RESOURCE EFFICIENCY = cascading use of raw material

How to make the best use of our natural resources?

cepi confederation of european paper industries
Policy supports wood-based energy production

The Renewable Energy Directive sets binding targets for EU Member States. To reach these binding renewable energy targets, Member States have put in place financial incentives (e.g. green certificates or feed-in tariffs). Biomass is expected to provide 57% of renewable energy consumption by 2020 of which two thirds will be based on solid biomass from the forest. The support for the direct burning of wood to create renewable energy increases the pressure on the wood markets.

Burning wood out of the forest

This is one way of using our resources with often very low conversion efficiencies, it creates simple value and jobs, but…

... is this resource efficient?

There is a more clever way to use wood! Please turn the page to find out how …
Using wood and paper for recycling for energy only...

Creating green jobs
When looking at job creation in a sector that is part of the bio-economy the pulp and paper industry value chain creates 7 times more jobs for every job created by the energy alternative. In absolute terms the pulp and paper industry value chain creates 1,597,200 jobs, while the energy alternative rests at 238,800 jobs.

Adding value for the economy
Promoting the use of wood first as a raw material to make products, encouraging the recycling of used products, and then recovering energy when recycling is no longer feasible, is far more economical than burning it immediately for renewable energy partly based on subsidies. An independent study* shows that converting wood to energy would create 20.1 billion euros value, while when using the same amount of wood as a raw material first and for energy production last the value is estimated at 97.7 billion euros. The wealth creation in the pulp and paper industry value chain is mainly market driven and 5 times that of the energy alternative.

... OR for wood products, pulp and paper, recycled paper and ...

Use wood and paper for recycling for paper production first and for energy last!

Using raw materials most efficiently
Using wood and paper for recycling for manufacturing purposes does not only add value and create jobs, it does so in a resource efficient manner. A new study named “Wood flows in Europe (EU27)” shows that due to recycling and the use of waste and by-products in the pulp and paper industry, 1 m³ of wood creates products worth 2.38 m³ of wood. This is resource efficiency at its best.

... creating energy in the end

The European pulp and paper industry is the biggest single industrial user and producer of renewable energy in the EU today. 54% of the industry’s total primary annual energy consumption is biomass-based. And we have the potential to do even more in the future. We have the experience, technology and supply chain to play a big part in the bio-economy and that in a resource efficient manner.

Paper adds up...

The wealth creation in the pulp and paper industry value chain is mainly market driven and 5 times that of the energy alternative.
What is the value chain?

The pulp and paper industry works closely together with several other industries to achieve efficiencies. In this leaflet the value chain includes the pulp, paper and paperboard industry, upstream activities (e.g. sawmill) and downstream (e.g. printing). For the energy alternative it includes the wood based energy conversion, upstream suppliers and downstream clients of wood based energy. Geographically, the analysis covers EU 27 for both studies and also Norway and Switzerland for the calculation of the value added and jobs creation.

For more information, go to www.cepi.org or contact:
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References:
* Pöyry 2012, Employment and Value added – a comparison between the European pulp and paper industry and the bioenergy sector

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