The Pulp and Paper Industry

Intelligent use of raw materials

European Economic and Social Committee
Brussels, 28 April 2011
Teresa Presas
European pulp & paper industry in 2009

- Turnover (billion euro) 71
- Pulp production (million tonnes) 36
- Paper production (million tonnes) 89
- Employment (thousand jobs) 235
- 60% of direct & indirect jobs in rural areas

€18 billion value added to EU GDP
The forest area of Europe GROWS by 4.363 football pitches per day!
(or 6.450 km² per annum)

Half the fibres are recycled: the other half are a good use of resources.

- 20-30% Residues from other industries
- 40-60% Thinnings from silviculture
- 20-30% from final fellings

Recovered Paper
- 42%

Non fibrous materials
- 15%

Woodpulp
- 42%

Non wood pulp
- 1%
Paper Consumption and Recovery
1991 - 2009

- Recycling in Paper Mills: 41.8%
- Recovered Paper Net Trade: 19.0%
- Non Recoverable: 0.1%
- Other Recycling / Recovery or Final Disposal: 58.8%
Efficient Use of Resources

The Paper industry:

- Uses resources efficiently with sustainable forest management and increased renewable energy use
- Has raw material supply base in Europe
- Applies eco-design in value chain for improved recyclability
- Increases collection and recycling of paper and board
“A sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit”

4th Assessment Report
UN International Panel on Climate Change
Increasingly envied resource

Materials and fibres
- Fibres
- Cellulose
- Hemicellulose
- Lignin
- Extractives

Energy
- DME
- Ethanol
- FT-diesel
- Bio oil
- Heat/Electricity
- Solid fuel

Products
- Construction material
- Furniture
- Pulp
- Paper
- Residues
With current assumptions, supply and demand gap of more than 200 million m$^3$ wood by 2020

million m$^3$ (under bark

**Supply**

- Current forest biomass supply
- Mobilization
  - Net imports
  - Recovered wood
- Estimated supply
- Estimated gap

**Demand**

- Estimated demand
- Non-traditional demand (energy)
- Traditional demand
  - Pulp/Paper
  - Wood products

Source: McKinsey/Pöyry team analysis
Conclusions

- Wood and recovered paper are critical raw materials for Europe
- Subject to international pressure and barriers to trade
- Availability undermined by internal policies
- Renewable raw materials need special focus as they face distorting competition from energy sector
- Focus on resource efficiency (waste hierarchy, cascading use of wood)!
- Separate collection means collecting paper, metals, glass and plastics separately from each other, not just separately from other waste!
A fully integrated Raw Materials strategy

✓ Embedded in a strong industrial policy
✓ Syncronized with:
  • Innovation partnership on raw materials focused on recycling,
  • Support clusters, priorities for bio-materials and products
  • Resource efficient: use raw materials where they create most value and jobs
  • Agriculture: to deliver food, raw materials & fuels for Europe
  • Trade: level playing field at global level
  • Renewable energy: biomass supply policy
  • Competition: harm and length of subsidies
  • Environmental policy: support recycling strategies
The EU Raw Material Communication

- Short sighted: focus on critical raw materials but not on what will be in the future for the sectors for which targets are set
- Missing full supply chain perspective - improved recovery and recyclability is not enough if not usable for European industry
  - Emphasis on research and innovation
  - Resource efficiency: use raw material where it creates more value and jobs
Growth is not only about getting raw materials.
It is about creating highest added value for each tonne.
Not only critical raw materials are critical…

What is critical is the need for an overarching vision on raw material supply to EU industry, that accommodates low carbon resource efficient, competitive, inclusive growth in 2020 and beyond.

An intelligent policy for an intelligent use of resources
The real challenges ahead!

- Population by 2050 – 9 billion
- GDP from US$35 to 72 trillion by 2030
- Cereal demand: + 67% by 2050
- Energy demand double by 2030
- GHG emissions decrease 50-80% by 2050
- Water demand to increase 30% by 2030
- Land deficit by 2050 – 200 million ha
Thank you!
Raw Materials Consumption
1991 - 2009

- Woodpulp: 51.1%
- Pulp Other than Wood: 14.2%
- Recovered Paper: 35.0%
- Non-Fibrous Materials: 0.9%
Confederation of European Paper Industries

• Represents:
  – 19 National Associations
  – 800 companies
  – 1,000 mills
Situation for some raw materials

- Metals and minerals, and some agriculture commodities: high dependency on imports
- Unprecedented pressure from emerging markets, new users
- Competitive distortions due to unfair trade policy measures (e.g. export restrictions from China and India, export duties from Russia)
- Increasingly national regulations restricting access to land

....in addition, some EU home made distortions:

- Import duties (e.g. on bio-ethanol, starch) leading to difficult access to world markets at world market prices
- Mandatory targets for renewable energy → subsidies for burning wood and recovered paper
- Destroying EU base for some raw materials