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Briefing: Transport fuels & the Energy Tax Directive (ETD)

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Context

This briefing aims to provide a short overview of the history and present status of EU energy tax policy, and summarises the Commission's proposal for a revised Energy Tax Directive (ETD), launched in April 2011.

It also provides explanation and argumentation of the key objectives the directive should achieve:

1. Raise the minimum tax levels for both petrol and diesel in a fuel-neutral way;
2. Adjust minimum tax rates according to inflation;
3. Make fuel-neutral taxation mandatory;
4. Abolish the fuel tax ban in aviation, shipping and fisheries;
5. Prepare for a better tax system in which member states can tax fuel USED instead of fuel SOLD, on the road and in the air.
6. Tax biofuels in relation to their energy content and net climate impact;

Why is EU-level coordination of transport fuel taxation important?

Although transport fuel taxation looks primarily like a national prerogative, European coordination is necessary as transport fuels can be bought in one country and used in another.

The result is that countries can attract tax revenues from other countries by setting their fuel taxes lower than neighbouring ones. This not only distorts trade and transport patterns in an inefficient way; it also limits the possibilities for member states – and the EU as a whole – to use fuel taxation as a means to lower oil imports and emissions of carbon dioxide (CO_2) in a cost-efficient way.

To limit these problems, in 1992 the EU adopted the Mineral Oils Directive, known from 2003 in an extended form as the Energy Tax Directive. Both directives set minimum tax rates for petrol and diesel used for road transport.

The current Energy Tax Directive

When the present ETD was adopted by the EU in October 2003 it was based on a proposal launched by the Commission way back in 1997. To conclude the very complicated and cumbersome negotiations and reach an agreement all governments could accept, a long list of exemptions, phase-in periods etc. were included.

A major reason the process was so cumbersome is that EU decisions on taxes are taken by all governments in the Council under unanimity. This means, firstly, that one single member can block any decision and, secondly, that the European Parliament only has an advisory role. The background is that a number of member states – the most outspoken example being the UK – want to hand over as little power over taxation as possible from their national governments and parliaments to the EU.

The directive that finally came out defines mandatory minimum tax levels for all traded energy products:

- Transport propellants (petrol, diesel, kerosene and LPG);
- Propellants for off-road use (agriculture, forestry, stationary motors, construction machinery etc.);
- Fuels for heating;
- Electricity.

The minimum tax levels decided in 2003 are, generally speaking, higher for transport and domestic purposes than for non-transport and industrial purposes. (Important to note is that due to specific phase-in derogations for individual member states, the minima in the table below will only apply universally in the EU from 2013.)

The ETD also sets (low) minimum rates for the fuels above plus coal and coke for non-transport use and heating and also for electricity. It does not cover the use of energy products for some specific industrial purposes. It also allows for a string of exemptions or tax rates below the minima for:

- Energy intensive industries;
- Households
- Particular fuel qualities (i.a. alkylate petrol);
- Rail traffic, taxis, public transport, defence purposes, ambulances etc.;
- Biomass derived fuels (wood, ethanol, RME, biogas etc.) as long as no quotas are applied;
- In the Azores, on Madeira and some Greek islands, tax levels below the minimum rates are allowed.

Notably – and in obvious conflict with the general principle of subsidiarity – the ETD includes in its Article 14 two mandatory exemptions where member states are <u>not</u> allowed to tax:

- Aviation: flights from and to the EU;
- Non-domestic shipping

Transport fuels in the ETD

Setting EU-wide minimum tax rates for road transport fuels is absolutely essential. Without these, small and

central member states would have even stronger incentives than today to hunt for higher tax revenues from "diesel tourism" by applying lower taxes than neighbouring countries do, particularly on diesel. Modern lorries can drive 1,500-3,000 km on a single tank. Hauliers can save a lot of money by filling their vehicles where the diesel tax is lowest. The table below summarises current minimum tax rates on transport fuels in the EU.

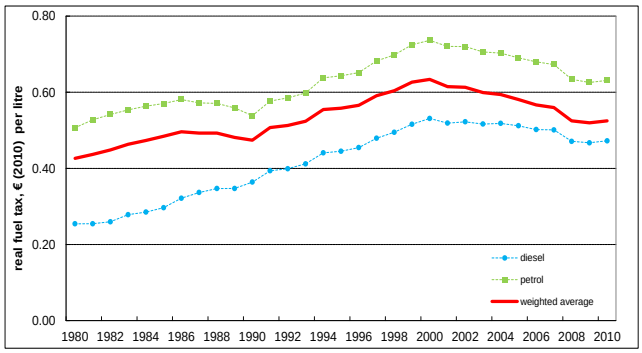
Table 1: Minimum tax levels for transport fuels in the current energy tax directive 2003/96

Petrol	€0.359 / litre
Diesel ("gas oil")	€0.330 / litre
LPG	€0.125 / kg
Natural gas	€2.6 / GJ

Kerosene: fuel taxation for flights from and to EU forbidden. Member states can tax kerosene used for domestic flights, and for flights to another Member State under a bilateral agreement.
Shipping fuel: taxation forbidden except for domestic transport.

Whilst the minimum rates have put a floor in fuel taxes, they have not been effective in pushing up tax rates in Europe. The graph below shows that oil markets, not government taxes, are behind the rises in fuel prices at the pump in the past 12 years.

Graph 1: Mainly due to inflation and a switch from higher-taxed petrol to lower-taxed diesel, fuel taxes in the EU9 in 2010 were 10 cents lower in real terms than in 1999. Source: 'Fuelling oil demand', T&E 2011



The first EU legislation on fuel taxation, the Mineral Oils Directive of 1992, had a blanket ban on fuel taxation in aviation, maritime transport and fisheries. When the current ETD was adopted in 2003, the ban was lifted for domestic aviation and flights between two member states, subject to bilateral agreement. 13 of the then 15 EU members (except Spain and Ireland) plus the Commission in a separate statement declared that the remaining exemption banning fuel used in international aviation i.e. from and to non-EU countries was in contradiction with the basic idea of the directive and ought to be abolished as soon as possible.

The new proposal

Informally, discussions on a revision of the ETD have been going on since the present directive was adopted in 2003. The present directive specifies that the Council, before 1 January 2012 shall decide on new minimum tax levels for diesel valid from 1 January 2013.

After a very long and complicated procedure (including a formal proposal which was never tabled in the Council as well as a couple of leaked drafts) the Commission published its proposal for a revision of ETD in April 2011.

The most important changes it proposes are:

- A mandatory split of the taxes into two parts – one related to CO_2 emissions and one to energy content. In itself this split does not necessarily affect tax levels for road fuels; for example, minimum levels for petrol tax are planned to stay the same (see table 2);
- For transport purposes the energy-related minimum diesel tax will rise in three steps to that of petrol, namely €9.6/GJ by 2018. Since a litre of diesel contains more energy and carbon than a litre of petrol, minimum tax rates per litre for diesel would eventually be higher than for petrol (see table 2).
- Fuel-neutral taxation – as of 2023 member states will have to apply the same CO_2-related tax factor as well as the same energy-content based tax factor for all fuels. The consequence is that from then member states will always have to tax a litre of diesel roughly 10% more than a litre of petrol.
- From 1 January 2013 member states will have to apply a CO_2 tax of at least €20/tonne on all fossil 'energy carriers', independent of use (activities covered by the EU Emission Trading scheme plus household heating exempted). The figure is aimed at linking the level of this general CO_2 tax as close as possible to the market price of emission allowances within the EU Emission Trading Scheme (which until now has been approx. €15/t CO_2).
- While the energy-related minimum tax would be automatically corrected for inflation every three years, starting in 2016, changes in the minimum CO2 tax would require a unanimous Council decision.
- On biofuels, until 2023 member states can exempt biofuels from energy tax. The proposal includes a ban on CO_2 tax for biofuels that comply with the EU's sustainability criteria defined in the directives on renewable energy sources (2009/28) and fuel quality (2009/30). Non-compliant biofuels have to be taxed as the equivalent fossil fuel (ethanol as petrol, FAME as diesel etc.).

The possibility for member states to exclude activities from the mandatory CO_2-tax will be limited to household heating plus minor, energy-intensive industries (i.e. industries that could move abroad to avoid the tax, 'carbon leakage') not included in the ETS (EU Emission Trading Scheme) that under specific conditions may be taxed less than the minimum. Similar rules will apply to agriculture, forestry and pisciculture.

For a number of other activities – public transport, rail traffic, ambulances, waste collection, vehicles for disabled etc. exemptions from the energy tax will be

allowed. From 2023 the possibility to exempt natural gas for transport purposes from tax will end.

Table 2: Resulting minimum tax levels of the Commission proposal

Petrol				
		2013	2015	2018
CO_2 tax	In €/tonne CO_2	€20		
	In €/litre fuel	€0.045		
Energy tax	In €/GJ energy	€9.6		
	In €/litre fuel	€0.314		
Total, in €/litre fuel currently €0.359		**€0.359**		
Diesel*				
CO_2 tax	In €/tonne CO_2	€20		
	In €/litre fuel	€0.053		
Energy tax	In €/GJ energy	€ 8.2	€8.8	€9.6
	In €/litre fuel	€0.293	€0.315	€0.343
Total, in €/litre fuel currently €0.33		**€0.346**	**€0.368**	**€0.396**

*Note that the tax figures per litre of diesel are lower than those used by the Commission. The Commission used a diesel density of 0.870 kg/l, which is higher than the legal maximum of 0.845 kg/l. This seems to have been done in error, so will probably change at some point.

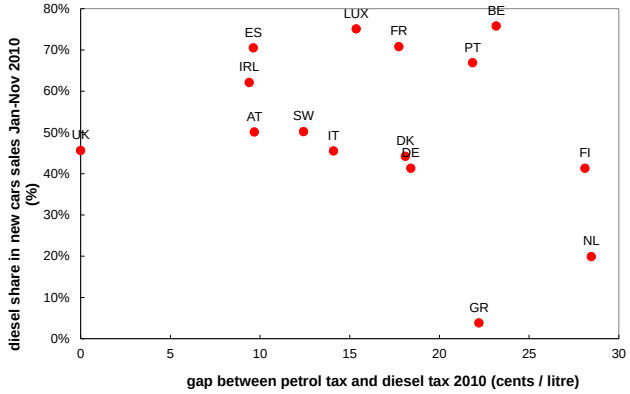
Will more expensive diesel destroy the market for diesel cars?

The car industry is against fuel neutral taxation

The associations representing the car industry, suppliers and drivers tried to prevent the Commission from proposing 'fuel neutral taxation'. The car lobby argues that cheap diesel is a precondition for achieving more energy-efficient cars. If diesel is taxed more per litre than petrol, the argument goes, diesel engines will lose market shares, resulting in lost competitiveness for European car industry, and higher average CO_2 emissions per km from the car fleet. The latter point, they argue, would make it impossible to reach the EU goal that new cars by 2020 shall have an average emission of below 95 g CO_2 per km.

It is easy to prove that this hypothesis is wrong and that the petrol-diesel tax relation has little influence on the market split between petrol and diesel cars. The graph below shows the relation between a) the difference in tax level between petrol and diesel and b) the diesel share in the sales of new cars.

Graph 3: relationship between tax differential petrol/diesel, and share of diesel cars in new car sales, in 'old' EU15 member states.



Source: ACEA economic report December 2010 (diesel shares), and European Commission's Oil Bulletin (fuel tax differentials). N.B. The ACEA report does not provide figures for the diesel share in the 'new' 12 Member States.

The graph shows no detectable correlation between relative diesel taxes and the share of diesel engines in new car sales. Other incentives like the differentiation between diesel and petrol models in sales taxes, annual vehicle taxes and company car taxation are apparently much more important in making people decide to buy a petrol or diesel car than fuel taxation.

Cheap diesel does not reduce CO_2 emissions, it increases them

Contrary to the opinion expressed by EU car manufacturers, cheaper diesel due to lower tax makes people choose heavier (and thereby less efficient) cars and drive them more, just like cheap petrol allows American citizens to drive gas-guzzling SUVs and pickup trucks.

An authoritative study on the issue concludes that diesel cars in Europe *'probably do not provide significant national energy or* CO_2 *savings on average'*[1]. Higher diesel taxes would also help cut fuel use and emissions from freight transport. In addition, most independent analyses, including impact assessments of the Commission[2], conclude that the potential to reduce CO_2 emissions from petrol-powered vehicles is greater than for diesel-powered vehicles.

EU carmakers are successful petrol engine producers

The car industry also warns of dramatic economic and employment impacts from fuel-neutral taxation, without providing any evidence. By contrast the industry has responded to the technology-neutral car CO_2 legislation agreed in 2008 by delivering significant CO_2 cuts. Most manufacturers are doing this ahead of time. And not just with diesel engines – the top six of the 2010 *'international engine of the year awards'* were all petrol engines from European manufacturers.

Less diesel facilitates EU energy supply

A lower dependency on diesel would also contribute to the EU's energy independence. Oil refineries in Europe cannot match production of diesel fuel to the artificially high demand created by today's unbalanced taxation of petrol and diesel. This means Europe does not just have to import crude oil, but also large amounts of diesel (and export petrol). The imbalance also harms refining efficiency, and causes unnecessary fuel shipments.

Ending the ban on taxation of aviation and shipping fuels

As we have seen, Article 14 of the current ETD forbids member states from taxing kerosene used on

[1] Disappointed by Diesel? The Impact of the Shift to Diesels in Europe through 2006, Lee Schipper and Lew Fulton, University of California, Berkeley and International Energy Agency, Nov. 2008

[2] Impact Assessment of the proposal from the Commission to the European Parliament and Council for a regulation to reduce CO2 emissions from passenger cars, Brussels, Dec 2007, p33

international flights from and to the EU as well as fuel used for maritime transport and fisheries.
There is no justification for this ban, neither policywise nor legally. There is no international legislation forcing the EU to ban fuel taxation in these sectors.

For aviation, the oft-mentioned Chicago convention does not prohibit fuel taxation; it only prohibits taxing fuel on board on arrival. In addition, if it did indeed outlaw international fuel taxation, the current ETD would also be illegal as it allows member states to tax fuel used for intra-EU flights. Deleting the ban from EU legislation would not in itself make kerosene taxation possible because many bilateral air service agreements with third countries still ban it. But if kerosene taxation is ever to be an option, the ETD is the place to start as it would no longer impede EU efforts to renegotiate its bilateral commitments.

For maritime fuels, the ETD is the only law that bans their taxation. Marine fuels are not taxed anywhere; not because of fuel tax bans (they don't exist outside Europe) but because evasion prevents anything other than a globally agreed tax regime. But the EU should not have domestic legislation stand in the way of such a global regime.

The Commission should therefore use the opportunity of the revision of the ETD to end the EU's prohibition on fuel taxation in international aviation and maritime transport.

The future: taxing fuel based on fuel used, not sold

While the EU's policy of setting minimum tax rates helps in combating fuel tourism and its associated 'race to the bottom', it does not solve it.
A solution would be to enable EU member states to tax diesel according to the fuel used, not sold. This is not a new idea; in fact, precisely such a system, called IFTA (the International Fuel Tax Agreement) has been in place in the USA and Canada for a long time and allows states and provinces in the two countries to apply different levels of diesel taxation without triggering any fuel tourism. A few minor changes in EU legislation would be enough to set up such a system, and the ETD could be a start.

Taxing fuel used rather than fuel sold could pave the way for a fair and efficient taxation of energy, also in aviation.

Adjust minimum tax rates according to inflation and raised climate ambition

The CO_2 tax, €20/t CO_2, is based on the assumption that the present EU goal to lower the greenhouse gas emissions 1990-2020 will stay at 20 %. It includes no mechanism for an adjustment either if the ambition is raised to (as discussed) 30% nor for inflation, which will successively weaken its function as an environmental policy tool. The only requirement included is that every five years, the Commission reports to the Council on the minimum level of the CO_2-tax. Changes will need unanimous decisions by the EU governments in the Council.

Tax biofuels in relation to their energy content and net climate impact

According to the proposal all biofuels that comply with the so-called sustainability criteria in the EU legislation must be exempted from the CO_2 tax. This restriction is very weak since it also exempts biofuels that cause only 35% (from 2017 50%) less greenhouse gas (GHG) emissions over the life-cycle than fossil petrol or diesel from the tax. The reduction of the CO_2 tax for biofuels should logically reflect the real and varying reduction of GHG emissions from different biofuels with 35 % as the default value, from 2017 raised to 50 %, from 2018 to 60%..

For further information

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Commission website
http://ec.europa.eu/taxation_customs/taxation/excise_duties/energy_products/legislation/index_en.htm

Report
Fuelling Oil Demand – What Happened to Fuel Taxation in Europe? Download from T&E website: www.transportenvironment.org