The pellet Market in Europe and the need of certification

4 February 2014
Pellets 2014, Jönköping
Content

- AEBIOM/European Pellet Council (EPC)
- Pellet market in Europe
- Importance of certification
- Conclusions
**AEBIOM mission:**
Common voice of the European bioenergy sector

**AEBIOM Members:**
- 36 national associations
- 80 companies from all over Europe
- 4,000 indirect members represented

**AEBIOM networks:**
EPC mission:
Representing the interests of wood pellet sector

EPC characteristics:
- Founded in 2010
- Organised in the AEBIOM
- Umbrella organisation
  - 18 national pellet associations
  - 5 observing members

EPC activities:
- Standardisation/certification of pellet (ENplus)
- Communication, lobbying
- Statistics
- Safety
- Education and training
World wood pellet production [in thousand of tonnes]

Source: IEA Bioenergy Task 40
Pellet market
World production overview

World wood pellet production in 2012 [in million tonnes]

- EU production = +/- 50 % of world production
- EU production, made of small and medium plants
- Big producers mainly located in North America
- New market players are coming

Source: AEBIOM European Bioenergy Outlook 2013
World wood pellet consumption in 2012 [in million tonnes]

- EU largest pellet consumer +/- 70%
- EU is net pellet importer
- Massive increase in some EU country (e.g. UK)
- New players are coming

Source: AEBIOM European Bioenergy Outlook 2013
Wood pellet market is becoming a world market

Source: IEA Bioenergy Task 40
EU wood pellet production in 2012 [in tonnes]

Source: AEBIOM European Bioenergy Outlook 2013
Pellet market
European consumption overview

EU wood pellet consumption share in 2012 [in tonnes]

3 different markets:
- Heat oriented market
- Power oriented market
- Mix market

Source: AEBIOM European Bioenergy Outlook 2013
Pellet market
European heat market overview

EU wood pellet consumption for heating in 2012 [in tonnes]

Source: AEBIOM European Bioenergy Outlook 2013

Different markets:
- Domestic heating appliances
- Commercial heating appliances
Pellet market
European heat market overview

Evolution of EU wood pellet consumption for heating [in tonnes]

- Fast growing sector
- Need high quality products

Source: AEBIOM European Bioenergy Outlook 2013
Pellet market
Conclusion

- Great world expansion
- Pellet market is becoming a world market
- Europe is the biggest producer (+/- 50%)
- Europe is the biggest consumer (+/- 70%)
- Europe is a net importer
- Heating market is an important market
- There is need to ensure the quality of the product
- Coordinated by EPC
- Invented in Germany in 2010
- Based on EN 14961-2 for residential pellets + sustainability requirements
- Covering the entire supply chain
- Developed by/for the pellet sector
- Handbook adaptable to market needs
- Huge simplification of trade
- Ensures consumer confidence

! Standard ≠ Certification
Create an uniform quality and environmental certification scheme called ENplus to improve pellets quality for small and large scale users and to secure sustainability.

Sub-objectives:
- Define market needs
- More cohesion between markets
- Influence future EU sustainability policy
National associations managing ENplus

+ Canada
**ENplus certification Requirements**

Based on EN 14961-2 standards

<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></td>
<td>6 or 8</td>
<td></td>
<td>EN 16127</td>
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<tr>
<td>Length</td>
<td>mm</td>
<td>3.15 ≤ L ≤ 40 ³</td>
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<td></td>
<td>EN 16127</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)

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</thead>
<tbody>
<tr>
<td>Nitrogen Content</td>
<td>w-%</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-%</td>
<td>≤ 0.03</td>
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<td>EN 15289</td>
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<td>Chlorine Content</td>
<td>w-%</td>
<td>≤ 0.02</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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ENplus certification
Worldwide expansion

2011
ENplus certification
Worldwide expansion

2012

1 - 200.000 t
200.000 - 400.000 t
400.000 - 800.000 t
800.000 - 1.200.000 t
1.200.000 - 1.600.000 t
1.600.000 - 2.000.000 t
> 2.000.000 t
ENplus certification
Worldwide expansion

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ENplus certification
Worldwide expansion

2014 (estimation)

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ENplus certification
Worldwide expansion

Currently: AT, BE, CA, CH, CZ, DE, DK, EE, ES, FR, HR, IT, LT, LV, NL, PL, PT, RO, RS, SI, SK, UK, US
ENplus certification
Worldwide expansion

- +/- 4 millions of pellets productions is ENplus certified
- +/-50 % of the EU domestic pellets consumption is ENplus certified
2nd international workshop
Pellet Safety

Save the date!

- 05-07/05/14
- Fügen (Austria)
Programme Overview

▪ European Legislation
▪ Pellets/heating sector
▪ Sustainability and certification
▪ Networking Dinner
▪ B2B meetings
▪ Visits to bioenergy plants

Why Sponsor the event?

▪ Show leadership!
▪ Brand exposure!
▪ Networking opportunities!

Organized by: AEBIOM
In cooperation with: European Pellet Council, European Industry of Pellet Suppliers, International Biomass Torrefaction Council
Chapter dedicated to pellets: [www.aebiom.org](http://www.aebiom.org)
Thank you for your attention

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