs with projected green sector job opportunities in the region.
- Economic Diversification: There was a strong demand for proactive support for new industries, innovation clusters, and small and medium-sized enterprises (SMEs) to ensure that the region is not left economically vulnerable.
- Monitoring and Accountability: Effective governance, according to the focus groups, requires robust oversight mechanisms, including independent monitoring bodies and stakeholder-led evaluation processes to ensure that transition promises are met.

These reflections show a shared understanding of governance not as a top-down administrative process, but as a locally grounded, participatory, and dynamic system that balances technical coordination with democratic legitimacy.

5.2. Challenges for Quadruple Helix Engagement (Policy, Business, Academia, Society)

In the Silesian context, participants discussed at length the difficulties of implementing the quadruple helix model framework which emphasizes collaboration between public authorities, private sector actors, academic institutions, and civil society.

- Dominance of Government and Business: Governance processes in the region are often led by political and industrial stakeholders, while academia and especially civil society have limited influence. This power imbalance was described as a significant obstacle to inclusive decision-making.
- Lack of Structured Dialogue: There is a clear absence of institutionalized platforms for sustained constructive dialogue among helix actors. Where such platforms exist, they often operate in an ad hoc or purely consultative capacity.
- Communication Barriers: Stakeholders were reported to operate in "separate languages." Businesses prioritize efficiency and return on investment, while civil society focuses on social justice, and academia values long-term research. These divergent priorities can hinder cooperation.
- Uneven Access to Resources: Civil society organizations and academic partners frequently lack the financial, technical, and organizational capacity to participate on equal footing.

- Limited Representation: Youth, women, and minority voices are notably underrepresented in governance structures. Participants pointed to the overrepresentation of older male stakeholders from business and government sectors.

These challenges reveal a governance environment that, despite rhetorical commitment to inclusion, still requires substantial structural reform to facilitate genuine, multi-stakeholder co-production.

5.3. Measures for Enhancing Participation of Local Actors

Participants proposed numerous practical measures to ensure that Silesian communities and local actors have a meaningful voice in just transition governance:

- Access to Clear and Timely Information: Regional authorities must ensure that relevant documents, funding calls, and decisions are easily accessible to the public, and translated into non-technical language when needed.
- Institutionalized Participation Mechanisms: Participants advocated for the creation of formal structures such as regional citizen assemblies, community working groups, and local energy forums, with actual influence on decision-making.
- Capacity-Building Programs: Technical training and workshops should be offered to equip civil society organizations and local leaders with the tools to participate effectively in planning and oversight.
- Collaborative Governance Agreements: Municipalities should formalize partnerships with NGOs, universities, and community organizations to co-create projects and monitor implementation.
- Incentive Structures: Grants, recognition programs, and co-funding schemes can serve as motivation for broader local engagement.
- Inclusive Governance Structures: Representation must be expanded to include marginalized voices and underrepresented groups, particularly women, youth, and long-term unemployed workers.
- Feedback Loops: Participants highlighted the need for feedback mechanisms, such as public reporting and community evaluation panels, to ensure that citizen input is acknowledged and acted upon.

Collectively, these measures aim to move beyond superficial consultation and establish a model of active co-governance, in which local actors co-shape both policy and practice.

5.4. Embedding the Place-Based Approach in Just Transition Governance

Participants noted that place-based principles remain underdeveloped in the current governance framework for Silesia. Despite the rhetoric of territorial sensitivity, much of the strategic planning is still formulated and administered centrally.

To meaningfully embed the place-based approach, participants proposed the following reforms:

- Decentralization of Governance Structures: The region should establish empowered Just Transition Committees with decision-making authority and budgetary autonomy, rather than relying solely on national-level approvals.
- Context-Specific Transition Plans: These plans should be based on territorial diagnostics, including social vulnerability indices, green infrastructure mapping, and labor market projections specific to Silesia.
- Territorial Monitoring and Evaluation Systems: Metrics should go beyond emission reductions to include social justice indicators, such as job quality, public health impacts, and the redistribution of transition benefits.
- Establishment of Regional Transition Support Hubs: These centers would offer technical support, advisory services, and access to funding instruments tailored to local actors and municipalities.
- Valuing Local Knowledge: Participants called for governance systems that actively integrate local expertise, including that of former miners, social workers, and community activists—whose understanding of the region's history and needs is often neglected.

These proposals reflect a consensus that a just transition cannot be centrally imposed, but must be locally negotiated, co-managed, and grounded in the lived experience of communities.

6. Conclusion

The energy transition, understood as a systemic transformation in production, distribution, and consumption of energy, requires complex interventions across multiple levels of governance. This article analyzes the concept of place-based governance as an effective approach to implementing a just energy transition. It highlights the necessity of incorporating local context, engaging communities, and ensuring institutional flexibility as key conditions for managing change in a manner consistent with social and environmental justice. Improving place-based governance in the context of energy transition requires a fundamental rethinking of public policy design and implementation. Contemporary research highlights the importance of moving beyond top-down, uniform frameworks by promoting governance models that are territorially differentiated, inclusive, and responsive to local conditions. In this regard, several key policy-oriented recommendations have emerged.

First, multi-scalar policy mixes are essential to ensuring coherence and complementarity across different levels of governance—from the EU and national authorities to regional and local administrations. These mixes should integrate climate, energy, and spatial development policies to reflect local realities and unlock synergies between sectors.

Second, polycentric governance—defined by the presence of multiple, overlapping centers of authority—enables more flexible and adaptive responses to the complex challenges of decarbonization. This model is particularly effective in fostering innovation, stakeholder engagement, and resilience within regional governance ecosystems. Third, coherent, long-term planning is required to navigate uncertainty and guide investment decisions in infrastructure, workforce development, and energy systems modernization. This entails the formulation of long-range transition roadmaps, aligned with the EU's climate targets for 2030 and 2050.

Fourth, integrating energy strategies with land-use planning is crucial, particularly in regions undergoing rapid spatial and infrastructural transformation. Coordinated planning helps avoid conflicts over land use, optimize the siting of renewable energy infrastructure, and ensure environmental and social safeguards. Finally, reforms to institutional and administrative structures are needed to improve coordination across scales and policy domains. This includes clarifying competencies, enhancing data-sharing mechanisms, and promoting intergovernmental cooperation.

Table 2
Energy transformation management framework

Institutional Design and Innovation	Stakeholder Engagement Strategies	Emerging Governance Models for Energy Transitions
The establishment of multi-level learning frameworks, enabling feedback and knowledge transfer between local, regional, and national actors.	Utilizing participatory decision-making processes based on co-designed tools.	Accelerator-based transition platforms, which facilitate rapid policy and technological deployment through innovation clusters.
The creation of formal structures for innovation, such as climate action councils, transition task forces, and regional energy agencies.	Building collaborative platforms that encourage local ownership of the transition process and foster long-term commitment	Just Transition frameworks and polycentric governance structures.
The promotion of collaborative arenas or integrative action situations, which facilitate joint problem-solving across policy sectors	Recognizing and supporting the role of intermediary actors, such as NGOs and knowledge brokers, in mediating conflicts and facilitating dialogue.	Co-transformation governance, where citizens, institutions, and businesses collaborate to jointly define and implement transition pathways.

Source: Own study.

These models collectively emphasize the need for governance systems that are flexible, socially embedded, and technically informed, balancing top-down strategic oversight with bottom-up community agency.

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