Future of European Forest-Based Sector

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Presentation based on:
Purpose

Provide a synthesis of the future of forest-based sector outlook in Europe

Focus on products and markets
Importance of European Forest Products (excl. Russia)

- Forest products are still biggest *income* and *employment* generator in the European forest based sector (*over 2 million jobs*)

- Value of European forest products sales in 2012 estimated to be €200 billion; a bit more than total turnover of European company giants, Nestlé, PSA Peugeot Citroen and Deutsche Telekom

- Produced 372 mil. m³ industrial roundwood in 2013, which generated probably around €15 billion income for forest owners
If you want to understand changes in forests, or environmental sustainability, you have to consider also the products

Forest products:

- buildings
- books, magazines
- furniture
- food
- textiles
- packages
- heat, light, power
- etc.
Current state of European forest-based sector could be labelled as one of Creative Destruction

Destruction

new technologies, products and business models emerge

Creation

economic activities or sectors decline and vanish

Joseph Schumpeter
“Destructive” processes include

- Declining demand for communication paper products, and stagnating demand for number of other forest products

- Very long economic slump in the EU since 2008 and its many impacts

- Move of some forest industry investments to fast-growing markets in Asia, or low-cost production regions like South America
European Forest Products Production Have Been Declining (excl. Russia)

Decline of 10-15% from 2007 to 2013

Structural & cyclical factors

Long slump is likely to have also structural impacts

Data: FAOSTAT

Trend forecasts (trend 2003-2013)

million tons or cub. meters

Sawnwood

Paper

2007 =
Never in the past 50 years has the uncertainty been so big!

Production declined 12% or -46 Mm³ from 2007 to 2013
But, destructive drivers have enforced the European forest-based sector to renew
“Creative” or innovative processes include

- Forest industry and other industries are changing strategies and business models, investing in new forest-based products

- New demand for old products, such as dissolving pulp for textiles or tall oil (fast growing markets)

- Demand is driven by the need to substitute non-sustainable products or food production disturbing raw materials with forest-based materials
Example of transformation to bioeconomy

Pulp Mill Today

- **Concept:** One Company
- **Energy use:** renewables + fossil
- **Pulp 0.5Mt**
- **340 M€/year**

Bioprodut Mill Tomorrow

- **Concept:** Ecosystem of Companies
- **Energy use:** 100% renewables
- **Pulp 1.3Mt**
- **2017**
- **800 M€/year**
- **≈ 2020 -**
- **Over 1 billion €/year**
How about European forest bioenergy outlook?
The most correct answer from science perspective is...

- We do not really know!
- Past assessments need to be updated
Major studies have projected shortage of forest biomass in EU towards 2030

- EU forest based bioenergy production is assumed to double from 2010 to 2030

- EU forest biomass demand in 2030 is almost 1/3 bigger than supply (*currently supply 20 % > demand*)
Implications drawn from these results

1. Wood resources in the EU as a whole will not suffice to reach the targets for renewable energy

2. “This means that without additional measures, forests and other sources of wood in EU cannot maintain their large share as a renewable energy source without leaving a shortage for the forest-based industries”

3. Possible policy trade-offs between biomass demand for energy and materials, and with biodiversity
Previous projections may overestimate EU forest biomass demand in 2030, because

- **Structural changes** in global forest products markets may decrease demand for industrial wood in EU, rather than increase

- **International trade.** EU is already *net importer* of forest biomass, both for forest industry and bioenergy purposes. Assessments have not taken into account international trade in forest biomass

- **Market adjustments** (prices) clear potential gaps for forest biomass

- **Technology** and *resource-efficiency* (*e.g.*, *cascading use*) developments

→ Need to reassess the outlook
Big question mark impacting the future: EU and global climate and renewable energy policies

What happens after Paris 2015?
IPCC recommendation* and forest-based bioeconomy go hand-in-hand

1. **Carbon price** in one form or another (tradable permit, tax) is going to be *one essential tool* to tackle climate change.

2. This would be important also for the forest-based sector to renew and boost investments to new products and services to reach bioeconomy goals.

3. But is not without short-term challenges for some industries.

*Reference: IPCC Synthesis Report, November 1, 2014*
Services megatrend
European economies and industries becoming servicizing

- Most likely will have a big impact also to forest-based sector
- But it seems that implications have hardly been analyzed

Manufacturing products + Services related to products
Value Chain – Smiling for forest-based sector?

Added value

- R&D
- Design
- Prototyping, pilot production
- Assembly, manufacturing
- Mass production
- Distribution
- Services, maintenance
- Marketing
- Sales
- Branding

Production value chain

High-Cost Countries

Low-Cost Countries
To what extent a country’s forest-based sector will be a manufacturer and/or service provider?

- Some countries may not produce new forest products at the scale that it does today

- To this conclusion points the competitive advantages in global economies, and recent economic studies and statistics

- *Services* related to new products could create more value and employment than actual “manufacturing” of the products
What does all this imply?
Policy implications

1. **Reassess** and **update** long-term outlook for European forest-based sector

2. Place strong emphasis on the role of **CO₂ price**

3. Be prepared for product-related **services**

4. **Sustainability** and **resource-efficiency** are necessities

5. Invest more in **research**, development and education
But these are easier said than done, and therefore what is need, is...
A coherent and well-coordinated forest-related policy framework, to:

- Address existing regulatory and market failures
- Reinforce cross-sectoral policy coordination
- Understanding limits of forest resources, societal values, and trade-offs between different forest uses
- Regional specificities in Europe - *one size does not fit all*
- Long-term predictability for investments and planning
Thank you!

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