European Panel Federation

viewpoint on wood energy policies

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European Panel Federation

Members in 23 countries

Particleboard 32.1 million m³
MDF 10.5 million m³
OSB 2.1 million m³
Wood-Based Panel Industry

Pioneer in sustainable use of resources

- Process heating (up to 91% needs) and CHP with wood biomass unsuitable for recycling
- Supporting sustainable forest management
- Continuously improving recycling rates
Sustainable resource management and respect for the carbon cycle

- Thanks to sustainable Forest Management, the wood-based panel industry has not been detrimental to the forest resource:
  
  European (EU-15) forests grow by 4 m³/sec

- Using wood extracted from the forest for manufacturing products contributes to sustainable development:
  - Wood products are carbon sinks
  - Wood products require little energy for manufacturing
  - Wood products are an energy source at the end of life
Raw wood consumption of the European particleboard industry

- Virgin wood (solid): 24%
- Recycled wood: 14%
- Sawmill by-products: 62%
sawmill by-products
recycled wood
(solid) virgin wood
EU Energy Policy

- 1997 White Paper on renewable energy

- Target WP Double the contribution of renewable energy by 2010
  Triple the contribution of biomass - mainly wood -
Wood products vs Biomass energy

- Increasing use of wood for energy production
- Governments in Europe are granting subsidies for building and operating biomass power plants as well as to the marketing of the so-called “green energy”
- Simultaneously, the taxes on the use of fossil fuels increase
- This leads to increasing costs for wood products, making our companies less competitive
- Several production lines/mills for wood-based panels have already closed, others may follow!
The main problem

BIOMASS = WOOD

- All national RES support schemes start by focusing on the most obvious biomass fuel: wood
- The effects on the wood supply to the wood-based panels industries are significant
Is this the most eco-efficient use of wood?
Using wood to tackle climate change

*The European Commission writes:*

Wood plays a major role in combating climate change

Greater use of wood products will
- stimulate the expansion of Europe’s forests and
- reduce greenhouse gas emissions
- by substituting for fossil fuel intensive products

Commission is examining ways to encourage these trends
EPF Position

Let wood products functionally cascade:

- Primary product
- Re-use and/or
- Recycle
- Eventually use wood as an energy source:

AFTER IT HAS BEEN FULLY USED
Sound use of wood

The value chain of the wood resource is at present not respected:

- Material suitable for the production of wood-based products, is used directly for energy generation.

The energy market is not governed by free market principles:

- Unbalanced energy subsidies.
By recognizing the value chains in the wood industry, we can see how the added value is generated at different stages of production.

**Pulp and Paper Industry**
- Forestry → Pulping → Paper-making → Printing & publishing → Retail/mailing → Consumption → Recycling → Energy production
- Forestry → Pulping → Paper-making → Printing & publishing → Retail/mailing → Consumption → Recycling → Landfill

**Wood Products Industry**
- Forestry → Sawing → Manufacturing of wood-based products (carpentry) → Construction & consumption → Reuse and recycling → Energy production
- Forestry → Sawing → Manufacturing of wood-based products (carpentry) → Construction & consumption → Landfill

**Bioenergy**
- Forestry & Procurement of by-products → Energy production

The added value in each sector is calculated as follows:
- 993 Euro/ton of dry wood
- 1044 Euro/ton of dry wood
- 118 Euro/ton of dry wood

The diagram illustrates the flow of materials and value through each industry, highlighting the stages of production and the resulting environmental impacts.
By recognizing the value chains II

**EMPLOYMENT**

**Pulp and Paper Industry**
- Forestry → Pulping → Paper-making → Printing & publishing → Retail/purchasing → Consumption
- 124 man-hours/ton of dry wood

**Wood Products Industry**
- Forestry → Sawing → Manufacturing of wood-based products (carpentry products) → Construction & consumption
- 54 man-hours/ton of dry wood

**Bioenergy**
- Forestry & procurement of by-products
- 2 man-hours/ton of dry wood

**Recycling**
- Energy production
- Landfill
In summary

DIRECT BURNING OF WOOD

Value added

€ 118 / dry ton

Employment

2 labour hours / dry ton

RESPECTING THE CARBON CYCLE

Value added

€ 1044 / dry ton

Employment

54 labour hours / dry ton
Possible solutions

- Enhanced use of wood products
- Encouraging *recycling* of wood by-products & residues
  - Support research on sorting & cleaning technologies
  - Improve the waste regulations – Wood residues that comply with quality standards are not waste
- Developing a definition of and appropriate requirements for (secondary) wood fuels
Possible solutions II

- More intensified usage of wood residues, currently left behind in the forests

- Further improved techniques for growing forests, resulting in:
  - increased yield per hectare of forest
  - improved quality of harvested wood towards final applications

- Reforestation of agricultural land, recurrently becoming available for alternative purposes

- Considering short rotation forestry as agriculture
Conclusions and Recommendations

- **Avoid massive burning** of wood for purely energetic reasons

- **Respect the value chain** of wood-based products as long-lasting pools of carbon, substantially contributing to climate change mitigation

- **Do not “subsidise away”** wood as a raw material for durable applications by favouring the firing of trees, unless locally socio-economic and environmental considerations are compelling
**Conclusions and Recommendations II**

- Fully recognise the superior eco-efficiency of wood-based products and their supreme properties in recycling, with minimal energy use, as compared to other materials.

- Focus future research policies on efficient recovery of forest residues and development of biomass crops specifically grown for energy generation.

- Propose a realistic “fuelwood-for-energy” target

Only burn wood after it has been fully and soundly used!