



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

Energy resources and market structure

Between 1990 and 2009, Portugal's total primary energy supply (TPES) grew by 44% and its final energy demand by 41%. The country is highly dependent on imported fossil fuels, which has stimulated efforts to diversify and secure its energy supplies, especially by encouraging the use of natural gas and renewable energy sources. Among fossil fuels, petroleum and coal accounted for, respectively, 49% and 7% of TPES in 2010. Natural gas was first introduced in Portugal in 1997, and by 2010, its share had reached 19% of TPES. Portugal is one of the few advanced economies for which renewable energy is the only form of energy produced domestically. Renewable energy averaged about 25% of TPES and 54% of electricity generation in 2010. Hydro-electric power generation is expected to increase following the construction of the new dams planned in the National Programme for Dams with High Hydropower Potential.

About 54% of consumed energy comes from oil, 22% from electricity, and 15% from renewable energy, mainly in the form of biomass. Transport and industry are the most important energy-consuming sectors, accounting for a 62% share in total final energy consumption in 2009. Energy consumption by the road-transport sector increased strongly in the 1990s due to the steady growth of traffic. This, however, changed in the 2000s as the total number of vehicles and distance travelled per vehicle stagnated. Energy used for transportation purposes has then remained relatively stable since 2005.

Portugal has not yet discovered significant deposits of oil or natural gas on its territory, but some companies continue to explore the continental shelf. Oil's share in TPES has declined gradually since the 1970s: from 76% in 1973 to 64% in 2001 and to 49% in 2010. The Portuguese government forecasts that this share will decline further, reaching 44% in 2020. Portugal closed its last coal mine in 1994. Imports of coal for electricity generation vary from year to year, depending on hydropower output. The share of coal in TPES is also expected to decrease steadily, to about 7% in 2020. These changes have been paralleled by an increase in the shares of natural gas and renewable energy.

All of Portugal's natural gas is imported, mainly from Algeria (via a pipeline that transits through Spain). In addition, some liquefied natural gas (LNG) is shipped from Nigeria. The electricity sector is the largest consumer of natural gas, accounting for 43% of total consumption in 2008. Industry consumed 32% of the total volume in the same year, while the commercial and residential sectors consumed 11%. Over the last decade, Portugal has made significant efforts to deregulate its electricity sector. Both distribution and generation markets have witnessed important changes. All electricity consumers are now free to choose their supplier (although regulated tariffs remain an option), and most of the Power Purchase Agreements are no longer in force. In order to improve the security of supply, the construction of four new gas-fired power stations totalling approximately 3 320 MW of capacity was licensed. Also, in 2004, the government launched the All-Iberian Electricity Market (MIBEL) initiative. The Portuguese natural gas market started to be liberalised only in 2006 due to a derogation under the EU Directive 2003/55/CE. EDP (*Energias de Portugal*) and Galp are now two major players in both the electricity and natural-gas markets – a major break from the past, when each was a single entity in their respective monopolised markets. A single transmission system operator for gas and electricity networks was also created. REN (*Redes Energéticas Nacionais*) acquired the electricity-transmission assets previously owned by EDP, the

gas-transmission operator formerly operated by the Galp-owned Transgás, the LNG terminal at Sines and existing gas-storage facilities.

In April 2010, Portugal approved a new plan for the energy sector. The National Energy Strategy (*Estratégia Nacional para a Energia*, or ENE 2020) updated the 2005 plan and established an agenda intended to increase competition, promote economic growth, and reduce Portugal's dependency on foreign supplies of energy. In particular, it envisages the decentralisation of energy production, the promotion of competition, the consolidation of MIBEL, the creation of an Iberian Common Natural-Gas Market (MIBGAS), the regulation of the national oil system, and the upgrading of the energy-storage infrastructure. As part of ENE 2020, a number of targets were established for the Portuguese energy sector, which are to be achieved by 2020. They include reducing the country's dependency on foreign energy supplies, increasing the share of final energy produced from renewable sources, developing the industrial cluster related to energy efficiency and consolidating that for renewable energy to boost economic development and foster job creation, and achieving Portugal's GHG emission-reduction targets, in line with its EU commitments.

Prices, taxes and support mechanisms

The Regulatory Entity for Energy Services (*Entidade Reguladora dos Serviços Energéticos*), created by the Decree-Law 97/2002, is responsible for fixing or approving natural-gas prices charged by companies in the sector. The 2010 Tariff Regulation (*Regulamento Tarifário*) determines the tariff calculation method and structure. By the end of 2012, regulated tariffs for natural gas and electricity will no longer be in force, and all consumers will be free to choose their supplier. At that point, with prices set by the market, the process of liberalisation of natural gas and electricity markets will be complete.

Since 2004, there has been no ceiling set on retail prices for motor fuels. The retail petroleum-products market in Portugal is dominated by three companies: Galp, Repsol and BP. The recent expansion of major supermarket chains into the retail market for liquid fuels has contributed to reduce retail prices. Taxes accounted for 64% and 48% of retail gasoline and diesel prices in 2009. Transport fuel prices are generally higher in Portugal than in Spain, leading to cross-border fuel tourism, especially by heavy freight vehicles.

On the production side, the extraction of crude oil in Portugal is subject to an Oil Production Tax (*Imposto sobre a Produção de Petróleo*) whose rates vary with annual production volumes and a field's depth. This progressive royalty system also distinguishes between onshore and offshore fields, with the latter benefitting from more favourable rates of tax. The production of oil from offshore fields that are deeper than 200 meters is totally exempt from the Oil Production Tax.

The Statute of Fiscal Benefits (*Estatuto dos Benefícios Fiscais*) sets out the general fiscal rules applicable to all tax concessions in Portugal. In addition, tax concessions can also be established in other pieces of legislation. A full VAT rate of 23% is applied to gasoline and automotive diesel for all non-commercial uses. Automotive diesel used in heavy passenger vehicles, public transport, and in machines and agriculture tractors are all granted a 100% VAT reimbursement. Full VAT applies at a rate of 23% to electricity and natural gas consumed by the residential sector. Reduced VAT rates also apply to equipment for the generation and use of energy derived from certain renewable sources, for pollution-control equipment, for agricultural inputs and machinery, and for waste collection and water supplies. Many exemptions and reduced VAT rates have been applied over the years on the grounds that they support vulnerable segments of the economy and population. The Decree Law 566 from 1999 also provides for full and partial exemptions from the petroleum and energy tax (*Imposto sobre Produtos Petrolíferos e Energéticos*, or ISP).

Since 2001, Portugal has made progress in expanding its use of environmentally related taxes. The vehicle taxation system was reformed in 2007, and both the registration tax on vehicle purchases and the annual circulation tax now take into account CO₂-emission levels and cylinder capacity, with the former aspect gradually becoming more important. These taxes have proved effective in changing the composition of the car fleet towards

new and more fuel-efficient cars. Furthermore, a vehicle-scraping programme has been in place since 2000; a discount is applied to the registration tax whenever a new vehicle is purchased at the same time that an old one is scrapped. From 2011 on, the vehicle scrapping scheme has been limited to electric vehicles only. Environmental initiatives are expected to be further strengthened in the future in accordance with the 2010-13 Stability and Growth Plan.

Data documentation

General notes

Portugal's fiscal year coincides with the calendar year. Following OECD convention, amounts prior to 1999 are expressed as 'euro-fixed series', meaning that we applied the fixed EMU conversion rate (1 EUR = 200.482 PRT) to data initially expressed in the Portuguese Escudos (PRT).

Producer Support Estimate

Reduced VAT for Oil and Gas Exploration (no data available)

Decree-Law 394-B from 1984 established the Code for Value Added Tax (*Código do Imposto sobre Valor Acrescentado*, or CIVA). This code was subsequently amended and updated several times, and its Annex II establishes that a lower rate of VAT should apply to tools, machines and other equipment used exclusively or mostly in the exploration for oil or natural gas. Starting from January 2012, the rule in Annex II establishing a lower VAT for oil and natural gas exploration was phased out.

No estimates of the revenue foregone due to this particular measure are available.

Sources: CIVA (1984).

Corporate-Revenue Tax Deductions for Oil Exploration and Production (no data available)

Article 42 of Portugal's Corporate-Revenue Tax Code (IRC) allows companies undertaking oil exploration and production (E&P) activities to deduct the smallest of the following amounts from their tax base for corporate-revenue-tax purposes, provided that such value is invested in other E&P activities in Portugal in the following three fiscal years: (i) 30% of the gross value obtained from sales of oil produced in the area of concession in the corresponding fiscal period; (ii) or 45 % of the amount that would have been collected were the previous deduction not available.

No estimates of the revenue foregone due to this particular measure are available.

Sources: CGE (various years).

Consumer Support Estimate

Fuel-Tax Exemption for Certain Motor Vehicles (no data available)

The use of Liquefied Petroleum Gas (LPG) and natural gas in public-transport vehicles (i.e. bus fleets) is fully exempt from the excise tax that is normally levied on most sales of petroleum products in Portugal. A lower rate of excise tax also applies to coloured and marked diesel fuel used in machinery and equipment for agriculture and forestry purposes.

No estimates of the revenue foregone due to this particular measure are available.

Sources: CIVA (1984).

Fuel-Tax Exemption for Coastal and Inland Navigation (data for 2001-)

Sales of motor fuels in Portugal are exempt from the country's fuel excise tax (the ISP) when used in coastal and inland water commercial navigation, including fishing, cabotage, public maritime leisure, and dredging operations in ports and waterways.

We allocate the annual amounts reported in the State Budget Account (CGE) to diesel fuel and fuel oil on the basis of the IEA's Energy Balances for the domestic navigation sector.

Sources: CGE (various years), CIVA (1984), IEA.

Tag: PRT_te_01

Fuel-Tax Exemption for Railway Vehicles (data for 2001-)

Sales of diesel fuel in Portugal are exempt from the country's fuel excise tax when used in railway locomotives.

Sources: CGE (various years).

Tag: PRT_te_02

Fuel-Tax Reduction for Agriculture Machinery (data for 2001-)

The use of coloured and marked diesel fuel in tractors and other farm machinery in Portugal attracts a lower rate of excise tax than that applied to most other uses of such fuels.

We allocate this measure entirely to diesel fuel given the very small use of gasoline in farming activities in Portugal.

Sources: CGE (various years), CIVA (1984).

Tag: PRT_te_03

Fuel-Tax Reduction for Fixed Engines and Heating (data for 2001-)

The use of diesel fuel for heating purposes and in power-generating engines, such as small-scale fixed generators, compressors, and heating boilers, benefits from a reduction in the rate of fuel excise tax normally applicable to most uses of petroleum products in Portugal.

Sources: CGE (various years).

Tag: PRT_te_04

Fuel-Tax Exemption for Electricity Generators (data for 2001-)

The use of coal, coke, and fuel oil by electric utilities or CHP plants in Portugal is exempt from the country's fuel excise tax. The use of diesel fuel for the same purpose is exempt from excise tax only in the two Autonomous Regions of Portugal (Azores and Madeira).

We allocate this measure to bituminous coal and fuel oil on the basis of the IEA's Energy Balances for the electricity-generation sector (main-activity electricity plants and CHP plants).

Sources: CGE (various years), IEA.

Tag: PRT_te_05

Fuel-Tax Exemption for Certain Industrial Processes (data for 2004-)

The use of petroleum products as industrial fuels in electrolytic, metallurgical, and mineralogical processes in Portugal is exempt from the country's fuel excise tax. To qualify for this exemption, approved installations must be under an emissions license scheme or an energy-efficiency agreement.

We allocate this measure to diesel fuel, LPG, and fuel oil on the basis of the IEA's Energy Balances for the following sectors: iron and steel, and non-ferrous metals.

Sources: CGE (various years), IEA.

Tag: PRT_te_06

Sources

Policies or transfers

CGE (various years), *State Budget Account (Conta Geral do Estado)*, Directorate General of Budget (Direcção-Geral do Orçamento), Government of Portugal, Available at: www.dgo.pt/politicaorcamental/Paginas/Conta-Geral-do-Estado.aspx.

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Energy statistics

IEA (2011), *Energy Balances of OECD Countries*, International Energy Agency, Paris.