CEI-Bois

Roadmap 2010

Executive Summary

Prepared by
Timwood AB
Final editing by CEI-Bois
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European Confederation of Woodworking Industries
Confédération européenne des Industries du Bois
Zentralverband der europäischen Holzindustrie

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1. Background & Task

The European Confederation of Woodworking Industries, CEI-Bois, is the main body representing the interests of the European woodworking industries. It is composed of national woodworking associations from currently 19 countries and 8 European branch federations, each representing one specific sub sector.

In 1999, CEI-Bois co-funded a study on the EU woodworking industry with the support of DG Enterprise of the European Commission with the objectives:

- Evaluate the competitiveness of the EU woodworking industry vis-à-vis competitors.
- Draw quantitative and qualitative conclusions, and recommendations as to future prospects for the industry.

Since then, major developments have taken place in the European woodworking industry and in its operating environment that warrants further analyses and actions in order to strengthen the role and position of the industry and CEI-Bois.

Therefore it was considered due time to initiate a new assessment of the wood products industry in Europe, aiming at developing a **Roadmap to 2010 for the European Wood Products Industry**.

This assessment had to:

- Produce an updated analysis on external drivers affecting the industry:
  - Market development, focus on Europe.
  - Wood supply, Europe and non-Europe.
  - Barriers to enhanced use of wood.
  - Environmental analyses.
  - Perception of the woodworking industry.
  - Industry structure.
- Identify opportunities.
- Describe the ideal position.
- Produce an action programme for the European woodworking industries towards 2010.

This work was performed within the general vision of "Wood and wood products to become a leading material in construction and interior solutions by 2010".

The project was headed by CEI-Bois and included the active involvement of its Secretariat as well as representatives from its member industries and organisations that participated in the work process through a Steering Group and a Working Group that convened with the performing consultants throughout the work process.

The performing consultants included:

- **BRE**, Building Research Establishment, Center for Timber Technology & Construction, Garston, Watford WD25 9XX, UK.
- **INDUFOR Oy**, Töölönkatu 11A, FIN-00100 Helsinki, FINLAND.
- **Jaakko Pöyry Management Consulting**, Century House, Station Way, Cheam, Surrey SM3 8SW, UK.
- **Timwood AB**, Drottninggatan 112, 113 60 Stockholm, SWEDEN.

The specific tasks ("Work Packages") performed by the consultants were:

Table – Work Packages and Leading Consultants

Work Package	Consultant
1. Environmental & European Resource Analysis	Indufor OY
2. European Market and Industry Developments	Jaakko Pöyry Consulting
3. Non-European Market & Resource Developments	Jaakko Pöyry Consulting
4. Barriers to Enhanced use of Wood	Building Research Establishment
5. Perception Analysis	Indufor OY
6. Conclusions & Development of Action Programme	Timwood AB

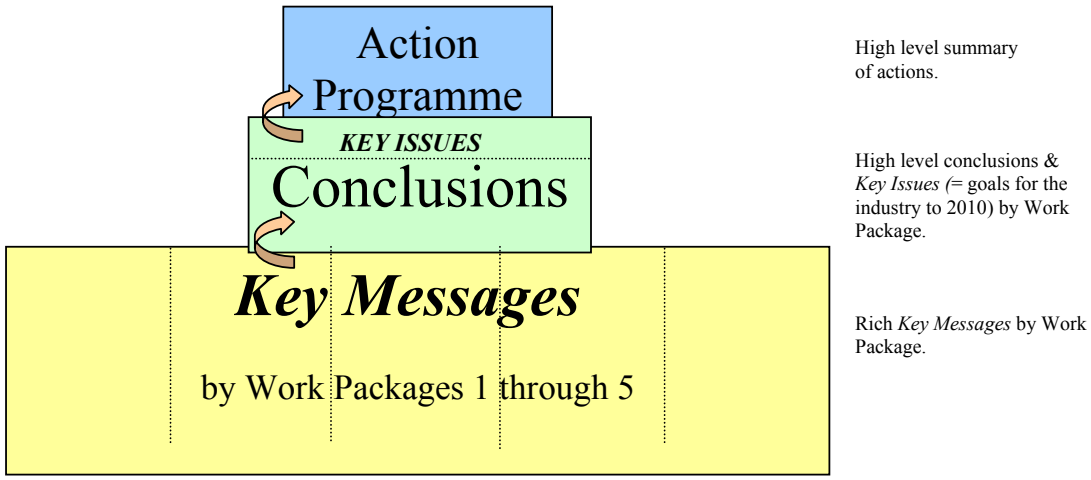
The preliminary conclusions from the project were presented at the European Wood Day in Brussels on 19 November 2003, launching a process of consultation with all interested parties and stakeholders. Based on the outcome of this consultation the final conclusions were refined and an action plan worked out. The consultation process also included interviews with key industrialists from the European woodworking sector.

The present document presents a summary of the conclusions as derived from the various work packages in the Roadmap 2010 project, as well as an action plan for CEI-Bois and the woodworking industries.

The action programme for the industry should now form the central platform of a European strategy for the wood sector, ideally linked in a cohesive way to other key actions and actors

How this summary relates to the various work packages is illustrated by the following figure.

Figure 1: **Illustration of how Key Messages from Work Packages and Conclusions and Action Programme are linked together**



Note: the summaries from the various work packages, on which this executive summary is based, are available separately.

Abbreviations and Acronyms

Bn.	Billion
CAD	Canadian Dollar
CADCAM	Computer Aided Design / Computer Aided Manufacturing
CAGR	Compound Average Growth Rate
DIY	Do-It-Yourself
EPF	European Panel Federation
EU	European Union
EWP	Engineered Wood Product
GDP	Gross Domestic Production
LCA	Life Cycle Assessment
LVL	Laminated Veneered Lumber
MDF	Medium Density Fibre board
MM	Million
NGO	Non-Governmental Organisation
OSB	Oriented Strand Board
PB	Particleboard / Chipboard
R & D	Research and Development
SW	Softwood
USD	US Dollar
WWI	Woodworking Industry

2. Conclusions

2.1 Market Development

The woodworking industry is an important business sector in Europe, accounting for almost €150 Bn. in sales and employing 1.6 million people in 2001.

The most prominent sub sector is the Furniture industry, accounting for 55% of the sales, followed by Building components (e.g. Windows, Doors, Flooring, Trusses etc.) (15%), Sawing, planing and impregnating (12%), Wood-based panels (9%) and Packaging (3%).

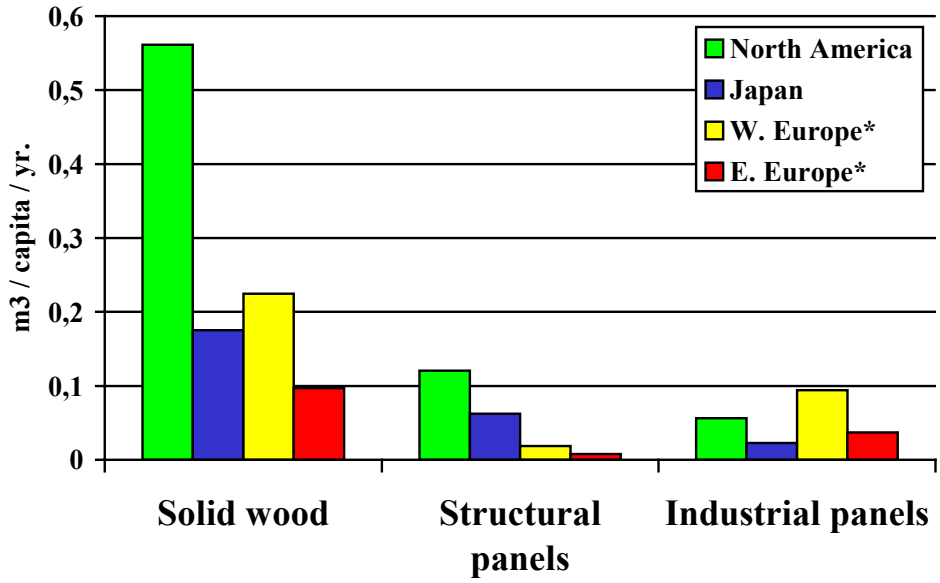
There are three overall features that apply to the European woodworking industry that flavours its position and performance:

- A comparably low level of wood products consumption in an international perspective.
- An increasing dependency on intra- and inter regional trade.
- A slowing growth in demand.

Wood Products Consumption

The per-capita consumption of primary wood products is typically lower in Europe* than in other industrialised regions in the world, albeit there are significant variations to its extent between specific wood products.

Chart 1: **Wood products per capita consumption in selected world regions, 2002**



Source: JPMC analysis of various sources

* Geographical definition used in this report: West Europe = EU15 + EFTA. East Europe = CEEC

Europe is a leading consumer of industrial wood-based panels (i.e. particleboard and MDF), primarily explained by two reasons; 1) particleboard is used extensively in construction, 2) Europe has a big furniture production sector which heavily uses industrial panels.

However, with regards to solid wood and structural panels Europe clearly trails the other major world markets. In view of the fact that less than 5% of the housing construction in Europe is timber frame (compared to around 90% in North America) and in recognition of the importance of the construction sector as a driver for solid wood and structural panels consumption, there is a clear potential for demand improvement in Europe.

Trade

During the 90's the wood products business has become a global business. Contributing factors are:

- Growing regional variations in wood supply and demand, e.g. Pacific Northwest (North America), Southern hemisphere.
- Reduced freight costs.
- Implementation of containerized shipping methods.
- Heavy currency exchange rate fluctuation.
- Improvement of communication (fax, e-mail).

The European wood products producers have benefited strongly from this development, seeing especially sawn softwood timber production growing significantly faster than European consumption. In 1992-1993, Europe became a net exporter of softwood sawn timber, and since then the export surplus has grown consistently and amounted to approx. 11 million m^3 in 2002.

However, Europe's future position as a big interregional exporter is at risk. The following can be concluded:

- The strong build-up of Europe's non-European market position in the late 90's was largely fuelled by weak currency.
- Going forward, concerns exist for the "strong" Euro to primarily USD & CAD.
  - Current exchange rates are quite normal seen in a longer perspective.
  - Future competitiveness of established market positions in Japan / Asia and the US. for primary wood products are at risk.
  - European markets may increasingly be satisfied through imports.
  - Potential loss of European finished goods export.
- Primary product lines' non-European export dependency*:

Export dependency *, 2002	LVL	Structural Glulam	Sawn SW	Plywood	OSB	MDF	PB
Share non-European export of total production	32%	21%	13%	16%	8%	5%	3%
- equivalent to million m3	0,04	0,4	12	0,6	0,2	0,5	1

- Mitigating factors that both fend off imports from non-Europe and support extra-European exports:
  - Quality.
  - Service.
  - Product development.

* Interpretation of table – example: Of total European LVL production in 2002 about 32% (or 40 000 m^3) was shipped to markets outside Europe.

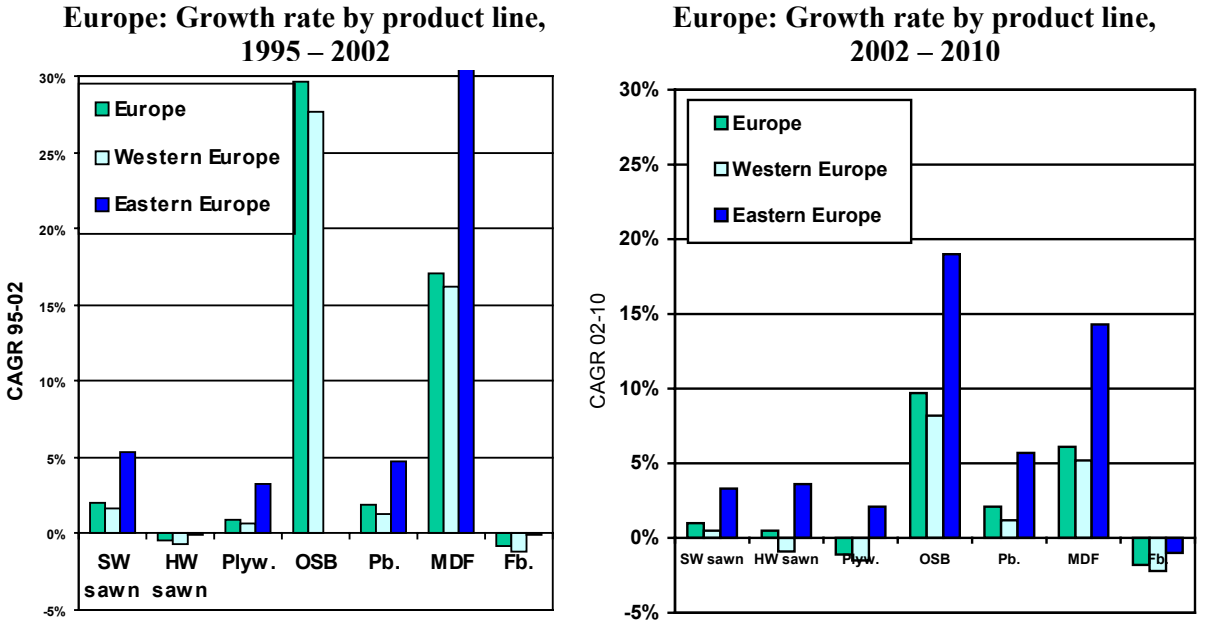
Wood products demand growth

The outlook for demand drivers to 2010 does not support an overall significant increase in wood products consumption in West Europe. Thus;

- **A substantial increase of wood consumption has to be actively created through:**
  - **increased market share taken from non-wood materials, and**
  - **development of new end-uses.**

The demand forecast development is summarized below.

Chart 2: **Demand forecast – *BASE CASE* – Primary wood products**



Source: Jaakko Pöyry Consulting

The demand analysis concludes that:

- Growth to 2010 in East Europe outpaces West Europe in almost all product lines.
- BUT, 1% growth in West Europe adds 1.3 million m^3 (all primary product lines) but only 0.25 million m^3 in East Europe.
- Overall a slower growth forecasted for this decade than during the 1990's.

On a product line by product line basis, the following can be concluded:

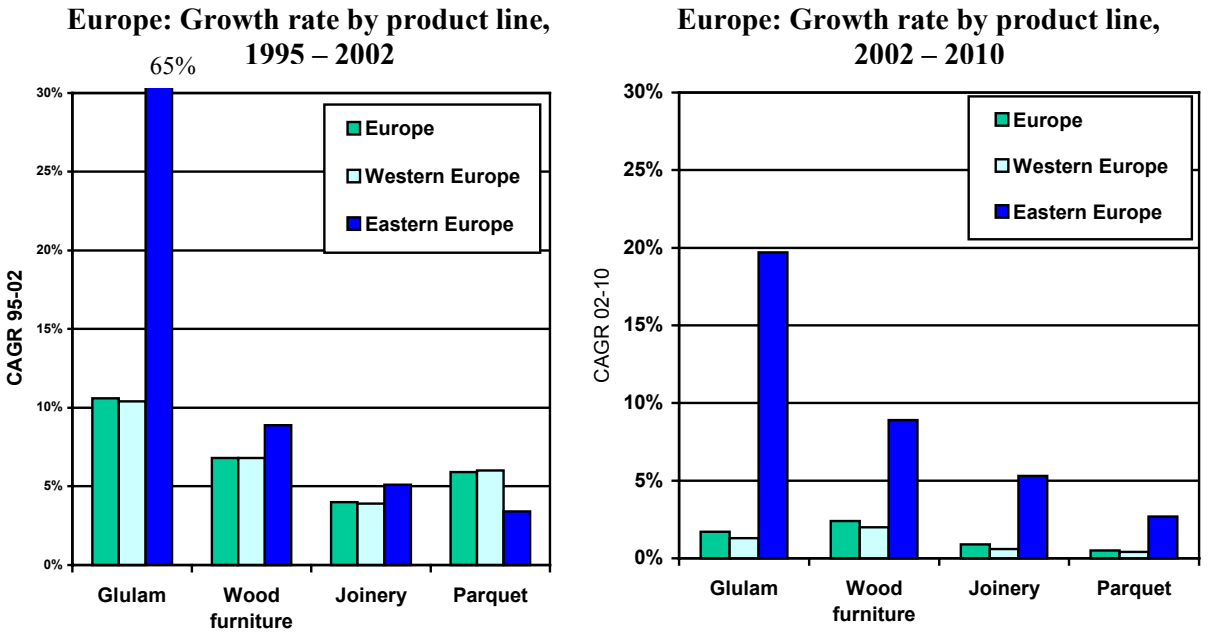
- Softwood sawn timber predicted to slow down to about 1% growth per annum.
- Hardwood sawn timber expected to switch growth mode, from a decline in the 90's to a slow growth, led by Eastern Europe.
- Plywood goes from a slow growth to a slow decline; –1% per annum.
- OSB and MDF continue their brisk growth, albeit in a slower tempo as they gradually reach the status of mature products.
- Particleboard demand remains about the same.
- Fibreboard's decline is slightly reinforced.

The volume weighted average growth rate for all primary product lines between 2002 – 2010 is about 1%, which implies:

- Less than half of the forecasted GDP growth.
- Loss of market share to other non-wood products and materials.

A similar analysis of selected secondary product lines indicates a comparable development pattern as seen for the primary wood products, as is shown in the chart below.

Chart 3: **Demand forecast – *BASE CASE* – <u>Secondary</u> wood products**

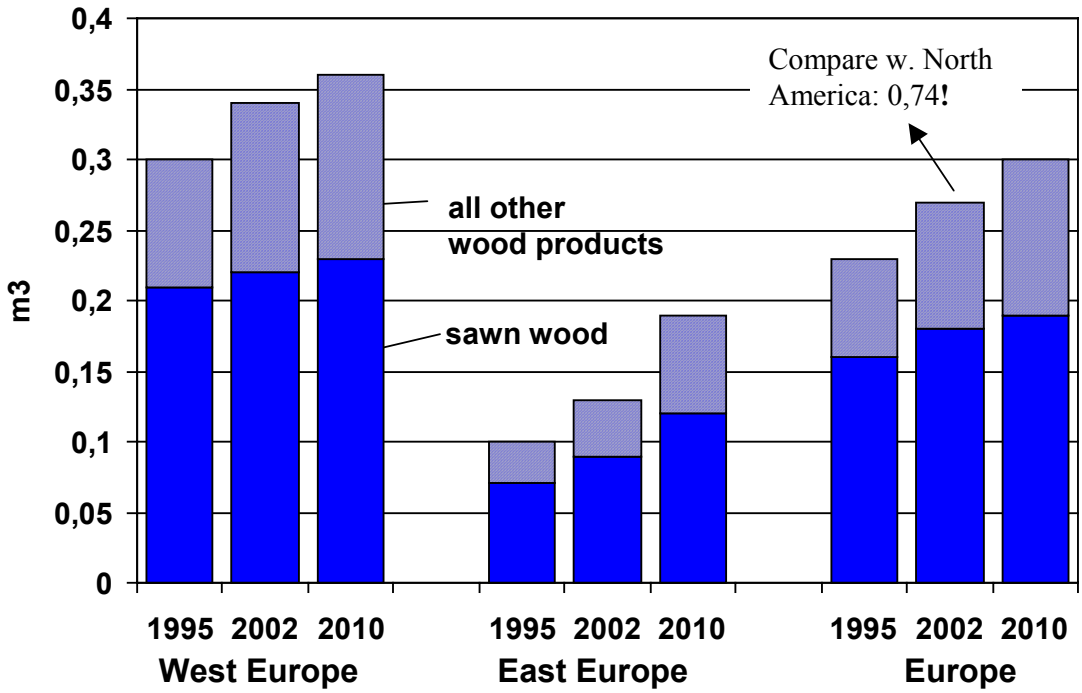


Source: Jaakko Pöyry Consulting

- Substantially reduced growth rates forecasted to 2010, compared to historic growth 1995 – 2002.
- East Europe grows significantly faster than West Europe, but due to a smaller market in absolute terms, the impact on a total European demand is limited.

The demand forecast by primary product line can be transferred into a per capita consumption analysis as follows:

Chart 4: **Demand forecast – *BASE CASE.* Per capita consumption in Europe of primary wood products.**



Source: Jaakko Pöyry Consulting, World Bank, FAO, Timwood

The chart shows that West European per capita consumption is 2.5x bigger than East Europe's in 2002, but East Europe's is expected to grow 7x faster than that in the West (CAGR*: 4.6% vs. 0.7%).

Overall, the per capita consumption of primary wood products is expected to grow by a meagre 0.03 m^3 (= 30 litres) from 2002 to 2010, corresponding to a CAGR 1%, which is less than half the forecasted GDP growth to 2010.

Key Issues facing the industry to 2010

- Increase the per capita consumption of wood products aggressively in a profitable – and as now – sustainable and environmentally responsible way.
- Improve industry competitiveness and value creation.
- Expand sales to and/or develop new markets outside Europe.

* Compound Annual Growth Rate

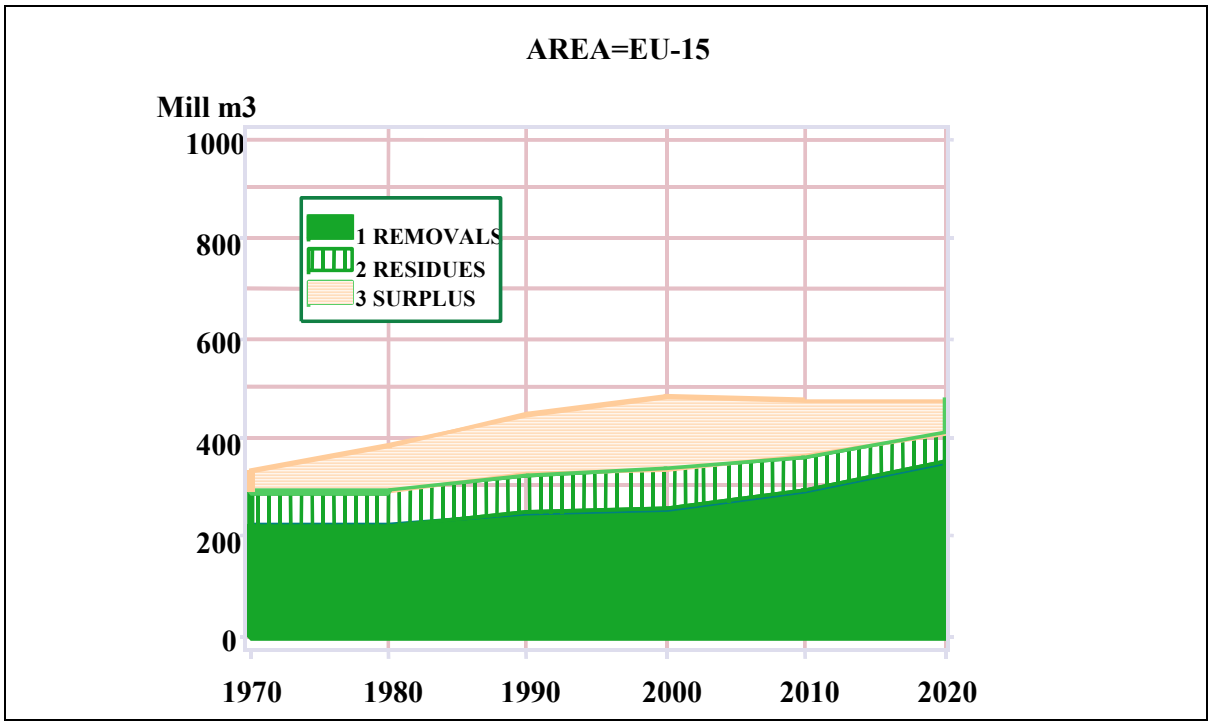
2.2 Wood Supply

Europe

The European forests produce more than what is expected to be needed in the current demand scenario to 2010. As a consequence,

- relatively cheaper wood raw material sources will be utilised first, and part of high-cost wood sources may not be utilised at all.

Chart 5: **Cutting Balance of Roundwood in EU-15 1970-2020**



Source: Indufor

Three factors will influence wood prices in the future:

- increased regional wood supply in the Accession Countries.
- globalisation of trade in wood raw material and in particular increase in intra-European trade flows.
- competitive pressure from other industries impacting the WWI's capacity to pay for its raw material.

Roundwood markets have been mostly national in Europe, but differences in wood price levels will be reduced in the future, encouraging more vivid foreign trade in round wood.

Improved manufacturing technology (e.g. using thin, high quality wood veneers on a low cost core) and market acceptance for new reconstituted panel products reduce the demand for, and preparedness to pay a premium for 'high quality' large-sized wood material from certain regions in Europe.

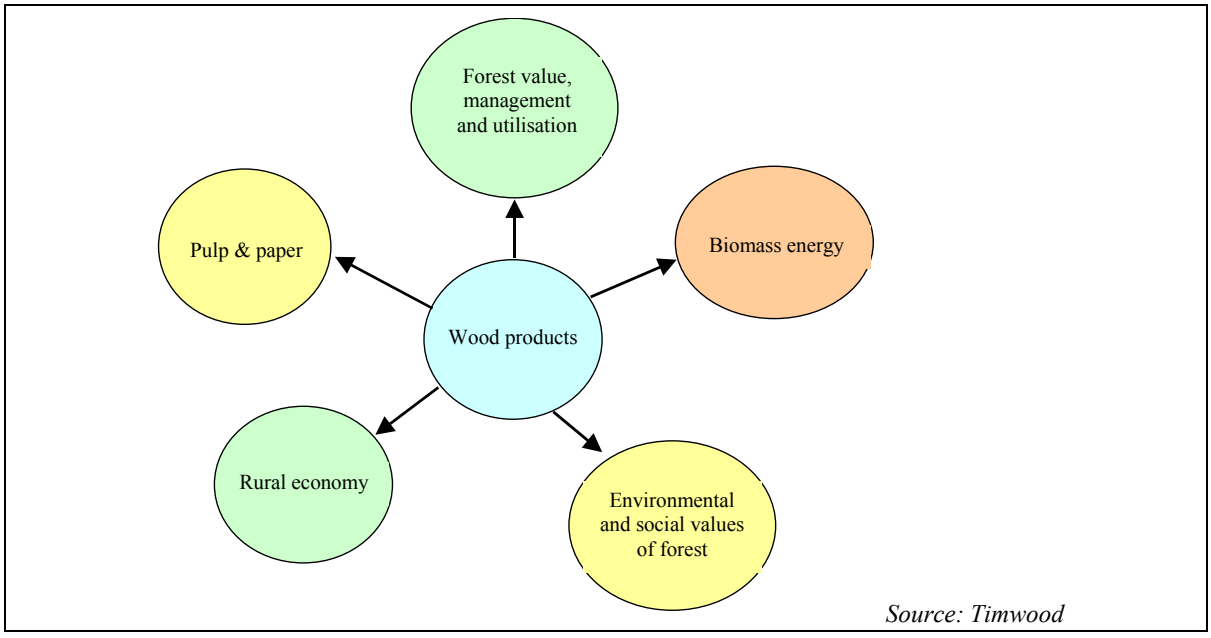
Future utilisation of wood raw material has three main areas where conflicts arise:

- Energy vs. wood products (e.g. particle board) manufacturing when industrial wood raw material is used as bioenergy.
- Setting aside ever increasing area for conservation, reducing industrial usage.
- Recycled wood usage vs. wood raw material from harvest or residues from sawmilling.

Despite the fact that the European forests can produce more than what is being consumed, it can be expected that the competition by other uses of forests and wood raw material will increase in certain areas.

The wood products industry constitutes the backbone of the sustainable forest management thanks to its capacity to pay the highest prices for harvested wood raw material. The bleak demand growth predicted for wood products up to 2010 is therefore a reason for strong concern, not only for forest owners but also for those who are primarily dependent on the wood products industry, including the whole range of related industries and local economies. The interdependence is illustrated in Chart 6.

Chart 6: **Linkages of Wood-working Industries**



Since raw material for solid wood products (saw and veneer logs) typically generate the bulk of stumpage revenue for the forest owner, any significant decline in demand for round wood in this industry would drastically reduce the revenue.

- A rough calculation*: aiming at estimating the loss in revenue for the European forest owners, if the softwood saw logs should be paid at the same price as pulpwood, results in EUR 4 billion per annum (or EUR 20/m^3).

* Assumptions: Europe produces 95 million m^3 of softwood sawn timber using about 190 million m^3 sawlogs. Average softwood saw log price is 45 €/m^3 and the average softwood pulpwood price is 25 €/m^3 (190 million* (45-25) ≈ €4 Bn).

Downward pressure in wood prices in Europe will influence:

- forest owners' interest in managing their assets to produce large volumes of the right quality.
- the asset values of forestlands.
- the economy in rural areas dependent on the forest industry leading to:
  - loss of employment.
  - emigration to regions where jobs can be found.
  - reduced social and commercial services, such as education, health, transportation, shops, etc.

It will be in the strong interest of forest owners and society to contribute to actions to promote increased use of wood.

Non-Europe

Active forest development in regions such as South America and Oceania has resulted in a strongly increased ability to harvest both cheap and highly suitable wood raw material for various wood products and pulp production purposes. This increasingly attracts the interest of major forest industries for forest industry investments.

Parallel to these recently man-made forest resources, Russia – and in particular Russia Far East – must be added to the list of "new" wood raw material sources that are being explored.

Against this supply situation, a growing wood raw material regional shortage in South and Far East Asia - in particular China - must be considered. It is generally believed, however, that as a whole, the world will not face a raw material shortage in the near to medium term perspective.

From this supply and demand scenario for global wood raw material, the following conclusions can be drawn:

- Inter-regional wood raw material as well as wood products trade will grow.
- Increasing international trade in combination with variances in the cost of wood and production resources will fuel a continued competitive business environment, particularly for the woodworking industry in Western Europe.

Key issues facing the industry to 2010

- Prepare to meet the future demand for raw material of woodworking industry from sustainable managed forests in a profitable way.
- Balance the usage of wood raw material between various interests in the society.
- Maintain and improve the competitiveness of the European wood raw material resources (especially in high cost regions) vs. non-European, cheaper wood sources.

2.3 Barriers to enhanced use of wood

It has previously been concluded that European wood products consumption is on a relatively low level and that it is not expected to grow strongly. So what holds back demand growth? There has been a perception in the industry that regulations stipulated by authorities in terms of how to construct buildings could be one factor hampering demand growth. Therefore, a European survey to identify 'Regulatory Barriers to Building with Wood' was conducted. This was conceived, steered and supported by the EU Enhanced Use of Wood Working Group (EUW WG).

The main findings were:

- At present, there are overall no direct regulatory barriers to the enhanced use of wood and wood-based products throughout Europe.
- In practice, functional (i.e. material independent) requirements cause limitations to wood and wood-based products being used.
    - Regulatory authorities may not be fully aware of the influences their regulations have on the use of different materials.
- Responses show that there are not only national but also regional differences in building regulations, which act as a barrier to joint actions across Europe.
- Fire and sound insulations are believed to be the main regulatory limitations to the use of wood in residential buildings, particularly in multi-occupancy dwellings.
- Generally, there is not enough guidance on wood structures.
- At present, wood from sustainable managed sources is not required in the majority of European countries.
    - Respondents did not think that this will become a requirement in the near future.
    - An emerging trend should be noted; public procurement policies asking for wood from legal and sustainable sources.
- Europe is getting familiar with Eurocodes, but their use in every day design is still limited.

The survey identified a number of non-regulatory barriers to the enhanced use of wood, such as:

- Institutional; education, training and skills, safety, networking within and between the woodworking and construction industries, voluntary industrial standards, planning, life cycle assessment issues and sustainability issues.
- Technical; durability, shortage of professionals and their knowledge, technical back-up, approvals, lack of interaction with other materials, construction process and availability.
- Economic; costing and pricing, risk, investment by all sectors, insurance policies, lack of common methodology (e.g. in manufacturing), taxes, and supply chain.

In its own work and in discussion of the above study, the EUW WG also identified a cultural barrier; poor perception of wood as a suitable material for building and living with wood.
It was therefore recommended that, in response to the key issues facing the industry to 2010, the EUW WG refocus its work programme on:

- education, training and skills.
- information and tools, especially information dissemination.
- research, development and demonstration**.**

Key Issues facing the industry to 2010

- At present, there are no regulatory barriers to the enhanced use of wood – **BUT** – there are many regulatory limitations and other influencing barriers. These are in the fields of: education, training and skills; information and tools, especially dissemination; research, development and demonstration. How can these be overcome?
    - Take actions (prioritised) on a national and European level.
    - Select relevant parties to be involved in this process.
    - Generate and disseminate technical proof and supporting information to the specifiers and end-users.
    - Raise the wood sector spending on R&D towards the EU target of 3% of GDP.

2.4 Environmental Analyses

There is sufficient scientific evidence to conclude that wood has superior environmental qualities compared to substituting materials but this important asset has not yet been capitalised by the woodworking industry above and beyond its technical suitability and price competitiveness.

The main end user of wood, the global construction activity is a significant user of natural resources. It is estimated* that its share of the global resources are:

- 10% of economic activity
- 40% of material and energy consumption
- 25% of harvesting of wood
- 17% of fresh water

Box 1 **Wood Has a Good Story to Tell**

1. Wood helps in mitigation of climate change as
   - trees are grown with solar energy
   - trees absorb carbon dioxide from the atmosphere and release oxygen while grown
   - wood products trap carbon dioxide during the product's lifetime until burned or decayed
2. Wood is renewable as
   - new trees are grown in harvested areas
   - it is recyclable and biodegradable
   - forests can be managed in a sustainable way
   - wood does not deplete existing finite resources like oil and ore, competing materials continue to do so
3. Wood is energy efficient as
   - little external energy is used in processing
   - it has better insulation properties than concrete and steel
4. Wood is natural, feels pleasant, has an inviting texture, and creates wellness experiences
5. Wood utilisation contributes to sustainable development, creating income and employment in rural areas and other socio-economic benefits
6. Wood-based materials offer cost efficiency and competitiveness in building
7. Wood allows environmental reasoning in product design: rethink, replace, reduce, recycle, reuse, repair (6 Rs)

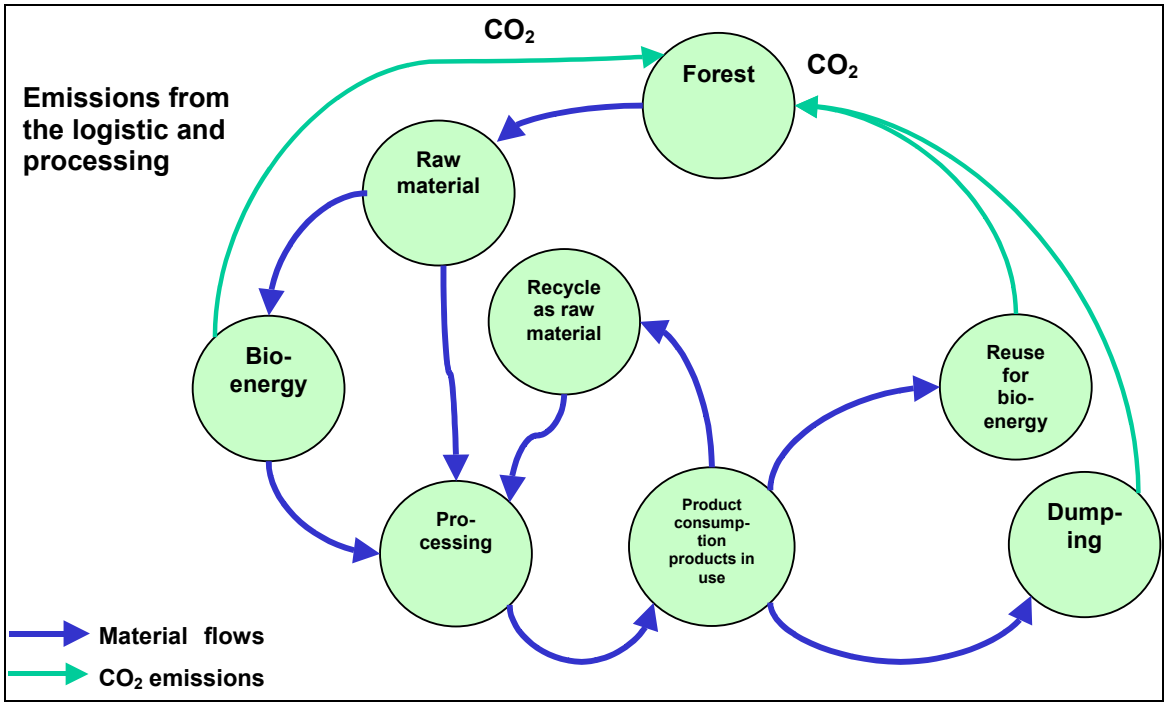
Enhanced wood use in construction could significantly reduce the environmental burden of the construction activity.

In spite of their environmental credentials, wood products' image suffers from conflicts related to forest management, and illegal logging and related trade. However, in Europe wood can be produced in a socially responsible way. This can be demonstrated and communicated to stakeholders, which is needed to improve the image of the woodworking industries.

* Source: Forintek Canada Corp., Athena Institute

The assessment of environmental impacts of wood products has to take place over their entire life cycle. After round wood has passed through the value chain ending up in a large variety of end uses, discarded wood products can be used for bioenergy. Important contributions to sustainable development and environmental conservation can be created during this process as wood is substituting less environmentally friendly materials. These are lost if such round wood is directly used for bioenergy.

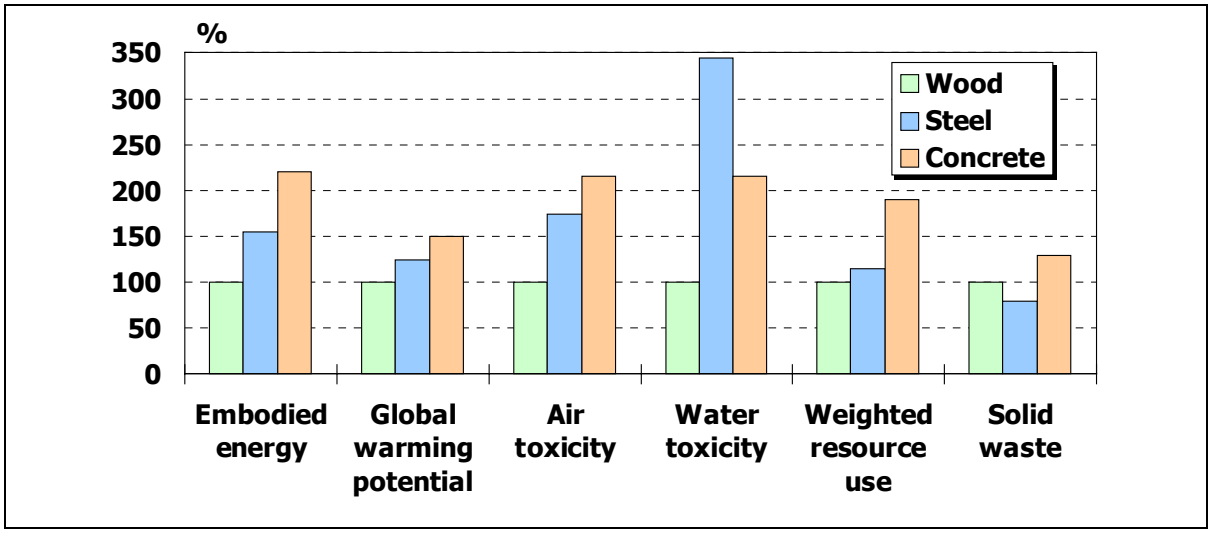
Chart 7: **Life-cycle Assessment of Wood Building Products**



Source: Indufor

As an example of wood's environmental advantage vs. competing materials, a life cycle analysis was carried out comparing three single family houses constructed with wood, steel and concrete.

Chart 8: **Environmental Load of Timber-frame Buildings Compared with Other Materials (Source: Athena)**



The results show that wood frame buildings represent a significantly lower environmental burden than buildings made of competing materials.

Environmental benchmarking between materials is complex exercise and therefore the results have been difficult to communicate. In addition, various stakeholders, i.e.

- governments
- industries
- consumer groups
- forest owners
- NGOs
- scientific and education communities

tend to emphasise different aspects.

A rapidly increasing number of policies and instruments related to environment are emerging on national, regional and international levels which sometimes represent a threat to the competitiveness of the European WWI. There is an urgent need to keep decision-makers continuously informed on the potential contribution of enhanced wood use to environmental conservation and social and economic aspects of sustainable development.

The role of use in wood products in the mitigation of climate change is a case in point as they serve as carbon sinks during their entire service life. It has been estimated that if wood consumption in Europe annually increases by 4% (Roadmap target), an additional 150 million tonnes of CO_2 would be sequestered in wood products per year, and the market value of this environmental service would be about EUR 1.8 billion/year.

Key Issues Facing the Industry to 2010

- Create an environmental agenda for the woodworking industry.
  - €1.8 Bn./yr. in potential revenue for forest owners stemming from CO_2 sequestration.
- Influence the public and policy makers to ensure that:
  - A sustainable forest management is not negatively impacted.
  - A sound utilisation of the forest resource is secured.
- Make use of "Environment" as a supporting argument for increased usage of wood products, but;
  - Don't be too technical – but still stick to accepted facts and sound logics.
  - Be aware of the risk of backfire when less cautious countries' / regions' forest resources are utilised in a less sustainable way.

2.5 Perception of the wood products in building and construction

Despite national and cultural differences between countries, there are common threads in the perceptions of wood among consumers and building professionals.

- Wood is perceived as:
  - Natural
  - Renewable
  - Economical
  - Sound absorbing

- But wood is not perceived as:
  - Strong
  - Durable
  - Modern
  - Fire proof

Furthermore, it can be generally noted that the strong polarisation between ”environmentalists” on one side vs, ”industrialists” on the other is gradually decreasing in Western and Northern Europe. Compared to the late 1980s and early 1990s the environmental tension around forestry and wood industry has levelled off. Trade and legality issues have become more pronounced instead.

Wood promotion campaigns have proven their effectiveness on both national and Pan-European levels. It is therefore strongly recommended that the woodworking industry take stock on the most successful campaigns, their methodologies and results obtained. Examples would be:

- Wood campaigns of the UK and Austria, which demonstrate that perceptions of wood can be changed both among consumers and building professionals.
- Pan-European level initiatives to coordinate wood promotion, e.g. with the help of the European wood magazine Building with Wood.

Much progress would be made if wood promotion professionals would actively learn from each other, instead of conducting isolated attempts with mixed techniques.

Key Issues facing the Industry to 2010

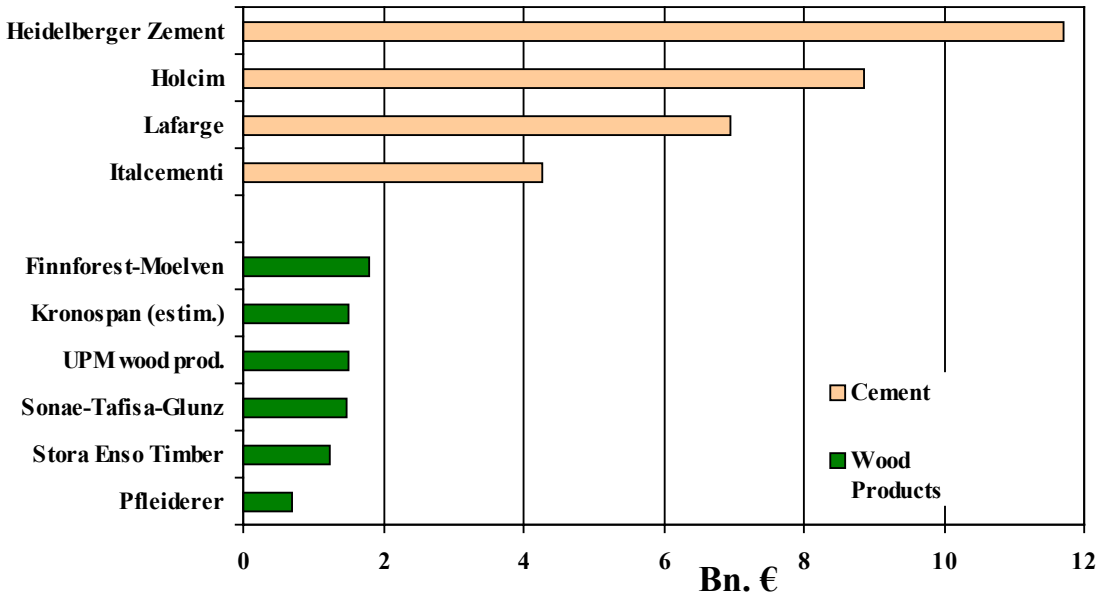
- Capitalise on the generally positive perceptions of wood among consumers with the help of wood-competent building and construction professionals, and less restrictive building regulators, and make wood products the preferred choice, easy-to-use material in:
    - Structural applications (Building with Wood).
    - Appearance applications (Living with Wood).
    - Packaging & Transports.
- Attract, develop and retain competent people in the industry.
- Consolidate and reinforce the country and industry based wood promotion activities into a coherent influence with a measurable wood consumption impact on:
    - Product sector.
    - Prioritised area and geography.

2.6 Industry and market structure

Large differences reside within the European woodworking industries with regards to its structure, position and level of consolidation. Overall, the fragmented industry and distribution structures in most wood industries and markets are weakening the supply chain efficiency, industry competitiveness and as a consequence the consumption of wood products.

Compared to many competing industries (e.g. cement and steel) the European woodworking industry is less consolidated and constituted of smaller-sized businesses.

Chart 9: **2002 sales for leading European wood products and cement producers.**



It should also be observed that Europe is home to two world giants in the steel industry – Thyssen Krupp and Arcelor – with sales of €34 Bn. and €27 Bn. respectively

In Europe, especially retail channels are increasingly being dominated by fewer and larger players. Examples of Top 10's market share in 2002:

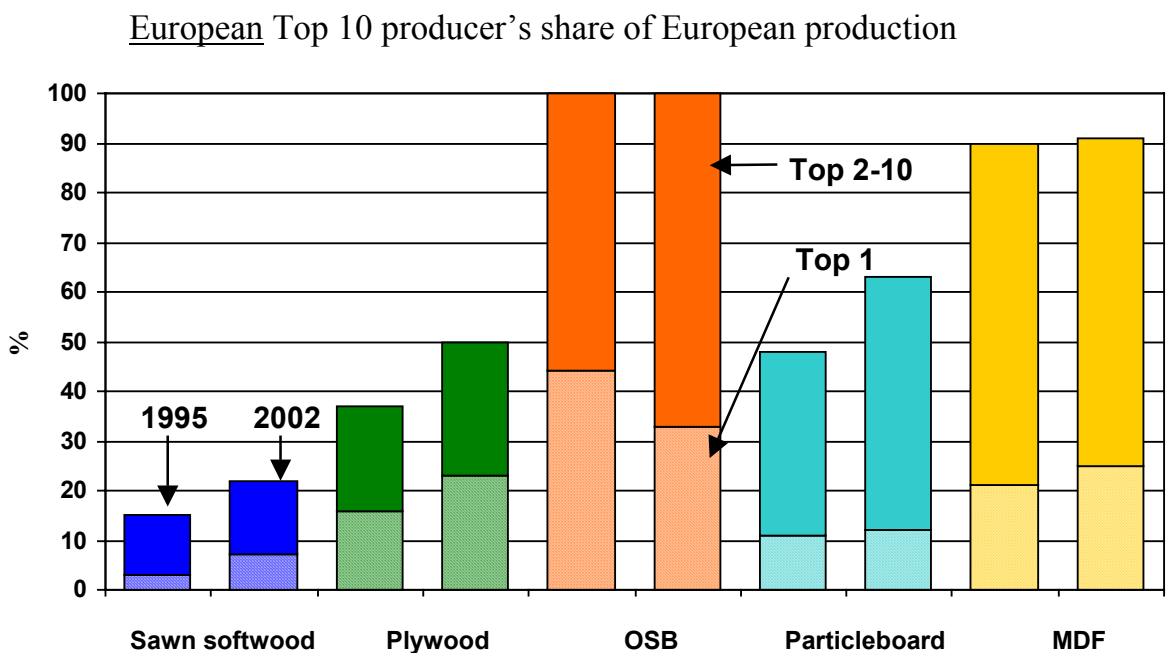
- UK Builders Merchants 67%.
- UK DIY chains 58%.
- French Builders Merchants 74%.
- French DIY chains 65%.

The consolidation trend among the wood product industry's customers is not unique to Europe. Examples from North America; between 1995 and 2002, the American Top 10:

- Builders grew from 7% to 16% of the market.
- DIY retail chains increased from 15% to 32% of the market.
- Builders' Merchants jumped from 14% to 22% of the market.

It is a very likely prediction that the consolidation trend among the wood product industry's competitors and customers will continue and that the trend of consolidation within the European woodworking industry will continue as well.

Chart 10: **Consolidation trends in the European wood products industry.**



Source: Jaakko Pöyry Consulting, FAO. Timwood analysis.

The future structural development will likely lead to a polarisation, where Global / Pan-European companies dominate the scene, but where smaller niche oriented companies thrive through qualitative competitive advantages and clustering.

Main features of:

- "Global / Pan-European" companies:
  - Production located according to low cost on a Global / Pan-European scale.
  - Product portfolio including a broad wood products range and system solutions.
  - Global / Pan-European marketing and distribution system.
  - Purchase complementary products from sub-suppliers.
  - Resources for own Research and Development.
  - Build own brand names.

- "Niche oriented" companies:
  - Defined by geography, product offering, quality, customer type, etc.
  - High degree of customer adaptation, specialisation and product development.
  - High degree of value adding as well as service level to customers.
  - Sometimes in partnership with larger wood product companies, using their marketing and distribution network.

Key Issues facing the industry to 2010

- Improve the ability to promote the interest of a diversified and fragmented industry.
- Improve the relative competitiveness of European production capacity.
- Improve the competitiveness of the Small & Medium sized Enterprises.
- Ensure industry's contribution to rural development (social responsibility).

2.7 Need for an Action Programme

2.7.1 Demand scenarios

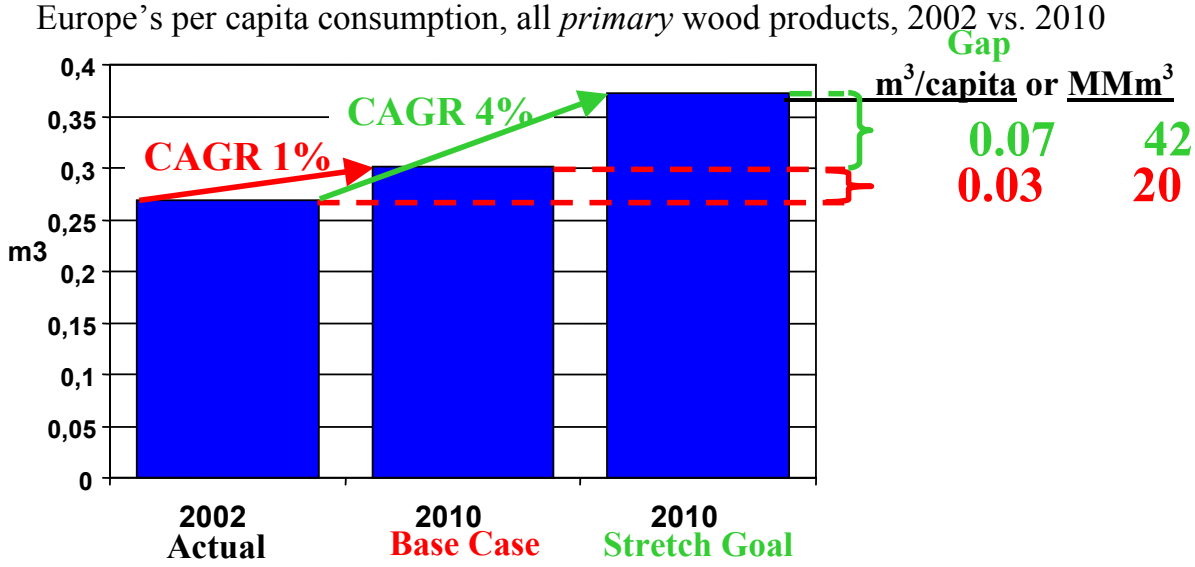
Of the over 1000 pages of detailed background information put together for this project, the absolutely most important conclusion is:

Base Case demand forecast to 2010 is unsatisfactory: only CAGR* 1%

1% growth per annum is less than half of the average expected GDP growth to 2010 in Western Europe (abt. 2.5%) and only ¼ of the forecasted GDP growth in Eastern Europe (abt. 4%). Thus, in reality the *Base Case* can be interpreted as a situation where wood products lose market share. Furthermore, this scenario would not be able to support a healthy wood products industry. The consultant team has therefore almost exclusively devoted suggested actions to the task of stimulating growth of wood products consumption.

First and foremost, a ***Stretch Goal*** was developed. The target was set at: **CAGR 4%**, an ambitious but obtainable goal. It is "only" about 1/3 higher than weighted average forecasted GDP growth to 2010 for West and East Europe. The results in numbers are shown in the following chart.

Chart 11: **Demand forecast scenarios – GAP ATTACK!**



Source: Jaakko Pöyry Consulting, Timwood analysis.

The *Base Case* scenario adds an average per capita consumption growth of 0.03 m^3, which equates to 20 million m^3 for all Europe. The *Stretch Goal* increases the per capita consumption from 0.27 m^3 in 2002 to 0.37 m^3 by 2010 which is a growth of 20+42 = 62 million m^3. However, a per capita consumption of 0.37 m^3 is not an aggressive one. It is still quite exactly only 50% of the average North American per capita consumption.

* Compound Annual Growth Rate

"Food for thoughts": if increasing the European per capita consumption to 0.5 m^3 (still 1/3 below North America), then an additional 130 million m^3 on top of 2002 consumption would be demanded.

Other benefits stemming from an increased consumption of wood products in line with the *Stretch Goal* are:

- An environmental service of increased wood products consumption (4% per year) valued in the range of €1.8 bn./year.
- €4 Bn. in estimated added value per annum for European forest owners due to SW saw logs being priced higher than SW pulpwood.

2.7.2 Summary of Key Issues facing the industry to 2010

Market development

- Increase the per capita consumption of wood products aggressively in a profitable – and as now – sustainable and environmentally responsible way.
- Improve industry competitiveness and value creation.
- Expand sales to and/or develop new markets outside Europe.

Wood supply

- Prepare to meet the future demand for raw material of woodworking industry from sustainable managed forests in a profitable way.
- Balance the usage of wood raw material between various interests in the society.
- Maintain and improve the competitiveness of the European wood raw material resources (especially in high cost regions) vs. non-European, cheaper wood sources.

Barriers to enhanced use of wood

- At present, there are no regulatory barriers to the enhanced use of wood – **BUT** – there are many regulatory limitations and other influencing barriers. These are in the fields of: education, training and skills; information and tools, especially dissemination; research, development and demonstration. How can these be overcome?
    - Take actions (prioritised) on a national and European level
    - Select relevant parties to be involved in this process.
    - Generate and disseminate technical proof and supporting information to the specifiers and end-users.
    - Raise the wood sector spending on R&D towards the EU target of 3% of GDP.

Environmental analyses

- Create an environmental agenda for the woodworking industry.
    - €1.8 Bn./yr. in potential revenue for forest owners stemming from CO_2 sequestration.
- Influence the public and policy makers to ensure that:
    - A sustainable forest management is not negatively impacted.
    - A sound utilisation of the forest resource is secured.
- Make use of "Environment" as a supporting argument for increased usage of wood products, but;
    - Don't be too technical – but still stick to accepted facts and sound logics.
    - Be aware of the risk of backfire when less cautious countries' / regions' forest resources are utilised in a less sustainable way.

Perception of the woodworking industry

- Capitalise on the generally positive perceptions of wood among consumers with the help of wood-competent building and construction professionals, and less restrictive building regulators, and make wood products the preferred choice, easy-to-use material in:
    - Structural applications (Building with Wood).
    - Appearance applications (Living with Wood).
    - Packaging & Transports.
- Attract, develop and retain competent people in the industry.
- Consolidate and reinforce the country and industry based wood promotion activities into a coherent influence with a measurable wood consumption impact on:
    - Product sector.
    - Prioritised area and geography.

Industry structure

- Improve the ability to promote the interest of a diversified and fragmented industry.
- Improve the relative competitiveness of European production capacity.
- Improve the competitiveness of the Small & Medium sized Enterprises.
- Ensure industry's contribution to rural development (social responsibility).

The concluding piece of the Roadmap project - the Action Programme – addresses these Key Issues in a number of Strategic Processes.

3. Action Programme

The main conclusions from the *Roadmap 2010* project are:

- Base case demand forecast to 2010 is unsatisfactory; 1% growth per year.
- A stronger cooperation within the whole European woodworking industry is necessary in order to change the bleak 2010 demand scenario.

The base documentation of this project comprises about 100 action suggestions. These should henceforward be linked together and into an overall EU wood sector strategy, based on the industries' "Road Map" as its motor and mainframe, but also having synergic linkages with other essential components of, or linked to the wood sector. Thus, taken as a comprehensive set, these actions are aimed at:

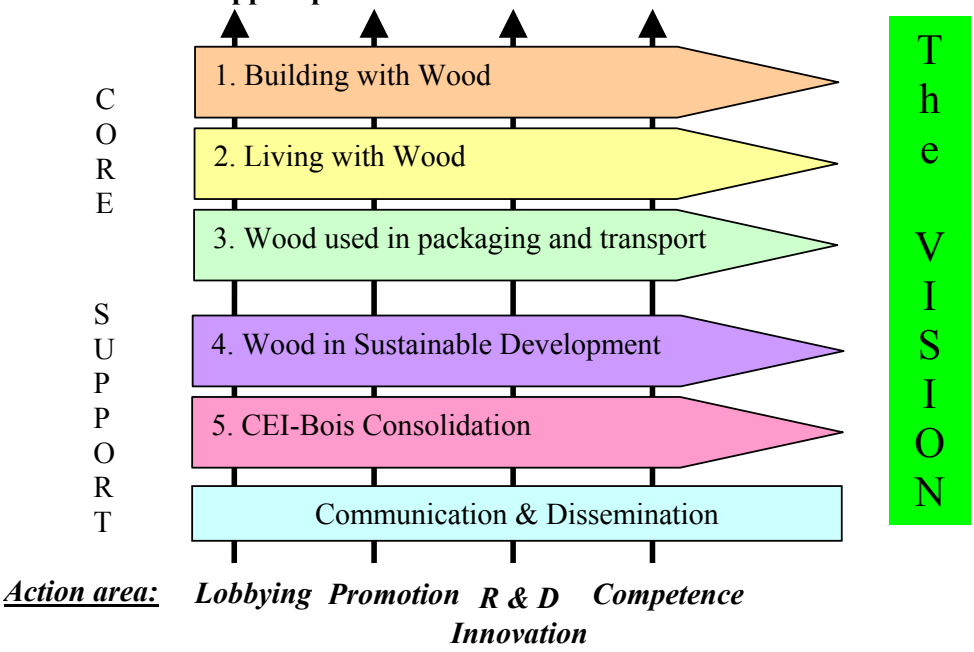
- Industry.
- Industry and trade associations.
- Administrative community (EU, national, regional authorities and other bodies).
- Educational and training community.
- Research and development community.

Their smallest common denominators for the proposed actions are:

- Emphasis on creating demand growth in both the secondary as well as the primary industries – "growing the pie".
- Requires coordination and prioritisation of activities on a European level in order to achieve maximum effect. Without coordination and prioritisation, it is unlikely to reach the *Stretch Goal*.
- Designed to assist in achieving CEI-Bois' **VISION**, i.e. ***"By 2010, wood will be Europe's leading material in building system solutions and high-quality home and office furnishing"***.

The summary of actions presented below does naturally not in detail reflect each and every one of the actions suggested in the base documentation. Instead, the aim has been to formulate a few *Strategic Processes*, which jointly – if successfully implemented – would lead to a significant demand increase and improved position of the European woodworking industry.

Figure 2: **A summary of actions into five Strategic Processes, split in three Core and two Support processes.**



Each Strategic Process could be seen as a set of activities with its own project management developing a detailed project plan. Overriding co-ordination and prioritisation on a European level is provided by the woodworking industry through CEI-Bois.

Across the Strategic Processes in the figure above, run four action areas; Lobbying, Promotion, R & D / Innovation and Competence, indicating that significant synergies exist between the various processes in this respect.

Each of the Strategic Processes is further commented below.

NOTE: The specific actions to be performed will be defined and decided by the respective process leaders.

Strategic Core Process: 1. Building with Wood
Goal by 2010: Double wood-based materials' market share in construction.

Main Actions / Features:

a. Facilitate changes needed through the whole construction and wood supply chains to increase the use of wood/wood-based products by removing limitations to their use and eliminating Institutional, Technical, Economical and Perceptional barriers.
b. Define European building system and facilitate "inter-changeability" / modularity of building components through standardisation process.
c. Develop planning toolboxes, e.g. CAD/CAM, and web sites to share information, especially targeted for European situation.
d. Provide relevant industrial and non-industrial codes & standards if not already available.
e. Address the needs of non-housing applications (i.e. industrial, commercial, heavy structures, etc.).
f. Create harmonized standards for EWP by fast-tracking process to ensure the smooth introduction of innovative wood products into the construction chain.
g. Remove Institutional, Technical, Economical and Perceptional barriers.
h. Eliminate regulatory limitations to the use of wood.
i. Address and use environmental credentials of wood.
j. Identify and develop other areas of application of the use of wood in construction.
k. …

Strategic Core Process: 2. Living with Wood
Goal by 2010: To achieve a substantial and sustained change in attitudes towards wood and wood products, leading to an increase in wood consumption.

Main Actions / Features:

a. Communication / Promotion / Product development / Innovation / Design / Attitude changing processes.
b. Target specific groups, e.g. specifiers, architects, designers, women, youths etc.
c. Coordinate national campaigns – develop promotion campaign boxes – exchange promotion material.
d. Provide relevant industrial and non-industrial codes & standards if not already available.
e. Create harmonized standards to ensure the smooth introduction of innovative wood products
f. Remove Institutional, Technical, Economical and Perceptional barriers.
g. Eliminate regulatory limitations to the use of wood.
h. Address and use environmental credentials of wood.
i. Create tools in order to facilitate specifying suitable wood-based products for different interior uses and to facilitate designers' work. Create similar tools for individual customers to visualise wood products in their home environment.
j. …

Strategic Core Process: 3. Wood used in packaging and transport
Goal by 2010: Create conditions for a better and increased use of wood-based products for packaging and transport purposes.

Main Actions / Features:

a. Promote standardisation of wood packaging and adequate phytosanitary requirements.
b. Communicate and do R&D in safety and health aspects of wood & food.
c. Involve the entire logistic chain in wood-based solutions development.

d. Remove Perceptional barriers on the suitability of wood for packaging and transport purposes.
e. Eliminate regulatory limitations to the use of wood for packaging or transport
f. Address and use environmental credentials of wood.
g. Create wood-based logistical systems.
h. Do research in order to create new innovative wood-based packaging materials and packaging systems.
i. …

Strategic Support Process: 4. Wood use in Sustainable Development.

Goal by 2010: Sufficient knowledge and awareness created among stakeholders on the sustainable development contribution of enhanced use of wood.

Main Actions / Features:

a. Take actions to insert enhanced wood utilisation in national and EU-level policies and programmes on sustainable development, environment, climate change and energy.
b. Generate new information on the environmental profile of wood and sustainability impacts of enhanced wood utilisation *vis-à-vis* alternative materials in order to influence international, EU-level and national policies and regulation.
c. Forge alliances with NGOs and other pressure groups to promote wood on the basis of environmental and social benchmarking.
d. Develop and promote appropriate tools to assist woodworking industry to demonstrate and communicate on its social responsibility and environmental performance to consumers, buyers and other stakeholders.
e. …

Strategic Support Process: 5. CEI-Bois Consolidation.

Goal by 2010:
- By 2005; a restructured CEI-Bois which is the owner of an ongoing strategy process for the European woodworking industry.
- A tiered system with clearly defined tasks by organisational level and a flourishing co-operation between all actors.

Main Actions / Features:

a. European Confederation – CEI-Bois – level:
   - Empower CEI-Bois to be able to monitor and update the Strategy process.
   - Promote the interests of WWI on EU and international levels.

b. Sub-sectorial level:
   - Deals with product line specific issues, e.g. trade, customs classification, standards etc. Example organisation: EPF.

c. National level:
   - Develop national, industry endorsed and government supported programmes in accordance with *Building with Wood*, *Living with Wood* and *Wood in Packaging and Transport*.
   - Empower national WWI organisations through strong European-level cooperation.

d. Actions are European-wide coordinated, but nationally implemented.

e. …

Measuring market share

In addition to the five Strategic Processes laid out above, there is a strong need to develop an ability to accurately measure wood and wood-based building materials' market share (in value terms) by segment. Without an understanding of wood's position vs. competing materials, it is difficult to properly design detailed actions and follow-up on their impacts.

Foundation for a successful implementation

The Steering Group has identified the following six factors as being fundamental for a successful implementation of the Action Programme:

1. An overall support from the industry, with the "Captains of the Industry" in the lead.

2. Identification of Strategic Process leaders.

3. Significant funding throughout the period to 2010 will be required.

4. Each Strategic Process has to be adequately staffed.

5. Timing is NOW.
   a. Considering the ambitious goal and the fact that 2010 is "only" 6-7 years away, the implementation of the Action Programme needs the highest priority.
   b. Develop intermediary evaluation points towards 2010 and monitor the progress of the implementation.

6. Interaction and cooperation are necessary elements in improving the efficiency and effects of the various actions.
   a. Internally; Industry – Associations - Unions.
   b. Externally; Authorities – NGOs – Customers.

European Roadmap: Communication & Dissemination

The Action Programme is ended by a broad suggestion to a communication plan, which logically is divided in three parallel activities:

1. Present and discuss the results of the European Roadmap to the:
    a. Industry.
    b. National associations and Authorities.
    c. European institutions.
2. Start a consensus building process among captains of the industry to get support for proposed actions.
3. Disseminate industry wide Conclusions, Action Programme and future results.
    - Use the:
        - Established dissemination system developed by EU.
        - European Wood Magazine.

And finally

As of January 2004, the consultant consortium's task has been finalized, i.e.:

- To analyse external drivers impacting the European wood products industry.
- Draw conclusions.
- Develop an Action Programme – a **Roadmap 2010 for the European Woodworking Industries**.

However, it is now the real job starts for the Industry and its Associations, that is:

- To spread the message of this project in as wide circles as possible to get consensus about required actions.
- To start implementation of suggested Strategic Processes.

It is the opinion of the Steering Group, the Working Group and the consultant team, that a coordinated effort by the European woodworking industries in line with the *European Roadmap 2010* recommendations will lead to a substantial demand improvement.

The *Base Case* is a frosty alternative…

…to the more sunny *Stretch Goal* road.