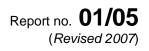


International Bioenergy Networks - DIRECTORY 2007





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that in a simple way can ider various participants within the				stablish efficient contact between the to and from the network.
The fact sheets were update	d March 2006 and June	e 2007, while th	e database is upd	lated continuously.
Managi	ng Director		I	Project leader
	lst Jørgensen			Mikael Forss
Stensberggt. 25 NO-0170 Oslo, Norway	www.nordicenergy.net			

Nordic Energy Research Bioenergy Directory 2007

Nordic Energy Research
Bioenergy Directory 2007

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Preface I

There is a significant need for new knowledge about the generation and use of bioenergy in the BASREC region, as well as co-operation between countries sharing common interests. Insufficient communication affects the rational co-operation between different sectors, such as energy, forestry/agriculture and environment; between different parts of the value chain (e.g. "from the forest to the power plant"); and between different decision-making levels within one operation. A change will require improvement of international co-operation and information exchange between national bioenergy programmes in the region.

A particular need is recognised for strengthening the co-operation as regards research, development, demonstration and innovation projects in the bioenergy sector between countries in the Baltic Sea Region. It is important to establish close co-operation and networks with already initiated and on-going activities in the EU, IEA, FAO, Nordic Council of Ministers (NCM) and other international organisations. As illustrated in this report, there already exist numerous international energy research networks where bioenergy is included, as well as pure bioenergy networks. In the future, this work of communication must be closely linked to the ongoing network development within and between the various programmes in the BASREC region. It is, however, hard to see any need to establish new networks or collaborative groups in order to help capacity building and communication, but rather the need to include more countries in the region in one or several of the already existing networks that are listed in this report.

Action 4 has <u>listed and described 27 international bioenergy networks and programmes</u>, and particularly scientific networks, in order to prepare for possible participation of new countries in the respective networks by describing the potential and limitations in the networks. This list is clearly documenting the uneven distribution of participating countries in the various networks and programmes. The Nordic countries are overrepresented compared to other countries in the Baltic Sea Region. In the 27 networks and programmes the countries participate as follows: Sweden 22, Finland 19, Denmark 16, Norway 15, (EC 8), Germany 7, Estonia, Latvia and Russia 5, Lithuania 4, Poland 2. The uneven distribution may be due partly to lack of information and partly to a lack of national programmes with accompanying financing that can enable international participation. <u>Links to 15 databanks</u> are listed in the report, with comments on the service offered by the databanks.

Action 4 has <u>developed a new bioenergy database</u> in which bioenergy actors in the Baltic Sea Region are easily visible and readily available. The aim of the database is first to identify and profile actors in a regional network, and then to arrange for a rational flow of information to and from the network and an efficient contact between its various participants. The database, which is an advanced address register, has been made available on the Internet – **www.nedatabase.info/bioenergy**.

Oslo/Ås, Febr. 2005 Gunnar Wilhelmsen

Preface II

The fact sheets were revised in 2006 and 2007 by Nordic Energy Research. The 2007-version has been reedited, and only fact sheets and links are left from the original report. The original report is still available from the NCM and BASREC websites.

Oslo/Ås, June 2007

Gunnar Wilhelmsen

Introduction

The project as presented in this report is initiated as an element of the Baltic Sea Region Energy Co-operation (BASREC) which was set up in the Helsinki conference of the Council of the Baltic Sea States (CBSS) energy ministers and the European Commission in 1999. The BASREC plan was merged with the plan of the Nordic Council of Ministers (NCM) concerning the bioenergy field, and these, together with joint financial resources, gave the framework of several actions.

The overall purpose of the initiative was to gather information of biomass resources and of the status and prospects of the use of biomass in energy production in the Baltic Sea Region. The aim was also to make a survey of barriers to increased use of biomass. This information can be used by politicians, authorities, and other decision-makers in the efforts to improve the framework conditions for biomass to take a growing share of the more open and integrated energy market. The better framework conditions would also contribute to the feasibility of meeting the requirements of reducing greenhouse gas emissions according to the Kyoto Protocol.

The need for more information and knowledge is a classical problem in a world of change. In reality, the lack of knowledge may, however, be an apparent barrier to the implementation of new technology. First of all, the awareness about renewables and national policies regarding renewables must be spread among people at all levels. To make it possible to take decisions on new bioenergy systems, guidelines must exist on how to implement and manage bioenergy projects with regard to national policies and regulations. Effective information systems and training courses must be available. Demonstration of best practise projects may be an effective way to introduce ideas at different levels. In many countries, there is a close relationship between educational systems and R&D programmes at universities and research institutes. *More R&D cooperation between countries in the Baltic Sea Region* has been proposed as a means for increasing the activities in this area.

The need for *closer interaction and communication between market actors*, such as research establishments, bioenergy producers, users and manufacturers of equipment, local consultants, projects developers, project owners and public authorities has been pointed out. This may be an important step towards establishing formalised platforms for public-private partnerships, and providing a "lift" in the regional profile.

In order to maintain the world leading role that the Nordic countries have in many of the bioenergy aspects, including e.g. handling and utilizing wood for energy purposes, it is necessary to establish a common Nordic/Baltic reference framework which could unite and guide the future regional work. There was an urgent need for information about existing networks and databases.

1. International bioenergy networks and programmes

AEBIOM

1.1. AEBIOM - European Biomass Association

Website: www.aebiom.org

President:	Email:	Address: Austrian Biomass
Heinz Kopetz	kopetz@biomasseverband.at	Association, Franz Josef-Kai 13,
	Phone: +43 1 533 07 97 0	1010 Vienna, Austria
	Fax: +43 1 533 07 97 90	
Secretary and Treasurer:	Email: jossart@aebiom.org	Address: AEBIOM, Croix du Sud 2
Jossart Jean-Marc	Phone: +32 10 47 34 55	bte 11, 1348 Louvain-la Neuve,
	Fax: +32 10 47 34 55	Belgium

Host organisation: AEBIOM is a non profit making association managed by the members through the General Assembly, a Steering Committee, and the Executive Committee according to the Statutes. **Secretariat**: See Secretary

Financing: Annual fees of the members, support by public authorities or private companies, financial support by participating in projects financed by EC, and additional financial aid by some of the member associations.

Duration: There is no limitation on the existence of AEBIOM in time

Participating countries: 28 national bioenergy/biomass associations from European countries and indirectly representing more than 4000 members. The following BASREC countries are represented: DANBIO, Denmark; EBA, Estonia; FINBIO, Finland; BBE, Germany; LITBIOMA, Lithuania; NOBIO, Norway; POLBIOM, Polen; RBA, Russia; SVEBIO, Sweden (*Addresses: See AEBIOM Website*). From 2007 it offers companies the opportunity to be associate members.

New participants: Full members can be national associations. Associated members can be experts in the field of biomass coming from countries that are not represented in AEBIOM by full members.

Objectives:

- promote and co-ordinate national and international initiatives and help directly or indirectly in the creation of national associations,
- study problems and suggest solutions in order to remove obstacles to the biomass development,
- organize symposiums, seminaries, meetings and all kinds of actions of information,
- realise studies, encourage the share of references together with various partners, and in particular with data banks, publish documents,
- be in permanent contact with organisations, companies or research and development organisations with activities in the field of biomass,
- favour transfers of appropriate technologies in developing countries,
- encourage the realization of appropriate measures to promote biomass.

Work programme:

The European Biomass Association (AEBIOM) is a group of national biomass associations founded in 1990. The membership is open to representatives of the European Union, Central and East Europe. The General Assembly, the Steering Committee and the Executive Committee manage the association.

AEBIOM spreads the message that a wider use of biomass will bring tangible benefits in the field of energy, materials, agriculture, forestry, environment and employment. To achieve such goal, AEBIOM undertakes several actions:

- DEVELOPS and ADVERTISES global solutions to boost biomass production
- COORDINATES international activities.
- PROVIDES direct or indirect assistance in setting up national associations.
- LIAISES with European institutions (European Commission, European Parliament, Economic and Social Council).
- ORGANISES seminars, conferences, information, and awareness campaigns.
- UNDERTAKES studies and ENCOURAGES experience sharing.
- PROMOTES the transfer of appropriate technologies to developing countries.

BEAC - The Barents Euro-Arctic Council (www.beac.st)

1.2. The Barents Energy Working Group (EWG)

Website: www.barentsenergy.org

Task force on Bioenergy - Chairman:	Email: Phone: Fax:	Address:
CSO - Chairman:	Email: Phone: Fax:	Address:

Host organisation: *BEAC* was established in 1993 as a forum for intergovernmental co-operation on issues concerning the Barents Region. The BEAC meets at Foreign Ministers level and the chair rotates every second year in the autumn between Finland, Norway (2003-5), Russia and Sweden. Between the BEAC meetings every second year, work is organised by the Committee of Senior Officials (CSO). Barents Energy Working Group (*EWG*) was established in 1998. Bioenergy is a matter of special priority in EWG and a *Task Force on Bioenergy* was established in 2001.

Secretariat: BEAC/CSO:

EWG:

Task Force on Bioenergy:

Financing: Duration:

Participating members / **countries**: BEAC has seven members: Denmark, Finland, Iceland, Norway, Russia, Sweden and the EC, and nine observers: Canada, France, Germany, Italy, Japan, Netherlands, Poland, United Kingdom, and USA.

New participants:

Objectives – Energy Working Group:

- Promotion of activities of the Barents Energy Focal Points, i.e. Kola Energy Efficiency Centre, Murmansk Oblask Energy Efficiency Centre, Arkhangelsk Oblast Energy Efficiency Centre, Karelia Energy Efficiency Centre.
- Further development, implementation and maintenance of the Barents information and communication concept, i.e. the dedicated website (**www.barentsenergy.org**) and the network of energy experts.
- Improvements in the efficiency of energy production, distribution, and consumption in the Barents Region.
- Project financing: Development of financing instruments by financial institutions and the development of an investment framework by the Russian Partners.
- Promotion of the use of bioenergy in Northwest Russia, which will give both environmental and economic benefits.
- Further work on the use of Joint Implementation and the other Kyoto mechanisms
- Co-ordination with other relevant initiatives.

Work programme:

The Task Force on Bioenergy was set up to analyse experience from relevant implemented, ongoing and planned projects and activities, and chart the potential for and obstacles to the utilisation of bioenergy and Joint Implementation (JI) and other Kyoto mechanisms in the Barents Region. The initiative is supposed to be co-ordinated with other relevant activities (i.e. BASREC).

The Task Force on Bioenergy presented in 2006 its final report (www.barentsenergy.org).

No activity in the Task Force on Bioenergy since 2005.

BASREC - Baltic Sea Region Energy Co-operation

1.3. BASREC Bioenergy Working Group

Website: www.cbss.st/basrec

Project leader – BASREC Bioenergy Working Group: Gudrun Knutsson (chair)	Email: gudrun.knutsson@energimyndigheten.se Phone: + 46 70 340 62 63 or +46 8 710 53 06 Fax: + 46 8 710 53 06	Address: Swedish Energy Agency (STEM), P.O. Box 310, SE-63104 Eskilstuna, Sweden
Secretariat: CBSS Secretariat/Energy Unit Risto Veivo	Email: risto.veivo@cbss.org Phone: +46 8 440 19 38 Fax: +46 8 440 19 44	Address: Energy Unit / CBSS Secretariat, P.O.Box 2010, 10311 Stockholm, Sweden

Host organisation: The energy ministers of the Baltic Sea Region Countries and the European Commission decided at their conference in Helsinki in October 1999 that the energy co-operation in the region should be organised in the form of BASREC. The *Bioenergy Group* is one out of five groups (Gas Market, Electricity Market, Electricity Efficiency, Climate Change)

Secretariat: Energy Unit, CBSS Secretarial, Stockholm, or

STEM, c/o Gudrun Knutson, STEM, Stockholm (bioenergy)

Financing: The Nordic Council of Ministers has financed the work of the Bioenergy Working Group

Duration: 2007 - 2009

Participating members / **countries**: Governments of Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia, Sweden. The EC is represented by DG TREN, and the participation in this work does also involve the Council of Baltic Sea States (CBSS), the Nordic Council of Ministers (NCM) and the Council of Baltic States (CBS).

New participants: Not possible

Objectives - Bioenergy Group:

To initiate activities that will contribute to an environmentally sound, sustainable and reliable supply of bioenergy in the Nordic countries and the Baltic Sea region, to promote environmental objectives associated with greenhouse gas emissions and waste disposal, and also to increase the added value of agricultural and forestry resources.

Work programme:

The programme included 4 main actions. A final report is describing the present situation regarding the use of bioenergy in the different countries (bioenergy resources, regulatory framework, finance, experiences, trade, barriers, and information and knowledge transfer, interaction and communication). The Final report(I) / Short version(II) are both available at www.norden.org./pub or www.cbss.st/basrec. The short version even in Russian.

Completed Actions:

- <u>Action 1 Manual for biofuel users.</u> A Manual for decision makers in municipalities, heating companies etc. has been published in Russian, English and Estonian by the Tallinn University of Technology. The report will be updated and translated into more languages (villu@staff.ttu.ee)
- <u>Action 2 Standards and Market Harmonization</u> Information dissemination of CEN Solid biofuel standards in Russia and Baltic States. Development of ash classification. Development of the fuel storage and handling guidelines (eija.alakangas@vtt.fi) www.nordicinnovation.net or www.cbss.st/basrec.
- Action 3 Baltic 21 / EU Strategic proposal to INTERREG BSR on "Baltic Sea Bio-Energy Programme" An Ad hoc WG on Bioenergy is planning the work. Project manager: Angela Schultz-Zehden
 (asz@sustainable-projects.eu) www.baltic21.org
- Action 4 International Bioenergy-R&D Sector Co-operation Through Networking The project has listed and described 27 international scientific networks and programmes (www.nordicenergy.net) and developed a database with 250 entries (www.nedatabase.info/bioenergy). The work is managed and financed from the Nordic Energy Research (www.nordicenergy.net)

EUROPEAN COMMISSION (EC)

1.4. Bioenergy NoE – The Bioenergy Network of Excellence

Website: www.bioenergy-noe.org

Coordinator:	Email: kai.sipila@vtt.fi	Address: VTT Processes, P.O.Box
Kai Sipilä	Phone: +358 20 722 5440	1000, FIN-02044 VTT, Finland
	Fax: +358 20 722 7000	
Secretariat: VTT Technical	Email:	Address: "
Research Centre of Finland	Phone:	
	Fax:	
Media enquiries:	Email: c.s.luxmore@aston.ac.uk	

Host organisation/management: This initiative includes eight institutes involved in research, development and implementation activities of bioenergy production, processing and utilisation. Bioenergy NoE is officially titled "*Overcoming barriers to bioenergy*" and was launched 1. January 2004.

Secretariat: VTT Technical Research Centre of Finland. For specific research enquiries, please contact the Research Area Leaders (See web-page)

Financing: Bioenergy NoE is sponsored by the European Commission DG Research.

Duration:

Participating countries: VTT Technical Research Centre of Finland, *Finland*; Joanneum Research, *Austria*; ECN, *Netherlands*; Forschungszentrum Karlsruhe, *Germany*; IIIEE, *Sweden*; Aston University, *United Kingdom*; EC BREC, *Poland*; INRA, *France*.

New participants: Bioenergy NoE wants to identify potential new partners and develop networks with appropriate actors.

Objectives:

The Bioenergy Network of Excellence (NoE) sponsored by the European Commission DG Research was launched in January 2004. Bioenergy NoE, officially titled "Overcoming barriers to bioenergy", will establish a new dynamic framework for developing better integration of international and national programmes and activities in the bioenergy area. The result will be the creation of a pan-European partnership that will lead to the most technologically and economically efficient biomass and bioenergy industrial sector. This advanced development and improved efficiency in the bioenergy industrial sector will result in the most effective solutions for meeting Europe's commitment to the environment by increasing the rate of penetration and success of bioenergy as a renewable energy resource, reducing carbon dioxide emissions, and improving the quality of life

Work Programme:

The use of bioenergy must be increased significantly to accomplish the renewable energy and emission reduction goals, and other related goals of the EU and the Kyoto Protocol. **Bioenergy NoE** will support and encourage efforts to accomplish these goals through technology development and implementation, policy actions, and market strategies. The RTD programme of the NoE will cover all processes, components, and methods necessary for establishing successful "bioenergy chains" to produce heat, electricity and biofuels for the energy end-use market including:

- planting and harvesting of biomass;
- solid fuels from agricultural, forestry and industrial biomass residues and organic waste components;
- combustion, gasification and synthesis, pyrolysis, anaerobic digestion and fermentation of biomass feed stock;
- production of liquid biofuels and hydrogen;
- heat and power production plants;
- analyses of socio-economic, policy, market and environmental issues including climate change.

Integrating activities will ensure that the ongoing RTD activities of the partner institutions will be integrated to create a "Virtual Centre of Excellence". In order to ensure far-reaching and long-term RTD excellence and integration within the NoE, wide-ranging dissemination and associated activities with stakeholders in the bioenergy field are strongly supported by this project.

EUROPEAN COMMISSION (EC)

1.5. EECI – European Energy Crops InterNetwork

Website: www.eeci.net

Coordinator:	Email:	Address: BTG, c/o University of
D. van den Berg	vandenberg@btgworld.com	Twente, P.O.Box 217, 7500 AE
	Phone: +31 53 486 1186	Enschede, The Netherlands
	Fax: +31 53 486 1180	
Secretariat:	Email: office@btgworld.com	Address:
BTG Biomass Technology Group BV	Phone: +31 53 486 1186	
	Fax: +31 53 486 1180	"

Host organisation/management: The consortium involved in this initiative involves seventeen institutes, representing nineteen EU countries, involved in research, development and implementation activities of energy crops production, processing and utilisation

Secretariat: BTG - Biomass Technology Group BV, The Netherlands

(www.btgworld.com)

Financing: This Concerted Action is financed by DG XII (Science, Research and Development) of the European Commission. The Netherlands Agency for Energy and the Environment (NOVEM) is co-financing the Dutch Part of the work

Duration:

Participating countries: Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, The Netherlands, Portugal, Sweden, United Kingdom.

New participants: EECI wants to identify potential new partners and develop networks with appropriate actors.

Objectives:

To provide all relevant parties with up-to-date information on energy crops in Europe by easy access to the network databases continues up-dating of the information and stimulation of active communication by the discussion forum.

Work Programme:

Though detailed technical, economic and financial information on energy crops has become available in recent years, potential users lack a complete picture of energy crops. Farmers, energy producers and distributors, organisations involved in logistics, and energy policy makers may have heard about willow, poplar, Miacanthus, rape seed, sweet sorghum, and other crops, - but authoritative information on which crops to select, how to grow them or how to convert them into energy is lacking.

- The <u>BioBase Archive</u> to find contributions per topic
- The <u>ActorBase</u> contains (brief) information about institutes, organizations, companies and persons that are active in the field of energy crops
- What's new contains the latest contributions that were made to the BioBase
- In the <u>Archive</u> is all expired contributions from the BioBase

1.6. EnR – European Energy Network

Website: www.enr-network.org

		3
Coordinator/Contact Point:	Email:	Address:
Emilie Carmichael	emilie.carmichael@est.co.uk	c/o EST, 21 Dartmouth Street,
	Phone: +44 20 7654 2450	London SW, 1H9BP UK
	Fax: +44 20 7227 0367	
Secretariat 2007:	Email: simon.green@est.co.uk	Address: "
Energy Saving Trust	Phone: +44 20 7227 0347	21 Dartmouth Street, London SW,
Simon Green (President)	Fax: +44 20 7654 2444	1H9BP UK
		Web-site: www.est.co.uk

Host organisation/management: EnR was founded in 1991 and is an association of 23 European organisations carrying responsibilities for the planning and management of national R&D, demonstration and dissemination programmes in the fields of 1) Rational use of energy, and 2) Renewable energies. Most members are national energy agencies and closely involved with governmental programmes. Presidency and Secretariat are rotated annually among the members.

Secretariat: At present: EST, UK (2008: ARCE, Romania)

Financing: EnR has no budget and the activities rely primarily on national resources. Specific projects within the working groups can receive financial contributions from outside sources, as can major tasks involving the member organisations such as dissemination activities.

Participating countries: EVA, Austria; EEA, Bulgaria; EIHP, Croatia; CEA, Czech Republic; DEA, Denmark; MOTIVA, Finland; ADEME, France; DENA, Germany; PTJ, Germany; CRES, Greece; SEI, Ireland; ENEA, Italy; AEL, Luxembourg; NOVEM, The Netherlands; ENOVA, Norway; KAPE, Poland; ARCE, Romania; SEA, Slovakia; AURE, Slovenia; ADENE, Portugal; IDEA, Spain; STEM, Sweden; EST, United Kingdom.

New participants: EnR wants to identify potential new partners and develop networks with appropriate actors in Europe.

Objectives:

Be at the forefront of Europe's drive towards increased energy efficiency, use of renewable energy sources and climate change abatement by enhancing the role of its members through communication, co-ordination and collaboration, - and by acting as a bridge between national activities and those of the European Community and other relevant international bodies.

Work Programme:

EnRs main function is to encourage and facilitate exchanges of *information*, *experience* and *expertise* among its member organisations. In addition members liaise on activities relating to the programmes of the European Union and those undertaken under other international collaborate agreements. EnR provides a forum for an informal and constructive dialogue between members and other partners around the world.

EnR members meet for two formal meetings per year. In addition, coordination of strategic issues takes place in regular meetings of the "Thinking group". The most important instruments of EnR are *working groups*, *contracts* and *consultations*. Working group activities are sharing skill and experiences, joint studies, interaction with the European Commission and international activities.

EREC

1.7. EREC - European Renewable Energy Council

Website: www.erec-renewables.org

,, ,		9
President:	Email: erec@erec.org	Address:
Prof. Arthouros Zervos	Phone:	
	Fax:	
Secretariat:	Email: lins@erec.org	Address: Renewable Energy House,
EREC,	Phone: +32 2 546 1933	Rue d'Arlon 63-65, B-1040 Brussels,
Secretary General: Christine Lins	Fax: +32 2 546 1934	Belgium

Host organisation/management: EREC is an umbrella organisation of the leading European renewable energy industry, trade and research associations active in the sectors of photovoltaic, wind, small hydropower, biomass and solar thermal.

Secretariat: EREC, Renewable Energy House, Brussels

Financing: **Duration**:

Participating members: AEBIOM, EGEC, EPIA, ESHA, EUBIA, EWEA, EUREC Agency,

ESTIF

New participants: Accept associate members

Objectives:

- To provide information and training on renewable energy sources.
- To provide information and consultancy on renewable energies for the political decision-makers on a local, regional national and international level.
- To publish information material (brochures, didactic material, manuals etc) on renewable energy sources.
- To encourage studies on the economics, techniques and feasibility in the field of renewable energy sources for the member associations, external organisations, as well as public and private institutions.
- To co-operate with renewable energy organisations from all over the world.
- To promote European exports of equipment and products, and promote the industrial protection of European renewable energy technologies on global markets
- To strengthen export initiatives and promote trade, while generally assisting the associations, the federation members of EREC and the renewable world
- To enlarge industrial export services with commercial publications, commercial indicators and seminars etc.

Work Programme:

Umbrella organisation for:

AEBIOM (European Biomass Association) www.ecop.ucl.ac.be/aebiom See AEBIOM in this report

EPIA (European Photovoltaic Industry Association) www.epia.org

ESHA (European Small Hydropower Association) www.esha.be

ESTIF (European Solar Thermal Industry Association) www.estif.org

EUBIA (European Biomass Industry Association) www.eubia.org See EUBIA in this report

EWEA (European Wind Energy Association) www.ewea.org

EUREC (European Renewable Energy Research Centres Agency) www.eurec.be

EGEC (European Geothermal Energy Council) www.egec.org

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European Renewable Energy Council - EREC

1.8. EUBIA - European Biomass Industry Association

Website: www.eubia.org

President:	Email:	Address:
Tord Fjällström	Phone:	
	Fax:	
Secretariat:	Email: eubia@eubia.org	Address: European Biomass Industry
EUBIA	Phone: +32 2 28 28 420	Association, Rond-Point Schuman, 6
Giuliano Grassi, Secretary General	Fax: +32 2 28 28 424	– B1040 Brussels, Belgium
		-

Host organisation: EUBIA is an industrial association grouping together: market forces (utilities, oil companies), technology providers and industry, regional and national organisations, R&D organisations, education and training organisations active in the field of bioenergy.

Secretariat: EUBIA, Brussels, Belgium

Financing: Entrance fee of €1000, and an annual fee of €2000,-.

Duration: Membership runs in a 12 month period from the date of joining.

Participating members / countries: 20 members from Belgium, France, Germany, Italy, Slovakia, Spain,

Sweden, Turkey

New participants: EUBIA is ready to accept new members and is open to all companies and organisations that have a commercial interest in biomass. Download application form at the website.

Objectives:

EUBIA was registered in 1996 as an international non profit association in Brussels, Belgium. It groups together market forces, technology providers and knowledge centres, all of them active in the field of biomass. EUBIA is a founding member of EREC.

The main objective is to support the European biomass industries at all levels, promoting the use of biomass as an energy source, developing innovative bioenergy concepts and fostering international cooperation within the bioenergy field.

Work programme:

- Small scale activities are carried out to use bioenergy for decentralised areas, mainly rural development inside and outside Europe.
- Industrial schemes: Power generation plants, biodiesel, bioethanol, hydrogen plants, etc ...
- Large scale integration of bioenergy, bioethanol, hydrogen in the energy market and to produce petrochemicals to improve traditional transportation fuels
- Other activities include the promotion of education and training in the field of bioenergy application, the promotion of innovative concepts and technologies.

EUBIA is working in a number of international projects to promote bioenergy. Some ongoing bioenergy projects are (2007):

- INTAS: Competitive Hydrogen from Agro-Forestry Residues
- IEE: Pellets@LAS
- FP6: Compete Competence Platform on Energy Crop and Agroforestry Systems for Arid and Semi-aris Ecosystems Africa
- FP6: RESTMAC Creating Markets for Renewable Energy Technologies EU RES technology marketing campaign

EUROPEAN COMMISSION (EC)

1.9. EUBIONET 2

Website: http://eubionet.net

Co-ordinator: Eija Alakangas	Email: eija.alakangas@vtt.fi Phone: +358 20 722 2550 Fax: +358 20 722 2598	Address: VTT, P.O.Box 1603, FIN-40101 Jyväskylä, Finland
Secretariat:	Email:	Address:
VTT Technical Research Center of	Phone:	"
Finland	Fax:	

Host organisation: European bioenergy networks AFBnet (Solid biofuels), Waste for Energy (Biogas) and NTB (Liquid biofuels) were established in 1995 by the European Commission to promote the utilisation of bioenergy in Europe. These networks have been integrated together under the cluster EUBIONET – European Bioenergy Networks as of the beginning of the year 2002, and will continue as Eurobionet2 the next years.

Secretariat: VTT Technical Research Center of Finland

Financing: Supported by the European Commission under the Intelligent Energy – Europe

Duration: 2005 - 2007

Participating countries: National co-ordinators in BLT, Austria; Valbiom, Belgium; DTI, Denmark; NCP, Finland; ADEME, France; FNR, Germany; CRES, Greece; SWS, Ireland; SenterNovem, The Netherlands; CBE, Portugal; SODEAN, Spain, SLU, Sweden, The University of Manchester, UK; AEBIOM; CEPI (See website about national co-ordinators and task managers)

New participants: The programme will welcome new participants

Objectives:

Eubionet 2 will concentrate on biofuel markets and fuel supply chains in Europe.

Work programme:

- To give a clear outlook of current and future biomass fuel market trends in Europe
- To give feedback on the suitability of CEN 335 biofuel standards for trading of biofuels
- To give well-analysed estimation on techno-economic potential of the biomass fuel volumes till 2010 based on existing studies and experts opinions. As regards forest biomass co-operation will be done also with forest industry stakeholders to find a proper balance between forest industry raw material and bioenergy use
- To enhance biomass fuel trade and technology transfer by networking of different actors
- To analyse, select and describe the most suitable trading and business models for small
 and large scale biofuel supply chains for heat and power production by taking into
 account the environmental aspects and sustainability
- To enhance biomass use by co-operation and information dissemination with different market actors in the fuel-utilisation chain

Communication and Promotion

Events, publications, meetings, study tours and contacts to key bioenergy organisations in Europe. Promotional material, Flyers, EU Policy, Facts, Biomass trade and fuel practicies.

INTERNATIONAL ENERGY AGENCY (IEA)

1.10. IEA Bioenergy Agreement

Website: www.ieabioenergy.com

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Chairman 2006:	Email:	Address: DG Energy & Transport,
Kyriakos Maniatis	kyriakos.maniatis@cec.eu.int	European Commission,
	Phone: +32 2 299 0293	Rue de la Loi/Wetstraat 200,
	Fax: +32 2 296 6261	B-1049 Brussels
Secretary:	Email: jrtustin@xtra.co.nz	Address: IEA Bioenergy Secretariat,
John Tustin	Phone: +64 7 348 2563	PO Box 6256, Whakarewarewa,
	Fax: +64 7 348 7503	Rotorua, New Zealand

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org). IEA Bioenergy Agreement is one of a number of Implementing Agreements established by the IEA

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per task and per participant (2006) varies between US\$10.000-21.000 depending on the total cost per task and the number of participants in each task. Contributions to the Executive Committee Fund vary from US\$ 6.000 to 15.000 per year and country depending on number of tasks per country.

Duration: The Agreement was set up in 1978 and has been renewed ever since for periods of 3 years. Present period: 1st Jan 2007 - 31st Dec 2009

Participating countries: Australia, Austria, Belgium, Brazil, Canada, Croatia, Denmark, Finland, France, Germany, Ireland, Italy, Japan, The Netherlands, New Zealand, Norway, Republic of South Africa, Sweden, Switzerland, United Kingdom, USA, - and the European Commission.

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives.

Objectives:

To accelerate the use of environmentally sound and cost-competitive bioenergy on a sustainable basis, to provide increased security of supply and a substantial contribution to future energy demands.

To facilitate commercialisation and market deployment of environmentally sound, sustainable and cost-competitive bioenergy technologies.

To provide platforms for international collaboration and information exchange in bioenergy research, development and demonstration. This includes the development of networks, dissemination of information, involvement of industry and encouragement of membership by countries with a strong bioenergy structure.

Work Programme:

The work is organized through the following 13 tasks and headed by the following operating agents (See separate fact sheets in this report):

- Task 29 Socio-economic Drivers in Implementing Bioenergy Projects Croatia
- Task 30 Short Rotation Crops for Bioenergy Systems Sweden
- Task 31 Biomass Production for Energy from Sustainable Forestry Canada
- Task 32 Biomass Combustion and Co-firing The Netherlands
- Task 33 Thermal Gasification of Biomass USA
- Task 34 Pyrolysis of Biomass The European Commission
- Task 36 Integrating Energy Recovery into Solid Waste Management United Kingdom
- Task 37 Energy from Biogas and Landfill Gas Switzerland
- Task 38 Greenhouse Gas Balances of Biomass and Bioenergy Systems Austria
- Task 39 Commercialising 1st and 2nd Generation Liquid Biofuel from Biomass Canada
- Task 40 Sustainable international bioenergy trade: Securing supply and demand The Netherlands
- Task 41 Bioenergy Systems Analysis Sweden
- Task 42 Biorefineries: Co-production of Fuels, Chemicals, Power and Materials from Biomass The Netherlands.

Communication and Promotion: See the various tasks and The Annual Reports from the web-site

1.11. IEA / Task 29 Socioeconomic Drivers in Implementing Bioenergy Projects

Website: www.iea-bioenergy-task29.hr/
The biomass and bioenergy educational website: www.aboutbioenergy.info

Operating Agent: Gary Shanahan	Email: gary.shanahan@dti.gsi.gov.uk Phone:	Address:
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Keith Richards	Phone: +44 1635 817 420	House, New Green Park, Newbury
	Fax: +44 1635 552 779	RG196HW, UK
Assoc.task leader: Julije Domac	(Email: jdomac@eihp.hr)	

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 12.000 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Austria, Canada, Croatia, Ireland, Japan, Norway, and the United Kingdom,

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

The objectives of this task are:

- i) to determine the economic contribution (financial, local industry creation, infrastructure developments, etc.) resulting from the deployment of bioenergy systems
- ii) to determine the social impact (employment, education, health, etc.) resulting from the deployment of bioenergy systems
- iii) to encourage the exchange of information and Task results between participants and also with countries in transition (Objective 5 of the Strategic Plan).

Work Programme:

The "flagship" project for the Task has been the development of an educational website about biomass and bioenergy. The website is now operational and can be visited at

www.aboutenergy.info. The final product will be a source of information for the non-expert audiences, mainly students, who are interested to learn more about the subject.

Communication and Promotion:

Proceedings containing a comprehensive selection of papers presented at Task workshops, Task booklet, Progress reports and the educational website.

1.12. IEA / Task 30 Short Rotation Crops for Bioenergy Systems

Website: www.shortrotationcrops.com

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Task leader:	Email: theo.verwijst@lto.slu.se	Address: Dep of Short Rotation
Theo Verwijst	Phone: +46-18-672-550/51	Forestry, SLU, P.O.Box 7016, S-
	Fax: +46-18-673-800	75007 Uppsala, Sweden

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 13.000 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Australia, Canada, New Zealand, Sweden, United Kingdom, (The Netherlands observing for 2007)

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

"Short Rotation Crops" means woody crops such as willows, poplars, Robinia and Eucalyptus with coppicing abilities, as well as lignocellulosic crops such as reed canary grass and Miscanthus.

The objective of the short-rotation crop Task is to meet the needs of bioenergy industries through technical improvement of biomass crop production technologies, through documenting and disseminating information on the potential environment benefits of biomass crop production systems, and through developing information to enhance market development in collaboration with the private sector.

The overall aim is to further develop the existing short rotation biomass production systems, improve the awareness of the bioenergy production potential of the concept and promote the use of biomass for energy in participating countries. The intention is to strengthen the contact and cooperation between scientists, biomass producers, machine developers, entrepreneurs in the production chain and end users with the aim to improve the understanding of the problems and find means to solve them.

Work Programme:

A major focus is on the integration of production and environmental functions of short rotation biomass production. Consequently a range of topics, from economic viability to system sustainability, are represented as high priority areas in the work programme. High priority areas are:

- Sustainable short rotation crop systems: biomass production and technical aspects
- Sustainable short rotation crop systems: environmental and economic externalities
- Full-scale implementation of short rotation crop systems: assessment of technical and non-technical barrier
- The use of policy instruments: incentives, regulations, legislation to boost bioenergy, and assessment of their effectiveness
- Systematic short rotation crop knowledge transfer: development of web-based communication, compilation and dispersal of short rotation crop knowledge

Communication and Promotion:

Task website was developed in 2003 to obtain a wider Task 30 exposure. Newsletters, in addition to proceedings and reports from workshops and conferences are published.

1.13. IEA / Task 31 Biomass production for energy from sustainable forestry

Website: http://ieabioenergytask31.org

Operating Agent:	Email: phall@nrcan.gc.ca	Address: Dep of Natural Resources,
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Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 14.400 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Canada, Denmark, Finland, Germany, Norway, Sweden, The United Kingdom, and USA (Observing for 2007 – The Netherlands).

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

To develop an integrative framework for information relating to biomass production for energy from sustainable forestry, based on leading-edge science and technology; and to share and promote the use of such an information framework with advanced information technology and a high level of collaboration.

Work Programme:

This Task continues and enhances the program undertaken in Task 31. It encompasses multi-use forestry systems with primary production for other than energy. The scope is world wide, including boreal, temperate, subtropical and tropical forest regions, and inviting participants from developing as well as developed countries. The work includes sharing and synthesizing of research information, stimulating new research directions to help meet the sustainable development goals of national programs in participating countries, as well as technology transfer based on integrative models of biomass production systems. The integrated approach incorporates biological, economic, environmental and social components of forestry systems. Multi-disciplinary partnerships of key research, government and industry stakeholders in forest biomass production research, planning and operations are fostered.

- -Annual workshops and field study tours, for sharing of scientific and technical information and furthering the Task program, with published proceedings.
- -Provision of information framework for sustainable biomass production systems integrating (1) forest management activities offering simultaneous opportunities for biomass recovery for energy and silvicultural benefits, (2) cost-effective, environmentally-benign operational biomass recovery, (3) sustainable biomass productivity taking into account soil and water conservation, nutrient cycling, carbon sequestration and biodiversity, and (4) social and cultural considerations
- -Transfer of new knowledge and technical information to research, government and industry stakeholders, with emphasis on advanced user-friendly interactive information technologies (Electronic Information System).
- -Strong collaboration and information exchange with related IEA Bioenergy Tasks and other forestry and bioenergy organizations worldwide.

Communication and Promotion:

Successful series of technical seminars will be continued. A technical newsletter series will be produced.

1.14. IEA / Task 32 Biomass Combustion and Co-firing

Website: www.ieabcc.nl

Website. WWW.iedbec.iii		
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Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 11.500 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Austria, Belgium, Canada, Denmark, Finland, Germany, The Netherlands, Norway, Sweden, Switzerland, United Kingdom, and the European Commission.

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

- * Draw together information from research and development programmes and industrial developments on Biomass Combustion, including technical and non-technical factors which influence barriers and solutions to the use of Biomass Combustion:
- * Use this information to stimulate the expansion of the use of Biomass Combustion for the production of heat and power to a wider scale;
- * Disseminate such information to Participants through:
- Publication of project results as IEA Bioenergy Reports and as contributions to seminars and workshops;
- Meetings of members;

Organisation of seminars for industry and potential users;

- Mutual IEA Bioenergy / Industry project proposals.

"Biomass Combustion" refers to both combustion and co-firing of biomass for the production of usable energy and includes market introduction and optimization of biomass combustion technologies.

Work Programme:

The work programme is based on a prioritisation of national activities. Task participants identify small and medium scale CHP systems as well as co-firing coal with biomass and related wastes as the most important topics:

- Small and medium scale CHP
- Co-firing coal with biomass and related wastes
- Increasing fuel flexibility, including contaminated biomass and biomass pellets
- Advanced process control and sensor development
- Corrosion and deposit formation mechanisms
- Formation and emission of particulates (aerosols) and primary measures for NOx reduction
- Improvement of existing systems and development of new concepts

Communication and Promotion:

Please see Media Centre for an overview article on recent work of this Task on co-firing biomass with coal in existing coal-fired power plants.

INTERNATIONAL BIOENERGY NETWORKS AND PROGRAMMES

1.15. IEA / Task 33 Thermal gasification of biomass

Website: www.gastechnology.org/iea

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		DC 20585-0121, USA	
Task leader:	Email:	Address: Gas Technology	
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	Phone: +1-847-768-0509	Road, Des Plaines, Illinois 60018-	
	Fax: +1-847-544-3470	1804, USA	

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 11.000 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Austria, Canada, Denmark, Finland, Germany, The Netherlands, New Zealand, Sweden, Switzerland, USA and the European Commission

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

The objectives of this Task are to review and exchange global information, seek continuing industrial involvement, and promote co-ordinated research, development, and demonstration among the Participants to eliminate technological impediments to the development and commercialization of thermal gasification of biomass. The ultimate objective of this Task is to produce substitute fuel gases from biomass for utilization in environmentally sound, efficient, and economical energy conversion systems.

Work Programme:

Subtask studies selected by the Task participants:

- Gas cleaning for moving-bed biomass gasifiers coupled to gas engines, gas engine performance with biomass gasifiers
- Gas cleaning and effluent characterization for CFB and FB gasifiers
- Toxicity of waste water generated from gasification of woodchips
- Biomass gasification to produce synthesis gas and hydrogen or hydrogen-rich gas and gas utilization in high-temperature fuel cells and gas processing to produce liquid fuels and chemicals
- Tar protocol
- Review and update on energy conversion devices
- Fuelgas co-firing
- Municipal solid waste/RDF gasification and energy recovery
- Country reports
- Legislation regarding technical issues, emissions and effluent limits, safety, permitting, and final considerations

Communication and Promotion:

Please see Media Centre for an overview article on three biomass gasification success stories. Semi-annual Task meetings, including seminars, workshops and round table discussions on critical technical topics, involving academic and industrial experts. Coordination of preparation and distribution of Technology Briefs and Technology Reports resulting from selected subtask studies are *available on the Task website*.

INTERNATIONAL BIOENERGY NETWORKS AND PROGRAMMES

1.16. IEA / Task 34 Pyrolysis of Biomass

Website: www.pyne.co.uk

THE SELECT THE PARTIES OF THE PARTIE		
Operating Agent:	Email:	Address: DG Energy & Transport,
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	Fax: +32-2-296-6261	
Task leader:	Email:	Address: Bio-Energy Research
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Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 10.000 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Germany, Norway, USA and the EC (Actual participation is higher than indicated because this is a joint programme with the European Commission)

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

"Pyrolysis" is the controlled thermal degradation of biomass in any form to derive valuable energy and chemical products.

The objectives of this Task are to study the technology and science of biomass pyrolysis and the associated processes and the applications that constitute and intergrated bioenergy scheme. The aim is to develop and extend the European Pyrolysis Network that has been operational for three years. The Network provides a forum for the discussion, evolution and dissemination of all aspects of biomass fast pyrolysis from preparation of feedstock through to the fast pyrolysis process to utilisation of the liquid product for energy, electricity and chemicals production.

Work Programme:

The main activities and contributions are in the following technical Topics and with designated topic leaders:

- Bio-oil quality norms and standards
- Environment health and safety
- Applications matching to product
- Charcoal
- Technology review

Joint Topics are structured as follows, and with designated topic leaders:

- Kinetics and modelling
- Education, training and promotion
- Technical and non-technical barriers
- Policy and strategy
- Country reports

Communication and Promotion:

The PyNe newsletter is published at six months intervals and continues to be an important vehicle for dissemination. The newsletter is circulated to member countries for distribution. The PyNe website continues to be a major method of dissemination and is increasingly used to communicate with members and the rest of the world.

1.17. IEA / Task 36 Integrating Energy Recovery into Solid Waste Management

Website: www.ieabioenergytask36.org

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Task leader:	Email: npatel@aeat.co.uk	Address: AEA Technology	
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Grace Gordon (assistant)	Fax: +44-1235463-004	Abingdom, Oxfordshire OX11 0QJ	
		UK	

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 15.320 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Canada, France, Germany, The Netherlands, Norway, Sweden, UK, and the European Commission.

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

The objective of the Task is to produce a comprehensive status report of the latest developments in, and deployment of, conversion technologies for Municipal Solid Waste (MSW) and Refuse Derived Fuel (RDF).

"Energy from Thermal Conversion of Municipal Solid Waste (MSW) and Refuse Derived Waste (RDF)" refer to thermal processes for the production of usable energy from these feedstocks.

"Usable energy forms" include heat and electricity as well as solid fuels.

For more information please contact the Task Leader or the Assistant Task Leader.

Work programme:

The work programme comprises five Topic Areas as follows:

- Product stewardship/producer responsibility
- Mechanical biological treatment
- Greenhouse gas balances for MSW systems
- Micro-particulate emissions pm10
- Thermal treatment of sewage sludge

Communication and Promotion:

Collaboration with Task 37 and 38. Progress reports are available on request from the Task Leader (grace.gordon@aeat.co.uk.)

1.18. IEA / Task 37 Energy from Biogas and Landfill Gas

Website: www.iea-biogas.net

	<u> </u>	
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Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 14.000 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Austria, Canada, Denmark, Finland, France, Germany, the Netherlands, Sweden, Switzerland, and the European Commission.

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives:

Task 37 covers the biological treatment of the organic fraction of municipal solid waste (OFMSW) as well as the anaerobic treatment of organic rich industrial waste water. OFMSW is digested in specifically designed digestors or in co-digestion with other wastes (mainly manure). The main interests are the production of biogas and a digestate of a high quality. Collection, sorting, gas upgrading and gas utilisation are accompaning technologies

Work Programme:

Task 37 covers the biological treatment of the organic fraction of municipal solid waste (OFMSW) as well as the anaerobic treatment of organic rich industrial waste water. OFMSW is digested in specifically designed digesters or in co-digestion with other wastes (mainly manure). The main interests are the production of biogas and a digestate of a high quality. Collection, sorting, gas upgrading and gas utilisation are accompanying technology.

The general activities of Task 37 are:

- · Exchange and disseminate information on biogas production and energy utilisation
- · Promote deployment of AD plants
- · Stimulate interaction between R, R&D programs, industry and decision makers
- · Assist participating and non-participating countries in adopting appropriate waste management practices to improve environmental standards
- · Interact and collaborate with appropriate international organisations

Communication and Promotion:

The website is a major commitment in the programme of work, in addition to progress reports, minutes of Task meetings, technical reports and brochures. In most of the Member countries educational training is offered to AD plant operators.

1.19. IEA / Task 38 Greenhouse gas balances of biomass and Bioenergy Systems

Website: www. ieabioenergy-task38.org

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Task leader:	Email:	Address: Joanneum Research,
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	Fax: +43-316-876-1320	

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 14.000 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Australia, Austria, Belgium, Croatia, Finland, Germany, Sweden, and the USA.

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives

The goal of the Task is to investigate all processes involved in the use of bioenergy systems on a full fuel-cycle basis with the aim of establishing overall GHG balances. Based on activities in the participating countries, the objectives are to:

- * Collect and compare existing data of GHG emissions from various biomass production processes in agriculture and forestry and from biomass conversion;
- * Improve the common analytical framework for the assessment of GHG balances (developed within IEA Bioenergy Task XV);
- * Apply the common analytical framework to compare different bioenergy options and assist in the selection of appopriate national strategies for GHG mitigation;
- * Compare bioenergy and fossil energy systems in terms of GHG balance;
- * Evaluate the tradeoffs between strategies of maximised carbon storage (afforestation, forest protection) and maximised fossil fuel substitution with biofuels;
- * Identify missing data and R&D requirements;
- * Contribute to the work of IPCC/OECD/IEA, especially to promote the possible role of bioenergy for GHG mitigation.
- "Greenhouse Gases" (GHG), like carbon dioxide (CO2), methane (CH4), nitrous oxide (N20) and others, are gases that influence the radiation balance of the atmosphere. An increase of their concentration in the atmosphere, e.g. due to additional anthropogenic emissions, may bring about a change of the earths climate.
- "GHG balances" shall mean the accounting of emissions and removals of GHG from that atmosphere.
- "Bioenergy Systems" means the set of all processes that are necessary to provide energy from biomass at its' point of use. These processes include biomass production, transportation, storage, processing, conversion, and energy distribution.

Communication and Promotion:

The Task 38 bibliography has been modified into a database system which can be accessed through the website where everyone can make new entries, which will be checked by the Task management. A pdf version of the Task 38 folder can be downloaded from www.joanneum.at iea-bioenergy-Task38/description/task38folder.pdf.

1.20. IEA / Task 39 Commercialising 1st and 2nd Generation Liquid Biofuel from Biomass

Website: www.task39.org

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	Fax: +1-613-947-9035	Ottawa, Ontario K1A 0E4, Canada
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Jack Saddler	Phone: +1-604-822-9741	Univ of British Columbia, Forest
	Fax: +1-604-822-9104	Science Center,
		Vancouver, B.C. V6T 1Z4, Canada

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, **nobuyuki.hara@iea.org**

Secretariat: IEA Bioenergy Agreement (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 10.500 (\$US)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Australia, Austria, Canada, Denmark, Finland, Germany, Ireland, Japan, the Netherlands, Norway, South Africa, Sweden, UK, USA, and the European Commission

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives

Objectives

The objectives of this Annex are to:

- * Work jointly with governments and industry to identify and eliminate non-technical environmental and institutional barriers which impede the use of liquid fuels from biomass in the transportation sector;
- * Establish and Advisory Board of stakeholders in the Liquid Biofuels industry to bring a business environment to the work of the Task;
- * Identify remaining technological barriers to Liquid Biofuels technologies and recommend strategies for overcoming these barriers;
- * Consolidate these efforts and formulate a deployment strtategy which will include agreement to proceed with a technology demonstration unit to be cost-shared by government and industry at the termination of the Annex.

Communication and Promotion:

The task provides information activities and international events related to biofuels. The archive is available through the web-site. Please see Media Centre for an overview article on recent developments in liquid biofuel commercialisation, especially bio-based ethanol and biodiesel..

1.21. IEA / Task 40 Sustainable international bioenergy trade: securing supply and demand

Website: www.bioenergytrade.org

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Andre Faaij (Scientific)	Phone: +31-30-253-7643	Sustainable Development, Utrecht
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Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant – budget 2006: 15.000 (US\$)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Belgium, Canada, Finland, Germany, the Netherlands, Norway, Sweden,

the United Kingdom (and FAO).

New participants: The IEA Bioenergy Agreement wants to identify potential new Member

Countries and develop networks with appropriate representatives.

Objectives

Short-term objectives (1-3 year)

- 1. Agreement on the emphasis on specific objectives and deliverables to be fixed together with participating countries and their stakeholders (especially interested industrial parties).
- 2. Overview of available information, work, insights, modelling tools and their possibilities and limitations for evaluating biomass markets (resources and utilisation) on different scale levels (global, national, regional).
- 3. Improvement on insights in influencing factors on the supply and demand of biomass for the short, medium and long term
- 4. Overview of development of biomass markets in various parts of the world and generic lessons to be deducted
- 5. Synthesis of existing trade experiences (i.e. Sweden, Finland, Brazil, the Netherlands) and survey on the possible effects towards existing markets (e.g. pulp wood, forestry and agricultural products and residues) on bioenergy trade 6. Synthesis of existing harriors, harroring development of a (global) commodity market (policy framework, ecology
- 6. Synthesis of existing barriers, hampering development of a (global) commodity market (policy framework, ecology, economics)
- 7. Identification of strategies to overcome "barriers"
- 8. Identification of sustainability criteria and their local influence on the biomass market (e.g. development of best practice guidelines)
- 9. Increasing public awareness of international bioenergy trade (i.e. within IEA and other international organisations) 10. Exchange of information on bioenergy experiences between parties with a different stage of market development

Medium-term objectives (4-10 year)

- 1. International platform (representatives from all kind of relevant stakeholders) for bioenergy trade (e.g. supply and demand, sustainability, financial products etc.), required for the necessary dialogue.
- 2. Dynamic demand and supply models of bioenergy, that takes influencing factors (pricing, actual demand, stocks, energy use for long distance transport) into account
- 3. Identification and analysis of options for integrating the production of biomass for energy and subsequent export into agricultural and agro-forestry systems especially in developing countries and countries in transition.
- 4. Evaluation of the political, social, economic and ecological impact of biomass production and trade in these systems for the local people, for food production; also in relation to specific sustainability criteria.

INTERNATIONAL BIOENERGY NETWORKS AND PROGRAMMES

1.22. IEA / Task 41 Bioenergy Systems Analysis

Website: None

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Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara, nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant: 21.000 (US\$)

Duration: 1st Jan 2005 - 31st Dec 2007

Participating countries: Germany, Sweden, United Kingdom, USA and the European

Commission.

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives.

Objectives

"Systems Analysis" means the study and analysis of the interaction between different parts of the energy system (eg. consumers, producers, fuel production) as well as the interaction of the energy system with other parts of society. The aim is to get a meta analysis of the larger context to facilitate the drawing of conclusions on priorities, decision making, policy effectiveness etc.

The objective of this Annex is to supply decision makers with scientifically sound and politically unbiased analyses and conclusions needed for strategic decisions related to research or policy issues. The target groups are particularly decision makers in Ministries, national or local administrations, deploying agencies/organisations, etc. Depending on the character of the various projects some deliverables are also expected to be of direct interest to industry. Decision makers, both public and private, have to consider a whole range of aspects in their planning and deliberations. Hence the Task will cover technical, economic and environmental data in its work.

Working Programme

Because of its special character in terms of participation, financing and cross cutting orientation, the Task is expected to be a valuable resource and instrument for the Executive Committee (ExCo). The Task will provide the ExCo with a highly qualified team of generalists with the capability and resources to carry out projects involving several parties (e.g. other Tasks and other organisations) as requested by the ExCo. It is expected to collaborate, by mutual agreement, with existing Tasks when they are relevant to a current project. Due to the character of the Task and its close contact with the other Tasks, the Task is expected to develop into a platform for joint Task work and to be a catalyst for proposals from the other Tasks to the ExCo.

All deliverables from the Task's programme of work will be made available to all Members of IEA Bioenergy whether or not they are participants in the Task.

INTERNATIONAL BIOENERGY NETWORKS AND PROGRAMMES

1.23. IEA / Task 42 Biorefineries:

Co-production of Fuels, Chemicals, Power and Materials from Biomass

Website: None

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René van Ree	Phone: +31 317 476593		
	Fax:		

Host organisation/management: International Energy Agency, Paris (IEA Liaison: Nobuyuki Hara nobuyuki.hara@iea.org)

Secretariat: IEA Bioenergy Agreement, New Zealand (www.ieabioenergy.com)

Financing: Annual contribution per participant: 21.000 (US\$)

Duration: 1st Jan 2007 - 31st Dec 2009

Participating countries: Austria, Canada, Denmark, France, The Netherlands, and the EC

New participants: The IEA Bioenergy Agreement wants to identify potential new Member Countries and develop networks with appropriate representatives. Observing for 2007: Finland, Ireland, Switzerland

Objectives

A biorefinery can be defined as a facility that optimises the integrated production of materials, fuels, energy and chemicals. By producing multiple products, a biorefinery can maximise the value derived from the biomass feedstock. A key driver for the development and implementation of biorefineries is the view that the growth in demand for energy, fuels, and chemicals, will place additional pressure on the use of resources and the environment. Accordingly, the thrust is in finding new technologies and creating novel processes, products, and capabilities to ensure the growth is sustainable. There is a common interest in shifting from a sole dependence on fossil resources to an industry based on plant-based resources. The shift to a biobased chemical and material industry will alter the technological basis of the industry quite radically. Further research and technology adoption will indicate which new products and processes contribute to sustainability. This will be necessary for communication with non-governmental organizations (NGOs), the general public, regulators and policy makers about, for example, CO²-emissions.

Work Programme

Task 42 addresses a new and very broad biomass-related field with a very large application potential. Releasing this potential will require collaboration between industry, research providers, government and NGOs to identify appropriate RD&D priorities and programmes as well as market introduction strategies.

Task 42 will cover a variety of market sectors eg. transport sector, chemical sector, power sector, agricultural sector, with a lot of interested stakeholders. It will also include a variety of biomass conversion technologies and, more importantly, integrated concepts of both (bio)chemical and thermochemical conversion technologies. Integrated biorefinery concepts convert a variety of feedstocks, including residues, into a portfolio of products with better energy efficiency, economy and environmental effects, than stand-alone processes often producing only one or two products.

The major objective of Task 42 is to assess the worldwide position and potential of biorefineries. It aims to gather new insight on the future possibilities for competitive, sustainable, safe and eco-efficient processing routes for the simultaneous manufacture of transportation fuels, added value chemicals, heat and power, and materials.

1.24. ITEBE - European Technical Institute for Wood Energy

Website: www.itebe.org

Executive Director: François Bornschein	Email: francois.bornschein@itebe.org Phone: + 33 384 47 81 00 Fax:	Address: ITEBE, 28 Boulevard Gambetta – BP 30149, 39004 Lons le Saunier, France
Secretariat: ITEBE	Email: info@itebe.org Phone: +33 384 47 81 00 Fax: +33 384 47 81 19	Address: ITEBE, 28 Boulevard Gambetta - BP 30149, 39004 Lons le Saunier, France

Host organisation: A non profit and non governmental , international and professional association, founded in 1997, under French law.

Secretariat: ITEBE, Lons le Saunier, France

Financing:

Duration:

Participating members / countries: 535 members/subscribers in 19 countries. Representations outside France: Argentina, Austria, Slovenia, Spain, Switzerland, Belgium, and Italy.

New participants: ITEBE welcome new members / subscribers

Objectives:

ITEBE is an international professional association that acts as a tool for promotion and support to the actors of the biomass sectors, mainly companies and communities

Competence:

Inside ITEBE: Forestry, forestry production, fuels production, energy production, environment, communication, documentation, graphics, computer, commercial, trainings.

In the experts network: Economy, heating networks, legislation, training, research

Work programme:

- ITEBE EXPO, organisation of trade fairs and conferences: promotion through exhibition, communication and competition
- ITEBE RESOURCES, services of documentation, information and advice, editions, professional clubs, Internet portal, knowledge server
- ITEBE DEVELOPMENT, development of sectors, international cooperation, research, technology and know-how transfers, quality promotion
- ITEBE EDUCATION: Initial and professional training

Communication and Promotion:

- Wood Energy Internet Portal
- Documentation Centre
- Professional clubs (Firewood club, Wood chips club, Pellet club, and Barbecue and charcoal club)
- Wood Energy revue published in French, English, German and Italian
- Monthly Wood Energy Newsletter in French, English, German, Spanish and Italian
- Directory of professionals in the sector

NCM - Nordic Council of Ministers (www.norden.org)

1.25. Nordic Energy Research

Website: www.nordicenergy.net

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Peter Lindblad		Uppsala, Sweden
* Nordic Graduate School of	Email: mikko.hupa@abo.fi	Address: Åbo Akademi,
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Wood for Cost-effective	Fax: +47 73 55 09 99	Høgskoleringen 6B, 7491
Ethanol Production: Karin		Trondheim, Norway
Øyaas		
Nordic Energy Research:	Email:	Address: Nordic Energy
Birte Holst Jørgensen,	birte.holst.joergensen@nordicenergy.net	Research, Stensberggt. 25, NO-
Managing Director	Phone: +47 4761 44 00 / +47 9747 3544	0170 Oslo, Norway
	Fax: +47 2256 5565	

Host organisation: Nordic Energy Research is a Nordic institution under the Nordic Council of Ministers.

Secretariat: Nordic Energy Research, Oslo, Norway **Financing**: Main financing from the Nordic countries

Duration: The Nordic Energy Research Programme was established in 1986. Nordic Energy Research was set up as a Nordic Institution under the Nordic Council of Ministers in 1999.

Participating members / countries: Denmark, Finland, Iceland, Norway, Sweden in close co-operation with the Baltic States and NV Russia.

New participants:

Participating is possible via established R&D-projects.

Objectives

- To contribute to effective and environmentally friendly energy production, distribution and application within the Nordic countries through research and technological development.
- To strengthen commercial development in the energy sphere within the Nordic countries.
- To promote the flow of knowledge within the energy sphere between the Nordic countries and adjacent areas

Work programme:

The idea is to generate Nordic added value in addition to the energy research results achieved under this co-operation. Well co-ordinated with the core areas of the energy related activities of NCM five target areas have been identified. In these areas problem-oriented research has a central position:

Within the target area Renewable Energy, five ongoing projects are directly related to bioenergy:

"Nordic Graduate School of Biofuel Science and Technology – phase 2" (www.abo.fi/biofuelsGS). Project duration: 2007-2010. Total project budget: 11.3 MNOK.

"BioH2 – Renewable Production of H2 using Biological Systems" (www.fysbot.uu.se/cyano). Project duration: 2007-2010. Total project budget: 9 MNOK

"New, Innovative Pre-treatment of Nordic Wood for Cost-effective Ethanol Production". Project duration: 2007-2010. Total project budget: 11.3 MNOK.(www.pfi.no)

"International Bioenergy Networks – Directory 2007". Updated lists and descriptions of international bioenergy networks are available as fact sheets at **www.nordicenergy.net**.

"Bioenergy Database". Database with 250 entries, covering various regional players within bioenergy in the Baltic Sea region. Available free of charge at www.nedatabase.info/bioenergy.

Please check the website www.nordicenergy.net for more detailed information

EUROPEAN COMMISSION (EC)

1.26. WoodWisdom-Net

Website: www.woodwisdom.net

Website: WWW.odawisdollimet				
Coordinator:	Email: christine.hagstrom-	Address: National		
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of Finland (Tekes) /	Phone: +358 10 605 5822	Finland (Tekes), P.O.Box 69,		
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		,		
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Project Manager,	woodwisdom.office@woodwisdom.fi	5, FIN-01530 Vantaa, Finland		
Leena Paavilainen,	Phone: + 358 50 3912020			
,	Fax: + 358 9 2517 8101			

Host organisation/management: WoodWisdom-Net, "Networking and integration of national programmes in the area of wood material science and engineering" is a project within ERA-NET Scheme of the EU 6th Framework Programme. The ERA-NET is also one of the major objectives in the 7th Framework Programme.

Secretariat: National Technology Agency of Finland (Tekes), Helsinki, Finland

Financing:

Duration: 2004 - 2007

Participating countries: 18 partners from eight countries (Austria, Denmark, Finland, France, Germany, Norway, Sweden, UK.

New participants: The programme wants to identify potential new partners and develop networks with appropriate actors.

Objectives:

The strategic objectives of the four-year project WoodWisdom-Net are to deepen the collaboration between the European funding organisations in the field of wood material science in order to coordinate the use of research funds, and to integrate research resources from different countries in order to promote the competitiveness and sustainability of the European forest cluster. The final goal is to open a co-funded joint call in the field of wood material science.

Work Programme:

- Benchmarking and dissemination of good practices
- Identification of complementary research activities
- Identification of practical networking and opening mechanisms for future cooperation
- Implementation of joint evaluation and foresight activities
- Identification together with stakeholders (e.g. industry) of the research areas and instruments needed to improve competitiveness and sustainability of the forest cluster
- Implementation of transnational research programme to improve competitiveness and sustainability of

2. LINKS

AGORES (www.agores.org) - A global overview of Renewable Energy Sources. A multimedia encyclopedia on renewable energies.

BALTIC 21 (www.baltic21.org). An Agenda 21 for the Baltic Sea Region, in short *Baltic 21*, is founded on the political will to accelerate the work on sustainable development in the Baltic Sea Region and to implement Agenda 21 regionally. The work of Baltic 21 is focused on seven economic sectors – incl. energy, forests and agriculture. You may access any of the Baltic 21 sectors from the main menu bar. A new bioenergy project will be developed and implemented in co-operation between BASREC and Baltic 21 as an INTERREG/TACIS project.

BASREC (www.cbss.st/basrec) - Baltic Sea Region Energy Cooperation. The countries and institutions participating in BASREC are Governments of *Denmark*, *Estonia*, *Finland*, *Germany*, *Iceland*, *Latvia*, *Lithuania*, *Norway*, *Poland*, *Russia and Sweden*. The European Commission is represented by *DG TREN*, the Directorate General for Transport and Energy. The participation in this work programme also involves the *Council of Baltic Sea States* (*CBSS*), the *Nordic Council of Ministers* (*NCM*), and the Council of Baltic States (CBS).

The BASREC co-operation has provided the CBSS member countries with a forum to build up a regional view of the energy policy strategies. The networks and the BASREC's organizational structure give administrations and business actors in the energy sector a natural base for analyzing the possibilities to develop the market framework and rules in order to effectuate the energy supply and to reduce environmentally problematic impacts of energy production, use and transmission.

EUFORES (www.eufores.org) – European Forum for Renewable Energy Sources is an independent, non-profit making organisation that aims to use renewable energy. EUFORES was established to pursue the target outlined in the 1994 "Declaration of Madrid" – a 15% substitution of conventional primary energy demand by renewable energy sources by 2010. Financed by sponsorships, grants and Members contribution. Membership is open to all organisations and individuals.

IEA / EETIC (www.eetic.org) – Energy and Environmental Technologies Information Centres. EETIC comprises two programmes: CADDET and GREENTIE

IEA / ETDE (www.etde.org) — Energy Technology Data Exchange and the Energy Database. Mission: "To provide governments, industry and the research community with access to the widest range of information on energy research, science and technology and to increase dissemination of this information to developing countries".

IEA / GREENTIE (www.greentie.org). An international Directory of suppliers whose technologies and services help to reduce greenhouse gas emissions. A database of supplies, goods and services for greenhouse gas abatement. Non-member countries are now eligible to submit Directory entries. GREENTIE has formed a partnership with the UNEP Sustainable Network (SANet / www.sustainablealternatives.net) project which encourages uptake of sustainable investment and complements GREENTIES work.

IEA / CADDET (www.caddet.org) – Centre for the Analysis and Dissemination of Demonstrated Energy Technologies. CADDET promotes the exchange of information on commercial energy efficiency and renewable energy projects. The site also includes News, Events, CADETT forum and links to other energy sites.

EC / ManagEnergy (www.managenergy.net). ManagEnergy promotes cooperation between local and regional actors in Europe through study tours and online events on energy efficiency, renewable energy and sustainable transport. The ManagEnergy Website has up-to-date information on events, case studies, funding, legislation and agencies across Europe. The website includes a partner search system with some 3000 organisations, including 380 energy agencies providing valuable expertise and partnerships.

EC / GasNet (www.gasnet.uk.net) – Biomass Gasification Network. The GasNet Website, funded by EC, is designed and constructed for all researchers, developers and implementers of biomass gasification. Information is provided on the technology, its application and specific topics.

EC / OPET Network (www.opet-network.net) – Organisation for the Promotion of Energy Technologies. An initiative of the EC that aims to promote public awareness of current energy research through a new and challenging series of activities. These activities are intended to further the deployment of innovative technologies and increase the pace of market uptake in respect of research that supports European Energy Policy priorities.

FAO / Global Bioenergy Partnership (www.globalbioenergy.org). GBEP was launched by the G8 leaders to support the development og biomass and biofuels market

FAO / Programme on Wood Energy (www.fao.org/forestry) is designed to promote Sustainable Wood Energy Systems (SWES) as a contribution to Sustainable Forest Management (SFM), livelihoods and food security. FAO s *Forestry Energy Forum* (www.fao.org/forestry/site) - Biannual newsletter. The aim is to provide readers with information on the issues surrounding the entire range of fuels that can be derived from forest biomass.

FAO / International Bioenergy Platform www.fao.org/sd/dim_en2/en2_060501_en.htm

RecAsh (www.recash.info) aims to create conditions for regular recycling of wood ash (ash from fuels originating from forests) to forestland – taking into account environmental, technical, economic, logistic, and administrative aspects.

THE BIOENERGY INTERNATIONAL

(www.bioenergyinternational.com or www.novator.se) – A media product published on the Internet and on paper. The web version consists of three sections: 1) The *Editorial*; 2) The *Connection* – the information is published directly from the provider to the reader; and 3) The *Special section* – consists of special topics including facts, photo archive, AEBIOM information and Country reports.

TRECKIN (www.treckin.com). This is the European component of a worldwide network that facilitates and stimulates initiatives in the field of Tradable Renewable Energy Certificates (TRECs) by government authorities, non-governmental organisations and the private sector.

USA / National Bioenergy Initiative (http://bioenergy.ornl.gov/).

To foster research and development on advanced technologies that will transform abundant biomass resources into clean, affordable, and domestically-produced biofuels, biopower, and high-value bioproducts.

USA / National Renewable Energy Laboratory (NREL)

(**www.nrel.gov**). NREL is the principal research laboratory for the US Department of Energy's office of Energy Efficiency and Renewable Energy

3. National Energy Agencies and National Bioenergy Associations

Please search in fact sheet "1.8 ENR – European Energy Network" for agencies and in fact sheet "1.1 AEBIOM – European Biomass Association" for National Bioenergy Associations, - or make a search in the Bioenergy Database (www.nedatabase.info/bioenergy).