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EUROPEAN BIOMASS ASSOCIATION

AEBIOM position on "A sustainable bioenergy policy for the period after 2020"

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The European Biomass Association (AEBIOM) is the common voice of the bioenergy sector with the aim to develop a sustainable bioenergy market based on fair business conditions.

AEBIOM is a non profit Brussels based international organisation founded in 1990 that brings together 29 national associations and around 90 companies from all over Europe thus representing more than 4000 indirect members including mainly companies and research centers.

KEY MESSAGES

What should the EU policy framework on the sustainability of bioenergy include ? AEBIOM, along with its members, has identified the following key points that should set the future EU sustainable bioenergy policy:

Define sustainability rules based on biomass types and categories. Today, all types of biomass can be used in the three main energy sectors (H&C, electricity, transport). Taking a concrete example, the same woodchips can be used to produce heat, electricity and lignocellulosic biofuels. In this context, regarding the raw material sustainability, it is important that the Commission takes an approach based on the biomass types and categories rather than on the energy end use or form.

GHG emissions reduction. Bioenergy contributes to climate change mitigation. In order to make this contribution clear and ambitious, AEBIOM is in favor of the EU policy setting a GHG emissions savings threshold for all bioenergy (60% may be relevant and appropriate). The calculation methodologies should be the ones already endorsed by the European Commission and should be set for the period 2020-2030 in order to provide certainty to investors.

Land sustainability criteria for agricultural biomass. The biofuels / bioliquids sustainability land criteria set by the EU RES directive were mainly established for agricultural biomass. This biomass can be used for producing heat, electricity or biofuels. This is why AEBIOM is of the views that these criteria should be maintained and their scope extended to all primary agricultural biomass, irrespective of their final energy use.

Risk based approach for forest biomass. Forestry is not an EU competence. However, it is essential to ensure that forest biomass used for energy purposes does not lead to environmental concerns. To this aim, AEBIOM supports the Risk Based Approach (RBA) at macro level (regional or national). This should address possible risks related to forest resources, carbon in forests and forest ecosystems (biodiversity, soil, water…). It should consist in listing and explaining the existing tools in place at national/regional level to address and monitor the risks identified and of evaluating whether these tools allow for the mitigation of risks.

Installations concerned. AEBIOM has been leading the EU project BASIS, looking at energy installations consuming woodchips with a fuel capacity over 1MW. This project shows that the 20MW fuel capacity threshold represents 14,8% of the installations and 73,7% of woodchips consumption. This share remains close (75,8%) also when considering pellets. AEBIOM is of the views that this threshold should be considered in the EU policy.

Recognition of voluntary schemes. Voluntary schemes should have the possibility to be recognised by the Commission if they meet the EU requirements, following the same approach as biofuels voluntary schemes recognition.

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Background

The European Biomass Association (AEBIOM) welcomes the initiative of the European Commission to define a sustainable bioenergy policy for the period post-2020, and to open up the debate through its public consultation. AEBIOM has long been calling for the introduction of a European harmonised sustainability framework for all bioenergy. Regarding solid and gaseous biomass, the current situation, consisting of different national legislations and private initiatives, with the EU regularly reporting on this subject, is creating uncertainty. Also, this situation sometimes makes trade more complicated. Overall, an EU harmonised policy would contribute to secure investments, to create a level playing field and to answer concerns on related future developments. It would demonstrate the sector's responsibility and commitment to sustainability and would accompany a smoother development of bioenergy.

Biomass is a major renewable energy source for the EU (61% of renewable energy consumption in the EU), and will play a crucial role in reaching the 2020 and 2030 renewable energy targets as well as the 2050 EU decarbonisation objective. In some EU Member States, biomass is already the leading energy source, and has surpassed fossil fuels consumption (eg: Sweden and Finland). In others, far less biomass is used and there is significant room for further utilisation. In terms of indigenous energy production, European biomass is about twice the oil production and equals fossil gas. The potential for bioenergy is still high in terms of strengthening EU energy security, decarbonising the EU economy, creating jobs, boosting innovation and competitiveness etc…

In this context, following the COP 21 agreement, bioenergy is a major asset for energy transition. AEBIOM, together with its members, has listed in this paper the key aspects that should be considered for the future EU sustainable bioenergy policy.

Define sustainability rules based on biomass types and categories

The ongoing public consultation led by the European Commission is focused on a sustainable bioenergy policy concerning all bioenergy uses. Today, all types of biomass can be used in the three main energy sectors (H&C, electricity, transport) and technological developments make it possible to produce all bioenergy forms in the same process. Taking a concrete example, the same woodchips can be combusted to produce heat and / or electricity and used for producing lignocellulosic biofuels. Drawing on this, it makes sense to address the raw material sustainability irrespective of its energy use. In this context, regarding the raw material sustainability, it is important that the Commission takes an approach based on the biomass types and categories rather than on the energy end use or form.

Summary of AEBIOM position on possible rules for biomass types and categories

Type of biomass	Biomass category	GHG savings according to methodologies from the Renewable Energy Directive and from the 2010 Commission recommendations[1] (confirmed in 2014[2])	Biofuels land sustainability criteria (art. 17.3 to 17.6 of the Renewable Energy Directive)	Risk Based Approach (RBA)	Chain of Custody or other evidence of origin
Biomass directly from forest (low value roundwood ; tops, branches)	Primary biomass	X		X	X
Agricultural crops		X	X		X
Agricultural energy crops		X	X		X
Agricultural residues (eg: straw)		X	X		X
Biomass from wood industry residues (eg: saw dust)	Secondary biomass	X			X
Biomass from agri industry residues (eg: bagasse)		X			X
Biowaste and post consumer biomass	Tertiary biomass	X			X

1. Report on sustainability requirements for the use of solid and gaseous biomass sources in electricity, heating and cooling, Commission Communication, 2010, COM(2010)11)
2. State of play on the sustainability of solid and gaseous biomass used for electricity, heating and cooling in the EU, Commission Staff Working Document, 2014, SWD(2014)259

Specific remarks regarding forest biomass

Before commenting further on the future EU sustainable bioenergy policy, it is important to recall some important issues concerning forest biomass:

- The woody bioenergy sector is characterised by many small and medium-size enterprises, and the biomass is supplied by hundreds of thousands of forest owners, besides larger forest industries and forest owners (companies and state forests). These characteristics make it essential to reach a balanced approach to develop sustainability criteria that guarantee that the increased use of bioenergy is met with sustainably sourced biomass, while minimising new administrative burdens and not hampering biomass mobilisation.

- Forests are already subject to several sets of legislation and to voluntary sustainable forest management (SFM) certifications. The future EU policy should take into account this existing framework.

- Biomass from forests is used for wood products (sawn wood, panels, paper…) and for energy purposes (heat, electricity and advanced biofuels). When managing forest, the forest owners do not know what the individual tree or tree part will finally be used for, as this depends on market prices, and decisions taken later in the supply chain. In the medium-to-long term, it may be relevant to adopt a holistic approach.

Greenhouse gas emissions savings threshold

Most of the solid biomass pathways are leading to significant greenhouse gas (GHG) emissions reduction[3],so representing an important alternative to fossil fuel in the fight against climate change. A GHG emissions savings threshold would allow to prove and ensure a guaranteed minimum savings level.

AEBIOM position

- Set a single GHG emissions savings threshold, irrespective of the biomass type, final energy use or form: 60% may be relevant and appropriate.

- Methodologies: For biofuels, GHG emissions should be calculated according to the current Renewable Energy Directive methodology. For H&C and electricity, GHG emissions should be calculated according to the methodology recommended by the European Commission in 2010[4] and confirmed in 2014[5].

- Defaults values should be established, as is the case today.

- The methodologies and default values should be established for the period 2020-2030 as potential future changes in methodology or values would create uncertainty for investors. The experience of the first generation biofuels sector (with changes related to ILUC) has shown how uncertainty is detrimental to investments in the long run.

3. State of play on the sustainability of solid and gaseous biomass used for electricity, heating and cooling in the EU, Ibid
4. Report on sustainability requirements for the use of solid and gaseous biomass sources in electricity, heating and cooling, Ibid
5. State of play on the sustainability of solid and gaseous biomass used for electricity, heating and cooling in the EU, Ibid

RES Directive land sustainability criteria and sustainable forest biomass

AEBIOM position on agricultural biomass

• The RES Directive land sustainability criteria currently applying to biofuels and bioliquids should be maintained and their scope extended to all primary agricultural biomass, irrespective of their final energy use, as this biomass can be used to produce heat, electricity or biofuels.

AEBIOM position on forest biomass:

• The EU biofuels / bioliquids land sustainability criteria are designed for agriculture and cannot be transposed to forest biomass.

• The development of bioenergy from forest biomass sources is raising questions and concerns regarding forestry in particular on possible impacts on forest resources, carbon in forests and on forest ecosystems (biodiversity, soil, water…). The EU sustainable bioenergy policy should focus on these questions.

• In order to address the above mentioned challenges, AEBIOM supports the Risk Based Approach (RBA). Such an approach is already in place in the UK, Denmark and Belgium legislations, and in existing voluntary schemes (eg: Sustainable Biomass Partnership (SBP))

- The spatial dimension of the RBA should be the macro level (national or regional level) and not the stand level.

- The RBA should consist in listing and explaining the tools and processes in place at national / regional level (pan European SFM processes, legislations in place and statistics / indicators available) allowing addressing and monitoring of the risks identified in relation with bioenergy development and in evaluating whether these tools and their implementation do allow the mitigation of the risks.

- The RBA should be carried out with unified methods and should be verified.

- Where a risk is identified at the national / regional level, this would require additional measures (risk mitigation measures) from the economic operator through, for example, on site further evidence or other means of proof.

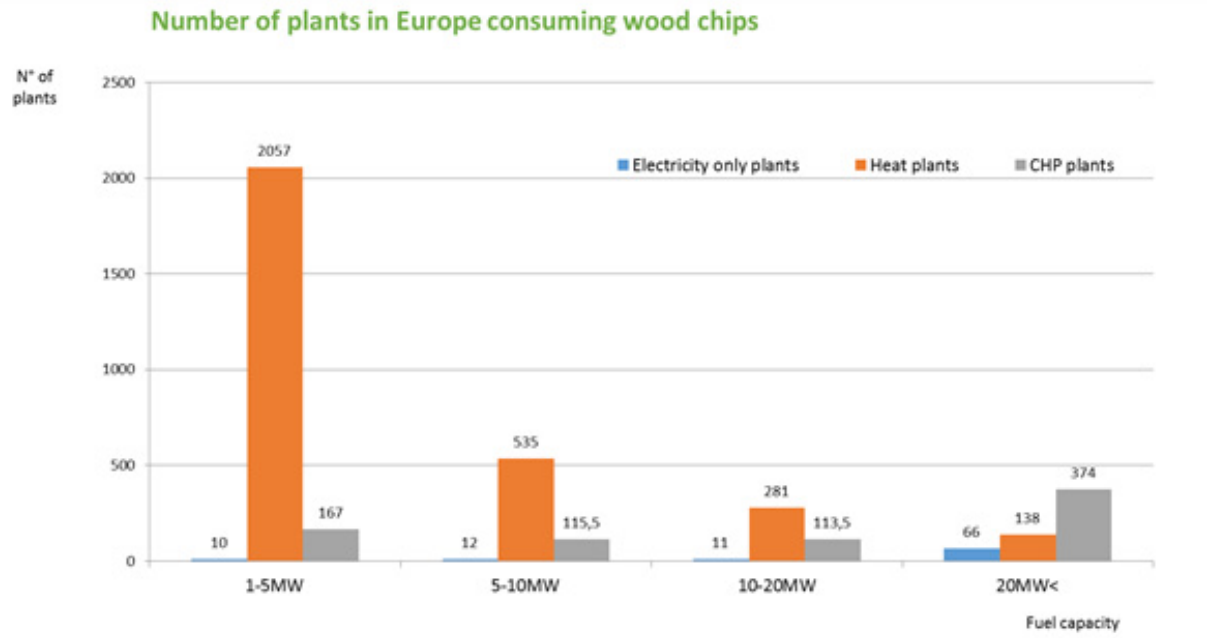
Installations concerned

Regarding biofuels, under the current sustainability legislation, all biofuels producers are concerned and there is no threshold applied.
As far as solid biomass in H&C and electricity sectors is concerned, in 2010, the Commission recommended that sustainability criteria should apply to installations above 1 MW electrical / thermal output capacity[6]. The EU project BASIS[7] and AEBIOM statistics indicate that a 1 MW fuel capacity threshold may not be the most relevant to meet the EU "better regulation" objective. These outcomes concern woodchips and pellets which represent a high majority of woodfuels used in installations with a fuel capacity above 1 MW in Europe.

6. Report on sustainability requirements for the use of solid and gaseous biomass sources in electricity, heating and cooling, ibid
7. BASIS project (supported by the European Commission under the IEE programme, www.basisbioenergy.eu): Data collection of over 4000 biomass woodchips plants > 1MW fuel capacity

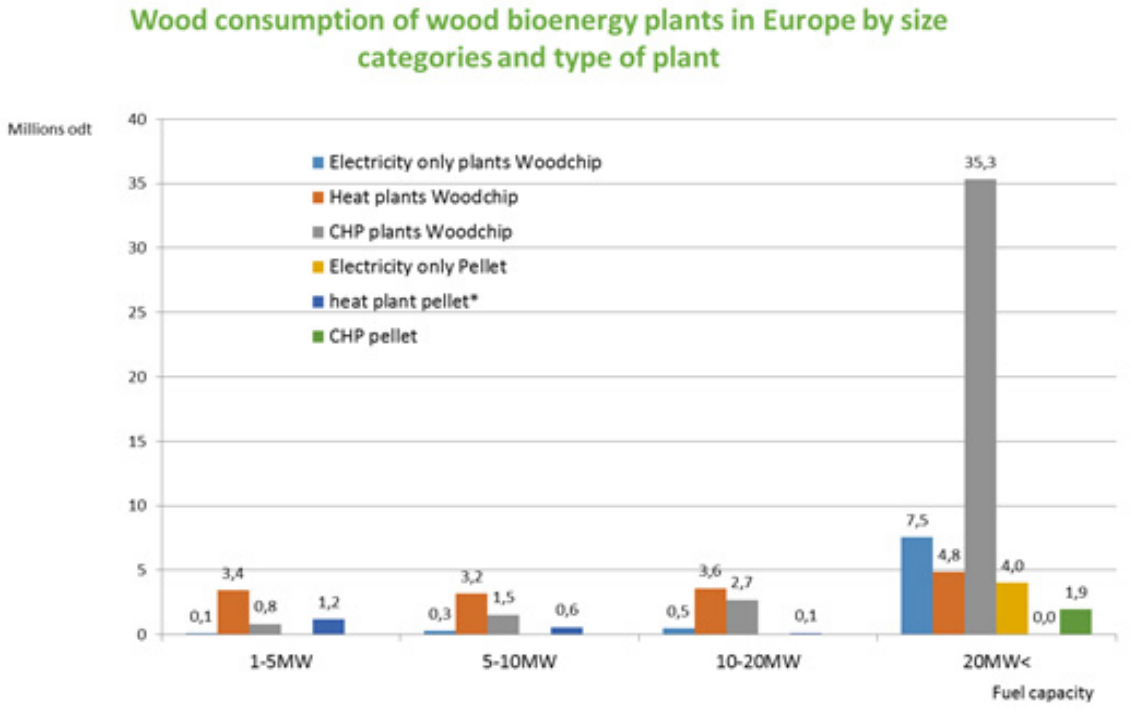
As shown in the two figures below, a high majority of woodchips consumed in the plants analysed under the project BASIS (fuel capacity of at least 1 MW) are actually used in installations with a fuel capacity above 20 MW. Those installations cover 73.7% of woodchips volume consumed while representing only 14.8% of all installations.
AEBIOM used the outcome of its statistical report on pellets to complete the findings of the BASIS project. According to AEBIOM estimates, as shown in figure 2, a high majority (75.8%) of EU pellet consumed in European installations with a fuel capacity over 1 MW are used in installations with a fuel capacity above 20 MW.

Figure 1



Source: Basis Bioenergy project

Figure 2



Source: Basis Bioenergy project and AEBIOM statistics
Odt: oven dry ton

AEBIOM position:

• No threshold should apply for sustainability rules for biofuels.

• For H&C and electricity installations using biomass, the 20 MW fuel capacity threshold (corresponding to about 6 MW electric capacity and about 17 MW thermal capacity based on BASIS energy efficiency average[8]) should be considered. The 20 MW fuel capacity threshold would allow the EU "better regulation" objective to be met through addressing a limited number of installations consuming a large share of woody biomass. Moreover, the 20 MW fuel capacity threshold is coherent with the ETS legislation threshold.

NB: the 20 MW fuel capacity threshold is not appropriate for biogas produced from anaerobic digestion for which a lower threshold should be defined.

Recognition of certification schemes

• Voluntary schemes should have the possibility to be recognised by the Commission if they meet the EU requirements, following the same approach as biofuel voluntary schemes recognition.

• Existing voluntary SFM certification schemes (eg: PEFC/SFI, FSC) address the risks identified above. Therefore, they should have the possibility to be recognised by the Commission, following the same approach as biofuels voluntary schemes recognition.

• In some countries, SFM certification is difficult to develop due to the economics of forestry and forest ownership structure. In addition, forest owners will not seek SFM certification purely for their lowest value residues that goes to energy use. Therefore, other certification schemes which use a risk based approach (covering the risks identified above) should have the possibility to be recognised by the Commission, following the same approach as biofuels voluntary schemes recognition.
This is for example the case with SBP. SBP's sustainability indicators are derived from FSC and PEFC indicators but compliance can be demonstrated using a regional risk assessment in the absence of SFM certification. This means SBP provides an alternative to SFM certification but can also fully recognise the credibility of existing and well proven forest certification schemes (PEFC and FSC). It does not wish to compete with or replicate them, but rather complements them. A pellet mill using wood with full FSC or PEFC certification would automatically be able to demonstrate compliance with SBP's sustainability indicators.

Visibility and security for investors

• It is highly important that the future EU bioenergy sustainability policy is set for at least until 2030 so as to provide visibility and security to investors. In addition, in order to secure past investments, a transition period should be established.

8. BASIS project (supported by the European Commission under the IEE programme, www.basisbioenergy.eu): Data collection of over 4000 biomass woodchips plants > 1MW fuel capacity

Sustainability in EU RES legislation: continuity of the current approach

- The current EU biofuels / bioliquids sustainability scheme is part of the RES Directive. If the EU policy on bioenergy sustainability was to take the form of legislation, AEBIOM is of the view that this approach should be maintained with the sustainable bioenergy policy being part of the revised RES Directive.

As displayed in its status 25 years ago, AEBIOM key missions and goals remained mostly unchanged and can be summed up within the 5 following objectives :

- To communicate to EU policy makers the opportunities and concerns regarding the development of bioenergy in Europe;
- To develop, deepen and disseminate the knowledge concerning the use of biomass for energy, from scientific, technological, economic, sociological, legal and political perspectives, as well as in any other aspect having a relevance at European level;
- To develop and promote the technical quality of the European bioenergy industry;
- To support any initiative at national and international level aiming at the promotion of the use of bio-energy;
- To actively promote the abolition of any technical or trade barriers which hamper the development of an open bioenergy market at European level.

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