

PELLETS FOR EUROPE
– BARRIERS AND PERSPECTIVES FOR INCREASED MARKET PENETRATION

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ABSTRACT:

Pellets for Europe is an European expert network on pellets working together in the ALTENER-project Pellets for Europe. 17 pellet expert centres in 12 European countries work for increased production and use of biomass pellets from woody and agricultural residues in Europe. Technologies using pellets for heat and electricity is commercially available in countries like Sweden, Denmark, and Austria. Pellets are competitive to oil, natural gas and electricity concerning convenience, reliability and price. Pellets are a cost effective mean of reducing greenhouse gas emissions. The purpose of the work and the general aim of the project is to stimulate the production and use of clean, high quality biomass pellets for heating and CHP-production in Europe. To realise the objectives the approach is to identify barriers, disseminate information and initiate promotion activities. Project work is carried out in close cooperation with local market actors and regional pellet networks are established. A European Pellet Centre ensures European wide impact and dissemination of project results

1 OBJECTIVES

Pellets for Europe has the overall aim to support development of the European pellet market.

Technologies using pellets for heat and electricity is commercially available in countries like Sweden, Denmark, and Austria. Pellets are competitive to oil, natural gas and electricity concerning convenience, reliability and price. Pellets are a cost effective mean of reducing greenhouse gas emissions.

The general scope is to stimulate the production and use of clean, high quality biomass pellets for heating and CHP-production in Europe. Pellets for Europe is a merge of three projects which were all evaluated favourably with respect to relevance, objectives, approaches, results and consortiums. The general aims of the original projects are maintained in the merged project:

- Stimulate new wood pellet markets
- Stimulate new markets of pellets from agricultural residues
- Support development and integration of the European pellet market

2 DESCRIPTION OF PROJECT WORK

Quality and impact of project deliverables has been enhanced by contribution from more partners. Furthermore the project is now covering and reaching all European pellet markets with an integrated approach.

To realise the general objectives the project group will identify barriers, disseminate information and initiate promotion activities. Project work will be in close cooperation with local market actors and regional pellet networks will be established. A European Pellet Centre will ensure European wide impact and dissemination of project results by means of:

- European Pellet Centre Webpage
- European Pellet Newsletter
- European Pellet Market Database
- European Pellet R&D-assessment report

- European Pellet Best Case Stories
- European Pellet Workshops
- European Pellet Conference

2.1 Stimulate new wood pellet markets

Co-operation between market actors, such as researchers, trade associations and end-user groups is essential to develop new wood pellet markets. The key objectives are to establish co-operation with market actors and establish regional platforms for information dissemination and business possibilities. The potential, obstacles, drivers and success factors for market deployment will be assessed, and actions taken, in consensus with a major part of the market actors and their representative trade associations. For coordination of the activities local steering groups will be established based on representation from manufacturers, pellets producers, energy agencies, local government, R&D institutions and consultants.

2.2 Stimulate new markets of pellets from agricultural residues

Potential of agricultural residues in countries like Italy or Greece is much bigger than the one associated to the potential of residues from forestry and forestry industry, like it is in Scandinavian/Central European countries. While biomass pellets market is a commercial reality in some Northern European and Scandinavian Countries, in Mediterranean areas their market is currently extremely limited. It is the aim to support a successful penetration of biomass pellets into the south European markets by the following tasks:

- To establish the current status of pellets conversion technologies and market (heating, decentralised co-generation), identifying possible technology-market deficits at regional level.
- To analyse data on the potential for the augmented energy production from biomass pellets
- To assess the possibilities of European wide technology transfer for biomass pellets utilisation
- To assess the factors affecting the deployment

of biomass pellets in South-European Market

- To perform an awareness campaign on the potential utilisation of biomass pellets.

2.3 Integration and development of the European pellet market

The objective of the European Pellet Centre is to overcome identified barriers limiting the market integration and penetration of pellets at European level. Finally it is the objective to support the European standardisation work of solid biofuels by serving as an infrastructure for dissemination of the standard to market actors, authorities and the public in general.

3 EXPECTED RESULTS

The overall outcome will be increased European production and consumption of pellets. Results can be expected in three ways: i) New wood pellet markets. ii) New markets of pellets from agricultural residues. iii) Development and increased integration of the European pellet market.

3.1 Stimulate new wood pellet markets

The expected result of the work within this scope is the establishment of a European network of regional pellets networks as part of already established biomass networks that will carry on the initiated work and continue with information dissemination and capacity building activities. The action will also lead to bilateral business developments in several European countries. The market actors' awareness of the advantages of refined biomass shall also increase as well as the availability of information material and sources for the consumers.

3.2 Stimulate new markets of pellets from agricultural residues

As a result of the work carried out within this scope the European SME's are helped to use the new, efficient technologies for biomass in small decentralised units (heating, co-generation) and to produce and operate plants with overall favourable price-performance balance.

3.3 Integration and development of the European pellet market

The outcome of the European Pellet Centre will be the dynamic European Pellet Centre Homepage containing updated market statistics, price statistics, newsletters, best-practise cases, publications, links and access to contact database on market actors. EPC will through international workshops and the European Pellet Conference establish a European knowledge network expected to continue after project end. The final report will give a detailed survey of national and European prerequisites for further development of the market for wood pellets, through identification of barriers and opportunities for further market development.

4 REFERENCES, AUTHOR AND COMPANY PROFILE

Mr. Bjerg is coordinator of the Pellets for Europe project funded by the European Commission. 17 expert centres from 12 European countries promote production and use of biomass fuel pellets across Europe. Results are disseminated and activities are promoted through the European Pellet Centre (www.pelletcentre.info), which will be launched by November 1st 2003.

Mr. Bjerg is a Danish expert on biofuel markets and biofuel applications. He is Project Manager at FORCE Technology (formerly dk-TEKNIK) in the Department of Fuels, Combustion and Residues (<http://fuels.dk-technik.dk>). Mr. Bjerg is author of the Danish Wood Pellet Handbook, organiser of the annual Danish Wood Pellet Conference and consultant for Danish and International clients in the pellet market.

In the Department of Fuels, Combustion and Residues 14 experts on biofuels are employed in research, development and demonstration projects on biomass for energy and industry. Several of the biofuel experts are national representatives in international committees and working groups – i.e. IEA gasification, IEA combustion, ThermoNet and standardization of solid biofuels (pellets).

dk-TEKNIK has been managing the Centre for Biomass Technology since 1986 which collects and disseminate information to professionals on biomass technologies and markets.

FORCEs laboratory is certified on analysis of solid biofuels and ashes.

[1] Bjerg et. al., "The Wood Pellet Handbook" (in Danish)

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[2] Bjerg et al.: Afsætning af biobrændsler til blokvarmcentraler (Barriers for Biofuels in Block Heating Units), dk-TEKNIK ENERGY & ENVIRONMENT, Report with English abstract. October 2001.

[3] Bjerg and Zarnaghi "Danish Wood Pellet Statistics 2001 – methodology and results" (in Danish) dk-TEKNIK ENERGY & ENVIRONMENT and the Danish Energy Authority. June 2003.

5 PARTNERS

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