POLAND: INVENTORY OF ESTIMATED BUDGETARY SUPPORT AND TAX EXPENDITURES FOR FOSSIL-FUELS

Energy resources and market structure

Fossil fuels provide the bulk of Poland's energy. It relies heavily on indigenous bituminous coal, which accounts for over a half (e.g. 55% in 2010) of its total primary energy supply (TPES). While Poland has the highest level of coal-based electricity generation among the OECD countries, it has been declining over the years — from over 97% in 1990 to about 88% in 2010. In 2010, oil provided about a quarter of TPES, all but about 5% of which was imported, and natural gas for a further 13%, about two-thirds of which was imported. Russia supplies over 90% of Poland's oil imports and over 80% of its imports of natural gas. Although its natural-gas reserves are in decline, Poland is thought to have significant unconventional resources, notably shale gas. Exploratory drilling started only recently. Domestically produced biomass, the only significant renewable energy source, accounted for the remaining 7% of primary supply in 2010. The government's medium-term objective is to diversify its energy mix away from coal by introducing nuclear power and expanding the role of renewable energy, particularly biogas.

The structure of Poland's energy sector has changed dramatically since the early 1990s, following the collapse of the communist bloc. Some assets were privatised, but the state has retained large stakes in most of the main companies. The state holds 100% of shares of two out of three biggest coal producers, Katowicki Holding Węglowy S.A. and Kompania Węglowa S.A. and it holds a majority share of the remaining one, Jastrzębska Spółka Węglowa S.A. The extraction of hard coal is also carried out by other, smaller companies, like Południowy Koncern Węglowy S.A., LW Bogdanka S.A., ZG Siltech Sp. Z o.o., PG Silesia Sp. Z o.o. Two vertically integrated power utilities, PGE S.A. and PAK S.A., mine lignite for their own use from four open-pit mines (Konin, Adamów, Bełchatów, Turów). Together with a small lignite mine, Sieniawa, these four open-pit mines account for the total lignite extraction in Poland.

There are half a dozen oil-producing companies in Poland, of which the Polish Oil and Gas Company (PGNiG), which is majority government owned, is by far the largest, accounting for 98% of production, most of which comes from on-shore wells. Another state-controlled company, PetroBaltic, produces small volumes offshore. Oil refining is undertaken by PKN Orlen, established in 1999 through the merger of two former state-owned enterprises, and by the LOTOS Group. Both companies are majority state-owned. A wholly state-owned company, PERN (Przedsiębiorstwo Eksploatacji Rurociągów Naftowych S.A., or "Przyjaźń"), operates oil storage and pipeline facilities. Distribution and retailing is carried out by PKN Orlen S.A. and the LOTOS Group, as well as a number of foreign companies.

PGNiG S.A., through subsidiaries, continues to dominate the downstream gas sector following the implementation of market reforms in recent years to comply with EU directives. The company controls virtually all gas imports and owns all the transmission pipelines and underground storage facilities, though the system is operated by an independent transmission system operator, OGP GAZ-SYSTEM S.A. — a wholly state-owned enterprise set up in 2004. Small quantities of liquefied natural gas (LNG) are transported by road in tanks by independent companies. PGNiG S.A. also owns six regional distribution companies covering most of the country, though they have been legally unbundled from the rest of the company. PGNiG S.A. dominates the retail market too. Several other companies (including G.EN Gaz Energia, CP Energia S.A., EWE Polska Sp. z o.o., Enesta

Sp. Z o.o. and KRI S.A.) have entered the market, but their total market share was only about 2% in 2009. As they have no access to gas resources, they purchase gas from PGNiG and resell it to final customers, often via their own local distribution networks. Customer switching is negligible.

There are more than 100 companies licensed to generate electric power in Poland, but four companies that were formed in 2007 out of the old state monopoly, Polskie Sieci Energetyczne S.A. (PSE), control most of the market: Polska Grupa Energetyczna (PGE), Tauron Polska Energia, Energa and Enea. They are vertically integrated, with activities in generation, distribution and direct supply. Poland's transmission grid is operated and owned by PSE Operator S.A., which remains in state ownership. There are 14 distribution system operators (DSOs) that were legally unbundled in 2007 from the former distribution companies, owned by the four main Polish power companies and two foreign companies (Vattenfall and RWE), as well as six so-called local distribution operators that were not subject to unbundling. The supply branch of each group sells most of its electricity to the customers connected to their distribution networks; the rate of customer switching to independent suppliers remains very low.

Prices, taxes and support mechanisms

Prices for coal, oil and oil products are set by the market and are neither regulated nor subsidised. The Energy Regulatory Authority, ERO, still regulates natural gas prices for all consumer groups. It also approves tariffs for electricity and gas transmission and distribution. End-user electricity prices are not regulated except for household tariffs, which are subject to approval by the ERO.

Sales of all fuels in Poland include a 23% value-added tax (VAT).[1] All oil products and electricity sales (both commercial and non-commercial) are subject to excise taxes; a road tax is levied on motor fuels. Excise taxes on gasoline are considerably higher than on diesel and automotive LPG, which has boosted demand for the latter fuels. Some off-road uses of petroleum fuels (fisheries, aviation) are exempt from excise taxes.

Although an excise tax on coal was introduced on 1 March 2009, coal used for heating purposes was exempt from the excise tax on coal until 1 January 2012. After that date, only certain users of coal are exempt from the excise tax on coal. Coal is exempt from the excise duty, if it is used (1) for electricity generation, (2) as input in production of other energy products, (3) by households, the army, public administration, certain entities within the educational system (e.g. nurseries, kindergartens), healthcare providers and NGOs, (4) for rail transport of cargo and passengers, (5) for combined heat and power generation, (6) in agriculture, horticulture, fish farming and forestry, (7) in various mineralogical, electrolytic, metallurgical and chemical-reduction processes, (8) by energy-intensive industries for heating purposes, and (9) by those business entities that implemented systems aiming at fostering environmental protection or increasing energy efficiency. The heavy costs of restructuring the Polish hard-coal industry have been borne mainly by the state. Since Poland joined the European Union in 2004, the European Commission has taken a number of decisions on the compatibility of restructuring plans with the EU competition rules and on conditions for approving state aid for the hard-coal-mining industry. In recent years, the selling prices of locally produced steam coal, coking coal and lignite sold in Poland have been freely negotiated. Coal sales are not subsidised and state aid is no longer given to support operating costs or to maintaining access to already exploited coal reserves.

Most of the costs currently associated with aiding the restructuring of the hard-coal industry are associated with historic liabilities, namely: the entitlement by retired mineworkers to free coal; the costs of mine closures; benefits paid to redundant miners; the costs of managing water, gas and fire risks at closed mines; and the restoration and clean-up of damage caused by past mining activity. The total cost to the national budget of these liabilities over the period 1999 to 2009 is estimated to be above PLN 20 billion. Almost 90% of these government

[1] In 2011, the basic VAT was increased from 22 to 23% until the end of 2013. However, the government announced it may further increase it, depending on the public-debt-to-gross-domestic-product ratio.

expenses covered exemption or deferral of social-contribution, tax and fine payments. Since 2007, the costs of mine closures have been met by a dedicated fund, established for this purpose by the remaining mining enterprises.

Data documentation

General notes

The fiscal year in Poland normally coincides with the calendar year. Corporations, however, may choose a different starting point of the fiscal year.

Producer Support Estimate

Most of Polish state aid to the energy sector is apportioned to the coal industry. Poland's heavy reliance on coal stems from both a large domestic endowment of this fuel and the fact that in the communist period Poland had limited foreign-exchange earnings with which it could import other fuels. Because coal-mining was considered a strategic sector, the state subsidised production of coal, providing various social benefits to coal miners and regulating coal prices to keep them low.

With the economic transition of the early 1990s, the state envisioned to transform coal mines into self-reliant commercial companies that would adapt to the conditions of a free-market economy. The continued policy of price controls, however, meant that the industry had a very limited potential for economic growth and, hence, needed further state assistance.

All subsequent plans for restructuring the coal sector throughout the 1990s supported capacity adjustment, shutting down unprofitable mines and reducing employment to levels that would improve productivity. The overarching objective of those programmes was thus to make the coal-mining sector profitable.

These programmes proved ineffective due to the lack of consensus between the government and the trade unions. This changed in 1998 as the new government, supported by *Solidarność* (the biggest Polish trade union), devised a coal-mining restructuring plan, the *Reforma górnictwa węgla kamiennego w Polsce w latach 1998 — 2002*. The plan provided additional funding for social schemes and expressed a commitment to write-off of the debt which the mines had accumulated over the years. Another plan adopted in 2003 — the *Program restrukturyzacji górnictwa węgla kamiennego w Polsce w latach 2003-2006* — pursued similar objectives.

When Poland joined the European Union in 2004, state aid became subject to the Community rules. In practice, this development meant that coal-mining restructuring plans would have to be compatible with the common market, and that the European Commission would need to approve any state-aid scheme before it reaches recipients.

The Council of Ministers has so far adopted two documents regarding restructuring of the sector: the *Restrukturyzacja górnictwa węgla kamiennego w latach 2004-2006 oraz strategia na lata 2007-2010*, which was then replaced by *Strategia działalności górnictwa węgla kamiennego w Polsce w latach* 2007-2015. Poland does not provide subsidies to coal-mining under article 5-3 (current production aid). All current subsidies therefore result from article 7 (aid to cover exceptional costs) and are associated either with mine decommissioning or investment aid to operating mines (for up to 30% of the total investments made). The former measures are mainly allocated to the GSSE as most of them do not increase current production or consumption of coal. The latter are allocated to the PSE since they directly support coal producers.

The coal-mining sector underwent major restructuring through a series of management mergers and mine closures. At the beginning of the transition, the industry comprised 71 independent mines. In 1993, the management of hard-coal production was taken over by seven joint-stock holding companies that held the assets of 60 mines. Four mines remained stand-alone enterprises, while the rest was shut down on unprofitability grounds.

The Polish coal-mining sector now comprises 31 mines grouped into seven joint-stock holding companies and is dominated by three state-owned companies: Europe's largest hard-coal company, Kompania Węglowa S.A. (KW), Katowicki Holding Węglowy S.A. (KHW) and Jastrzębska Spółka Węglowa S.A. In 2000, two state-owned liquidation companies, Spółka Restrukturyzacji Kopalń S.A. (SRK) and Bytomska Spółka Restrukturyzacji Kopalń Sp. Z o.o. (BSRK), were given responsibility to manage mine decommissioning. Since 2006, only two companies in Poland have been benefitting from state aid: KW and KHW. Aid is also being envisaged for the SRK (BSRK was consolidated into SRK in 2009).

Rehabilitation of Regions Damaged by Coal-Mining Activity (data for 1996-)

This item forms part of the broader restructuring programme. It provides funding for the rehabilitation of regions damaged by both past coal-mining activity and the reactivation of abandoned mining sites. Funding provided for the rehabilitation of regions damaged by the latter is a producer subsidy but it is impossible to isolate this single item from the reports (see the GSSE part of the cookbook).

Data for the 2001–03 period are not reported since they cannot be isolated from total state-aid for restructuring. The data reported for 2006 are an underestimate since no report is available for that particular year. The report for January–November 2006 is used instead.

Sources: Ministry of Economy (various years), Office of Competition and Consumer Protection (various years).

Tag: POL_dt_02

Exemption or Deferral of Social Contributions (data for 1996-2003)

This item comprises annual payments made by the state to the Social Insurance Office (ZUS) on behalf of coal mines. State aid took the form of both social-contribution exemptions and deferrals.

Both types of aid were granted on the basis of two government acts: Rozporządzenie Rady Ministrów z dnia 15 września 1982 r. w sprawie zasad umarzania i udzielania ulg w spłacaniu należności państwowych (Dz. U. Nr 30, poz. 211 z 1982 r. z późn. zm.) and Ustawa z dnia 27 sierpnia 1997 r. o restrukturyzacji finansowej jednostek górnictwa węgla kamiennego oraz wprowadzeniu opłaty węglowej (Dz.U. Nr 113, poz.735 art 7). Aid was available for both operating coal mines and the liquidation companies dealing with shutting down the unprofitable mines.

State support provided through social-contribution exemptions and deferrals seems to date back to 1982 but data are only available for the 1996 – 2003 period. According to the document adopted by the Council of Ministers (*Strategia działalności górnictwa węgla kamiennego w Polsce w latach 2007-2015*), the scheme terminated in 2006.

Amounts reported under this item were estimated as the product of the value of deferred contribution payments and the interest rate on these payments.

Payments are allocated to the PSE since they subsidise one of the production factors, labour.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_03

Exemption or Deferral of Taxes and Fines (data for 2001-2003)

This item comprises annual payments made by the state to exempt or defer tax and fine payments on behalf of the coal-mining sector. State aid covered unpaid income taxes and fines, including environmental charges paid to the Environmental and Water Management Fund (NFOŚiGW) and fines paid to the Disability Fund (PFRON). Aid was available for both operating coal mines and liquidation companies dealing with shutting down the unprofitable mines.

The state is committed to continue the programme until at least 2015, as outlined in a document adopted by the European Council, *Strategia działalności górnictwa węgla kamiennego w Polsce w latach 2007 – 2015.*

The annual amounts for tax and fine deferrals were estimated as the product of the value of deferred payments and the interest rate on these payments.

Payments are allocated to the PSE since they constitute a production tax credit.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_04

NFOŚiGW Aid for Environmental Protection (data for 1996-2000)

The Environmental and Water Management Fund (NFOŚiGW) provides funding for the coal-mining industry to support environmental protection programmes. It can also write-off fines whenever the industry proves unable to pay them. These fines are imposed by the NFOŚiGW to partially internalise the social costs associated with coal-mining.

Data are available for the 1996 – 2000 period only since the amounts for later years cannot be distinguished from total aid for restructuring.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_05

R&D Funding from the Research Committee (data for 1996-2000)

This item comprises annual grants obtained from the Research Committee by the coal-mining industry for financing their R&D programmes.

The Research Committee provides funding for financing research and development to companies which apply for R&D grants.

Data are available for the 1996 – 2000 period. From 2001, data are unavailable since they cannot be isolated from total state-aid for restructuring.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_06

Stranded-Costs Compensation (data for 2008-)

This item comprises subsidies provided to power plants to compensate them for the termination of long-term Power Purchase Agreements (PPAs).

In the mid-1990s, the Polish government decided to launch a programme designed to modernise the domestic electricity sector and bring it into line with the technical and environmental standards of Western Europe. The programme initially launched a tender procedure with a view to selecting projects for new or modernised electricity generation plants. The selected projects would be awarded long-term PPAs for their generation capacity. The PPAs were signed between 1994 and 1998 and most of them had been concluded for a period of more than 15 years. The last PPA was to expire in 2027.

Under these agreements, the state network operator had a purchase obligation for a guaranteed volume of electricity at a guaranteed price. Power plants charged the electricity network operator an amount equivalent to all their fixed and variable costs plus a profit margin. The PPAs thus provided price-support to the power plants that had signed such agreements with the network operator (the PPAs covered around 40% of Polish electricity generation).

In November 2005, the Commission opened an in-depth investigation on the PPAs in Poland. During 2006 and 2007, the Polish authorities worked out a draft law that foresees the end of the PPAs and a compensation system to the power plants in line with the Commission's methodology for analysing state aid linked to stranded costs. That methodology allows stranded-cost compensations to alleviate the effect of liberalisation without threatening the continuation of electricity supply. Such compensations should be proportionate, and not discourage the entrance of new companies into the generation market.

The programme started in 2008 and funding is planned until the end of 2025. The biggest Polish power plants, *PGE Elektrownia Opole S.A.* and *PGE Elektrownia Turów S.A.*, received most of the payments. Payments are financed from a parafiscal levy imposed on all consumers to make up a fund which is then disbursed among the power plants. This fund is run by a special purpose company that is fully-owned and controlled by the state.

The formula for calculating these payments provides for the state to cover the losses associated with certain types of cost, plus depreciation and fuel costs, if the revenue collected on the market is not sufficient for that purpose. This implies that state payments cover the costs and risks normally borne by the power plants under normal market conditions. Since Polish power plants rely mainly on coal (more than 90% of Polish electricity is produced out of coal), this scheme is an implicit subsidy to the coal sector. These payments are therefore allocated to the PSE.

Sources: European Commission, Office of Competition and Consumer Protection (various years).

Tag: POL_dt_13

Initial Investment Aid for Hard-Coal-Mining Sector (data for 2010-)

This item comprises investment aid for hard-coal-mining sector. Aid was granted to investment projects related to ensuring access to coal reserves and was not granted for covering costs related to the production-process itself.

Grant was provided by the Ministry of Economy in form of a grant that covered initial investment costs and it covered fixed capital costs directly related to infrastructure work or to the equipment necessary for the mining of coal resources in existing mines (such as pits and main dip headings, roadways and other infrastructure work, mechanical installations, modern managements equipment, washrooms and surface installations).

The scheme operated only in 2010, with a planned budget of PLN 400 million. It followed the EU regulation stating that the state can reimburse up to 30% of the qualifying investment costs incurred by coal producers.

Sources: Ministry of Economy (2010).

Tag: POL_dt_14

Consumer Support Estimate

Coal Allowances in Coal-Mining Sector (data for 2004-)

Traditional in-kind benefits for miners include free provision of coal which used to serve heating and water-warming purposes. With time, however, most miners have obtained access to distributed heating systems and the benefit in-kind lost its rationale. The in-kind coal support is now being phased out with the introduction of cash equivalents.

Data for the period 2001 – 2003 are not reported since they cannot be isolated from total state-aid for restructuring. The data reported for 2006 are an underestimate since no report is available for that particular year. The report for January – November 2006 is used instead.

Sources: Ministry of Economy (various years), Office of Competition and Consumer Protection (various years).

Tag: POL_dt_11

Rebates on Diesel-Fuel Tax in Farming (data for 2006-)

In 2006, Poland adopted the EU Council Directive 2003/96/EC – *Restructuring the Community Framework for the Taxation of Energy Products and Electricity*, which requires each member state to apply a minimum tax rate of EUR 21 per 1 000 litres to diesel fuel when used for farming purposes.

Rebates are financed out of the state budget and their value cannot exceed 86 litres per hectare of utilised agricultural area. The Minister of Agriculture and Rural Development determines the exemption rate on a yearly basis. Polish farmers can obtain rebates by submitting the relevant invoices to the local authority twice a year.

Data for this scheme were provided by the Ministry of Agriculture and Rural Development and are available at the Polish Business in Agriculture website.

Sources: Ministry of Agriculture and Rural Development (various years).

Tag: POL_te_01

General Services Support Estimate

Aid for Coal-Mine Decommissioning (data for 1996-)

The coal-mine decommissioning programme started in 1991. It became an official government policy in 1993 as part of the plan to make the coal-mining sector profitable. The state is committed to continue the programme until at least 2015, as outlined in a document adopted by the European Council, *Strategia działalności górnictwa węgla kamiennego w Polsce w latach 2007 – 2015.*

Throughout the existence of the programme, numerous mines have been either partially or completely shut down. The state has been covering the costs of dismantling the equipment, protecting the land above from subsistence, and ensuring that neighbouring coal mines are secured from water, gas and fire hazards.

Data for the 2001 – 2003 period are not reported since they cannot be isolated from total state-aid for restructuring. The data reported for 2006 are an underestimate since no report is available for that particular year. The report for January – November 2006 is used instead.

Payments are allocated to the GSSE as they do not increase current production or consumption of hard coal.

Sources: Ministry of Economy (various years), Office of Competition and Consumer Protection (various years).

Tag: POL_dt_01

Rehabilitation of Regions Damaged by Coal-Mining Activity (data for 1996-)

This item forms part of the broader restructuring programme. It provides funding for the rehabilitation of regions damaged by both past coal-mining activity and the reactivation of abandoned mining sites.

State support for the scheme was regulated by a document adopted in 1994: *Prawo geologiczne i górnicze (Dz. U. Nr 27, poz. 96, z późn. zm.)*. The state is committed to continue the programme until at least 2015, as outlined in a document adopted by the European Council, *Strategia działalności górnictwa węgla kamiennego w Polsce w latach 2007 – 2015.*

Payments are allocated to the GSSE as most of them do not increase current production or consumption of coal. Funding provided for the rehabilitation of regions damaged by the reactivation of abandoned mining sites is a producer subsidy but it is impossible to isolate this single item from the reports.

Data for the 2001 – 2003 period are not reported since they cannot be isolated from total state-aid for restructuring. The data reported for 2006 are an underestimate since no report is available for that particular year. The report for January – November 2006 is used instead.

Sources: Ministry of Economy (various years), Office of Competition and Consumer Protection (various years).

Tag: POL_dt_02

Aid for Employment Restructuring (data for 1998-)

The employment restructuring programme was established in 1993. The item comprises various social schemes over the last two decades but its aim has always been to bring about a reduction in unemployment in the mining sector without a significant loss of the dismissed workers' welfare.

The aid devoted to employment restructuring was substantially increased with the introduction of the 1998 coal-mining restructuring programme, *Reforma górnictwa węgla kamiennego w Polsce w latach 1998 – 2002*. The programme introduced two different sets of measures.

The first set aimed at reemployment of younger miners in other sectors of the economy and provision of welfare benefits to dismissed workers while looking for a new job. Miners were to choose from a soft loan for the establishment of a business, social-assistance benefits and two different kinds of severance-payment schedules. Also, workers from closed mines were offered alternative forms of employment and access to active-labour-market policies.

The other set of measures was to provide social protection for older employees. Miners who had five or fewer years of work left before becoming eligible for a pension were entitled to receive a "mining leave" (equal to 75% of the wage paid when on a holiday leave). Miners two or fewer years away from qualifying for a pension obtained a prospect of a secure job in the coal-mining sector.

Data for the 2001 – 2003 period are not reported since they cannot be isolated from total state-aid for restructuring. The data reported for 2006 are an underestimate since no report is available for that particular year. The report for January – November 2006 is used instead.

Payments are allocated to the GSSE as they do not increase current production or consumption of coal.

Sources: Ministry of Economy (various years), Office of Competition and Consumer Protection (various years).

Tag: POL_dt_07

Investment Aid from the Ministry of Economy (data for 1998-2000)

This item comprised aid to investment in environmental protection and research and development. Aid was provided by the Minister of the Economy in the form of direct transfers.

Data are available for the 1998 – 2000 period.

Payments are allocated to the GSSE as a more detailed description of the programme was not available.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_08

Severance Payments for the Coal-Mining Industry (data for 1999-2000)

Severance payments were granted to those miners who agreed to leave the coal-mining industry.

Data are available for the 1998 – 2000 period.

Payments are allocated to the GSSE as they do not increase current production or consumption of coal.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_09

Aid for Restructuring of the Coal-Mining Sector (data for 2001-2003)

The reports do not specify the purpose of this item so payments are allocated to the GSSE. Aid was mainly provided by the Ministry of the Economy in form of direct transfers.

Sources: Office of Competition and Consumer Protection (various years).

Tag: POL_dt_10

Early-Retirement Benefits for Laid-Off Miners (data for 2004-)

The state provided aid to all miners from liquidated hard-coal mines in the form of early-retirement benefits, provided they were five or fewer years away from retirement.

Payments are allocated to the GSSE as they do not increase current production or consumption of coal.

Sources: Ministry of Economy (various years), Office of Competition and Consumer Protection (various years).

Tag: POL_dt_12

Sources

Policies or transfers

European Commission, *Stranded Costs Compensation in Poland*, Available at: *ec.europa.eu/competition/sectors/energy/electricity/electricity_en.html*.

Ministry of Agriculture and Rural Development (various years), Available at: *www.portalspozywczy.pl/agrobiznes/wiadomosci/720-mln-zl-na-doplaty-do-paliwa-rolniczego-w-2011-r,37534.html*.

Ministry of Economy (various years), *Aktualne informacje nt. górnictwa węgla kamiennego, opracowania, raporty, propozycje aktów prawnych, informacje prasowe oraz informacje archiwalne*, Available at: *www.mg.gov.pl/Bezpieczenstwo+gospodarcze/Gornictwo/Archiwum+2003++2006*.

Office of Competition and Consumer Protection (various years), *Raport o pomocy publicznej w Polsce udzielonej przedsiębiorcom*, Available at: *www.uokik.gov.pl/raporty_i_analizy2.php#*.

Energy statistics

IEA (2011), *Energy Balances of OECD Countries*, International Energy Agency, Paris.