Wood pellets
A booming sector that is cost-effective, environmentally friendly and comfortable!

Pellet production in Europe and North America started when the oil crisis happened in 1973 and 1979. Since then, wood pellets have become the future-proof heating alternative that is cost-effective, environmentally friendly and comfortable. Due to this, wood pellets are starting to gain ground and are seriously taken into consideration by large energy players.

Wood pellets feature many decisive advantages over other heating alternatives. Massive price variations and geopolitical risks characterize the supply of natural gas and oil. In contrast, the supply of wood from domestic forests is much more secure and can help in saving about half of the heating costs.

An important element for the cost-effectiveness of wood pellet heating is the efficient heating devices. Wood pellet central heating boilers, like wood pellet stoves, can transform more than 90% of the energy contained in the fuel into usable heat. It is this combination of low fuel costs and efficient utilization that makes wood pellets so economical.

Another key aspect to take into account is the fact that the raw material from which pellets are made from is renewable. Since wood absorbs the same quantity of CO₂ from the atmosphere while growing as is emitted during combustion, wood fuels prevent an increase of CO₂ concentration in the atmosphere. Even if one takes the deployment of fossil fuels for the production and transport of wood pellets into account, the result is a CO₂ reduction in the order of 80-90% compared to the use of heating oil.

The use of wood pellets not only offers benefits for the environment and clear economic advantages for the customers, but also a secure future market for domestic companies that deliver the fuel, manufacture the devices, or install and service them.

Due to these advantages, the EU market consumption has grown significantly in the past period.

1 ProPellets Austria
2 Argus
3 Biofpr, Wood pellet market and trade: a global perspective
of time. Worldwide, there are now 760 pellets production plants with a total capacity of 42 million tonnes. Europe is consuming around 70% of the pellets produced worldwide. At the moment, we can talk about three different countries market orientations: power oriented market, heating oriented market and mix oriented market.

Countries such as UK and the Netherlands have clearly power oriented markets which are mainly based on imports. The main flow is coming from North America (USA, Canada), however there are also other countries growing as exporters such as Russia, Brazil, and Australia.

Countries such as Germany, Austria, France, Italy, Finland, and Norway have a heating oriented market. Germany, Austria and France have currently a sufficient national production to cover their consumption. This is not the case for Italy which relies mostly on imported pellets. Sweden, Denmark, Belgium and Poland have a mix oriented market with a shared consumption between power market and heating market.

The wood pellets heating sector is growing rapidly at EU level with an increase of 1 million tonnes of pellets consumption every year since 2011. Today, the heating market represents around 8 million tonnes of the global consumption of 15 million tonnes consumed on EU level. With this fast growing market, there is a need to guarantee the quality of wood pellets. This is one of the reasons why the ENplus certification, introduced in Germany in 2010, is becoming very successful. Today, more than 4 million tonnes of pellets are ENplus certified which represent around 50% of the EU heating market.

The European Pellet Council (EPC) and the European Industry of Pellet Supplier (EIPS), both founded by the European Biomass Association (AEBIOM) published a chapter on pellets in the AEBIOM Statistical report-2013 European Bioenergy Outlook. The 2014 version will be published at the end of October 2014.

If you would like to hear more about the heat market, the 5th AEBIOM Bioenergy Conference organized on the 12-14 May, 2014 in Brussels will touch on hot topics such as: Member States with successful pellet market developments, how to ensure a sustainable pellet supply for the heat markets and the markets of briquettes, wood chips and wood logs. For more information please access the www.aebiom.org/conference website.

**Fig 8.8 Evolution of pellet consumption for heating in the highest consuming countries (2011-2013)**

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