

Promotion of the use of energy from renewable sources. Renewable Energy Directive

2008/0016(COD) - 25/02/2010 - Follow-up document

The Commission presents its report on sustainability requirements for the use of solid and gaseous biomass sources in electricity, heating and cooling. To recall, Directive 2009/28/EC (the Renewable Energy Directive) provides that the Commission should report by December 2009 on requirements for a sustainability scheme for energy uses of biomass other than biofuels and bioliquids (i.e. solid and gaseous fuels in electricity, heating and cooling). This report is intended to fulfil that obligation.

In the EU, around 5% of final energy consumption is from bio-energy. The projections made for the [Renewable Energy Road Map](#) of January 2007 suggested that the use of biomass can be expected to double, to contribute around half of the total effort for reaching the 20% renewable energy target in 2020.

The growing use of biomass for energy purposes already gives rise to international trade, and this market is bound to expand in future. Member States that are dependent on biomass imports increasingly turn to sources in other Member States or outside the EU. For biomass produced within the EU, the current legal framework (notably related to agriculture and forest management) gives certain assurances for the sustainable management of forest and agriculture. The same is true for some third countries - but others lack such a framework. For this reason, concerns have been expressed that an expansion of international trade of biomass and increasing imports from third countries may lead to the unsustainable production of biomass. As a result, the main importing countries of biomass have started to develop national sustainability requirements for bio-energy. This has led to certification schemes (voluntary and mandatory) in the agriculture, forestry and energy sectors which are not necessarily complementary or compatible. This in turn has led to calls from utilities, environmental organisations and biomass importing countries for a common sustainability scheme for biomass in order to limit intra-EU cross-border barriers in setting up bio-energy projects.

The report covers the main sustainability issues, and makes recommendations for actions to be taken.

Recommendations for appropriate action to address sustainability issues: the sustainability concerns raise the issue of the level at which action should be taken and the content of the action.

Level of action: the wide variety of biomass feedstocks make it difficult to put forward a harmonised scheme at this stage. Different feedstocks present different challenges to sustainable production, greenhouse gas performance or efficient energy conversion. It is also considered that the sustainability risks relating to domestic biomass production originating from wastes and agricultural and forestry residues, where no land use change occurs, are currently low. For these reasons, the Commission does not at this stage propose binding criteria at EU level. However, to minimise the risk of the development of varied and possibly incompatible criteria at national level, leading to varying degrees of mitigation, barriers to trade and stifling the growth of the bio-energy sector (and imposing increased costs on Member States for meeting their national targets), the Commission makes recommendations to Member States on the development of their sustainability schemes.

Recommended sustainability criteria: the Commission recommends that Member States that either have, or who introduce, national sustainability schemes for solid and gaseous biomass used in electricity, heating and cooling, ensure that these in almost all respects are the same as those laid down in the Renewable Energy Directive. This would ensure greater consistency and avoid unwarranted discrimination in the use of raw materials.

Due to the characteristics of the production and use of solid and gaseous biomass used in electricity, heating and cooling, the following differences are appropriate:

- according to the Renewable Energy Directive, wastes and certain residues should only be required to fulfil the requirements of the Directive, i.e. the greenhouse gas performance criteria. However, it is recommended that the greenhouse gas performance criterion is not applied to wastes, but to the products for which default greenhouse gas emission values have been calculated as listed in Annex II;
- the methodology for the calculation of greenhouse gas emissions should be extended, resulting in the methodological rules described in Annex I. Default and typical greenhouse gas performance values calculated using this methodology are presented for primary solid and gaseous biomass fuels in Annex II;
- to stimulate higher energy conversion efficiency, Member States should in their support schemes for electricity, heating and cooling installations differentiate in favour of installations that achieve high energy conversion efficiencies, such as high efficiency cogeneration plants. For small-scale solid-fuel boilers, the Commission is expected to propose minimum efficiency and environmental requirements related to air quality in 2010. Emissions related to land use, land use change and forestry (LULUCF) accounting and provisions related to the UN programme for reducing emissions from deforestation and forest degradation in developing countries (REDD) could help addressing land use related sustainability issues in third countries. As such rules are not yet in place at international level, and because of the relatively higher sustainability risks related to forestry, the Commission will closely monitor progress in this field and, by 31 December 2011, reassess the situation.

Scope of application of the criteria: the biomass sector is fragmented and there are numerous small-scale users of biomass. It is recommended that sustainability schemes apply only to larger energy producers of 1 MW thermal or 1MW electrical capacity or above. Placing requirements on small-scale producers to prove sustainability would create undue administrative burden, although higher performance and efficiency should be encouraged.

Requirements for reporting and monitoring: biomass trade in the EU plays an important role in the development of the bio-energy sector. National and European statistics have large gaps concerning the amount of biomass used for energy purposes. In order to improve data on biomass use, it is recommended that Member States keep records of the origin of primary biomass used in electricity, heating and cooling installations of 1 MW or above. Member States are also encouraged to monitor small-scale (mainly household) biomass use through surveys and strive to improve the availability and quality of data.

It is recommended that the information collected by Member States is communicated to the Commission so that the Commission may take this

into account in monitoring potentially vulnerable areas. Further development on the emergence of wider sustainability regimes affecting forests (e.g. sustainable forest management schemes) or other agricultural or forest products will be monitored, to assess whether sustainability requirements for only the energy uses of forest and agricultural biomass help to deliver on sustainable development for the forest and agricultural sectors. The Commission will also examine efforts to account for global emissions from land use, land use change and forests under the United Nations Framework Convention on Climate Change.

These recommendations aim to promote the sustainable production and use of biomass, a well functioning internal market in biomass trade and to lift barriers to bio-energy development. Member States must ensure that national sustainability schemes do not constitute a means of arbitrary discrimination or a disguised restriction on trade.