



Forging a Green Path: Poland's Coal Odyssey to Sustainable Horizons

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Contents

- 1 Introduction** **1**

- 2 Problem Definition** **2**
 - 2.1 The Green Deal Industrial Plan and the JTM 2
 - 2.2 Unjust Transition: The Misallocation of the Just Transition Fund 2

- 3 Case Study: Poland** **4**

- 4 US IRA Insights for EU's Green Transition** **6**

- 5 Policy Recommendations** **7**
 - 5.1 Transparency within the Implementation of the JTM 7
 - 5.2 A Strong Focus on Reskilling and Upskilling 7
 - 5.3 Inclusion of all Stakeholders Within the Regions: Private-Public Focus Groups 8

- 6 References** **9**

Abbreviations

CTL	Collaborative Transition Labs
EIQ	Education Innovation Quota
EU	European Union
GDIP	The Green Deal Industrial Plan
JTM	Just Transition Mechanism
JTF	Just Transition Fund
MS	Member States
NGO	Non-Governmental Organization
SMEs	Small and Medium-Sized Enterprises
US IRA	United States Inflation Reduction Act
TJTP	Territorial Just Transition Plan

Executive Summary

This policy paper addresses the challenges and opportunities within the European Union's Green Deal Industrial Plan (GDIP), with a focus on the implementation of the Just Transition Fund (JTF). Poland, being the main receiver of the JTF but still struggling to implement measures to facilitate the green transition successfully, will be used as a case study. With high coal reliance and challenges in financing the green transition evident in numerous European regions, akin to the situation in Poland, the recommendations outlined in this paper can first be implemented in Poland and then extended to other regions of the EU that struggle with meeting EU climate targets. These recommendations include improving transparency in the Just Transition Mechanism (JTM) implementation, emphasizing reskilling and upskilling within the JTF's framework, and fostering inclusive collaboration among all stakeholders in the transition process. By addressing these key challenges with targeted solutions, the policies aim to facilitate a more effective and equitable transition towards climate neutrality in European regions.

1 | Introduction

In the global pursuit for sustainable development, the European Union (EU) has been at the forefront of this endeavor. The Green Deal Industrial Plan (GDIP), presented in February 2023 by the European Commission (EC), aims to facilitate the transition towards climate neutrality and enhance the competitiveness of the EU's net-zero industry.[4] It builds upon the existing European Green Deal of 2019, which sets the goal of making Europe the first climate-neutral continent by 2050.[4] Its main objective is to provide a more supportive environment for the upscaling of Member States' (MS) manufacturing capacity of net-zero technologies, and help existing industries adapt to the EU's climate targets.[4] The United States' Inflation Reduction Act (US IRA) offers a parallel, but unique method to similar environmental challenges that EU policymakers can draw insights from when dealing with the transition from coal. Within this context, the Just Transition Fund (JTF) emerges as a critical component of the EU's strategy. Designed to facilitate a fair green transition across all Member States, the JTF, however, encounters distinct implementation challenges, highlighting the need for focused attention and tailored solutions.[5]

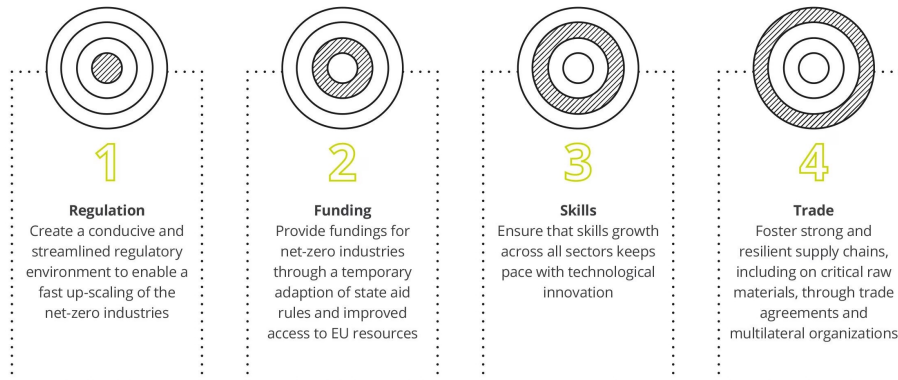
In addressing the Directorate-General for Regional and Urban Policy (DG-Regio), this paper offers concrete recommendations to improve the JTF's effectiveness, particularly in the most impacted regions. With a focus on Poland, the largest recipient of the JTF and highly coal-dependent, this brief proposes recommendations aimed to enhance the effectiveness of the JTF, crucial for meeting the EU climate goals. Additionally, comparative insights from the US IRA are drawn, exploring how its techniques for revitalizing former industrial regions could inform and improve the EU's Green Deal and Just Transition efforts.

This policy brief selects Poland as a pivotal case study; this choice is driven by the urgency to support Poland in its coal phase-out. A successful green transition in Poland has implications for the EU at large, given that Poland is the largest recipient of the JTF, but is far beyond EU climate and coal phase-out targets.[15] Poland's transition to a more sustainable future reflects broader issues within the EU, making it an appropriate focal point for understanding and tackling the complexities of a just transition. Investing in the improvement in terms of swiftness and efficacy of the JTM in Poland will positively spill-over to other EU recipients of the JTF and serve as an important precedent.



2 | Problem Definition

2.1 | The Green Deal Industrial Plan and the JTM



„A Green Deal Industrial Plan for the Net-Zero Age (GDIP)“

Source: European Commission

Figure 2.1: 4 Pillars of the Green Deal Industrial Plan [2]

The GDIP is integral to achieving the EU’s ambitious climate goals and is structured around 4 pillars, as shown in Figure 2.1. These include achieving a clear and straightforward regulatory framework, speeding up access to investment and financing for clean technologies, using a “skills-first” approach for the workforce transition [4], and advocating for open trade and a resilient supply chain. Each pillar serves its own role; from implementing the Net-Zero Industry Act and the Critical Raw Materials act, to developing free trade agreements, ensuring the fairness and competition of free trade, and the reskilling and upskilling of workers.

The Just Transition Mechanism (JTM) plays a pivotal role in furthering this objective. As an arm of the GDIP’s ambitions, the JTM specifically targets the regions and communities most impacted by the transition towards a greener economy. It is more than just a fund; it is a crucial part of the Sustainable European Investment Plan.[9] By providing specialized financial and policy support, the JTM strives to offset the socioeconomic challenges created by the fossil-fuel phase out. This targeted approach is critical and reflects the EU’s commitment in leaving no region behind in their journey towards climate neutrality.

2.2 | Unjust Transition: The Misallocation of the Just Transition Fund

Despite the JTM being a key element of the GDIP, there is a lack of targeted support and investment strategies specifically tailored to the socioeconomic realities of coal-dependent regions within the EU. The Just Transition Fund, the financial tool meant to support the diversification and reconversion of regions struggling to catch up with the green transition, is based on the four pillars of the GDIP. Countries, such as Poland, benefit strongly from the funds. However they are not necessarily allocated in an optimal way.[3] This is partly due to the mechanism which allows countries to independently decide on what policies to implement in their regions, through the Territorial Just Transition Plan.[11] Similarly, the EU only provides general guidelines to follow, setting global goals, which negatively impact coal-dependent regions that are not able to achieve them as quickly as others.



Indeed, the JTF faces many challenges including disparities between big companies and small and medium-sized enterprises (SMEs) in accessing these funds, uncertainty in sustainable job creation, delayed implementation and impact and insufficient scale of funding. The thin dispersion of the funds does not help the impacted countries to pursue urgent objectives within their regions. The gap in policy and support mechanisms for these regions hinders their ability to diversify economically, develop sustainable industries and ensure a just transition for their workforce. This creates a pressing need for additional, region-specific interventions that comprehensively address the economic, social, and environmental implications of moving away from coal dependency in an inclusive way.

3 | Case Study: Poland

As the major beneficiary of the JTF, Poland is confronted with a multifaceted challenge in aligning its coal-dependent economy with European Union (EU) climate policy targets. With experts estimating the Polish economy's heavy reliance on coal at an alarming 85% in 2023, the need for change is especially urgent.[7] However, the Polish government's plan to engage in coal mining until 2049, significantly exceeding EU climate goals, poses a significant obstacle in the green transition of the country. Moreover, the stipulation that no mines should be closed before the completion of Polish nuclear plants (anticipated by 2030) raises concerns about delayed transitions and environmental impact. Poland shares a striking similarity with other Eastern European nations such as Romania and Czechia, where coal remains a substantial component, contributing over 10% to electricity generation as of 2022, as highlighted by Ember's data.[8] Both countries receive a significant share of the JTF of €757 million and €1.5 billion respectively.[12] The high dependency on coal in these countries, coupled with the common challenge of limited budgets for promoting green transitions, underscores the applicability of the recommendations derived from the Polish case study to foster environmentally friendly transitions in the broader context of Eastern European nations.

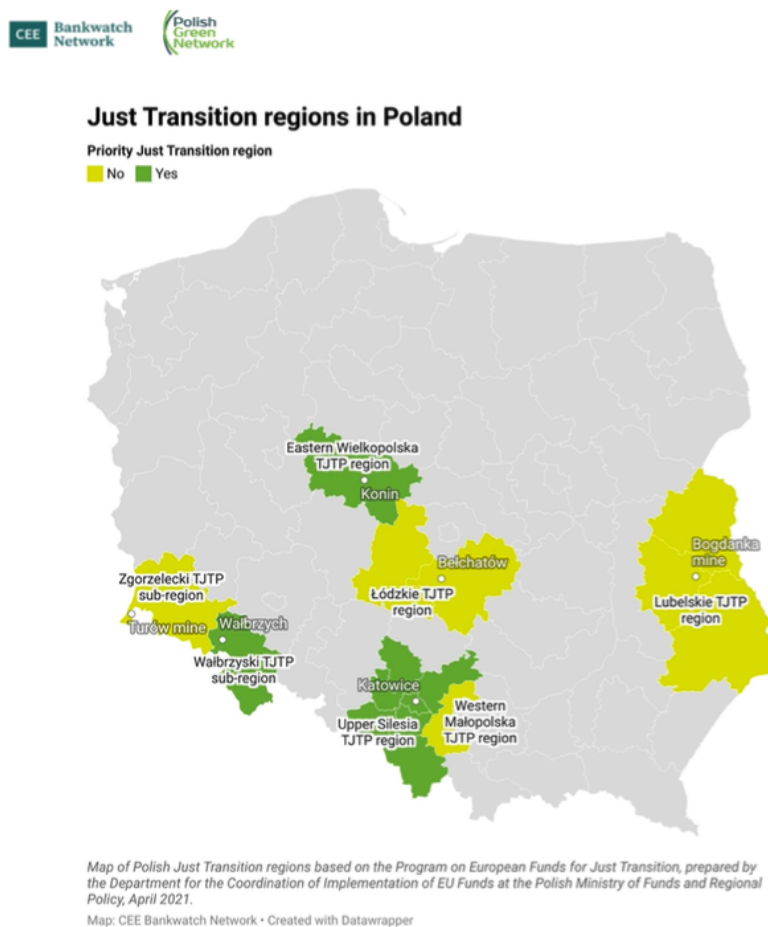


Figure 3.1: Just Transition Regions in Poland[1]

The importance of this challenge is apparent: between 2014 and 2020 the region of Silesia alone, a large coal mining region in Poland, benefited from over \$4 billion in funding from the European Union.[16] These funds played a crucial role in supporting investments in infrastructure, public services, job creation, and training. Consequently, they not only stimulated the growth of alternative sectors but also played a vital role in preventing Silesia from experiencing an economic slowdown.

In order to steer Poland towards a sustainable future, the JTM is indispensable. However, it faces considerable implementation challenges in Poland. First, the JTF displays signs of a disorderly and

improvised process, particularly in its initial phase. The guidelines, especially those regarding project submission criteria, are not clearly defined, creating challenges for stakeholders such as local government bodies and businesses in comprehending the specific requirements. Respondents to a survey conducted by Nowakowska et al. (2021) unanimously point to an atmosphere of misinformation surrounding the identification of key projects.^[10] The absence of clear guidelines not only fosters confusion but also risks suboptimal project selection, undermining the intended impact of the JTF.

Insufficient engagement of local interest groups in JTF-funded projects in Polish mining regions poses another significant challenge. Neglecting the perspectives of key stakeholders, such as local communities, workers, and environmental organizations, undermines the green transition's legitimacy and risks resistance among the population, evident in the negative public perception of the energy transition in Poland.^[13]

4 | US IRA Insights for EU’s Green Transition

The US Inflation Reduction Act (IRA), signed in August 2022, offers valuable lessons for the EU GDIP, particularly in reinventing former industrial regions into thriving innovation hubs. The IRA is a comprehensive key legislative package aimed at reducing inflation, primarily through significant investments in clean energy and climate change initiatives. Many coal dependent regions, like the Rust Belt, have experienced issues due to deindustrialization that resulted in major employment losses.[6] The transformation of cities such as Columbus, Ohio, and Pittsburgh, Pennsylvania, into dynamic centers for clean energy and advanced manufacturing, as seen in Table 4.1, is a testament to the IRA’s effectiveness. These cities have successfully leveraged the Act to attract substantial investment and generate new employment opportunities, setting a benchmark for how policy can drive economic and technological progress in historically industrial areas.

Table 4.1: U.S. IRA City Initiatives in Coal-Dependent Regions[14]

City	Description
Columbus, Ohio	The city’s partnership with Intel and the Ohio Semiconductor Collaboration Network exemplifies the success of aligning educational programs with industry needs, specifically in semiconductor manufacturing.
Pittsburgh, Pennsylvania	Pittsburgh’s transformation into a hub for robotics, biomanufacturing, and clean energy, supported by initiatives like the Build Back Better Regional Challenge grant, illustrates the potential of targeted government funding in stimulating regional innovation.
Baltimore, Maryland	Baltimore’s development in the offshore wind industry, propelled by new apprenticeship models and infrastructure projects like the Frederick Douglass Tunnel, showcases how infrastructure investment can catalyze industry growth.
Augusta, Georgia	Augusta’s focus on clean energy industries, including battery manufacturing, highlights the impact of private-sector investment in line with government sustainability goals.

For Poland, embarking on its green transition and coal-phase out, adopting strategies similar to the IRA - could be very beneficial. Given these findings, the recommendations for Poland take these approaches into account to improve workforce development, transparency within implementation of the JTF, and stakeholder inclusion. This approach ensures an effective, green transition in Poland.

5 | Policy Recommendations

5.1 | Transparency within the Implementation of the JTM

Improving communication regarding the implementation of the JTM in Poland requires a strategic and transparent approach. The goal is to enhance communication, reduce uncertainty, and improve public perception of the coal phase-out to ensure that the public is not suffering from misinformation on the topic.

1. Clear and Accessible Information and Transparency

- [a] Develop a comprehensive and easy-to-understand information package that explains the Just Transition Mechanism, the goals and importance of the green transition, and the specific plans for its implementation in Poland.
- [b] Establish a system for regular updates on the progress of JTM implementation to increase transparency.
- [c] Develop accessible feedback mechanisms, such as dedicated hotlines, email addresses, or online forums, where the public can ask questions, express concerns, and provide input.

2. Use Diverse Communication Channels to Reach all the Population

- [a] Use a combination of communication channels such as traditional media, social media, official websites, and community newsletters to reach different demographic groups.
- [b] Create visually appealing materials, including infographics, charts, and maps, to illustrate key points about the JTM implementation.

5.2 | A Strong Focus on Reskilling and Upskilling

The Poland case study demonstrates a lack of guidelines within the JTF to guide coal-dependent regions through the process of reskilling and upskilling. This indicates a clear necessity to implement regulatory mechanisms that include a mandatory focus on education during the drafting of Just Transition Territorial Plans.

1. JTF Education Innovation Quota (EIQ)

- [a] Introduce the 'Education Innovation Quota' within the JTF, ensuring every MS allocates a specific percentage (i.e. 15-20%) of their JTF funding to educational initiatives (e.g., reskilling).
- [b] A mandatory quota (for the country applications) that is targeted towards skilling and reskilling projects.
- [c] Provide a clear framework for the implementation can help enhance support and consent amongst the population
- [d] Develop a dynamic allocation system where funds are distributed based on specific educational needs, such as digital transformation skills and emerging green technologies.

2. Clear Frameworks on education

- [a] The creation of clear frameworks, programs, courses, and the provision of tools to the MS can guide them in implementing reskilling and upskilling programs efficiently.
- [b] Develop university programs on renewable energies.
- [c] Facilitate mentorship and exchange programs between different EU states within CTLs to share knowledge, strategies, and best practices.

5.3 | Inclusion of all Stakeholders Within the Regions: Private-Public Focus Groups

Enhancing collaboration between private and public entities, as well as among all stakeholders in general, is crucial to ensure a cohesive, efficient, and comprehensive green transition. Solidarity and cooperation among the population is necessary in order to achieve this goal.

1. Collaborative Transition Labs (CTL) made to enhance private-public collaboration
 - [a] Establish CTL as incubators for public-private partnerships, focusing on innovative green transition projects.
 - [b] Host bi-annual innovation forums in order to familiarize the population with green transition jobs and the benefits thereto connected.
 - [c] Create focus groups that bring together all stakeholders involved: EU commission, grassroots organizations, public and private entities, etc.
 - [d] Revise company policies on inclusiveness and make sure there is no discrimination practices towards industrial workers.

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