




Weekly Briefing

Poland economy briefing:
Poland's Energy Policy until 2040: the end of coal's dominance
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Poland's Energy Policy until 2040: the end of coal's dominance

Summary

"Energy Policy of Poland until 2040" (PEP2040) assumes a significant reduction of coal use in energy production in Poland. In 2040, more than half of energy production will be zero-emission sources. A special role in this process will be played by the development of offshore wind energy and the launch of a nuclear power plant, the use of gas will also increase. According to the plan, coal mines are to be closed by 2049, and the transformation of the mining sector is to cost almost 13 billion euros. Its costs are to be covered in large part with EU funds. Experts are divided in their assessment of the strategy. Positive opinions point in a positive direction. The criticism concerns, on the one hand, the insufficient speed of changes, but also, on the other hand, the costs of transformation for society.

Introduction

The Polish government has adopted the strategic document "Energy Policy of Poland until 2040". (PEP2040), prepared by the Ministry of Climate and Environment. This is the first Polish strategic document in last 12 years, setting out the directions for the development of the energy sector. The document provides a clear vision of Poland's strategy for energy transformation. It was developed in the context of the EU's New Green Deal policy, including the energy transition, and the EU's Post-Pandemic Reconstruction Plan, under which Poland is to receive significant financial support. The document is also relevant to the work on the National Reconstruction Plan.

Moving away from coal

According to the strategy, in 2040 more than half of energy production in Poland will be zero-emission sources. A special role in this process will be played by the implementation of offshore wind energy into the Polish power system and the launch of a nuclear power plant. These will be two strategic new areas and industries to be built in Poland. "The document aims to put Poland on the path to a low-carbon economy by implementing a just energy transition, developing Renewable Energy Sources, improving energy efficiency and air quality. These

issues are becoming increasingly important for citizens. The strategy also takes into account the needs of professional groups and regions that, without appropriate intervention, will bear a disproportionate cost of the transformation. This applies primarily to the coal sector and citizens at risk of energy poverty" - emphasises Michał Kurtyka, Minister for Climate and Environment. Low-emission energy transformation is to support modernisation changes throughout the Polish economy, guaranteeing energy security, taking care of fair cost distribution and protection of the most vulnerable social groups.

According to the strategy's assumptions, the role of gas in energy production will increase, and Poland will have to finally say goodbye to coal. The environmentally unfriendly coal-fired furnaces popular in Poland are to disappear by 2040. Coal mines should be closed by 2049. The strategy indicates that the total share of coal in net electricity generation will be decreasing - in 2030 it will reach no more than 56%. In the scenario of expensive emission allowances for carbon dioxide, the departure from coal will be much faster. Coal as a fuel is to be used mainly in power plants currently under construction or commissioned in recent years, as they are less carbon intensive and use fuel more efficiently. The document indicates that demand for hard coal will be met from domestic resources and the import-export relationship will be complementary.

Currently, the electricity generation in Poland is mainly based on coal (hard coal in nearly 57% and lignite in over 24%). As far as "green energy" is concerned, the highest contribution comes from wind installations - almost 9%, other Renewable Energy Sources play a minor role (only 1%), natural gas constitutes 7.5% of the Polish energy mix.

An expensive transition

Polish government is aware of the social costs of actions taken to limit the use of coal. The strategy states that limiting or ending the exploitation of coal deposits may entail economic and social problems in the regions dependent on the mining sector. It will therefore be necessary to transform these regions. To this end, a mining restructuring plan and a National Plan for Equitable Transformation are to be developed in 2021, followed by corresponding territorial plans. The actions will be eligible for financial support (e.g. from EU funds) to a total amount of around 13 billion euros. The document, in connection with the mining restructuring plan, also mentions a new state aid programme for the mining sector, investments in clean coal technologies and the establishment of a new special purpose vehicle to deal with such technologies.

The future in nuclear and wind energy

The strategy states that natural gas-based units will gain in importance in the electricity balance. Gas is seen as a transitional fuel. It will be used, among others, for balancing Renewable Energy Sources. The advantage of gas-powered installations is also lower emissions than in the case of coal-fired power plants. The key role will be played by further diversification of gas supplies: through expansion of import capabilities and development of connections with neighbouring countries. In this way, a gas transmission and trading center is to be established in Poland for the countries of Central and Eastern Europe and the Baltic states. The strategy mentions three factors: expansion of Świnoujście gas port to 8.3 billion m³ annual capacity, construction of FSRU terminal in the Gdańsk Bay (4.5 billion m³ after 2025) and Baltic Pipe gas pipeline (import at the level of 10 billion m³ per year). It was also pointed out that an important factor will be achieving by 2030 the ability to transport through the gas networks a mixture containing about 10% of decarbonised gases, in particular biomethane and hydrogen. The strategy envisages that the first nuclear power plant unit with a capacity of about 1-1.6 GW will come online in 2033. Subsequent units will be implemented every 2-3 years, and the entire nuclear program assumes construction of 6 units.

Opinions on the strategy are divided

Opinions on the strategy are divided; apart from the positive ones, there are also critical ones, on the one hand, from environmental organizations and, on the other hand, from the opponents of the EU climate policy.

As the Polish economic weekly "Puls Biznesu" reports, the current version of the document is evaluated by experts better than the previous ones. Kamila Tarnacka, vice-president of the Polish Wind Energy Association, believes that it fits better with the narrative of the European Commission and the goal of climate neutrality. Zofia Wetmańska from the WiseEuropa Institute emphasizes the more realistic vision of the future of Polish energy sector contained in the strategy, which assumes smaller share of coal in the Polish energy mix. - Poland's new energy policy is a reasonable compromise between external pressure for the country to move away from coal and the complexity of such a step in a country where 100,000 jobs depend on the coal mining sector - Polish mBank analyst Kamil Kliszczyk said in a commentary for the "Financial Times".

The Energy Forum, a think tank advocating faster energy transformation, does not like the strategy either. The organization praises the adoption of the document, which has been waiting "almost seven years", but finds it "disappointing" because "it makes no reference to the new European Union reduction targets we have adopted and this could be an obstacle to reaching for EU funds for energy changes, at a time when the distribution of funds for a just transition is being decided". Experts from the Energy Forum believe that Polish plans for the transformation of the heating sector are not ambitious, given the scale of the problems Poland already has with smog from home heating. In their opinion, the phasing out of coal from home heating and district heating should happen much sooner. The association of environmental organizations, the Climate Coalition, points to the "disastrous faith in nuclear energy. And also, the lack of strategic thinking about the development of renewable, dispersed and civil energy". The organizations assess the plans to reduce greenhouse gas emissions contained in the draft as "a desire to please the energy and coal lobby, rather than a real energy transformation". The Climate Coalition also criticizes the fact that the strategy neglects energy efficiency challenges, while it should be "the starting point for estimating energy needs".

The Solidarna Polska party, which is a part of the government coalition, also does not support the energy strategy. Its politicians criticise the potential costs of the EU climate policy, which will be borne by energy consumers in Poland. They also believe that the implementation of its assumptions will "limit Poland's energy sovereignty".

Summary

Poland's energy future faces a profound transformation. It is necessary in the context of the EU's New Green Deal policy, which imposes green requirements but allows the European Union to cover the costs of changes to the Polish energy sector. A new energy strategy is also necessary to receive support from the EU's Covidien Recovery Plan. Its implementation is an extremely difficult socio-economic challenge for Poland because energy production in Poland is based primarily on coal. Poland is currently the largest producer of energy from coal in Europe. "Energy Policy of Poland until 2040" is, however, a comprehensive plan to change this situation, assuming a gradual reduction of coal consumption, energy transition and increasing the share of nuclear and wind power in the Polish energy mix.

The entire strategy: <https://www.gov.pl/web/klimat/polityka-energetyczna-polski>