Wood-using industries and woody biomass

The case of the European Pulp and Paper Industries

October 2003
RES is not a fad

- EU White Paper on renewable energy sources
- RES-Electricity Directive
- « Intelligent Energy for Europe » Programme
- EU policy options on RES-Heat
- Communication on RES
- Johannesburg Renewable Energy Coalition (JREC)

« We express our strong commitment to the promotion of renewable energy and to the increase of the share of renewable energy sources in the global total primary energy supply. »
Wood at the intersection

Raw material

Energy

Nature
Industry’s increasing capacity

![Graph showing the increasing capacity of the industry from 1999 to 2006. The x-axis represents the years 1999 to 2006, and the y-axis represents the capacity in thousands of cubic meters of roundwood equivalent.]
Forecasts of paper and board consumption

Million tonnes

+2.7% yearly average

Extrapolation for the period 2002-2005
Forest – a growing resource

Net annual increment
Fellings

25 m³/sec. of which 12 are not used
Looking into the future …
Nature-oriented management

Enhance nature conservation values in the forests

Reduced harvesting

Changed wood quality and type
Climate change

Enhance forest potential to sequester carbon

Postponed harvesting

Changing management practices
Renewable energy

Promote the use of wood as a source of renewable energy

Competing use of wood

Distorted wood market
Theoretical shortfall

- Forecasted industry demand
- Shortfall under historical management
- Supply of wood under historical management
- Shortfall under new management
- Supply of wood under new management

2005 2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2060

million m$^3$ of roundwood

- 27 million m$^3$
- 89 million m$^3$
- 195 million m$^3$
- 36 million m$^3$
Pulp and paper industries’ general objective

- To maintain the sustainability of the forest ecosystem
- To further contribute to the RES and RES-E targets put forward by the Community
- Aiming for a free energy market
- To secure the future wood availability both in terms of quantity and quality for the EU PPI
Energy production from biomass in the EU PPI in 2001 - 2010 (estim.)
Electricity production from RES in the EU PPI in 2001 - 2010 (Estim.)
Candidate measures leading to increasing the available biomass for energy production

- SRF and bio-fuels from agricultural origin (CAP)
- Increased harvesting potential (via research, mechanisation, new methods)
- Increase felling rate
- Extract larger quantities of forest residues (e.g. stumps, branches and tops)
- Collect larger volumes of industry and post-consumer residues via contracts subscribed with municipal waste management organisations
- Rely on the international trade of wood fibres

EU should act as a facilitator