

EBB

European Biodiesel Board

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EBB POSITION PAPER

ON THE PROPOSALS FOR

A RENEWABLE ENERGY DIRECTIVE (RED)

AND A REVISED FUEL QUALITY DIRECTIVE

***THE CONTRIBUTION OF BIODIESEL TO
EU ENERGY AND CLIMATE CHANGE POLICIES***

June 2008

Introduction

Last January 2008, the European Biodiesel Board (EBB), representing the major industry producing biofuels in the EU, welcomed the Commission proposals for the revision of Directive 2003/30 as a fully fledged Directive on Renewable Energies. EBB acknowledged that important signals had been given by the European Commission towards the creation of a new Common Energy policy based on the key principles of sustainability, security of supply and competitiveness of energy production.

This new proposal, which will now be examined by the Parliament and the Council, will entail major consequences, not only for the EU biodiesel industry but more certainly for the overall EU policy for climate change mitigation. Amongst other major issues contained in the text are the 10% legally binding target for the use of biofuels in the transport sector as well as the proposed sustainability criteria for biofuels.

In parallel, the Quality of Fuels Directive 98/70 is undergoing revision and will entail an ambitious 10% CO₂ reduction target. Therefore, one major challenge lying ahead will be to **ensure maximal consistency between the new Renewable Energy Directive and the revised Quality of Fuels Directive.**

More generally, it will be crucial to ensure that the potential of biofuels will be fully taken into account by the new EU legislative framework, in particular within the Renewable Energy Directive. Against this background, EBB would like to underline the following:

- **The 10% binding minimum target for biofuels use should be secured and reinforced by setting up interim targets**

The 10% biofuels target endorsed by EU Heads of State in March 2007 represents a major step forward. **To pave the way for its progressive implementation by the Member States, EBB considers that intermediate binding targets of 7% in 2012 and of 8,5% in 2015** (expressed in energy content as already in Directive 2003/30) **should be introduced.** The difficulties experienced until now in implementing long term targets at national level not only suggest the need for mandatory targets, but also the necessity that those targets are detailed over shorter periods of time, certainly not over a decade.

- **The greenhouse gas balance of biofuels should be assessed in a pragmatic and realistic way, both in terms of threshold and methodology**

As it stands in the Commission proposal of last January 23rd, the 35% threshold is based on a single, and quite restrictive, methodological approach, **which might exclude biofuels pathways that will be critical in reaching the 10% target.** This highlights the urgent need **to establish a neutral set of criteria for assessing the GHG performances of biofuels**, based on sound scientific expertise. In particular, it will be critical that the biofuels industry is entirely involved in the forthcoming revision of the JRC-Eucar-Concawe study on CO₂ performances of biofuels, from which regrettably biofuels experts have been excluded so far.

In the absence of such a neutral scientific reference, any cut-off value above 35% would not be acceptable.

Furthermore, it will be essential that the latest available data are taken into account when **revising the default values used to calculate the GHG balance of biofuels, in particular the IPCC guidelines concerning N₂O emissions.**

With regard to the proposed methodology, **it is important that indirect land use change remains out of the scope of the methodology.** Indeed, it is clearly impossible to establish a link between indirect land use effects and individual consignments of biofuels. Moreover, the creation of a sustainability scheme for biofuels and bio-energy should suffice to avoid inappropriate land use. Since

there cannot be an objective definition of indirect effects on land use, such criteria should not be retained.

- **The transition period for applying the 35% cut-off should be modified to allow more flexibility**

At present, the draft RED provides for a transition period running until 1st April 2013 for those biofuels installations that were in operation in January 2008. The purpose of this provision is to avoid penalising companies that have made investments in good faith before January 2008 in accordance with the existing biofuels target for 2010. However, taking into account that 2 years are necessary to build up a plant, **EBB considers that the transition period should be extended until 1st of January 2015 and should be made available to all biofuels plants having received the necessary authorisation by the time of the entry into force of the Directive, this is in order to avoid legal uncertainty.** This will be all the more necessary, should the cut-off value for GHG savings be raised above the proposed 35% threshold.

- **The new Directive should not discriminate between current and future biofuels technologies**

Considering that existing biofuels technology will be the ones contributing the most towards the 10% target for 2020, **it is important that each biofuels pathway is assessed on its own merits.** Phasing out the so-called "first generation" technologies by 2020 as some would like to propose is not realistic.

While EBB welcomes the fact that the Commission proposal makes no reference to the misleading terminology of "1st/2nd generation biofuels", **the 40% penalty for GHG calculations applied to the processing stage is not acceptable.**

- **More biofuels pathways should be included as counting double towards the targets**

EBB welcomes the Commission proposal that biofuels from waste, residues and ligno-cellulosic material shall count double towards the target. However, this provision should be extended to **promising biofuels pathways with extremely positive CO₂ balance** such as **biodiesel from algae and from plants growing on arid lands (e.g. jatropha and other species under trial).**

- **Biofuels feedstock cultivation on degraded lands and collection of waste to be used for biodiesel production should be encouraged**

EBB supports the creation of a bonus for feedstock cultivated on restored degraded land, unsuitable for agricultural production, also as a way to fight against desertification. Equally, the collection and recycling of waste to be employed for biodiesel production should be specifically encouraged.

- **Sustainability criteria should be applicable to all biomass uses**

The European biodiesel industry supports the setting up of a sustainability certification for biofuels raw materials, provided it will be simple and transparent, in order to avoid hindering the development of the biofuels market. On a longer term perspective however, such a scheme should apply not only to bioenergy (transport, heating and cooling) but also to the food and feed applications. Only when the sustainability scheme applies horizontally to all sectors, will the goal of protecting biodiversity be achievable. This is all the more true when considering for example that EU biodiesel industry uses less than 3% of all the palm oil imported in the EC.

The most sustainable biofuels feedstock should be included in the scope of the Directive. **EBB strongly opposes the proposal put forward by some Member States to remove animal fats and used cooking oils from the scope of this Directive. Such proposal is absolutely inconsistent with the aim of promoting sustainable biofuels production.**

- **The definition of biomass should be clarified**

To avoid any confusion on the scope of the Directive, EBB suggests clarifying the definition of biomass by specifically excluding the by-products of the mineral refinery process.

- **Specification for blends with 10% and 15% biodiesel content should be introduced on time to meet the 2020 objective**

Today, most of biodiesel is sold in blends up to 5% with conventional diesel. The 5% ceiling is becoming a major hurdle for the development of the biodiesel market. Although required by the Commission, the CEN normalisation process leading to the amendment of the EN590 diesel standard in a sense that would increase the biodiesel content in conventional diesel is progressing at very slow pace for too many years already. The 5,75% target for 2010 (which equates to 6,5% in volumes) already requires a modification of this threshold. Furthermore, the ambitious move towards an EU binding target of 10% (in energy content, which means 11,5% in volume) will imply that in the future **all EU diesel selling points shall be authorised to market normal diesel containing up to 10%¹ and later 15% of biodiesel.** This should be done by modifying the EU diesel definition and not by creating a new separate product with specific labelling, which would imply huge logistics, infrastructure and segregation costs. Against this background EBB strongly supports the statement contained in the draft RE-D that **“In order to permit the achievement of a 10% share of biofuels, it is necessary to ensure the placing on the market of higher blends of biodiesel in diesel than those envisaged by standard EN590/2004.”** The proposal from Mr. Turmes and Mr. Wijkman in their respective reports to delete such provision is therefore not acceptable as it would stand in strong contradiction with the aim of the Directive.

While the inclusion in the RED Directive of specifications for blends containing 7% and 10% biodiesel (Annexes V and VI) is welcomed, EBB considers that the calendar for introducing such specifications should be accelerated to ensure that the binding target of 10% by 2020 is effectively met:

- blends containing up to 10% biodiesel should be allowed as from 1st January 2010;
- blends containing up to 15% biodiesel should be allowed already as from 1st January 2015.

EBB would also propose a number of technical amendments to the specifications for 7% and 10% biodiesel blends (additivation, oxidation stability).

- **The legal basis of the new Directive should reflect the combined goals of environment protection and economic development**

In the views of EBB, it is important that the legal basis of the new Directive specifically refers to article 95 of the Treaty, which relates to the harmonising the internal market. Indeed, the need to set up sustainability criteria for biomass should not lead to a fragmentation of the internal market, whereby EU Member States would apply diverging criteria or would fail to sufficiently coordinate their policies.

More specifically, it is critical that a biofuel meeting the EU sustainability requirements can be released for consumption in any of the EU Member States. Failure to ensure this mutual recognition would stand in strong contradiction with the aims of the EC Treaty.

The European Biodiesel Board, also known as EBB, is a non-profit organisation established in January 1997. EBB aims to promote the use of biodiesel in the European Union. It gathers 61 member companies and associations. EBB member companies account for around 80% of biodiesel produced in the EU.

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¹ in volume

ANNEX I BIODIESEL BENEFITS

Biodiesel is a renewable fuel produced from vegetable oils such as rapeseed oil, sunflower seed oil, soybean oil and also used frying oils (UFO) or rendered tallow. It presents a number of decisive advantages, notably in terms of climate change mitigation and security of energy supply. Therefore, it will be one of the key biofuels pathways to reach the ambitious targets set at EU level (10% biofuels and 20% renewable energies by 2020).

With 80% of the EU biofuels production, biodiesel is today the main biofuel produced and consumed in the EU. The European Union is by far the world leader in biodiesel production with close to 5,7 million tonnes of biodiesel produced in 2007. EBB believes it is an essential moment in time for the promotion of a real fuel alternative that could contribute to meet the targets set in the Kyoto Protocol and that will reduce the EU dependence on oil imports.

- **There are important GHG savings associated with biodiesel use**, with typical values ranging from 50% to more than 95% GHG savings depending on the raw material used for biodiesel production. This should not be overlooked in the confusing frame of public opinion campaigns indicating biofuels as a potential source of threat while the real threat is represented by maintaining the status quo with an exponential increase of conventional fuels and of CO² emissions deriving from transport.
- **Biodiesel has the potential to pay a significant tribute to enhancing the EU security of energy supply.** The reason for soaring diesel prices in the EU can be found in the pattern of EU fossil fuels consumption, with an **enduring and growing diesel deficit as well as increasing gasoline surpluses at EU level.** In 2005, the EU imported 24 Mo tonnes diesel (mainly from Russia) and exported 19 Mo tonnes of gasoline (mainly to the US). In 2006, this proportion raised to 30 Mo tonnes, for diesel imports and gasoline exports respectively. This trend is expected to continue, leading the annual EU diesel deficit over 50 Mio tonnes by 2007/2008 as result of the dieselisation of the EU vehicle pool.
- **In the EU, biodiesel production can be done in accordance with sustainability principles and without endangering food supply.** This will be made possible notably by raising the EU oilseeds production. Currently amounting to 23 Mo tons, the EU oilseeds production is expected to reach 35 Mo tonnes by 2015-2020. **Additionally, biodiesel production development will improve the EU self-sufficiency in terms of vegetable proteins.** The EU has currently a deficit in protein meals for animal feed. The development of biodiesel production in the EU has already increased the availability of oilseeds meals by 3 Mo tonnes since 2002. The further development of the production should provide an additional 8 Mo tonnes by 2015-2020, thus increasing the EU self-sufficiency ratio from 20% to 30%.
- Biodiesel produces **valuable co-products like glycerine and meals** which each have an added value and many possible outlets (animal feed, chemical industry, energy uses etc). In addition, since they substitute for other items that do not need to be produced (chemical glycerine, soybean meals for animal feed, for example), it represent an additional credit for biodiesel production in terms of green-house gas savings.
- Finally, it is not useless to remind that biodiesel is the only renewable energy where Europe holds a strong world-wide leadership, be it in the field of production technology, logistics or research. This leadership should be considered with all its strategic relevance and needs to be preserved and further developed, notably through the new EU legislative framework on renewables.

ANNEX II

EBB PROPOSED AMENDMENTS TO THE DRAFT RENEWABLE ENERGY DIRECTIVE

This annex lists a number of amendments to the draft Directive proposed by the European Commission last January 23rd, which are deemed essential by the European biodiesel industry. In addition, a number of important technical amendments (n°5 to 12 below) are recommended, following a thorough examination by EBB technical experts. It is the view of EBB experts that such modifications should not raise any political discussion and should therefore be considered on technical grounds. Failure to do so would actually significantly weaken the applicability of the Directive. Such technical changes are summarized in the form of revised standards for 7% and 10% biodiesel blends (p.9 and 10).

Overall, EBB considers that the specifications provided in Annexes V and VI of the draft Directive are absolutely fundamental for the further development of the EU biodiesel sector, given the very limited progress achieved so far within CEN on the revision of the relevant standards.

AMENDMENT 1

Article 2 b)

« Biomass: means the biodegradable fraction of products, waste and residues from agriculture (including vegetal and animal substances), forestry and related industries, as well as the biodegradable fraction of industrial and municipal waste, **of non fossil origin.** »

Justification:

To avoid any confusion regarding the scope of the Directive, the definition of biomass should be clarified by specifically excluding the by-products of the mineral refinery process.

AMENDMENT 2

Article 15 §2

« The greenhouse gas emission saving from the use of biofuels and other bioliquids taken into account for the purposes referred to in paragraph 1 shall be at least 35%. In the case of biofuels and other bioliquids produced by installations **that received all the necessary authorisations by the time of entry into force of this Directive**, the first subparagraph shall apply from **1st April 2015.** »

Justification:

Considerable investments have been made in reliance of the 10% biofuels target. Those investments should not be penalized by applying the GHG criteria at an early stage of their development. To allow the necessary flexibility and adaptation, the transition period should therefore be extended until 1st of January 2015 and should be made available to all biofuels plants having received the necessary authorisation by the time of the entry into force of the Directive, this in order to avoid legal uncertainty.

AMENDMENT 3

Article 17 §4

« The Commission shall report by 31 December 2012 at the latest on the estimated typical and default values in Annex VII Part **A, B, D** and **E**, paying special attention to emissions from transport and processing, and may, where necessary, decide to correct the values. Such a measure designed to amend non-essential elements of this Directive shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 21(3). »

Justification:

It is important that the Directive allows the possibility to update the typical and default values not only for future biofuels pathways but also for existing pathways.

AMENDMENT 4**Whereas 52, Article 18 §4, Article 19 c), Article 19 i)**

« ...biofuels made from wastes, residues, grasses, straw and ligno-cellulosic material, **algae, as well as non irrigated plants grown in arid areas to fight desertification.** »

Justification

Biodiesel pathways produced from algae or from plants growing on arid lands will have extremely positive CO₂ profile. They should be encouraged by counting double towards the 10% target.

AMENDMENT 5**Annex V: Title**

"Specifications for a 7% blend for biodiesel in diesel (EN590)"

Justification:

It is essential that Annex V specifically refers to the EU diesel standard for conventional diesel, which sets the specifications for biodiesel blends to be used inside the Community.

AMENDMENT 6**Annex V, line 17**

Parameter	Unit	Minimum	Maximum
FAME content - EN14214	% (V/V)	0	7

Justification:

The Directive should specify that the biodiesel component of blends should conform to the biodiesel EN14214 standard, this to ensure that quality issues are properly addressed. The reference to the EN 14078 is not appropriate and should therefore be deleted.

AMENDMENT 7**Annex V, line 22**

Parameter	Unit	Limits
Additivation for stability (on the pure FAME content):		Anti-oxidant equivalent to BHT* at 1000 ppm

* Recommended

Justification:

The BHT content of 1000ppm specified in the draft Directive relates to the pure FAME content, not to the blend itself. Furthermore, the additive type specified in the Annex should be a mere recommendation, allowing the use of any other additive of comparable efficiency.

AMENDMENT 8**Annex VI: Title**

" Specifications for a 10% blend of biodiesel in diesel (EN590)"

Justification:

It is essential that Annex VI specifically refers to the EU diesel standard for conventional diesel, which sets the specifications for biodiesel blends to be used inside the Community.

AMENDMENT 9**Annex VI, line 17**

Parameter	Unit	Minimum	Maximum
FAME content - EN14214	% (V/V)	5	10

Justification:

The Directive should specify that the biodiesel component of blends should conform to the biodiesel EN14214 standard, this to ensure that quality issues are properly addressed. The reference to the EN 14078 is not appropriate and should therefore be deleted.

AMENDMENT 10**Annex VI, lines 20-22**

Parameter	Unit	Limits
Phosphorus content	mg/kg	In accordance with the EN14214 standard
Acid Index	mgKOH/g	DELETED
Peroxides EN ISO 3960		DELETED

Justification:

With regard to the phosphorous content, the CEN is still discussing the appropriate threshold for 10% biodiesel blends. Annex VI should therefore leave enough flexibility so that the industry can adapt to the outcome of the CEN discussions.

The requirement for an acid index of 0.05 would add an unnecessary burden for the production of biodiesel blends. In addition, this is already covered by the oxidation stability requirements.

The peroxides content parameter is not relevant for the purpose of establishing biodiesel blends specifications.

AMENDMENT 11**Annex VI, lines 25**

Parameter	Unit	Limits
Acid index variation	mgKOH/g	DELETED

Justification:

The requirement for an acid index variation of 0.12 would add an unnecessary burden for the production of biodiesel blends. It is already covered by the oxidation stability requirement.

AMENDMENT 12**Annex VI, lines 27**

Parameter	Unit	Limits
Additivation for stability (on the pure FAME content):		Anti-oxidant equivalent to BHT* at 1000 ppm

* Recommended

Justification:

The BHT content of 1000ppm specified in the draft Directive relates to the pure FAME content, not to the blend itself. Furthermore, the additive type specified in the Annex should be a mere recommendation, allowing the use of any other additive of comparable efficiency.

AMENDED ANNEX V TO THE DRAFT RENEWABLE ENERGY DIRECTIVE

Annex V – Specifications for a 7% blend of biodiesel in diesel (EN590)

Parameter	Units	Limits		
		Minimum	Maximum	
Measured cetane		51	-	
Calculated cetane		46	-	
Density at 15°C	kg/m ³	820	845	
Polycyclic aromatic hydrocarbons	% wt	-	8	
Sulphur content	mg/kg	-	10	
Flash point	°C	>55	-	
Carbon residue in 10% distillation residue	%	-	0.3	
Ash content	mg/kg	-	0.01	
Water content	mg/kg	-	200	
Total contamination	mg/kg	-	24	
Copper strip corrosion (3h-50°C)	cotation	class 1		
Lubricity EN ISO 12156-1	µm	-	460	
Kinematic viscosity at 40°C	mm ² /s	2	4.5	
Distillation	% recovery at 250°C	%	-	<65
	% recovery at 350°C	%	85	-
	Temperature for 95% recovery	°C	-	360
FAME content EN14214	%	0	7	
Cloud point	°C	Ref. national standard		
Cold filter plugging point	°C	Ref. national standard		
Oxidation stability - EN14112	h	20		
Oxidation stability by ASTM D2274 at 95°C	g/m ³	25		
Additivation for stability (based on the pure FAME content)	Anti-oxidant equivalent to BHT* at 1000ppm			

*Recommended

AMENDED ANNEX VI TO THE DRAFT RENEWABLE ENERGY DIRECTIVE

Annex VI – Specifications for a 10% blend of biodiesel in diesel (EN590)

Parameter	Units	Limits		
		Minimum	Maximum	
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Density at 15°C	kg/m ³	820	845	
Polycyclic aromatic hydrocarbons	% wt	-	8	
Sulphur content	mg/kg	-	10	
Flash point	°C	>55	-	
Carbon residue in 10% distillation residue	%	-	0.3	
Ash content	mg/kg	-	0.01	
Water content	mg/kg	-	200	
Total contamination	mg/kg	-	24	
Copper strip corrosion (3h-50°C)	cotation	class 1a		
Lubricity EN ISO 12156-1	µm	-	460	
Kinematic viscosity at 40°C	mm ² /s	2	4.5	
Distillation	% recovery at 250°C	%	-	<65
	% recovery at 350°C	%	85	-
	Temperature for 95% recovery	°C	-	360
FAME content EN14214	%	5	10	
Cloud point	°C	Ref. national standard		
Cold filter plugging point	°C	Ref. national standard		
Phosphorus content	mg/kg	in accordance with EN 14214		
DELETED		DELETED		
DELETED		DELETED		
Oxidation stability - EN14112	h	20	-	
Oxidation stability by ASTM D2274 at 95°C	g/m ³		25	
DELETED		DELETED		
Injector fouling	Detergent additive package			
Additivation for stability (based on the pure FAME content)	Anti-oxidant equivalent to BHT* at 1000ppm			

*Recommended