

Verneuil, le 20 juin 2007

Contribution of INERIS

to the European Commission's public consultation exercise

"Biofuels issues in the legislation of renewable energy"

The National Institute of Industrial Environment and Risks (INERIS) was founded in 1990. Its mission is to carry out, or to have carried out, studies and research that make it possible to prevent the risks that economic activities can present to the health and safety of persons and property and to the environment, and to provide a full range of services aimed at helping companies to attain this objective.

This paper summarises the position of INERIS on the questions submitted in the European Commission's Public Consultation Document issued in April-May 2007.

1 How should a biofuel sustainability system be designed ?

Question 1.1 Do you think the « possible way forward » described above is feasible ?

As expressed in general considerations and more practical issues in Boxes 1 and 2, we would consider the « possible way forward » guideline must be improved in the following way.

Instead of a list of criteria to be fulfilled by the biofuels, the application of a quantitative methodology for measuring quantitatively « sustainability » for a given biofuel in a given territory should be the target. This methodology shall rely on a number of measurable criteria that relate to conventional factors, currently taken in account for sustainability evaluation (economical, societal and environmental factors) but also on cross-linking factors such as the management of safety and sanitary issues. The methodology shall be able to analyse the criteria on the full life cycle of biofuels.

A special emphasis could be put on some particular points for example:

- pressure on biodiversity and environment
- emissions of oxygenated compounds increase (aldehydes for ex.)
- ...

Certification procedures shall be developed to make sure that adequate and impartial use of such a methodology will be achieved to control sustainability of a given biofuel type. Certificates of conformity to criteria that would qualify a given biofuel as "sustainable" would be delivered by accredited entities, according to rules that have to be defined and agreed by EU members.

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Research is currently undertaken in some EU member states (including France) to make such methodologies available soon. Imported biofuels should be submitted to the same criteria to be allowed for use in the EU.

BOX 1 : according to what has been said before, we think the criteria indicated are too restrictive (no societal criteria for instance. At least human rights and health are missing).

Question 3.1

How should 2nd generation biofuels be defined ?

In our view « advanced biofuels » would be a better word for designating what we previously called 2nd generation biofuels.

Labelling a biofuel as « advanced » may result from use of unusual type of feedstock (eg. criteria of type a), or may be justified essentially to major breakthrough in processing biofuels (e.g. criteria of type b), but more generally may be due to a combination of the 2 criteria a) and b) : producing biodiesel from 1 step process making direct transformation of oil seeds into biodiesel (instead of the conventional three -step process) can be qualified as an advanced biofuel. Making use of the full agroressource (or of the non-alimentary part), instead of part of it, whatever the process in use is, would also in our view deserve « advanced biofuel » labelling.

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.

See above : we believe a sustainability certification system for biofuels would be a better solution. Several research works tend to demonstrate this in Europe today.

Question 3.3 : Should 2nd generation biofuels only be able to benefit from this advantages if they also achieve a defined level of greenhouse gas saving ?

Greenhouse Gas saving is the priority, but life cycle analysis has to be taken into account in any way. The producing agroressources practices for the 2nd generation biofuels must respect the environment, preserved health and safety of population and workers, biodiversity, soil quality, water resources, etc.

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

Promote investigations to develop E-diesel, and E-biodiesel (that are blends of ethanol into diesel, suitable for diesel engines) that could make a suitable link

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between markets of bioethanol and biodiesel. It is the more interesting in the EU due to decrease in gasoline consumption and increase in diesel fuel consumption. Considerable work has already been done in the past in the USA to study feasibility of such a solution for heavy lorries.

Promote and encourage use of biofuels in other transport modes (rail, marine, in a first step, air in a second step...).

Question 4.2 : Should the legislation include measures to encourage the use of ethanol and biodiesel in high blends ? If so, what ?

Such measures would in our view be less effective as the progressive development of (increased) low blending of bioethanol and biodiesel in the public fleets of vehicles

Question 4.3 :

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

Encouragement of such a measure shall be limited to captive fleets, as the use of those fuels require careful safety precautions that would not necessarily be well understood by the public.

Potential issues on health impact and safety have to be carefully taken into account previously.

Question 4.6 : More generally, what role should taxation play in the promotion of biofuels (considering different situations such as low blends and second generation biofuels ?

Maintain at least competitiveness of biofuels as compared to fossil fuels from the end-use point of view.

Applying increasing taxes to fossil fuels would be an interesting solution to promote renewable energies and energy saving in general.

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