

## **The European Biofuels Technology Platform's contribution to the biomass sustainability certification issue, in the frame of the EC consultation.**

---

**This paper only intends to bring EBTP's contribution to the biomass sustainability certification issue, in the frame of the EC consultation. Beyond the issue of biomass certification, a broader contribution to the public debates on biofuels is in preparation within EBTP.**

### **Introduction**

Biomass is high on the European policy agenda and is expected to play a major role in achieving the 2020 targets to increase the renewable energy in the EU's overall energy mix (from less than 7% today to 20% by 2020). Among specific targets there are expectations for a more than tenfold increase within the biofuels sector (from 3.3 Mtoe in 2005 to 30- 35 Mtoe in 2020).

The challenges of developing successful and sustainable biomass chains for fuel, energy, industrial products, etc. are well understood in Europe. Strong efforts are deployed by the relevant scientific and industrial actors to tackle issues of security of supply, efficiency in resource production and conversion, logistics, compatibility with existing infrastructure and environmental regulations as well as investigation on innovative production pathways and concepts that could bring a significant contribution to the very ambitious EU objectives.

However, more than ever, the perception of biomass by certain interest groups and advertised by the media among the wider public is jeopardized by a vivid, on-going debate with discussions mixing up energy production, higher food prices, new opportunities for rural areas and agriculture, third world poverty and food crises, deterioration of biodiversity and landscape, climate change and greenhouse gasses emissions, new technologies, employment and so on.

The stronger debates seem to focus on the upstream and specifically the production of feedstocks for biofuels on agricultural land, in conflict with vital sectors such as food and feed. The risk of using land of high conservation value is also a concern.

The **European Biofuels Technology Platform (EBTP)** was established in June 2006 (<http://www.biofuelstp.eu/>). It brings together the knowledge and expertise of stakeholders from industry, biomass resources providers, research & technology development organisations and NGOs.

Its mission is to contribute to the development of:

- cost-competitive world-class biofuels technologies,
- a healthy biofuels industry supplying sustainable biofuels in the European Union,

through a process of guidance, prioritisation and promotion of research, development and demonstration activities.

Under this framework, the EBTP considers the development of sustainability criteria an essential mechanism for the future development of bioenergy and biofuels.

### Relevance and challenges of sustainability

Sustainability is a rich concept because it covers and combines three essential dimensions (economy, environment, social). The practical deployment of this concept is very challenging because of the complex and sometimes conflicting interactions between these three dimensions and across different sectors (agriculture, energy, pulp & paper, transportation ...)

There is no absolute yardstick of sustainability that could be applied to any system or product, hence the need for a pragmatic approach aiming at clear objectives.

### Key issues regarding the development of sustainability criteria

In collaboration with members of the Suschem, Forest Based and Plants for the Future Technology Platforms, the EBTP had a consultation among its members and the following issues emerged as important when setting criteria and developing methodologies:

- **Terminology** (for example the different types of primary biomass, intermediate bioenergy carriers, by products of non energy value chains, final bioenergy carrier being turned into heat, electricity or mechanical energy ...) needs to be very carefully defined in order to develop relevant sustainability criteria. Two levels of terminology could be developed:
  - a very precise one to be used to define, measure and check the specific sustainability criteria of relevance to bioenergy value chains
  - a simplified version to be used to communicate to the public clear and simple messages. Coherence between these two levels should be ensured.

This terminology needs to be developed with the relevant stakeholders and should become the reference terminology. Today no such reference terminology exists for biomass and bioenergy, while different stakeholders and/or organisations have proposed their own.

- **Accounting for the value of co-products:** 'Energy' crops under the wider concept on 'non- food' or '4F' (food, feed, fibre and fuels) crops may be used for a variety of applications and end products so attention should be paid in each case for the co-products (e.g. resins, proteins, etc.) that cannot be accounted for in energy terms.

- **Sustainability criteria should be as consistent as possible between different biomass applications**, unless there are good reasons for differentiation.
- Apart from direct (chain) sustainability issues, indirect effects should also be paid attention to (both in fuel and in E/H applications).
- Relevant stakeholders need to be involved & future activities should build on the experience gained from previous 'standard- setting' (soy, palm, wood) and national biofuels activities (DE, NL, UK).
- The application of adequate sustainability criteria in non-EU countries is considered important to strengthen the acceptance of this concept in Europe. These of course should be elaborated with stakeholders from the respective non- EU regions and take into account the different driving forces for the production / use / trade of biomass.

### Corresponding research areas from EBTP Strategic Research Agenda

In January 2008, the European Biofuels Technology Platform has presented its 'Strategic Research Agenda & Strategic Deployment Document', highlighting the Research, Technology Development and Demonstration (R&D&D) efforts required to achieve the ambitious EU goals for biofuels in the context of its Energy and Climate Policy. .

Within the research priorities included in the SRA, the following ones are in close relation to the development of tools and databases related to sustainability issues and the respective interdependencies with other sectors at different scale, geographic and temporal levels:

- Develop integrated approaches for regional forecasts by combining top- down and bottom- up approaches, including externalities (potential reductions in GHG emissions, land use changes imports, interactions of different markets, policies, etc.).
- Identify and benchmark supply system tools taking into account various land use and market interdependencies, transport, international trade, etc.
- Develop a harmonized approach in order to the constraints for biomass supply & evaluate how sustainability can affect future land use changes (and vice-versa) and define trade-offs.