

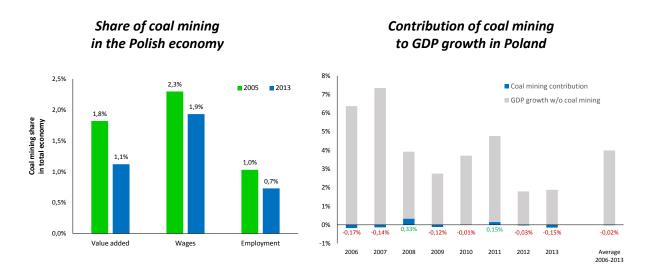
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New report by WISE Institute

Grim perspectives for hard coal mining in Poland

Hard coal mining in Poland has not contributed to the country's growth during last decade of the favorable market conditions, and now faces inevitable decline due to low productivity – such is the conclusion from latest report prepared by Warsaw-based think tank WISE Institute. The only question is whether the sunset of the domestic hard coal extraction will be gradual or sharp, and the answer depends on whether the government will manage to restructure the unprofitable state mines.



Source: WISE Institute based on the data provided by Central Statistical Office of Poland and Eurostat

The report points out that – contrary to popular belief – hard coal mining is no longer a growth engine for the Polish economy. Its contribution to GDP and employment is modest and shrinking, and its growth record weak. Unable to grow during boom on the global commodity markets, it now faces deep crisis as low prices uncovered its structural weaknesses.

According to WISE Institute, the key problem of state-owned mines – which constitute vast majority of domestic extraction – is low productivity and resulting high labour costs. Average coal mining productivity in Poland – 700 tons per employee per year – is comparable to old mines of Western Europe that have long been subsidised and are to be closed in the next few years. The authors underline that successful restructuring of the Polish mines would require sharp increase in productivity, comparable to turnaround in the UK brought by Margaret Thatcher after conflict with trade unions, mass lay-offs and closing of unprofitable mines.

The report stresses that significant employment cuts – exceeding 50% in some scenarios – are required to restore mines` profitability within the next five years. If these unpopular actions will not be taken, the

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majority of Polish mines will go bankrupt by 2020. Yet, even successful restructuring will not ensure that the hard coal output will remain stable over the next decades. The pressure to increase wages in the growing economy will require further increases in productivity, which means ongoing restructuring of the sector and closing of unprofitable mines.

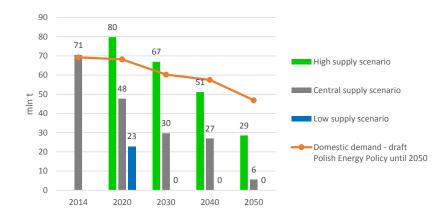
Productivity in underground hard coal mines in Europe and the USA

Country	Period	Tons of coal per year per employee
Poland	2005-2012	648
France	1996-2000	458
Germany	2012	678
Spain	2012	869
Great Britain	1981	654
	1991	2143
USA	2012	4156
USA – bottom 20% mines	2012	2144

Source: WISE Insitute based on the data provided by Eurostat, DECC and EIA

The restructured Polish mines will extract less coal than today. If shift away from hard coal in the energy sector does not accelerate, Polish mines will not be able to meet domestic coal demand and the coal imports will inevitable rise. This will happen even in the most optimistic (and highly unlikely) scenario of sharp coal price rebound, access to cheap financing and significant miners` wage cuts. In worst-case scenario for Polish mining, it will completely disappear by 2030. Thus, Poland has to shift towards alternatives to coal in order to avoid imports of this fuel.

Different projections for domestic hard coal supply by WISE Insitute compared to the coal demand projection from the recent draft of Polish Energy Policy until 2050.



Source: WISE Institute projections, Ministry of Economy

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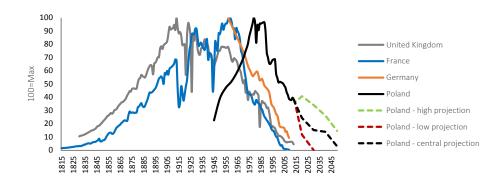


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The decline of hard coal mining in Poland will not be unprecedented. In fact, major European economies such as Germany, France or the UK have gone through similar process in previous decades. The key drivers are the same: depletion of easily accessible coal deposits, labour costs increases and strong competition from abroad. To see the fate of coal mining in Poland in coming decades, one must look no further than the Western Europe in 1980s and 1990s.

"Peak coal" – decline of coal mining in Western Europe and Poland



Source: WISE Institute based on own projections and historic data for various countries

The report concludes with recommendations for energy and industrial policy. According to the authors, Polish policymakers should take into account a clear downward trend of hard coal mining. In short term, employment restructuring and wage cuts in the sector are necessary. While new, productive mines may slow the decline of domestic coal production, reducing coal use by at least 70-80% is required to avoid sharp increase in coal imports by 2050.

"Polish hard coal: quo vadis? Perspectives of development of hard coal mining in Poland" report. Authors: Maciej Bukowski, Jędrzej Maśnicki, Aleksander Śniegocki, Rafał Trzeciakowski.

The report is available at: www. wise-institute.org.pl





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