

Bio-energy and the European Pulp and Paper Industry – an impact assessment

McKinsey & Company and Pöyry Forest Industry Consulting

CEPI Summary of the Report

- 1 EU renewable energy policy and objectives are an important element for achieving the climate change goal as well as meeting the energy supply security. However, measures put in place for reaching 20% renewable energy by 2020 might have an undesired and adverse impact on the European pulp and paper industry.**

From their modelling of future scenarios McKinsey/Pöyry conclude that, unless relevant policies are put in place, there is a risk of not meeting the renewable energy sources targets, or putting the pulp and paper industry severely at risk of global un-competitiveness, or both. Putting the pulp and paper industry at risk is dangerous also from a renewable energy perspective, as that industry is currently a major contributor to bio-energy generation and can act as a key enabler to reach future renewable energy targets.

Financial incentives for generating energy from wood has the potential to generate a shortage of raw material supply for the pulp and paper industry. A number of other measures, in different areas, can help secure that biomass plays its central role as renewable energy, while maintaining fair competition for the pulp and paper industry raw material supply.

- 2 The pulp and paper industry is part of the solution to renewable energies**

The pulp and paper industry is the bio-energy driver in Europe. It is the largest producer and user of renewable energy sources with 50% of its primary energy consumption coming from these. It is also the largest user of solid biomass representing 25% of current volume and has invested heavily in bio-power and energy efficiency.

The pulp and paper industry must therefore be seen as an enabler as it has the infrastructure, biomass generation and sourcing organisations are in place for both recovered paper and virgin fibres. The industry is also well located with a network of installed assets that can be used to generate power, heat and fuel and has expert experience in operating efficiently both in the generation and use of heat



3 Wood should be primarily used as a raw material to support the industries that depend on it, and that deliver its high added value to society

Resource efficiency is well established as a principle in EU policy, for example the “waste hierarchy” and the thematic strategy for sustainable use of natural resources. According to that common sense principle, resources are more efficiently used if they first deliver added value. In the case of wood, when used for paper making it delivers eight times more added value and 13 times more jobs than if used for energy. (Poyry dateXXXX)

4 Gap in supply and demand of more than 200 million m³ of wood by 2020

Under the EU assumptions, the most extreme scenario, where the 20% renewable target is met by policies that do not consider the impact on our industry, there could be a mismatch between supply and demand of 200 to 260 million m³ of wood.

5 Using recovered paper as a feedstock for energy production will hamper the EU recycling goals

Recovered paper is classified as waste, therefore considered as biomass and eligible for subsidies if burned for energy, which at some point could become attractive for energy producers. Municipalities would then also find it more attractive and cheaper to leave it in the waste stream and stop sorting. This is in contradiction with the EU goal of a recycling economy and the entire EU waste policy. It would also reduce significantly the resource available to the pulp and paper industry.

6 Policy priority should focus subsidies on resource efficiency

A number of measures and policies can be put in place to maximise the achievement of 20% renewable energy, while minimising the impact on the pulp and paper industry.

Two principles must be followed:

- When implementing measures to reach the renewable energy targets, consideration must be taken to align and balance sustainability objectives with these targets.
- Subsidies to renewable energy sources, including biomass, must follow the principle of priority to efficiency and added value delivery.

Subsidies and other policy measures that increase the ability of power plants and energy producers to pay more for wood as a fuel distort the pulp and paper industry's raw material markets and competition.

7 Taking more wood out of the forests

Policy makers at European and national level need to quickly take action to maximize new sources of biomass and ensure that other non-biomass based sources of renewable energy are being realised.

Policies and measures to increase the mobilisation and supply of forest biomass, while maintaining the sustainability of the forests are vital to the renewable energy targets. About 35% of the remaining harvest potential in the forest can be mobilised although requiring substantial efforts.



The pulp and paper industry will also support the transition towards the renewable targets by working to ensure a higher outtake of fibres from existing supply sources (e.g. accelerate the harvesting of forest residuals and harvesting of unused sources) and leveraging its vast installed asset base to expand its renewable power, heat and bio-fuel production in a cost effective way.

8 Investing in the future

Investment support in harvesting and transport technology to improve cost and eco-efficiency of forestry operations will also step up the efficiency of the sourcing of wood and recovered paper.

Afforestation both in Europe and outside Europe to ensure future additional supplies of biomass has also to start now.

9 Other solutions

High efficiency of resources will also not be reached when land is used to growing feedstock for first generation bio-fuels. Therefore the acceleration of second generation biofuels crops and technologies is also an investment in the future.

To this end, support mechanisms could also be developed to make the amount of land available for energy crops financially attractive. This could result in increasing the area available from 10 million to 16 million hectares.

There is also a need to tackle the obstacles to increased supplies of raw materials and biomass from third countries. This can be done by removing import barriers for sustainably produced bio-fuels.

The active implementation of the EU Landfill Directive will see the diversion of wood and all carbon containing waste from landfill and increase the availability of bio-mass for energy.