



TURKEY: INVENTORY OF ESTIMATED BUDGETARY SUPPORT AND TAX EXPENDITURES FOR FOSSIL-FUELS

Energy resources and market structure

Turkey has negligible fossil-fuel resources, and imports practically all of the oil and natural gas it uses from countries to the east. It is, however, a major energy transit route owing to its proximity to major oil and gas reserves. Turkey depends on imports for about 72% of its total primary energy supply (TPES). In 2010, fossil fuels accounted for nearly 90% of TPES while renewable energy sources provided the remaining 10%. Natural gas is the leading fossil fuel in TPES, accounting for 30% and followed by oil (27%) and coal (32%). Since 2000, Turkey's electricity supply has increased by around 75%. In 2010, natural gas fuelled nearly half of all power generation, while coal provided 26%, hydropower 25%, and oil 1%. Only a half per cent of Turkey's electricity is exported. In order to meet the growing demand, Turkey has already started the construction of its first nuclear plant, and is planning to build a second one.

Turkey produces both hard coal and lignite. However, domestic production only covered around 47% of total domestic consumption in 2010. Although its hard-coal resources are meagre, the country is richly endowed when it comes to lignite, with several production facilities scattered all over the country. Turkey consumes all the lignite it produces but imports around 90% of its total hard-coal needs.

Following the enactment of the 2001 Electricity Law, Turkey unbundled its state-owned vertically-integrated enterprises into different business activities, notably generation, transmission, distribution, wholesale trading and retail supply. Since 2003, private-sector investment in generation capacity has increased significantly while the government has already started to privatise a significant share of its state-owned generation assets. In 2005, the government-owned distribution company was divided into 20 different companies for which privatisation have already begun. The electricity law also mandated an independent regulatory authority, namely the Energy Market Regulatory Authority (EMRA), to issue licenses; determine and approve tariffs; set the eligibility limits for market opening; draft secondary legislation; and solve disputes and apply penalties in electricity, natural-gas, petroleum and LPG markets.

In 2001, Turkey passed the Natural Gas Market Law with the objective of establishing a competitive natural-gas market. Although the law requires the government-owned Petroleum Pipeline Corporation (BOTAS) to unbundle its import, transmission, storage and trade activities, BOTAS remains a major player in the natural-gas market. The natural-gas market reform prioritises contract transfer in order to limit the share of any importer or wholesaler in the domestic market to 20%. In 2006, BOTAS gave four companies the right to import around 12% of all natural-gas imports for a period of 15 years. Third-party access (TPA) to the transmission and distribution network is regulated by EMRA, and is non-discriminatory. As part of its market reform, Turkey has also started to privatise gas-distribution activities with a view to extending the network. EMRA granted licenses for a total of 60 cities, 53 of which are new distribution areas and include an obligation to build a gas network.

Turkey's domestic oil and natural-gas transmission network is owned and operated by BOTAS. Owing to its location between Europe, the Middle-East and the Caspian region, Turkey has become a major hub for international pipeline connections. Gas from Russia is transported to Bulgaria through the Russia-Turkey Bluestream and the Russia-Turkey West gas pipelines, while gas from Azerbaijan is transported through the

Baku-Tbilisi-Erzurum pipeline. There are also a number of projects that are being contemplated and which would increase Turkey's international pipeline connections. The Nabucco pipeline is one such project that would enable new suppliers from the Middle-East and the Caspian region to access the European gas market.

Prices, taxes and support mechanisms

As part of its natural-gas and electricity markets reform, Turkey is moving towards a fully cost-reflective tariff structure. Although wholesale prices for the gas and electricity markets are already cost-based, retail prices remain regulated by means of a uniform national retail tariff, which is approved by EMRA. Hence, the retail tariff does not reflect the differences in costs across the distribution regions.

Retail prices for electricity remained constant between 2002 and 2007 in spite of a significant increase in generation costs, which itself resulted from high feedstock prices. Since 2008, tariffs have been adjusted quarterly to take into account input prices, inflation and exchange rates. The transition to this system involved three large tariff increases (in January, July, and October 2008), which raised the average retail tariff by about 50%.

The Automatic Pricing Mechanism (APM), which operated between July 1998 and the end of 2004, set a ceiling on the prices of almost all oil products. In the beginning of 2005, the government decided to remove price caps, which led to an increase in pre-tax prices. Since then, oil prices have been set by the market.

Turkey levies an 18% value-added tax (VAT) on all energy products. Prices for gasoline and diesel fuel are among the highest in the OECD, owing to the relatively high excise taxes levied on petroleum products. As of July 2011, the excise tax for regular gasoline (TRY 1.8915 per litre) was higher than that for diesel (TRY 1.3045 per litre). Excise taxes in Turkey are identical for both commercial and non-commercial users. Jet kerosene and aviation gasoline are, however, exempted from excise taxes.

The most important measure supporting energy production in Turkey is the financial assistance benefitting the hard-coal industry. Support is mostly provided through transfer payments from the Turkish Treasury to Turkish Hard-Coal Enterprises (TTK). The Ministry of Energy & Natural Resources also distributes coal for heating purposes to poor households. The country supports R&D in relation to clean-coal technologies, including coal gasification, CO₂ storage and transport, and fuel production from biomass and coal blends. Meanwhile, there are a number of tax exemptions and rebates targeting specific fuels and sectors. These include: fuels used in domestic maritime shipping and in vehicles used for national-security purposes; diesel fuel used in agriculture for specific crops; and oil and gas exploration, transportation and distribution.

Data documentation

General notes

The fiscal year in Turkey coincides with the calendar year.

Producer Support Estimate

Aid to the Hard-Coal Industry (data for 1991-)

Turkey's reserves of hard-coal are relatively small compared with those for lignite, and producers receive significant amounts of support to compensate them for costs in excess of revenues. Production costs for hard coal from Turkish Hard Coal Enterprises (TTK) stood at an average of USD 289 per tonne in 2008. Meanwhile, steel producers and power generators could purchase coal at prices ranging between USD 50 and USD 180 per tonne. State aid per tonne of coal has increased significantly over the years while production has declined.

Estimates for this measure are expressed in USD. Data prior to 2008 come from the IEA while those for later years come from TTK.

Sources: IEA (2009; 2005), TTK.

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Aid to the Lignite Industry (no data available)

Lignite makes a significant contribution to Turkey's domestic total coal supply. Turkish Coal Enterprise (TKI) is responsible for the exploration, production and marketing of both domestic lignite and asphaltite. Although TKI used to receive support from the Turkish government, the company has been able to cover its costs and make a profit since 1995.

Sources: IEA (2009; 2005).

Tax Exemption for Oil and Gas Exploration and Transportation (no data available)

This tax exemption was introduced in 1984 to encourage the exploration of oil and precious metals. According to the Turkish VAT Law (No. 3065), the Corporate Tax Law (No. 5520), and the Special Consumption Tax Law (No. 4760), activities connected to the exploration, processing, enrichment and refining of gold, silver and platinum, and those falling under the scope of the Oil Law (No. 6326), are entitled to tax-free provisions of services and delivery of goods. Eligible companies must be involved in certified oil-exploration activities. In addition, the delivery of machines and equipment to the owner of an investment-incentive certificate is exempted from value-added tax.

No estimates are available for this particular provision.

Sources: VAT Law No. 3065, Special Consumption Tax Law No. 4760, Tax Expenditure Report (2007).

Tax Exemption for the Transportation and Distribution of Oil and Gas (no data available)

This tax exemption was also introduced in 1984. It allows the transportation through pipelines of foreign crude oil, natural gas, and their by-products (including the construction and the services involved such as stations, pumps, measurement, and communication tools) to be exempted from both VAT and property tax.

No estimates are available for this particular provision.

Sources: Property Tax Law No. 1319, Tax Expenditure Report (2007).

Consumer Support Estimate

Tax Exemption for LPG Consumption (no data available)

Between 1999 and 2001, the Turkish government supported the residential use of LPG for cooking purposes by foregoing both VAT and the special consumption tax. Those tax exemptions resulted in the price of LPG dropping below that of both gasoline and diesel fuel. As regular motor engines cannot use LPG, the government expected its use in cars to remain limited. However, an underground industry soon developed to make gasoline and diesel engines compatible with LPG. With a payback period of less than two years, the operation proved sufficiently simple and cheap for drivers to convert massively their vehicles to LPG use. Alarmed by the resulting loss in tax revenue, the government began to phase

out this tax expenditure at the end of 2000. This provision resulted in significant increases in LPG consumption.

No estimates are available for this particular provision.

Sources: IEA (2001).

Rebate for Diesel Used in Agriculture (data for 2008-)

The excise tax rate on diesel fuel is very high in Turkey, which creates a burden for farmers whose profit margins are significantly low. This programme was introduced by the Ministry of Agriculture in 2007 to help farmers grow specific crops. There are three different types of crops defined by the ministry, which correspond to different aid levels. The amounts of aid are calculated according to the area of the land (in decares) used in growing specified crops, and paid according to a schedule defined by the cabinet. There are no restrictions on how grant money is spent. This measure is to be phased out.

Sources: Ministry of Agriculture and Rural Affairs (2007), Turkish Grand National Assembly.

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Fuel-Tax Exemption for Domestic Commercial Aviation (no data available)

In addition to the VAT, the Turkish government levies a “Special Consumption Tax” for every litre of fuel consumed. While gasoline, LPG and diesel fuel are all subject to this tax, the domestic use of aviation and jet fuel has been exempted since the introduction of the excise tax law in 2002.

No estimates are available for this particular provision.

Sources: Revenue Administration.

Coal Aid to Poor Families (data for 2009-)

This programme was initiated in 2003 by the Ministry of Energy and Natural Resources to assist poor families. In Turkey, a significant number of households still burn lignite for heating purposes. Coal is supplied by TKI and distributed by local governments. According to the Minister of Energy, an average of 1.7 million families received coal aid between 2003 and 2009. However, quantifying the total amount spent by the ministry is hampered due to lack of data.

We allocate this measure entirely to lignite coal.

Sources: Ministry of Energy and Natural Resources (2010), Turkish Court of Accounts (various years).

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Fuel-Tax Exemption for Ships in Cabotage Lines (data for 2007)

This fuel-tax exemption was introduced by the government in 2003 to support the domestic maritime navigation sector. The high special consumption tax on fuel was at the time considered to be a major barrier to the development of the sector in Turkey. The government therefore decided to abolish the special consumption tax as it applied to sales of fuel for ships. Eligible ships are those carrying cargo

and passengers within the cabotage lines registered with the Turkish International Ship Registry and National Ship Registry, commercial yachts, and service and fishing ships.

Estimates are only available for the year 2007.

Sources: Tax Expenditure Report (2007), Ministry of Finance.

Tag: TUR_te_02

Fuel-Tax Exemption for Vehicles used for National Security (no data available)

Fuel purchased by the Ministry of Defence, the General Command of Gandermarie, the General Command of Coast Guard, and the National Intelligence Agency is fully exempt from both VAT and the special consumption tax.

No estimates are available for this particular provision.

Sources: Tax Expenditure Report (2007), Ministry of Finance.

Sources

Policies or transfers

Ministry of Agriculture and Rural Affairs (2007), *Annual Report*, Government of Turkey.

Ministry of Energy and Natural Resources (2010), *Budget Proposal*, Government of Turkey, Available at: www.enerji.gov.tr/yayinlar_raporlar/2010_Plan_ve_Butce_Komisyonu_Konusmasi.pdf.

Ministry of Finance, General Directorate of Budget and Fiscal Control, *Budget for 2011*, Available at: www.bumko.gov.tr/EN/Genel/Default.aspx?17A16AE30572D313AAF6AA849816B2EF2858DA18F4388CDD.

Property Tax Law No. 1319, Available at: www.mevzuat.adalet.gov.tr/html/457.html.

Revenue Administration, Government of Turkey, Available at: www.gib.gov.tr/fileadmin/mevzuatek/otv_oranlari_tum/31_12_2009.htm

Special Consumption Tax Law No. 4760, Available at: www.gib.gov.tr/fileadmin/mevzuatek/otv_oranlari_tum/31_12_2009.htm.

Turkish Court of Accounts (various years), *Treasury Accounting Report*, Available at: www.sayistay.gov.tr/rapor/hazine/islemler/2009/2009_Hazine_Islemleri_Raporu.pdf.

Tax Expenditure Report (2007), Government of Turkey.

VAT Law No. 3065, Available at: www.gib.gov.tr/index.php?id=1028.

Energy statistics

IEA (2009), *Energy Policies of IEA Countries: Turkey 2009 Review*, OECD Publishing, Paris.

IEA (2005), *Energy Policies of IEA Countries: Turkey 2005 Review*, OECD Publishing, Paris.

IEA (2001), *Energy Policies of IEA Countries: Turkey 2001 Review*, OECD Publishing, Paris.