

Turkey

G20 coal subsidies



Turkey **continues to provide** significant subsidies to coal mining and coal-fired power through state-owned enterprises

Coal and Turkey's economy

US\$25,883



GDP per capita, PPP
(2016–2017 average)

23,535



2016 imports
(kilotonne oil equivalent)

157



2016 exports
(kilotonne oil equivalent)

34%



Share in power mix
(by generation)

Key findings

- Turkey provides substantial support to production and consumption of coal.
- The biggest fiscal support was to lower-income households for coal consumption.
- Coal mining in Turkey is also supported, especially hard coal. Lignite exploration is subsidised too, despite it being the lowest grade of coal.
- Turkey supports coal through two state-owned coal mining companies, Turkish Coal Operations Authority (TKI) and Turkish Hard Coal Enterprises (TTK), and the state utility company, Electricity Generation Company (EÜAŞ).

Prominence of fossil fuels and subsidy phase-out commitments

- Turkey obtains 67% of its electricity from fossil fuels (34% from coal) (IEA, 2019), with significant government support for fossil fuels and fossil fuel-powered electricity (Bast et al., 2015).
- As a member of the G20, Turkey has committed to the phase-out of inefficient fossil fuel subsidies over the medium term, as agreed in 2009 (G20, 2009). As a signatory of the Convention on Biological Diversity (Aichi Target 3), it has also committed to phasing out environmentally harmful subsidies, including those to fossil fuels, by 2020 (UN, 1992).
- Turkey has the third-largest pipeline (behind China and India) of coal-fired power plants, at 37 gigawatts (GW) of capacity in various stages of planning (Darby, 2019).
- Government policy promotes coal mining and coal-fired power production as an energy security measure (Ministry of Energy and Natural Resources, n.d.).

Government support to coal production

- Coal mining benefits from government subsidies. Tenders are planned for at least five coal mines in 2018 (a record year – 101.5 million tonnes) (Hurriyet Daily News, 2018; Temizer, 2018).

- Our analysis identified ₺947 million (US\$276 million) of fiscal support for coal production per year (2016–2017 average), including for exploration, research and development, and mining.
- The two state-owned coal mining companies, Turkish Coal Operations Authority (TKI) and Turkish Hard Coal Enterprises (TTK) explore for and produce lignite (the lowest grade of coal) and hard coal. TTK has a virtual monopoly in hard coal production, processing and distribution, including imported hard coal. TKI and TTK set low domestic prices for hard coal and lignite.
- TKI’s annual capital expenditure was ₺198 million (US\$57 million) per year between 2016–2017 (TKI, 2016; 2017). Figures were unavailable for TTK.

Government support to coal-fired power production

- In March 2019, 2,000 local residents filed a lawsuit delaying the Hema coal plant (Darby, 2019). Just four coal plants are under construction, with 93 cancelled or delayed since 2010 (ibid.).
- While Turkey is broadly privatising its electricity market, the state-owned Elektrik Üretim A.S. (EÜAŞ) remains the largest producer, with 17% of electricity generation in 2016 (EÜAŞ, 2016). EÜAŞ also owns 60% of Turkey’s lignite reserves, which accounted for 41% of its electricity in 2017 (EÜAŞ, 2017). Support for coal resulting from annual expenditures of EÜAŞ in primary materials and supplies is estimated at ₺953 million (US\$272 million) per year (2016–2017 average).
- The Turkish Electricity Transmission Company (TETC) has been operating a capacity mechanism – remunerating power plants for remaining on stand-by – since April 2018. Plants with less than 50% efficiency or those over 13 years old cannot participate unless they use domestic resources. Payment for plants also depends on using domestic coal (Resmi Gazete, 2018; 2019).
- Also in 2018, the government provided a ₺3.47 billion (US\$1.4 billion) incentive to Polyak Eynez Enerji for the development of a new coal-fired power plant (Daily Sabah, 2019).

Government support to coal and coal-fired power consumption

- Turkish regulators raised electricity prices in 2018 in response to inflation, hence increasing government subsidies to consumption of coal-fired electricity (Coskun, 2018).
- The Turkish government still provides support to poor households for coal consumption, amounting to ₺1,287 million (US\$347 million) of support per year (2016–2017 average).

Turkey’s government support to coal and coal-fired power production and consumption

₺ millions, 2016–2017 annual average

Instrument	Coal production ⁱ	Coal-fired power	Coal consumption ⁱⁱ	Transition support ⁱⁱⁱ
Fiscal support (budgetary transfers and tax exemptions)	947	31	1,287	none identified
Public finance	none identified	none identified	none identified	none identified
State-owned enterprise investment	198	953	none identified	none identified

Note: for more detail and sources see the Turkey data sheet available at odi.org/g20-coal-subsidies/turkey.

ⁱ This category includes support for coal exploration, mining, processing and transportation.

ⁱⁱ This category includes support for consumption of coal-fired power, and of coal other than for its use for coal-fired power generation (or for co-generation of power and heat).

ⁱⁱⁱ This category includes support for closing down mining sites, and for workers and communities in their transition away from coal and coal-fired power.

Government support to the transition away from coal and coal-fired power

- New pollution standards for coal plants are due in 2019. Legislative efforts to delay implementation were ineffective as all political parties ultimately opposed the delay after public pressure (Health and Environment Alliance, 2019).

References

- Bast, E., Doukas, A., Pickard, S., van der Burg, L. and Whitley, S. (2015) *Empty promises: G20 subsidies to oil, gas and coal production*. London and Washington DC: Overseas Development Institute and Oil Change International (www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9957.pdf)
- Coskun, O. (2018) ‘Turkey hikes gas and power prices by as much as 14 percent as lira crisis deepens’. Reuters, 1 September (www.reuters.com/article/us-turkey-currency-energy/turkey-hikes-gas-and-power-prices-by-as-much-as-14-percent-as-lira-crisis-deepens-idUSKCN1LH379)
- Daily Sabah (2019) ‘Local energy firm receives nearly TL 3.5B incentive’. Daily Sabah, 1 March (www.dailysabah.com/energy/2019/03/01/local-energy-firm-receives-nearly-tl-35b-incentive)
- Darby, M. (2019) ‘Turkish supreme court blocks coal plant, as wave of new projects stalls’. Climate Home News, 5 March (www.climatechangenews.com/2019/03/05/turkish-supreme-court-blocks-coal-plant-wave-new-projects-stalls/)
- EÜAŞ – Elektrik Üretim A.S. (2016) *Yillik faaliyet raporu: annual report 2016*. Ankara: Elektrik Üretim A.S. (www.euas.gov.tr/Documents/yillik_raporlar/EUAS_2016_YILLIK_FAALİYET_RAPORU.pdf)
- EÜAŞ (2017) *Yillik faaliyet raporu: annual report 2017*. Ankara: Elektrik Üretim A.S. (www.euas.gov.tr/Documents/yillik_raporlar/E%3%9cA%5%9e%202017%20Y%c4%b1l%20Faaliyet%20Raporu.pdf)
- G20 (2009) G20 Leaders’ Statement: The Pittsburgh Summit. Pittsburgh PA: G20 (www.g20.utoronto.ca/2009/2009communique0925.html)
- Health and Environment Alliance (2019) ‘Step forward for health protection in Turkey: proposal to extend the pollution exemptions given to privatised coal power plants withdrawn’. News release, 15 February (www.env-health.org/step-forward-for-health-protection-in-turkey-proposal-to-extend-the-pollution-exemptions-given-to-privatised-coal-power-plants-withdrawn/)
- Hurriyet Daily News (2018) ‘Turkey “aims to hold tenders for at least five coal mines in 2018”’. Hurriyet Daily News, 10 April (www.hurriyetcdailynews.com/turkey-aims-to-hold-tenders-for-at-least-five-coal-mines-in-2018-130077)
- IEA – International Energy Agency (2019) ‘Statistics: electricity generation by fuel’ (electronic dataset, International Energy Agency) (www.iea.org/statistics/)
- Ministry of Energy and Natural Resources (n.d.) ‘Coal’. Webpage. Ankara: Ministry of Energy and Natural Resources (www.enerji.gov.tr/en-US/Pages/Coal)
- Resmi Gazete (Turkish Official Gazette) (2018) ‘Elektrik piyasası kapasite mekanizması yönetmeliği’ (Electricity market capacity regulation). Resmi Gazete, 28 January (www.resmigazete.gov.tr/eskiler/2018/01/20180120-23.htm)

Resmi Gazete (Turkish Official Gazette) (2019) ‘Elektrik piyasası kapasite mekanizması yönetmeliđi deđişiklik yapılmasına dair yönetmelik’ (Regulation regarding the changes to the electricity market capacity regulation). Resmi Gazete, 9 January (www.resmigazete.gov.tr/eskiler/2019/01/20190109-11.htm)

Temizer, M. (2019) ‘Turkey breaks local coal production record in 2018’. Anadolu Agency, 16 January (www.aa.com.tr/en/economy/turkey-breaks-local-coal-production-record-in-2018/1366302)

TKI – Türkiye Kömür İşletmeleri Kurumu (2016) *faaliyet raporu* [TKI 2016 annual report]. Ankara: Türkiye Kömür İşletmeleri Kurumu (www.tki.gov.tr/depo/2017/2016faaliyetraporu.pdf)

TKI (2017) *faaliyet raporu* [TKI 2017 annual report]. Ankara: Türkiye Kömür İşletmeleri Kurumu (www.tki.gov.tr/depo/file/faaliyet%20raporu/2017faaliyetraporu.pdf)

UN – United Nations (1992) Convention on Biological Diversity. 1760 UNTS 20619, entered into force 29 December 1993 (www.cbd.int/convention/text/default.shtml)



This country study is one in an 18-part series. The country findings are collated in the summary report, which you can find at odi.org/g20-coal-subsidies along with full references, acknowledgements and further information about methodology and data sources.

Unreferenced information in this summary is from the analysis conducted for this report, available in the Turkey data sheet at odi.org/g20-coal-subsidies/turkey.

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