Overview of the European pellet market
Pellets 2015, Eskilstuna

Gilles Gauthier
27 January 2015
AEBIOM presentation
common voice of the European bioenergy sector for the past 25 years

non-profit, Brussels based association founded in 1990

How it works

- EU Policy Strategy and Strategic Communication at EU and Industry level
- European Union
- Bioenergy Industry

Umbrella of 3 Networks

- EPC is an umbrella organisation representing the interests of the European wood pellet sector.
- EIPS is a platform of European companies focused on the wood pellet business.
- IBTC is a platform of international companies promoting the use of torrefied biomass as energy carrier.

30 Full Members
90 Associate Members
from all over the world

How to stay informed and connected

- AEBIOM Statistical Report
- AEBIOM Bioenergy Conference
- Biomass Counts Campaign
<table>
<thead>
<tr>
<th>Full Members</th>
</tr>
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<tbody>
<tr>
<td>AEBIOM MEMBERS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Members</th>
</tr>
</thead>
</table>
Our Mission
- Representation at EU level
- Business representation
- Exchange & share experience
- Network & visibility

Full members

Supporting members
Europe in the world pellet market
Europe in the world pellet market

World pellet production/consumption in 2013 [in million of tonnes]

Source: AEBIOM European Bioenergy Outlook 2014
Europe in the world pellet market

World wood Pellets trade map in 2013 [in millions of tonnes]

Source: AEBIOM European Bioenergy Outlook 2014/Hawkins Wright
Europe in the world pellet market

Estimated world wood Pellet production [in millions of tonnes]

Source: AEBIOM European Bioenergy Outlook 2014/IEA Bioenergy Task 40/Ren 21/Hawkins Wright

EU28 is the biggest producer => 50% of the world pellet production
Europe in the world pellet market

World wood Pellet demand in 2013 - power versus heating [in thousand of tonnes]

Source: AEBIOM European Bioenergy Outlook 2014

EU28 is the biggest consumer => 80% of the world pellet consumption
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European pellet market
The European pellet market

European wood pellet production in 2013

**Actual production [in tonnes]**
- > 1,000,000
- 600,000 – 999,999
- 300,000 – 599,999
- 100,000 – 299,999
- 1 - 99,999
- no data available

**Number of operational production plants**

Source: AEBIOM European Bioenergy Outlook 2014
The European pellet market

Trend of wood pellet production (2007-2013) in 6 biggest EU producers [in tonnes]

Source: AEBIOM European Bioenergy Outlook 2014
The European pellet market

European wood pellet consumption in 2013

Actual consumption [in tonnes]
- > 1,000,000
- 600,000 – 999,999
- 300,000 – 599,999
- 100,000 – 299,999
- 1 - 99,999
- no data available

Main usage: Power vs Heating

Source: AEBIOM European Bioenergy Outlook 2014
Top ten wood Pellet consuming countries by end-use in 2013 [in millions of tonnes]

Source: AEBIOM European Bioenergy Outlook 2014
The European pellet market

Evolution of EU wood Pellet consumption for heating [CHP incl. in millions of tonnes]

Source: AEBIOM European Bioenergy Outlook 2014
Ensure the pellet quality: ENplus
ENplus certification ensures:
- Pellet quality
- Quality of service
- Sustainability

Standard ≠ Certification
Ensure the pellet quality: ENplus

- Coordinated by EPC
- Based on EN 14961-2 (soon ISO 17225-2) for residential pellets + sustainability requirements
- Covering the entire supply chain
- Developed by/for the pellet sector
- Handbook adaptable to market needs
- Harmonisation on pellets quality and sustainability worldwide!
Ensure the pellet quality: ENplus

Based on EN 14961-2 standards (soon ISO 17225-2)

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>ENplus-A1</th>
<th>ENplus-A2</th>
<th>EN-B</th>
<th>Testing standard</th>
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</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>mm</td>
<td>6 or 8</td>
<td></td>
<td></td>
<td>EN 16127</td>
</tr>
<tr>
<td>Length</td>
<td>mm</td>
<td>3.15 ≤ L ≤ 40 ³)</td>
<td></td>
<td></td>
<td>EN 16127</td>
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<tr>
<td>Nitrogen Content</td>
<td>w-% ²</td>
<td>≤ 0.3</td>
<td>≤ 0.5</td>
<td>≤ 1.0</td>
<td>EN 15104</td>
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<tr>
<td>Sulfur Content</td>
<td>w-% ²</td>
<td>≤ 0.03</td>
<td>≤ 0.04</td>
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<td>EN 15289</td>
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<tr>
<td>Chlorine Content</td>
<td>w-% ²</td>
<td>≤ 0.02</td>
<td>≤ 0.03</td>
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<td>EN 15289</td>
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<tr>
<td>Ash Melting Behaviour</td>
<td>°C</td>
<td>≥ 1200</td>
<td>≥ 1100</td>
<td></td>
<td>EN 15370</td>
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</tbody>
</table>

Chemically treated wood is not even allowed for wood pellets EN B

Mandatory requirements on ash melting behaviour (EN 14961-2 is voluntary)
Ensure the pellet quality: ENplus

Total volume of produced pellet ENplus certified worldwide [in tonnes]

6.500.000 t ENplus certified
⇒ 60% of EU domestic consumption

Source: EPC
Ensure the pellet quality: ENplus

Number of countries with ENplus producers

Source: EPC
This year’s statistical report includes the following important highlights:

- Bioenergy market developments and trends
- Industry overview and investment opportunities
- Market research data
- Exhaustive overview on the pellets sector

Available on www.aebiom.org
Thank you for your attention!

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