

Navigating the Energy Transition: The Impacts of Germany's 2020 Coal Phase-Out Legislation on Macro-Level Worries

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Abstract

The phasing out of coal-fired power generation is a key component of Germany's energy transition, which aims to address the challenges of climate change, resource depletion, and social inequality. Germany's Coal Phase-Out Act, enacted in 2020, formalizes this transition through mandating the complete cessation of coal-fired power generation by 2038.

The act was accompanied by legislation aimed at strengthening the regions affected by the change in energy infrastructure and ensuring a just transition. Together, both pieces of legislation provide a legal framework for the systematic decommissioning of power plant capacity while offering financial and structural support to mitigate potential job losses and economic inequality.

This study empirically examines the effects of the 2020 coal phase-out legislation on the perceptions of citizens in coal regions impacted by structural change, particularly in the Lusatian and Central German mining areas. We focus on macro-level worries that may arise during the transformation process, such as worries about social cohesion, climate change, and economic development.

We hypothesize that citizens in those regions recognize the necessity for transformation but also perceive it as a threat to their livelihoods, regional identity, and employment opportunities. A transformation process that triggers worries within the population poses a notable risk, as lack of public acceptance can considerably impede implementation efforts.

To assess causal effects, we use longitudinal data from the German Socio-Economic Panel from 2015 onwards. Using a panel event study design, we conduct a comparative analysis of the concerns of residents of coal mining regions and residents of unaffected areas before and after the legislation's implementation. Our focus is on coal regions in Eastern Germany that have undergone significant structural transformation during the post-reunification period. Preliminary findings indicate that the energy transition has led to an increase in worries about social cohesion and economic development among the affected populations.

Keywords: macro-level worries, energy transition, coal phase-out

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