



AEBIOM NEWSLETTER

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Dear Readers,

The EU Commission's proposal for the New directive on Renewable Energy was the starting point for intensive discussions in the Parliament, the Council, the member states and the media about the shape and content of the new European energy policy. Biomass for energy is playing a key role in these discussions. Therefore, a few basic facts on the biomass for energy issue has been put forward:

- biomass covers two thirds of all renewables and is therefore the most important renewable energy source.
- more than 80% of bioenergy is used to deliver heat and electricity and less than 20% to deliver transport biofuels; this ratio will also be valid in the future. It is often overseen that the replacement of fossil fuels in the heating sector is at least as important as the production of 10% transport biofuels.
- rising prices of wheat, corn or rice are not caused by the European biofuels production.

The 10% biofuels target is important not only for the CO₂ reduction but also for the improvement of the security of energy supply. Therefore the targets should mainly be reached by biofuels produced in Europe, be it first generation fuels, biomethane, second generation fuels or renewable electricity.

Many aspects have to be taken into account in this discussion. The main point seems to me the following: fossil fuels are the main cause of global warming and they are getting scarcer and scarcer – hence, they have to be replaced step by step. Biomass among other renewables is an indispensable alternative, especially for heat and for transport biofuels. I hope you will find more arguments in favour of the new directive in this newsletter.

Heinz Kopetz –President

AEBIOM NEWS

► New AEBIOM members

Eight international companies working in biomass field have recently joined AEBIOM as associate members. AEBIOM welcomes the new associate members:

- Wärmebetriebe GmbH (Austria) – this company is active in district heating, energy contracting, develops, finances and implements bioenergy projects (builds bioenergy plants).
- Raiffeisen Leasing GmbH (Austria) – this company plans, builds and finances biomass power plants, provides all kind of energy services such as energy contracting etc.
- Electrabel (Belgium) – this large Belgium electricity producer is one of the leading companies in pellets co-firing and certification in Europe
- Xylowatt S.A (Belgium) – develops and builds small and medium scale wood gasifiers.
- Jenz GmbH (Germany) - a big producer of large and small scale chippers and crushers
- EC Bioenergie GmbH (Germany) – develops and operates biomass projects, produces solid biofuels (including pellets); the company is also active in biomass trade, bioenergy consulting and energy contracting.
- Biopower International (the Netherlands) – the company is working with solid biofuels, bio-oils, biomass trade, builds combustion plants and provides energy services
- VICTAM International (the Netherlands) – an international conference organizer
- Svenska Biogasföreningen - Swedish Biogas Association
- Swedish Association of Pellet Producers - Swedish Pellets Association

EU ENERGY POLICY FOR RENEWABLES

► European Parliament is working on renewables directive

The renewables directive proposed by the European Commission on 23 January 2008 is now being discussed by the European Parliament. An MEP Claude Turmes (The Greens) was appointed to deliver a report on renewables directive. This report has been already submitted for translation. As a next step, the parliamentarians will be working on amendments of this report. The final European Parliament's position will be available in September 2008.

The most controversial issues seem to be the sustainability criteria, 10% biofuels target and the trade of green certificates. The Claude Turmes report scraps the 10% biofuels target, proposes a clear flexibility mechanism (to reach the national targets) based on voluntary agreements between two or more member states, introduces mandatory RES interim targets (in the proposed directive the interim targets are voluntary) and a direct penalty mechanism if the member states fail to reach their interim RES targets. The report strengthens many other issues of the RES directive such as the heat sector from renewables (especially district heating), efficiency measures, administrative barriers etc. The Turmes report recognises the importance of the National Action Plans and provides detailed information on what should be included in these National Action Plans. As regards to sustainability criteria, the report provides the definitions for high conservation value land, wetlands, agrofuels etc. but leaves for the ENVI committee to define the sustainability criteria. The details on sustainability criteria will be defined in close partnership with Mr Wijkman (EPP) the draftsman of the ENVI opinion on renewables and with Mrs Corbey (PSE), the rapporteur for the fuel quality directive (ENVI committee). In the explanatory note of the Turmes report, one can find the opinion that the sustainability criteria should be reinforced – GHG savings should be at least 55-60% GHG savings, indirect land use changes should be taken into account, social criteria to protect e.g. small farmers in third world countries should be introduced etc.

The European Parliament's Committee on Agriculture and Rural Development (AGRI) was discussing the renewables directive on 6 May. Ms Bourzai, the rapporteur of the AGRI opinion regretted that there are not many provisions focusing on wood as energy source and on sustainability criteria. As regards to biofuels, the directive, according to Ms Bourzai, does not take into consideration the land use change and the annex lacks the default values for jatropha, soja and algae. Ms Bourzai thinks that due to the food crisis and competition between food/energy for the land use, the binding nature of the target should be eliminated.

The second generation biofuels, according to the MEPs such as Mr Parish (EPP, UK) and Ms Mathieu (EPP, France), will play a key role. Most of the MEPs did not think that the first generation biofuels is the right way to reach the biofuels target. For example, Ms Garcia believes that first generation biofuels are not viable for ethical reasons mainly because of the prices for food. An MEP Neil Parish also mentioned that biofuels imports will be necessary to reach the biofuels target and that a 45 euros per hectare premium for farmers growing energy crops is about to be cut in the health check of the CAP which will be difficult for farmers to accept.

Ms Mathieu and Ms Bourzai think that the directive should better address biomass from forests. The Biomass Action plan from the Commission should be updated. Second-generation agrofuels could be a good solution.

In response to these discussions, Mr Paul Hodson from the European Commission said that the Commission did not include sustainability criteria for biomass in the directive because the sustainability criteria need to be set in the right way. The Commission is at present launching a consultation on this issue. According to Mr Hodson, "if we want to meet the 10% target, we need an increase of 4 million tones of commodities (while in the USA 12 million tons are currently used). There is no comparison between these two figures. The biggest demand for biofuels is for sugar in Brazil at present, nevertheless prices for sugar are actually going down. There is a biased debate."

According to him, second generation biofuels will save GHG as well as first generation biofuels if we make it in a right way.

As regards to the land use, the Commission did not ignore land-use change but indirect land use change is very complicated to integrate in the calculation. As for competition between land use for biofuels and for food, one has to bear in mind that there is no need for more land for biofuel production but a need for more productivity. Since the 1950s, the production of cereals increased by 43% whilst at the same time the land use was reduced by 6%.

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► Council conclusions on sustainability criteria

On 22 February, the Council decided to establish an ad hoc Working Party with the task of drawing up a common sustainability scheme for biofuels. This sustainability criteria is being drawn for two directives: renewables directive proposed by the Commission on 23 January 2008 and proposal for an amendment of the

fuels quality directive.

This report includes four key outstanding issues:

- the level and date of application of the second stage for the minimum greenhouse gas saving requirement in Article 15(2); In the present text biofuels should decrease CO₂ by 50% by 2015.
- the definition of highly biodiverse forests (Article 15(3)(a));
- whether to have binding criteria, reporting requirements or monitoring for the environmental and social impact of biofuel production in third countries (Article 15(5a), (5b) and (5c)); and
- elements of the methodology for calculating the greenhouse gas saving obtained by using biofuels (Annex VII), particularly as regards the calculation of default values and the treatment of co-products.

The Slovenian Presidency is pushing hard to finalize this intensively discussed part of the directive. A strong debate takes place in the European Parliament as well. The Rapporteur Claude Turmes is pushing for a mandatory CO₂ reduction by 60% (against 35% proposed in the directive).

A proposal to include social criteria is also being debated. Countries willing to export biofuels to the EU should ratify a number of environmental treaties and several conventions of the International Labour Organization. This is still a critical issue because these aspects should be ideally treated via bilateral discussions and it is questionable how far we can impose the sustainability criteria outside Europe.

WTO compatibility is certainly also an issue. The Council conclusions are available here: http://www.aebiom.org/newsletter/April_May2008/Common_sustainability_scheme.pdf

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► European Agricultural Commissioner Mariann Fischer Boel's speech on biofuels

Mariann Fischer Boel, the commissioner for Agriculture and Rural Development has presented an interesting speech on biofuels during the Policy dialogue on biofuels on 6 May 2008.

She highlighted the importance of the binding 10% biofuels target for the following reasons:

Environmental – our transport sector is a heavy polluter. It's responsible for more than 20 per cent of greenhouse gas emissions that contribute to climate change in the European Union. And emissions are climbing faster in this sector than in any other.

Fuel security - a transport sector that depends on imported oil for 98 per cent of its fuel needs is a vulnerable transport sector. 80 per cent of our imported oil comes from five countries: Russia, Saudi Arabia, Libya, Iran and Norway. For political and economic reasons, this is not a comfortable position to be in.

According to Ms Boel, we need to diversify our sources of fuel. And this makes all the more sense when oil prices as high as \$ 120 a barrel are stirring up inflation.

As regards to first and second generation biofuels, the Commissioner stated that both types of biofuels are important to reach the target. First generation biofuels could be used as a bridge to start using next generation biofuels. Of course, no biofuels should be counted towards the 10% target that would not meet strict sustainability criteria. For example, this would exclude biofuels made from feedstock coming from a land with a high biodiversity value and a land with high carbon stocks.

The Commissioner reminded that 80% of biofuels target could be met by domestically produced raw material grown on about 15 % of European Union arable land. Nevertheless, the "real" land use figure would in a sense be lower than 15 %. This is because of the by-products obtained from biofuel production.

The Commissioner has also explained the reasons and implications of rising food prices. According to her, those who see biofuels as the driving force behind recent food price increases have overlooked two other big reasons for the food price increase: huge increase in demand of meat from emerging countries like China and India (it takes about 4 kg of cereals to produce 1 kg of pork) and the weather, and its effect on production. In 2006, bad weather hit cereal production in the US, the European Union, Canada, Russia, Ukraine and Australia! In 2007, the same thing happened again, except in the US. This is not a recipe for low prices.

However, long-term price rises are not an entirely bad thing. They could be good news for the 70 to 80 % of the world's poorest who live in rural areas and depend on farming for their livelihood. Here, we can do much better with our development aid. We should help developing countries to improve their agricultural knowledge and to look at new types of agricultural products.

[Read the speech](#)

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AEBIOM POSITION ON EU ENERGY POLICY

► 10% binding biofuels target – to keep it or to scrap it?

The AEBIOM Board has recently discussed the issues regarding biofuels and thinks that current discussions

about the danger of biofuels are far too exaggerated.

Even though biofuels takes a very small part of the market (the EU currently uses between 1 and 2% of its cereal production to make ethanol and European rapeseed production accounts for about 2% of global oilseed demand), they are blamed for all: rising food prices, competition for land, hunger in the world, deforestation etc. However, it is worth noting that 75% of palm oil is used for food and only 0,75% is used for biofuels production.

AEBIOM believes that it is feasible to produce 10% of biofuels in sustainable way and, therefore, strongly supports binding 10% biofuels target. However, for biofuels to be sustainable, we should ensure that most of it comes from the European Union where we can easily ensure the sustainability. The imports increase the uncertainty of biofuels sustainability due to the fact that it is difficult to monitor the sustainability of imported biofuels. Imports might also have indirect negative effects (additional land for food outlets could be cultivated) as well as other negative impacts such as social aspects. For example, the millions of hectares of land taken over from Africans to grow raw material for biofuels to be exported to Europe might take away the possibility from Africans to procure themselves food from their land. Further to that, imported biofuels do not provide the security of supply and job creation in Europe.

AEBIOM calculated that the European agriculture could meet the 10% target, knowing that in reality only a certain percentage of the land goes to biofuels and the rest to feed industry (60% of rapeseed goes to feed, 40% of wheat), and therefore, the European legislation should ensure that most of biofuels target is met locally. Unfortunately, the renewables directive proposed by the Commission on 23 January this year seems to favor biofuels imports. More precisely, if we look at the production of biofuels only (without taking into account the by-products used for feed), the CO₂ reduction of Brazilian ethanol and palm oil biodiesel are higher than the CO₂ reduction of European biofuels. This advantage will be significant in the light of the fuels quality directive in which oil companies will use these results to count the CO₂ reduction they will be committed to.

It is also important to note that biogas for transport is included in the 10% biofuels target, with a significant development potential. Also, the biofuels target should be coupled with energy efficiency objective in cars. If the biofuels target is scrapped, it is the oil industry that wins the most.

Finally we should bear in mind that biofuels roughly represent 20% of bioenergy targets, and should not overshadow measures to develop the bioheat and bioelectricity targets.

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PUBLICATIONS

► WWF supports sustainable biofuels

Within the renewables directive, WWF takes the opportunity to increase its well known involvement in certification schemes. WWF thinks that there are many good reasons to develop biofuels – biofuels would help to avoid using oil, coal to liquid processes, oil sand etc. Plug in cars, according to them, should be developed; nevertheless, biomass will be also needed for required renewable electricity. Therefore, WWF proposes to tackle the biomass issue straight away. We should especially avoid "bad" impacts of biofuels such as the impacts on water, biodiversity, food supply as well as social impacts. This could be done via global certification.

Certification of biofuels is seen as a good opportunity to get mandatory certification systems for all our imports, first for biofuels and then for other products. FSC for forest is covering "only" 10% of our consumption after more than 10 years of efforts. If the mandatory aspect of biofuels is scrapped from the directive, there is a risk to slow down the current discussion on sustainability of imports. Biodiversity and social aspects have never been so close to concrete implementation as it is today!

WWF made a comprehensive presentation in the Belgian Parliament on this topic on 7 May.

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► BirdLife International Biofuels Report "Fuelling the ecological crisis"

BirdLife International has published a report examining the implications of the EU biofuel policy for natural ecosystems worldwide. The report highlights the severe shortcomings of current proposed sustainability standards.

BirdLife proposes six solutions on how to address the biofuel problem in the Renewable Energy Directive:

- A moratorium on all new biofuel incentives and targets at EU level until it can be shown that the targets can be met in a truly sustainable manner, taking into account the latest science and evidence on the direct and

indirect environmental and social impacts of biofuel policy and production.

- Minimum greenhouse gas emissions savings of 60% compared to fossil fuels for all bioenergy applications including biofuels for transport and electricity and heat generation from biomass, taking into account direct and indirect land-use change and emissions from nitrogen fertiliser use.
- Minimum sustainability standards - for all bioenergy, that adequately safeguard against negative environmental and social impacts.
- A robust and verifiable system of certification for all bioenergy based on these standards.
- Active promotion of measures aimed at reducing emissions in the transport sector that have fewer sustainability concerns and higher levels of greenhouse gas emission savings such as managing demand for travel and improved vehicle efficiency.
- A greenhouse gas emission reduction approach to transport fuels through the emission reduction mechanism currently proposed in the Fuel Quality Directive i.e. setting a greenhouse gas reduction target that takes into account the full life-cycle of the fuel, rather than setting volume or energy-based targets. The contribution of biofuels to the achievement of such targets should be kept at a sustainable level and linked to the above-mentioned sustainability standards. The report can be downloaded at: http://www.birdlife.org/eu/pdfs/BirdLife_Biofuels_report

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► BTG study on sustainability criteria and certification systems

The objective of this study was to provide a basis upon which the Commission's services could decide which actions to undertake in view of proposing minimum sustainability criteria and certification systems for the production of biomass in the EU and for imported biomass. The approach is based on analysis of existing certification systems and initiatives toward biomass certification using a specific model proposed in the study. The study is focused on whole biomass.

An interesting workshop on certification was organised in March to present the report. Presentations are available at :

http://ec.europa.eu/energy/res/legislation/biofuels_sustainability_criteria_en.htm

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► The potential of biogas as Vehicle Fuel in Europe

Despite the many estimations of the biogas potential, there is a gap in research regarding current production volumes of biogas in Europe and the corresponding potential of bio-methane as a vehicle fuel. Therefore, this report's primary aim was to determine how much biogas that is produced within Europe at present and estimate how the biogas production may develop until 2015. The second purpose of this report was to analyse and identify the most important factors which are likely to decide whether this potential will be realized as a vehicle fuel or not.

The report also identifies a number of driving forces such as appropriate policies as well as various barriers for the biogas use in transport.

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EU PROJECTS

► BAPdriver – workshop results on bioenergy strategy/action plans are available

The promotion of bioenergy is a top priority on the political agenda. However, the progress in terms of actual market deployment is still dissatisfactory. Many of the existing market barriers are due to insufficient policy framework at the national level. Therefore recent policy initiatives such as the European Biomass Action Plan or BAP aim at overcoming such barriers. The process of developing country-specific biomass action plans is the starting point for this project. Energy agencies and institutions from eight European countries together with the biomass industry association AEBIOM and a consultancy firm named Eclareon form a European biomass policy group in order to exchange ideas, transfer knowledge and build capacities on biomass strategies and policy options. The participating countries are Belgium, the Netherlands, France, Germany, Poland, Slovenia, Romania and Greece. A European Advisory board is foreseen to guide the process. The project is divided into four key themes, each of them with its own thematic working group:

- 1) cross country effects
- 2) cost-effective support of bioenergy
- 3) sustainable production and use of biomass
- 4) energy from the biogenic part of waste.

These four transnational working groups consist of experts and stakeholders at a European level.

A workshop was organized on these topics on 9 April gathering key experts to define main barriers and solutions. The presentations and reports can be downloaded from the project web site, managed by AEBIOM : www.bapdriver.org

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► Intelligent Energy Europe - call for proposals – deadline 26 June 2008

The objective of the Intelligent Energy - Europe Programme is to contribute to secure, sustainable and competitively priced energy for Europe. The Programme will in particular contribute to the Energy Policy for Europe, including the action plan for energy-efficiency and the proposal for a Directive on the promotion of the use of energy from renewable sources.

Intelligent Energy - Europe covers action in the following fields:

Energy efficiency and rational use of resources (SAVE), including:

- improving energy efficiency and the rational use of energy;
- supporting the preparation and application of legislative measures.

New and renewable energy resources (ALTENER), including:

- promoting new and renewable energy sources for centralised and decentralised production of electricity, heat and cooling, and biofuels, thus supporting the diversification of energy sources;
- integrating new and renewable energy sources into the local environment and the energy systems;
- supporting the preparation and application of legislative measures.

Energy in transport (STEER) to promote energy efficiency and the use of new and renewable energies

- sources in transport, including supporting initiatives relating to all energy aspects of transport and the diversification of fuels;
- promoting renewable fuels and energy efficiency in transport;
- supporting the preparation and application of legislative measures.

Integrated initiatives combining several of the aforementioned fields or relating to certain Community priorities. They may include actions integrating energy efficiency and renewable energy sources in several sectors of the economy and/or combining various instruments, tools and actors within the same action or project.

The deadline for the submission of the projects is 26 June 2008. The maximum funding period of the project is 3 years. At least 3 partner organisations from 3 different eligible countries. Budget usually between € 0.5 - 2.5 million. More information is available at http://ec.europa.eu/energy/intelligent/call_for_proposals/index_en.htm

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► CHEUBIO project – EU-CHINA collaboration in cofiring

Project CHEUBIO is a specific support action within the European Commission's Sixth Framework Programme. It is a two year duration project that started November 2006 and concerns the 'development of co-firing power generation market opportunities to enhance the EU biomass sector through international cooperation with China'. The overall objective is to determine and establish the basis by which the EU industrial companies might enter the co-firing power generation market in China, which offers very significant potential.

The recent study within this project has shown that the various EU approaches to co-firing should have equal technical merit in China and in principle there are major opportunities for future international cooperation. However, unlike in Europe, Chinese policy does not at present encourage co-firing. While China is keen to encourage use of biomass and the co-firing route is seen as an important part of that process, the Chinese legislation has inadvertently discouraged co-firing applications. At present there are two national incentives, namely CDM credits and the provision of an enhanced electricity-selling tariff if co-firing is used. Both incentives are important but the enhanced price the generators can get for selling 'green' electricity is a powerful driver. However, the Government has decreed that the green electricity price will only apply if co-firing includes at least 80% biomass addition (i.e. 20% coal: 80% biomass). For any reasonable size power plant, this creates major technical problems with operation plus significant logistical problems with collection and processing of biomass. Consequently, there is very little progress at present. This problem has arisen as the Chinese Government does not have faith in their monitoring and verification process for determining the proportion of biomass fired with coal. This is an area where Europe has particular expertise. Therefore the project team is cooperating with various institutes and industrial companies to explain EU monitoring and verification techniques, to aim to demonstrate that the EU approach is robust and that it may well be suitable for Chinese application.

Key project deliverables will be made available on the AEBIOM website www.aebiom.org/CHEUBIO. Those organizations that either require further information and/or wish to engage with the Chinese stakeholders

should contact Edita Vagonyte at AEBIOM.

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▶ [Bioenergy in Motion project – a movie on innovative heating and cooling technologies](#)

Demand for heating and cooling constitutes about half of the EU final energy consumption, however, this sector is lagging behind (as compared to renewable electricity and transport biofuels) due to inexistent legislation at a European level.

To promote the deployment of biomass heating and cooling technologies, a movie will be made in June 2008 showcasing successful applications and flagship projects.

The movie will address practical potential and possibilities, investment opportunities, and the policy context of biomass heating and cooling. The movie will cover applications in individual households and large buildings, block heating and district heating systems, and industries.

The core of the movie will consist of realised projects, interviews with key stakeholders, and information on national and EU policy targets and instruments. Three country-tailored versions of the movie will be made, covering Bulgaria, Estonia and the Czech Republic respectively. Each of these movies will have spoken word in the national language and in English, plus subtitles in various other languages.

The project is co-ordinated by BTG (The Netherlands) and financed under the Sixth Framework Programme. Further information is available on the project website www.bioenergy-in-motion.com.

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EVENTS

▶ [World Bioenergy 2008 in Stockholm on 27-29 May](#)

Nordic Bioenergy 2008 is one of the largest bioenergy events in Europe. The conference, which acts as a gathering point for professionals in the bioenergy industry, highlights the market trends, and aims at promoting Nordic bioenergy whilst also enhancing Nordic cooperation and competitiveness. Speakers will include leading decision makers from the transport, heat and power industries, buyers and sellers of equipment, fuels and systems, as well as service suppliers and consultants. Politicians, municipalities, research institutions, NGOs and journalists will also be represented in the conference.

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▶ [3rd International Bioenergy Conference and Exhibition in Valladolid on 16-18 October](#)

The third international bioenergy conference and fair will be held in Valladolid on 16-18 October 2008. This conference is one of the most important bioenergy events at international level. The success of the first and second editions has made Expobioenergía a unique meeting place for bioenergy industry and a point of reference at international level.

Expobioenergía'08 offers a wide range of activities that will take place in parallel with the exhibition:

- 3rd International Bioenergy Congress
- 2nd edition of the 'Activa Bioenergy' business workshop: companies from Europe and Latin America will be showing professional demonstrations in the exhibition
- Forestry demonstrations and visits to facilities for the production and use of biofuels
- Series of specific work sessions: BIOPAC, BIOMUN etc.
- 3rd Technological Innovation Awards

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