



www.bioclus.eu  
FP7 Regions 245438

## BIOCLUS, a project focused on the sustainable use of biomass resources

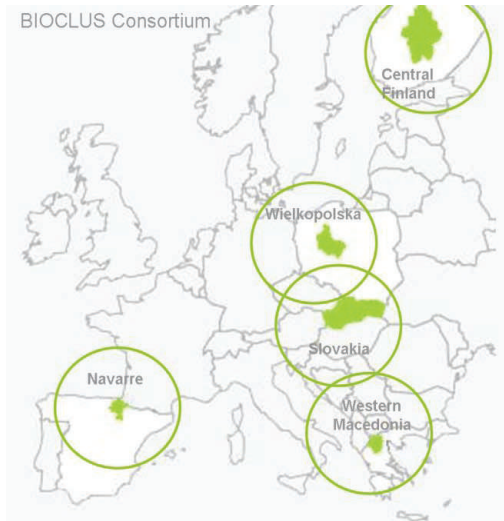
The project is funded by the EU seventh framework programme for research and technological development. The BIOCLUS objective is to boost the regional competitiveness and growth in five European cluster regions:

- Central Finland
- Navarre (Spain)
- Western Macedonia (Greece)
- Slovakia
- Wielkopolska (Poland)

It promotes collaboration and integration of cluster regions and strengthens the innovation environment by improving research potential and innovation management. Besides, the project supports sustainable development by improving the use of biomass resources. The development is achieved by:

- Promoting scientific, strategic and business competence at cluster and consortium level
- Developing collaboration capabilities in the clusters and consortium level
- Improving innovation to business environment by mutual learning and by mentoring

The BIOCLUS clusters (20 partners involved) are located in rural regions and all possess great biomass resources such as forests, agriculture, industrial and agricultural by-products



**The five regions form the BIOCLUS consortium**

as well as municipal waste. Biomass is a challenging raw material. The utilisation chains require special technical and practical competence as well as applications.

The global trend is that renewable resources replace non-renewable resources. Besides, the use of resources should be efficient and sustainable. Therefore, the clusters aim to improve the RTD activities and innovation systems. Furthermore, the biomass resources offer great possibility to BIOCLUS regions in economical and social terms.



JYVÄSKYLÄN AMMATTIKORKEAKOULU  
JAMK UNIVERSITY OF APPLIED SCIENCES

### BIOCLUS — Contact us

#### Questions about BIOCLUS Project?

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#### Questions about the current issue?

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**Institute for Solid Fuels Technology & Applications (ISFTA)**

## First project meeting in Finland: Jyväskylä 16-18 February 2010

The aim of the Bioclus project meeting was to achieve mutual understanding about key issues and project implementation in regional and international level.

**Key issues related to the five regions form the BIOCLUS consortium were defined as follows:**

- Important to learn about each other: other regions, their policies, organisations...
- Now there are mostly bilateral relationships and cooperation → aim to develop multilateral actions and Co-operation, and therefore to build up a strong consortium
- From some occasional contacts to a strong network or alliance

### And now the objectives and expectations of the meeting

- In the very beginning: getting to know each others' regions, organisation, policies etc
- Later benchmarking, sharing good practises etc.
- We need each other in order to create something new (ideas, innovations, projects etc.). The consortium can be a background or a foundation for future projects.
- Good partnerships & collaboration
- New links to other regions and organisations: networks through networks, new contacts.



Project meeting in Hotel Alba's conference room

On the last meeting day a trip to was organised by JAMK to various sites of biomass utilization, described as follows:

## Biomass utilisation in large scale energy production: Case Äänevoima Ltd

**Äänevoima Ltd uses the bark of pulp mills and provides heat for paper mill and town centre nearby...**

**Ääneseudun Energia Ltd.** is a versatile, environmentally friendly and service minded utilities company in Äänekoski, Finland. The areas of concentration are electricity distribution/sales, district heating production/sales and water supply/treatment.

District heating is produced almost entirely by domestic wood-based fuels.

Ääneseudun Energia's partner organization, **Äänevoima Ltd.**, produces district heating for the center of Äänekoski.

In practice, one-third of electricity and almost all district heating is produced by bioenergy. In co-operation with partner organizations, the company provides a substantial amount of hydro and bioelectricity to their customers.

Further information is available on: [www.aane-energia.fi](http://www.aane-energia.fi)

## Wood processing - pulp for demanding customers: Botnia Ltd



The Äänekoski mill

### Some words about pulp...

Pulp is the most important raw material for paper manufacturing. It is manufactured from various types of wood -- from softwood or hardwood -- depending on the kinds of special properties required in the manufacturing process of the desired paper product. The **Botnia** mills are specialised in developing and manufacturing pulp grades with different characteristics.

mill is 1,5 times that of the originally planned capacity. The production capacity is 500tonnes of ECF (Elemental chlorine free) bleached softwood and hardwood pulp on one line. The mill specializes in the production of bleached softwood and birch pulp for the manufacture of printing papers and boxboards.

More information about Botnia Ltd can be found on: [www.botnia.com](http://www.botnia.com)

### The Äänekoski mill:

...went on stream in 1985. The present day production capacity of the

## Energy supplier as biomass user: Case Jyväskylän

**Jyväskylä Energy Group's** main business areas are production, distribution and sales of electricity, district heat and water, as well as construction of distribution networks.

It operates primarily in the Jyväskylä region, with 150,000 inhabitants.

The company deals with 50 biomass suppliers, such as forest owner societies and other professional biomass suppliers. The fuel buffer stabilizes the variation in biomass supply. The biomass trade is supported by a biomass classification system.

**Development Manager Risto Rymyn** gave information about fuel resources and potential in Finland.

In specific:

Fuel peat resources are vast:

- estimated peat resources in Finland are about 12 500 TWh

- less than 1 % of the peatland area is in production

- annual use is about 25 TWh/a

- adequacy with annual use is about 500 a (without annual growth)

- Forests are growing about 100 million m<sup>3</sup>/year

- cuttings are about 50 million m<sup>3</sup>/year

Agrobiomass utilization is a technological challenge in boilers

- max 5 –10 % included in the fuel mix (due to the thermal corrosion)

More information (only in Finnish) about Jyväskylän Energia Ltd can be found on: [www.jenergia.fi](http://www.jenergia.fi)



**Peat production site and reed canary grass field in Finland. Photo by Agronomist Tiina Vilkkilä.**

## The BIOCLUS project has its own website — [www.bioclus.eu](http://www.bioclus.eu)

The website, launched by the end of May 2010 has six language versions, each for the respective national site: English (international site), Polish, Greek, Spanish, Slovakian and Finnish.

The national sites are built up by JAMK in English and the regional key partners update their site in their native language.

Information about the BIOCLUS cluster regions, Strategic Research Agendas, Joint Action Plans, Publications and contact details for the partners participating in this project are provided.



### Latest Events

- BIOCLUS Distance Meeting: 26 April 2010

...using **Adobe Acrobat Connect Pro** software, hosted by JAMK. This software is used to create information and general presentations, online training materials, web conferencing etc.

Topics such as the approval of documents (minutes, plans, tasklists etc.) were discussed along with a guidance for reporting.

Participants with voting rights were Steering Committee Members.

### Upcoming Events

- BIOCLUS Distance Meeting: 25 May 2010 & 21 June 2010
- BIOCLUS Steering Committee Meeting: 21 September 2010, Bratislava, Slovakia
- BIOCLUS Innovation Workshop: 22-23 September 2010, Bratislava, Slovakia



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