

Czech Republic

France

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Hungary

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Poland

Spain

United Kingdom

Cutting Europe's lifelines to coal

Tracking subsidies in 10 countries

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Netherlands

**Key findings**

Transparency – subsidy reporting

Rating: poor

- The Dutch government does not publish an overview of country's coal subsidies.

Coal mining – subsidy phase out

Rating: not applicable

- The Netherlands has not produced coal since 1974; nonetheless, it provides critical transport infrastructure for fossil fuels, including coal. In March of 2017, the Port of Amsterdam, set a goal of becoming coal-free by 2030.

Coal fired power – subsidy phase out

Rating: poor

- The Netherlands provides high subsidies to co-firing of biomass in coal-fired power stations and has reintroduced a tax exemption for the use of coal in electricity production, to compensate coal-fired power stations for having to close
- The Dutch government is discussing setting an end date for phasing out coal-fired power – in line with commitments to reduce emissions.

1. Trends in the production and use of coal in the Netherlands

The Netherlands has not domestically produced any coal since 1974. It accordingly relies on coal imports to fuel its coal power plants and production of iron and steel (IEA, 2014). Next to importing coal for domestic use, the Netherlands is a major transport hub for coal, along with other fossil fuels because of its geographical location and large ports. Rotterdam and Amsterdam are Europe's biggest coal ports, placing the Netherlands among the main importers and exporters of coal in the world (IEA, 2016). Recognising that the need to diversify in line with the energy transition, the Port of Amsterdam has set a goal of becoming coal free by 2030 as part of its sustainability strategy (Darby, 2017).

The Netherlands continues to rely heavily on coal for electricity production. In contrast with wider European Union (EU) trends, where investments in new coal-fired power plants have dropped and coal-fired capacity has reduced, the Netherlands has opened three new coal plants since 2013, with a combined capacity of 3.5GW (IEA, 2014). This, combined with the low coal and carbon prices under the EU Emission Trading Scheme (ETS), has led to a significant increase in coal's share in coal-fired power generation in the Netherlands: from 18% in 2010 to 35% in 2015 (CBS, 2016). The share of gas in electricity production fell from 62% to 42% over the same period (ECN et al., 2016).

According to the Institute for Energy Economics and Financial Analysis (IEEFA), the new coal-fired power plants are already losing billions of euros because of the poor economics of coal linked to an increase in renewable energy production, flat power demand growth and tightening carbon emission targets (Wynn, 2016).

In addition to the economic costs of coal-fired power, coal creates significant health and environmental costs. In 2013, coal-fired power generated between €410 and €780 million in health costs and caused 290 premature deaths (Schaible et al., 2016). Because of the new coal-fired power plants, CO₂ emissions from coal in the Netherlands have increased in 2014 and 2015 (ECN et al., 2016) and in 2015, coal accounted for 17% of total greenhouse gas emissions in the Netherlands.

Despite the recent opening of new coal plants, there are ongoing discussions regarding a possible coal phase-out in the Netherlands. In 2013, the Social and Economic Council (SER) in the Energy Agreement agreed on the closure of five of the oldest coal fired power plants in the Netherlands in 2016 and 2017. While the Dutch Authority for Consumers and Markets (ACM) opposed the decision, the government proceeded on the basis of introducing stricter energy efficiency standards. In 2015, Urgenda, an environmental group, won a historic lawsuit against the Dutch government because of its lack of ambition in its emission reduction plans. The court ordered the government to cut emissions to 25% below 1990 levels by

2020 (Wynn, 2016). Even though the government appealed the judgment, the Lower House of Parliament adopted two motions calling for the phase-out of the remaining coal-fired power stations, in line with the emission reductions required under the Court's ruling. Although the government was supposed to present its coal phase-out plan by the end of 2016, it has failed to take a decision on this. The Energy Agenda on the government's energy plans for 2050 presented in December 2016 failed to mention any coal phase-out plans and the decision regarding the remaining coal-fired power plants was postponed until after the elections of March 2017.

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

As a Member State of the EU and thus part of the G20 group, the Netherlands 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 has furthermore repeatedly called on EU Member States to end all environmentally harmful subsidies, including those to fossil fuels, by 2020. At the negotiations for a global climate agreement in Paris in 2015, the Netherlands – together with almost 40 countries and hundreds of companies and organisations – signed a communiqué calling on countries to eliminate inefficient fossil fuel subsidies (FFFSR, 2015).

Despite these commitments, the Dutch government agreed, in January 2016, to reintroduce a subsidy to coal-fired power to compensate operators who have needed to shut down as part of the 2013 agreement to close old fired power stations. This subsidy comes in the form of exemptions from energy tax for the use of coal in electricity production. The reintroduction of this exemption, which was previously abolished in 2012, is estimated to cost the government €189 million in foregone revenue every year (Rijksoverheid, 2015). These costs are being borne by households, through an increase in tax on gas use (Business Insider Nederland, 2015). Some analysts have argued that compensation in the form of tax exemptions is not justified, as some of these coal-fired power plants were due to close anyway (Delta, 2015; Spring Associates, 2016).

The Netherlands also provides subsidies to the co-firing of biomass in coal power plants to support meeting its renewable energy targets. The government has made €3.6 billion available for this subsidy over eight years. This amounts to an average annual subsidy of about €438 million a year, supporting a maximum of 25 petajoule (PJ) annually (Minister van Economische Zaken, 2016). In 2016, the energy company, RWE, was allocated a €2.7 billion of the total support for co-firing biomass over a period of eight years.

Recognising that the costs of biomass are increasing, while those of solar and wind energy are decreasing, the parliament in December 2016 adopted a resolution calling for an end to this subsidy, which was subsequently ignored by the Minister of Economic Affairs. Greenpeace Netherlands is currently looking into options to take legal action against these biomass subsidies. It estimates that the 25 PJ limit set in the Energy Agreement was breached, as the subsidies were allocated on the basis of the production of renewable electricity, ignoring heat production and utilisation (Fluxenergie, 2017b).

Although not the focus of this study, it should be noted that, in 2014, the Netherlands followed the United States in restricting the financing of coal-fired power, only allowing it in rare circumstances (Chen et al., 2015). In 2015, the Dutch bilateral aid agency, the Financierings-Maatschappij voor Ontwikkelingslanden (FMO), set a precedent by ending public finance for coal mining (Bast et al., 2015).

3. The Netherlands' coal subsidy measures explained

Annual average coal subsidies (see table): €639 million

The breakdown below provides a chronological overview of The Netherlands' continuing and new coal subsidies.

- **Co-firing of biomass in coal plants (continuing: 2003 onward):** The Netherlands provides subsidies to the co-firing of biomass in coal power plants to support meeting its renewable energy targets. The government has confirmed that it made €3.6 billion available, in 2016, to support the co-firing of biomass over eight years, which could amount to an annual subsidy of approximately €438 million a year (Minister van Economische Zaken, 2016; Fluxenergie, 2017a). In 2016, the Dutch parliament adopted a resolution calling for an end to this subsidy, recognising that the costs of biomass are increasing, while the costs of solar and

wind energy are decreasing. However, this was not honoured by the Minister of Economic Affairs. Any next steps on the subsidy to the co-firing of biomass in coal plants will need to be taken by the new government, which could choose to cancel subsidy grants that have already been provided if the utilities have not yet invested the subsidy.

- **Reintroduction of tax exemption for use of coal in electricity production (New: 2016 onward):** As part of the 2013 decision to close old fired power stations, the Dutch government agreed to compensate coal plant operators by reintroducing a subsidy in the form of exemptions from energy tax for the use of coal in electricity production in 2016. As outlined in section 2, the reintroduction of this exemption, which was previously abolished in 2012, is estimated to cost the government €189 million in foregone revenue a year (Rijksoverheid, 2015). These costs are being recovered by an increase in tax on gas use by households (Business Insider Nederland, 2015).
- **Research and development budget for coal (continuing):** According to IEA data, the Dutch government spends an annual average of €0.2 million on coal-related research, development and demonstration (IEA, 2016).

4. Opportunities to phase out coal subsidies in the Netherlands

The new government should move ahead with adopting an ambitious timeline for ending coal-fired power by an agreed date. In the context of this coal phase-out and the Netherlands' existing commitments to end fossil fuel subsidies, the country should also adopt end subsidies to a) the co-firing of biomass in coal-fired power plants and b) coal-fired power in the form of energy tax exemptions for the use of coal in electricity production. Compensation for shutting down coal plants, if necessary, should rather be directed towards supporting workers as part of a just transition to cleaner energy sources, including through retraining.

Table 1. Existing and new measures that support coal

Measure	Subsidy type	Subsidy category	Fuel	Annual average (€ millions)	Year(s) for which estimate calculate	Source
Co-firing of biomass in power generation	Budgetary support	Biomass co-firing	Coal	450.0	Annual average over a period of eight years*	Minister van Economische Zaken (2016) Fluxenergie (2017a)
Energy tax exemption for use of coal in electricity production (New)	Tax expenditure	Coal-fired power	Coal	189.0	2016 onwards**	Rijsoverheid (2015)
RD&D Budget for coal	Budgetary support	Research and Development	Coal	0.2	2007-2013	IEA (2016)

*The €3.6 billion subsidy is valid for a period of eight years. Therefore, if an amount is allocated to a utility in a certain year, it can access this support for eight years.

**Exemption was abolished in 2012 and then reintroduced in 2016.

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This country study is a background paper for the policy briefing *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: odi.org/coal-subsidies-Europe.



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