

**Policy Department  
Economic and Scientific Policy**

**Workshop on the European Commission's  
proposal to amend the Fuel Quality Directive**

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This workshop was requested by the European Parliament's Committee on the Environment, Public Health and Food Safety

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# Workshop on the European Commission's proposal to amend the Fuel Quality Directive, 5 July 2007, European Parliament, Brussels

## Summary of the findings and the discussion

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## Opening of the workshop

Dorette Corbey MEP<sup>1</sup> opened the workshop by recalling that the amendments for the Fuel Quality Directive focus on two main topics: Air pollution and GHG emissions. This workshop focuses primarily on the second subject, and in particular on two specific items: emission reductions and calculation methods for GHG emissions in the fuel chain, and the introduction of sustainability criteria in the directive. Air pollution will not be presented in this workshop, but issues related to this subject could be discussed at the end of this workshop in Q&A session. A study produced by TAUW and Ecofys is at the disposal of Members of the Parliamentary Committee on Environment, Public Health and Food Safety and it will be published shortly on the website.

Paulo Silva Lemos, member of the Portuguese Permanent Representation, presented the view of the European Council of Ministers, on behalf of the Portuguese Presidency. He commented that the 1% annual reduction target is still considered 'difficult to be reached' by some Member States delegations. Sustainability criteria are still in discussion, and it remains to be seen whether and how such criteria can appear in the amendments. He also mentioned that there are remaining problems to be solved on the ethanol issue. The use of two different blends is still problematic. Moreover, the potential time frame for decision-making among EU Institutions on amendments has been presented.

Mark Major, representative of the European Commission, DG ENV, presented the view of the European Commission on the proposed Directive. Apart from presenting the highlights of the proposed amendments he also commented possible ways to achieve the objectives of the amendments (1% reduction of CO<sub>2</sub> annually) such as increased energy efficiency, technology improvements, reduction of gas flaring, fuel switching in refineries and the increased use of biofuels and cogeneration, use of low carbon hydrogen in processing and the use of process waste heat. He argued for closer co-operation on methodology development with USA (California), where similar developments are currently taking place. He emphasised that in addition to amendments to the proposed Directive there is a need for more detailed arrangements that regulate how GHG emissions will need to be calculated, reported and verified. This will be established by the comitology procedure. A consultation exercise on sustainability criteria has just been finalised.

## First expert panel: CO<sub>2</sub> reduction

The first expert panel was introduced by Mr Stans of TAUW.

Robert Edwards<sup>2</sup> gave a presentation on the calculation of GHG emissions in the fuel chain. He showed that there are still many uncertainties and needs for data improvement in the computation methods. Accounting for by-products is one of them. It is also important to ensure that the methods pay attention to the sectors that are receiving the benefits. In the computations for biofuels factors of importance include the fuels used for process heat, electricity cogeneration, use of by-products but also the wide range of N<sub>2</sub>O emissions from farming, and specifically reference land use.

Christina Holmgren's<sup>3</sup> presentation dealt with CO<sub>2</sub> emission reduction in the fuel chain, in particular on 'refining'.

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<sup>1</sup> European Parliament's Rapporteur, Committee on Environment, Public Health and Food Safety

<sup>2</sup> European Commission, Joint Research Centre, Institute for Environment and Sustainability, Renewable Energies Unit, Ispra, Italy

<sup>3</sup> IVL Swedish Environmental Research Institute

Ms Holmgren studied abatement measures to be taken in three Swedish petroleum refineries and calculated marginal abatement cost curves. She showed that several measures had negative costs, and had nevertheless not been implemented. Reasons for this have been analysed as well. A promising measure with negative cost was natural gas switch. A promising measure with still positive cost is the carbon capture process.

## **Discussion on topics treated in the first panel**

### *Questions*

- MEP Matzakis: why did the refineries not implement the abatement measures with negative costs?
- MEP Turmes: are Swedish refineries generally at the forefront of refineries in Europe in terms of environmental efficiency?
- Representative of the Economic and Social Committee: the uncertainties in the ranges are quite large, especially in the use of biofuels. Is there an average number to be used in calculations?
- Representative of the Ethanol Producers: how can you say that it is not possible to replace 10% of the fuels by bio-fuels?
- Mr Calvert, British Sugar: In the UK refineries are not implementing measures due to lack of incentives. Are you measuring the life cycle of the oil we must leave in the ground?
- Mr Schnieder, EUROPIA, representing Oil Companies: we see that the use of low sulphur petrol creates an increase in emissions. How is that accommodated for?
- Mr Bravo Lopez, Repsol IBF: was burning natural gas in the refinery taken into account?
- Mr Klein, COPA-COGECA: argues that relevant organisations such as his have not been involved in the development of the database for the JRC studies. Reference scenarios may be wrong.
- Mr Dings, T&E: marginal oil should be taken into account in the models; is it possible to co-fire biomass in the refineries? In 2009 the sulphur reduction is completed, so this measure could be in the baseline.

### *Answers*

- Ms Holmgren:
  - According to the Solomon studies the Swedish refineries are among the most efficient ones. This is mainly due to the use of waste heat in district heating.
  - It may be possible to use biomass. There may be technical problems to overcome.
  - We should not think lightly about technical problems to be solved. Carbon capture will probably not be implemented by 2011.
  - The refinery sector is not the only one with negative abatement costs for certain measures.

- Mr Edwards:
  - Availability of land is a big issue. In fact, 11% reduction will not be possible through set aside land alone. Therefore there will be an influence on import and export.
  - The data source for the JRC studies is on internet for the last 4 years; comments and inputs have been limited; stakeholders have been invited to provide input.
  - For ethanol, studies of British Sugar have been used.
  - Marginal oil: comes from the Middle East. The involvement of heavy oil depends on the oil price. The update of the JRC study next year will take this into account.
  - For biofuels UK and The Netherlands have developed on line tools. Default values can be used, but you are allowed to give deviating values.
- Paul Hodson on behalf of the European Commission, DG Transport
  - The JRC study is the most objective that can be found.
  - There will be meetings next week where the bio-fuel and agricultural sector have explicitly been invited to participate.
  - Necessary land use has been calculated for the production of 11% biomass. It needs to be a mix of arable land, set aside land and lower rate land, but in addition there is a need to replace other production. The calculations did not yet include Romania and Bulgaria. Including them will make the overall picture better. By-products will be used as animal feed. This will save land elsewhere.

## **Second expert panel: Sustainability criteria**

John Stans of TAUW presented the second expert panel.

Bart Dehue<sup>4</sup> gave an overview of sustainability criteria for bio-fuels and mentioned that developments on calculation methods and the inclusion of sustainability criteria have taken place in UK, The Netherlands and Germany. In the development of sustainability criteria both environmental and social aspects are included. In particular, where standards are needed (such as for certification) the concept of the use of a Meta Standard is increasingly discussed to avoid double certification. In this case existing standards are used without changes. Gaps in requirements still remain, such as conservation of carbon stocks and displacement effects. The role of WTO in allowing or precluding the use of sustainability requirements has been presented as well.

Uwe Fritsche<sup>5</sup> discussed the same subject, but from a different perspective. He draws the attention on the linkages between biodiversity and the use of bio-fuels. Land use will lead to displacement effects and the risk from indirect land-use changes has to be taken into account in standards and the effects need to be minimised. The German proposal deviates from the UK and Dutch works.

One of the ways to include sustainability criteria for biodiversity is the use of tools such as exclusion maps with no-go areas. GHG reduction counting can easily lead to double counting of the benefits. This should be avoided.

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<sup>4</sup> Ecofys, Utrecht, The Netherlands

<sup>5</sup> Institute for Applied Ecology, Darmstadt, Germany

## Discussion on topics second panel

### Questions

- MEP Dorette Corbey: why to attach social criteria to fuels production and not to all traded products? Why not use the concept of informed consent? NGOs work towards a moratorium on importing bio-fuels from developing countries. Can we supply all our fuel needs without developing countries? Do WTO rules allow a ban?
- Ms Dixson-Decleve, International Fuel Quality Centre: How much weight is given to social criteria compared with environmental criteria? Do we have a CO<sub>2</sub> debate, an energy debate or an agricultural debate? The issue of import of ethanol from Brazil can be mentioned as well as conflicting issues of using bio-diesel or ethanol.
- Representative of the Economic and Social Committee: Can't much be done without legislation, by using standards and criteria that have been developed between NGOs, industry and consumers? Do oil companies already work with corporate social responsibility?
- Mr Klein, COPA-COGECA: on agriculture policy in Europe cross compliance is required. Would that not be sufficient?
- Representative from eBIO: there will be confusion from initiatives only at a national level, such as the UK, Dutch and German initiatives. It calls for harmonisation. There will be effects of displacement. Farmers do not know the end use of their products. A trade-ban as discussed may not be WTO proof, but if it occurs it will not only impact bio-fuels, but also food and feed.
- Mr Seisler, European Natural Gas Vehicle Association: there is a continued bias towards liquid biomass. Gaseous options should be considered as well: biogas, bio-methane.
- Representative from EUROPIA: could the process of finalising the amendments to the directive be made faster by removing the sustainability criteria for the time being and allow for developing these criteria separately?
- Mr Wallace, European Fuel Oxygenates Association: we have to ensure that apart from avoiding double counting we avoid not counting benefits at all, since fuels may be used in another sector.
- Mr Røj, Volvo/ACEA: We are still considering the Fuel Quality Directive but the key issue on such proposal is to ensure that the fuels are compatible with the cars.
- Ms Dixson-Decleve, International Fuel Quality Centre: Do take into account air quality and meeting air quality targets, and do not sacrifice it for CO<sub>2</sub>.
- Representative of Bio-fuels producer: the import of first generation bio-fuels leads to a slowdown of the development of second generation bio-fuels.

### Answers

- Mr Fritsche:
  - The responsibility is with the party that creates the demand. That is the government. The customer does not have a choice.
  - A moratorium is not the best option. It destroys the possibility to regulate the market. This opportunity should be taken, including the introduction of sustainability criteria.

- Voluntary schemes for different products such as wood, flowers, cotton do contribute, but cannot cover yet a large part of the trade.
- Cross compliance should be expanded in the world and we should help developing countries to develop this.
- Sustainability criteria for other products will be introduced as well, but the issue with bio-fuels is different, since in this case the governments create the market.
- We should ensure that we do not introduce double counting because of taking into account heat, fuel and electricity production.
- Suggestion not to take the sustainability criteria out of the directive and continue the discussion on them. The proposed Directive can be adopted; its methodology and its improvements will follow later on. European Union has a leadership status to show here.
- Mr Dehue:
  - The weighting between social and environmental criteria: in the Dutch and UK systems the criteria will include minimum scores.
  - In bio-fuels there are big, very visible players. This will be a factor in complying with standards.
  - Prior informed consent is already part of the criteria used in the UK and Dutch systems. There is still the question whether it will be WTO-proof.

## **Concluding remarks**

Parliamentary rapporteur, Ms Corbey, thanked all speakers. Several key points could be retained from today's presentations and discussions, in particular that calculations on CO<sub>2</sub> are still a very complex matter. Specific attention is needed for by-products and land use factors. In using abatement measures in refineries there are still important contributions on reduction of CO<sub>2</sub> emissions to be expected.

Sustainability criteria are needed, also because a new market is created but it is still complicated. We have to avoid different regimes. The introduction of these criteria in the Fuel Quality Directive cannot be the final word. Moreover, the comitology procedure could not be considered the place to delegate these decisions; discussions need to continue and decisions need to be taken among the two European decision-making bodies, the European Parliament and the Council of Ministers. Today, the importance of the tool of global mapping has been stressed. In addition, double counting should be avoided.

Study prepared by TAUW/Ecofys on calculation of CO<sub>2</sub>, baseline year for CO<sub>2</sub> emission reductions, sustainability criteria and traceability will soon be available on the following website:

[http://www.europarl.europa.eu/comparl/envi/externalexpertise/environment\\_en.htm](http://www.europarl.europa.eu/comparl/envi/externalexpertise/environment_en.htm)