

Sustainability Criteria for Solid & Gaseous Biomass

In reaction to EC COM(2010)11 final

A EURELECTRIC Position Paper



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► Growth, added-value, efficiency

Environmental Leadership

► Commitment, innovation, pro-activeness

Social Responsibility

► Transparency, ethics, accountability

Sustainability Criteria for Solid & Gaseous Biomass

TF Biomass

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STATEMENT OF KEY VIEWS

This paper is published in reaction to the European Commission's report on Sustainability requirements for the use of solid & gaseous biomass in electricity, heating and cooling, published on 25th February 2010 (COM(2010)11 Final). It encompasses both our overall views on biomass sustainability and specific reactions to the EC report.

EURELECTRIC views bioenergy as a key tool in fulfilling the EU's 2020 renewable energy targets and curbing climate change. Forecasts suggest that electricity production from biomass will increase from 90 TWh in 2006 to between 200 and 360 TWh in 2020¹. EURELECTRIC members will play the major role in developing this growth in biomass fired power generation. Biomass is an essential part of the renewable portfolio; unlike other sources of renewables, it can provide baseload power generation and heating, and can also be utilised in existing thermal plants. Furthermore, biomass can be used as fuel in the automotive and transport sector. We favour the use of sustainable biomass, avoiding potential detrimental effects on the environment and social welfare. We believe that in the medium term, the use of biomass in all sectors – not just energy - should be subject to sustainability requirements. However, there is a danger that the administrative burden of verifying such sustainability requirements could hinder the positive development of biomass use – therefore criteria must be proportionate and appropriate to the purpose.

We advance the following views on sustainability criteria for solid biomass for energy production:

- EURELECTRIC is convinced that **biomass is a key renewable source and will form a major part of reaching the 2020 targets.**
- As a consequence, EURELECTRIC believes that the need for biomass for energy will increase over the coming years, necessitating much greater import from outside Europe. **We fear that the development of many different national sustainability schemes in response to this will create inefficiencies and increase costs,** leading to barriers to biomass trade and deterring investment in both biomass cultivation and biomass-powered electricity generation, because of uncertainty over long-term fuel supply in a changing regulatory environment.
- EURELECTRIC believes that EU-wide harmonised sustainability criteria will be needed in due time to provide reliable evidence to the general public that biomass is a sustainable fuel. However, before imposing such criteria, further consultation and experience of biomass markets is needed, but the finalisation of the criteria should not wait longer than the end of 2011. **In order to achieve this timescale, we believe that the dialogue between policymakers and different**

¹ Estimates of electricity production from biomass in 2020 with 20% RES target achieved:

1) ~200TWh: EURELECTRIC Power Choices study (2010, *forthcoming*) (PRIMES model, 2009 baseline)

2) ~360TWh Capros et al (2008) Model-based Analysis of the 2008 EU Policy Package on Climate Change and Renewables (report for EC DG Environment, using PRIMES model, 2007 baseline)

stakeholders on creating mandatory criteria must start now.

- In developing criteria, through an **open, consultative process**, EURELECTRIC believes that the Commission **should make use of lessons learnt through existing voluntary schemes and legislation**. Several member states and industries already have good experience of using sustainability criteria which would usefully contribute towards the design of appropriate criteria at EU-level.
- EURELECTRIC recognises that the largest share of solid biomass used in the EU is produced within the union. Many Member States, particularly those who are large producers of solid biomass, have **national legislation on forestry that comprehensively covers sustainability issues** relevant for that geographical area. Such legislation should be taken into account, and, if possible, and where appropriate, **biomass produced in such states should be considered sustainable by default or by a simplified “fast-track” process**. This concept could also be extended to non-EU countries where legislation is sufficient and well-enforced, in order to avoid disproportionate administrative burden that may hinder biomass market development.
- EURELECTRIC considers that sustainability criteria **should include requirements for sustainable production and positive greenhouse gas balance**. However the inclusion of use in greenhouse gas balance needs to be approached carefully.
- EURELECTRIC believes that one of the key missions of EU should be to minimize barriers and ensure supply in an EU wide biomass market – **harmonised, mandatory criteria will play a key role in development of this market**.
- EURELECTRIC considers that **sustainability criteria should progressively be applied to all uses of solid biomass regardless of its end-use**. This will assure transparent, non-discriminatory and objective rules for players in the biomass market and ensure that “unsustainable biomass” is not simply diverted from the energy sector to other users. Sustainability criteria for the non-energy industry should be equal in most respects apart from greenhouse gas balance which would not be practical to apply to uses in the non-energy sector.

GUIDING PRINCIPLES OF FUTURE CRITERIA

EURELECTRIC would clearly like to play a constructive role in the development of sustainability criteria over the next years.

EURELECTRIC envisages that the difference between solid and liquid biomass will progressively decrease. Therefore, continuation of the current status quo, under which sustainability criteria for biofuels and bioliquids are being implemented but not for solid and gaseous biomass, will become untenable. Criteria for sustainable production of biofuels, solid biomass and gaseous biomass should ideally be based on the same concepts. Therefore, we consider that a useful basis for discussion is established with the

guidance criteria defined in the EC report, given that they are based on the existing guidelines for biofuels in the 2009 Renewables directive. However, we do feel that these guidelines would require significant modification in order to develop mandatory sustainability criteria.

EURELECTRIC favours a careful approach for the design and verification of adequate sustainability criteria, based on the following key principles

- Criteria must be well-developed, taking into account the widely different environmental and sustainability issues in different Member States and climatic zones.
- Criteria must be as simple as possible to implement, avoiding unnecessary burdens on companies
- Criteria should have two key purposes – to ensure the sustainable production of biomass and an acceptable greenhouse gas balance for biomass utilized for energy production.

We therefore consider the specific aspects of criteria as follows:

A. Sustainable production

We consider sustainable production to include but not be exclusive to the following:

- a) biodiversity, carbon stocks and soil productivity,
- b) responsible management of raw material sources in accordance with:
 - i. FSC (forests), PEFC (forests), RSPO (palm oil), RTRS (soy), BSI (sugarcane), Eurepgap (agriculture) or equivalent global standards,
 - ii. national laws and regulations stipulating sustainable forest or agricultural management principles similar to the requirements of the global standards mentioned.

B. Greenhouse gas (GHG) balance:

- 1) Greenhouse gas calculation should be based on simple and transparent rules relying on the conversion of energy balance into GHG balance using reference factors for fossil fuels and electricity.
- 2) We agree to adopt the same greenhouse reduction requirements as for biofuels, and believe that the following aspects should be included in the calculation of GHG balance, but with the further considerations mentioned:
 - a) Land use change – land use change should be dealt with through simple default values for certain types of land use change rather than the complex calculations referred to in the report
 - b) Cultivation

- c) Processing
- d) Transport – transport should be dealt with carefully and transport emissions should not be included where they have already been included in emissions trading (e.g. electricity used for electric trains; in future possibly intra-EU shipping)

We consider the inclusion of end use in greenhouse balance criteria is challenging and must be considered very carefully.

C. By-products, residues and waste

According to the type of source of raw material, the certification process could be simplified by reducing the scope of criteria and providing easier verification. Special types of resources could be considered for this like by-products, residues and waste. But a clear definition of those three concepts is needed (some residues are needed for fertilising the soil in the forest), as well as the corresponding reduced list of criteria (see e.g. NTA8080 in the Netherlands). Residues should be defined very clearly, for example “material which remains after a finalised process, whose main purpose is not to produce this material”. We refer to the following specific points:

- **Waste** could be totally excluded from verification through sustainability criteria (e.g. Municipal Solid Waste).
- **Residues** do not generally require additional land use and therefore the set of sustainability criteria to verify can be made much shorter.
- **By-products** are high-value residues. Their usage in the energy production can be in competition with other industrial sectors, therefore they should be subject to similar sustainability criteria as other forms of biomass.

CONCLUSION

EURELECTRIC believes that sustainability criteria need to be put in place within the next two years, possibly in advance of the proposed report by December 2011. We argue that the criteria should be in accordance with the principles we have set out in this document. We believe that the Commission should start an open, consultative process to form these criteria,

EURELECTRIC looks forward to being actively involved in this process.



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