

# Cutting Europe's lifelines to coal

## Tracking subsidies in 10 countries

Sejal Patel, Laurie van der Burg and Leah Worrall

### Italy



**Key findings**

#### Transparency – subsidy reporting

**Rating: good**

- Italy has published an inventory of environmentally harmful and environmentally friendly subsidies in advance of the G7 meeting in 2017.

#### Coal mining – subsidy phase out

**Rating: good**

- Italy's last coal mine (state owned) was modernised in 2012 (Carbosulcis), but will close in 2018, with environmental restoration continuing until 2027.

#### Coal fired power – subsidy phase out

**Rating: poor**

- EU ETS reimbursements were rewarded to several coal-fired power plants in Italy following errors in credit allocations
- A capacity market mechanism is currently within the consultation phase in Italy, however it is unclear whether coal-fired power will be eligible to capacity payments.

## 1. Trends in the production and use of coal in Italy

Italy domestically produces very small amounts of coal, natural gas and oil. This means the country relies on imports for most its fossil fuel consumption (Organisation for Economic Co-operation and Development (OECD), 2016). Italy's last coal mine has plans to end production by 2018 and it is expected that Italy's coal use, which will account for 8% of the country's total primary energy supply in 2018, will continue to decline as Italy's older and more inefficient power stations are closed (International Energy Agency (IEA), 2016).

The only remaining active coal mine in Italy is state-owned by Carbosulcis which is set to close by 2018, with environmental restoration continuing until 2027 (Carbosulcis, 2014; Carbosulcis, 2015). In 2012, the Ministry of Industry decided to close the mine, but this was reversed in favour of mine upgrades in reaction to protests from coal miners (BBC News, 2012; Overseas Development Institute (ODI), 2015:4). The mine is loss-making: the Sardinian Regional Government, the sole shareholder of the mine, reported net revenue losses of more than €4.5 million in 2015 and €6.6 million in 2014 (Carbosulcis, 2015; ODI, 2015).

Because of low domestic coal reserves, Italy imports 90% of the coal it uses in electricity production and industry. The main countries from which Italy imports coal are the United States, South Africa, Australia, Indonesia and Colombia (Assocarboni, 2015; ODI, 2015).

Gas remains Italy's main source of electricity, accounting for 34% of electricity production in 2014, with coal accounting for 16.8% (World Bank, 2016). Coal's electricity contribution dropped further to 12% in 2016 (Assocarboni, 2016). However, as older coal plants are retiring, its share in Italy's electricity mix is declining; between 2010 and 2015, 1,980 MW of proposed new coal-fired power capacity was cancelled (Shearer et al., 2016). The former Prime Minister, Matteo Renzi, spoke out in favor of a complete coal power phase-out, although he did not provide a timeframe for this (Littlecott, 2016).

Although the government has no plan to deliver a coal phase-out, the state-controlled utility company Enel has pledged to become 'carbon neutral' by 2050 and promised to shut down 13GW of fossil-fuel generation capacity in Italy by 2020 and end investments in coal (Enel, 2015). This has included the closure of three coal plants in its five-year plan (released in 2015) – the Marghera plant (140 MW), Genova plant (295 MW) and Bastardo plant (150 MW) (Littlecott and Schwartzkopff, 2015). These closures were already expected, with the Marghera and Bastardo plants having stopped producing electricity since 2012 and 2014 respectively, and with two of the three Genova units having closed in 2013, with the final unit set to close by 2017 (Littlecott and Schwartzkopff, 2015). Only one additional coal plant at La Spezia has since been added to the retirement pipeline, with an estimated closure date

of 2021 (Littlecott, 2016). However, Enel's coal power remains significant and there is not yet an explicit plan for coal phase out (Littlecott, 2017). Meanwhile, the planned carbon capture and storage (CCS) facilities at the Porto Tolle plant and Bridisi pilot have been abandoned (IEA, 2016).

Coal power in Italy is a source of greenhouse gas emissions and air pollution, posing a threat to the environment and public health. In 2015, coal-fired power accounted for 9% of total greenhouse gas emissions in Italy, or 40mt of CO<sub>2</sub> (Sandbag, 2016). This created pollution costs in an estimated range of €920 million to €1,720 million and caused over 600 premature deaths in 2013 (Schaible et al., 2016). With support from the Italian government, the share of renewables (excluding hydroelectricity) in electricity production in Italy is significantly increasing. Renewable energy sources other than hydropower accounted for 22% of electricity production in 2014, while hydropower accounted for 20.6% of electricity production (World Bank, 2016).

## 2. Status of subsidies to coal and coal-fired power in Italy

As a Member State of the European Union (EU) and thus part of the G20, Italy 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 environmentally harmful subsidies, including those to fossil fuels, by 2020. As the current president of the G7, Italy has also taken the important step of publishing an inventory of its environmentally harmful subsidies in advance of the 2017 G7 meeting, thus contributing to transparency on its fossil fuel subsidies (Ministero Dell'Ambiente, 2016).

Italy's minister for economic development, Federica Guidi, promoted a reform package in 2014. This reduces electricity subsidies by approximately €1.5 billion per year, representing 10% of the overall subsidy bill (Stagnaro, 2014). The original motivation for many of Italy's fossil fuel subsidies was to keep the price of electricity consumption low for targeted groups. However, these payments have included provisions to specific consumer groups – such as current and former employees of state-owned utilities – and several industrial sectors, particularly energy-intensive industries (Stagnaro, 2014). The resulting subsidy interfered with market signals and lowered the cost of electricity production, including coal-fired electricity generation. It also increased energy consumption in target groups.

In 2013, Italy submitted a proposal to provide state aid to support the development of a new coal plant under the Decree n. 145/2013 'Destinazione Italia'. The €8.4 million in proposed support from the region of Sardinia was

however blocked by the European Commission (Castaldi, 2017). With a perspective on the future of coal subsidy support, a capacity market mechanism is currently within the consultation phase in Italy. At this stage, it is unclear whether coal-fired power will be eligible to capacity payments (Castaldi, 2017).

From a regional perspective, and because of errors made when determining the credit allocations required under the EU Emissions Trading Scheme (ETS) in 2008, it is estimated that €160 million in public funding will be rewarded as reimbursements to plants that began operating in the four years following 2008, including several coal plants (Legambiente, 2013). Decision-making regarding these investments will have implications for the ongoing operations of these coal-fired plants, including their financial longevity.

Though not a focus of this study, it is worth mentioning that Italy also continues to support coal internationally through public finance, which includes the provision of grants, equity, loans, guarantees and insurance by majority government owned financial institutions (such as national and multilateral development banks, export credit agencies and majority state-owned domestic banks). Between 2007 and 2015, Italy provided €1.2 billion for coal to 36 countries in the form of direct finance, guarantees, technical assistance, and aid for coal power, coal mining and related projects. There was a large increase in total public finance for coal in 2015 (Chen et al., 2016). SACE, Italy's credit export agency, has provided guarantees for fossil fuels, totalling €1.1 billion during 2013-14 alone, for which the majority was for oil and gas projects. SACE's largest new coal project is now providing \$632 million towards the 675MW Punta Catalina coal-fired thermoelectric power plant in the Dominican Republic (Chen et al., 2016; Corporación Dominicana de Empresas Eléctricas Estatales (CDEEE), 2016).

### 3. Italy's coal subsidy measures explained

#### Annual average coal subsidies: €9 million.

The breakdown below provides a chronological overview of Italy's historic and continuing coal subsidies. The historic subsidies are not included in the annual average estimate of coal subsidies as these have been phased out.

- **VAT deductions for fossil fuels for electricity generation (historic: 2013):** This measure provided deductions from value added tax rates for the use of fossil fuels in electricity generation. This reduced the cost of fossil fuel-based electricity generation, including for coal-fired power. Estimates for this measure are not available. This subsidy has not been included in the table below, as it was phased out in 2013 (Makhijani, 2014).
- **Re-adaptation Aid Art. 56 ECSC (historic: 1960 to 2006):** This measure was introduced in 1960 to help workers affected by the decline of Germany's hard-coal, ore and steel industry. It was used for training programmes and allowances to support the workforce in transitioning into new sectors. Payments from the Federal Government ceased in 2006 (OECD, 2015). In 2005 and 2006, the government spent an annual average of €875,000 on re-adaptation aid. As this subsidy ended in 2006, it has not been included in the table below.
- **Reimbursements under the EU ETS (continuing: 2013 onward):** reimbursements made to power plants as a result of errors made in credit allocations under the EU ETS in 2008. It is estimated that €733 million in public debts were generated during 2008 to 2012 (Qual Energia, 2016, Legambiente, 2016). In 2013, the regulatory authority for electricity and gas established the level of reimbursements to individual plants, which included €51 million in reimbursement to the Civitavecchia coal-fired power plant (Legambiente, 2013). Total

reimbursements to power plants reached €690 million in 2015 and €43 million in 2016 (Qual Energia, 2016, Legambiente, 2016).

- **Research and development budget for coal (continuing):** IEA (2016) data shows that between 2007 and 2011, Italy spent an average of €8.9 million on coal-related research, development and demonstration (RD&D) a year. The IEA has stated that since 2011, data on this subsidy ‘exists but was not collected’ (IEA, 2016).

#### 4. Opportunities to phase out subsidies to coal and coal-fired power in Italy

Italy can take a more proactive and decisive approach to phasing out coal and fossil fuel subsidies, building on Enel’s commitments to become carbon neutral by 2050. Domestic momentum for this can be achieved through

Italy’s new National Energy Strategy, as well as the EU National Energy and Climate Plan process (Littlecott, 2017). As the country holds the Presidency of the G7 in 2017, it can work towards increasing ambition for the phase-out deadline in line with calls from the European Commission to end environmentally harmful subsidies by 2020, particularly through advocating this increased ambition at the 2017 summit and adopting a clear timeframe and process for phasing out its domestic fossil fuel subsidies, including those to coal. Italy should prevent the introduction of new subsidies that serve to extend the lifetime of coal-fired power, including through the potential capacity payment mechanism which is currently under consultation. Italy will also need to end international public finance to coal, which grew significantly from 2014 to 2015.

**Table 1. Existing and new measures that support coal:**

Measure	Subsidy type	Subsidy category	Fuel	Annual average (€ millions)	Year(s) for which estimate calculated	Source
EU ETS reimbursements	Budgetary support	EU ETS	Coal	Not available*	Not applicable	Legambiente (2013) and Legambiente (2016)
RD&D Budget for coal	Budgetary support	Research and Development	Coal	8.9	2007-2011	IEA(2016)

\*A total of €733 million in emissions permits is being rewarded, including to several coal plants, with €690 million awarded in 2015 and €43 million in 2016. Estimates for coal-fired power plant reimbursements are missing, with the exception of the Civitavecchia coal-fired power plant that is receiving €51 million in reimbursements.

---

# References

- Assanelli, M. and Cammi, C. (2012) An Overview of Italy's Energy Mix. Paris: Institut français des relations internationales (<http://goo.gl/fX7eIY>).
- Assocarboni. (2015) Coal Plants in Italy. Rome: General Association of Coal Operators Rome: Assocarboni ([www.assocarboni.it/index.php/en/the-coal/coal-plants-in-italy](http://www.assocarboni.it/index.php/en/the-coal/coal-plants-in-italy)).
- Assocarboni. (2016) Assocarboni, il carbone copre il 12% del mix italiano. (<http://www.staffettaonline.com/articolo.aspx?id=272050>).
- Caciagli, V. (2015) 'Centrale a carbone CCS in Sulcis: quanto ci costi?'. Rome: Qualenergia.it ([www.qualenergia.it/articoli/20150317-centralecarbone-ccs-sulcis-quanto-ci-costi](http://www.qualenergia.it/articoli/20150317-centralecarbone-ccs-sulcis-quanto-ci-costi)).
- Cappelletti, F. (2013) 'Implementation of EU CCS Directive in Italy'. Rome: Ministry of Economic Development, Department of Energy (<http://unmig.mise.gov.it/unmig/info/pdf/20130409.pdf>).
- Carbon Capture and Sequestration Technologies at MIT. (2015) 'Brindisi Fact Sheet: Carbon Dioxide Capture and Storage Project'. Boston: Carbon Capture and Sequestration Technologies at MIT ([https://sequestration.mit.edu/tools/projects/enel\\_1.html](https://sequestration.mit.edu/tools/projects/enel_1.html)).
- Carbosulcis. (2014) 'Bilancio Carbosulcis SPA 2014'. Monte Sinni: Carbosulcis (<http://www.carbosulcis.eu/images/trasparenza/bilancio/bilancio%202014.pdf>).
- Carbosulcis. (2015) 'Relazione sulla Gestione al 31/12/2015'. Monte Sinni: Carbosulcis (<http://www.carbosulcis.eu/images/trasparenza/bilancio/Bilancio%20al%2031.12.2015.pdf>).
- Castaldi, G. (2017) Interview. 3 April 2017.
- Corporación Dominicana de Empresas Eléctricas Estatales (CDEEE). (2016) 'Punta Catalina'. Santo Domingo: CDEEE (<http://cdeee.gob.do/puntacatalina/>).
- Chen, H., Doukas, A., Godinot, S., Schmidt, J. and Vollmer, S. (2016) Swept under the rug: How G7 nations conceal public financing for coal around the world. Washington D.C.: Embassy of India (OCI); Tokyo: Friends of the Earth (FoE) Japan; Tokyo: Japan Center for a Sustainable Environment and Society (JACSES); KIK Network; New York: Natural Resources Defense Council (NRDC); Gland: World Wildlife Fund (WWF) (<https://www.nrdc.org/sites/default/files/swept-under-rug-coal-financing-report.pdf>).
- Enel. (2015) Sustainability report 2015. Rome: Enel (<http://sustainabilityreport2015.enel.com/en/responsible-management-business/environment/climate-strategy#start>).
- Gestore dei Servizi Energetici (GSE). (2014) Rapporto 2013 delle attività del Gestore dei Servizi Energetici. Rome: Gestore dei Servizi Energetici ([www.gse.it/it/Dati%20e%20Bilanci/Rapporti%20delle%20attività/Pages/default.aspx](http://www.gse.it/it/Dati%20e%20Bilanci/Rapporti%20delle%20attività/Pages/default.aspx)).
- G7 G20. (2016) G7 Italy: The Sicily Summit. May 2017. London/Washington D.C: Newsdesk Media ([http://www.g7g20.com/images/media-information/PDFs/G7\\_Italy\\_media\\_pack.pdf](http://www.g7g20.com/images/media-information/PDFs/G7_Italy_media_pack.pdf)).
- International Energy Agency (IEA). (2016) Energy Policies of IEA Countries: Italy 2016 Review. Paris: IEA (<https://www.iea.org/publications/freepublications/publication/EnergiePoliciesofIEACountriesItaly2016Review.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](http://www.oecd-ilibrary.org/energy/data/iea-energy-technology-r-d-statistics_enetech-data-en)).
- International Institute for Sustainable Development (IISD). (2012) G20 2012 Progress Reports. Geneva: IISD ([www.iisd.org/gsi/sites/default/files/g20lib\\_g20\\_2012\\_countryprogressreports.pdf](http://www.iisd.org/gsi/sites/default/files/g20lib_g20_2012_countryprogressreports.pdf)).
- Legambiente. (2013) Stop al carbone. Rome: Legambiente ([http://www.legambiente.it/sites/default/files/docs/stopcarbone\\_sett2013.pdf](http://www.legambiente.it/sites/default/files/docs/stopcarbone_sett2013.pdf)).
- Legambiente. (2016) Stop Sussidi Alle Fonti Fossili. Rome: Legambiente ([https://www.legambiente.it/sites/default/files/docs/stop\\_sussidi\\_fonti\\_fossili\\_2016.pdf](https://www.legambiente.it/sites/default/files/docs/stop_sussidi_fonti_fossili_2016.pdf)).
- Littlecott, C. and Schwartzkopff, J. (2015) G7 Coal Phase Out: Italy. A Review for Oxfam. London; Brussels; Berlin; Washington D.C.: E3G. ([https://www.e3g.org/docs/Italy\\_G7\\_analysis\\_September\\_2015.pdf](https://www.e3g.org/docs/Italy_G7_analysis_September_2015.pdf)).
- Littlecott, C. (2016) 'G7 coal scorecard – 2016 update'. London; Brussels; Berlin; Washington D.C.: E3G (<https://www.e3g.org/library/japanese-coal-report>).
- Littlecott, C. (2017) 'The Coal Phase Out Transition: Italy's Leadership Opportunity'. London; Brussels; Berlin; Washington D.C.: E3G (<https://www.e3g.org/library/summary-the-coal-phase-out-transition-italys-leadership-opportunity>).
- Makhijani, S. (2014) 'Fossil fuel exploration subsidies: Italy'. London: ODI (<https://www.odi.org/publications/8944-fossil-fuel-exploration-subsidies-italy>).
- Ministero Dell'Ambiente. (2016) Catalogo dei sussidi ambientalmente favorevoli e dei sussidi ambientalmente dannosi 2016. Rome: Ministero dell'ambiente e della tutela del territorio e del mare (<http://www.minambiente.it/sites/default/>

- 
- files/archivio/allegati/trasparenza\_valutazione\_merito/SVI/economia\_ambientale/catalogo\_sussidi\_ambientali\_-\_def.pdf).
- Ministero Dello Sviluppo Economico (MSE). (2013) 'Decreto 29 marzo 2013: Proroga dei termini, di cui al decreto 23 giugno 2011, ai fini della risoluzione anticipata delle convenzioni Cip6 per gli impianti alimentati da combustibili di processo o residui o recuperi di energia. (13A04144)'. Rome: Government of Italy. (<http://www.cti2000.it/utills/downloadfile.php?table=legislazione&cid=34809>).
- Organisation for Economic Co-operation and Development (OECD). (2016) Fossil Fuel Support Country Note: Italy. Paris: OECD (<http://stats.oecd.org/wbos/fileview2.aspx?IDFile=430c6032-1b58-4212-8364-d8e6d5a06af3>).
- Qual Energia. (2016) ETS in Italia, come i soldi tornano a chi inquina. Rome: Qual Energia (<http://www.qualenergia.it/articoli/20160407-ets-italia-cos%C3%AC-i-soldi-tornano-chi-inquina-anzich%C3%A8-andare-rinnovabili-ed-efficien>).
- Sandbag. (2016) How much CO2 came from coal fired power stations in 2015? London: Sandbag.
- 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>).
- Shearer, C., Ghio, N., Myllyvirta, L., Yu, A. and Nace, T. (2016) 'Boom and bust 2016: tracking the global coal plant pipeline' CoalSwarm ([http://endcoal.org/wp-content/uploads/2016/06/BoomAndBust\\_2016.pdf](http://endcoal.org/wp-content/uploads/2016/06/BoomAndBust_2016.pdf)).
- Stagnaro, C. (2014) 'Italy Powers Down Energy Subsidies'. New York: The Wall Street Journal (<http://www.wsj.com/articles/italys-energy-subsidy-reform-1409594919>).
- World Bank. (2016) 'World Development Indicators'. Washington D.C.: (<http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>).

---

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

The authors are grateful for support and advice on this country study from: Gabriele Nanni and Katuscia Eroe (Legambiente) and Gionata Castaldi (Ministero dell'Ambiente e della Tutela del Territorio e del Mare). The authors would also like to thank Holly Combe, Claire Bracegirdle and Amie Retallick for editorial support.

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](http://odi.org/coal-subsidies-Europe).



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

ODI is the UK's leading independent think tank on international development and humanitarian issues. Readers are encouraged to reproduce material for their own publications, as long as they are not being sold commercially. As copyright holder, ODI requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the ODI website. The views presented in this paper are those of the author(s) and do not necessarily represent the views of ODI or our partners.

© Overseas Development Institute 2017. This work is licensed under a Creative Commons Attribution-NonCommercial Licence (CC BY-NC 4.0).