

Budgetary support and tax expenditures for fossil fuels

An inventory for six non-OECD EU countries

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Introduction

Financial support for the production and consumption of fossil fuels, while clearly at odds with the objective of greenhouse gas reduction, is still a widespread phenomenon throughout the world. The International Energy Agency estimated that fossil-fuel consumption subsidies worldwide amounted to about USD 523 billion in 2011.¹ In developing countries and emerging economies, these subsidies are largely provided by means of price regulations and other support measures that keep prices for consumers artificially low. In high-income countries, support is mainly given through indirect subsidies such as tax concessions.

The importance of reforming policies supporting fossil fuels was recognised in the OECD's June 2009 Declaration on Green Growth, in which 34 countries vowed to "encourage domestic policy reform, with the aim of avoiding or removing environmentally harmful policies that might thwart green growth, such as subsidies to fossil fuel consumption or production that increase greenhouse gas emissions".² Three months later, G-20 leaders at the Pittsburgh Summit committed to "rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption", and called upon the rest of the world to do the same.

The reform of environmentally harmful subsidies (EHS) is also high on the agenda of the EU. The Europe 2020 strategy calls for a phase-out of EHS, limiting exceptions to people with social needs. Subsidies to fossil fuels constitute a significant part of these EHS.

In 2010 the OECD started collecting data on budgetary support and tax expenditures that relate to fossil fuels. This has resulted in the publication of the "Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels", a new version of which will be released in January 2013.³ The inventory identifies over 550 individual producer or consumer support mechanisms for fossil-fuels in all 34 OECD countries. The value of these budgetary support and tax expenditures amounted to between USD 55 billion and USD 90 billion a year during 2005-11.

The OECD data may be a useful source of information feeding into policy discussions about the impact that fossil-fuel subsidies and their possible phase-out, as foreseen in the EU's Resource Efficiency Roadmap, can have on the environment and the broader economy. However, six EU Member States are at present not OECD Members: Bulgaria, Cyprus, Latvia, Lithuania, Malta and Romania. The present study is intended to fill the data gap for these countries.

Objective and scope

The overall objective of this study is to provide information on measures supporting the production or consumption of fossil fuels in six EU Member States: Bulgaria, Cyprus, Latvia, Lithuania, Malta and Romania. In order to ensure comparability, this is done following the approach used by the OECD.

In the OECD approach, support measures are distinguished along two dimensions: the transfer mechanism (how a transfer is created) and the statutory or formal incidence

¹ www.worldenergyoutlook.org/resources/energysubsidies/

² www.oecd.org/greengrowth

³ www.oecd.org/iea-oecd-ffss

(to whom and what a transfer is first given) (see Figure 1). In the present study (just as in the OECD report) the measures covered are limited to budgetary expenditures and tax expenditures (corresponding to the first and second row in the table, and some elements from the third row).

Method

The methodology and approach taken were as similar as possible to that taken by the OECD. To this end, the OECD was consulted in an early stage of the project.

Data collection for the six Member States was done by energy experts who are native speakers of the respective national languages. This was considered essential since most of the information sources are available only in those languages. The experts have used a variety of information sources (legislation, official policy documents, reports, statistics, books, articles, other literature and websites) and have consulted fiscal and energy experts in order to check the completeness, validity and reliability of the information collected.

Reporting

Each country section starts with a general description of the energy sources and energy market structure in the Member State. Next, energy price regulations, taxes and support mechanisms are described. Under the heading 'Data documentation' the available information on specific budgetary support and tax expenditure schemes is presented. This is subdivided into 'Producer Support Estimate,' 'Consumer Support Estimate' and (if applicable) 'General Services Support Estimate'. For those schemes on which quantitative data were available, estimates are given for the size of the support, if possible over several years (back to 2002). The 'tags' in the text relate to the data in a separate Excel database. Tables at the end of each section summarize the estimates.

Table 1. Matrix of support measures, with examples

		Statutory or Formal Incidence (to whom and what a transfer is first given)								
		Production						Direct consumption		
		Output returns	Enterprise income	Cost of intermediate inputs	Costs of Production Factors				Unit cost of consumption	Household or enterprise income
					Labour	Land	Capital	Knowledge		
Transfer Mechanisms (how a transfer is created)	Direct transfer of funds	Output bounty or deficiency payment	Operating grant	Input-price subsidy	Wage subsidy	Capital grant linked to acquisition of land	Capital grant linked to capital	Government R&D	Unit subsidy	Government-subsidized life-line electricity rate
	Tax revenue foregone	Production tax credit	Reduced rate of income tax	Reduction in excise tax on input	Reduction in social charges (payroll taxes)	Property-tax reduction or exemption	Investment tax credit	Tax credit for private R&D	VAT or excise-tax concession on fuel	Tax deduction related to energy purchases that exceed given share of income
	Other government revenue foregone	Reduced resource-rent tax		Under-pricing of a good, government service or access to a natural resource		Under-pricing of access to government land; reduced royalty payment		Government transfer of intellectual property right	Under-pricing of access to a natural resource harvested by final consumer	
	Transfer of risk to government	Government buffer stock	Third-party liability limit for producers	Provision of security (e.g., military protection of supply lines)	Assumption of occupational health and accident liabilities	Credit guarantee linked to acquisition of land	Credit guarantee linked to capital		Price-triggered subsidy	Means-tested cold-weather grant
	Induced transfers	Import tariff or export subsidy	Monopoly concession	Monopsony concession; export restriction	Wage control	Land-use control	Credit control (sector-specific)	Deviation from standard IPR rules	Regulated price; cross subsidy	Mandated life-line electricity rate

Source: OECD (2011), Table 1.1.

Bulgaria

Energy resources and market structure

Bulgaria has relatively few fossil fuel resources and only a third of the country's electricity is generated from fossil fuels, according to EURACOAL.⁴ Fossil fuel reserves are estimated at approximately 200 tonnes coal equivalent (tce) per capita, which is far below the global average of 3,000 tce. Solid fuels, the country's only long-term, local energy source (along with nuclear energy), amount to 3 billion tonnes and consist mainly of lignite coal (88.7%), brown coal (10.9%) and hard coal (0.4%). According to Georgiev and Aleksandrova (2007), the majority of the lignite coal (80%) is of low-calorific value and has a high dust content. It is produced by the Maritsa Iztok mines in central Bulgaria, which are adjacent to the four coal-fired plants of the Maritsa Iztok basin complex that generate about 65% of the electric power in Bulgaria.

In 2010, total lignite coal production in Bulgaria amounted to 27.2 million tonnes, of which 26.1 million tonnes were extracted at Maritsa Iztok Mines; the remaining reserves of lignite coal are situated in the regions of Bobov Dol and the capital Sofia. The total production of brown coal, mainly situated in the western part of the country (Bobov Dol, Pernik, Pirin, and Katrishte) and near the Black Sea coast, amounted to 3 million tonnes in 2010; the brown coal is mostly supplied to nearby power plants such as the one in Bobov Dol, or used by households. Bulgaria has very small reserves of conventional oil and natural gas. With regard to the latter, the country recently banned natural gas extraction through hydraulic fracturing. At the vote in parliament there was a 166 to 6 majority in favour of the indefinite suspension of the technique. Bulgaria is the second country in Europe and the world which banned the extraction of shale gas using hydraulic fracturing on its entire territory.⁵

Along with domestic production of coal, Bulgaria is a producer (and in the past exporter) of nuclear energy. The main nuclear power station in the country is "Kozloduy" situated at the Danube River. The construction of the nuclear power plant started in 1970 in cooperation with the USSR. It had six operating units but four were shut down in accordance with the requirements of Bulgaria's EU accession in 2007. Following the closure of the Kozloduy units, the Bulgarian government revived plans for a second ('Belene') nuclear power plant on the Danube River though the project was once again suspended in March 2012. The parliament is currently in the process of discussing whether a national referendum should be held on the question of building a second nuclear power plant in Bulgaria.

Except for coal and nuclear energy, the Bulgarian energy sector is mostly based on imported resources. Georgiev and Aleksandrova (2007) state that more than 60% of the country's energy consumption is met by oil and natural gas imported from Russia. Given its strategic location in Europe and in order to reduce both the continent's and its own dependence on Russian natural gas, Bulgaria has participated in several multinational energy projects such as the NABUCCO gas pipeline, which is proposed to connect Austria and Turkey and permit the supply of 30 billion cubic meters of gas per year from Iran by 2015. At the time of writing, construction of the South Stream gas pipeline (planned to transport natural gas from Russia to Italy and Austria via Bulgaria), was scheduled to commence in early December 2012. South Stream is expected to have a transport capacity of 63 billion cubic metres per year and cost EUR10 billion.

⁴ EURACOAL, Country profile Bulgaria, www.euracoal.be/pages/layout1sp.php?idpage=69

⁵ www.treehugger.com/fossil-fuels/bulgaria-bans-fracking.html

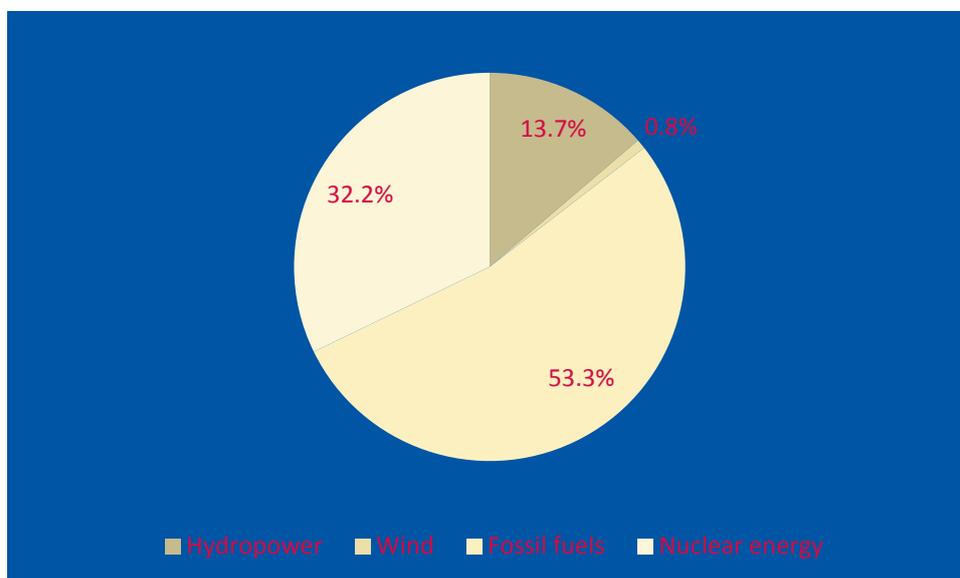
The main player in the country's gas industry is Bulgargaz Bulgaria⁶, which in 2011 imported 97.87% of the natural gas consumed in Bulgaria, a marked increase of 17.21% in comparison to 2010; only 2.13% of the natural gas in Bulgaria was supplied from domestic producers during the same year (Bulgargaz, 2012).

The country has also participated in trans-Balkan energy projects which aim to diversify supply routes for Russian and Caspian oil, usually passing through the Bosphorus. The AMBO oil pipeline with an annual capacity of 35 million metric tonnes is expected to connect the port of Bourgas on the Black Sea coast of Bulgaria with the port of Vlore in the Adriatic Sea in Albania through FYROM. The Bourgas-Alexandroupoli oil pipeline, designed to carry up to 50 million tonnes of oil annually through to Greece's Aegean Sea, was suspended by the Bulgarian government at the end of 2011 due to environmental concerns.

The main player in the country's oil industry is LUKOIL Bulgaria⁷ which owns the Balkan Peninsula's largest oil refinery in Bourgas. According to the Ministry of Economy, Energy and Tourism,⁸ in 2007 LUKOIL Bulgaria imported 7,107,900 tonnes of oil, producing 5,550,000 tonnes of fuel oil (e.g. automobile, diesel, jet fuel and lubricants) through its refinery in Bourgas and selling them mainly on the domestic market. Other major players on the market for crude oil and petroleum products, which is fully liberalised, are Petrol, OMV, Shell, Naftex, Prista-Oil, Opet, and Hellenic Petroleum.

Figure BG-1 below provides a graphic representation of Bulgaria's electricity generation mix in 2010. Fossil accounted for make up for 53,3% of Bulgaria's power generation (Eclareon & Öko-Institut, 2011).

Figure BG-1 Bulgaria's energy mix for electricity production in 2010



Source: Bulgarian report for the study on RES-Integration by Eclareon and Öko-Institut (2007)

⁶ www.bulgargaz.bg/en/index.php

⁷ www.lukoil.bg/Main.do;jsessionid=79D9839485EB396094BE65A854F109D8?lang=EN

⁸ Ministry of Economy, Energy and Tourism, Oil industry, www.old.mi.government.bg/energy/energy/docs.html?id=270882 [BG version]

The market for thermal and electric energy and natural gas production is dominated by the state-owned Bulgarian Energy Holding (BEH)⁹ which was established in 2008. BEH owns some of the major energy producers and power plants in Bulgaria, and the public service providers and suppliers in the country, namely:

- “Mini Maritsa Iztok” – the largest coal mining company in Bulgaria, producing lignite;
- “Maritsa East 2” – the biggest thermal power plant in the country;
- “Kozloduy” – the main nuclear energy plant in the country;
- National Electric Agency (NEK) – the sole public service provider in the country, whose main activities among others are the transmission, import and export of electric energy;
- Electricity System Operator (ESO) – which controls and maintains the electrical power system;
- Bulgargaz – the sole public supplier of natural gas in the country, and
- Bulgartransgaz – which has competence in the field of transmission, transit and storage of natural gas.

The rest of the energy production market is owned by the Czech energy corporation CEZ,¹⁰ which is also one of the country’s major power distribution and supply companies, along with EVN (which has its headquarters in Austria)¹¹ and E.ON (which has headquarters in Germany).¹² The three companies have taken ownership of the domestic distribution and supply market since privatisation in 2005. In addition, there is another, smaller supplier of electric energy in Bulgaria called ERP Golden Sands.¹³

Prices, taxes and support mechanisms

The exploration and extraction of natural resources in Bulgaria operates on a concession basis. A special permit is issued by the Council of Ministers based on a proposal by the Minister of Economy, Energy and Tourism. The Law for underground resources specifies the circumstances under which the concession charge for exploiting deposits of natural resources can be discounted or waived.¹⁴

At present, the Bulgarian electricity market is based on bilateral power supply contracts and a balancing market, as illustrated in Figure BG-2 below. A central feature of this market model is that producers are dispatched according to their contractual quantities of electricity. Any energy imbalances resulting from a producer’s or consumer’s failure to meet its contractual delivery schedules are redressed with balancing energy purchased from or sold to the transmission system operator, ESO. Producers who have generated less energy than the contract amount over a certain settlement period, along with consumers who have consumed more energy than the contract amount, will be in a negative energy imbalance and buy energy from ESO at a top-up price. On the other hand, producers who have generated more energy than the

⁹ www.bgenh.com/en/index.php

¹⁰ www.cez.bg/en/home.html

¹¹ www.evn.bg/

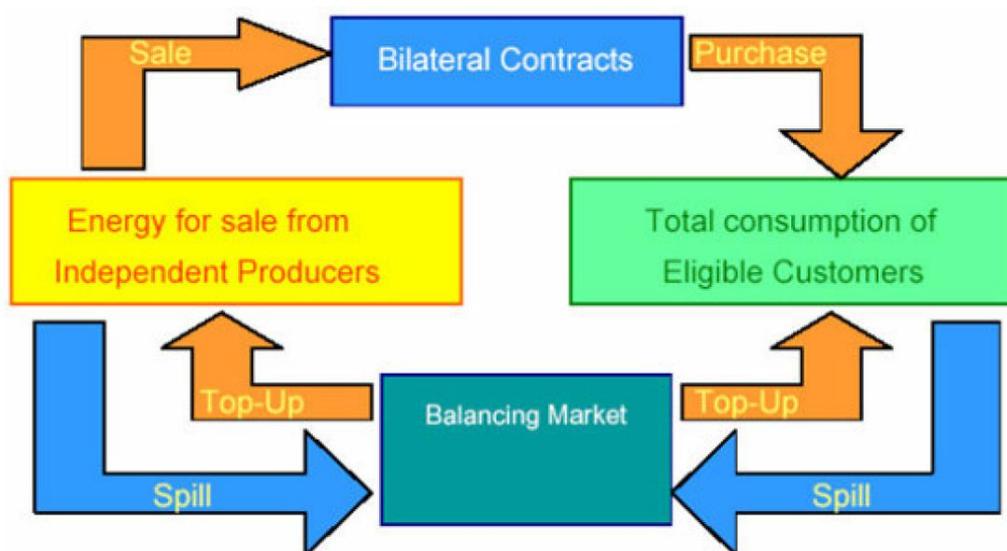
¹² www.eon-bulgaria.com/english/index.htm

¹³ www.erp-zlatni.bg/

¹⁴ Law for the underground natural resources (1999). Available at: www.mi.government.bg/bg/library/zakon-za-podzemnite-bogatstva-321-c25-m258-2.html [BG version]

contract amount over a certain settlement period, along with consumers who have consumed less energy than the contract amount, will be in positive net imbalance and sell energy to ESO at a spill price. Since the top-up and spill price is respectively higher and lower than the initial contract price, producers and consumers are incentivised to stick as closely as possible to their contractual delivery schedules which result in lower levels of imbalances between electricity generation and demand.

Figure BG-2 Electricity market model in Bulgaria



Source: Brief guide to the market rules, Electricity System Operator (ESO)

There are two markets that operate in parallel in Bulgaria: a market with prices regulated by the State Energy and Water Regulatory Commission¹⁵ and a market with freely negotiated prices. The State Energy and Water Regulatory Commission was established by a decree of the Council of Ministers in 1999. The Commission *inter alia* regulates heat, electricity and natural gas prices in Bulgaria. The powers of the Commission, as well as the dual pricing structure of the market, are laid down in the Energy Act¹⁶ which was adopted in 2003.

The Energy Act defines the following regulatory principles:

- Article 21 of the law stipulates that the production, transmission, distribution, supply, trade and transit of electric energy or natural gas, as well as their prices (or availability in the case of production) are regulated by the State Energy and Water Regulatory Commission. The Commission sets price caps for these activities on an annual basis.
- As specified in Article 30 (2), the prices of energy, natural gas and services provided by energy companies are not subject to regulation by the Commission when the latter establishes that there is competition that creates prerequisites to negotiate prices freely in market conditions.

The Energy Act states that the State Energy and Water Regulatory Commission sets the prices at which producers sell electricity to the public service provider. As mentioned previously, the sole public service provider of energy in Bulgaria is the National Electric

¹⁵ www.dker.bg/

¹⁶ www.mi.government.bg/bg/library/zakon-za-energetikata-256-c25-m258-1.html [BG version]

Agency (NEK), which transmits electricity to the distributors and final suppliers in the country i.e. CEZ, EVN, E.ON and ERP Golden Sands, in accordance with the rules determined by the regulatory body. The prices and price caps for the above activities are publically available on the website¹⁷ of the State Energy and Water Regulatory Commission.

The share of the market using freely negotiated prices is expected to gradually increase once full liberalisation of the electricity market has been achieved (Georgiev and Aleksandrova, 2007). To this end, the Ministry of Economy, Energy and Tourism¹⁸ and the Norwegian Water Resources and Energy Directorate (NVE)¹⁹ are currently cooperating with the Bulgarian regulatory body and ESO in order to establish rules for a competitive energy market, including the possibility of upgrading the market to an exchange-based model. Whilst liberalisation is expected to provide households with competitive prices after contracting industrial electricity consumers, an exchange-based model would make energy prices more transparent and support price-setting of balancing energy and sunk costs (Georgiev and Aleksandrova, 2007).

Eurostat data shows that the implicit tax rate on energy²⁰ in Bulgaria was EUR 73.3 per tonne of oil equivalent (toe) in 2009, which means that the country lags compared to the EU average of EUR 170.6 per toe. Excise tax, which is one aspect of implicit tax, is levied on energy products and electric energy at different rates. The duty was introduced for the first time in Bulgaria on 1st January 2007 and currently affects only business clients of electricity. Pursuant to an amendment of the Excise Duties and Tax Warehouses Act,²¹ since 1st January 2010 the excise tax on electricity for business purposes increased from 1.40 BGN (approximately EUR 0.70) to 2.00 BGN (approximately EUR1,00) per MW hour.

All energy products and electricity are subject to VAT at the standard rate of 20%.

Data documentation

General notes

The fiscal year in Bulgaria coincides with the calendar year. The current exchange rate of the national currency, Bulgarian lev (BGN), is around EUR 1 = BGN 1.95.

Producer Support Estimate

Temporary concession charge waiver or reduction for exploitation of certain deposits of underground natural resources (no data available)

¹⁷ www.dker.bg/pagebg.php?P=401 [BG version]

¹⁸ www.mi.government.bg/en

¹⁹ www.nve.no/en/

²⁰ Eurostat defines this indicator as the ratio between energy tax revenues and final energy consumption calculated for a calendar year. Energy tax revenues are measured in euro (deflated) and the final energy consumption as toe (tonnes of oil equivalent), www.epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsdcc360&plugin=1

²¹ www.customs.bg/bg/page/77

The Law for the underground natural resources²² provides for a temporary waiver or a reduction in the concession charge for the exploitation of deposits of underground natural resources²³ with unfavourable mining and geological, technological and economic characteristics. The same exemption rule applies for restoring mining in deposits in regions with long-term unemployment where mining had previously ceased. The waiver or a reduction of up to 50% of the concession charge can be granted to the concessionaire for a maximum period of five years.

No estimates are available for this measure.

Source: Law for the underground natural resources (1999), www.mi.government.bg/bg/library/zakon-za-podzemnitate-bogatstva-321-c25-m258-2.html

Consumer Support Estimate

VAT exemption for import of natural gas, electricity or heating (no data available)

Since 2011, Article 58(10) of the VAT Act²⁴ stipulates that VAT exemptions on the import of the following energy resources apply in Bulgaria:

- Gas imported through a natural gas system or any network which is connected to such a system or to a vessel transporting gas into a natural gas system or a pipeline network in front of such a system;
- Electricity;
- Heating (or cooling) energy through heating (or cooling) networks.

Whilst no estimates are available for this measure, it is unlikely to be an important subsidy because the final consumption of imported energy is subject to VAT.

Source: VAT Act, www.nap.bg/page?id=34 [BG version]

Reduced excise duty on gasoil in agriculture (data for 2012)

In 2011, Bulgaria notified the European Commission²⁵ that the government would like to put in place a measure which aims to assist registered primary agricultural producers to create favourable conditions for the use of fuel in the production of primary agricultural products by applying a reduced excise duty on gasoil. The measure plans to provide beneficiaries with fuel vouchers in the period 2012-2013. The estimated number of beneficiaries is over 1000 and the maximum budget for the scheme which runs until 31st December 2013 is 140 million BGN. In other words, the amount of excise duty which the state will not collect in the national budgets for 2012 and 2013 is 70 million BGN per year. However, one of the stakeholders consulted for this case study reported that at this stage the measure does not appear to have been adopted as it is not included in the relevant legislation (i.e. Excise Duties and Tax Warehouses Act, Law to support farmers, and the state budget).²⁶

²² www.mi.government.bg/bg/library/zakon-za-podzemnitate-bogatstva-321-c25-m258-2.html [BG version]

²³ The natural resources covered by this law are metal ores, non-metallic/ industrial minerals, oil and natural gas, solid fuels, construction materials, stone materials, and mining waste.

²⁴ VAT Act, www.nap.bg/page?id=34 [BG version]

²⁵ European Commission, DG Competition, State aid/ Bulgaria, Aid No SA.32982 (2011/N), www.ec.europa.eu/competition/state_aid/cases/240570/240570_1287814_94_2.pdf

²⁶ Personal communication Petar Ganev, Institute for Market Economics.

Source: European Commission, DG Competition, State aid/ Bulgaria, Aid No SA.32982 (2011/N), www.ec.europa.eu/competition/state_aid/cases/240570/240570_1287814_94_2.pdf

Tag: BG_te_01

Excise tax rebate for motor fuels used in agriculture (data for 2008-2009)

A report by the Institute for Market Economics (2009) states that Bulgaria applies an excise tax return on motor fuels (e.g. gasoil, kerosene, natural gas) used in the processing of agricultural land by farmers who qualify for financial assistance granted by the Law to support farmers. The financial support is provided in the form of preferential rates and reimbursement of the difference. According to data by the Customs Agency²⁷ cited in the report, the amount of excise tax reimbursed to Bulgarian farmers in 2008 was 62,5 million BGN and in 2009 75,4 million BGN. The 2012 update of the report by the Institute for Market Economics elaborates that the return to farmers is based on the difference between the normal rate of 600-700 BGN per 1,000 litres of fuel and the preferential excise duty of 50 BGN per 1,000 litres of fuel which farmers paid in the period 2007-2009.

However, since 2010 the preferential rate for farmers was discontinued because it was not authorised by the European Commission. According to the source, there were negotiations and a signed agreement for a gradual reduction in fuel duty for farmers but no such texts are adopted in the Excise Duties and Tax Warehouses Act as of the end of 2012, Having said this and given the previously described scheme (BG_te_01), it may be the case that the latter either intended to succeed this one when adopted, or refers to the above and confirms that it has not been adopted as of yet.

Source: Institute for Market Economics (2009 and 2012)

Tag: BG_te_02

Excise duty exemption on coal and coke for sale to individuals (data for 2009)

Article 20(20), section 5 of the Excise Duties and Tax Warehouses Act stipulates that the excise duty on coal and coke for sale to individuals (as opposed to enterprises) is 0,00 BGN per gigajoule. This measure is enforced with a social purpose.

The amount of coal used by households was approximately 355 kt or 1,485,320 gigajoule in 2009, according to data by the International Energy Agency.²⁸ Multiplying this amount by the excise tax rate normally applicable to businesses, which was 0,60 BGN per GJ, provides a consumer support estimate under this scheme amounting to 891,192 BGN, or EUR 455,666. The Ministry of Finance projects that the amount of the excise tax for coal and coke for industry representatives will remain the same in the period 2013-2015.²⁹

Sources: Ministry of Finance (2012); IEA 2009 country statistics on coal and coke, www.iea.org/stats/coaldata.asp?COUNTRY_CODE=BG

Tag: BG_te_03

Excise duty exemption on natural gas for household use (data for 2012)

²⁷ www.customs.bg/en/

²⁸ International Energy Agency 2009 country statistics on coal and coke, www.iea.org/stats/coaldata.asp?COUNTRY_CODE=BG

²⁹ Ministry of Finance, *Budget forecast 2013-2015*, www.minfin.bg/document/10721:1 [BG version]

Changes to the Excise Duties and Tax Warehouses Act in 2012 stipulate natural gas used for household needs is exempted from the excise duty of 0.10 BGN per gigajoule which normally applies to businesses.

Sources: Excise Duties and Tax Warehouses Act (2005). Available at: www.customs.bg/bg/page/77 [BG version]

International Energy Agency 2009 country statistics on natural gas, www.iea.org/stats/gasdata.asp?COUNTRY_CODE=BG

Tag: BG_te_04

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Ministry of Finance (2012), Tax exemptions and preferential tax regimes in Bulgaria, www.minfin.bg/document/10847:2

*Table BG-1. Summary of fossil fuel support to coal – Bulgaria
(millions of Bulgarian leva, nominal)*

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Excise duty exemption on coal and coke for sale to individuals	national			0.9*		

* 2009.

*Table BG-2. Summary of fossil fuel support to petroleum – Bulgaria
(millions of Bulgarian leva, nominal)*

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Excise tax return for motor fuels used in agriculture	national		69.0 *			
Reduced excise duty on gasoil in agriculture	national					70.0

* Average for 2008-2009.

*Table BG-3. Summary of fossil fuel support to natural gas - Bulgaria
(millions of Bulgarian leva, nominal)*

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Excise duty exemption on natural gas for household use	national					0.2*

* Based on consumption figures for 2009.

Cyprus

Energy resources and market structure

Cyprus has negligible economically recoverable fossil energy resources and has traditionally relied heavily on imported petroleum products. Over the last few years the amount of imported oil products has stabilized close to 2.8 million tons of oil equivalent (IEA 2012, CYSTAT 2012). Imports have become increasingly skewed towards energy products posing a substantial cost for the local economy. Imports of oil products amount to approximately 17% of total imports, while the corresponding share for the mid nineties was twice as low (CYSTAT 2012). The vast majority of these imports cater for the demand by the oil marketing companies, the Electricity Authority of Cyprus and the cement industries. Substantial offshore gas fields recently discovered in the region's Levant basin are likely to transform the energy landscape of the country in the coming decades.

While renewable energy sources still play a very minor role in current electricity production, Cyprus aims at investing in renewable forms of energy so that the latter account for at least 13% of total energy supply by 2020. In previous years solar and biomass accounted for a small fraction (close to 2-3%) of total energy consumed (IEA 2012). The recently completed 82MW wind power plant close to Paphos is expected to substantially increase renewable power capacity (European Commission 2010).

The Cypriot electricity has been dominated by the state-owned Electricity Authority of Cyprus (EAC) that generates and provides 100% of the island's electricity. In May 2004 35% of the electricity market was liberalized (for the wholesale component of the electricity market) paving the way for ending up the existing public monopoly in the electricity market. This was further increased to 65% in January 2009 with an objective to fully liberalise the electricity market by 2014 (CERA 2011). Nevertheless, EAC still remains the sole supplier of electricity in the domestic market. There is currently no active gas market on the island. Energy companies wishing to supply electricity in the near future would need to submit an application to the Cyprus Energy Regulatory Authority (CERA) and obtain a corresponding license.

In July 2011 an explosion next to the Vassilikos power station damaged the local facilities that covered approximately 50% of the country's electricity demand. A series of measures were initially introduced to temporarily curb demand (e.g. closure of desalination units, selective power cuts). Temporary generating units have been subsequently introduced by EAC to alleviate the energy gap as a result of the Vassilikos accident (CERA 2011).

Prices, taxes and support mechanisms

Given the lack of a competitive environment, the Cyprus Energy Regulatory Authority ensures that electricity prices determined by the public monopoly firm 'reflect the actual costs of the services offered with a reasonable profit' (CERA 2011). CERA has been entrusted the responsibility to approve the EAC energy prices so that consumers are protected against monopolistic prices, as well as maintain the competitiveness of the Cypriot economy. CERA also ensures that energy prices are not kept artificially low (so that unnecessary consumption is encouraged) and ensures that there are no unanticipated drastic changes in energy prices that create uncertainty to investors and

consumers. Between 2004 and 2010, the average selling price of electricity increased from 9.647 to 16.232 eurocents per kWh.

Energy products and services are generally subject to VAT, which has progressively increased from 5% in early 1993 to 15% in late 2008 and 17% since 1 March 2012. Cyprus imposes the EU-mandated minimum excise duty on leaded petrol (Council Directive 2008/96/EC) which is equivalent to EUR 421.00 per 1000 litres (EUR 359.00 for unleaded petrol). These are the lowest excise duties across EU member states (along with the ones adopted by Bulgaria and Romania). For gas oil used for industrial/commercial use there is an excise duty of EUR 330.00 per 1000 litres, although a reduced rate of EUR 124.73 is applied on gas oil used as motor fuel in stationary motors. Gas oil for heating is also subject to VAT of 17%, although the applied excise taxes also stands at the reduced rate of EUR 124.73 per 1000 litres (both for commercial and non-commercial use) (European Commission 2012)

Data Documentation

General notes

The fiscal year in Cyprus coincides with the calendar year. Following OECD conventions, amounts prior to 2008 are expressed as 'euro-fixed series', meaning that we applied the fixed EMU conversion rate (1 EUR = 0.585274 CYP) to data initially expressed in the Cyprus Pound (CYP).

Producer Support Estimate

Cyprus is currently examining possibilities for the future production of natural gas. There are no other indigenous fossil fuel resources and the country relies almost entirely on imported energy products. There is no production of nuclear energy and no current plans to invest in nuclear energy technologies.

Consumer Support Estimate

Fuel-Tax Reductions for the Use of Motor Fuels in Agriculture (no data available)

For gas oil used as motor fuel in stationary motors for agricultural purposes there is a reduced tax rate of EUR 124.73 per 1000 litres.

Source: European Commission (2012)

Fuel-Tax Exemptions for the Use of Motor Fuels in Agriculture (data for 2011)

Gas oil used as motor fuel in certain machineries in agricultural, horticultural or piscicultural works and in forestry is fully exempted from excise duty. 40,000 tonnes of oil equivalent were consumed in the agricultural sector in 2011 which would correspond to a fossil-fuel support equivalent to approximately EUR 20 million.

Sources: European Commission (2012), Eurostat (2012)

Tag: CY_te_01

Fuel-Tax Reduction for the Use of Fuels for Heating Purposes (no data available)

Gas oil and kerosene for heating is subject to a reduced excise of EUR124.73 per 1000 litres (both for commercial and non-commercial use). Heavy fuel oil is subject to a reduced excise of EUR 15.00 per 1000 litres.

Source: European Commission (2012)

Reduced Electricity Charges for Certain Families (no data available)

There is a reduced electricity charge of EUR 0.21 per kWh for families with more than 4 children and low-income families. The legal basis for this measure is the Regulatory Administrative Act 230/2010. This financially burdens the Electricity Authority of Cyprus rather than the government budget (although it indirectly results in loss of indirect taxes for the government budget since the reduced electricity fee also results in reduced public revenues from VAT charges).

Source: CERA (2010)

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*Table CY-1. Summary of fossil fuel support to petroleum – Cyprus
(millions of euros, nominal)*

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Fuel-Tax Exemptions for the Use of Motor Fuels in Agriculture	national				20.0	

Latvia

Energy resources and market structure

Although Latvia has a large stock of its own non-fossil energy resources (biomass, biogas, hydropower and wind energy), the country's energy balance still heavily relies on imported fossil energy resources (such as natural gas, petroleum products and coal). The total consumption of primary energy resources in Latvia in 2011 was 188.7 PJ and self-sufficiency was only 33.1% (see Figure LV-1). All of the country's oil, gas and coal needs are imported. In the total consumption of primary energy sources, fuelwood with its total consumption of 46.9 PJ was the most widely used domestic energy resource, while the electricity generated in hydropower stations and wind power stations constituted 10.6 PJ.

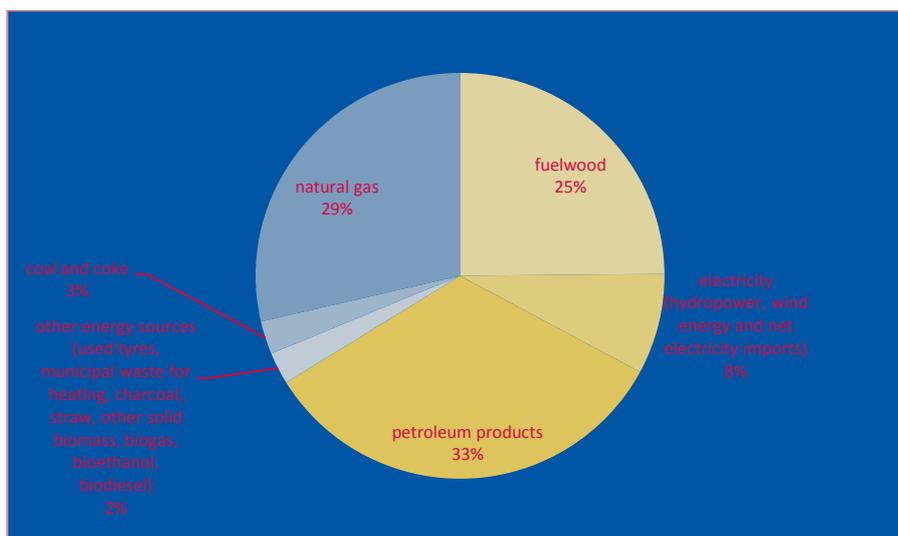


Figure LV-1. Consumption of Primary Energy Resources in Latvia in 2011 (source: Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv)).

Natural gas was the main resource for generating heat energy and electricity. The largest consumers of natural gas are CHP plants owned by the energy utility Latvenergo (Riga CHP1 and Riga CHP2) and district heating companies (66.5%), followed by industries (13.5%), and other consumers (17.3%).

Final energy consumption by sectors in Latvia is presented in Figure LV-2. Among the largest final energy consumers are households (32%) and the transport sector (29%), followed by the industry and construction sector (20%), and services (15%). Agriculture, forestry, hunting and fishing constitute only 4% of total final energy consumption.

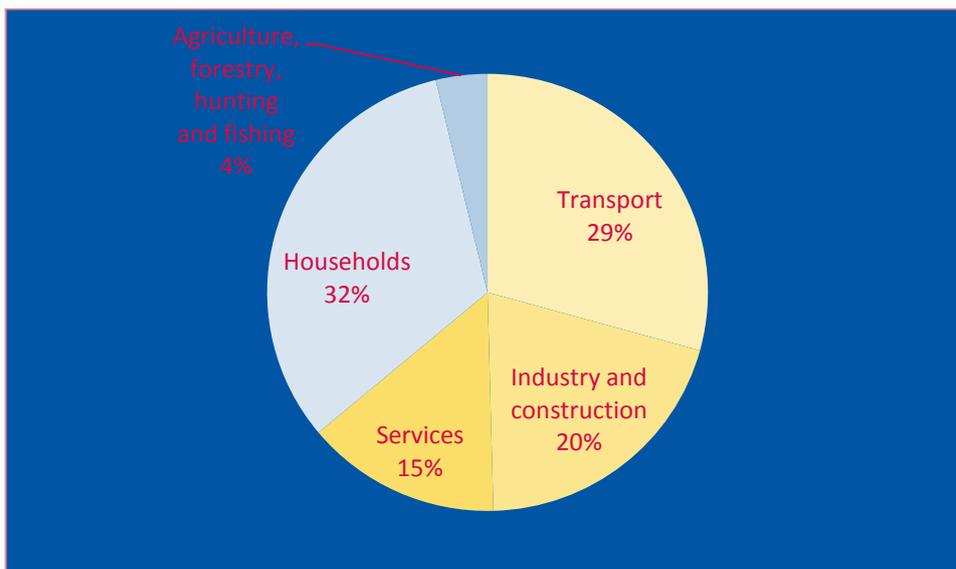


Figure LV-2. Final energy consumption by sectors in Latvia in 2011 (source: Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv)).

In 2011, Latvia's electricity demand was covered by energy generated by Latvia's hydro power plants (39 %), CHPs (41 %), biogas and biomass (2 %) and wind power plants (1 %), whereas the remaining part was imported (17 %).

The Latvian oil market is privately owned and fully open to competition. Latvia does not have a petroleum refinery industry and the only refinery in the Baltic states is located in Mazeiki, Lithuania. The main suppliers of gasoline in 2011 were Lithuania (73.9%) and Finland (26.1%), while diesel was supplied from Lithuania (47%), Finland (17.7%), Belarus (3%), and Russia (2.1%).³⁰

The total transport fuel sales in 2011 amounted to 1.0 million tonnes. It was divided among diesel (72%), gasoline (25%) and gas fuel (LPG) (3%).³¹ 67.7% of the total oil products in 2011 were sold through petrol stations and 26.5% of all sold oil products delivered to the wholesale end-users (transport companies, bus companies, agricultural companies).³² In 2011, 624 licensed petrol stations operated in Latvia.³³

One of the main problems in the Latvian fuel market is the import of illegal fuel from Russia and Belarus. The price in both of these countries is 1/2 of the Latvian retail prices due to the excise tax rates and VAT that are applied in Latvia.³⁴

The natural gas market is dominated by one company, Latvijas Gāze AS, that owns and provides gas transmission, distribution, storage and sales of natural gas. The company is owned by E.ON Ruhrgas International GmbH (47,23%), Gazprom (34%), ITERA Latvija (16%) and others (2.77 %). The company purchases its supplies from Gazprom (Russia).

The Latvian electricity market is fully liberalized since July 1, 2007. Besides the largest state owned utility Latvenergo, which is the major player in the Latvian electricity

³⁰ Source: UEPI (2012).

³¹ Source: Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv)

³² Source: UEPI (2012).

³³ Source: UEPI (2012).

³⁴ Source: UEPI (2012).

market, only one company Enefit started its activities in 2008. By 2011 7 companies have received licenses to sell electricity while 12 companies have received licenses to distribute or sell electricity.

Since September 1, 2005, Augstsprieguma tīkls AS, is an independent Transmission System Operator, which operates the electric power transmission network and ensures security of electric power supply in Latvia, provides power transmission services, based on published transmission service tariffs, free third-party access to the transmission network, operational control of the transmission system and ensures stable operation of the transmission network. Sadales tīkls AS, the Distribution System Operator since July 1, 2007 ensures the supply of electricity to over one million electricity users, with its services covering 99% of the country's territory, and performs monitoring of electricity use, activities aimed at reducing losses, electricity metering, and creation of new connections where necessary. Both operators are owned by state owned utility Latvenergo.

Since November 1, 2012 all commercial energy consumers have to choose their own supplier which leads to the situation when 75% of electricity market is free while the households still have to purchase electricity for regulated prices. The Ministry of Economy plans to open market for the rest of electricity consumers on September 1, 2013.

Prices, taxes and support mechanisms

All energy prices are regulated in Latvia, except the electricity price for commercial users and prices of oil products. The Public Utilities Commission (PUC) regulates district heating, natural gas and electricity tariffs through price controls. Those controls set the maximum amount of revenue the energy provider can collect through the charges they levy on users of their services. Prices are meant to cover the costs to owners of the system for the period in question.

Energy is subject to an air pollution tax, including CO₂, SO₂, NO_x, PM10, NH₃, CO, heavy metals, and organic volatile compounds. In addition to that, electricity is subject to an energy tax. Renewable energy sources and peat are exempted from the air pollution tax for CO₂.

All fuels and energy services are subject to value added tax (VAT) at the standard rate of 21%. Excise taxes are applied to oil products and natural gas.

Electricity production from renewable sources and natural gas used in CHP plants is supported through mandatory procurement of electricity. Both electricity and heat produced by CHP plants using natural gas is supported through installed capacity payments.

Data Documentation

General notes

The fiscal year in Latvia coincides with the calendar year, except for the excise tax exemption mechanism of diesel used in agriculture transport where the fiscal year is from July 1 till June 30. The current exchange rate of the national currency, the Latvian lat (LVL), is around EUR 1 = LVL 0.69.

Producer Support Estimate

No producer support measures were identified.

Consumer Support Estimate

The Ministry of Finance of Latvia or any other public authority does not publish official tax expenditure data. Therefore data are gathered from a number of other sources.

Excise Tax Exemption for Natural Gas used in Heat Supply for Greenhouses and Industrial Poultry Breeding (data for 2011)

From July 1, 2011 till December 31, 2013 greenhouses and industrial poultry breeding are granted a full excise tax rebate for natural gas used for heating.³⁵ The benchmark against which this tax expenditure is calculated is the excise tax rate on natural gas. The Central Statistical Bureau does not provide detailed data on natural gas consumption for greenhouses and industrial poultry rising. Natural gas consumption calculations are based on information available from different sources.

Sources: Information sheet of the Agriculture Organizations Cooperation Board (LOSP) available on www.losp.lv/sites/default/files/.../infolapa_16_23_4_2010.doc; www.vistas.lv/home/par-kekava/informacija-medijiem/?catid=42&itemid=100; pollution permission issued to Balticovo (available on www.vpvb.gov.lv/lv/piesarnojums/a-b-atlaujas/?download=1722).

Tag: LV_te_01

Excise Tax Exemption for Natural Gas for Industrial Consumers (data for 2011)

From July 1, 2011 till December 31, 2013, a number of industries are granted a full excise tax exemption for natural gas used for industrial manufacturing and other processes related to it, the processing of agricultural raw materials, and technology required to maintain indoor climate of industrial and agricultural raw material processing premises.³⁶ The benchmark against which this tax expenditure is calculated is the excise tax rate on natural gas. The data provided by the Central Statistical Bureau on natural gas consumption for tax exempted industries are used to estimate the amount of revenue foregone due to this exemption.³⁷

Sources: Database of the the Central Statistical Bureau of Latvia available on www.csb.gov.lv; Regulations of Cabinet of Ministers of Latvia No.457 "Noteikumi par dabasgāzes apriti un akcīzes nodokļa piemērošanas kārtību" (Regulations on natural gas movement and excise tax application) (in force since 01.07.2011).

Tag: LV_te_02

VAT Reduction for Natural Gas for Households (data for 2006-2011)

Natural gas used by households was subject to lower VAT rates until July 1, 2011.³⁸ Data from the Central Statistical Bureau are used for annual natural gas consumption

³⁵ Regulations of the Cabinet of Ministers of Latvia No.457 "Noteikumi par dabasgāzes apriti un akcīzes nodokļa piemērošanas kārtību" (Regulations on natural gas movement and excise tax application) (in force since 01.07.2011).

³⁶ Regulations of the Cabinet of Ministers of Latvia No.457 "Noteikumi par dabasgāzes apriti un akcīzes nodokļa piemērošanas kārtību" (Regulations on natural gas movement and excise tax application) (in force since 01.07.2011).

³⁷ Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv).

³⁸ Law On Value Added Tax (in force since 09.03.1995).

in households. The benchmark against which this tax expenditure is calculated is the full VAT tax rate.³⁹

Source: Database of the Central Statistical Bureau of Latvia (available on www.csb.gov.lv).

Tag: LV_te_03

Energy Tax Exemption for Electricity Produced in CHP Plants Using Natural Gas (data for 2007-2011)

Since 2007 electricity produced in CHP plants using natural gas is granted a full energy tax exemption. The benchmark against which this tax expenditure is calculated is the energy tax rate.⁴⁰ Data available in databases of the Central Statistical Bureau on electricity produced from natural gas in CHPs are used.

Source: Database of the the Central Statistical Bureau of Latvia available on www.csb.gov.lv.

Tag: LV_te_04

Excise Tax Exemption for Natural Gas for All Users (data for 2010-2011)

On August 28, 2010, the Parliament has issued an amendment to the Law on Excise Duties that natural gas use is granted excise tax rate exemption from 01.09.2010. till 30.06.2011.⁴¹ The benchmark against which this tax expenditure is calculated is the standard excise tax rate before 01.09.2010.⁴² Data available in databases of the Central Statistical Bureau on natural gas consumption are used.

Source: Database of the the Central Statistical Bureau of Latvia available on www.csb.gov.lv.

Tag: LV_te_05

Excise Tax Exemption for Oil Products used for Domestic Shipping (data for 2005-2011)

Oil products used in domestic shipping, with the exception of private leisure and entertainment are exempted from the excise tax normally levied on sales of petroleum products in Latvia.⁴³ The benchmark against which this tax expenditure is calculated is the excise tax rate on diesel oil. The annual amounts of diesel used for shipping reported in the annual oil product movement reports are used.

Sources: Ministry of Finance (2012b, c); The movement of oil products in 2006/2007/2008/2009/2010/2011 (Naftas produktu (degvielas) aprite 2006/2007/2008/2009/2010/2011.gadā); both available on www.vid.gov.lv/default.aspx?tabid=11&id=402&hl=1&llzveleld=1551&periodsld=5735

³⁹ Law On Value Added Tax (in force since 09.03.1995).

⁴⁰ Electricity Tax Law (in force since 19.12.2006).

⁴¹ Law on Amendments on Law on Excise Duties (in force since 28.08.2010).

⁴² Regulations of Cabinet of Ministers of Latvia No.577 "Noteikumi par dabasgāzes apriti un akcīzes nodokļa piemērošanas kārtību" (Regulations on natural gas movement and excise tax application) (in force since 01.07.2010).

⁴³ Law On Excise Duties (in force since 12.12.2008)

Tag: LV_te_06

Excise Tax Exemption for Domestic Aviation (data for 2005-2011)

Oil products used for domestic aviation, with the exception of private leisure and entertainment is exempted from the excise tax normally levied on sales of petroleum products in Latvia. The amounts consumed by this sector are negligible and we will therefore not provide an estimate.⁴⁴

Excise Tax Exemption for Oil Products for Industrial Consumers and Excise Tax Reduction for Petroleum, Fuel oil and Diesel oil used for Heating (data for 2005-2011)

Data for both tax exemptions are combined since the annual amounts of oil products used for industrial customers and heating are reported in the annual oil product movement reports as one common figure. The benchmark against which this tax expenditure is calculated is the excise tax rate on diesel oil.

Sources: Ministry of Finance (2012b,c)

Tag: LV_te_07

Excise Tax Exemption for Oil Products used in Special Economic Zones (data for 2005-2011)

Oil products used in Special Economic Zones for (1) ships and other floating vessels that are not used for leisure and entertainment, (2) vessels used for the construction, testing and maintenance needs, (3) ships and other floating vessels used for waterway dredging and expansion works, (4) production of electricity in CHP plants, are fully exempted from the excise tax normally levied on sales of petroleum products in Latvia.⁴⁵ The State Revenue Service provides an annual report on the amount of oil products used in the Special Economic Zones. The benchmark against which this tax expenditure is calculated is the excise tax rate on diesel oil.

Sources: Ministry of Finance (2012b,c)

Tag: LV_te_08

Excise Tax Exemption for Diesel used in Agricultural Transport (data for 2005-2012)

Diesel used as fuel for transport in agriculture is subject to excise tax exemption.⁴⁶ The benchmark against which this tax expenditure is calculated is the standard diesel excise tax rate and the data on the annual tax expenditures are gathered from the sources mentioned below.

⁴⁴ Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv).

⁴⁵ Application of Taxes in Free Ports and Special Economic Zones (in force since 27.01.2001.)

⁴⁶ Regulations of Cabinet of Ministers of Latvia No.344 "Kārtība, kādā no akcīzes nodokļa atbrīvo dīzeļdegvielu (gāzeļļu), ko izmanto lauksaimniecības produkcijas ražošanai, lauksaimniecības zemes apstrādei un meža vai purva zemes apstrādei, kurā kultivē dzērvenes vai mellenes, kā arī zemes apstrādei zem zivju dīķiem" (Procedures on exemption from excise duty diesel (gas oil), which is used for agricultural production, agricultural processing and forest and swamp land, is cultivated cranberries or blueberries, as well as to process soil underneath the fish ponds) (in force since 03.05.2011).

Sources: Ministry of Finance (2012b); Database of the State Revenue Service of Latvia available on

www.vid.gov.lv/default.aspx?tabid=11&id=401&hl=1&llzveleId=563&periodsId=1168; Regulations of Cabinet of Ministers of Latvia No.177 "Par Konceptiju par akcīzes nodokļa atvieglojumu vai kompensācijas mehānismu zemniekiem, iegādājoties dīzeļdegvielu" (The concept of the excise tax relief or compensation mechanism for farmers for purchasing diesel) (in force since 29.03.2010.); Report by Ministry of Finance of Latvia „Par iespēju valsts budžeta apakšprogrammas „Akcīzes nodokļa par dīzeļdegvielu atmaksāšana zemniekiem” līdzekļus atspoguļot pārskatā atbilstoši šo līdzekļu ekonomiskajai būtībai” available on www.mk.gov.lv/doc/2005/FMZino_240409_lauk.1320.doc (23.04.2009).

Tag: LV_te_09

Excise Tax Exemption for Oil Products used for CHPs or Electricity Production (data for 2008-2011)

Oil products used for CHP plants or electricity production are granted excise tax exemption. Annual consumption data is provided by the Central Statistical Bureau.⁴⁷ The benchmark against which this tax expenditure is calculated is the excise tax rate on fuel oil.⁴⁸

Sources: Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv); Ministry of Finance (2012b)

Tag: LV_te_10

Excise Tax Exemption for Oil Products Imported from non-EU Countries by Individuals for Own Consumption (data for 2005 - 2011)

Oil products which individuals import for their own consumption (one full vehicle standard fuel tank additionally to fuel portable tank with no more than 10 litres per vehicle) from non-EU countries is subject to an excise tax exemption. Since January 1, 2012 individuals are subject to excise tax exemption for the allowed amount once every seven days instead of once every day as was the case before. The State Revenue Service has estimated the average annual amount of oil products imported by individuals, which is the amount that has been used here as the basis for calculations. The benchmark against which this tax expenditure is calculated is the excise tax rate on unleaded gasoline.

Source: Ministry of Finance (2012b)

Tag: LV_te_11

CO2 Tax Exemption for Peat (no data available)

⁴⁷ Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv).

⁴⁸ The movement of oil products in 2012 (6 months) (Naftas produktu (degvielas) aprite 2012.gada 6 mēnešos), available on www.vid.gov.lv/default.aspx?tabid=11&id=402&hl=1&llzveleId=1551&periodsId=5735.

Peat consumption is exempted from the CO₂ tax. The amounts consumed are negligible.⁴⁹

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⁴⁹ Database of the the Central Statistical Bureau of Latvia (available on www.csb.gov.lv).

*Table LV-1. Summary of fossil fuel support to petroleum - Latvia
(millions of Latvian lats, nominal)*

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Excise Tax Exemption for Oil Products used for Domestic Shipping	national			4.0	4.2	
Excise Tax Exemption for Oil Products for Industrial Consumers and Excise Tax Reduction for Petroleum, Fuel oil and Diesel oil used for Heating	national			9.0	7.9	
Excise Tax Exemption for Oil Products used in Special Economic Zones	national			1.0	1.2	
Excise Tax Exemption for Diesel used in Agricultural Transport	national			17.8	18.3	7.2*
Excise Tax Exemption for Oil Products used for CHPs or Electricity Production	national			0.1	0.1	
Excise Tax Exemption for Oil Products Imported from non-EU Countries by Individuals for Own Consumption	national			16.0	17.4	

* First six months only.

*Table LV-2. Summary of fossil fuel support to natural gas – Latvia
(millions of Latvian lats, nominal)*

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Excise Tax Exemption for Natural Gas used in Heat Supply for Greenhouses and Industrial Poultry Breeding	national				0.2	
Excise Tax Exemption for Natural Gas for Industrial Consumers	national				1.0	
VAT Reduction for Natural Gas for Households	national		7.9	17.1	6.7	
Energy Tax Exemption for Natural Gas for Electricity Produced in CHPs	national			2.1	2.2	
Excise Tax Exemption for Natural Gas for All Users	national		8.4	10.1	15.2	

Lithuania

Energy resources and market structure

The Lithuanian energy sector is largely fossil fuel based. With reference to data of 2011, fossil fuel accounted for 74.5% of total primary energy supply (TPES). This is 17.7 percentage points more than in 2009. Fossil fuel consumption and share in TPES increased due to the fact that at the end of 2009 Lithuania fully closed the Ignalina nuclear power plant (NPP), which historically covered 25–44% of TPES. Currently, natural gas is the most important fuel in Lithuania. It accounts for 37.3% in the structure of TPES. The share of oil and its products is 34% in TPES. Coal accounts for only 2.7% of TPES. Lithuania depends on Russia for 100% of its natural gas, for more than 90% of its crude oil and almost for 100% of coal requirements. Due to the implementation of promotional measures for renewable energy sources, consumption of firewood, wood and agricultural waste, biogas and biofuel, hydro, wind and geothermal energy was increasing by 4.5% a year during 2000–2011, and accounts for 14.5% in the structure of TPES in 2011. Firewood, wood and agricultural wastes dominate in the structure of renewable energy sources (RES) – they accounted for 86.5% of RES in 2011. Other indigenous energy sources (peat and energy from chemical processes) are rather scarce in Lithuania. They account for only 3.5% of TPES. After the closure of Ignalina NPP Lithuania became a net electricity importer. It imports electricity from Russia, Belarus and Latvia. In 2011 net electricity imports amounted to 579.5 ktoe (or 7.9% of TPES).

Since the recovery of independence in 1990, the structure of the Lithuanian energy sector strongly changed. All energy sector composing sub-sectors passed a long lasting restructuring process.

The oil refining sector started to be restructured already in 1995, when the state owned company Nafta was reorganized into the JSC Mazeikiu Nafta. After the reorganization about 90% of shares remained in the hands of the Lithuanian government and the remaining 10% was distributed among employees. At the end of 1998, the oil refining sector in Lithuania was reorganized once more, i.e. JSC Mazeikiu Nafta, Butinges Nafta (operator of the Butinge Terminal), and Naftotiekis (operator of Lithuanian pipelines) were merged into Mazeikiu Nafta. In 1999, the Lithuanian Government, Mazeikiu Nafta, and Williams International signed an agreement, under which Williams International became a 33% owner and operator of Mazeikiu Nafta. Three years later, in July 2002, the Lithuanian Government, Williams International, and YUKOS signed investment agreements, under which YUKOS acquired a 26.85% stake in Mazeikiu Nafta. Several months later, YUKOS acquired from Williams International an additional 26.85% stake. In 2006 the Polish company Polski Koncern Naftowy ORLEN S.A. (PKN ORLEN S.A.) became the major shareholder of Mazeikiu Nafta. It acquired 90% of the shares. In 2009 Mazeikiu Nafta changed its name into SC ORLEN Lietuva. PKN ORLEN S.A. became the sole shareholder. Currently, SC ORLEN Lietuva manages a petroleum refinery, a crude oil and petroleum products network and a marine terminal. Every year the oil refinery processes approximately 10 million tons of crude oil. The company supplies petrol and diesel fuel in Lithuania, Latvia and Estonia. Besides, products are exported to Western Europe, USA, Ukraine, and other countries.

The reorganization of the heat sector started after the 'Law on Reorganization of Special Purpose SC Lietuvos energija and the Assigning of the Heating Sector and its Management to Municipalities' came into force in 1997. With reference to the Law the management of the heating sector was decentralized by reorganizing the utility.

Reorganization meant that regional subsidiaries were distinguished from Lietuvos energija and special purpose stock-companies were established. Regional utilities were further reorganized to district ones. New utilities started to be municipality-owned. Already in 2002, private capital entered the district heating sector: the joint Lithuanian-French Company Litesko leased several district heat companies and the French joint-stock Company Dalkia leased the biggest district heating utility Vilnius silumos tinklai. With reference to data of 2002, Dalkia and Litesko controlled 38.3% of the heat supply market in Lithuania. Thirty one municipality-owned district heating utilities covered 58.5% of the market. Other market shares were controlled by three small companies – Energijos taupymo centras (2.0%), Deltima (0.5%) and Suomijos energija (0.7%). In 2003, a Law on Heat came into force. It legitimated the participation of independent producers in the heat market. Since that time the heat market structure has changed. According to 2010 data, there were 50 regulated heat suppliers in Lithuania, supplying more than 10 GWh of heat a year each and covering about 97% of the heat market. Of these, 33 were municipality-owned and 17 were performing on a lease basis. There were seven independent heat producers. Municipality-owned heat suppliers provided heat to 58% of consumers.

The electricity sector restructuring process started in 2000, when the Law on Electricity came into force. At that time the vertically integrated electricity company SC Lietuvos energija was split into five independent companies that started performing electricity generation, transmission and distribution activities. Over the past years the Lithuanian electricity sector has undergone a further process of restructuring. Finally, in 2011 four blocks of electricity companies were completely formed. On the basis of SC Lietuvos energija an electricity generating block was established. Currently, SC Lietuvos energija unites all state-owned electricity generation capacities, i.e. the Lithuanian Power Plant (1800 MW), the Kruonis Pumped Storage Power Plant (900 MW) and the Kaunas Hydropower Plant (101 MW). SC Lietuvos energija covered 70% of all electricity production capacities in 2011. The state's interest in SC Lietuvos energija was 96.13% in 2011. An electricity transmission block was also successfully created in 2010. Currently it consists of JSC LITGRID and its asset JSC BALTPool. 97.5% of the shares of SC LITGRID are owned by the state. In the beginning of 2011 the electricity distribution company SC LESTO started functioning. It was established on the basis of two regional electricity distribution companies: SC Rytu skirstomieji tinklai and JSC Vakarų skirstomieji tinklai. With reference to data of 2011, the state owned 82.6% of the shares of SC LESTO, E.ON Ruhrgas International GmbH (Germany) 11.8%, and other shareholders 5.6%.

Following a wave of restructuring of the natural gas sector, currently it consists of companies which execute the following activities: natural gas import, transmission, distribution and supply. SC Lietuvos dujos, JSC Dujotekana, SC Achema, JSC Kauno termofikacijos elektrinė and JSC Haupas are natural gas importers. They import natural gas from a single supplier (SC Gazprom, Russia), directly or using intermediary services. Almost all natural gas importers are private entities. While the state has a 17.7% stake in SC Lietuvos dujos, E.ON Ruhrgas International GmbH (Germany) has a 38.9% stake and natural gas supplier Gazprom (Russia) controls 37.1% of the company. In 2011, Lietuvos Dujos was the only company in Lithuania performing natural gas transmission activities and distributed around 98% of the total amount of gas consumed. Natural gas supply activities were exercised by 7 companies (SC Lietuvos dujos, JSC Dujotekana, JSC Haupas, JSC Fortum Heat Lietuva, JSC Druskininkų dujos, SC agrofirma Josvainiai and JSC Intergas). SC Lietuvos dujos was the largest supplier, i.e. it supplied more than 70% of total natural gas supplied to consumers in 2011.

Prices, taxes and support mechanisms

A National Control Commission for Energy and Prices (NCCEP) was established in 1997 in Lithuania. It regulates electricity, heat and natural gas prices. Prices of other energy and fuel prices are not regulated in Lithuania.

The bases for electricity sector regulation have been placed already in 2000, when the Lithuanian Parliament adopted the Law on Electricity. The following electricity sector regulation principles are set in the Law:

- the producer's and independent supplier's electricity selling price is not regulated, except in cases where the producer or independent supplier takes more than 25% of the selling market;
- transmission, distribution, public supply and public electricity prices are regulated by NCCEP. NCCEP sets price caps for these activities. The service provider itself sets and changes the particular price of transmission, distribution, and public supply services and public electricity.

Thus, electricity production prices are not regulated. However, if the electricity producer (combined cycle heat and power (CHP) and renewable electricity producer, as well SC Lietuvos elektrine) satisfies the concept of public service obligations (PSO), then its price is determined by NCCEP and activity is supported. In accordance with a valid legislation, CHP electricity is supported by setting regulated fixed prices for determined production quota. With reference to existing legislation, electricity production that is essential to assure energy system reserves is also mandatorily purchased at a fixed price.

Electricity production in wind, biomass, solar and hydro (<10 MW) power plants is supported in Lithuania as well. Historically a feed-in tariff was the main support instrument. The feed-in tariff was applied only for the volume of electricity that does not exceed the supported quota. Renewable electricity that exceeded the supported quota could be traded in accordance with bilateral agreements or in auctions (from 2010 in power exchange). Since 2004 the renewable electricity production volume did not exceed the quota. Currently a new methodology is applied to calculate support for renewable electricity.

Retail electricity in Lithuania satisfies the concept of public electricity, for which the public (regulated) electricity price is paid. Since 1 July 2007 all consumers have a status of free consumer and have a right to choose an independent supplier. No information was found about subsidies provided to public electricity suppliers. In 2011, independent electricity suppliers sold electricity to final consumers at a price of LTL 0.1692 per kWh, whereas the price of public electricity supplier was LTL 0.1860 per kWh.

NCCEP regulates heat prices in accordance to principles set in Law on Heat. Heat prices can be differentiated in accordance to heat supply systems, groups of consumers, heat purchase-sale location, volume of heat consumed, supply reliability, seasonality, periodicity and other criteria. Cross-subsidizing is prohibited when prices are differentiated.

NCCEP regulates natural gas transmission and distribution prices by setting price caps for the services. Natural gas transmission and distribution prices are set applying the post mark principle⁵⁰.

Energy supply is subject to VAT at the standard rate of 21%, with the exception of district heat for household use, which is taxed at a lower rate of 9%. This reduced VAT rate will apply till the end of 2012. An excise tax is levied on petroleum products, coal, coke, natural gas and electricity at different rates.

Data Documentation

General notes

The fiscal year in Lithuania coincides with the calendar year. The national currency exchange rate is about 1 EUR = 3.45 LTL.

Producer Support Estimate

Exemption of natural resources tax for peat for purpose of treatment (no data available)

Peat extraction is subject to a natural resource tax. The standard tax rate for peat extraction is 2.0 LTL/m³. However, if peat is extracted and used for purpose of treatment in any type of health facilities and sanatoriums, it is not taxable at all.

No data estimates are available for this scheme.

Source: Law on Natural resource tax, 1991.

Consumer Support Estimate

Reduced rate of excise tax for heating (data for 2002 - 2011)

A reduced excise tax rate of 73 LTL / 1000 litres (standard excise tax rate is 1043 LTL / 1000 litres) is applied to gas oil (if it is qualifiedly marked) used as fuel for heating.

Source: Law on Excise tax, 2001.

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Exemption of excise tax for agriculture and fisheries (no data available)

The excise tax is not applied to gas oil that is used by economic subjects, which execute agricultural and fishery activities; as well by agricultural science, studies and learning institutions, which have educational farms. In the case of fishery related activities, the tax exemption is applied if not more than 275 litres of gas oil per ton of landed and realized fish a year is used.

No data estimates are available for this scheme.

Source: Law on Excise tax, 2001.

⁵⁰ This principle implies that the natural gas transmission and distribution distance is ignored when the price for provided service is set and paid, i.e. the same transmission and distribution prices are paid by near and far a way located natural gas consumers.

Reduced rate of excise tax and tax exemption for other purposes (no data available)

Fuel oil that corresponds to certain criteria set by the Government or its authorized institution⁵¹ is taxed by the excise tax at a rate of 52 LTL / 1000 litres. However, if fuel oil does not satisfy these criteria, it is taxed at a rate of 1043 LTL / 1000 litres; if this fuel is used for heating, then the excise tax of 73 LTL / 1000 litres is applied to fuel oil (see above).

For coal a reduced excise tax of 13 LTL / t (standard excise tax rate is 26 LTL / t) is applied if the fuel is used for business needs. For business use of coke and lignite a reduced excise tax rate of 16 LTL / t (standard excise tax rate is 31 LTL / t) is applied. The mentioned excise tax rates are practiced if fuels are sold to a subject, who has a license issued by the Central Tax Administrator. Hard coal, coke and lignite are exempt from excise tax, when the fuels are sold to residents and public entities, which are aid receivers according to the Law on Charity and Aid.

A standard excise tax rate of 758 LTL / 1000 m³ is applied to natural gas that is used as a motor fuel. However, if natural gas is used as motor fuel for local (city and suburb) buses, then the excise tax is not applicable. There is also no excise tax on natural gas that is used in electricity and heat production industries.

Aircraft fuel that is supplied for air navigation purposes (including fuels that are used for aircraft production, maintenance, exploitation and service), ship fuel that is used for ship navigation purposes in EU waters (including for fishing) and energy products used in electricity production process are not subject to excise tax.

A standard excise tax rate of 1050 LTL / t is applied to (liquid) petroleum gas. However, petroleum gas is exempt from excise tax if it is poured into home gas cylinders. Besides, petroleum gas is exempt from excise tax, if non-poured petroleum gas is purchased or imported by registered consumers, who supply (use) it to satisfy daily living needs (for heating and food preparation purposes).

Energy products that are used for other purposes than motor fuel, motor fuel additives or as fuels for heating are not subject to excise tax.

Energy products, used in electricity production, except energy products that are used for own needs as motor fuel or as heating fuel, are not subject to excise tax.

No data estimates are available for these tax provisions.

Source: Law on Excise tax, 2001; Government of Lithuania (2004).

Reduced VAT for heat energy in the residential sector (data for 2002 – 2011)

The district heating sector in Lithuania uses natural gas extensively. In 2011, 73.1% of the fuel used in the district heating sector was natural gas (Lithuanian District Heating Association, 2012). Because of increases natural gas prices, heat energy bills for final consumers have increased as well. Seeking to mitigate the impact of increasing heat energy bills on households, a reduced 9% VAT was introduced for heat energy supplied for space heating (including for heat energy that is supplied through a hot water supply system) and for hot water in the residential sector. The reduced VAT rate will be

⁵¹ These criteria are:

- CN (2004) subheadings 2710 19 61, 2710 19 63, 2710 19 65 or 2710 19 69;
- density higher than 880 kg/m³ at a temperature of 15°C;
- color (applying ASTM D1500 method) not less than 6;
- amount of water does not exceed 4% of mass.

applicable until 31 December 2012. The standard 21% VAT rate applies to heat energy and hot water supplied to other consumers (i.e. legal entities).

Source: Law on Value Added Tax, 2002.

Tag: LT_te_2

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Table LT-1. Summary of fossil fuel support to petroleum – Lithuania
(millions of Lithuanian litas, nominal)

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Reduced rate of excise tax for heating	national	3.3		15.2	18.3	

Table LT-2. Summary of fossil fuel support to natural gas – Lithuania
(millions of Lithuanian litas, nominal)

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Reduced VAT for heat energy in the residential sector	national	22.1		152.9	157.2	

Malta

Energy resources and market structure

Malta produces no fossil fuels, refines no petroleum, and is highly dependent on energy imports. Electricity generation accounts for around 63% of the country's global fossil fuel consumption while the remaining 37% largely accounts for transportation and water production purposes by reverse osmosis. As there is no fixed energy transport infrastructure connecting the island with its suppliers, oil imports are shipped. Despite being surrounded by oil producing countries, Malta has so far failed to tap into commercially viable oil reserves. Renewable sources of energy constitute a minimal share of the country's energy market structure.

Malta's energy economy is largely dominated by the state-owned Enemalta Corporation (EMC) which remains the main importer and provider of energy generation and distribution. The Corporation is responsible for the importation and distribution of petroleum products, and for the generation and distribution of electricity. In 2010, the importation of liquefied petroleum gas was passed to Liquigas Malta Limited. By the end of the same year, EasyGas Malta Limited also entered the market. At present EMC is still responsible for the unloading, storing and bottling of liquefied petroleum gas in cylinder and bulk. This will be discontinued when Gasco Energy Limited commissions its new storage and bottling plant which is currently under construction. Progress in reforming the energy sector has been slow mainly due to the country's little opportunity to benefit from economies of scale.

As a result of the country's continued economic growth and surge in tourism figures, Malta's energy demand has been rising steadily over the past years. By 2013, Malta plans to reduce its dependence on oil imports by connecting the country to the European electricity grid through a submarine interconnector. Under Directive 2009/28/EC, the overall target for the share of energy from renewable sources in gross final consumption in 2020 for Malta is set at 10%. At present, the country's total achievable potential of renewable energy has been set at 24% if all available sources of renewable energy were to be exploited. Notwithstanding Malta's vast potential in solar and aeolian power, renewable energy resources have to date remained largely untapped. The Maltese Government plans to increase renewable energy production significantly to foster sustainable economic growth and its energy independence as the country remains exposed to the soaring international oil prices.

Prices, taxes and support mechanisms

The pricing structure of the energy industry is regulated, with the exception of the supply, storage and distribution of minerals resources. Electricity consumption tariffs, as well as service charges, are regulated by the Malta Resources Authority (MRA) based on domestic, residential and non-residential rates. Consumers may only opt to switch suppliers in the case of petroleum fuels and liquefied petroleum gas. Liquefied petroleum gas distributors are obliged to observe the prices established by the two operators. For petroleum fuels, a maximum mark-up is established by MRA. Petroleum fuels and liquefied petroleum gases are subject to VAT at the standard rate of 18%. Electricity is subject to the reduced VAT rate of 5%. Excise taxes are levied on all shipped oil and gas products, with the exception of petroleum products intended for electric power generation, and the biomass content in biodiesel. The provision and

fuelling of commercial, industrial, fishing and rescue vessels, as well as commercial aircraft are also exempt of such duties.

The main forms of public support to fossil energy other than the low VAT rate and the excise tax exemptions include the eco-reduction based on the number of registered occupants in every household. Households consuming less electricity than the average household of the same size pay a reduced rate. Consumers also benefit from a feed-in tariff leading to a rebate on their energy bill when supplying excess electricity generated by photovoltaic (PV) equipment in the grid. To offset the effect of increasing electricity tariffs, an energy benefit in the form of a voucher is also given to vulnerable families. In 2010, a one-off energy allowance was also distributed based on the number of occupants per household. A series of energy grant schemes supporting enterprises and consumers when investing in energy saving measures, efficient domestic appliances and alternative energy sources were also introduced throughout the last number of years.

Data Documentation

General notes

The fiscal year in Malta coincides with the calendar year. Following convention, amounts prior to 2008 are expressed as 'euro-fixed series', meaning the fixed EMU conversion rate (1 EUR = 0.4293 MTL) to data initially expressed in the Maltese Lira (MTL) was applied.

Producer Support Estimate

Support to oil exploration and production in deep waters (no data available)

Oil exploration and production licences in Malta are awarded under Production Sharing Contracts (PSC). Revenue derived from oil and gas production is subject to an income tax of 35% on the contractors' profits. An investment allowance amounting to 50% of the initial development assets is applied to developments in water depths exceeding 200m. Depreciation expenses are calculated over 4 years, however in the case of development in water depths exceeding 200m, depreciation is calculated over a 3 year period.

Consumer Support Estimate

Lower VAT Rate on Electricity Tariffs (no data available)⁵²

A reduced rate of VAT (5%) is applied on the supply of electricity. Under Article 102 of Council Directive 2006/112/EC, the current practice is permissible provided that no distortion of competition arises.

No estimates of the revenue foregone due to the reduced rate of VAT are available.

Source: VAT Department (various years).

⁵² This measure is included here since Malta's electricity production is almost completely fossil fuel based.

Excise Tax Exemptions on Petroleum Products for Specific Purposes (no data available)

The Excise Tax Act (Chapter 382 of the Laws of Malta) provides for the exemption of excise duties if energy products are used for electric power generation. The Act also provides for the exemption of excise tax on the biomass content in biodiesel. Producers of biofuels are to register their operations with the Customs Department and report the production and source of biofuels produced.

The Customs and Tax Act (Chapter 395 of the Laws of Malta) grants the exemption of excise duties on the provisioning and fuelling of vessels used for navigation on the high seas for the purpose of commercial, industrial or fishing activities, of vessels used for rescue or assistance at sea. Fuel supplied to vessels for the purpose of inshore fishing is exempted as well. The Act also provides for the exemption of fuel used by aircraft operating for reward in international traffic.

No estimates of the revenue foregone due to the excise tax exemptions are available.

Source: Customs Department, Ministry for Justice, Dialogue and the Family (various years).

Energy Benefit for Low Income Families (no data available)

This scheme is aimed to mitigate the effect of the increase in expenditure on water and electricity bills of low income families. Beneficiaries include; individuals in receipt of social security benefits, persons qualify through a means test, humanitarian ground cases. Subsidies entitle beneficiaries to offsets up to 80% of the consumption of electricity tariffs before the eco contribution. Utility meter subsidies are also applicable. The energy benefit is paid in the form of a voucher.

No official data estimates are available for this scheme.

Source: Department of Social Security (2012).

Energy Allowance Compensation (no data available)

A one-off payment to around 97% of households who do not benefit from energy-benefit vouchers was distributed in 2010 to families to cover the increase in energy prices. Payments increase with the size of the household. Lone individuals were entitled to EUR 55, a household of two benefitted from EUR 80, three people from EUR 105, four people from EUR 130, five people from EUR 155, while a household of six individuals were entitled to EUR 180.

Source: Department of Information (2010).

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Romania

Energy resources and market structure

Romania has a diverse range of primary resources for energy production, consisting of mineral and fossil fuels, as well as a high potential for developing renewable energy solutions. However, the country's primary energy resources, mainly oil, natural gas, coal and uranium, come in modest quantities. A 2007 forecast of Romania's Energy Strategy for 2007-2020 shows that in order to secure a somewhat realistic long-term energy plan, Romania can only count on its natural coal resources in combination with an optimistic development plan of its renewable options. While coal deposits can secure a medium to long term energy production, natural gas and oil resources are expected to be depleted before 2020.

National production currently meets 100% of Romania's renewable and nuclear demand of energy, 84% of the gas consumption and 87% of its coal needs. The only part of the energy mix that is only half provided by national resources is petroleum, with only 52% coverage of demand (EC, 2011). At a first glance, Romania seems to have a balanced and stable energy strategy in place. Nevertheless, predictions on increase in demand and depletion of natural resources call for a prudent approach. Plans for increasing unconventional natural gas exploitation on newly discovered sites have brought hope for policy makers that Romania will once again become one of the key energy exporters of Europe. Gas is still seen as a feasible option, while coal mining is slowly being phased out in accordance with EU legislation (coal subsidies and incentives to be phased out by 2018). With all pieces together, Romania is now below the European average for energy import dependence, with only 29.1% (EC, 2011), compared to 52% at the EU level (Eurostat, 2011).

The Romanian energy industry has been publicly owned for a long period of time, preserving a certain communist inertia in the first years following the revolution. The first large privatization contract in the energy industry was signed in 2004 with OMV for the national oil giant Petrom. Electricity company Termoelectrica followed in 2008 when EON signed a EUR 1 billion contract. Many contracts followed, leading to a relatively liberalized energy market. Nevertheless, important actors are still publicly owned – notably the National Hard Coal Company, the only hard coal producer in Romania and at this point of time the heaviest weight on the energy subsidies budget. The energy sector evolution is still heavily influenced by state involvement in financial instruments, even if the general trend is towards the liberalization of the market.

On the strategy side, The Ministry of Economy and Commerce is the one responsible for drawing up the national energy strategy for energy sector evolution, such as power and thermal energy, hydroelectric and nuclear power, oil, natural gas, mineral resources, mine-geology fields. Romania has implemented significant market reforms in the energy sector, mainly during the pre-accession phase, with practical changes in the system following the EU accession in 2007. Structural changes in the electricity and gas sectors lined up national legislation and implementation practices to the EU directives.

A central focus of the Romanian current energy policy is phasing out hard-coal subsidies before the end of 2018. This measure should have been implemented by the

end of 2011, however an extension was given⁵³ based on the social and economic impact arguments of the Rapkay report⁵⁴.

Prices, taxes and support mechanisms

Petroleum products and coal prices have been partially deregulated in 2012, the government allowing 15% of the energy total to be traded on the free market. There has been continuous pressure on the Romanian government to implement this measure, both from the EC and the IMF representatives. However, the change has a significant impact on end users: a 2-3% increase in electricity prices for all end users, and a 5% increase in natural gas prices for household users and 10% for industrial consumers. This is only the first step out of a series of measures to be implemented according to the Electric Energy and Natural Gas law adopted in July 2012. The liberalization calendar is to be finalized by July 1st 2013, when the current regulatory institution – The National Authority for Electricity and Heat Regulations – will minimize its role in market regulation.

All types of energy are subject to a value added tax at a rate of 24%. Excise taxes are applied to oil, coal and gas products (at a different rate), in accordance with EU recommendations. An eco-tax has been introduced in 2007 in the shape of a “pollution tax”. The eco-tax is still under discussion and its status remains unclear.

Gas and heating prices are subsidized on an end user level. There is no unique formula for setting the subsidy value, the financial situation of the household and the social status of the user being taken as criteria for subsidy approval. Heat and gas price support is given as a transfer from the local municipality to the end user, based on an individual written request evaluated and approved by the municipal council committee. At the same time, energy providers receive a different type of subsidy, in the shape of a excise tax exemption for energy products and electric energy used to produce and maintain capacity for energy production.

A highly discussed set of subsidies in the last years in Romania is the one attributed to the hard coal industry. As mentioned before, 2011 was expected to be the end of coal subsidies in all European countries. The process has been successful up to a point – production activities regarding coal mining have been gradually reduced based on efficiency criteria. Only the highly productive units with internal capacity to survive on the competitive market made it in the sector. However, many units have not been equally successful, yet they still survived due to state intervention. The impact assessment of phasing out governmental aid for the latter category indicated a major social impact on the community and an economic challenge when having to deal with the financial side of unemployment and extensive lay-off benefits. The 2006 Rapkay report builds a case on this topic and anticipates a change of decision at European level regarding the coal subsidies phase out time frame. The 7 years extension of the deadline works as a buffer zone for the member state governments to tackle the issue in a prudent and socially accepted manner. Under the new agreement, hard-coal production is expected to gradually reduce its output, limited also by a retirement scheme for the miners. Only for 2012, the public budget for non-productive coal mine closure reaches 213,085 million RON. More exactly, 158,379 million RON are intended to cover production losses and 54,706 million RON cover exceptional costs such as

⁵³ Council Decision 2010/787/EU.

⁵⁴ COM/2010/372/FINAL.

social reintegration programs, retirement benefits and aid for disabled former workers of the mining facilities.⁵⁵

The overall tax code impacting the energy sector can be split in retroactive subsidy payments, tax exemptions, partial refunds and rebates specific to each category of energy products. In the tax exemption group worth mentioning are: energy providers who are exempted from paying excise tax on energy used for producing energy⁵⁶; tax rebates on fuel, natural gas and heating services for specific agriculture actors; reduced excise taxes for commercial airlines and water transport companies on inland waterways; reduced excise taxes for public transport fuel.

Data Documentation

General notes

The fiscal year in Romania coincides with the calendar year. The current exchange rate of the national currency, Romanian new lei (RON), is around EUR 1 = RON 4.53.

Producer Support Estimate

Direct budgetary support for coal production (data for 2006-2012)

The National Hard Coal Company subsidies received from the state budget through the Ministry of Economy, Commerce and Business Environment fall under the extended Coal Regulation until 2018. According to the Ministry of Economy and The Agency of Mineral Resources in Romania, no part of the coal production of the National Hard Coal Company can be viably produced without state aid (Ecorys, 2009). The aim of the subsidy, as notified by Romania to the EC, is to cover the difference between the production costs and the revenues of the company. The main condition imposed by the Coal Regulation on this aspect is that the aid granted by the state does not lower the price of hard coal below the level of coal imported from third countries and that the total amount of aid is not higher than the difference between production costs and revenues.

Source: Ecorys, 2009; SEC(2007) 602; C(2007) 4531 final; N 239/2007; EC no.1407/2002

Tag: RO_dt_01

Capital related expenses for ortho-lignite exploitations (data for 2006-2007)

Ortho-lignite production received the last subsidies in 2007. Before 2007, producers received state aid mainly as part of the restructuring process, for operational and social expenses. Once the price of ortho-lignite became stable on the Romanian Goods

⁵⁵ Romanian Government Communication, 28/02/2012.

⁵⁶ Energy companies that use coal, petroleum or natural gas products in order to produce energy as their main scope of activity are exempted from the excise tax that normally applies to final consumption of fossil fuels. Thermo-electric cogeneration units are also included in this type of tax exemption. These provisions are intended to avoid double taxation of energy, and therefore are not considered as support for fossil fuels within the framework of this study.

Stock Exchange, the production of this specific fossil resource was considered economically viable and therefore taken out of the national aid scheme.

Source: Ecorys, 2009; C(2007) 4531 final; N 239/2007

Tag: RO_dt_02

Consumer Support Estimate

Household Natural Gas and Heat Subsidies

Subsidies provided to household energy consumers fall under the national social protection aid scheme. The first documented reference of the current legislation dates back to 2001. The beneficiaries of the subsidies must apply for the aid on a municipal level, while the funds are distributed from national level to local administrations, through the Ministry of Labor, Family and Social Protection. Eligible candidates for this type of subsidy are either one-person households or low income families. The value of the subsidy varies according to the income level of the applicant, starting from 5% of the monthly heating bill for higher income, to 90% of the value for the lowest income category.

This measure is not specifically supporting fossil fuels and therefore not included in the quantitative estimates.

Source: Law 416/2001, Art. 22; OUG nr.5/2003; OUG nr.86/2010; OUG nr.70/2011; Romanian Government, 2011

Excise tax exemption for coal, petroleum and natural gas used by small households, charity institutions; hospitals, orphanages, elderly people institutions, education units or religious buildings (no data available)

According to the national tax code and the underlying legislation, institutions falling under the category mentioned above are exempted from paying excise taxes on fuels used for heating. The legislation dates back to 1995 in the case of the education law, and has a general aim of protecting activities with low or no revenue, or institutions providing social services for communities.

Source: National Tax Code (2010); Law 571/2003; Law 500/2002; Law 114/1996; Law 84/1995

Excise tax exemption for petroleum products used as fuel for (domestic) commercial aviation (no data available)

The fiscal code indicates a tax exemption for commercial airline services on fuel tax, including domestic flights. However, no specific data is mentioned in the official budget documents.

Source: National Tax Code (2010); Ministry of Transport, Strategy Paper 2008

Excise tax exemption for fuels used for internal waterway transportation (no data available)

The tax code offers the legal basis for internal waterway transportation to not pay the fuel tax that normally applies to fossil fuel acquisition. The measure is mentioned in the 2010 version of the code, however no historical data or values are mentioned in the Ministry of Transport's documents.

Source: National Tax Code (2010)

Fuel Tax Refund for Agriculture (data for 2010-2011)

Fuel expenses for agricultural purposes can be refunded through the Agency for Payments and Interventions in Agriculture (APIA) under the Ministry of Agriculture and Rural Development. The measure was implemented in 2010 through a Government Decision, with no previous reference in official documentation. The refund is based on individual applications and is approved at municipal level. The funds are nationally distributed and are assigned annually from the state budget towards the Ministry of Agriculture and finally APIA.

Source: 2010 - HG nr.408/2010

Tag: RO_te_01

Fuel Subsidy for Public Transportation (no data available)

The fuel subsidy for public transport refers to private and public owned commercial transport companies. One of the largest beneficiaries is the Metro service provider in Romania, Metrorex. This support measure is disputed as being part of the railway system and at the same time under public transportation. The subsidies are being allocated on a national level and the funds are administrated and distributed through the Ministry of Transport.

Source: Ministry of Transport, 2011

Fuel Subsidies for Railways (data for 2011)

The national railway company, SNCFR has been heavily subsidized by the Government through the Ministry of Transport ever since its reorganization and the liberalization of the railway system in 1998.⁵⁷ There is little official data on the exact values of the subsidies per year. Even less when it comes to an accurate attribution of the funds for different types of expenses. In a recent interview the National Railway Company (CFR Passengers) director, Stefan Roseanu, indicated a sum of EUR1.6 billion. This accounts for the subsidies received by the company from the Romanian government between 2007 and 2011. However, this covers the whole range of expenses, direct payments, and tax exemptions for which the company receives aid from the state. Therefore, except for 2011, there is no data on the exact amount dedicated to fuel expenses and fuel tax exemptions.

Source: Ministry of Transport – 2011 Budget; HG nr. 746/2011

Tag: RO_dt_03

General Services Support Estimate

Exceptional costs and social protection in the coal mining sector (data for 2006-2012)

The subsidy funds are dedicated to exceptional costs regarding human resources in the mining sector. It covers unemployment benefits for the early retired miners, and aid for former miners with disabilities related to work causes. The funds are aimed to cover the benefits in the period until the miner becomes eligible for regular pension conditions. The measure is allocated under General Services Support Estimate as it does not increase current production or consumption of coal.

⁵⁷ HG 1409/2007.

Source: Gov. Decision nr.52/2010; Ecorys, 2009; SEC(2007) 602; Ministry of Finance and Economy (available years)

Tag: RO_dt_04

Support for mine decommissioning (data for 2008-2012)

Financial support is provided by the government for decommissioning state owned coal mines. With no past data on specific budget transfers for this activity, in 2012, the European Commission authorized RON 1 169 million (approximately EUR 270 million) for the closure of three uncompetitive coal mining units owned by National Hard Coal Company. The measure comes in line with the Coal regulation extension and is meant to support the closing of targeted coal mines before the EU deadline in 2018.⁵⁸ The measure works together with the gradual decrease in production aid, while the socio-environmental impacts are absorbed by the exceptional cost subsidies offered under the state aid scheme. The National Hard Coal Company currently owns seven coal production units, out of which three have been declared uncompetitive and will be decommissioned.

Source: Gov. Decision nr.52/2010; Council Decision 2010/787/EU; DG Competition SA.33033/2012

Tag: RO_dt_05

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Table RO-1. Summary of fossil fuel support to coal – Romania
(millions of Romanian new lei, nominal)

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Producer Support Estimate</i>						
Excise tax exemption for coal used as an input for fuel production	national			54.7 *		
Direct budgetary support for coal production	national		195.6	249.8	178.7	158.4
Capital related expenses for ortho-lignite exploitations	national	54.2 **				
<i>General Services Support Estimate</i>						
Exceptional costs and social protection in the coal mining sector	national		39.4	10.4	53.1	54.8
Support for mine decommissioning	national		144.7	148.4	127.2	158.4

* Figure for 2006. ** Average for 2006-2007.

Table RO-2. Summary of fossil fuel support to petroleum – Romania
(millions of Romanian new lei, nominal)

Support element	Jurisdiction	Avg 2002-2004	Avg 2010-2012	2010	2011	2012
<i>Consumer Support Estimate</i>						
Fuel Tax Refund for Agriculture	municipal			1.9	4.3	
Fuel Subsidies for Railways	national				295.0	