Turkey

The OECD Inventory of Support Measures for Fossil Fuels identifies, documents and estimates direct budgetary support and tax expenditures supporting the production or consumption of fossil fuels in OECD countries, eight partner economies (Argentina, Brazil, the People’s Republic of China, Colombia, India, Indonesia, the Russian Federation, and South Africa) and EU Eastern Partnership ( EaP) countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine).

Energy resources and market structure

Turkey’s proven reserves of fossil-fuel resources are modest, though the country produces lignite and smaller amounts of hard coal. Coal production satisfies, however, only about 39.7% of demand and Turkey imported 59.2% of its total coal supply in 2018. Yet, Turkey is an important energy-transit route owing to its strategic location between Europe, the Caspian region, and the Middle East. The country relies on imports to meet more than 80% of its total energy demand.

Following the enactment of the 2001 Electricity Law, Turkey unbundled its state-owned enterprises into different business activities such as generation, transmission, distribution, and retail sales. As a result, private-sector investment in power generation has increased significantly since 2003. As a part of the 2001 Electricity Law, the Energy Market regulatory Authority (EMRA) was set up as an independent regulatory authority to issue licences, approve tariffs, solve disputes, and apply penalties in the electricity, natural-gas, petroleum, and LPG markets.

The Turkish Government also passed a Natural Gas Market Law in 2001 with the objective of establishing a competitive natural-gas market. Although the law was supposed to unbundle the state-owned Petroleum Pipeline Company (BOTAS), the firm remains a major player in the natural-gas market, importing 85.2% of all the natural gas (including LNG) consumed in 2018. Gas from Russia flows to Turkey via the Russia-Turkey Bluestream and Russia-Turkey West gas pipelines. As well, the construction of TurkStream pipeline (replacing the South Stream Transport Project) has been completed towards the end of 2019 with first gas deliveries recorded in January 2020. Meanwhile, gas from Azerbaijan enters Turkey through the Baku-Tbilisi-Erzurum pipeline. Last June 2018 saw the launch into operation of the Trans-Anatolian Gas Pipeline (TANAP) connecting the European gas market to Shah Deniz-2 gas field.

Energy prices and taxes

Oil prices in Turkey have been set by the market since 2005. Wholesale prices for and electricity are cost-based but retail prices remain regulated through the EMRA-approved uniform national retail tariff. The tariff is therefore not reflective of cost differences between various distribution regions. Retail electricity prices remained fixed between 2002 and 2007 despite rising generation costs. Starting in 2008, prices have then been adjusted quarterly to take into account input prices, inflation, and exchange rates. Prices for gasoline and diesel fuel in Turkey are among the highest in the world owing to high excise taxes on fuel. Excise taxes are identical for both commercial and non-commercial users.

Total Primary Energy Supply* in 2018

- Coal, 30%
- Oil, 29%
- Natural gas, 28%
- Hydro, 4%
- Geothermal, solar & wind, 8%
- Biofuels & waste, 2%

*excluding net electricity import
Source: IEA

Energy resources and market structure

Turkey’s proven reserves of fossil-fuel resources are modest, though the country produces lignite and smaller amounts of hard coal. Coal production satisfies, however, only about 39.7% of demand and Turkey imported 59.2% of its total coal supply in 2018. Yet, Turkey is an important energy-transit route owing to its strategic location between Europe, the Caspian region, and the Middle East. The country relies on imports to meet more than 80% of its total energy demand.

Following the enactment of the 2001 Electricity Law, Turkey unbundled its state-owned enterprises into different business activities such as generation, transmission, distribution, and retail sales. As a result, private-sector investment in power generation has increased significantly since 2003. As a part of the 2001 Electricity Law, the Energy Market regulatory Authority (EMRA) was set up as an independent regulatory authority to issue licences, approve tariffs, solve disputes, and apply penalties in the electricity, natural-gas, petroleum, and LPG markets.

The Turkish Government also passed a Natural Gas Market Law in 2001 with the objective of establishing a competitive natural-gas market. Although the law was supposed to unbundle the state-owned Petroleum Pipeline Company (BOTAS), the firm remains a major player in the natural-gas market, importing 85.2% of all the natural gas (including LNG) consumed in 2018. Gas from Russia flows to Turkey via the Russia-Turkey Bluestream and Russia-Turkey West gas pipelines. As well, the construction of TurkStream pipeline (replacing the South Stream Transport Project) has been completed towards the end of 2019 with first gas deliveries recorded in January 2020. Meanwhile, gas from Azerbaijan enters Turkey through the Baku-Tbilisi-Erzurum pipeline. Last June 2018 saw the launch into operation of the Trans-Anatolian Gas Pipeline (TANAP) connecting the European gas market to Shah Deniz-2 gas field.

Energy prices and taxes

Oil prices in Turkey have been set by the market since 2005. Wholesale prices for and electricity are cost-based but retail prices remain regulated through the EMRA-approved uniform national retail tariff. The tariff is therefore not reflective of cost differences between various distribution regions. Retail electricity prices remained fixed between 2002 and 2007 despite rising generation costs. Starting in 2008, prices have then been adjusted quarterly to take into account input prices, inflation, and exchange rates. Prices for gasoline and diesel fuel in Turkey are among the highest in the world owing to high excise taxes on fuel. Excise taxes are identical for both commercial and non-commercial users.
Total support for fossil fuels in Turkey by support indicator (left) and fuel type (right)

Note: CSE=Consumer Support Estimate; PSE=Producer Support Estimate; GSSE=General Services Support Estimate.

Recent developments and trends in support

Although Turkey has made significant strides in reforming its energy sector since 2001, measures supporting the consumption and production of fossil fuels have become more numerous. The 2012 New Investment Incentive Regime provides, for example, higher levels of support to coal and oil investments than to renewable-energy projects. Coal exploration, coal production, and domestic coal-fired power plant investments are all recognised as “priority investments”, benefiting from waiver of value-added tax, support to the investment location, interest and insurance premiums paid by employers and tax reductions.

The Strategic Plan 2015 – 2019 of the Ministry of Energy and Natural Resources identifies increased exploration activities as a priority goal to reduce import dependency in coal, oil and gas. Under this plan, the electricity generated from domestic coal is aimed to be nearly doubled from 32.9 billion kWh in 2013 to 60 billion kWh in 2019. A law introduced in June 2016 aims to increase utilisation of domestic coal by creating a purchasing programme for the Turkish Electricity Wholesale and Contracting Co. (TETAS), a state-owned enterprise, to purchase additional electricity from domestic coal-fired power plants by tender.

In line with the Strategic Plan, the Ministry of Energy and Natural Resources has announced its National Energy and Mining Policy framework, in April 2017. This Policy rests on three pillars: security of supply, use of domestic resources and establishment of foreseeable markets. On the domestic resources front, a higher rate of utilisation of domestic coal resources through cutting-edge technologies and an active exploration policy regarding oil and natural gas resources were highlighted. Mining sector is also targeted in the new strategy, where the Directorate General for Mining is restructured to alleviate the bureaucracy for mining investments.

Aid to the state-owned Turkish Hard Coal Enterprise (TTK) compensates the company for the high costs of its production. Coal is widely used as heating fuel by poorer households in Turkey and Turkish Coal Enterprises (TKI) have been supplying coal in-kind to households since 2003 as part of a government measure for supporting the poor. The financial cost of this measure has increased substantially lately with surging energy demand in Turkey and the widening reach of the programme.

Examples of measures

<table>
<thead>
<tr>
<th>Aid to hard-coal industry (1991-)</th>
<th>Production costs for hard-coal of the state-owned Turkish Hard-Coal Enterprises (TTK) averaged TRL 1,365 per tonne in 2018. The average selling price was only TRL 394 and the treasury compensated the loss. The support amounted to TRL 899 million in 2018.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Aid to Poor Families (2003-)</td>
<td>This measure was initiated to provide coal in-kind to poor families for heating. The coal is supplied by Turkish Coal Enterprises (TKI) and distributed by local governments. In 2018, an average of 2.030 million families received coal aid.</td>
</tr>
</tbody>
</table>