Title of the measure	**LV14 Taxation of Fuels. Reduced excise duties rate for oil products mixed with biofuel and utilised for heat production**

General description

Law „On Excise Duties" [2] establishes the procedure by which excise duty shall be imposed on excisable goods and applied to excisable goods which are imported, exported, produced, processed, stored, marketed, received or dispatched in the Republic of Latvia. The law was adopted in 30.10.2003 (with amendments in years 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013, 2014, 2015, 2016 and 2017).

Taxation applicable for natural gas

In Latvia natural gas is the most important fuel in end-use sectors. It constituted in 2016 around 25% of gross primary energy consumption. Around 70% of natural gas was consumed in energy transformation sector and around 30% in end-use sectors. In 2016 in Tertiary (commercial and public) sector natural gas constituted ~ 16%, in Agriculture sector ~ 8% of total final consumption in the sector [4].

The procedure of taxation applicable for natural gas is prescribed by the Law on Excise Duties [2]. The Amendments of the Law (the articles 6^1&15^1), adopted in 2010, had introduced excise duty for natural gas utilised as fuel, this duty is introduced starting from 01.07.2010 (not applied in the period 01.09.2010 – 30.06.2010).

Up to 31.12.2013 the single general rate – 12 LVL (17.07 EUR per 1000m³ (which corresponds to ~0.5 EUR/1 GJ) – had been applied.

Starting from the 1st January 2014 the differentiated rates are applied, namely, the reduced (33%) rate is applied for natural gas utilised as fuel for production processes and for providing necessary climate conditions in production premises (before 01.01.2014 this utilisation was exempted from taxation), and the exemption from taxation is continued in agriculture sector for providing heat for greenhouses, industrial scale henhouses/sheds and incubators (Table 1). The exemption from taxation is continued also for natural gas utilised for other purposes (not as fuel) or utilised in two ways (including processes of chemical reduction, electrolytic and metallurgy processes) as well as utilised in mineralogy processes, see Table 1 below.

The average natural gas price (without VAT) for tertiary sector (commercial and public) end-users in 2016 were 277 (2015 – 354) EUR/1000m3, for agriculture sector end-users 313 (2015 – 322) EUR/1000m3 [3]. Thus, natural gas actual general tax rate corresponds to around 6%, the reduced rate around 2% of the 2016 natural gas price. Thus the impact of actual tax rates on promotion fuel switch from natural gas to other more environmentally friendly fuels (e.g., biomass) might be considered as potentially important.

Table 1. Excise Tax rates for Natural Gas, in force from 01.01.2014

	Rate	
	01.01.2014-31.03.2017	from 01.04.2017
Utilised as fuel	17.07 EUR/1000 m³ (general rate)	1.65 EUR/1 MWh, the highest calorific value.
Utilised as fuel to provide (see note 1) (i) industrial production processes as well as other	5.65 EUR/1000 m³	0.55 EUR/1 MWh,

processes related to production, (ii) the work of technological equipment for agriculture raw materials pre-treatment, (iii) necessary climate condition in the premises of industrial production and agriculture sector's raw materials pre-treatment (iv) for entities placed in industrial parks	(reduced rate)	the highest calorific value.
Utilised to provide heating of greenhouses, industrial scale henhouses/sheds and incubators (see note 2)	0.00 (exempted)	
Used as raw material for technological production	0.00 (exempted)	
Notes: (1) As the industrial production it is stated the production processes which corresponds to the Annex I, part C, chapters 10.-22 and 24-33 of the Regulation No 1893/2006; the agriculture sector raw materials pre-treatment processes coresonds to the Annex I, part A, section 01.63 of the given Regulation. (2) includes the production processes which corresponds to the Annex I, part A, sections 01.17 and 01.47 of the given Regulation.		

Taxation applicable for oil products

The Article 14 of the Law determines the rates of duty for mineral oils and their substitutes used for heat production. The current duties are presented in Table 2. For historical date on excise duties rates for mineral oils utilised for heat production see the Table 5 below.

The amendments on the law "On Excise Duties", adopted in 12 June 2009, had increased (starting from the 1st July 2010) the excise duties rate from 21.34 EUR to 56.91 EUR per 1000 litres for diesel (gas oil) and fuel oil (with the colorimetrix index below 2.0 and kenematic viscosity at 50°C below 25 mm^2/s) as well as for oil products' and lubricants' waste utilised as fuel for heat production, but at the same time had kept the previous rate (21.34 EUR) if at least 5% biodiesel or rapeseed oil are added, see Table 2.

The exempt from taxation is made for the oil products utilised for electricity production and for electricity-heat production in CHP mode (Article 18.1.4). The duties are not applied for those oil products which are utilised in another way as fuel.

The average diesel oil price (without VAT) for tertiary sector (commercial and public) end-users in 2016 were 909 EUR/ton [3]. Thus, the diesel oil tax in 2016 corresponded to around 6% of diesel oil price. However in Latvia diesel oil plays minor role by constituting in 2016 in Tertiary sector ~ 5% of total final consumption in the sector [4]. Thus the impact of actual tax rates on promotion fuel switch from diesel oil to other more environmentally friendly fuels is rather limited.

The average residual (heavy) fuel oil price (without VAT) for tertiary sector (commercial and public) end-users in 2016 were 468 EUR/ton [3]. Thus, the residual fuel oil tax in 2016 corresponded to around 3.3% of residual fuel oil price. However in Latvia residual fuel oil plays very minor role by constituting in 2016 in Tertiary sector only ~ 0.016% of total final consumption in the sector [4]. Thus the use of residual fuel oil is currently very minor and is unlikely that actual tax rate will play role on potential, if any, fuel switch from residual fuel oil to other more environmentally friendly fuels.

Table 2. The current duties for oil products used for heat production, EUR per 1000 litres [2]

	Excise Duties
fuel oil with the colorimetrix index equal or above 2.0 and kenematic viscosity at 50°C equal or above 25 mm^2/s	15.65
kerosene, diesel (gas oil) and fuel oil (with the colorimetrix index below 2.0 and kenematic viscosity at 50°C below 25 mm^2/s) as well as oil products and lubricants waste utilised as fuel for heat production	56.91
kerosene, diesel (gas oil) and fuel oil (with the colorimetrix index below 2.0 and kenematic viscosity at 50°C below 25 mm^2/s) as well as oil products and lubricants waste utilised as fuel for heat production and containing at least 5% mix of rapeseed oil or biodiesel made from rapeseed oil	21.34
Rapeseed oil and pure biodiesel produced from rapeseed oil, produced in Latvia or imported from EU member state	0

Taxation applicable for coal

The procedure of taxation applicable for coal is prescribed by the Natural Resources Tax Law [1].

The taxation on coal utilisation (Annex 9) was introduced by the Amendments of Law, adopted in 19 December 2006, in force starting from the 1st January 2007. The exemption (zero tax rate) is stated for coal, coke and lignite utilised for electricity production and for combined heat-power production (Law's Section 23[1]), see Table 3 below.

The average coal price (without VAT) for tertiary (commercial and public) sector end-users in 2016 were 92 EUR/ton. Average heat value in 2016 was estimated 23.72 GJ/ton. Thus, coal actual tax rate corresponds to ~ 9% of 2016 coal price (without VAT) for tertiary sector.

However in Latvia coal plays very minor role by constituting in 2016 only ~ 0.9% of gross primary energy supply [4], and ~ 0.9% of Tertiary sector final consumption. Thus the impact of actual tax rates on promotion fuel switch from coal to other more environmentally friendly fuels is limited.

Table 3. Tax Rates for Coal, Coke and Lignite (Brown coal)

			Rate		
No.	**Classification of Coal, Coke and Lignite (Brown coal)**	**Unit of measurement**	**01.01.2007-31.12.2008**	**01.01.2009-31.12.2013**	**01.01.2014-31.12.2016**
			(LVL)		**(EUR)**
1.	Coal, Coke and Lignite (Brown coal) with thermal input (GJ/t) indicated in accompanying documents	GJ/t	0.11 (0.1565 EUR)	0.21 (0.299 EUR)	0.30
2.	Coal, Coke and Lignite (Brown coal) with thermal input (GJ/t) not indicated in accompanying documents	t	3 (4.269 EUR)	6 (8.537 EUR)	8.54
Note: 1 EUR = 0.702804 LVL					

			Rate

No.	Classification of Coal, Coke and Lignite (Brown coal)	Unit of measurement	01.01.2017-31.12.2017	01.01.2018-31.12.2018	From 01.01.2019
			EUR		
1.	Coal, Coke and Lignite (Brown coal) with thermal input (GJ/t) indicated in accompanying documents	GJ/t	0.35	0.36	0.38
2.	Coal, Coke and Lignite (Brown coal) with thermal input (GJ/t) not indicated in accompanying documents	t	9.80	10.25	10.65

Impact evaluation

Reduced excise duties rate for oil products mixed with biofuel and utilised for heat production

The amount of biodiesel utilised in Latvia Tertiary (commercial and public) sector is still low, see Table 2. There is no indicated stable trend of biodiesel utilisation. In 2015 the biodiesel amount in Tertiary sector formed 0.67% of the consumption of oil products and contributed 0.06% in total final consumption of the sector. However there is no indicated by [4] utilization of biodiesel in Tertiary sector in year 2016.

CO_2 emissions savings in 2015

Assuming 100% of CO_2 savings in case biodiesel replaces fossil diesel and applying IPCC 2006 Guidelines default value of CO_2 emissions for gas/diesel oil, it can be calculated in 2015 1.1 thousand tons of CO_2 savings reached in Tertiary sector. Evidently, the estimated CO_2 savings will be lower in case the GHG impact of biofuels will be calculated according the Renewable Energy Directive 2009/28/EC and thus the typical or default values of GHG emissions savings will be applied instead of 100% savings.

Table 4.
Utilisation of Biodiesel compared to Total Final Consumption and Consumption of Oil Products in Tertiary (Commercial and Public) sector in Latvia, in TJ [4]

Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Utilisation of Biodiesel, TJ											
Tertiary					4	31	34	54	12	15	-
Gross CO2 savings, in tons											
Tertiary					296	2297	2519	4001	889	1112	0
Consumption of Oil Products, TJ											
Tertiary	2347	1931	1625	1586	1599	1375	1839	1921	2111	2226	1590
Amount of Biodiesel (in %) compared to Consumption Oil Products											
Tertiary					0.25	2.25	1.85	2.81	0.57	0.67	0
Total Final Energy, TJ											
Tertiary	26716	28657	25582	24030	25157	23446	26104	25263	25585	24631	24939
Amount of Biodiesel (in %) compared to Total Final Consumption											
Tertiary					0.015	0.13	0.13	0.21	0.05	0.06	0

Historical data

Table 5.
Historical excise duties rates for mineral oils utilised for heat production after Latvia joining the EU, in EUR

	01.05.2004	01.01.2005	01.01.2006	01.01.2007	01.01.2008	01.02.2009	01.02.2010	01.07.2010
fuel oil with the colorimetrix index equal or above 2.0 and kenematic viscosity at 50°C equal or above 25 mm^2/s	12.81	14.23	14.23	15.65	15.65	15.65	15.65	15.65
kerosene, diesel (gas oil) and fuel oil (with the colorimetrix index below 2.0 and kenematic viscosity at 50°C below 25 mm^2/s) as well as oil products and lubricants waste utilised as fuel for heat production				21.34	21.34	21.34	21.34	56.91 previous decreased tax rate (21.34) may apply if least 5% biodiesel or rapeseed oil mix is made
pure biodiesel, produced in Latvia or imported from EU member state	0	0	0	0	0	0	0	0
business entities which utilise the fuel oil (with the colorimetrix index equal or above 2.0 and kenematic viscosity at 50°C equal or above 25 mm^2/s) for heat production for heating premises and hot water supply	0	0	0	0	0	0	Exemption cancelled	
oil gasses and other hydrocarbons if utilised by (private) persons as fuel or in gas furnaces (not as the transport fuel)	0	0	0	0	0	0	0	0

References

1. **Natural Resources Tax Law** (*Dabas resursu nodokļa likums*, adopted 15 December 2005, in force 1 January 2006, amendments adopted 19.12.2006, 08.11.2007, 13.12.2007, 08.05.2008, 14.11.2008, 12.06.2009, 20.12.2010, 19.09.2013, 06.11.2013, 25.09.2014 and 23.11.2016). Actual consolidated version in Latvian available http://www.likumi.lv/doc.php?id=124707 , English translation (the amendments of 2014 and 2016 not included) available http://m.likumi.lv/saistitie.php?id=124707&saistitie_id=7
2. **Law on Excise Duties** (Likums "Par akcīzes nodokli"). Actual consolidated version available in Latvian http://www.likumi.lv/doc.php?id=81066 // Cabinet of Ministers (Governmental) Regulations No 199 „Regulations on Natural Gas Turnover and Application of Excise Duty (*Noteikumi par dabasgāzes apriti un akcīzes nodokļa piemērošanas kārtību*)", adopted 04 April 2017, in force 14 April 2017. Published: „Latvijas Vēstnesis", 76 (5903),13.04.2017, https://m.likumi.lv/doc.php?id=290128
3. Latvia Republic Central Statistical Bureau. Statistics Data Base ENG19 „Average Prices of Energy Resources for Final Consumers", http://data.csb.gov.lv/pxweb/en/vide/vide__ikgad__energetika/?tablelist=true&rxid=cdcb978c-22b0-416a-aacc-aa650d3e2ce0
4. Latvia Republic Central Statistical Bureau. Statistics Database ENG02 "Energy Balance", http://data.csb.gov.lv/pxweb/en/vide/vide__ikgad__energetika/?tablelist=true&rxid=cdcb978c-22b0-416a-aacc-aa650d3e2ce0