Country brief

Cutting Europe’s lifelines to coal

Tracking subsidies in 10 countries

Sejal Patel, Laurie van der Burg and Leah Worrall

Czech Republic

Key findings

Transparency – subsidy reporting

Rating: Poor

- The Czech Republic does not publish an overview of country’s coal subsidies, and has not yet committed to the fossil fuel subsidy peer review under the G20 process.

Coal mining – subsidy phase out

Rating: Good

- The Czech Republic provides aid to support the closure of coal mines and the remediation of environmental damages, as well as to cover the social costs of phasing out mining activity.

Coal fired power – subsidy phase out

Rating: Poor

- The Czech Republic has energy tax exemptions for certain uses of coal and subsidies to support upgrades of coal boilers.
- Like other EU Member States, the Czech Republic is said to have used the Article 10c derogation of the EU Emission Trading Scheme (EU ETS) to subsidise existing and new coal power plants, but the extent to which it has done this is unclear.

1. Trends in the production and use of coal in the Czech Republic

Coal has – and continues to – play a big role in the Czech Republic's energy mix in terms of both coal mining and coal power production, much of which is state-owned. Beyond coal, other fossil fuels also continue to form an important part in the Czech Republic's energy supply (OECD, 2015). In 2013, fossil fuels accounted for approximately 75% of the Czech Republic's total primary energy supply (TPES), with 38% coming from coal, 20% from oil and 17% from natural gas (OECD, 2015).

There are substantial coal resources available in the Czech Republic, with estimated economically recoverable coal reserves of 2.3 billion tonnes (Euracoal, 2016). The mining sector is dominated by ČEZ, the majority state-owned integrated energy group that owns the lignite mining company Severočeské uhelné doly, a.s., which produces about 50% of lignite in the Czech Republic and is also the largest consumer of coal, operating the majority of coal-fired power plants in the country (OECD, 2015). A total of nine coal mines are still operational in the Czech Republic, including five lignite mines (OECD, 2015). While regulation has been in place since 1990 to prevent the expansion of lignite mining activities for environmental reasons, the government revoked some of these decrees in 2015 and lifted expansion limits on one of the mines (CAN Europe, 2015). Overall, it is estimated that coal production in the Czech Republic will fall slightly between 2016 and 2020, from 53 to 52 million tonnes (BMI research, 2016). The government has said that it wants the coal mining industry to gradually wind down, promising that it will help people who subsequently lose their jobs. However, ministers have repeatedly rejected the claim that government aid will be given to New World Resources (NWR), the cash-strapped coal mining company that is asking for government support (Reuters, 2016a).

Coal accounted for 51% of electricity generation in 2013, of which approximately one quarter was generated in Combined Heat and Power (CHP) plants (OECD, 2015; OECD, 2016). The Czech Republic exports most of the coal-fired power it produces, and is the third-largest net electricity exporter in the EU, after France and Germany (IEA, 2016).

Since 2010, the state-owned utility ČEZ has continued to invest in coal-fired power production; investments in the Tušimice II and Prunéřov II power plants have been made to extend their operation for the next 20-25 years, while a new 600MW lignite plant at Ledvice is planned to operate for the next 40 (IEA, 2016). The Czech Republic is currently operating 9GW of coal power capacity. Although 1.2GW of planned coal-fired capacity has been cancelled, one coal plant, Ledvice 660, is currently still under construction and several others are under retrofits (Coal Plant Tracker, 2016).

The social and environmental costs of coal-fired power production are a key concern for the Czech Republic. In 2015, coal-fired power accounted for 38% of total greenhouse gas emissions or 48mt of CO_2 (Sandbag, 2016). Coal use also poses a substantial threat to local air quality (IEA, 2016). As coal provides an inexpensive option for heating, household consumption has accordingly accounted for 20% of final coal consumption in 2015, significantly contributing to low local air quality and public health issues (IEA, 2016). In 2013, coal-fired power caused an estimated 1400 premature deaths and generated health costs ranging between €2 and €3.8 billion in 2013 (Schailbe, et al., 2016).

2. Status of subsidies to coal and coal-fired power in the Czech Republic

As a Member State of the European Union (EU) and thus part of the G20, the Czech Republic has repeated its commitment to phase out fossil fuel subsidies every year since 2009. In 2016, as a continuing EU member and therefore part of the G7, the country called on all nations to end fossil fuel subsidies by 2025. The European Commission (EC) has furthermore repeatedly called on EU Member States to end all environmentally harmful subsidies, including those to fossil fuels, by 2020.

Nonetheless, the government of the Czech Republic continues to provide support to coal, including provision for the restructuring of the coal mining sector through two state-owned enterprises that are highly reliant on government subsidies: DIAMO, s.p. and Palivový kombinát Ústí, s.p. (OECD, 2016). In addition, the government supports coal through tax exemptions that lower the cost of coal consumption and its support for the modernisation of coal mines under the EU Emissions Trading Scheme (ETS) serves to extend the lifetime of coal assets in the Czech Republic. Article 10c of this scheme (EU ETS) gives '[low-income member states] allowances for free to electricity installations under the condition that they invest at least the equivalent monetary value in the modernisation and diversification of their energy systems' (Carbon Market Watch, 2016:2). However, instead of diversifying its energy sources, the Czech Republic is using these investments to modernise its fossil fuel capacity, invest in new fossil fuel energy production and increase future coal consumption (Carbon Market Watch, 2016). About half of the investments listed in the Czech Republic's Article 10c national plan support coal-fired installations (Carbon Market Watch, 2016).

A significant share of coal subsidies provided in the Czech Republic is allocated to mitigate the negative environmental and social impacts of current and past mining activity. The royalties that coal companies pay to the central state budget do not support wider government spending, as they are largely used to support the clean-up of coal mining activities (OECD, 2016). More recently, in 2016, the European Commission approved a proposal from the Czech Republic to provide €22 million in State aid to OKD, a private mining company, to cover the costs of the closure of the Paskov mine, which was making a loss on every tonne of coal it produced. This aid will be provided on the condition that the mine is closed permanently by 31 December 2017 and will be used to cover expenses linked to workers who will lose their jobs as a result of the closure of the mine (European Commission, 2015).

The IEA (2016) finds it likely that new subsidies will be offered to support the retrofitting of existing coal-fired power plants with flue-gas treatments or replacing ageing plants with more efficient plants. These investments are expected to lead to a continued reliance on coal-fired power and therefore also create a reliance on the subsidies that are in place that compensate the municipalities affected by mining.

The IEA (2016) finds it likely that new subsidies will be offered to support the retrofitting of existing coal-fired power plants with flue-gas treatments or replacing ageing plants with more efficient plants. These investments are expected to lead to a continued reliance on coal-fired power and therefore also create a reliance on the subsidies that are in place that compensate the municipalities affected by mining.

3. Czech Republic's coal subsidy measures explained

Annual average coal subsidies (see table): €115 million equivalent to 2,920 million Koruna.

The breakdown below provides a chronological overview of the Czech Republic's historic, existing and new coal subsidies. The historic subsidies are not included in the annual average estimate of coal subsidies as these have been phased out:

- **Remediation of past environmental damages (Historic: data available only for 2009):** The Ministry of Finance supports the remediation of past environmental damages associated with coal mining activities through the National Property Fund, which allows coal-mining entities to draw financial resources for this purpose (OECD, 2016; Kaštovský and Platzek, 2010). Since this support is no longer being provided, it is not included in the table below.
- **Programmes financing remediation of ecological damage caused prior to 1994 (Historic: data available only for 2009):** The State takes responsibility for financing the remediation of ecological damages caused by coal mining activities before 1994 (OECD, 2016; Kaštovský and Platzek, 2010). Since this support is no longer being provided, it is not included in the table below.
- **Remediation of Environmental Damages Caused by Mining Funded from Royalties on Coal Extraction (continuing: 1993 onward):** The royalties transferred to the central state budget (25% of all royalties paid by coal mining companies to the Regional Mining Authority) are earmarked to cover remediation of environmental damages caused by mining activities. Before 2000, half of the royalties paid to the central state budget were earmarked in this way, with all of it allocated to remediation programmes from 2001 (OECD, 2016). As such, the royalties paid by the companies do not provide compensation to the State for being allowed to exploit State-owned coal resources, as the majority of these payments are used to clean up the coal industry's mining activities. This is a subsidy provided to the coal industry in the form of foregone royalty revenues for the state.
- **Free emission allowances under the EU ETS (continuing: 2003 onward):** Article 10c of the EU Emission Trading Scheme (ETS) Directive allows lower-income Member States from Central and Eastern Europe to give free allowances under the ETS to electricity installations, under the condition that they invest at least the equivalent monetary value of these free allowances in the modernisation and diversification of their energy systems (Carbon Market Watch, 2016). However, this derogation has been largely misused to subsidise existing and new coal power plants in Central and Eastern Europe. In the Czech Republic, almost half (46%) of investments listed in the Article 10c national plan support coal-fired installations.
- **Restructuring of the Coal Mining Industry (continuing: 2005 onward):** In 1992, as part of the closure of uneconomic underground mines, the Czech Republic committed to finance the technical work for closing mines, in order to rectify the consequences of past mining activity and also cover the social costs of phasing out mining activity (including health benefits for miners) (OECD, 2016).
- **Energy Tax Exemption for Certain Uses of Solid Fuels (continuing: 2008 onward):** Various uses of solid fuels are exempt from the energy tax normally levied on energy products. This includes the use of coal for:
  - combined heat and electricity production if that heat is supplied to households
  - non-recreational transport by boat
  - certain chemical, mineralogical, and metallurgical processes
  - coke production.

  All persons with diplomatic immunity also receive rebates of the energy tax levied on solid fuels (OECD,2016).
- **Support to replace old coal boilers with more efficient ones (New: 2015 onward):** The government has financial commitments to improving the energy efficiency of households, but part of this support is allocated to

replacing old coal boilers with more efficient versions and this leads to a continued reliance on coal. Although the support provided is slightly lower than that provided for biomass and heat pumps, the difference is thought not to be big enough to convince households to switch to renewables (Bankwatch, 2016).

- **State aid to OKD for the closure of the Paskov mine (New: 2018 onward):** In February 2015, the European Commission approved €22 million in State aid to OKD, a private mining company owned by New World Resources N.V., which was declared insolvent in May 2016 after it failed to secure government aid. This State aid, provided on the condition that the mine is closed permanently by 31 December 2017, will be used to cover the costs of the closure of the mine of Paskov, which was making a loss on every tonne of coal it produced. As previously discussed, it will be used to cover expenses linked to job loss (European Commission, 2015). Among other measures, a law granting all miners the option to retire seven years early has been introduced (Praguemonitor, 2016). Following the approval of a government loan worth CZK 700 million in July 2016, in response to a letter requesting additional aid, the Czech State, made a bid of CZK 1 in December 2016, to take over the OKD mining company (Český rozhlas, 2016; Reuters, 2016b).

4. Opportunities to phase out coal subsidies in the Czech Republic

If used to facilitate the re-structuring of the energy sector away from coal, such as in the rehabilitation of mining land and the re-training of the workforce, subsidies can support the energy transition in the Czech Republic. In 1994, the Czech Republic government introduced an obligation for coal mining companies to set up financial reserves for mines currently in operation to cover the costs of remediation, reclamation and damages. This constituted a positive example of dealing with liabilities that other Member States can follow (OECD, 2015). However, the following examples all serve to pull in the opposite direction and slow the energy transition by extending the lifetime of coal assets:

- other coal subsidies provided by the Czech Republic, including the energy tax exemptions
- funding for coal mine modernisation
- the use of free emission allowances for investments in coal-fired power plants
- potentially new subsidies to a) support the retrofitting of existing coal-fired power plants with flue-gas treatments or b) replace ageing plants with more efficient ones.

Instead of perpetuating the reliance on coal-fired power, with all its associated social and environmental costs, the Government should be directing its resources to a transition away from coal.

Table 1. Existing and new measures that support coal

Measure	Subsidy type	Subsidy category	Fuel	Annual average (€ millions)	Year(s) for which estimates available	Source
Remediation of environmental damages caused by mining funded from royalties on coal extraction	Budgetary support	Decommissioning and environmental rehabilitation	Coking coal, Other bituminous coal, Lignite	6.4	2005 - 2014	OECD (2015)
Article 10c derogation, EU ETS	Budgetary support	EU ETS	Coal	Not available	Not applicable	Carbon Market Watch (2016)
Restructuring of the coal mining industry	Budgetary support	Coal mining	Coking coal, Other bituminous coal, Lignite	66.2	2005 - 2014	OECD (2015)
Energy tax exemption for certain uses of solid fuels	Tax Expenditure	Coal-fired power (other); Households	Hard coal	34.1	2008-2014	OECD (2015)
State aid for the closure of the Paskov hard-coal mine (new)	Budgetary support	Transition support	Hard coal	8.0	2017-2019	EC (2015)
RD&D Budget for coal	Budgetary support	Research and development	Coal	0.5	2007-2014	IEA (2016)

References

Bankwatch. (2016) 'Bring on the money, don't ask for results.' Prague: *Bankwatch CEE.* (http://bankwatch.org/sites/default/files/enfants-terribles-CzechRepublic.pdf).

BMI Research. (2016) 'Czech Republic Mining Report.' London: *Business Monitor International* (http://store.bmiresearch.com/czech-republic-mining-report.html).

Climate Action (CAN) Europe. (2015) 'Government policies on the phasing-out of coal'. CAN Europe Coal Briefing. Brussels: CAN Europe (http://www.caneurope.org/docman/coal-phase-out/2811-coal-briefing-3-phase-out-of-coal/file).

Carbon Market Watch. (2016) 'Fossil fuel subsidies from Europe's carbon market: the lessons learnt with article 10C of the EU ETS directive and recommendations for the post-2020 period.' Brussels: *Carbon Market Watch* (http://carbonmarketwatch.org/wp-content/uploads/2016/04/Fossil-fuel-subsidies-from-Europes-carbon-market-final-web.pdf).

Český rozhlas Radio Praha. (2016) 'Czech state bids to take over OKD mining company'. Prague: Hello Czech Republic, operated by Czech Ministry of Foreign Affairs (http://www.czech.cz/en/Comercio/Czech-state-bids-to-take-over-OKD-mining-company).

Coal Plant Tracker. (2016) 'Coal Plant Tracker:' Czech Republic' Brussels: *Euracoal* (https://euracoal.eu/info/country-profiles/czech-republic/).

European Commission (EC). (2015) 'State aid SA.39570 (2014/N) – Czech Republic. Aid to OKD, a.s. for the closure of the Paskov mine'. Brussels: EC (http://ec.europa.eu/competition/state_aid/cases/254578/254578_1680719_130_2.pdf).

IEA. (2014) 'Energy Supply Security. Chapter 4: Emergency response systems of individual IEA countries'. Paris: IEA (https://www.iea.org/media/freepublications/security/EnergySupplySecurity2014_TheCzechRepublic.pdf).

IEA. (2016) 'Energy policies of IEA countries: Czech Republic 2016 Review'. Paris: IEA. (https://www.iea.org/publications/freepublications/publication/Energy_Policies_of_IEA_Countries_Czech_Republic_2016_Review.pdf).

IEA (2016). 'Energy Technologies Perspectives 2016'. Paris: International Energy Agency. (http://www.oecd-ilibrary.org/energy/data/iea-energy-technology-r-d-statistics_enetech-data-en).

IMF. (2015) 'IMF Survey: Counting the Cost of Energy Subsidies'. Washington D.C.: IMF (http://www.imf.org/external/pubs/ft/survey/so/2015/new070215a.htm).

Kaštovský, V. and Platzek, A. (2010) 'Eliminating negative consequences of mining in the Czech Republic — main methods and financial resources'. Ha Noi: Ministry of Industry and Trade.

Organisation for Economic Co-operation and Development (OECD). (2016) 'Fossil Fuel Support – CZE'. Paris: OECD (http://stats.oecd.org/Index.aspx?DataSetCode=FFS_CZE).

OECD. (2015) 'Czech Republic: Country Overview'. Paris: OECD (ftp://ftp.oecd.org/FFS2015/CZE_country%20overview.pdf).

Praguemonitor. (2016) 'Czech miners to retire at 56, 7 years before rest'. Praguemonitor (http://www.praguemonitor.com/2016/06/16/czech-miners-retire-56-7-years-rest).

Reuters. (2016a) 'Czech minister aims for gradual phase-out of hard coal mines'. Johannesburg: Reuters Africa (http://af.reuters.com/article/commoditiesNews/idAFL8N14P1U220160105?pageNumber=2&virtualBrandChannel=0).

Reuters (2016b) 'Czech government approves loan to help miner OKD'. London: Reuters UK (http://uk.reuters.com/article/uk-czech-okd-idUKKCN1072M3).

Sandbag. (2016) 'How much CO2 came from coal fired power stations in 2015?' London: Sandbag.

Sandbag. (2014) 'Slaying the dragon: vanquish the surplus and rescue the ETS'. London: Sandbag (https://sandbag.org.uk/wp-content/uploads/2016/11/Sandbag-ETS2014-SlayingTheDragon.pdf).

Schaible, C., Flisowska, J., Huscher, J., Jones, D., Lazarus, A. and Urbaniak, D. (2016) Lifting Europe's Dark Cloud – how cutting coal saves lives. Brussels: CAN Europe; Brussels: European Environmental Bureau (EEB); Brussels: HEAL; Brussels/London: Sandbag; Gland: WWF (http://www.eeb.org/index.cfm?LinkServID=E3882544-5056-B741-DBB3E8DE57F619F6).

This material was funded by the Oak Foundation and the Hewlett Foundation.

The authors are grateful for support and advice on this country brief from Jiri Jerabek (Greenpeace Czech Republic). The authors would also like to thank Holly Combe and Amie Retalick for editorial support

This country study is a background paper for the policy brief *Cutting Europe's lifelines to coal: tracking subsidies in 10 countries.*

For the purpose of this country study, subsidies to coal include: direct spending, tax expenditure and other support mechanisms (e.g. capacity mechanisms). Where information is available, estimates for all of these categories are included in the national subsidy total for each country and in the Country Studies. The policy brief provides a more detailed discussion of the methodology used for the country studies. The authors welcome feedback on both this country study and the policy brief to improve the accuracy and transparency of information on coal subsidies.

A Data Spreadsheet summarising coal subsidies data for the 10 European countries reviewed is available here.

Overseas Development Institute
203 Blackfriars Road
London SE1 8NJ
Tel +44 (0)20 7922 0300
Fax +44 (0)20 7922 0399
www.odi.org
info@odi.org