Variable vulnerability

Local governments' tax income from the coal industry - an obstacle for Poland's decarbonisation

Executive Summary

instrat

Instrat Policy Note 03/2023

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Warsaw, September 2023

Key facts and figures

4 558 PLN	is the annual tax income per inhabitant from the coal industry of Sulmierzyce (Lodzkie voivodeship) – one of the most coal-dependent communities in Poland. Revenues from the coal industry comprised **48% of all revenues** of this community.
90 PLN	is the annual tax income per inhabitant from the coal industry of Katowice – another mining location, but at the same time a city with almost 300 thousand inhabitants, a regional capital and an economic and administrative centre of the urban area housing almost 3 million people. Revenues from the coal industry comprise **little more than 1% of all revenues** of this local government. Even without it, this city would be one of the wealthiest local governments in the region.
25bn PLN	was Poland's revenue in 2021 alone from the sale of CO2 allowances.
501m PLN	only that much would be enough to cover the costs of a compensations program protecting all communities particularly dependent on revenues from the coal industry from poverty or bankruptcy. This sum covers theoretical (and obviously impossible) scenario of closure of all coal mines and large coal-fired power plants in Poland in a single year.

- **Fiscal effects of decarbonisation are highly concentrated.** Only 0.2% of Polish citizens live in communities, where more than 20% of revenues comes from the coal industry. Highest numbers are present in the vicinity of lignite mining areas: Belchatow Mine and Power Plant (Lodzkie), Turow Mine and Power Plant (Lower SIlesia) and Eastern Greater Poland Lignite Mining Area (Wielkopolskie).

- **Distribution of particularly vulnerable communities is not obvious.** The majority of the most dependent communities are located in lignite mining areas and in selected cases around large hard coal power plants. Mining revenues from hard coal mining in Upper Silesian Coal Basin was found out to be less significant in the budgets of local governments because of a higher population density and a more diversified economy structure.

- **Lost revenues in most affected communities are significant on the local but not on the national scale.** Instrat's recommendation of the „Just Compensations" fiscal instrument for the most affected communities should not exceed a few hundred million PLN annually. Compensations for the lost revenues of most affected communities will not constitute a big share in the costs of the energy transition of the whole country.

- **Instrat recommends including potential fiscal problems of local governments in national just transition plans and local strategies** in order to alleviate problems associated with lost revenues from the coal industry and give enough time for the transition of local economies. It is critical to take into account site-specific issues of individual communities, which are at the risk of unbalanced budget or budget cuts on programs important for local communities.

EURPLN exchange rate is approx. 4.5.

All numbers and data in this report come from survey results included in a scientific paper: A mainstay of budget? Coal mining as a source of revenue for Polish local governments by Bernard Swoczyna (Warsaw University of Life Sciences - WULS PhD Candidate) and Zbigniew Karaczun (WULS Professor), published in 2023 in Energy Policy, journal by Elsevier. The whole paper is available for subscribers at: https://doi.org/10.1016/j.enpol.2023.113658. Data collection method has obvious limitations, e.g. it does not include PIT incomes paid by coal industry workers. Data directly from local governments was prioritised, since it contains data, which is not available in Statistics Poland. Detailed description of data acquisitions and analyses is included in the aforementioned scientific paper.