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Małgorzata Kamola-Cieślik

Associate Professor, University of Szczecin, Poland https://orcid.org/0000-0003-2956-3969

Polish government policy towards the hard coal mining sector after 2015

Introduction

In the years 1990–2021, the hard coal mining sector in Poland underwent a restructuring process, which resulted in a decrease in coal output, reduction of employment in mines and changes in the organisational structure of the mining industry. The biggest restructuring of hard coal mining industry was carried out by the government of Jerzy Buzek at the turn of the twentieth and twenty-first centuries. It resulted in liquidation of 23 unprofitable mines, reduction of over 100,000 jobs, and the restoration of profitability of mines.¹ In the following years, the provisions of the government's programs for restructuring mining enterprises were not implemented, as a result of which the hard coal mining sector did not achieve lasting profitability. The reason for the failure of the restructuring of the hard coal mining sector was the inconsistency of the government's actions with regard to the elimination of jobs in mining and the reduction of mining privileges. In 2014, Prime Minister Donald Tusk did not take any decision to liquidate unprofitable mines. The reason for the Prime Minister's lack of decision was to seek public support for Platforma Obywatelska (PO, the Civic Platform) in the upcoming European

¹ Ty górnicza żmijo! Rozmowy z profesorem Andrzejem Karbownikiem o restrukturyzacji polskiego górnictwa węgla kamiennego, Katowice: Wydawnictwo Górnicze, 2014, pp. 165–179.

Parliament and local government elections. Also, Prime Minister Ewa Kopacz, under the influence of strikes of mining trade unions, abandoned the recovery plan for Kompania Węglowa SA, which assumed the liquidation of four loss-making mines (KWK Pokój, KWK Sośnica-Makoszowy, KWK Brzeszcze and KWK Bobrek-Centrum).²

Although hard coal, alongside lignite, is the most important energy carrier in Poland, its extraction has been decreasing since the beginning of the twenty-first century. In 2008, 84 million tons of hard coal was mined in Poland, and in 2015, 73 million tons. Hard coal consumption in Poland decreased from 81 million tons in 2008 to 73 million tons 2015. Also, hard coal consumption in the European Union (EU) decreased from 467 million tons in 2008 to 346 million tons in 2015.

In December 2019, the European Commission unveiled a multi-year strategy called the European Green Deal, which involved transforming the energy sector. The strategy set EU member states two ambitious climate targets for 2030 and 2050. The first target was to achieve zero net greenhouse gas emissions by 2050. The second target was to reduce net greenhouse gas emissions by at least 55% by 2030 compared to the levels in 1990.³ Initially, Poland, Estonia, the Czech Republic and Hungary blocked the EU's adoption of the 2050 climate neutrality target. Prime Minister Mateusz Morawiecki has stated that Poland cannot afford to meet the 2050 climate neutrality target due to historical and structural circumstances. According to Energy Forum experts, the implementation of the European Green Deal will cost Poland around 500 billion euros.

At the end of 2020, at the European Council (EC) summit, the presidents and prime ministers of the EU Member States unanimously decided to implement the interim target of the European Green Deal, i.e. to reduce greenhouse gas (GHG) emissions by at least 55% by 2030 compared to 1990 levels.⁴ In May 2021, before the EC summit, the President of the European Commission, Ursula von der Leyen, confirmed that all EU member states do not question the EU goal of achieving climate neutrality by 2050.⁵ The provisions adopted at the May 2021 EC summit

M. Kamola-Cieślik, "Bezpieczeństwo energetyczne Polski a sytuacja ekonomiczna Kompanii Węglowej SA PO 2014 roku", Bezpieczeństwo. Teoria i Praktyka, no. 1, 2016, pp. 138–141.

J. Sobolak, "Krótka historia Europejskiego Zielonego Ładu i problemów z KPO, czyli co w Polsce poszło nie tak?", Business Insider, 11 December 2021, https://businessinsider. com.pl/gospodarka/krotka-historia-europejskiego-zielonego-ladu-i-problemow-z-kpoczyli-co-w-polsce/mlvwmps [accessed: 3 April 2022].

Posiedzenie Rady Europejskiej (10 i 11 grudnia 2020 r.) – konkluzje, Rada Europejska, Bruksela 2020, https://www.consilium.europa.eu/media/47337/1011-12-20-euco-conclusions-pl.pdf [accessed: 3 April 2022].

^{5 &}quot;Polska popiera neutralność klimatyczną UE, ale...", Teraz Środowisko, 26 May 2021, https://www.teraz-srodowisko.pl/aktualnosci/Polska-poparcie-neutralnosc-klimatyczna-UE-10367.html [accessed: 3 April 2022].

confirmed the implementation of the European Green Deal objectives, which will be a serious challenge for Poland due to the fact that the Polish energy sector is dependent on coal.

Poland's transition away from hard coal requires difficult decisions, including closing mines, halting the construction of the new ones and shutting down existing coal units in power plants. In November 2021, during the UN COP26 climate summit held in Glasgow, Poland announced a gradual transition away from coal in the energy sector by 2049. As stated by Prime Minister Morawiecki, the energy transition meant abandoning new investments in coal mining and developing clean technologies. The Glasgow Declaration was a confirmation of the social agreement on the transformation of the coal mining sector and selected processes of transformation of the Silesian Province (commonly referred to as the social agreement on the transformation of the coal mining sector).

In 2021, among EU countries, Poland was the most dependent on coal. More than 70% of electricity production was dependent on this fuel. Departure from hard coal in the Polish energy sector will be connected, among others, with closing mines, providing jobs for people working in the hard coal mining sector and increasing the share of renewable energy sources (RES) in the Polish energy mix.

The aim of the article is to analyze the government's policy towards the hard coal mining sector in Poland in the years 2015-2021. This issue is presented in the context of hard coal deposit in Poland, the cost of purchasing CO_2 emission authorizations, the position of mining trade unions in relation to restructuring programs and mine liquidation and the decision to be taken by the EC on granting public aid for mine liquidation until 2049. The paper poses the following research hypothesis: The European Commission will not approve state aid for the implementation of the social agreement on closing the coal sector until 2049, which was signed by Morawiecki's government with the mining trade unions in 2021.

Analyzing the above issue, it is reasonable to pose the following research questions:

- 1. What were the assumptions and implementation of the government's policy towards coal mining in Poland in 2015–2021?
- 2. Is the liquidation of hard coal mines according to government policy realistically possible by 2049?

The interdisciplinary approach to the studied phenomenon imposed the use of research methods appropriate to political science (systemic, decision-making, comparative methods), legal science (dogmatic method), sociology (statistical method). Due to the topicality of the subject of this article, the research material was documents. Important sources of data were documents produced by the European

The social agreement was approved by the government of Morawiecki and the trade unions on May 28, 2021.

Association for Coal and Lignite and Eurostat, as well as the Polish government, and interviews with mine management and trade unions.

Institutional determinants of hard coal mining restructuring

The restructuring of hard coal mining is primarily the responsibility of the government administration. Within the framework of the energy security policy, the Council of Ministers defines the directions of the hard coal mining sector and, through specialised institutions, conducts restructuring and liquidation of mining companies. From 2015 to 2019 in the governments of Beata Szydło (2015–2017) and Mateusz Morawiecki (2017-2019), the Ministry of Energy (ME) was the ministry responsible for coal mine operations and mineral deposit management. From 2015 to 2019, the ME was headed by Krzysztof Tchórzewski. The position of Deputy Minister was held by Grzegorz Tobiszowski, who at the same time held the position of Government Plenipotentiary for Hard Coal Mining Restructuring. The tasks of the Minister of Energy included, among others, issues related to the national energy policy, security of energy supply and management of mineral deposits. Minister of Energy Tchórzewski supervised the mine operations and managed the mining property.⁷ He was the patron of the Ostrołęka C coal block construction project. In the energy policy of Prawo i Sprawiedliwość (PiS, Law and Justice), this was a strategic investment. The plans related to the construction of the Ostrołęka C coal block were one of the program demands of PiS in the 2015 parliamentary elections. It is worth noting that Ostrołęka was a part of the constituency from which Tchórzewski was elected to the Polish Parliament in 2015. Three years later, the construction of the Ostroleka C coal-fired unit began. During construction, Morawiecki's government decided to dismantle it at a cost of 1.5 billion PLN. The government argued its decision with the EU climate policy aiming to reduce greenhouse gases and move away from coal to clean energy sources. It was announced that a gas-steam unit would be built in Ostrołęka in place of the coal unit.

In 2019, following the parliamentary elections, Morawiecki was once again elected Prime Minister. Yet the organisational structure of Morawiecki's second government was reorganized compared to the first composition of his cabinet. In order to efficiently carry out corporate governance of state-owned companies, including energy companies, the ME was transformed into the Ministry of State Assets (MSA).⁸ In November 2019, the position of Minister of State Assets was held

Rozporządzenie Rady Ministrów z dnia 7 grudnia 2015 r. w sprawie utworzenia Ministerstwa Energii, Dz.U. [Journal of Laws of the Republic of Poland], 2015, item 2075; Zarządzenie Ministra Energii z 18 października 2016 r. w sprawie podziału pracy w Kierownictwie Ministerstwie Energii, Dz.Urz. ME, 2016, item 11.

Rozporządzenie Rady Ministrów z dnia 19 listopada 2019 r. zmieniające rozporządzenie w sprawie utworzenia Ministerstwa Energii, Dz.U., 2019, item 2290.

by Deputy Prime Minister Jacek Sasin. The task of the Minister of State Assets, likewise the Minister of Energy, was to direct the management of mineral deposits. The Minister of State Assets was responsible for the state's policy on the management of, among others, coal mines. Tasks related to state energy policy were taken over by the Ministry of Climate after the abolished ME.

In October 2020, the Climate Ministry was merged with the Ministry of Environment. In MSA's organizational structure, mineral deposit management was subordinated to the Mining Department. In 2019-2020, Deputy Minister of State Assets and Government Plenipotentiary for Coal Mining Restructuring Adam Gaweda was responsible for coal sector affairs at MSA. The plan for hard coal mining during the COVID-19 pandemic, prepared by the Deputy Minister of State Assets Gaweda, provided for limiting hard coal imports through an active sales policy and improving the efficiency of coal mining, accelerating the liquidation of some non-productive mines being in the structures of Spółka Restrukturyzacji Kopalń SA (SRK) and carrying out the consolidation process of the Polish mining industry. The plan for hard coal mining during the COVID-19 pandemic was not accepted by the Deputy Prime Minister and Minister of State Assets Sasin. The reason for non-acceptance was the proposal to accelerate the liquidation of mines that were not operating and were subject to SRK. In March 2020, Gaweda was dismissed from his functions in the government of Morawiecki. In this situation, the supervision of mining was taken over by Deputy Prime Minister and Minister of State Assets Sasin. Two months later, the Plenipotentiary of the Minister of State Assets for Coal Mining, Jonasz Drabek, formerly Director of the Mining Department at MSA, took over the sector and mining companies. 10 The Minister's plenipotentiary, who did not hold the position of Minister, only supervised the implementation of tasks related to the restructuring of the hard coal mining sector. Therefore, the function of the Minister's plenipotentiary held by Drabek was not equivalent to the function held by the government's plenipotentiaries for the restructuring of the hard coal mining sector and, at the same time, the Deputy Ministers Tobiszowski and Gawęda.

One of the urgent tasks of the Minister's plenipotentiary for Mining Affairs Drabek, was to clarify the financial problems of state-owned coal mining companies caused, among other things, by a surplus of coal (7.6 million tons) accumulated on stockpiles at mines. Since 2020, the situation of the mines worsened, which was related to a decrease in demand for hard coal of energy companies. In September

Odwołany minister opisuje w rządzenie spór o górnictwo", BiznesAlert.pl, 30 March 2020, https://biznesalert.pl/adam-gaweda-dymisja-wiceminister-aktywow-panstwowych-pelnomocnik-gornictwo-energetyka-wegiel [accessed: 3 April 2022].

¹⁰ Zarządzenie M, A i P z dnia 11 maja 2020 r. w sprawie ustanowienia pełnomocnika do spraw górnictwa wegla kamiennego, Dz.Urz. MAP, 2020, item 10.

2020, Prime Minister Morawiecki signed a regulation establishing the Government Plenipotentiary for the transformation of energy companies and hard coal mining.¹¹ At the same time, the position of the Government Plenipotentiary for coal restructuring,¹² which was vacant after the resignation of the Deputy Minister of State Assets Gaweda, was abolished.

The reason for abolishing this position, given by Prime Minister Morawiecki, was the appointment of the Government's Plenipotentiary for the transformation of energy companies, which took over the tasks of the plenipotentiary for mining restructuring.¹³ The appointment of the Government's Plenipotentiary for the transformation of energy companies and coal mining was also related to the ongoing work in MSA to prepare a strategy for the transformation of the energy and mining sector. In September 2020, the Prime Minister appointed Deputy Minister at MSA Artur Soboń the Government Plenipotentiary for Transformation of Energy and Coal Mining Companies. The Government Plenipotentiary was entrusted with tasks related to the preparation and implementation of the concept of transformation of the energy and mining industry, as well as providing opinions on Government's draft documents in the field of energy and mining. At the turn of 2020/2021 Soboń, representing the Government, participated in talks with mining trade unions on the social contract along with the determination of the date of mine closures and social packages for miners and the mechanism for subsidizing unprofitable mining plants. In December 2021, the position of Deputy Minister of State Assets and Government Plenipotentiary for the Transformation of Energy Companies and Coal Mining was taken by Piotr Pyzik. Soboń was appointed Secretary of State in the Ministry of Development and Technology.

Resources, consumption, export and import of hard coal to Poland

From 1990 to 2020, there was a visible (threefold) decline in hard coal mining in the EU. In 1990, the production of this raw material was 277.4 million tons and 56.5 million tons in 2020. The decrease in hard coal mining in the EU was related to high prices of CO_2 emission rights and increasing the share of RES and natural gas in electricity production. In 1990, Poland mined 147 million tons of hard coal, or 53% of the EU total. At the same time, 70 mines were operating, employing

Rozporządzenie Rady Ministrów z dnia 3 września 2020 r. w sprawie ustanowienia Pełnomocnika Rządu do spraw transformacji spółek energetycznych i górnictwa węglowego, Dz.U., 2020, item 1525.

Rozporządzenie Rady Ministrów z dnia 3 września 2020 r. w sprawie zniesienia Pełnomocnika Rządu do spraw restrukturyzacji górnictwa węgla kamiennego, Dz.U., 2020, item 1523.

B. Sawicki, "Premier powołał pełnomocnika rządu do spraw transformacji energetyki i górnictwa", BiznesAlert.pl, 5 September 2020, https://biznesalert.pl/premier-powolal-pelnomocnika-rzadu-do-spraw-transformacji-energetyki-i-gornictwa [accessed: 9 April 2022];

416 thousand people.¹⁴ Between 1990 and 2000, hard coal was produced in Germany, the Czech Republic, Spain and France, among other countries. At the end of 2018, all EU countries except Poland and the Czech Republic closed their hard coal mines.

Although there was a reduction in hard coal production in Poland between 1990 and 2020, Polish mines still produced the most hard coal compared to other EU countries. In 2020, due to lower demand for electricity during the COVID-19 pandemic, there was a visible decrease in demand for hard coal on the global market. Mining this raw material in the EU amounted to 67 million tons in 2019 and 56.5 million tons in 2020. According to research conducted by the International Energy Agency, hard coal extraction in the EU in 2021 amounted to 68.4 million tons and increased by 21% (11.9 million tons) compared to 2020.

Hard coal extraction in the EU in the years 1990–2021, is shown in Figure 1. Polish mines also extracted more hard coal in 2021 than the year before. According to data from the Industrial Development Agency, Polish mines extracted more than 55 million tons of hard coal in 2021. Figure 2 presents hard coal mining in Poland from 2015 to 2021.

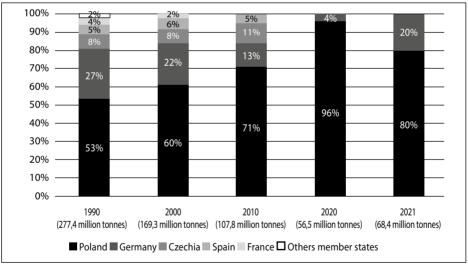


Figure 1. Hard coal mining in the European Union between 1990–2021

Own elaboration based on: Eurostat, Coal production and consumption statistics, 22 February 2022, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Coal_production_and_consumption_statistics [accessed: 9 April 2022]; European Association for Coal and Lignite AISBL, Euracoal Annual Report 2019–2020, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports [accessed: 9 April 2022].

Węgiel kamienny. Hard coal, Państwowy Instytut Geologiczny, Państwowy Instytut Badawczy, https://www.pgi.gov.pl/dokumenty-pig-pib-all/foldery-instytutowe/foldery-surowcowe-2018/6214-folder-wegiel-kamienny-1/file.html [accessed: 9 April 2022].

The increase in demand and production of hard coal in 2021 was driven by the global economic recovery, increased use of hard coal for power generation, adverse weather conditions and a surge in natural gas prices.¹⁵ CO₂ emissions increased by more than 2 billion tons globally in 2021 compared to the previous year. Hard coal accounted for over 40% of the total increase in global CO₂ emissions.¹⁶ It is worth noting that despite the increase in hard coal in 2021, the EU's renewable energy production was "the highest ever, exceeding 8,000 TWh in 2021, a record 500 TWh above 2020 levels."¹⁷ In addition, in line with climate policy, a decarbonization process has begun in the EU. The first EU country to phase out coal-fired power generation was Belgium (2016), followed by Sweden (2020), Austria (2020) and Portugal (2021).

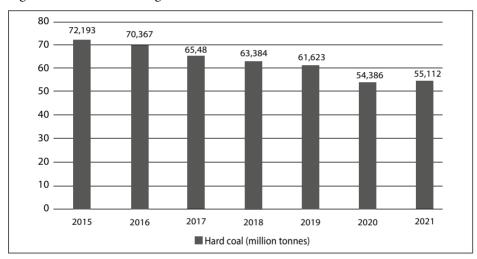


Figure 2. Hard coal mining in Poland between 2015-2021

Own elaboration based on: Obraz polskiego górnictwa na rynku węgla w latach 2011–2020 i po 7 miesią-cach 2021 r., Agencja Rozwoju Przemysłu SA, https://szkolaeksploatacji.pl/wp-content/uploads/2021/09/xxx_sep_arp_raport.pdf [accessed: 9 April 2022]; W ubiegłym roku wzrosło wydobycie i sprzedaż węgla. Tak wynika z danych ARP, Polskie Radio 24, 21 February 2022, https://www.polskieradio24.pl/42/273/Artykul/2905985,W-ubieglym-roku-wzrosło-wydobycie-i-sprzedaz-wegla-Tak-wynika-z-danych-cessed: 9 April 2022].

Coal Analysis and forecast, International Energy Agency, December 2021, https://iea.blob.core.windows.net/assets/f1d724d4-a753-4336-9f6e-64679fa23bbf/Coal2021.pdf [accessed: 9 April 2022].

 $^{^{16}}$ "W 2021 roku światowa emisja $\rm CO_2$ była najwyższa w historii", Energetyka 24, 11 March 2022, https://energetyka24.com/klimat/wiadomosci/w-2021-roku-swiatowa-emisja-co2-bylanajwyzsza-w-historii [accessed: 9 April 2022].

[&]quot;Global CO₂ Emissions Rebounded to Their Highest Level in History in 2021", United Nations Climate Change, 9 March 2022, https://unfccc.int/news/global-co2-emissions-rebounded-to-their-highest-level-in-history-in-2021 [accessed: 9 April 2022].

Between 1990–2021, despite the reduction of hard coal mining in the EU, this raw material continued to be used, among others, for the production of electricity. In 1990, hard coal consumption in the EU amounted to almost 500 million tons and in 2020 – 146 million tons (of which 89.5 million tons were imported, 53% of which from the Russian Federation).

According to the Central Statistical Office, hard coal consumption in Poland was 72.3 million tons in 2015, 74.2 million tons in 2016, 74.6 million tons in 2017, 74.2 million tons in 2018, 68.3 million tons in 2019, 62.4 million tons in 2020. From 1990 to 2021, domestic hard coal was used in Poland by power plants, combined heat and power plants and heating plants.

Considering 2015–2016, Poland exported slightly more hard coal than it imported (net exporter). Since 2017, there has been a sharp increase in the import of this raw material to Poland (net importer). Between 2015 and 2021, hard coal entered the Polish market primarily from the Russian Federation. The raw material was also imported from the United States, Australia, Colombia, Kazakhstan and Mozambique. Hard coal imports and exports to Poland in the years 2015–2021 are presented in Figure 3. The directions of hard coal imports to Poland in the years 2015–2021 are presented in Figure 4.

In the years 2015–2021, the increase in the import of Russian hard coal to the Polish market resulted from its lower price (which was related to cheaper mining) compared to the price of domestic coal and high quality of the raw material. For example, a ton of hard coal produced by Lubelski Węgiel Bogdanka in 2020 cost 460 PLN, and a ton of coal imported from the Russian Federation cost 302.90 PLN.¹⁹ It is worth noting that coal-fired power plants were more willing to buy imported coal in the situation of high CO₂ emission fees imposed on them.

In 2017–2021, mining trade unions repeatedly protested against coal imports to Poland. According to miners, the import of Russian coal to Poland had an impact on the deepening difficult situation in the Polish mining industry additionally related to the growing coal reserves.

Zużycie paliw i nośników energii w 2015, Główny Urząd Statystyczny, Warszawa 2016, p. 8; Zużycie paliw i nośników energii w 2016, Główny Urząd Statystyczny, Warszawa 2017, p. 8; Zużycie paliw i nośników energii w 2017, Główny Urząd Statystyczny, Warszawa 2018, p. 11; Zużycie paliw i nośników energii w 2018, Główny Urząd Statystyczny, Warszawa 2019, p. 11; Zużycie paliw i nośników energii w 2019, Główny Urząd Statystyczny, Warszawa 2020, p. 11; Zużycie paliw i nośników energii w 2020, Główny Urząd Statystyczny, Warszawa 2021, p. 11.

J. Frączyk, "Węgiel z Rosji tańszy nawet od miału z polskich kopalń. Górnictwo ma problem", Business Insider, 7 February 2020, https://businessinsider.com.pl/finanse/ceny-wegla-w-polsce-kontra-swiat-wegiel-z-rosji-tanszy-od-mialu-z-polskich-kopaln/nz7jrbs [accessed: 14 April 2022].

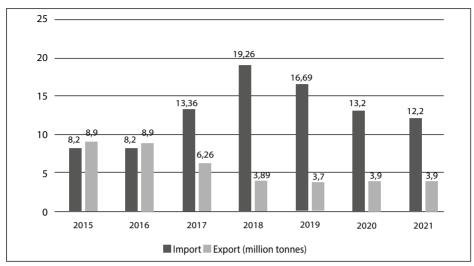


Figure 3. Hard coal exports and imports in Poland in 2015–2021

Own elaboration based on: S. Medoń, Dlaczego import węgla kamiennego do Polski jest tak wysoki?, O węglu.pl, 29 September 2020, https://oweglu.pl/dlaczego-import-wegla-kamiennego-do-polski-jest-tak-wysoki [accessed: 14 April 2022]; Udzielenie odpowiedzi przez sekretarza stanu w Ministerstwie Aktywów Państwowych przez Adama Gawędę na interpelację posła Aleksandra Misztalskiego z dnia 27 stycznia 2020 r. w sprawie polityki węglowej, Minister Aktywów Państwowych, 21 February 2020, http://orka2.sejm.gov.pl/INT9.nsf/klucz/ATTBMFJX6/%24FILE/i01571-o1.pdf [accessed: 14 April 2022].

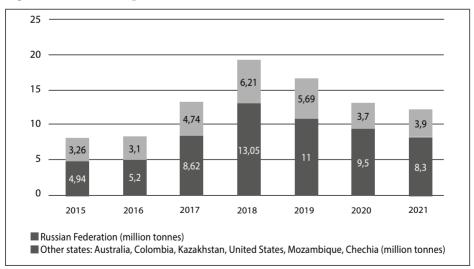


Figure 4. Hard coal imports in Poland in 2015–2021

Own elaboration based on: S. Medoń, op. cit.; Udzielenie odpowiedzi..., op. cit.

In the face of Russian aggression against Ukraine in 2022, the Polish parliament passed a law introducing an embargo on coal from the Russian Federation.

Imported coal was and is used in the district heating sector and by private companies. The decision to ban the import of Russian coal to Poland will result in increased supplies of this raw material from other directions. Russian coal may be replaced by Colombian coal which has similar parameters but is much more expensive. In turn, according to the Deputy Prime Minister and the Minister of State Assets, Sasin, "in the reality of war and the embargo on Russian coal, Polish mines have to work longer than it was assumed." ²⁰

Government policy towards transformation of the Polish mining industry

For over a decade, Poland's energy security has been an important element of PiS program. In 2009, the document *Nowoczesna*, *solidarna*, *bezpieczna Polska* (Modern, Reliable, Safe Poland) focused on ensuring energy security of Poland by diversifying supplies of energy sources and using domestic hard coal and lignite. Analysis of the provisions of *Nowoczesna*, *solidarna*, *bezpieczna Polska* program allows concluding that Polish economy was to be dependent on hard coal and lignite due to working power plants in Poland. Hard coal and lignite "covered over 90% of the economy's needs for electricity. It is not in Poland's interest to significantly change this state, which would firstly be associated with additional costs associated with switching energy production from coal to other fuels, and secondly, would make the economy dependent on external supplies of energy resources [...]. Actions aimed at increasing the marketization of coal mining, particularly hard coal, should be continued, e.g. through the expansion of the framework of cooperation between the raw material base and energy producers, restructuring activities in the hard coal mining industry and securing new deposits and mining fronts."²¹

It should be noted that the provisions of the *Nowoczesna*, *solidarna*, *bezpieczna Polska* program regarding the share of coal in electricity generation were different from the policy of the EU, which, caring for clean air, started to move away from this raw material in the power industry. In 2015, the electoral postulates presented by the candidate for Prime Minister of Poland in the parliamentary elections – Szydło, coincided with the program provisions of PiS. Szydło announced the restructuring of the coal mining sector and the establishment of the ME. The hard coal mining sector was to fall under the ME. The restructuring of the hard coal mines was necessary because the operations of most state-owned hard coal mines were generating

[&]quot;Sasin o konieczności zmiany strategii: Kopalnie będą wygaszane zdecydowanie wolniej", Wprost, 12 April 2022, https://biznes.wprost.pl/gospodarka/energetyka/10684987/sasin-o-koniecznosci-zmiany-strategii-kopalnie-beda-wyga [accessed: 14 April 2022].

Nowoczesna, solidarna i bezpieczna Polska. Program Prawa i Sprawiedliwości, Prawo i Sprawiedliwość, Warszawa 2009, p. 234.

losses, which were affected by low labor productivity, limited investment in mining equipment and the declining price of coal on the global market. In 2015, 23 mines operated under three coal companies – Kompania Węglowa SA (KW), Jastrzębska Spółka Węglowa SA (JSW), and Katowicki Holding Węglowy SA (KHW). The debt of the coal companies within KW and KHW amounted to PLN 13 billion. ²² Due to the losses generated by the hard coal mines the Ministry of Economy decided to restructure them. As a result of negotiations between the trade unions of coal companies and the government, it was agreed to suspend the fourteenth payment to miners for 2017–2018 and to reduce the monthly salaries of mine directors by 7.3%.

In April 2016, Polska Grupa Górnicza Sp. z o.o. (PGG) was set up,²³ which took over the indebted KW. The newly established company was recapitalized by energy companies (including PGE Górnictwo i Energetyka Konwencjonalna SA, Energa Kogeneracja Sp. z o.o., PGNiG Termika SA, Węglokoks SA) for the amount of PLN 2.4 billion and by banks and funds (BNP Paribas Bank Polska SA, Santander Bank Polska SA) in the form of bonds for over PLN 1 billion. In 2017, the mines of KHW were added to PGG. In order to carry out the holding, PGG was recapitalized for the amount of PLN 1 billion. It is worth noting that energy companies were not interested in recapitalizing mines which generated losses and the high price of Polish coal. The energy companies found it more profitable to purchase cheaper and better quality imported coal. Changes in the positions of presidents and supervisory board members of the energy companies have resulted in the newly appointed management of the energy companies deciding to invest funds in PGG.

Thanks to the financial support from energy companies, Polish mines have been able to continue operating. It should be noted that under EU law, member states are not allowed to subsidize the hard coal sector except for closing down mines. The integration of the energy companies and the mines was supposed to solve the financial problems of the mines and guarantee a constant supply of coal for Polish power plants.

In PGG, organizational and employment restructuring was carried out with the aim of reducing the number of jobs, changing the organizational structure of enterprises, starting investments and disposing of redundant assets. The hard coal companies employed 80 thousand employees in 2017, 79.8 thousand in 2018, 80.3 thousand in 2019, 77.2 thousand in 2020 and 75 thousand in 2021. In the same years, the Polish government granted state aid to the hard coal mining sector. State

W. Gałązka, "Górnictwo: zamykamy trzyletni etap restrukturyzacji sektora", Górnicza Izba Przemysłowo-Handlowa, http://www.giph.com.pl/aktualnosci/art/gornictwo-zamykamytrzyletni-etap-restrukturyzacji-sektora [accessed: 23 April 2022].

²³ In December 2017 Polska Grupa Górnicza Sp. z o.o. was transformed into a joint stock company.

aid provided to mines amounted to: in 2017 – PLN 1, 365 billion, in 2018 – PLN 140 million, in 2019 – PLN 729 million, in 2020 – PLN 1,084 billion. In 2015–2021, the operation of hard coal mines in Poland proved to be unprofitable due to the decline in demand for coal, which was mainly caused by the high price of coal. In 2020, lower use of domestic coal resulted from a decline in electricity consumption due to pandemic lockdown with gradually increasing use of renewable energy sources in households. At the end of 2020, there were nearly 7 million tons of excess hard coal in Polish mines. It is worth noting that the amount of raw material stored at mines has steadily increased since 2018. The net financial result of hard coal mining amounted to: in 2015 – PLN 4.5 billion; in 2016 – PLN 0.4 billion; in 2017 – PLN 2.9 billion; in 2018 – PLN 0.9 billion; in 2019 – PLN –1.1 billion; in 2020 – PLN 4.3 billion; in 2021 (first three quarters) – PLN 2.3 billion. Despite election promises, PiS has taken steps to close mines.

Between 2019 and 2021, the government and representatives of mining trade unions agreed on a list of mines to be liquidated. The list included KWK Brzeszcze Wschód (2019), KWK Mysłowice (2019), KWK Wieczorek I (2019), KWK Boże Dary (2020), KWK Wieczorek II (2020), KWK Centrum (2021), KWK Krupiński (2021), KWK Mysłowice-Wesoła I (2021), KWK Rydułtowy I (2021), KWK Śląsk (2021). Es thould be noted that these mines did not produced coal for several years due to the exhaustion of their deposits. The companies chosen for liquidation were transferred to SRK, which was responsible for their closure.

Coal imported by private companies, which was competitive in terms of price and quality in relation to that extracted from domestic mines, turned out to be a major problem for the Polish mining industry. In 2020, miners' protests against imported coal from Russia influenced the decision of Deputy Prime Minister and Minister of State Assets Sasin, who banned state power plants from buying coal from abroad.²⁷ The decision of the Deputy Prime Minister was a heavy burden for the power plants, which paid high fees for CO₂ emissions. The consequence of these actions was an increase in energy bills. Despite the unprofitability of hard coal mining in Poland, the government document *Polityka energetyczna Polski do 2040 r.* (Energy Policy of Poland by 2040) states that domestic hard coal will remain an important element of Poland's energy security.

²⁴ Except 2017–2018.

B. Derski, "Górnictwo przynosiło 4,3 mld zł strat w 2020 roku", Wysokienapiecie.pl, 31 March 2021, https://wysokienapiecie.pl/36605-gornictwo-przynioslo-43-mld-zl-strat-w-2020-roku [accessed: 25 April 2022].

T. Raudner, "SRK przedstawiło listę 14 kopalń do likwidacji do 2023 roku", ŚląskiBiznes.pl, 8 January 2020, https://www.slaskibiznes.pl/wiadomosci,srk-przedstawilo-liste-14-kopaln-do-likwidacji-do-2023-roku,wia5-1-2401.html [accessed: 25 April 2022].

²⁷ J. Frączyk, *op. cit.* [accessed: 25 April 2022].

Demand for hard coal "will be covered by domestic resources, and the import-export relationship will be supplementary. The role of this raw material will be reduced. The share of coal in the energy consumption structure will reach no more than 56% in 2030." The Entrepreneurship Council criticized the government's *Polityka energetyczna Polski do 2040 r.* because it provides for, among other things, "production of energy from coal in 2030 at the level of 75 TWh, by 35 TWh less than in 2020, which will significantly increase the risk that the goals of reducing CO₂ emissions by at least 55% by 2030 at the EU level and climate neutrality as of 2050, as set by the EU will not be achieved." ²⁹

According to Ember, a British think-tank, in light of the Polityka energetyczna Polski do 2040, the transition away from hard coal will not happen quickly, and the feasibility of the EU's goal of reducing GHG emissions by at least 55% by 2030 is unlikely.³⁰ With the growing debt of hard coal mines, at the end of 2020, representatives of the government of Morawiecki (including Deputy Prime Minister and Minister of State Assets Sasin, and Plenipotentiary for the transformation of energy companies and coal mining Soboń) and mining trade unions (including Chairman of the Board of the Silesia-Dąbrowa Region NSZZ "Solidarność" Dominik Kolorz, Chairman of the Company Coordination Organization of the Trade Union of Miners in Poland PGG Sebastian Czogała) undertook negotiations on plans to close mines. As a result of the negotiations, the parties signed a social agreement on the transformation of the hard coal mining sector. The document concerns closing hard coal mines by 2049 according to a schedule agreed upon between the parties. It has been agreed that unprofitable mines will receive public aid for their operation and their closure will take place in the late 2040s of the twenty-first century. It is worth noting that unprofitable mines would continue to be maintained and subsidized, which is against the law in the EU. A package of social protection for workers from the liquidated companies, such as mining vacations or one-off severance payments, was a part of the social agreement.³¹

In December 2021, the Polish Parliament received a draft (from PiS parliamentary group) of an act amending the Act on the functioning of the hard coal mining

Polityka energetyczna Polski do 2040 r. zał. do uchwały nr 22/2021 Rady Ministrów z 2 lutego 2021 r., Ministerstwo Klimatu i Środowiska, https://www.gov.pl/web/klimat/polityka-energetyczna-polski [accessed: 25 April 2022].

Polityka energetyczna Polski do 2040 r. zał. do uchwały nr 22/2021 Rady Ministrów z 2 lutego 2021 r., Ministerstwo Klimatu i Środowiska, https://kig.pl/wp-content/uploads/2021/05/uwagi-do-polityki-energetycznej-polski-2040.pdf [accessed: 25 April 2022].

[&]quot;Ember: podejście polskiego rządu ws. PV trudne do zrozumienia", Gramwzielone.pl, 16 March 2021, https://www.gramwzielone.pl/energia-sloneczna/104996/ember-podejscie-polskiego-rzadu-ws-pv-trudne-do-zrozumienia [accessed: 25 April 2022].

[&]quot;Poland agrees coal mining phase out with unions by 2049", Climate Home News, 25 September 2020, https://www.climatechangenews.com/2020/09/25/poland-agrees-coal-mining-phase-unions-2049 [accessed: 25 April 2022].

sector, which provided for a system of support for the transformation of the hard coal mining sector. It should be noted that the parliamentary draft does not require the extensive debate or consultation required for government draft. In the first quarter of 2022, the Act was passed by the parliament and signed by Polish President Andrzej Duda. According to Article 2 of the Act on amending the Act on the functioning of the hard coal mining industry in the years 2022–2031, funds coming from the state budget in the amount of PLN 28.821 billion are provided for mine closures. Thanks to the Act, it will be possible to suspend and ultimately redeem over PLN 818 million of PGG's liabilities towards the Social Insurance Institution and PLN 1 billion of the loan from the Polish Development Fund.

Implementation of the solutions set out in the amended law regarding the transformation of the hard coal mining sector requires notification of the EC. A decision on this matter has not been made yet.

Conclusions

As far as the first question posed at the beginning of the article is concerned, it should be noted that Poland's energy security and the restructuring of the hard coal mining industry were an important part of the PiS scheme. In the years 2015–2021, PiS government aimed to make Poland's energy security dependent on domestic hard coal. According to the assumptions of the government program, the Polish economy was to be based on hard coal as the primary energy resource. The governments of Szydło and Morawiecki supported the operations of the mines by taking decisions to keep them in a situation where they were generating losses from their operations and while EU countries were abandoning using coal. Between 2015 and 2021, PiS government failed to develop a coherent and comprehensive policy towards hard coal mining sector taking into account the EU climate policy and the increased demand for energy resources of the Polish economy. Due to the high costs of mining and low quality of coal obtained, as well as maintaining high safety standards of work in difficult geological conditions, most Polish mines should be liquidated. The government's reluctance to run difficult negotiations with miners was due to fear of their protests and the loss of support of mining trade unions, which are the political base of PiS party. Frequent personnel changes in ministries of energy and state assets resulted from the government's lack of a professional approach to issues important for Polish energy security.

As for the second question, it must be stated that the implementation of the EU objective to reduce carbon dioxide emissions by 55% by 2030 and a noticeable increase in the price of emission allowances forced the PiS government to make decisions related to abandoning fossil fuels, including hard coal. The government realised that the transition from hard coal in the energy sector is inevitable. Hence,

the government's decision to stop the construction and subsequent dismantling of the Ostrołęka C coal block.

Liquidation of the mine is possible on the condition that the EC accepts the government's restructuring plan for the hard coal mining sector. There is a high probability that the EC may not consent to public aid for mining on the terms proposed by the Polish party. The EC may object to subsidising unprofitable enterprises for almost three decades, i.e. until 2049. The EU law provides for financial aid in connection with closing down mines, not with their continuation. In addition to public aid, mine closures are conditioned by replacement of hard coal with other energy sources. In this situation, Poland needs to increase the share of renewable energy sources in its energy mix as soon as possible. Shifting away from coal in the energy sector may prove to be a big challenge for the Polish government in the situation of the war in Ukraine. Replacing Russian gas and coal by buying them from other countries will increase the price of these raw materials. It is unlikely that coal-fired power plants will be decommissioned by 2049. Such a solution could result in an energy shortage.

References

- Coal Analysis and forecast, International Energy Agency, December 2021, https://iea.blob.core. windows.net/assets/f1d724d4-a753-4336-9f6e-64679fa23bbf/Coal2021.pdf [accessed: 9 April 2022].
- Derski B., "Górnictwo przynosiło 4,3 mld zł strat w 2020 roku", Wysokienapiecie.pl, 31 March 2021, https://wysokienapiecie.pl/36605-gornictwo-przynioslo-43-mld-zl-strat-w-2020-roku [accessed: 25 April 2022].
- "Ember: podejście polskiego rządu ws. PV trudne do zrozumienia", Gramwzielone.pl, 16 March 2021, https://www.gramwzielone.pl/energia-sloneczna/104996/ember-podejscie-polskiego-rzadu-ws-pv-trudne-do-zrozumienia [accessed: 25 April 2022].
- Euracoal Annual Report 2015, European Association for Coal and Lignite AISBL, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports/EURACOAL-Annual-Report-2015-rev05.pdf [accessed: 9 April 2022].
- Euracoal Annual Report 2016, European Association for Coal and Lignite AISBL, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports/EURACOAL-Annual-Report-2016-rev06.pdf [accessed: 9 April 2022].
- Euracoal Annual Report 2017, European Association for Coal and Lignite AISBL, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports/EURACOAL-Annual-Report-2017-rev09.pdf [accessed: 9 April 2022].
- Euracoal Annual Report 2018, European Association for Coal and Lignite AISBL, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports/EURACOAL-Annual-Report-2018-rev02.pdf [accessed: 9 April 2022].
- Euracoal Annual Report 2019, European Association for Coal and Lignite AISBL, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports/EURACOAL-Annual-Report-2019-rev03-WEB.pdf [accessed: 9 April 2022].

- Euracoal Annual Report 2020, European Association for Coal and Lignite AISBL, https://euracoal2.org/download/Public-Archive/Library/Annual-Reports/EURACOAL-Annual-Report-2020-rev05-WEB.pdf [accessed: 9 April 202].
- Eurostat, Coal production and consumption statistics, 22 February 2022, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Coal_production_and_consumption_statistics [accessed: 9 April 2022].
- Frączyk J., "Węgiel z Rosji tańszy nawet od miału z polskich kopalń. Górnictwo ma problem", Business Insider, 7 February 2020, https://businessinsider.com.pl/finanse/ceny-wegla-w-polsce-kontra-swiat-wegiel-z-rosji-tanszy-od-mialu-z-polskich-kopaln/nz7jrbs [accessed: 14 April 2022].
- Gałązka W., "Górnictwo: zamykamy trzyletni etap restrukturyzacji sektora", Górnicza Izba Przemysłowo-Handlowa, http://www.giph.com.pl/aktualnosci/art/gornictwo-zamykamy-trzyletnietap-restrukturyzacji-sektora [accessed: 23 April 2022].
- "Global CO₂ Emissions Rebounded to Their Highest Level in History in 2021", United Nations Climate Change, 9 March 2022, https://unfccc.int/news/global-co2-emissions-rebounded-to-their-highest-level-in-history-in-2021 [accessed: 9 April 2022].
- Kamola-Cieślik M., "Bezpieczeństwo energetyczne Polski a sytuacja ekonomiczna Kompanii Węglowej SA PO 2014 roku", *Bezpieczeństwo. Teoria i Praktyka*, no. 1, 2016, pp. 133–148.
- Medoń S., "Dlaczego import węgla kamiennego do Polski jest tak wysoki?", O węglu.pl, 29 September 2020, https://oweglu.pl/dlaczego-import-wegla-kamiennego-do-polski-jest-tak-wysoki [accessed: 14 April 2022].
- Nowoczesna, solidarna i bezpieczna Polska. Program Prawa i Sprawiedliwości, Prawo i Sprawiedliwość, Warszawa 2009.
- Obraz polskiego górnictwa na rynku węgla w latach 2011–2020 i po 7 miesiącach 2021 r., Agencja Rozwoju Przemysłu SA, https://szkolaeksploatacji.pl/wp-content/uploads/2021/09/xxx_sep_arp_raport.pdf [accessed: 9 April 2022].
- "Odwołany minister opisuje w rządzenie spór o górnictwo", Biznes Alert.pl, 30 March 2020, https://biznesalert.pl/adam-gaweda-dymisja-wiceminister-aktywow-panstwowych-pelnomocnik-gornictwo-energetyka-wegiel [accessed: 3 April 2022].
- "Poland agrees coal mining phase out with unions by 2049", Climate Home News, 25 September 2020, https://www.climatechangenews.com/2020/09/25/poland-agrees-coal-mining-phase-unions-2049 [accessed: 25 April 2022].
- Polityka energetyczna Polski do 2040 r. zał. do uchwały nr 22/2021 Rady Ministrów z 2 lutego 2021 r., Ministerstwo Klimatu i Środowiska, https://www.gov.pl/web/klimat/polityka-energetyczna-polski [accessed: 25 April 2022].
- Polityka energetyczna Polski do 2040 r. zał. do uchwały nr 22/2021 Rady Ministrów z 2 lutego 2021 r., Ministerstwo Klimatu i Środowiska, https://www.gov.pl/web/klimat/polityka-energetyczna-polski [accessed: 25 April 2022].
- "Polska popiera neutralność klimatyczną UE, ale...", Teraz Środowisko, 26 May 2021, https://www.teraz-srodowisko.pl/aktualnosci/Polska-poparcie-neutralnosc-klimatyczna-UE-10367.html [accessed: 3 April 2022].
- Posiedzenie Rady Europejskiej (10 i 11 grudnia 2020 r.) konkluzje, Rada Europejska, Bruksela 2020, https://www.consilium.europa.eu/media/47337/1011-12-20-euco-conclusions-pl.pdf [accessed: 3 April 2022].
- Raudner T., "SRK przedstawiło listę 14 kopalń do likwidacji do 2023 roku", ŚląskiBiznes.pl, 8 January 2020, https://www.slaskibiznes.pl/wiadomosci,srk-przedstawilo-liste-14-kopaln-do-likwidacji-do-2023-roku,wia5-1-2401.html [accessed: 25 April 2022].

- Rozporządzenie Rady Ministrów z dnia 7 grudnia 2015 r. w sprawie utworzenia Ministerstwa Energii, Dz.U., 2015, item 2075.
- Rozporządzenie Rady Ministrów z dnia 19 listopada 2019 r. zmieniające rozporządzenie w sprawie utworzenia Ministerstwa Energii, Dz.U., 2019, item 2290.
- Rozporządzenie Rady Ministrów z dnia 3 września 2020 r. w sprawie ustanowienia Pełnomocnika Rządu do spraw transformacji spółek energetycznych i górnictwa węglowego, Dz.U., 2020, item 1525.
- Rozporządzenie Rady Ministrów z dnia 3 września 2020 r. w sprawie zniesienia Pełnomocnika Rządu do spraw restrukturyzacji górnictwa węgla kamiennego, Dz.U., 2020, item 1523.
- "Sasin o konieczności zmiany strategii: Kopalnie będą wygaszane zdecydowanie wolniej", Wprost, 12 April 2022, https://biznes.wprost.pl/gospodarka/energetyka/10684987/sasin-o-koniecznosci-zmiany-strategii-kopalnie-beda-wyga [accessed: 14 April 2022].
- Sawicki B., "Premier powołał pełnomocnika rządu do spraw transformacji energetyki i górnictwa", BiznesAlert.pl, 5 September 2020, https://biznesalert.pl/premier-powolal-pelnomocnika-rzadu-do-spraw-transformacji-energetyki-i-gornictwa [accessed: 9 April 2022].
- Sobolak J., "Krótka historia Europejskiego Zielonego Ładu i problemów z KPO, czyli co w Polsce poszło nie tak?", Business Insider, 11 December 2021, https://businessinsider.com.pl/gospodarka/krotka-historia-europejskiego-zielonego-ladu-i-problemow-z-kpo-czyli-co-w-polsce/mlvwmps [accessed: 3 April 2022].
- Ty górnicza żmijo! Rozmowy z profesorem Andrzejem Karbownikiem o restrukturyzacji polskiego górnictwa węgla kamiennego, Katowice: Wydawnictwo Górnicze, 2014.
- Udzielenie odpowiedzi przez sekretarza stanu w Ministerstwie Aktywów Państwowych przez Adama Gawędę na interpelację posła Aleksandra Misztalskiego z dnia 27 stycznia 2020 r. w sprawie polityki węglowej, Minister Aktywów Państwowych, 21 February 2020, http://orka2.sejm.gov.pl/INT9.nsf/klucz/ATTBMFJX6/%24FILE/i01571-01.pdf [accessed: 14 April 2022].
- *Uwagi Rady Przedsiębiorczości do Polityki energetycznej Polski 2040*, Krajowa Izba Gospodarcza, Warszawa 10 May 2021, https://kig.pl/wp-content/uploads/2021/05/uwagi-do-polityki-energetycznej-polski-2040.pdf [accessed: 25 April 2022].
- "W 2021 roku światowa emisja CO₂ była najwyższa w historii", Energetyka 24, 11 March 2022, https://energetyka24.com/klimat/wiadomosci/w-2021-roku-swiatowa-emisja-co2-byla-najwyzsza-w-historii [accessed: 9 April 2022].
- "W ubiegłym roku wzrosło wydobycie i sprzedaż węgla. Tak wynika z danych ARP", Polskie Radio 24, 21 February 2022, https://www.polskieradio24.pl/42/273/Artykul/2905985,W-ubieglym-roku-wzrosło-wydobycie-i-sprzedaz-wegla-Tak-wynika-z-danych- [accessed: 9 April 2022].
- Wegiel kamienny. Hard coal, Państwowy Instytut Geologiczny, Państwowy Instytut Badawczy, https://www.pgi.gov.pl/dokumenty-pig-pib-all/foldery-instytutowe/foldery-surowcowe-2018/6214-folder-wegiel-kamienny-1/file.html [accessed: 9 April 2022].
- Zarządzenie Ministra Energii z 18 października 2016 r. w sprawie podziału pracy w Kierownictwie Ministerstwie Energii, Dz.Urz.ME, 2016, item 11.
- Zarządzenie Ministra Aktywów Państwowych z dnia 11 maja 2020 r. w sprawie ustanowienia pełnomocnika do spraw górnictwa węgla kamiennego, Dz.Urz. MAP, 2020, item 10.
- Zużycie paliw i nośników energii w 2015, Główny Urząd Statystyczny, Warszawa 2016.
- Zużycie paliw i nośników energii w 2016, Główny Urząd Statystyczny, Warszawa 2017.
- Zużycie paliw i nośników energii w 2017, Główny Urząd Statystyczny, Warszawa 2018.
- Zużycie paliw i nośników energii w 2018, Główny Urząd Statystyczny, Warszawa 2019.
- Zużycie paliw i nośników energii w 2019, Główny Urząd Statystyczny, Warszawa 2020.
- Zużycie paliw i nośników energii w 2020, Główny Urząd Statystyczny, Warszawa 2021.

Polish government policy towards the hard coal mining sector after 2015 Abstract

The article looks at the government's policy towards the hard coal mining sector in Poland in the years 2015–2021 in the context of the climate policy of the European Union, and the increase in demand for energy resources of the Polish economy. Despite the fact that for several years hard coal mines in Poland have been generating losses, they continue to operate. For political reasons, they could count on government support. Poland's obligations towards the EU have made the transition from hard coal in the power industry inevitable. The article discusses the assumptions of the government's mine restructuring plan until 2049. Its implementation depends on the decision of the European Commission on granting public aid to the liquidated mines.

Key words: energy policy, government decisions, coal mining, energy resources, Poland