Reply of COPA and COGECA to DG TREN Biofuel consultation exercise April-May 2007

Biofuel issues in the new legislation on the promotion of renewable energy
Public consultation exercise, April – May 2007
Energy and Transport Directorate-General, European Commission

1. How should a biofuel sustainability system be designed?

The Commission intends to bring forward a proposal for a simple incentive/support system for biofuels. Its objective is to further increase the greenhouse gas benefits of EU biofuel policy and to minimise environmental risks. The system could discourage:

_.- the conversion of land with high biodiversity value for the purpose of cultivating biofuel feedstocks;

_.- the use of environmentally harmful systems for biofuel production.

It should avoid any discrimination between domestic production and imports and should not act as a barrier to trade. Its operation should be monitored with a view to making it more sophisticated in future.

A possible way forward

One option for the initial design of the scheme (before it is reviewed and steps are taken to make it more sophisticated) would be as follows:

a) The legislation would list the "sustainability criteria" to be fulfilled by the biofuels that are used to fulfil the biofuels target.
There could be three of these criteria (see box 1).

b) Biofuels that failed to meet one of these criteria would not count towards national biofuel targets. They would not count towards national "biofuel obligations"
. They would not be
eligible for tax reductions and similar types of financial support.

c) Member States would be responsible for ensuring that the criteria were respected.
The legislation would set out some procedural requirements (for example on reporting, verification and monitoring).

The legislation would define types of evidence that Member States would have to accept as evidence that the sustainability criteria were fulfilled (see box 2).
Biofuels obligation: a measure requiring a fuel supplier to incorporate a given proportion of biofuel in the fuel it sells.
http://ies.jrc.cec.eu.int/wtw.html. The study shows that the main factors influencing biofuels' greenhouse gas balances are the raw material used, the energy source used in the transformation process and (in some cases) the use made of by-products.
This wording is not
meant to rule out different verification systems being used. Examples include:

- "track and trace", under which a certificate accompanies the raw material/biofuel from farm to filling station;

- "book and claim", under which raw material/biofuel producers acquire certificates and

fuel sellers have to obtain them, but the certificates are not necessarily transmitted along with the biofuel;

- "mass balance", based on figures for the proportion of material meeting the sustainability criteria that is contained in each load of raw
material/biofuel.
Intergovernmental Panel on Climate Change
This option is put forward as a starting point for discussion and to give an indication of how a system could work in practice.

General questions

Question 1.1:

Do you think the "possible way forward" described above is feasible?

The environmental benefits from “well to wheel” have been demonstrated by the Life Cycle Analysis studies carried out in France for each biofuel production sector. As such, current agricultural production methods generate considerable reductions in greenhouse gas emissions, in the destruction of the ozone layer, eco-toxicity and photo-chemical pollution.
The Commission has to define “biofuels” and establish the stage (for example primary production, industrial procedure) at which it proposes certification. COPA-COGECA takes the view that the Commission must bear the entire responsibility for the certification scheme including controls; voluntary certification schemes are unacceptable. COPA and COGECA demand equivalent requirements for products from third countries. Equivalent requirements in third countries must be approved by Community authorities like in other sectors. The European logo for organically farmed products is a case in point.
In principle yes, “the possible way forward” is feasible, but the fact that Biomass with EU origin is produced under the cross compliance legislation must be taken into account. Therefore specific sustainability criteria would not be appropriate for EU Biomass. It has to be taken into consideration that introducing a certification scheme, different from cross-compliance, would delay its implementation in EU agriculture, whilst the cross-compliance is already in place. Certification schemes for biofuels must be effective and lean without causing additional administration for EU production. It must be compatible with CAP. The existing regulatory framework must apply to biofuel production as for food production.
Specific certification schemes are necessary for biofuels with origin outside the EU where equivalent regulation as in the EU do not exist.
It should also be noted that sustainability criteria have not been generally accepted by WTO on trade with other agricultural products. Therefore, there is an obvious risk that a certification scheme will make EU production of biofuels more complicated and costly, while production in third countries not will be affected at all in reality. The fact that it will be very difficult for the Commission to monitor, control and fully trust certification schemes in other countries should also be considered when constructing a system that depends on these schemes.

Question 1.2

What do you think the administrative burden of an approach like the "possible way forward" would be? (If possible, please quantify your answer.)

Specific certification of biofuels is likely to increase the cost of traceability and administrative burden for the sector. Specific certification of biofuels would go against the administrative simplification of the EU legislation. Experience with existing administrative systems (e.g. EU non food production on set aside land) shows, that costs for private operators and public authorities are likely to increase heavily. These cost risks should be analysed with the national authorities in the EU-Member States.

Question 1.3

Please give your general comments on the "possible way forward", and on how it could be implemented. Does it give an adequate level of assurance that biofuels will be sustainably produced?
If you think the problem should be tackled in a different way, please say how, giving details of the procedures that would be used.

COPA and COGECA believe that the sustainable criteria should not be restricted to only greenhouse gas savings and reduction of carbon stocks and biodiversity due to land use change. Sustainability is compounded not only by environmental criteria but also by economic and social criteria. The sustainability criteria should take into account other equivalent criteria like: greenhouse gas emission reduction throughout the whole chain, that means from the agricultural raw materials to the transport, energy efficiency, security of supply as much for agricultural raw materials as for transport fuels, conformity of the production with equivalent environmental and social standards, maintenance of Europe as a production site and creation of added value in EU rural areas.
The competitiveness of the European biofuels industry must not be jeopardised by focusing, as with the previous approach, on individual criteria such as greenhouse gas emission reduction without taking into account the different local conditions in the EU and in third countries.
COPA and COGECA insist that otherwise, previous investments would be put at risk and further investments excluded. Therefore, COPA and COGECA do not support the setting of a safety margin of greenhouse gas savings. A positive greenhouse gas balance must be the baseline bearing in mind that greenhouse gas saving is not the only sustainability criteria.
The current approaches for determining the greenhouse gas emission balance of biofuels are based on theoretical rather than empirical data and, due to methodological differences, are not an appropriate basis for evaluating biofuels.
Given the differing results in the impact studies and the ecological assessments on biofuels as a result of different methodology, COPA and COGECA request that the European Commission take appropriate measures to reach a consensus on the value of biofuels and fossil fuels based on the EU's strategic objectives to reduce dependence on fossil energy, greenhouse gas emissions and creation of jobs in rural areas.
In particular, the JRC's "well to wheel" study on biofuels is not transparent and is clearly based on old data on biofuels production. The JRC must be urgently reviewed. COPA and COGECA believe that stakeholders from agriculture and the biofuels industry must be involved equally. The previous approach of restricting participation to stakeholders from the mineral oil and automobile industries is unacceptable.
If default values were laid down in a proposal for a directive on the basis of the JRC/EUCAR/Concawe study, biofuels produced in the EU would be severely penalised, which goes against the EU's objectives in terms of securing energy supply.
COPA and COGECA ask that all of the factual and legal conditions for a regulation be put in place before drawing up a directive on the evaluation of biofuels or corresponding EU legislation. Harmonised EU legislation on the internal market is indispensable.

Questions relating to individual criteria in box 1

Question 1.4
Carbon stock differences between land uses would be taken into account under criterion 2. Should they also be taken into account under criterion 1? If so, what method should be used to determine how the land in question would have been used if it had not been used to produce raw material for biofuels?

Biofuels are currently produced from **arable crops** on agricultural arable land. In the EU, land use changes are not expected, taking into account EU legislation: projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes and initial afforestation

and deforestation for the purposes of conversion to another type of land uses must be submitted to a procedure of impact assessments on the environmental effects according to the Directive 97/11/EC.
Carbon losses through land use change should also be included in any greenhouse gas (GHG) calculation - this is a major factor. Well understood average values for known land use change could be used to estimate GHG emissions that will cover all situations. GHG calculations of imported feedstock must include carbon losses from land use change.Therefore, COPACOGECA agree on this criteria until it is possible to check it for imported feedstock.
Forest materials used for biofuel/bioenergy production originate from European forests which are managed in a sustainable way according to the internationally agreed sustainable forest management (SFM) criteria.
Forest certification is one way to guarantee sustainable forest management and sustainable origin of timber. However, as a voluntary mechanism forest certification does not cover all forests in EU and therefore cannot be used as a consistent guarantee for SFM at EU level. The mechanism used for guaranteeing the sustainability of timber shall include harmonised criteria for the whole EU and shall be based on SFM criteria agreed upon in the Ministerial Conference on the Protection of Forests in Europe, MCPFE.
EU must – in cooperation with Member States – take full responsibility for a harmonised way of verifying that the initial criteria are fulfilled. The system for verification shall be harmonised within the EU Common Market and can not be left to different solutions in different Member States.
In defining the term exceptional biodiversity a special emphasis should be put on the definition which will not lead to any additional demands on forest conservation. From the forestry point of view there is no need to define a new term called exceptional biodiversity since the MCPFE criteria on sustainable forest management already covers biodiversity matters. SFM criteria also cover energy wood because there is no difference in producing timber for forest-based industry use or bioenergy use.
The same sustainability criteria should also encompass timber imported from third countries.

Question 1.5

As described in the "possible way forward", criterion 3 focusses on land uses associated with exceptional biodiversity. Should the criterion be extended to apply to land that is adjacent to land uses associated with exceptional biodiversity? If so, why? How could this land be defined?

The definition of exceptional biodiversity must be based on the international convention on biodiversity and existing EU definitions and legislation for high conservation value land. Imported fuels or feedstock must be subject to similar protection requirements for ‘exceptional biodiversity’ areas defined using consistent criteria. The delimitation of these areas and its vigilance should be carried out properly to assurance its survival, especially in those third countries which evidence lack of control. It should be noted that the biodiversity in agricultural areas in some regions and Member States is more threatened by decreased agricultural activity and production than increased production. Land abandonment is in many cases the biggest threat to biodiversity in e.g. some of the new Member States and in Scandinavia. Increased agricultural activities from biofuel production will therefore in many cases contribute to biodiversity in a positive way.

Question 1.6

How could the term "exceptional biodiversity" (in criterion 3) be defined in a way that is scientifically based, transparent and non-discriminatory?

2. How should overall effects on land use be monitored?

The problem

Two of the sustainability criteria in the "possible way forward" in section 1 relate to the direct conversion of land for biofuel production from other uses.
Increased demand for biofuels is also likely to have an indirect effect on land use, leading to an increase in the total amount of land devoted to forestry and crop production.
This land use change will be associated with greenhouse gas savings from biofuel use. It will have other environmental effects. These could be positive or negative. The environmental effect of using land that would otherwise have been used for an out-of-town housing development is different from the effect of using land that would have been a biodiverse habitat.
It seems clear that these indirect effects cannot be linked to individual consignments of biofuel. But they should still be monitored.
Possible way forward
The legislation could ask the Commission to report regularly on:
_.-how land use would have developed if biofuel use had remained constant;
_.-how land use has in fact developed; and
-the estimated effect on overall land use of increasing biofuel use.

Question 2.1:

Please give your comments on the "possible way forward" described above. If you think the problem should be tackled in a different way, please say how.

COPA and COGECA wish to stress that agriculture and forestry in the EU of 27 have not yet fulfilled their full production potential. The improvement of farm structures and productivity gains, especially in the New Member States, while taking agri-economic constraints into account, could see oilseed production in the EU-27 expand.
Furthermore, current availabilities in cereals and sugar on the EU market are enough to supply bioethanol plants. The competition could take place between non food and export.
The EC should carefully and periodically revise EU limitations in order to not alarm other parties and prevent confusion about the impact of biofuels in the food or feed sector. The EC should be able to explain those limits to calm the markets, avoiding speculative movements.
The report should be extended to the commodity trade market, even though the grain or the oilseed is not used in the biofuel industry. The commodity market should be studied as a whole, it is useless to control only a small percentage of the market trade, because bad practices, such as cultivation of wetlands or protected areas, would be carried out eventually only to get feed crops, for which there is the highest demand, without any limitation.
COPA-COGECA feel that the positive impact of energy crops on crop rotation and biodiversity should be taken into consideration. COPA and COGECA stress that current legislation and the implementation of cross-compliance (Regulation (EC) n°1782/2003) guarantee the respect, in Community production, of biodiversity, crop rotation and the environment. Specific certification of energy crops is likely to increase the administrative burden for the sector. Biomass from EU production that is subject to cross-compliance needs no special certification. COPA and COGECA demand equivalent requirements for products from third countries. Equivalent requirements in third countries must be approved by Community authorities as in other sectors. The European logo for organically farmed products is a case in point.

Question 2.2

Do you think it is possible to link indirect land use effects to individual consignments of biofuel? If so, please say how.

Yes, but it could be seen as a technical barrier to trade. Concerning the EU production, traceability and cross-compliance applies (article 4 and 5 of the regulation n° 1783/2003).

3. How should the use of second-generation biofuels be encouraged?

Through the 7 RTD Program and the implementation of the Strategic Research Agenda created by the EU Technology platform on biofuels which should be available during 2007 and through the implementation of the Strategic Research Agenda of the Forest-based Sector Technology.

The Commission intends to bring forward a proposal to encourage the production and use of second-generation biofuels.

Question 3.1:
How should second-generation biofuels be defined? Should the definition be based on:

a) the type of raw materials from which biofuels are made (for example, "biofuel from cellulosic material")?

It seems to be difficult to find an appropriate definition of so called second generation biofuels. From a chemical, biological and physical point of view a differentiation between several generations of biofuels seems artificial and not in line with scientific evidence. In fact technological progress in all kinds of biofuel production is rapidly moving forward, e.g. new production technologies for byproducts, more effective uses of processing energies or more effective uses of biomass as processing energy resource. Cellulosic material is already now used as direct or indirect feedstock for biofuel production.

b) the type of technology used to produce the biofuel (for example, "biofuels produced using a production technique that is capable of handling cellulosic material")?

No, because the production technologies are rapidly moving forward. From today it seems impossible to foresee the state of the art of production technologies over a mid term period of just five years. The technological development must not be restricted by artificial definitions. The EU, as in other biofuel developing countries and regions worldwide, is only at the beginning of its learning curve, no direct or indirect obstacles for R+D are acceptable.

c) other criteria (please give details)?

Advanced biofuels should be defined by their efficiency (energy balance or land use) not technology or feedstock.

Possible way forward
The legislation could require Member States to give an advantage to second-generation biofuels in their support systems.
For example,

. • Under national biofuel obligations, second-generation biofuels would count extra (for example, double) – this would mean that an obligation to achieve a 2% share of firstgeneration
biofuels could be fulfilled, instead, with a 1% share of second-generation.

. • The legislation would confirm that second-generation biofuels may receive higher subsidies than first-generation biofuels (subject to Community state aid rules and applicable Community tax legislation).

Question 3.2:

Please give your comments on the "possible way forward" described above. If you think the problem should be tackled in a different way, please say how.

It should be considered that the second generation fuels probably not will be the 'silver bullet' solution to the EU biofuel needs. The time in the future when these fuels will be fully commercialised and the estimated low price for these fuels will probably not respond to present expectations. First generation fuels still have the most important function in this context in a short and midterm perspective.
As the second generation biofuels are not available on the market at least in the mid term, the global directive on renewable energy sources should not make a distinction between first and second generation biofuels at this stage.
Regarding the possibility of second-generation biofuels counting twice in incorporation rates, COPA-COGECA thinks that such a measure would run completely counter to the goal of reducing greenhouse gas emissions. If extra is granted to a given biofuel category in terms of the incorporation rate, we create a fictitious incorporation that replaces the genuine incorporation of other biofuels that do comply with the criteria laid down. This creates a distortion of competition between the generations and, above all, hinders the genuine incorporation of biofuels regardless of their nature, which is the very opposite of what is intended.
Encouragement for 2nd generation biofuels absolutely must follow the same assessment criteria as for 1st generation biofuels.

Question 3.3

Should second-generation biofuels only be able to benefit from these advantages if they also achieve a defined level of greenhouse gas savings?

COPA-COGECA is not in favor of preferential treatment for second generation biofuels. Assessment of second-generation biofuels must follow the same criteria as for first-generation biofuels.

4. What further action is needed to make it possible to achieve a 10% biofuel share?

The problem
The proposed target for biofuels is a 10% share, by energy content, in 2020.
The easiest way to get biofuels into the market is by blending them directly with ordinary fuel and using them in low blends in ordinary vehicles.
The most widely available biofuels today are ethanol (replacing petrol) and biodiesel (replacing
diesel) -although other petrol and diesel replacers exist.
The fuel quality directive (directive 98/70/EC) limits the direct blending of ethanol in petrol to 5% by volume. This equates to 3.4% by energy content.
The diesel standard (EN590) limits the direct blending of biodiesel in diesel to 5% by volume. This equates to 4.4% by energy content.
If the 10% (energy content) target is to be met mainly by direct blending of ethanol and biodiesel, these limits will need to be changed. They will also need to be changed if the existing 5.75% (energy content) target for 2010 is to be met mainly by direct blending of these fuels.

The current situation
As a first step, the Commission has proposed amending the fuel quality directive to increase the maximum blending of ethanol in petrol to 10% by volume (6.8% by energy content). This proposal is under consideration by the Council and the European Parliament.
The Commission has given the European Committee on Standardisation (CEN) a mandate to amend the diesel standard to allow a 10% biodiesel blend (8.8% by energy content). This process may take a long time – perhaps 4 years – and may not lead to widespread availability of fuel containing 10% biodiesel.

Question 4.1:

Should the legislation include measures to ensure that diesel containing 10% biodiesel (by volume) can be placed on the market, and is in fact placed on the market?

In order to meet the European target of incorporating 10% biofuels, EN590 must be revised together with industry. Such cooperation must take precedence; nevertheless, if this path were not able to be pursued, it might be necessary to take legislative action to ensure that the 10% incorporation target is complied with. Furthermore, EN 4214 and its specifications must be maintained for biodiesel. The necessary legislative adjustments must also be made in order to allow ethyl esters (FAEE) to be used as biodiesel, which is currently limited solely to methyl esters (FAME).

Other options for solving the problem
Even if the changes described in the last section come to fruition, they will not be enough for the 10% target to be met – if it is to be met mainly by direct blending of ethanol and biodiesel.
The term "biodiesel" in this section refers to the fuel also known as FAME (Fatty Acid Methyl Ester).
The target could be met through other means than the direct blending of ethanol and biodiesel:

1. 1. More ethanol can be added to petrol in the form of the fuel additive ETBE.
However, limits on ETBE blending in the fuel quality directive mean that even with maximum use of ETBE, the 10% target will not be reached.

2. 2. Ethanol and biodiesel can be used in high blends – 85% or 95% ethanol, 100% biodiesel, for example – outside the scope of the fuel quality directive and the diesel standard. However, unlike low blends, these fuels need specialised vehicles and distribution systems.

3. 3. Other biofuels that can be used are biomethane (made from biogas), methanol (made from biomass-based synthesis gas) and dimethyl ether (DME). However, these fuels also need specialised vehicles and distribution systems.

4. 4. New types of biofuel or ways of using them could avoid the blending constraints in the fuel quality directive and the diesel standard. An example is the second-generation biofuel "BTL" ("Biomass-to-liquid" or Fischer-Tropsch diesel). However, it is not certain when or if these fuels and technologies will come onto the market on a wide scale.

Question 4.2:

Should the legislation include measures to encourage the use of ethanol and biodiesel in high blends? If so, what?

The binding EU 10 % biofuels target until the year 2020 needs to be implemented by appropriate measures. If no specific measures are undertaken it seems clear, that the poor results of existing biofuels policies in most of the Member States will not be improved. Therefore, it is necessary to decide upon a clear road map for the introduction of biofuels in

the market as for example the year by year increasing minimum requirements for biofuels in the German biofuels law. The economic operators need clear framework conditions, otherwise the required heavy investments will not be made.
With regards to the ongoing market introduction of the high blend biofuel E 85 in the member states E 85 should be integrated on the basis of CWA 15293 in directive on fuel quality as new annex VII.
To increase the rate of biodiesel incorporation in diesel, the biodiesel must be of a high quality. The biodiesel standard EN 14214, which meets the technical needs of the automobile industry, must therefore be maintained. COPA and COGECA support the revision of the diesel standard EN 590 at the European Standardisation Committee.
The direct incorporation of ethanol into petrol (ethanol has a positive impact on the environment) should also be encouraged – following in the footsteps of Brazil and the United States. To this end, COPA and COGECA support the Commission's recent proposal concerning the revision of the directive on fuel quality (COM(2007)18 final). They ask the Council and the European Parliament to adopt this proposal rapidly to incorporate 10% bioethanol directly into petrol. This being said, COPA and COGECA ask for the Commission's proposal to be modified on the basis of the following proposals:
The total oxygen compound content of 3.7% should be increased so as not to exclude the incorporation of ethanol in the form of ETBE; the target imposed on fuel suppliers to reduce greenhouse gas emissions from fuel by 1% annually from 2011 must be replaced with a mandatory annual biofuel incorporation target. The reports on the monitoring of greenhouse gas emissions required from fuel suppliers from 2009 must be replaced by reports on biofuels.

Question 4.3:

Should the legislation include measures to encourage the use of biomethane, methanol and DME in transport? If so, what?

Biomethane can in principle be used as.transport fuel in vehicles that are on the market using natural gas, but biomethane might be used more easily e.g. for heating purposes being introduced in the natural gas grid. Biomethane if used as transport fuel would have to face similar problems as natural gas..

Possible way forward

If none of these methods can be relied on to ensure that the target will be met, it will be necessary to allow a further increase in the share of ethanol that can be blended in ordinary petrol – up to 20%, for example – and perhaps also to allow a further increase in the share of biodiesel that can be blended in ordinary diesel – up to 15%, for example.
For manufacturers to take these requirements into account in designing the vehicles that will be on the roads in 2020, a decision should be made soon.

Question 4.5:

Should the legislation ask the Commission to review, by a given date, whether it is possible to be confident that the 10% target can be achieved through:
a) rules that allow 10% blending by volume of ethanol in ordinary petrol, plus
b) rules that allow 10% blending by volume of biodiesel in ordinary diesel, plus
c) the four options listed under 'other options for solving the problem';
If so, what should the date be?
If the review were to conclude that the target is unlikely to be met, what action should the Commission take?

As proposed above in answer 4.2 it is necessary to decide upon a clear road map for the introduction of biofuels in the market and year by year increasing minimum requirements for

biofuels as for example in the German biofuels law. The logistical barriers on transporting bioethanol must be lifted. If these clear framework conditions for the economic operators exist, the 10 % target is likely to be achieved. To enable economic operators to fulfil the biofuels requirements E 85 should be integrated on the basis of CWA 15293 in the Directive on fuel quality as new annex VII.
Legislation should ask the Commission to monitor and publish reports year by year on the achievement of the biofuel targets in all of the individual Member States and undertake appropriate measures to support the achievement if necessary.
The achievement of the 10 % target should not be challenged.

Question 4.6

More generally, what role should taxation play in the promotion of biofuels (considering different situations such as low blends, high blends and second-generation biofuels)?

Detaxation of pure or directly or indirectly blended biofuels must not be called into question if incorporation becomes mandatory. Reduced taxes on biofuels has been the main force behind a broad introduction of these fuels in some Member States, e.g. Sweden where 28 % of the country's total energy consumption comes from biomass sources In any case, it is unacceptable, when energy is equal, for biofuels to be taxed at higher levels than the equivalent fossil fuels.

See also the Green Paper on market-based instruments for environment and related policy purposes, COM (2007) 140