Overview of mixed biomass pellet market in Europe

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MBP market present:

- Austria
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Italy
- Netherlands
- Poland
- Slovakia
- Spain
- Sweden
- UK
CONTENTS:

- Countries with some MBP market
- Countries with no MBP market
- General overview of the European market
- Summary, conclusions
Austria

- only one company selling straw pellets as heating fuel: Oberwaltersdorfer Kommunalbetriebs GmbH

- consumers – DH plants

- in general - pelletizing is expensive, proper legal regulations are missing
Czech Republic

- the ECOVER company is the holder of the patent for the production of bio-fuel, in the form of pellets made from non-wooden agricultural by-products
- due to low production costs, this bio-fuel became very attractive and the company now awarded the production license to other companies
The Danish MBP market consists of two types of supply chains:

- The first consists of approx. 8 manufacturers, that sell small amounts of MBP in order to satisfy the needs of small to medium scale customers, who demand a cheap fuel and wish to experiment with their plant installation.
- The second type is made out by one large manufacturer, the utility company Vattenfall, that produces annually 80-100,000 tonnes of straw pellets at the factory in Køge for its own use at the plant Amagerværket in Copenhagen.
Finland

- Fees for CO2 emissions rose at the beginning of 2008 up to 20€/ton. This fact, combined with the multilevel national support for bioenergy, gives Finland strong and vital biomass market. In 2008 the MBP market was approximately 30% of whole pellet market (approx. 120 thousand tons).

- Controversy around peat pellets
all existing production plants have former activities in food industry

so far only small quantity of MBP has been produced because of lack of regulations on agro pellets.
Germany

- MBP, mainly straw pellets, are produced by several small producers (at least 10), and the annual production capacity is probably still below 20,000 tonnes.
- The produced straw pellets are mostly used for purposes such as littering or animal feeding, and their use for heat and energy production is insignificant.
- Pusch AG - plans to set up decentralised MBP production capacities. Basis will be a licensing system, in which special pellet production equipment is given to farmers, who produce MBP from local agricultural and waste materials.
Only one company produces MBP officially. There are two more companies producing MBP, but on experimental level.

Greek legislation does not cover MBP production, which is a significant drawback for this market to expand.
Hungary

- There are two permanent pellet producers on the national market. Besides them, in the course of Pelletsatlas project, numerous plans for establishing production facility have appeared and ended due to several reasons.

- In general, the market status can be described by the absence of broad range of consumers and trading chains.
Nowadays 3 MBP producers operate in Italy.
Their production capacity is much higher than their actual production, but the market is so limited today, that higher production level are useless.
Dutch MBP market includes mainly large-scale consumers. However, due to failing policy support, the interest in MBP declined.
Production of mixed biomass pellets constantly increases in Poland.

Moreover, several traders claim to imports sunflower shells pellets from Ukraine.

Consumers: large CHP plants that use MBP for co-firing
Slovakia

- A clear market for bio-energy is still lacking in the Slovak Republic- however, as the country has poor domestic energy resource base, and abundant biomass resources available, it becomes obvious that the situation will change in the near future.
Spain

- the main factor hampering MBP market development is the low internal consumption
- major part of future production will be probably addressed to foreign markets
- 3 companies in operation, offering:
  - straw pellets
  - olive cake pellets
Sweden

- Sweden has almost no production of MBPs for fuel purposes. Sweden has abundant wood residues, that can be used for fuel purposes without the technical obstacles that MBPs may have.

- At the Swedish University of Agricultural Science in Umeå a pilot-plant for pelletising reed canary grass has been tested. The pellets were used in an internal heating plant for examining combustion properties.

- within BIOAGRO project MBP pelletising line is installed at the seed and grain producer, Skånefrö AB, along with a combustion line producing heat.
UK

- 2 companies in operation
- DRAX Power Station, a coal-fired plant, supplying about 7% of the UK’s electricity, sets up straw pellets plant near Goole.

It is anticipated, that the use of both wood and MB pellets might decline after 2009 and/or 2015 as some of the existing coal fired power stations in the UK close down rather than opting in to the Large Combustion Plant Directive*).
MBP present:
No MBP market present:

- Belgium
- Bulgaria
- Cyprus
- Estonia
- Ireland
- Luxembourg
- Malta
- Norway
- Portugal
- Romania
- Slovenia
- Switzerland
Identified companies

Number of producers

- Austria
- Bulgaria
- Czech Rep.
- Denmark
- France
- Germany
- Greece
- Hungary
- Italy
- Poland
- Slovakia
- Spain
- UK
*) Installed production capacity in France is very high, but the production is mainly destined for food industry, therefore not relevant for our data collection.
Exemplary prices of some companies

![Bar chart showing prices in €/tonne for different countries: Greece, Germany, France, Hungary, Poland, UK. Greece has the highest price, followed by Germany and France, with Hungary, Poland, and UK having lower prices.]
Conclusions. Market characteristics

Technology has to be improved.

Missing legal regulations shall be implemented.

Trade is organised by producers.

Consumers include:
- large power plants (for co-firing)
- DH plants
- individual households
THANK YOU FOR YOUR ATTENTION!

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