COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL AND THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE

Smarter energy taxation for the EU:
proposal for a revision of the Energy Taxation Directive
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1. THE NEED TO ACT ON ENERGY AND ENVIRONMENTAL TAXATION

Energy taxation as a key driver towards the Europe 2020 goals

The EU has set itself a series of demanding, legally binding climate and energy targets to be met by 2020. These are spelled out in the Europe 2020 Strategy defining the challenges that Europe is facing for the next decade, in economic, environmental and social areas and setting as a priority sustainable growth resulting in a more resource efficient, greener and more competitive economy.¹

This includes the commitment to bring energy taxation more closely in line with the EU’s energy and climate change objectives as requested in the March 2008 European Council conclusions² and as the Commission highlighted as a priority in its 2011 Annual Growth Survey³.

Energy taxation, when giving the right incentives, plays an important role in reaching these objectives. In fact, energy consumption is responsible for the majority of greenhouse gas emission, representing 79% of total gas emissions. As part of the Europe 2020 strategy, Member States are committed to setting national targets for energy efficiency implying substantial energy savings.

The financial and economic crisis has substantially changed the environment in which we operate. It has put huge pressure onto businesses and communities across Europe, as well as causing considerable stress on public finances. However, legally binding energy and climate change targets are part of our sustainable future and our long-term path for sustainable and stronger recovery from the crisis. The challenge is how to achieve them in the most cost-effective way - for governments, business and citizens - and how to obtain simultaneous benefits for the economy. We need policy responses that reinforce each other, not only improving the environment, but also supporting the economy and avoiding social hardship.

Key issues for reforming energy taxation

It is in this context that the Commission is presenting its proposal for a revision of Directive 2003/96/EC⁴ (hereinafter “the Energy Taxation Directive” or “the ETD”): to allow Member

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² European Council of 13-14 March 2008, Presidency conclusions (7652/1/08 rev.1, 20/05/2008).
States to make the best use of an existing instrument in the new policy framework. More rational and targeted energy taxation will contribute in a technology-neutral manner to cleaner and more efficient consumption of energy, therefore supporting sustainable growth. In a nutshell, the proposal for the ETD revision:

- rebalances the charge between different fuels, including renewable energies, in an objective manner (based on energy content and on CO₂ emissions);

- provides for a framework for CO₂ taxation in the internal market and in that way puts a price on CO₂ emissions which are not covered by the EU Emission Trading System.

The proposal also fits well with the ongoing discussions on the restructuring and modernisation of tax systems as part of the national strategies to exit from the financial and economic crisis. Furthermore, it shows the path towards a qualitatively better way of generating revenue in line with Europe 2020 and the need to encourage suitable economic recovery and job creation. The proposal as such does not aim at raising additional revenue but rather to rebalance the charge between different energy sources and different energy consumers (outside and inside the EU Emission Trading System (hereinafter 'ETS')).

However, if Member States decide to implement a revised ETD in a way that does generate additional revenue, the Commission would encourage them to use this revenue in an appropriate way according to their specific budgetary situation. This could mean using resources to address fiscal consolidation needs. A growth-friendly tax-shift using additional revenue wholly or partly to reduce the tax burden on labour would be in line with the 2020 Strategy. Another possible growth-enhancing alternative which Member States could choose would be to use additional revenue to further incentivise green research and development, as well as green investment, in particular by SMEs. Additional revenue could also be used to mitigate the impact of underlying policies on household income by compensating less well-off sections of the population. Targeted subsidies to low income households (lump-sum checks unrelated to energy consumption) would be the best example.

The following figure shows the evolution of the share of environmental and of energy tax revenues as a % of total tax revenues in the EU-25 from 1995 until 2008. Both have declined by about 1% during this period, which shows that, on average, there is room for increases in energy taxation and, more generally, environmental taxation.
Further coordination on environmental taxation is needed

While the ETD is absolutely key, more can and must be done in the broader area of environmental taxation to foster the Europe 2020 strategy. In particular, an intensified debate on the use of taxes that promotes the transition to a sustainable economy is needed. New developments (e.g. the introduction by Member States of waste taxes, plastic bag taxes and air ticket taxes) also need to be taken into account. According to Article 1(2) of Directive 2008/118/EEC, Member States are free to introduce such new taxes, provided they do not give rise to formalities connected with the crossing of frontiers between Member States. Member States should also ensure non-discrimination in taxation to prevent distortions in the internal market (Articles 34-36 and 110, TFEU). The proper functioning of the internal market warrants mutual information and coordination of Member States' taxes in this field so as to, for instance, tackle discrimination between directly competing products facing different tax regimes.

The Commission is committed to take these discussions forward and support the necessary coordination in this field, *inter alia* via appropriate discussions with Member States (e.g. in the Tax Policy Group and at Council level) and with other stakeholders. As far as the broader political context is concerned, the outcome of the UN Climate Change Conference held in Cancun, Mexico, between 29 November and 10 December 2010 also constitutes an important landmark for the future development of the EU's own ambitions in this field.

2. BACKGROUND TO THE PROPOSAL

The current Energy Taxation Directive is unsustainable and sets the wrong incentives

The ETD sets minimum rates for the taxation of energy products used as motor fuel, for energy products used as heating fuels, and for electricity. The minimum rates apply generally to the volume of the energy product consumed. The following figures show the current
minimum rates of the most commonly used energy products taking into account CO₂ emissions (rate in euro per tonne CO₂) and energy content (rate in euro per Gigajoules (GJ))⁵:

**Motor fuels**

![Figure 1: Existing minima expressed in euro per tCO2](image1)

![Figure 2: Existing minima expressed in euro per GJ](image2)

**Heating fuels**

![Figure 3: Current minima expressed in euro per tCO2](image3)

![Figure 4: Current minima expressed in euro per GJ](image4)

Source: Own calculations.

These figures clearly demonstrate that the current minimum rates based on the volume of energy products consumed do not reflect the energy content (see figures 2 and 4) or the CO₂ emissions (see figures 1 and 3) of the energy products, leading to inefficient energy use and distortions in the internal market. They also create incentives that are contradictory to the EU energy and climate change goals as, for instance, they promote the use of coal as heating fuel (lower tax rate both when considering its CO₂ emissions and its energy content expressed per GJ). As regards motor fuels, lower minima for diesel further reinforce the natural advantage

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⁵ Source: Own calculations based on the current ETD (Annex I, table A), Directive 2006/32/EC (energy content of the products), Commission decision 2007/589 (CO₂ emission factors. E85 is an energy product which consist of 85% ethanol and 15% petrol).
that diesel has over petrol due to its higher energy content. The current minimum rates also discriminate against renewables which are in principle taxed at the rate of the conventional fuel which they replace even though their energy content is lower (see figure 2, showing that E85 is taxed much more heavily than petrol, meaning that its lower energy value and better performance as regards CO₂ emissions are not taken into account). Moreover, the current minima do not create a level playing field for business consumers, because, in practice, economic operators can be better off compared to others depending on the energy source they use.

Revising the ETD is imperative so as to make it more consistent with other EU policies

From an energy policy point of view, the ETD provides no incentive or even price signal to promote alternative energies and encourage consumers to save energy. With taxation based on volume, ethanol is effectively the most heavily taxed energy product today. The same goes for energy sources used for heating, where coal is currently the least taxed energy source.

From an environmental point of view, sectors outside the EU ETS such as transport, small industrial installations, agriculture and households account for half of the CO₂ emissions. Here, a potential lack of coordination between the ETD and the EU ETS may give rise to a double burden or, conversely, to the possibility of evading the responsibility for emissions. In the worst case, these sectors would not contribute to reaching the Europe 2020 climate change and energy targets. Moreover, the current treatment of biofuels does not allow taking full advantage of its possible positive environmental potential.

From the point of view of the single market, Member States currently might not tax CO₂ emissions as much as they would like because it could put their businesses at a disadvantage or induce consumers to buy their fuel in lower tax Member States leading to revenue losses. Member States are beginning to implement a variety of different approaches to environmental taxation, which may lead to distortions and double taxation within the single market.

Why now?

Given that many Member States are now defining their policy strategies to exit from the economic and financial crisis and are considering structural reforms to their fiscal policies and tax systems the revision of the Energy Tax Directive comes at a particular appropriate time as it provides opportunities to meet both environmental and economic objectives at the same time.

Taxation, when properly designed, can play a major role in support of the EU's energy and climate change objectives and in promoting sustainable growth, resulting in a more resource-efficient, greener and more competitive EU economy. This remains the case at times of rising energy prices when it becomes all the more important to restructure energy taxation so as to provide the right incentives towards the use of less energy overall, from more environmentally-friendly sources.

Member States are currently designing and implementing their strategies to meet the EU 2013-20 energy and climate change goals. This proposal would provide a clear answer on the role that taxes could play in that context. The revised Energy Taxation Directive is also designed to complement the third phase of the EU ETS (2013-2020) and it is therefore urgent to make a proposal now in order to allow time for it to be agreed by Council.
From an Internal Market perspective, it is also important to establish a common framework for CO2 taxation now. Member States are beginning to introduce their own CO2 taxes, and approaches may differ. A patchwork of national policies could create difficulties for businesses operating in different Member States and distortions in competition within the EU. It is better to introduce an EU approach now, when many Member States are still considering national legislation in this field, than later, when complex re-adjustments of national laws may be needed.

All these reasons make a timely revision of the ETD as laid down in the Commission proposal imperative.

3. **Key Features of the Proposal**

The proposal for a revision of the Energy Taxation Directive *streamlines the existing taxes on energy* and introduces *framework rules for CO2 taxation within the single market* so that CO2 taxes can effectively complement the EU ETS.

*The proposal splits the minimum rate of taxation of energy products into two parts:*

- **CO2-related taxation, based on the CO2 emissions of the energy product,** fixed at a level of 20 euro per tonne CO2. The CO2-related part of taxation would be zero for all biofuels that comply with the sustainability criteria laid down in Article 17 of Directive 2009/28/EC. Such taxation will provide for a technology-neutral advantage for all low carbon energy sources. Introducing a CO2-related part will also align the ETD better to the EU ETS. Taxation will apply to all emitters not included in the EU ETS, those that are taxable already now as well as all small installations excluded from the EU ETS, even if they use energy for purposes other than heating. At the same time, emitters included in the EU ETS will be exempt from the CO2 part of taxation, whatever the actual scope of the EU ETS might be.

- **General energy consumption taxation, based on energy content measured in GJ,** regardless of the energy product, thus providing an incentive to save energy. The tax will reflect the actual energy that a product generates and energy efficient consumption would automatically be rewarded. For motor fuels, the minimum level of taxation is fixed at 9,6 euro per Gigajoule, which corresponds to the current minimum rate applicable for petrol minus the corresponding CO2 part of the minima. For heating fuels, the current minimum level for electricity of 0,15 euro per Gigajoule (corresponding to approximately 0,5 euro per MWh) is applied to all the energy products used for heating, taking into account the energy content of the respective product. The scope of energy taxation remains unchanged and comprises heating use and motor fuel use and consumption of electricity in similar situations.

To maintain the incentive effect, the real value of the minimum levels of taxation should be preserved over time. The minimum rates of general energy consumption taxation should be automatically aligned at regular intervals to take into account the evolution of their real value in order to preserve the current level of rate harmonisation. Since CO2-related taxation complements the operation of Directive 2003/87/EC, the CO2 minimum tax level should follow the evolution of the market price of the CO2 emission allowances. The Commission considers that a method for automatically calculating such an alignment should be put in place. However, the development of this method would need to be based on objective
evidence from observing the operation of the emission allowance market under the new 
arrangements for phase III of the EU ETS. It is therefore not possible to address this issue at 
the time of presentation of this proposal. This question will therefore be addressed in the 
review that the Commission intends to present for the first time in 2015, in order to propose a 
method for an automatic alignment that would be operational as soon as possible after this 
date.

Counter-productive subsidies are removed ...

The proposal to revise the ETD removes subsidies and inconsistencies that at present exist in 
ergy taxation. It reduces the tax burden on renewable energies and rebalances the charge 
between different fossil fuels in an objective manner (in basing it on energy content and CO2 
emissions). In consequence, sources of energy rich in CO2 or with high energy content will be 
taxed more per physical volume unit. This will encourage the consumption of energy sources 
emitting less CO2 and reward more energy efficiency, in line with and supporting EU climate 
and energy policies. Energy products with high energy content (such as diesel, LPG and 
compressed natural gas) will continue to be attractive, but they will ultimately compete on 
fairer grounds, without an additional subsidy from taxation. The changes introduced by the 
proposal are fully in line with our 2020 policies and are a direct reflection of the commitments 
that the EU Member States have already taken. This also means that differentiation in tax 
rates between private and commercial use of transport shall no longer continue, ensuring that 
the transport sector – the fastest growing source of emissions – is not left outside the emission 
reduction efforts.

... but due account is taken of the wider context...

In relation to competitors outside the EU, in order to avoid that CO2-related taxation makes 
our companies leave Europe while emissions globally remain unchanged or increase ("carbon 
leakage"), the proposal introduces an approach similar to the free allocation of allowances 
under the EU ETS for sectors that are deemed to be at a significant risk of carbon leakage. 
Small industrial installations subject to the CO2-related taxation will be granted a lump sum 
tax credit calculated on the basis of a fuel benchmark. In that sense the environmental effect 
of the tax will be maintained, while companies will be compensated. Other sectors or sub-
sectors of the economy may also be subject to carbon leakage. As far as the agricultural sector 
is concerned, the Commission is currently preparing a report examining the risk of carbon 
leakage in that sector. As soon as this report is available, the Commission will take 
appropriate follow-up action to ensure that all sectors susceptible to carbon leakage are 
subject to the same treatment under the future ETD, either by ensuring the conclusions of the 
report are taken into consideration during the ongoing discussions in the Council on the 
proposal revising the ETD or, should the report not be available before the adoption of the 
proposal, by way of a separate legislative initiative.

Taking into account the architecture of the EU 2020 emission reduction commitments and the 
principle of solidarity between Member States, the Commission proposes to grant transitional 
periods for a gradual phasing-in of CO2-related taxation for uses other than motor fuel in 
those situations where less effort is required from certain Member States to meet these 
commitments (Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, 
Romania and Slovakia).

And particular situations will continue to be given appropriate treatment ...
In preparing the proposal the Commission paid careful attention to ensure that it does not lead to abrupt changes in price levels that could lead to unacceptable difficulties or hardship for those concerned:

Acknowledging that differences in taxation of domestic heating are less relevant for the proper functioning of the internal market and that heating costs might be an important issue in the domestic social conditions of some Member State, the Commission proposes to maintain the possibility for Member States to apply tax exemptions or reductions for energy products and electricity and to extend it to all heating fuels.

$\text{CO}_2$-intensive energy sources (such as coal) will be subject to a higher charge under the revised system. The change will ensure that all energy consumers, not only those included in the EU emission trading system, face an incentive to shift towards cleaner energy sources. At the same time, the proposal introduces the rule that external costs of $\text{CO}_2$ emissions are addressed only once. As a consequence, the direct price impact on coal consumers would be limited as coal is largely used in the heavy industries and in power generation already included in the EU ETS. Moreover, the proposal leaves it up to the Member States whether to mitigate or completely avoid the impact on households.

Diesel will gradually face higher minimum levels of taxation per litre compared to petrol as a mere consequence of the fact that diesel has a higher energy content and also generates more $\text{CO}_2$ emissions per litre than petrol. Even under the new system, diesel will still keep its advantage on a distance driven basis, but the removal of the diesel subsidy will encourage energy efficiency improvements on the petrol engine and will also create a market for less $\text{CO}_2$-emitting and alternative energy sources which are expected to become more common on the fuel market in the next decade. Rebalancing petrol and diesel taxation will also help rebalancing the supply and demand on the European fuel market, which faces an increasing need to import diesel. Taking into account that European car manufacturers have invested heavily in diesel technology and that vehicles running on alternative fuels or power trains are not yet available in larger quantities, the alignment of all motor fuel taxation will be introduced gradually in three steps over the period of time 2013 – 2023. The gradual phasing-in of the new tax treatment for diesel will also provide for an adaptation period for the commercial transport sector.

Lower minimum rates apply to motor fuel used in agriculture, aquaculture and horticulture and this will remain the case with the ETD revision. The ETD revision will affect the current possibility for Member States to fully exempt from taxation motor fuels and heating fuels as well as electricity consumed in these sectors. With the revised ETD, they will become subject to the $\text{CO}_2$-related part of the tax as well as being liable to the general energy consumption part of the tax. Full exemption from the latter part of the tax will remain possible in exchange for energy efficiency improvements, thus no longer without counterparts as is the case now. In consequence, Member States will still be able to provide a more beneficial treatment to the primary sectors, while at the same time ensuring more consistency in the taxation of a sector which is a patchwork of various exemptions today.

4. IMPACTS OF THE PROPOSAL

The Commission services carried out an impact assessment examining the impacts of possible options for the revision of the Energy Taxation Directive. On the basis of this impact
assessment, which is published together with this Communication and the proposal to revise the ETD, a number of important conclusions can be drawn.

**The ETD revision can achieve a "double-dividend" but is in any event beneficial ...**

The revised ETD rebalances the charge between fossil and non-fossil energy sources and to a certain degree also between the ETS and non-ETS sector. Whilst it is for Member States to decide how to use possible additional revenue, the modelling in the impact assessment assumes that any revenue would be used to reduce the tax burden on labour. This assumption reflects the practices of many Member States which have carried out environmental tax reforms and is in line with the general orientation in the ETD itself, which promotes the principle of tax neutrality as a means to modernise national tax systems in favour of both the environment and employment. Such modelling confirmed that via the ETD revision, energy taxation would in all circumstances contribute to the Europe 2020 goals and at the same time create tangible economic benefits. Even if the energy tax receipts were not "recycled" into the economy via lower taxation of the factor labour, the contribution to fiscal consolidation would still help to deal with the high crisis-driven budgetary needs.

The proposal creates an improved level playing field for European business. The new minima will become a true benchmark on the internal market by providing an objective value for each energy source and treating energy consumers equally whichever energy products they consume.

... while the precise effects depend on the choices made by Member States

The precise impacts of the ETD revision will to a large degree depend on pre-existing national rates and on the choices made by Member States in accordance with the subsidiarity principle, in particular on the balance between the CO₂ and the energy component of the tax and the tax rates applied. The impacts of the proposal would also depend on the extent to which Member States decide to avail themselves of the transitional periods and options contained in the proposal to take account of the context and specific situations as described in section 3 above. For heating fuels, for instance, the following two scenarios can be identified in order to describe the likely impacts:

- A maximalist scenario 1 assuming that Member States decide to introduce CO₂-related taxation equal to the proposed minimum level of 20 euro per tonne CO₂ on top of their existing national tax rates. Their current rates would then become their rates of general energy consumption taxation.

- A scenario 2 assuming that Member States revise their tax rates only if needed to respect the EU minima and fix the CO₂-related taxation at a level of 20 euro per tonne CO₂. This would mean that they split their current rates into a CO₂-related part of 20 euro per tonne and a general energy consumption taxation part.

The table below shows the aggregated impact of these scenarios for the EU 27 under the assumption that revenues are recycled by reducing charges on labour, as calculated in the impact assessment accompanying the proposal:

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6 See recital (11) of Directive 2003/96/EC
Impact of the ETD revision from changes related to heating fuels (EU 27)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Budgetary impact (Change in annual tax revenues annually)</th>
<th>Environmental impact (Reduction of CO₂ emissions in non-ETS sectors by 2020)</th>
<th>Social impact (% change in the households real income by 2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>+39.6 billion euro</td>
<td>-4%</td>
<td>+0.29%</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>+20 billion euro</td>
<td>-0.84%</td>
<td>+0.08%</td>
</tr>
</tbody>
</table>

Source: Impact Assessment – Accompanying document to the Proposal for a Council Directive amending Directive 2003/96/EC – Chapter 5.2., 5.3. and 5.4. (Scenario 1); modelling with E3ME by Cambridge economics (Scenario 2)

These figures need to be evaluated in relation to the overall objectives of the Europe 2020 strategy as outlined above.

The impact on CO₂ emissions is considerable and could reach 2% of total EU emissions or about 4% of emissions outside the EU ETS. In absolute numbers this corresponds to 92 million t CO₂ and represents more than one third (about 37%) of the GHG reduction effort needed outside the EU ETS.

Similarly, the number of additional jobs created as a consequence of reforming the ETD would grow over time and can, in absolute numbers, reach 1 million in 2030 under the most ambitious policy option⁷. An additional economic growth 0.27 of GDP can be expected under this policy option. The positive impact on employment is driven by the modelling assumption that additional revenue from energy taxation would be used to reduce the employers' social security contributions.

... and an overall assessment after five years will allow for a thorough ex-post policy evaluation.

While the current proposal is based on a comprehensive impact assessment and policy analyses, economic circumstances as well as environmental and technological framework conditions might be subject to future change. The Commission therefore considers it appropriate to review the effects of the amended ETD after five years (from the adoption) so as to achieve a better understanding of the impact of the new tax structure with regard to the objectives of the proposed revision. Accordingly, the Commission intends to present a report to the Council, if appropriate with proposals to amend the relevant rules. This concerns notably (1) the adaptation of the CO₂ minimum tax level to the evolution of the market price in the EU of the CO₂ emission allowances with a view to establish an automatic link between the price of CO₂ allowances and the CO₂ minimum tax level; (2) the adaptation of national systems as regards exemptions and tax reductions for households' taxation, fuel used for the purpose of air and maritime navigation in the light of the outcome of international negotiations, electricity produced on shore and directly provided to vessels while at berth in a

⁷ For references and further explanations reference is made to the related Commission services impact assessment.
port (shore-side electricity), alternative fuels, carbon capture and storage (CCS) and (3) taxation of electricity used for transport.

5. CONCLUSION

The revision of the ETD as proposed by the Commission will restructure the current energy tax system in order to make it more efficient and consistent. It will improve the functioning of the Internal Market, creating a level playing field for businesses which will be treated on equal footing, whether they consume oil, natural gas, coal or biomass. Most importantly, it will have considerable positive environmental steering effects and thus contribute to realising the objectives of the Europe 2020 strategy. In the longer run, such a new EU framework will help Member States to implement more ambitious policies on national level - due to both the need to fulfll environmental objectives as well as fiscal needs – which is why the proposal has the potential to provide efficiency gains that go largely beyond the impacts/gains at the time of the implementation. It thus enables Member States to achieve their Europe 2020 commitments in a cost-effective way and provides legal certainty for their structural reforms of their fiscal policies and tax systems under way in the exit from the economic and financial crisis. At the same time, the new framework will promote sustainable economic growth and support job creation. In short, smarter energy taxation will help both the environment and the economy.