

Position Paper on Revision of the Energy Taxation Directive

Finnish Biogas Association, 5 October 2011

Finnish Biogas Association welcomes the intent of the Commission to increase emphasis on emissions in the Energy Taxation Directive (2003/96/EC), with a purpose of replacing fossil fuels by renewable energy sources. However, the proposal COM(2011)169 not only falls short of necessary actions but contains elements that actually decrease incentive for emission reduction.

The Commission proposal introduces separate carbon dioxide tax and energy content tax, which form the total energy tax. For fuels used in heating, the weight of the CO₂ tax is about 90 % and the share of energy content tax is about 10 %. This is the correct way of balancing the two. However, the weights are reversed in the case of traffic fuels.

The following table shows the current minimum tax levels of traffic fuels in the Energy Taxation Directive. Although environmental objectives are not formally part in defining the taxes, the current levels reflect well not only CO₂ emissions but other emissions, too.

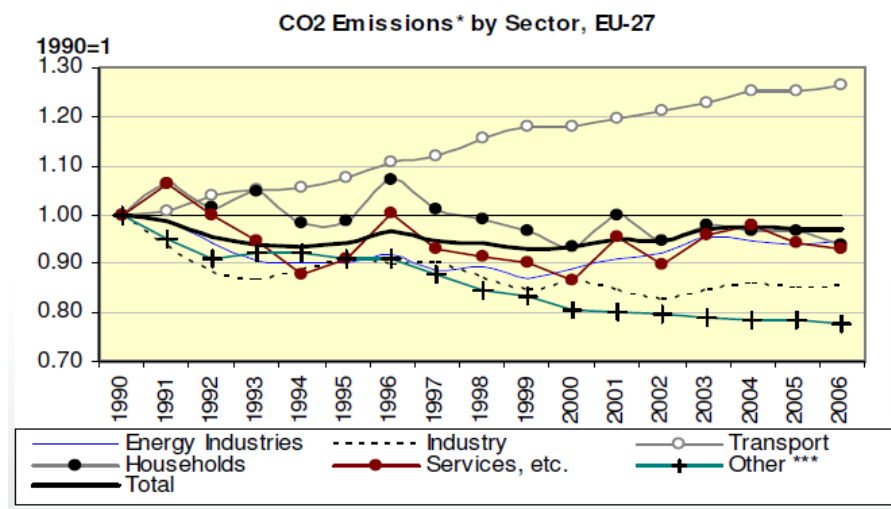
Current	2003/96/EC	Energy unit based
Gasoline	359 €/1000 l	11.2 €/GJ
Diesel	330 €/1000 l	9.2 €/GJ
Kerosene	330 €/1000 l	9.5 €/GJ
LPG	125 €/1000 kg	2.7 €/GJ
Natural gas	2.6 €/GJ	2.6 €/GJ

In the proposed Directive, the weight of emissions is greatly reduced, as seen in the table below.

Proposed	CO ₂ tax	Energy content tax	Total	Change	Share of CO ₂ tax
Gasoline	1.552 €/GJ	9.6 €/GJ	11.2 €/GJ	0	13.9 %
Diesel	1.486 €/GJ	9.6 €/GJ	11.1 €/GJ	+ 20 %	13.4 %
Kerosene	1.436 €/GJ	9.6 €/GJ	11.0 €/GJ	+ 16 %	13.0 %
LPG	1.136 €/GJ	9.6 €/GJ	10.7 €/GJ	+ 298 %	10.6 %
Natural gas	1.100 €/GJ	9.6 €/GJ	10.7 €/GJ	+ 312 %	10.3 %

Almost 90 % of the taxes are based on energy content meaning that essentially a flat rate for all fuels is created. This removes incentives for using low emission fuels (natural gas and LPG) as their tax level is increased by 4-fold. This is a disaster for biogas sector in those EU countries, where biogas is taxed at the level of or in proportion to the tax of natural gas. And because crude oil based liquid fossil fuels are promoted by this revision, also energy security concerns are increased in the peak oil world.

In the proposed Directive the Commission substantiates this change by arguing that for the sake of competitiveness the CO₂ tax per ton should be 20 Euros for all fuel use and approximately the same as the cost of emission permissions in the EU emission trading system. This is a faulty argument, since different sectors do not compete with each other. Because all sectors need to reduce their CO₂ emissions, the rate should be set according to the features of each sector individually. As seen in the figure below (based on statistics from Eurostat), the CO₂ emissions of the EU have been dominated by traffic. Between 1990-2006 traffic sector increased its emissions by 35 %, whereas power production and heat production sectors decreased their emissions, as well as all the other sectors. Total emission in the EU in 2006 were only a little below 1990 levels, because traffic sector alone had neutralized all progress in emission reduction in all other sectors.



Therefore, it is clear that traffic is the main problem in CO₂ emission mitigation. Climate change policies and legislature, including the energy tax Directive, should reflect that. However, the weight of emissions is much less, instead of more than in other sectors.

To correct for this, below is a table where the weight of CO₂ tax is set the same as fuels for heating, i.e. about 90 %. This was calculated assuming that the gasoline tax rate remains the same. It results in a CO₂ emission tax equivalent of 229.9 Euros/ton.

	CO ₂ tax	Energy content tax	Total	Change	Share of CO ₂ tax
Gasoline	10.08 €/GJ	1.12 €/GJ	11.2 €/GJ	0	90 %
Diesel	9.65 €/GJ	1.12 €/GJ	10.8 €/GJ	+ 17 %	89 %
Kerosene	9.33 €/GJ	1.12 €/GJ	10.4 €/GJ	+ 9 %	90 %
LPG	8.55 €/GJ	1.12 €/GJ	9.7 €/GJ	+ 259 %	88 %
Natural gas	7.14 €/GJ	1.12 €/GJ	8.3 €/GJ	+ 219 %	86 %

Other emissions have not yet been taken into account, as they essentially have been in the energy tax Directive in force today. Finnish Biogas Association does not at this point suggest taking into account pollutant emissions of diesel fuel, although according to the European air quality studies of the European Environmental Agency, diesel exhaust components are the common denominator for pollutants that are not decreasing in the European air. This exerts pressure into raising tax levels of diesel, e.g. at the first revision of the Directive in 2015. The same applies to kerosene: its emissions are mostly taking place in the upper troposphere, and therefore all pollutants have much longer lifetime compared to ground level emissions.

However, the especially low pollutant levels of natural gas and LPG should be taken into account immediately. Compared to gasoline, natural gas reduces NOx emissions by about 50 %, NMHC emissions by 78 %, ozone precursors by 94 % and aromatic compounds as well as fine particles by 99.9 %. A new tax table has been calculated, where CO₂ tax has evolved into emission tax. Basis for tax level of natural gas is the current tax level in Finland, Sweden and Germany. This leads to defining emission tax for natural gas as CO₂ tax with 63 % reduction. For LPG the reduction is 50 %. **Finnish Biogas Association proposes that this tax table replaces the table A in Annex 1 of the revised tax Directive.**

	Emission tax	Energy content tax	Total	Change	Share of emission tax
Gasoline	10.08 €/GJ	1.12 €/GJ	11.2 €/GJ	0	90 %
Diesel	9.65 €/GJ	1.12 €/GJ	10.8 €/GJ	+ 17 %	89 %
Kerosene	9.33 €/GJ	1.12 €/GJ	10.4 €/GJ	+ 9 %	90 %
LPG	4.28 €/GJ	1.12 €/GJ	5.4 €/GJ	+ 100 %	79 %
Natural gas	2.64 €/GJ	1.12 €/GJ	3.8 €/GJ	+ 46 %	69 %

Finnish Biogas Association has also calculated the tax table for working machines and proposes that the following table replaces the table B in Annex 1 of the revised tax Directive. Here the CO₂ tax level of 20 Euros/ton has been retained.

	Emission tax	Energy content tax	Total	Change	Share of emission tax
Diesel	1.486 €/GJ	0.15 €/GJ	1.64 €/GJ	+ 183 %	91 %
Kerosene	1.436 €/GJ	0.15 €/GJ	1.59 €/GJ	+ 165 %	90 %
LPG	0.504 €/GJ	0.15 €/GJ	0.65 €/GJ	- 26 %	78 %
Natural gas	0.300 €/GJ	0.15 €/GJ	0.45 €/GJ	+ 50 %	67 %

Finnish Biogas Association also has the following suggestions for improving the Directive:

- **Excise tax exemption should be guaranteed for biogas** for states wishing to do so (under fiscal control, like the Directive in force permits), without artificial deadline (1 January 2023).
- **Revision of tax rates should be based on environmental and energy policy reasons, not Eurostat consumer price index.** Tax rates should be increased if at any given sector the CO₂ emissions are not decreasing or the share of renewable energy is not increasing.
- **Division of biofuels into two groups is not sufficient: the group for waste and residue based biofuels should be added.** The RES Directive (2009/28/EC) divides biofuels into three groups of which the environmentally most benign group has been omitted in the revision of the Energy Taxation Directive resulting in e.g. that toilet waste based biogas is treated the same way as energy crop based ethanol causing ecological and other environmental damage.