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MINISTRY OF ECONOMY OF THE REPUBLIC OF LITHUANIA

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Secretariat-General
Commission of the European Communities To
B-1049 Brussels
Belgium

10.06.2009 No (30.4-63)-3-3534

RE: SUBMISSION OF THE REPORT ON THE IMPLEMENTATION OF THE PROVISIONS OF DIRECTIVE 2003/30/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL IN LITHUANIA

Implementing the provisions of Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels and other renewable fuels for transport, we hereby submit Lithuania's report on legal and financial measures introduced in Lithuania in 2008 promoting the use of biofuels for transport and other renewable resources and the production, use and promotion of biofuels for transport.

ATTACHMENTS:

1. The report on measures promoting the use of biofuels for transport and other renewable resources, six pages.
2. The annex to the report (information on State aid No 44/2005-Lithuania), three pages.

Undersecretary of the Ministry

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REPORT ON MEASURES PROMOTING THE USE OF BIOFUELS FOR TRANSPORT AND OTHER RENEWABLE RESOURCES

(Implementation of the provisions of Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels and other renewable fuels for transport)

**Country: LITHUANIA
2008**

Introduction

Following the entry into force of Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels and other renewable fuels for transport (hereinafter 'Directive 2003/30/EC'), Member States must transpose the provisions of the Directive in their national law. Implementing the requirements of Article 4 of Directive 2003/30/EC, Member States must report to the Commission, before 1 July each year, on the implementation of the provisions of the Directive in the country.

The present report provides information on the implementation of the provisions of Directive 2003/30/EC in Lithuania in 2008.

2. National legal framework and promotion measures

Increasing the production and use of renewable energy resources and biofuels for transport is important for Lithuania. Energy savings and efficient use of energy resources, as well as the promotion of the production and use of local, renewable and waste energy resources are among the key objectives of the Lithuanian energy policy defined in the National energy strategy and the National energy efficiency programme for 2006–2010.

The country has employed legal and economic measures to promote the increased use of local energy resources: the necessary laws are being prepared that regulate the use of renewable energy resources for energy and transport and financial assistance is being provided.

To implement the provisions of Directive 2003/30/EC and the commitments assumed under the legal acts, Lithuania adopted a number of national laws promoting the development of renewable energy resources and biofuels for transport in 2005–2008.

We hereby provide brief information on the national legal acts regulating the production, use and promotion of biofuels for transport.

1. The Law of the Republic of Lithuania on biofuel, biofuels for transport and bio-oils (Žin. [Official Gazette], 2004, No 28-870), Article 8(3) whereof stipulates that measures must be prepared providing that by 31 December 2005 the share of biofuels for transport should amount to at least 2%, calculated on the basis of energy content, of all petrol and diesel for transport purposes placed on the national market, and by 31 December 2010 to at least 5.75%.
2. Article 38(4) of the Law of the Republic of Lithuania on excise duties (Žin., 2001, No 98-3482; 2004, No 226-802) provides for an excise duty exemption on energy products from materials of biological origin, i.e. the reduction of the excise duty rate on these products is proportional to the content (percentage) of additives of biological origin per tonne of the product (at present, the zero excise duty rate is applied on fuels of biological origin).
3. The Law amending and supplementing Article 25 of the Law on excise duties (Žin., 2005, No 153-5633), adopted by the Parliament of the Republic of Lithuania on 15 December 2005), lays down an excise duty exemption (the zero excise duty rate) on dehydrated ethyl alcohol. The law provides for more favourable economic conditions for the production of biofuels for transport.
4. The Law on pollution tax (Žin., 2002, No 13-474; 2005, No 47-1560) (effective from 1 January 2006) stipulates that natural and legal persons who pollute from vehicles using

biofuels that comply with the established standards and who submit documents confirming the use of biofuels for transport are exempt from the tax on emissions from mobile sources.

5. The Regulations for financing the development of the production of biofuels for transport, approved by an order of the Minister for Agriculture of the Republic of Lithuania each year, provide for the promotion of the development of the production of biofuels for transport by creating opportunities for the non-food use of agricultural products. The main objectives of financing the production of biofuels for transport laid down in the Regulations include the promotion of biofuel production, the creation of opportunities for the non-food use of agricultural products and the reduction of dependence on imported fuel. The Regulations approved by Order No 3D-417 of 25 July 2008 of the Minister for Agriculture (Žin., 2008, No 88-3551) lay down the amount of support for raw materials intended for the production of biofuels for transport (raw material): 160 LTL/tonne for rape grains and 114 LTL/tonne for cereal grains.
6. The Regulations for the management and control of support for energy crops intended for the production of biofuel have been approved by Order No 3D-223 of 5 May 2007 of the Minister for Agriculture (Žin., 2007, No 52-2035; 2008, No 44-1670). The Regulations state that an agricultural operator who grows energy crops may, upon submitting an application, receive support for energy crops in the amount of EUR 45 per hectare of the area of energy crops. (Energy crops are crops (cereals, rape, sugar beet, maize, perennial grasses, short rotation trees and bushes) grown as raw materials for biofuel (except for biofuels for transport).
7. Order No 4-249 of 13 June 2008 of the Minister for Economy of the Republic of Lithuania (Žin., 2001, No 37-1269; 2008, No 70-2669) has supplemented the Regulations for the marketing of petroleum products, biofuel, bio-oil and other combustible liquids in the Republic of Lithuania which state that petroleum products placed on the domestic market must meet the following conditions:
 - as from 1 January 2007, 95 RON motor spirit must be produced using the additive bio-ethyl-tertio-butyl-ether (hereinafter 'bio-ETBE'), the content of which in a blend with petrol must be at least 7% by volume, but not more than 15% by volume; and as from 1 October 2008, the content of the additive bio-ETBE in a blend with petrol of the said octane rating must be at least 10% by volume, but not more than 15% by volume;
 - in 95 RON motor spirit produced without bio-ETBE, the content of bioethanol must be 5% by volume (the tolerance may be -0.5% by volume); the bioethanol tolerance in bioethanol E85 may be ±0.5% by volume;
 - in diesel (except for class 2 arctic-grade diesel), the content of fatty acid methyl ester (hereinafter 'FAME') derived from vegetable oils or animal fat must be 5% by volume (the tolerance may be -0.5% by volume). The content of FAME in diesel may exceed 5% by volume where a blend of diesel and FAME meets the mandatory quality indicators for diesel;
 - petroleum products placed on the domestic market from public stocks must contain substances of biological origin.

These Regulations also permit the sale in Lithuania of a new type of fuel, bioethanol E85 (containing 85% of ethanol derived from agricultural products, with the remaining 15% of unleaded 95 RON petrol). The marketing of these biofuels for transport in Lithuania was launched in late 2007, but the use of E85 has been extremely limited as engines of vehicles need to be adapted to its use.

In Lithuania, the main raw materials for the production of biofuels for transport are rapeseed (raw material for the production of biodiesel) and cereal grains (raw material for the production of bioethanol). Pursuant to the Regulations for financing the development of the production of biofuels for transport, LTL 26.6 million (EUR 7.7 million) was appropriated for the development of biofuel production from the national budget, and 118 580 tonnes of rapeseed (crop area of 59 290 ha) and 78 300 tonnes of cereal grain (crop area of 26 181 ha) were purchased for biofuel production in 2008.

Pursuant to the Regulations for the management and control of support for energy crops intended for the production of biofuel, LTL 9.6 million (EUR 2.78 million) was distributed in direct payments for energy crops from the national budget in 2008.

According to the statistics provided by the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania, exemptions from the excise duty on biofuels for transport sold on the domestic market totalled LTL 74.16 million (EUR 21.43 million) in 2008 pursuant to the provisions of Article 38(4) of the Law on excise duties. Exemptions from the excise duty were applied to 20 300 tonnes of pure bioethanol blended with mineral fuels in its pure form or as a compound of ETBE and to 42 400 tonnes of biodiesel (FAME) blended with diesel.

It should be noted that the Government of the Republic of Lithuania, in fulfilling its commitment to increase the rates of excise duties in order to bring them in line with the minimum excise rates of the European Union, raised the excise duty on fuel by 12% as from 1 January 2008. The excise duty on petrol and diesel was increased up to LTL 1 116/1 000 litres and LTL 947/1 000 litres, respectively.

3. Production and use of biofuels for transport

The production and use of biofuels for transport in Lithuania are governed by the provisions of legislation. They are also affected by the continuous growth of demand for diesel and the high price of mineral fuels. In recent years, the consumption of diesel fuel in Lithuania has been almost double that of petrol. Recently, Lithuania's entrepreneurs have demonstrated an interest in the production of biofuels for transport, especially of biodiesel. In addition to rapeseed as a traditional raw material for the production of biodiesel, Lithuania has begun to use fat of vegetable or animal origin.

In 2002, the first large biodiesel production undertaking Rapsoila UAB began operating in Lithuania. The plant's capacity allows processing 30 000 tonnes of rapeseed and producing 10 000 tonnes of biofuels for transport annually. Reconstruction of the plant carried out in 2006 has increased the annual capacity to 30 000 tonnes of biodiesel.

The capacity of the biodiesel plant Mestilla UAB, which was put in operation in 2007, allows processing up to 200 000 tonnes of rapeseed per year. Biodiesel production has also been launched by Arvi Cukrus UAB and by the cooperative society Obeliai SV in small quantities.

In Lithuania, bioethanol is produced by Biofuture AB which uses grains of wheat and triticale as a raw material.

Anhydrous bioethanol intended for fuels is used in two ways: by blending it with petrol mechanically and by producing ETBE (ethyl-tertio-butyl-ether) which contains 47% of bioethanol. In 2008, Mažeiki• Nafta AB produced 27 100 tonnes of bio-ETBE and blended the whole quantity with petrol in the refinery.

Table 1 shows information on the quantity of biofuels for transport produced by Lithuanian undertakings in 2006–2008 and their exports and sales on the domestic market (source: data from undertakings engaged in the production of biofuels for transport).

Production, sales and exports of biofuels for transport in 2006–2008
(‘000 tonnes)

Table 1

Product	Production			Domestic sales			Exports		
	2006	2007	2008	2006	2007	2008	2006	2007	2008
Bioethanol	14.4	15.0	16.58	8.1	14.0	16.58	6.3	0.6	-
Biodiesel (FAME)	10.3	24.7	87.14	9.9	17.2	14.74	-	5.1	49.02

According to preliminary data, Lithuania's total fuel consumption (including biofuels for transport) in 2008 amounted to 1 787 500 tonnes, including 437 000 tonnes of petrol, 1 111 900 tonnes of diesel and 231 100 tonnes of liquefied petroleum gas (source: the Department of Statistics under the Government of the Republic of Lithuania).

In 2008, Lithuania imported 9 200 tonnes of bioethanol and 44 300 tonnes of biodiesel. Exports included 2 400 tonnes of bioethanol (pure and blended with fuels), 47 100 tonnes of biodiesel (pure) and 5 700 tonnes of biodiesel blended with mineral fuels.

Fuel consumption for transport amounted to 51 800 tonnes of biodiesel, 20 000 tonnes of bio-ETBE (containing 11 900 tonnes of bioethanol) and 12 300 tonnes of bioethanol used by blending it directly with mineral fuels.

Table 2 provides preliminary data on the consumption of fuels for transport in 2008 (in '000 tonnes) and their share (percentage) by fuel type and energy content (source: Statistics Lithuania).

Fuel consumption for transport in 2008

Table 2

Fuel type	'000 tonnes	Energy content of fuel GJ*	Energy content of fuel (share, percentage)
Bioethanol, used for production of blends with motor spirit	12.3	332 100	
Bioethanol, used for production of bio-ETBE (bio-ETBE, used for production of blends with motor spirit)	11.9	321 300	
Biodiesel, used for production of blends with diesel	51.8	1 916 600	
Total biofuels for transport, used for production of blends	76.0	2 570 000	4.3
Motor spirit (without bio-additives)	408.9	17 582 700	
Diesel (without bio-additives)	921.3	39 615 900	
Total fuels (without bio-additives)	1 330.2	57 198 600	95.7
Total transport fuel consumption	1 406.2	59 768 600	100.00

Conclusion: According to preliminary estimates, the share of biofuels in total transport fuel consumption in Lithuania, based on energy content, accounted for 4.3% in 2008.

According to Eurostat data, the share of biofuels in Lithuania's overall transport fuel consumption was:

- 1.58% in 2006;
- 3.63% in 2007.

The significant increase in the share of biofuels for transport was caused by the mandatory blending of biofuels and mineral fuels established by national legislation.

Notes:

The energy content of fuels was calculated according to the energy content of biofuel presented in Annex III 'Energy content of transport fuels' to the Proposal of 30 January 2008 by the Commission for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources.

4. Use of renewable energy resources

The use of renewable energy resources for heat and electricity generation provides:

- energy security (reduces the country's dependence on imported fossil fuels);
- economic and social benefits (the creation of new jobs, growth of employment; the promotion of forest cleanup for biofuel preparation and the use of infertile land for growing biofuel);
- environmental security.

Lithuania uses local and renewable resources for energy generation, in particular wood and its waste, agricultural crops and waste, energy crops, biogas and geothermal, hydro and wind power.

In late 2008, Lithuania had 120 registered producers of electricity that used renewable energy resources, including the 100.8-MW Kaunas Hydropower Plant, 84 small hydropower plants below 10 MW, six biogas power plants, four biomass power plants and 25 wind power plants.

In 2008, 4.7% of total electricity consumed in Lithuania was generated using renewable energy resources. These resources were used in Lithuania to generate over 596 GWh of electricity, of which 329.2 GWh (67%) came from the Kaunas Hydropower Plant, 131.4 GWh from the wind power plants, 72.9 GWh from the small hydropower plants, 57.0 GWh from the biomass power plants and 5.8 GWh from the biogas power plants.

The amount of electricity generated by using biomass and biogas went up by 19.0% and 9.4%, respectively in 2008 compared to 2007.

Power generation from renewable energy resources in 2006–2008 is shown in Figure 1.

Fig. 1. Power generation from renewable energy resources

Original	Translation
Biomasa	Biomass
Biodujos	Biogas
Vėjai	Wind
Hidroenergija (hidroelektrinės iki 10 MW)	Hydropower (hydropower plants below 10 MW)
Hidroenergija (hidroelektrinės virš 10 MW)	Hydropower (hydropower plants over 10 MW)

The use of renewable energy resources (RER) for heat generation has been on the rise in Lithuania as well. These energy resources for heat generation accounted for 17.7% of fuel consumption of district heating undertakings in 2008 (16.2% in 2007). Figure 2 shows the RER share in fuel consumption of district heating undertakings in 2000–2008.

Fig. 2. RER share in fuel consumption of district heating undertakings

These undertakings used 144 186 toe of wood (137 372 toe in 2007), 1 662 toe of straw (1 127 toe in 2007), 436 toe of biogas (2 843 toe in 2007) and 900 toe of geothermal power (2 400 toe in 2007).

In 2008, consumption of peat for heat generation at district heating undertakings amounted to 2 028 toe, which came to 68.4% of the 2 967 toe of peat used for the same purpose in 2007.

The last three years have witnessed a significant increase in the number of biofuel boilers: in 2005, there were about 200 biofuel boilers (total installed capacity of about 420 MW), and their number exceeded 360 (total installed capacity of about 610 MW) in 2008. The largest number of biofuel boilers were installed in district heating undertakings. At present, Lithuania has more than 200 biofuel boilers.

Table 3 presents preliminary data on domestic resources of biomass used for energy generation in 2006–2008.

**Consumption of domestic resources of biomass (for energy generation) in
2006–2008**

Table 3

Biomass	Unit of measurement	Domestic resources		
		2006	2007	2008
Biogas	million m ³	4.1	5.2	6.2
Firewood and waste wood	thousand m ³	3 715.1	3 602.2	3 750.2
Fuel peat	thousand tonnes	47.0	67.0	38.4
Peat briquettes	thousand tonnes	28.7	20.7	20.9
Straw	thousand tonnes	-	-	9.2

Artūras Dainius */Signature/*
Undersecretary of the Ministry of Economy

10 June 2009

**Annex
to the Report on measures promoting
the use of biofuels for transport and
other renewable resources**

**State aid No 44/2005-Lithuania
(Excise duty reduction for biofuel)**

Pursuant to Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity and without prejudice to Article 16 of the Directive which allows Member States to apply a reduced rate of the excise duty on products produced from biomass or products containing biomass and excise duty exemptions on certain conditions, Lithuania has begun applying a reduced excise duty rate on biofuels for transport.

The measure applied constitutes State aid as defined in Article 87(1) of the EC Treaty. The aid is provided by Lithuania and is funded from its national resources, since the tax exemption results in reduced revenues that would otherwise be received by the State. As the excise duty reduction for biofuels for transport is deemed to be equivalent to State aid, Lithuania has notified the Commission, according to the established procedure, of its intention to reduce the excise duty on biofuels for transport.

On 25 July 2005, the Commission informed Lithuania (letter No 204085) that it had no objections to the aid scheme for the application of a reduced rate of the excise duty on blends of biofuel and other fuels (State aid No N44/2005-Lithuania. Excise duty reduction for biofuel.)

The reduction is applicable to bioethanol, biodiesel, bio-ETBE and pure vegetable oil.

Lithuania has undertaken to submit to the Commission annual monitoring reports on the cost of production of mineral fuels (diesel and petrol) and biofuels for transport (biodiesel and bioethanol) and on the price of fuel blends to prove that no overcompensation exists. This information must be provided to the Commission in annual reports.

To meet this commitment, we hereby provide a comparison of the cost of production and selling prices of mineral fuels (petrol or diesel), biofuels for transport (biodiesel and bioethanol) and fuel blends in 2008 (Tables 1, 1a, 1b, 2, 2a and 2b).

The data in Tables 1a, 1b, 2a and 2b show that the selling price of fuel blends, adjusted for fuel energy content, is higher than the selling price of mineral fuels (diesel or petrol).

Since 1 January 2008, the excise duty on petrol and diesel has been LTL 1 116/1 000 litres and LTL 947/1 000 litres, respectively in Lithuania.

The information provided in the annex to the report was obtained from undertakings engaged in the production of biofuels for transport, in particular Biofuture AB (bioethanol production), Rapsoila UAB (biodiesel (FAME) production) and Mažeiki• Nafta AB (information on the cost of production of mineral fuels and selling prices set by the producer).

Table 1 contains the cost of production and the selling price set by the producer for biodiesel (FAME) that were calculated on the basis of the data provided by Rapsoila UAB only, as about 97% of all biodiesel produced in Lithuania was placed on the market by this undertaking. Mestilla UAB supplied about 2% of biodiesel to the domestic market; therefore, the product of this undertaking has little influence on the price for fuel blends. In addition, according to the information provided by Mestilla UAB, the selling price of biodiesel set by the undertaking made up LTL 4.00 per litre (LTL 2.95 per litre from Rapsoila UAB).

**Cost of production and selling price (excluding taxes) of fuels for transport
(biodiesel and diesel)**

Table 1*

Fuel price, LTL¹ per litre	Biodiesel (FAME)	Diesel
1. Raw material (+)	2.41	1.53
2. Processing (+)	0.71	0.04
3. Other costs (research, reorganisation of production) (+)	0.23	
4. Cost of production	3.35	1.57
5. Logistics (+)	0.09	0.06
6. Selling price of by-product (-)	0.49	-
7. Profit	-	0.27
8. Selling price set by producer (excluding taxes)	2.95	1.90

* Confidential.

Selling price of fuel blend (diesel and biodiesel)

Table 1a

Price of fuel blend, LTL per litre	5% FAME
Biodiesel (FAME) cost in blend <i>(5% x LTL 2.95 per litre)</i>	0.15
Diesel cost in blend <i>(95% x LTL 1.90 per litre)</i>	1.805
Excise duty <i>(95% x LTL 0.95 per litre)</i>	0.90
Total selling price of fuel blend	2.855
Adjustment for lower blend energy content (15%) ^{2a}	0.022
Selling price of fuel blend (relative)	2.877

Selling price of diesel

Table 1b

Selling price of diesel (excluding taxes) (100% x LTL 1.90 per litre)	1.90
Excise duty on diesel	0.95
Selling price of diesel³	2.85

¹ The exchange rate used: LTL 3.4528 = EUR 1.

^{2a} The energy content of biodiesel, as compared to mineral fuel (diesel), is lower: it has been estimated that biodiesel consumption for producing a unit of energy is by 15% higher than diesel consumption.

³ Calculated excluding VAT.

**Cost of production and selling price (excluding taxes) of fuels for transport
(bioethanol and petrol)**

Table 2*

Fuel price, LTL ¹ per litre	Bioethanol (ETBE)	Petrol
1. Raw material, including payments for grain (+)	1.19	1.55
2. Processing (+)	0.57	0.04
3. Other costs (research, reorganisation of production) (+)	0.60	
4. Cost of production	2.36	1.59
5. Logistics (+)	0.19	0.06
6. Selling price of by-product (-)	0.06	-
7. Profit	-	-0.07
8. Selling price set by producer (excluding taxes)	2.49	1.58

* Confidential.

Selling price of fuel blend (bioethanol and petrol)

Table 2a

Price of fuel blend, LTL per litre	with 5% of bioethanol	with ETBE where bioethanol content is:	
		3.29%	7.05%
Bioethanol cost in blend <i>(3.29% x LTL 2.49 per litre)</i> <i>(5% x LTL 2.49 per litre)</i> <i>(7.05% x LTL 2.49 per litre)</i>	0.125	0.082	0.176
Petrol cost in blend <i>(96.71% x LTL 1.58 per litre)</i> <i>(95% x LTL 1.58 per litre)</i> <i>(92.95% x LTL 1.58 per litre)</i>	1.501	1.528	1.469
Excise duty <i>(96.71% x LTL 1.116 per litre)</i> <i>(95% x LTL 1.116 per litre)</i> <i>(92.95% x LTL 1.116 per litre)</i>	1.06	1.08	1.04
Total selling price of fuel blend	2.686	2.69	2.685
Adjustment for lower blend energy content (60%) ^{2b}	0.075	0.05	0.106
Selling price of fuel blend (relative)	2.76	2.74	2.79

Selling price of petrol

Table 2b

Selling price of petrol (excluding taxes) (100% x LTL 1.58 per litre)	1.58
Excise duty on petrol	1.12
Selling price of petrol³	2.70

¹ The exchange rate used: LTL 3.4528 = EUR 1.^{2b} The energy content of bioethanol, as compared to mineral fuel (petrol), is lower: it has been estimated that bioethanol consumption for producing a unit of energy is by 60% higher than petrol consumption.³ Calculated excluding VAT.

Note. The information received from the undertakings and presented in Tables 1 and 2 is confidential and, at the request of the undertakings, may not be disclosed to third parties.