



International Workshop Future Skill Needs in the Agri-Food & Forestry- Wood Chains - Lisbon, 20-21/11/2006

**“ANALYSIS OF THE SUPPLY AND DEMAND
OF EDUCATION AND TRAINING IN
RELATION TO THE EU WOOD SECTOR
AND KEY RELATED OCCUPATIONS.”**

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The challenge of Lisbon: matching sustainability with competitiveness

Recalling the three components of sustainability (environmental, social, economic), as well as **competitiveness**, the **Lisbon Agenda**: was re-launched Feb 2005:

« To preserve the EU sustainable development model for the future, the Union's competitiveness must be strengthened; its economy dynamised »:

EU policies (EC + MS): Internal Mkt., Industry, Employment, R&D

- EU + attractive for investment & work (Single Mkt., less & better regulation)
- 2010: R&D 3% GDP - knowledge & innovation for sustainable growth
- 2010 create 6 M new and better jobs

(Lisbon essentially: growth & jobs)

NB High-level Group on Competitiveness, Energy & Environment

1st report June 2006, 2nd report October 2006

EU FOREST-BASED SECTOR (resources, owners + industries):

- EU has 160 M ha. forests (5 % global FOWL), mostly small, private lots (16 M owners); forestry employs < 400 000 = < 4% agriculture
- EU-25 forests grow 574 M m³ wood each year (o.b. NAI), yielding 315 M m³ (o.b.) of wood annually = **55% net annual increment (NAI)**
- So, the EU forest standing wood volume is constantly increasing (+ 290 M m³/yr) and so is the area (+ 400 000 ha/yr)
- Logically, EU forest resources can be more intensively used (85 % NAI fellings + **173 Mm³?**) no negative ecological impacts (**EEA: + 40 Mtoe**)
- **But:** large national, regional and local variations in supply & use and
- not all wood of right species, age, dimension, quality at a distance, price and time suitable for markets (NB also infrastructures)
- Moreover, private forest owners not always “market” actors
- Educational, training and skills **needs** for all “actors” are evolving
- EU is importing about 10 % (+/- 30 M m³) of the supply of wood for industries (in Finland +/- 25 % wood raw material is imported)

Forest-based sector – NB no EU sectorial policy, but:

EU Forest Action Plan (COM 2006/302, June 2006) :

based on the principle of subsidiarity, the FAP has actions to enhance sustainable forest management and the multi-functional roles of forests. The **objectives include:**

- to improve long-term competitiveness of the forest sector**
- to contribute to the quality of life by preserving and improving the social and cultural dimensions of forests and forestry**

The FAP will provide a framework for co-ordinated forest-related actions at Community and Member States levels

NB key actions on education & training: owners, workers

Communication on implementing the Lisbon Agenda

(COM (2005) 474): sectorial file - EU forest-based industries
woodworking, pulp & paper (mfg. & converting); printing):

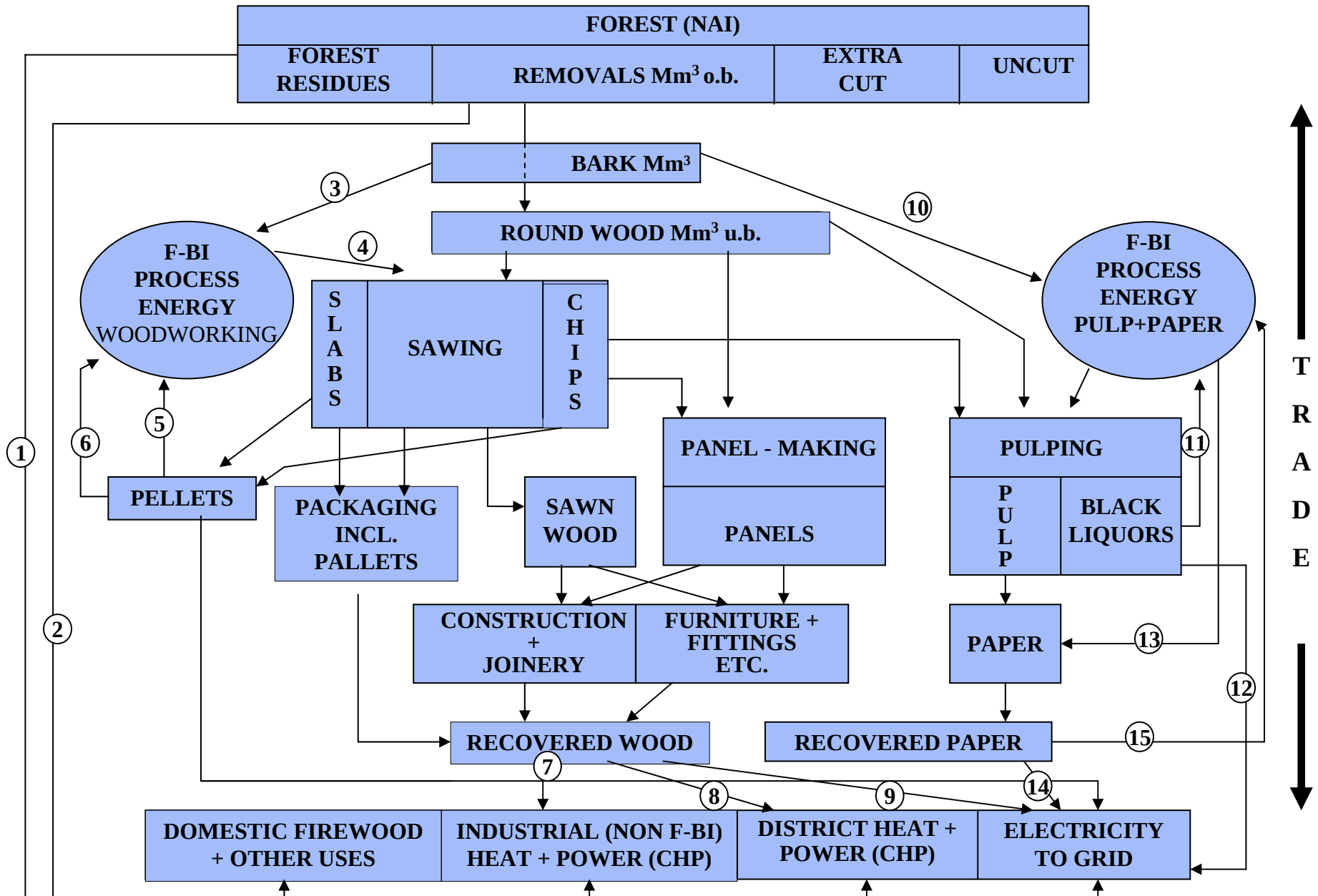
- 340 Bn € turnover p.a.(8% of EU manufacturing added value),
- 1.25 - 2. 5 M jobs (9 % of EU manufacturing jobs)
- growing export markets for paper and structural timbers
- 90 % (315 M m³) wood used from SFM in EU forests 55% NAI

Therefore the **competitiveness** of the EU forest-based sector
must be maintained and enhanced

products > jobs > wealth > growth) **BUT:**

Mostly SMEs; low capacity for investment in R&D & education
(49% unskilled, 41% low); high costs; relocation risk - out of EU

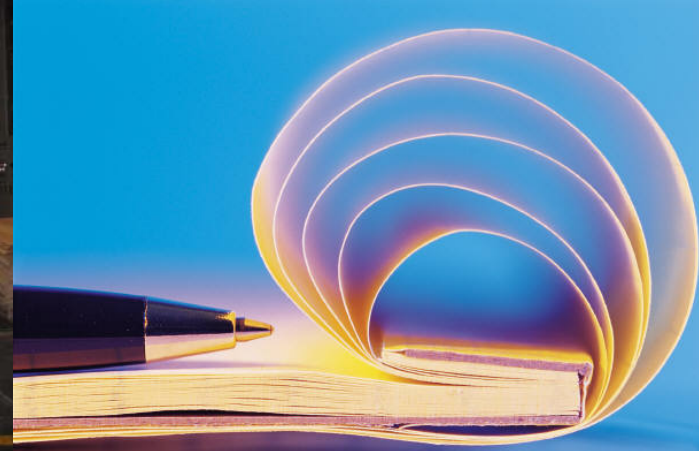
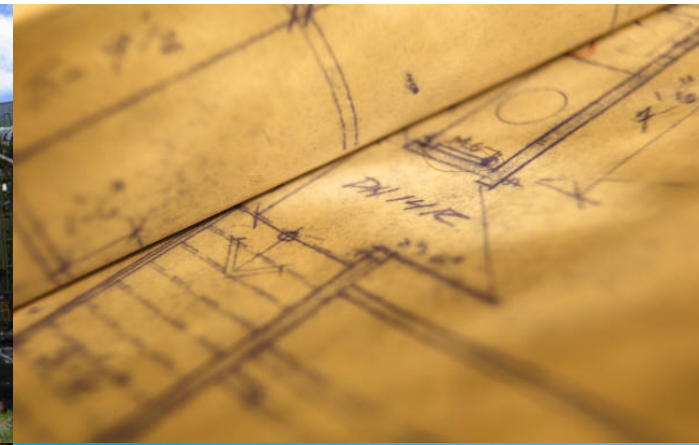
COMPLEXITY: WOOD & WOOD ENERGY FLOW DIAGRAM



1999: communication:« The State of the Competitiveness of the EU Forest-based and Related Industries »

New communication document foreseen (1st qtr. 2007):

« Innovative & sustainable forest-based industries in the EU »



Survey of education, training and skills (E&T) in the EU woodworking ind.s (WWI):

Background: needs for improved E&T were first identified in the 1999 joint (with CEI-Bois) sectorial competitiveness study. From 2001-2005 the **Enhanced Use of Wood Working Group** (EUW WG)*, has identified barriers to the enhanced use of wood. In 2003, a “**barriers**” study, in concert with the CEI-Bois “**Road Map 2010**” initiative, identified the need to deepen the knowledge and understanding of the education and training situation, both in the wood sector as well as in **key, linked occupations**.

In 2005, the survey was launched with a view to deriving remedies to the current and on-going **mismatch of the supply of and demand for educational and training** services and facilities, in and related to the EU wood sector.

* An ad hoc working group of the EU Advisory Committee on Community policy regarding Forestry and Forestry-based Industries

Survey: supply & demand education, training & skills in and around the EU wood sector:

Scope: EU-27 (EU-25 + Bu & Ro) woodworking industries (as per NACE) and key, linked occupations.

Target groups:

Supply side: govt., academia: availability of courses

Demand side: E&T and skills needed by industry

For each target group, questions were focused on:

- wood-related & other E&T for those in WWI
- wood-related E&T for key related occupations,

at three levels: **operative, technical and tertiary (ISCED)**, taking into account both **initial and continuing learning** and seeking a maximum of information in a “one-off” opportunity

DG ENTR - project phases:

1. **Survey** by DG ENTR of EU supply (govt.) and demand (industry) sides of wood-sector and related education & training (launched 08/2005)
2. Reception of **responses** (09/2005 – 03/2006)
3. **Consultants** (hired under public tender):
 - analysis of survey responses (01-06/2006)
 - interim report (07/2006) **assessing the availability of education and training courses and facilities in the EU pertinent to the EU wood sector, compared with the needs of the EU woodworking industries**
4. Preparation (12/06) of EU **workshop** 02/07)
5. final rpt (conclusions & recommendations (04/07)
6. Implementation? MS? Industry?

Survey - main results:

Review of (limited) studies presentations & initiatives:

(De, F, Hu, Sw, UK + Bologna, InnovaWood, Road Map, Forest-based Sector Technology Platform):

- sector not attractive for careers
- needs for E&T well recognised, but not well defined
- need for links between industry, academia, government at all levels (currently focus on tertiary only), including:
 - closer links between new sectorial training & national prog.s
 - EU-level schemes take more a/c of sectorial needs

Survey - main results:

- 20/27 countries responded (71 replies + CH, Croatia)
- more from supply side than demand side (25 -10; 18 both)
- industry sector and E&T supply structures confirmed
- main KLOs:
 1. architects, civil & structural engineers
 2. designers (incl. interior), specifiers
 3. construction co.s, builders, insurers
 4. legislators, regulators, planners
 5. end-users (DIY, individuals)

Supply side:

- courses at 3 levels, but many « don't-knows »
- course satisfaction: relevance>length>cost>career prospects
- attractiveness: lowest for operatives but for all three:
image<career + salary structures<opportunities<wkg. env.
- % females +/- 20% at 3 levels but opportunities: 3rd>tech>op
- but: more course applicants than places: op>tech>3rd -?
- courses > qualification but low acceptance: op>tech>3rd
- most find jobs within 2 years: 3rd>tech>op
- ages: 3 levels most 40-60 yrs., inflow: 3rd>tech.> operative
- course responsibility: min.s>agencies>fed.s>co.s
- pay courses: op>tech>3rd (no specific WWI grants)
- how? pvt>grant/scholarship>bursary>tax credit
- vocational training: op>tech>3rd

Demand side: competencies:

1. technical knowledge
2. ability to adapt (NB 6th for 3rd)
3. ICT skills
4. management skills
5. inter-personal skills
6. entrepreneurship
7. communication – mother tongue
8. communication – other languages

- firms find qualified staff? 50:50 – mostly nat.
- satisfaction with E&T: op&tech; NO; 3rd mixed
- finance new initiatives: no reply>yes>none

New EU Member States: many more applicants than places (more than KLOs) despite unattractive/outdated courses & political priorities for services

Overall conclusions: no overall conclusions about mis-match of supply/demand, but match better in countries with strong wood-using traditions

Changes in 5-10 years: no very common patterns:

- **supply side:** « Bologna » main driver but progress slow
- **demand side:** industry: wants + wood-specific courses
- **both:** EU-level co-operation seen as important

Recommendations:

- forward-looking strategic partnership with industry leading academia to address skills shortages through:
 - common courses/modules, based on market needs but also looking out of the « wooden box » e.g. environment
 - partnered sponsorship for students (industry +? EU?)
 - life-long learning packages e.g. free on-line knowledge
 - best practices (e.g. exchanges) should be identified, co-ordinated at EU level and disseminated
- (- promotion campaigns addressing the sector's image)

Follow-up: further contacts with survey respondents, inputs from INTERFOB, TUs, expert panel, CEDEFOP workshop

Challenges for workshop:

Facts:

- most decisions affecting sector/wood are made elsewhere
KLO: architects, designers, specifiers, planners (public?)
- focus more on (labour) productivity & profitability than prod.

Questions:

- is the sector's image of itself correct?
- focus on workers only or +/- other levels (tech.; 3rd)?
- need for package of measures? (institutional and policy frameworks, business models, finance)
- how/who to initiate change? Should industry take the lead (alone)? Who else?
- « action grid »? Who should do what?

Many thanks! - Muito obrigado!



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http://ec.europa.eu/enterprise/forest_based/index_en.html

Other information sources:

EU research (DG RTD)

<http://ec.europa.eu/comm/research>

- **Seventh Framework Programme (FP7)**
http://ec.europa.eu/comm/research/future/index_en.cfm
- **Information on research programmes and projects**
<http://cordis.europa.eu/>
- **RTD *info* magazine** <http://ec.europa.eu/comm/research/rtdinfo/>
- **Information requests**
research@ec.europa.eu

Energy, Regional & Agricultural policies & finance (EIB):

- **EC, DG TREN: Biomass Action Plan**
http://ec.europa.eu/energy/res/biomass_action_plan/green_electricity_en.htm
- **EC, REGIO: Structural and Cohesion funds**
http://ec.europa.eu/regional_policy/index_en.htm
- **EC, DG AGRI: EAFRD**
http://ec.europa.eu/agriculture/rurdev/index_en.htm
- **European Investment Bank (EIB)**
<http://www.eib.org/>