

Policy Issues Related to Forest Products Markets in 2003 and 2004

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Policy Issues Related to Forest Products Markets in 2003 and 2004

- Forest law enforcement, governance and trade
- Forest certification
- Policies promoting the sound use of wood
- Research and development related policies
- Industry competitiveness and investment policy
- Climate change policy
- Wood energy promotion policy
- Trade policy and tariff and non-tariff barriers
- Phytosanitary measures
- Russia – a new forest code

Forest Law Enforcement, Governance and Trade

Topic One



Issues related to forest law enforcement, governance, and trade are primarily those linked to the illegal logging problem.

A photograph of a dense forest with a dirt path leading through the trees. The path is in the center, winding through the forest. The trees are tall and thin, with green foliage. The lighting is bright, suggesting a sunny day. The overall scene is a lush, green forest.

The World Bank estimated that the loss of revenue to local governments due to illegal logging was on the order of \$5 billion annually, with a further \$10 billion lost to local economies.

Forest Law Enforcement, Governance and Trade

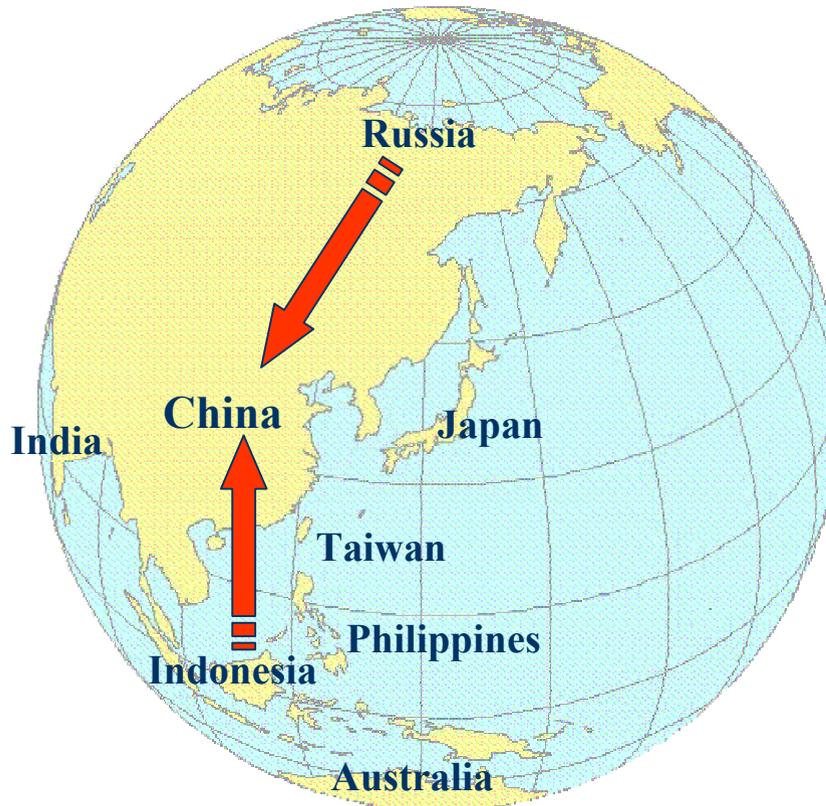
- Pressure from the international community to curtail illegal logging is growing.
- A pending EU regulation is intended to control imports of illegally-sourced timber from specific countries.

Forest Law Enforcement, Governance and Trade

- Pressure from the international community to curtail illegal logging is growing.
- A pending EU regulation is intended to control imports of illegally-sourced timber from specific countries. Some say the measure is meaningless unless the importation of paper, furniture, and other products is addressed.

Issues related to illegal logging will likely grow in importance as wood production shifts

to Asia and Eastern European countries.



Forest and Wood Certification

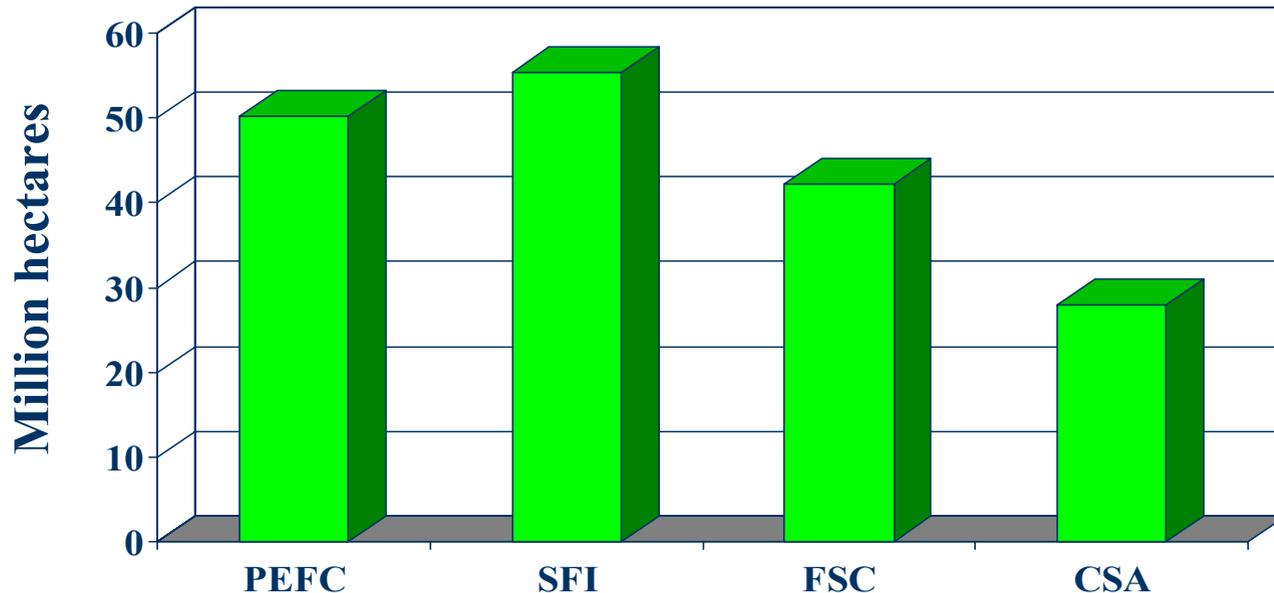


Topic Two

Forest and Wood Certification

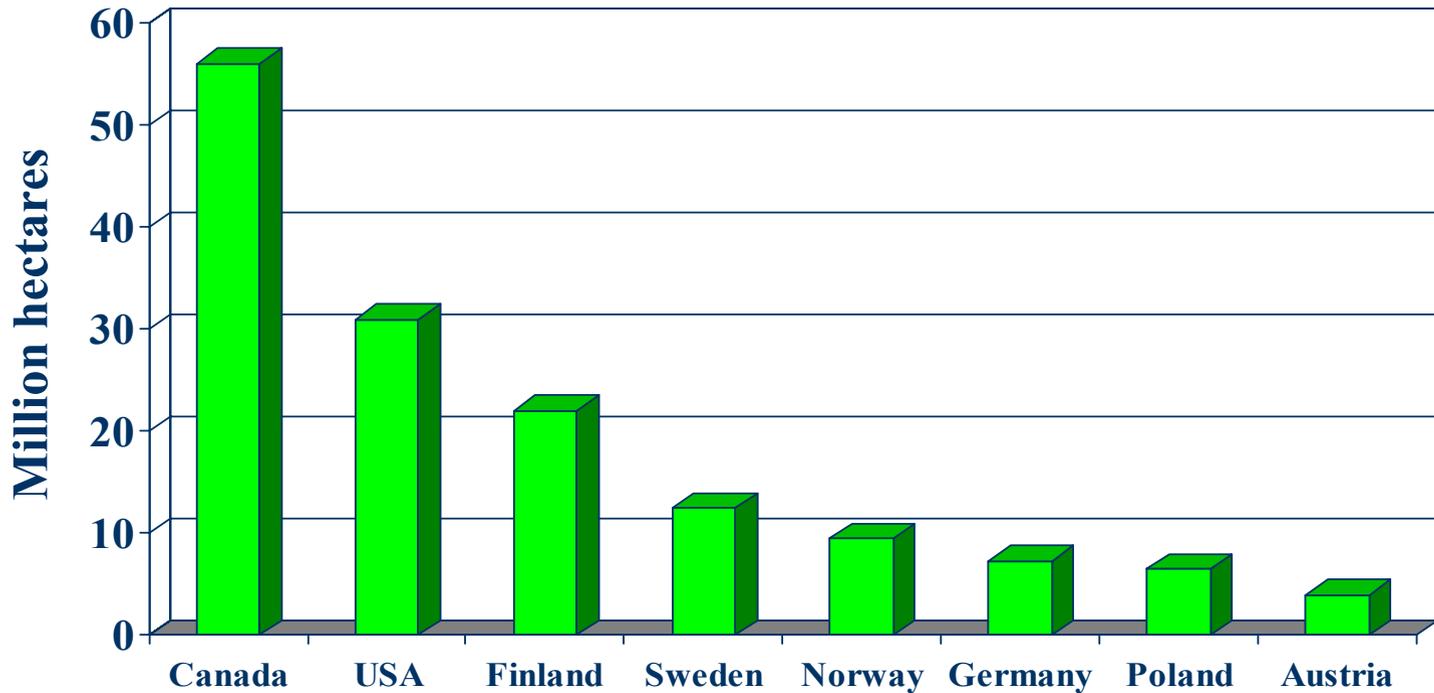
- Forest certification programs expanded significantly worldwide during 2003-2004.
- By mid-2004, about 45% of European and 18% of North American forests were certified by one or more of the leading certification schemes.
- A new approach to certification – a stepwise process – is now emerging.

Certified Forest Area Globally – Jan. 2004



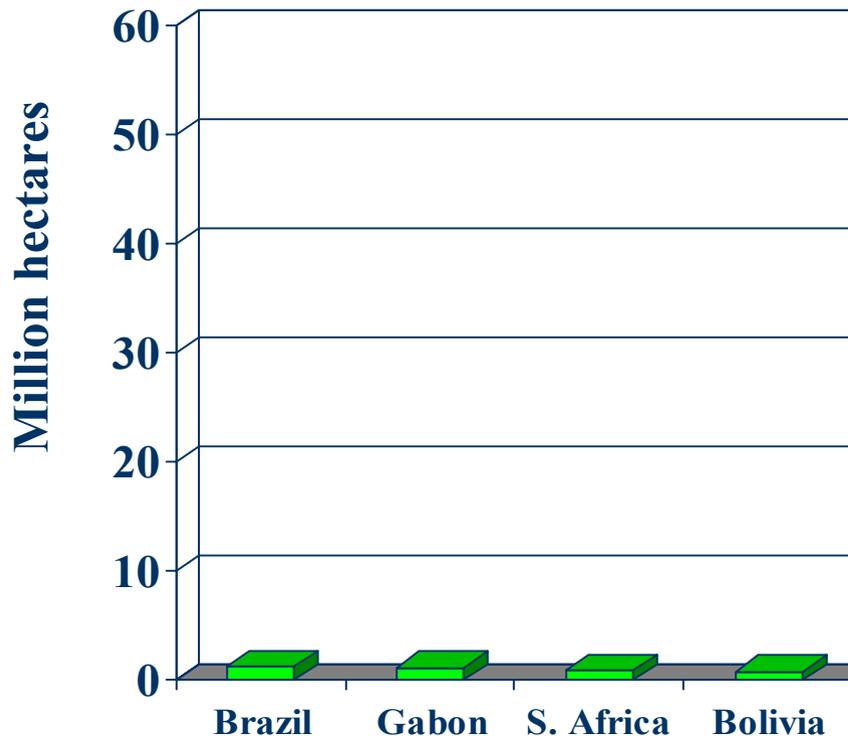
This amounts to about 6% of the total forest area globally.

Certified Forest Area Globally by Country – Jan. 2004



Note that none of these are tropical countries.

Certified Forest Area Globally by Country – Jan. 2004



Forest and Wood Certification

- Certification programs remain non-compulsory around the world.
- Certification appears to be having a positive impact on forests globally.
- Certification must refocus on tropical forests if it is to effectively address the original goal.

Forest and Wood Certification

- Government purchases of timber comprise about 18% of timber imports into the G8 countries, giving governments an opportunity to influence adoption of certification. **However, some see this kind of practice as constituting a non-tariff barrier to trade.**

Policies Promoting the Sound Use of Wood

Topic Three

Policies Promoting the Sound Use of Wood

Europe

- A group of European lobby organizations have called upon ministers to support an EU-wide campaign to remove regulatory barriers to increased use of wood in society.
 - codes related to fire, acoustics
 - lack of awareness of different materials on the part of regulators
 - lack of in-depth knowledge of building regulations regarding wood use in construction

Policies Promoting the Sound Use of Wood

Europe

- Differences between sets of regulations act as barriers to common practice across Europe.

Policies Promoting the Sound Use of Wood

North America

- Barriers to wood use are less common in the U.S. and Canada
 - long history of wood use
 - relatively few regional codes
- As in Europe, a lack of knowledge of wood-based materials and wood construction on the part of engineers and architects is a problem.

Policies Promoting the Sound Use of Wood

North America

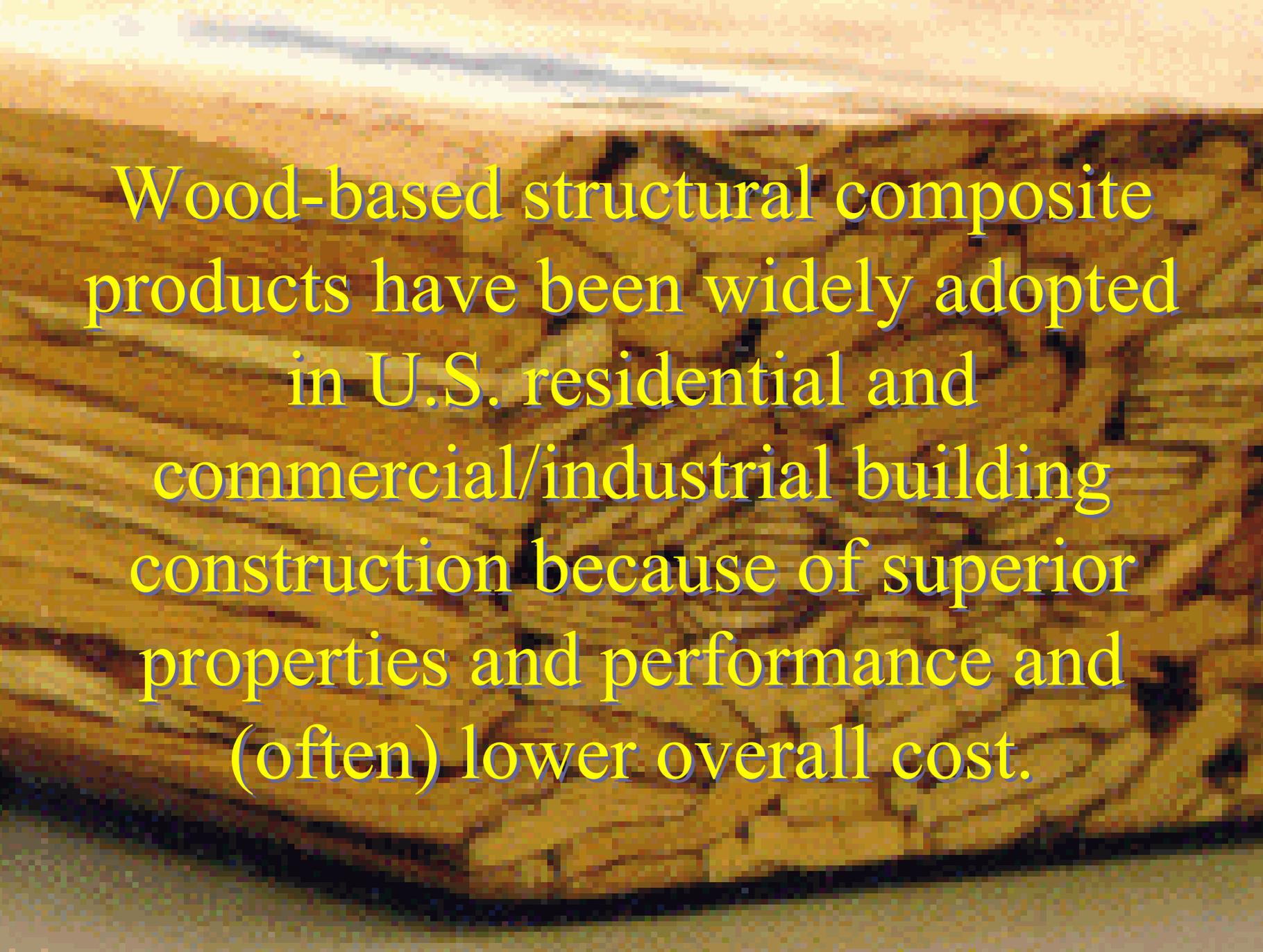
- Building materials choices are influenced primarily by initiatives arising from the private sector and by innovation.
 - Leadership in Energy and Environmental Design (LEED) program is gaining momentum.



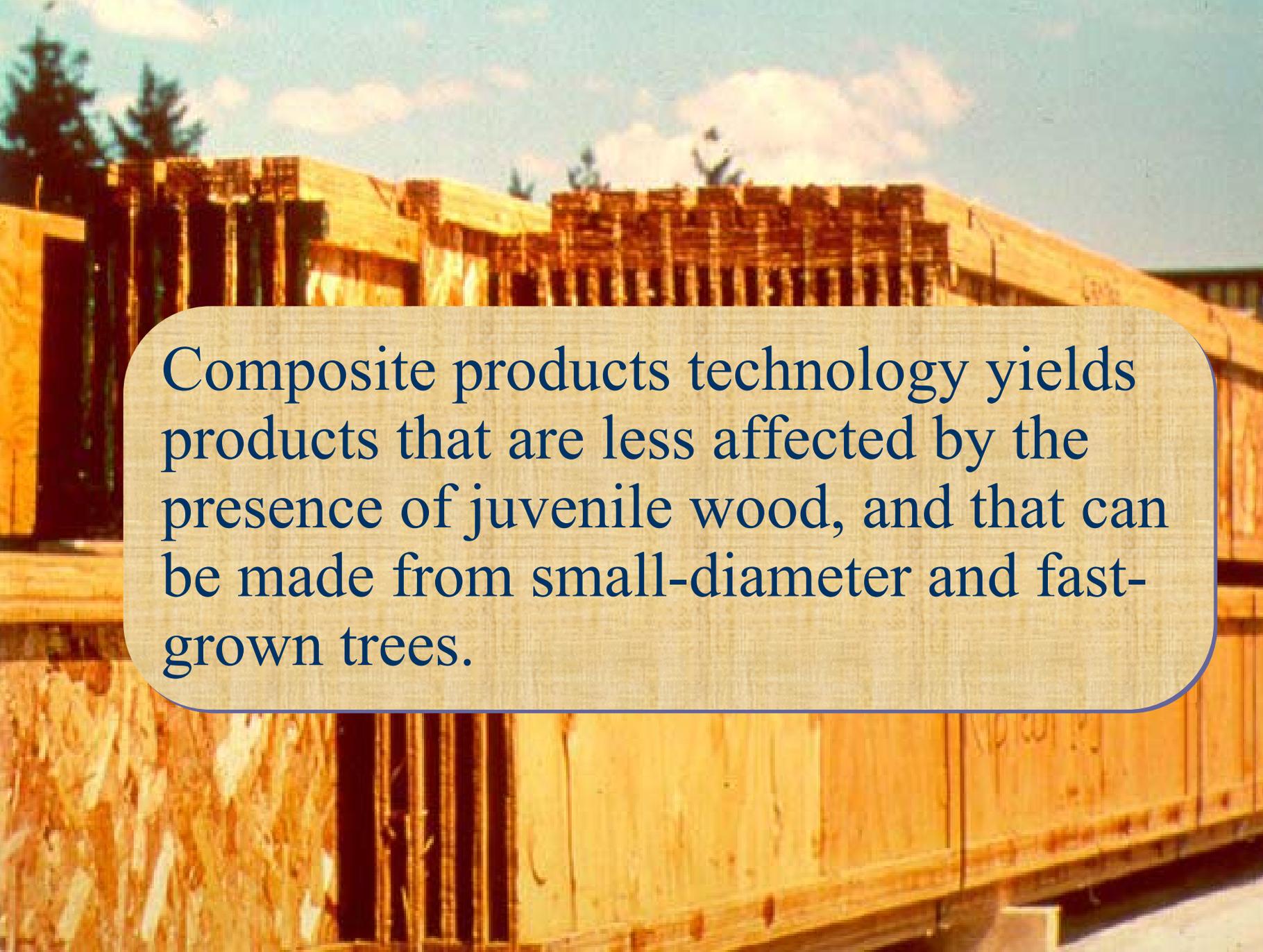
Policies Promoting the Sound Use of Wood

North America

- New and emerging wood-based composite products technologies have dramatically altered North American wood markets, while providing new options to forest managers and policy makers.



Wood-based structural composite products have been widely adopted in U.S. residential and commercial/industrial building construction because of superior properties and performance and (often) lower overall cost.



Composite products technology yields products that are less affected by the presence of juvenile wood, and that can be made from small-diameter and fast-grown trees.

The background of the slide shows a wooden building with a corrugated metal roof. In the foreground, there is a wooden lattice structure, possibly a fence or a screen, with some diagonal supports. The overall scene is brightly lit, suggesting a sunny day.

The net effect of these new technologies is that there is less need from an industrial perspective for large diameter logs and long harvest rotations, and therefore heightened interest in wood from fast-growing plantations.

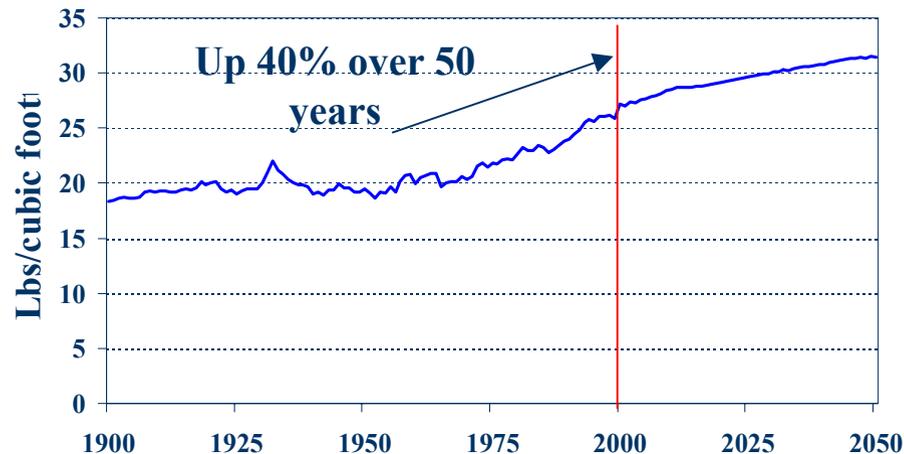
Research and Development Related Policies

Topic Four

A long history of wood products research in developed nations has substantially increased the efficiency of wood use.

- The U.S. yield of useful products from roundwood has increased about 40% in the past 50 to 60 years.

U.S. Industrial Wood Product Output per Unit of Industrial Roundwood Input, 1900-2000, with projections to 2050

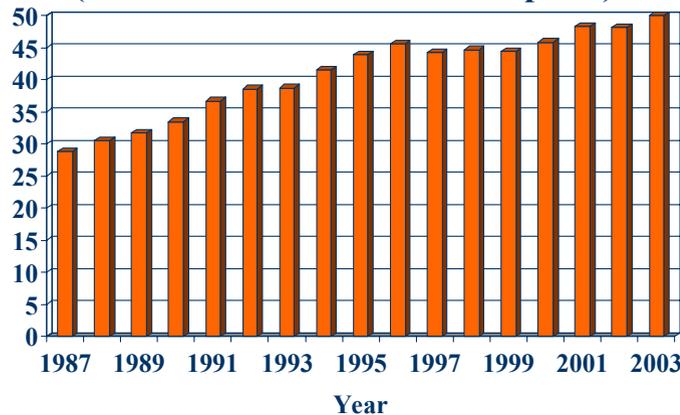


Source: Skog, USFPL 2002.

Recycling technology improvements have substantially increased waste paper recovery and reuse rates.

U.S. Paper and Paperboard Recovery, 1987-2003

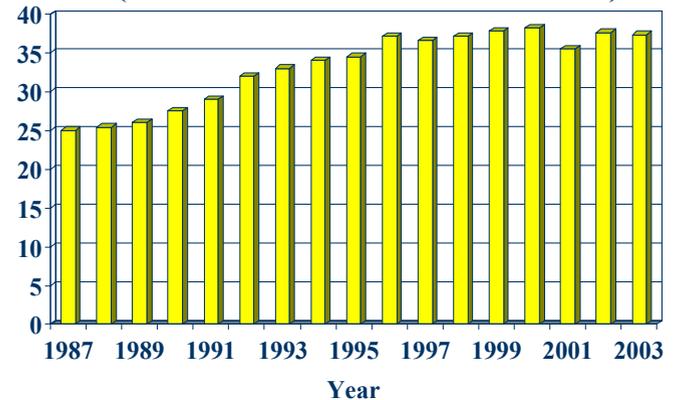
(Percent of Domestic Consumption)



The EU is aiming for a 56% recovery rate by 2005 . . .

U.S. Paper and Paperboard Reuse, 1987-2003

(Percent of Domestic Production)



. . . and a reuse rate of 45% in 3 to 5 years.

Research and Development Policies

- Despite the significant role of research in the forest sector, funding for forestry and wood-oriented research has declined in the UNECE region in recent decades.

In the U.S.:

- Funding for the national forest products laboratory is 30% lower than 20 years ago.
- The number of wood technology oriented scientists in the U.S. Forest Service has declined by more than 75 percent since 1985.

Research and Development Policies

In the U.S.:

- University programs devoted to wood science and technology have declined in number and average size.
- Industry funding of forestry and wood products research also declined over the past two decades.

Industry Competitiveness and Investment Policy

Topic Five

Industry Competitiveness and Investment Policy

- Regions not previously known as major wood products producers are rapidly emerging as major competitors in global markets.
 - Paper
 - Lumber
 - Finished goods – furniture, flooring, millwork, cabinets.

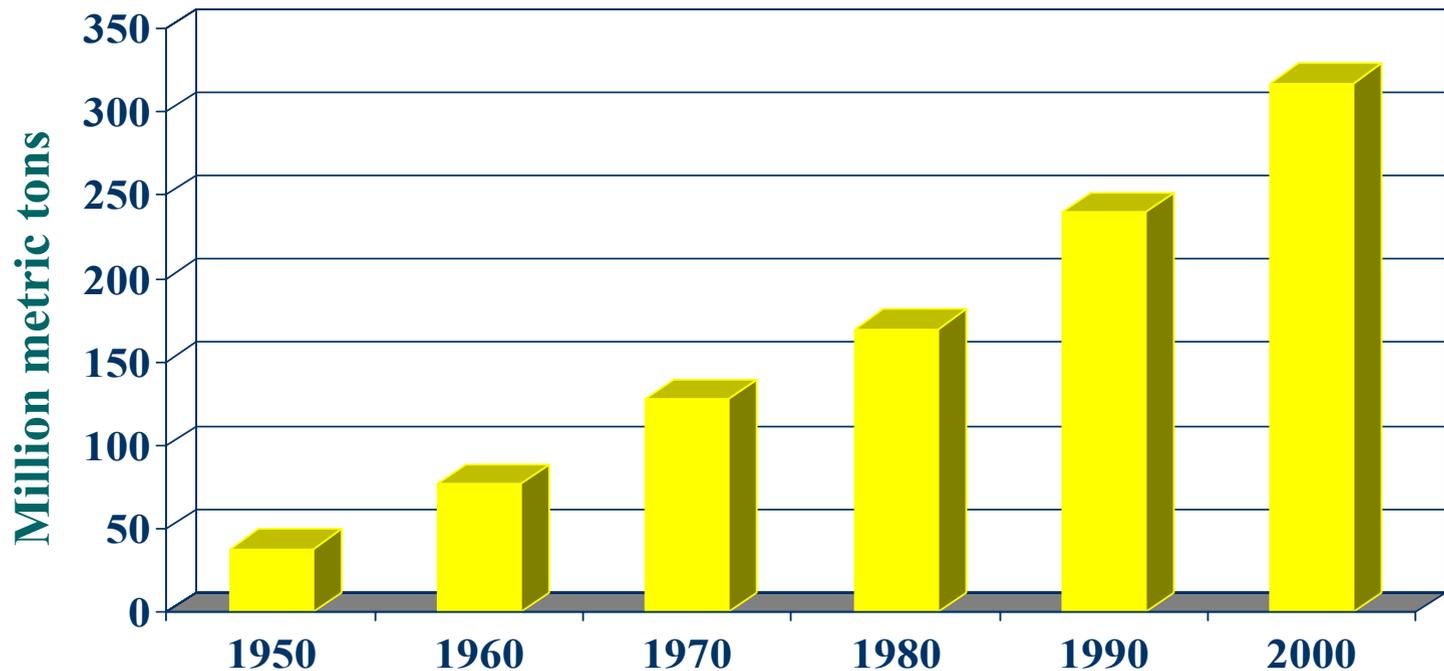
Industry Competitiveness and Investment Policy

- Massive investment (estimated at \$0.54 billion in 2002) is going into the logging, woodworking, and pulp and paper industries of Russia. (Jaakko Poyry 2003)
- Some 5.5 million m³ of new sawnwood production capacity is slated for western Russia by 2006. (Taylor 2004)
- Furniture production capacity is shifting from Italy to eastern Europe.

Industry Competitiveness and Investment Policy

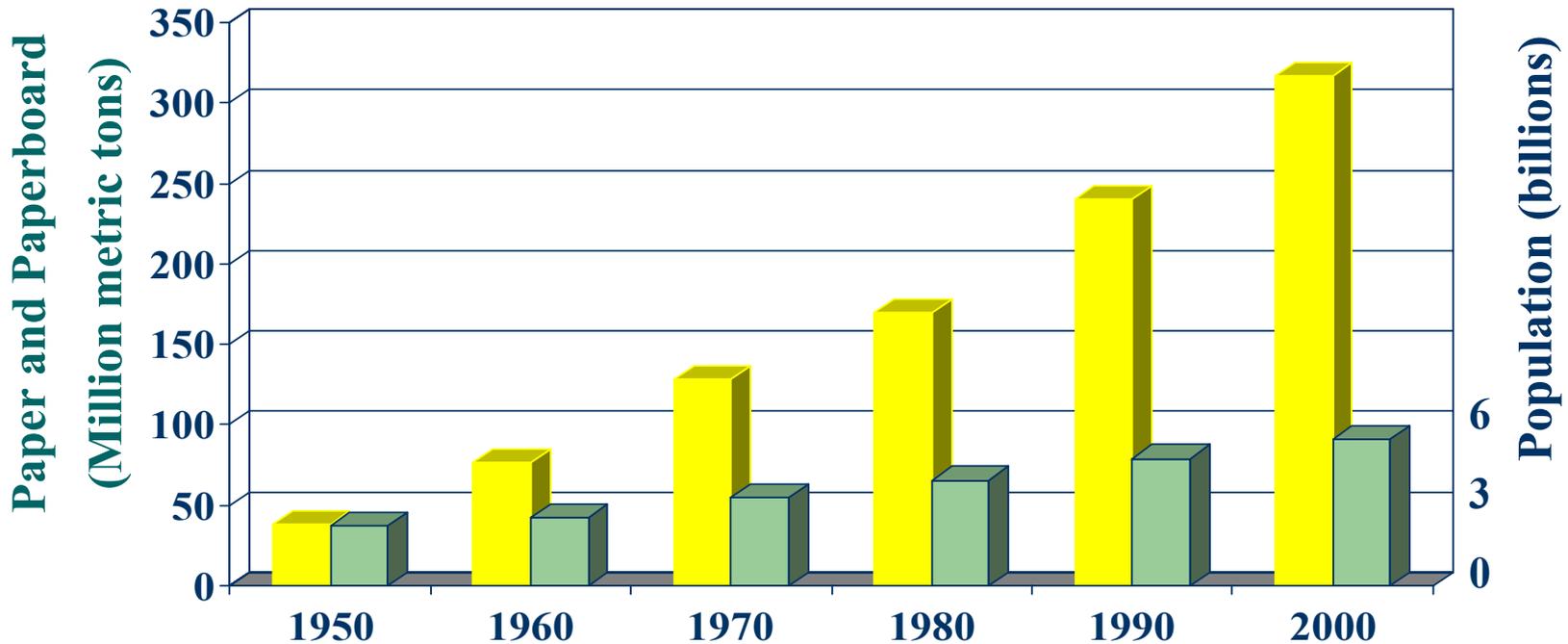
- China is emerging as both a major consumer and producer of wood products, with a sizeable portion of new production capacity based on use of imported wood.

World Paper and Paperboard Consumption, 1950-2000

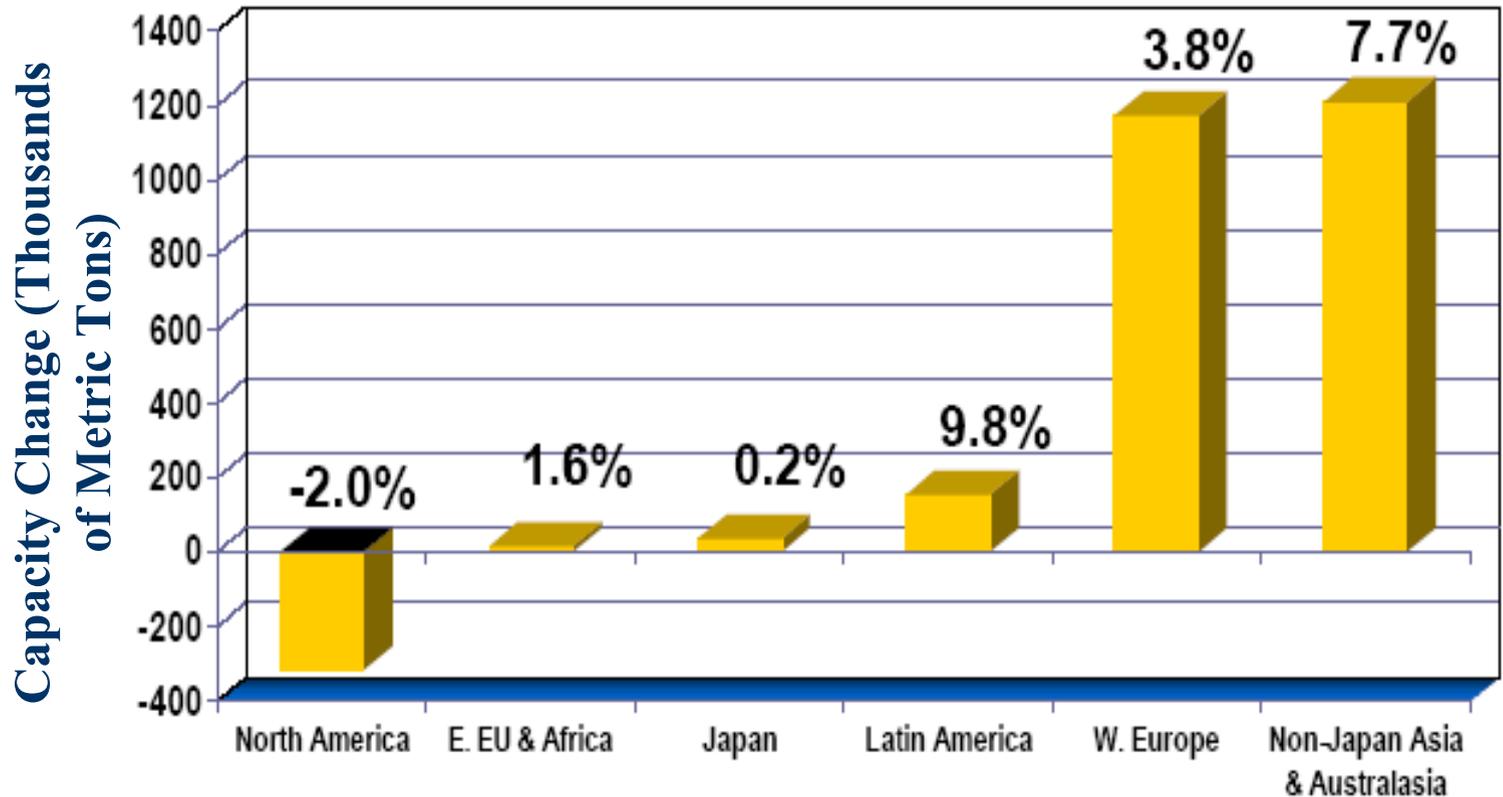


Source: FAO, Forestry Statistical Database, 2001.

World Paper and Paperboard Consumption vs. Population, 1950-2000

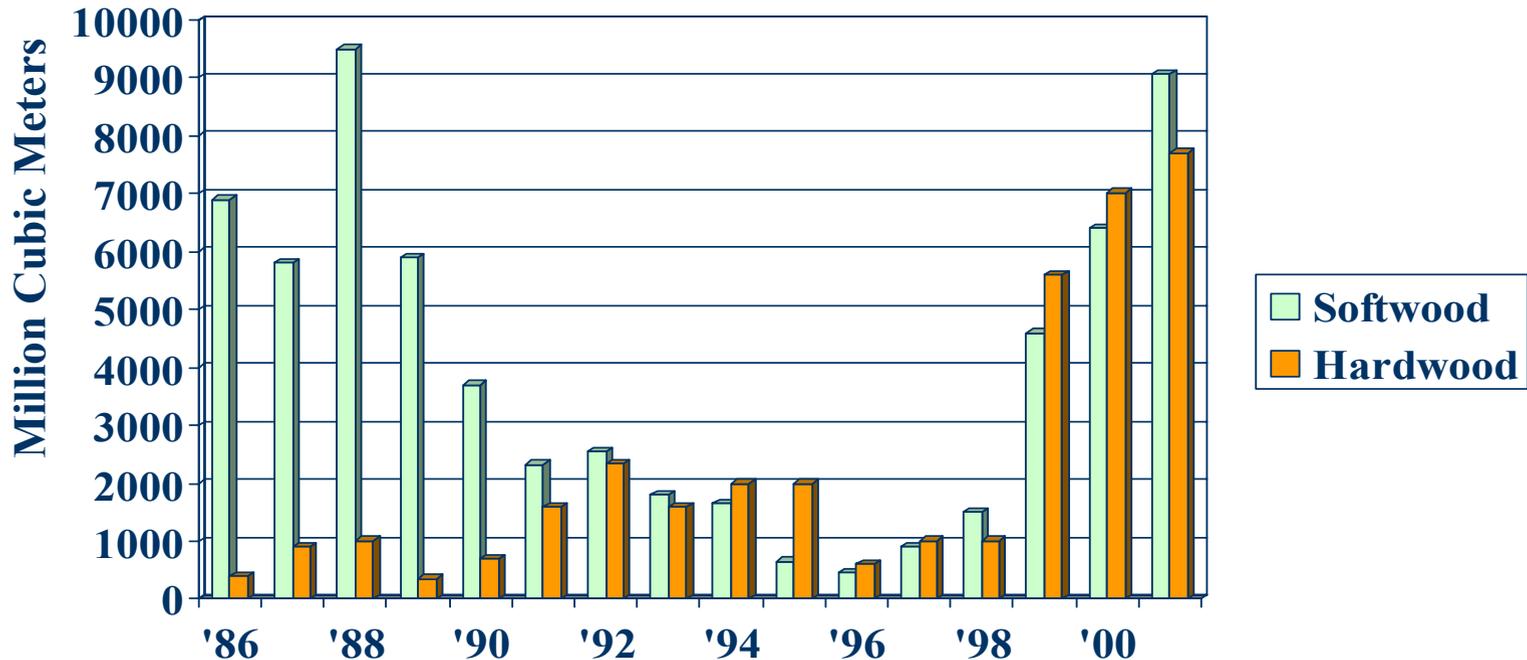


Coated Free Sheet Change in Mill Capacity, 2001-2004



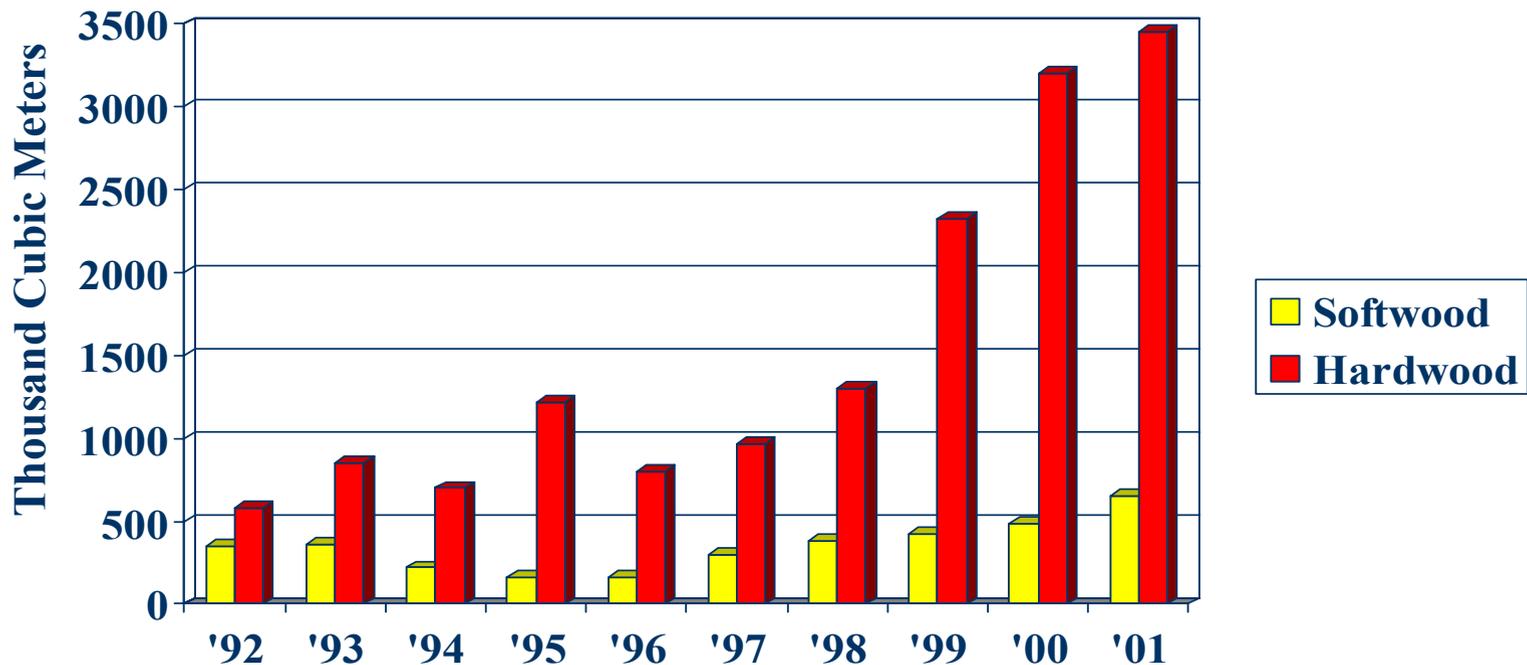
SAPPI, 2003.

China Log Imports by Species Type, 1986-2001



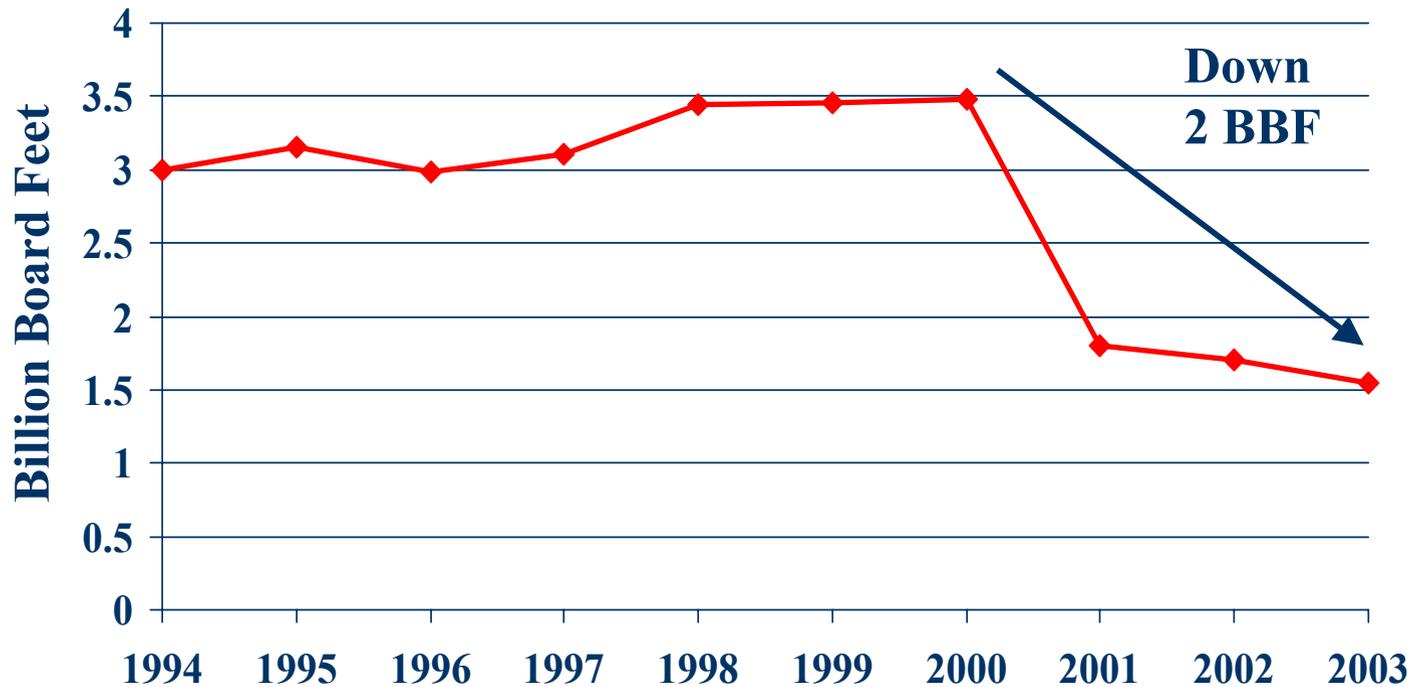
Source: Ekström, Wood Resources International, Ltd. 2002

China Lumber Imports by Species Type, 1992-2001



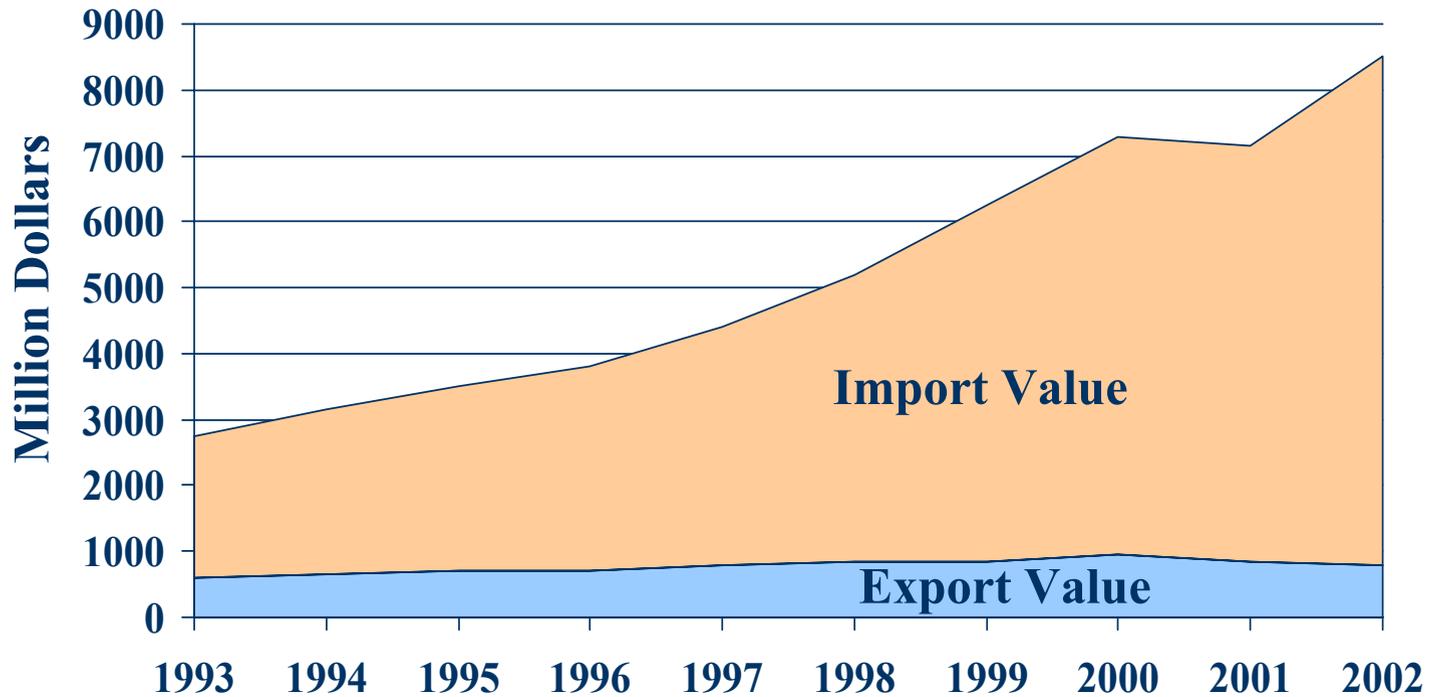
Source: Ekström, Wood Resources International, Ltd. 2002

Hardwood Lumber Consumption by U.S. Furniture Industry, 1994-2003



Source: U.S. Foreign Agricultural Service as reported by Dan Meyer, Hardwood Review, 2004.

U.S. Wood Household Furniture Imports vs. Exports, 1993-2002



Source: U.S. Foreign Agricultural Service as reported by Dan Meyer, Hardwood Review, 2004.

U.S. Wood Household Furniture Imports by Country of Origin, 1993-2003

(Million \$)

Country	1993	2002	2003	Growth (%)	
				1-year	10-year
China	\$139.2	\$2,472.9	\$3,433.2	25.2	2,366.4
Canada	307.3	1,269.3	1, 230.1	-3.1	300.3
Italy	135.8	479.9	476.1	-0.8	250.6
Malaysia	158.3	412.4	434.5	5.4	174.5
Indonesia	85.5	418.8	413.1	-1.4	383.1
Mexico	148.4	365.2	335.9	-8.0	126.3
Thailand	129.9	285.9	284.4	-0.5	118.9
Brazil	28.6	183.9	190.5	3.6	566.2
Taiwan	589.0	270.7	180.9	-33.2	-89.3
Vietnam	0.0	52.3	134.0	156.4	--
Total Imports	\$2,148.5	7,416.7	8,019.9	9.1	276.6

Source: Mann, Amistead & Epperson, Ltd. as reported by Meyer, Hardwood Review, 2004.

U.S. Wood Household Furniture Imports by Country of Origin, 1993-2003

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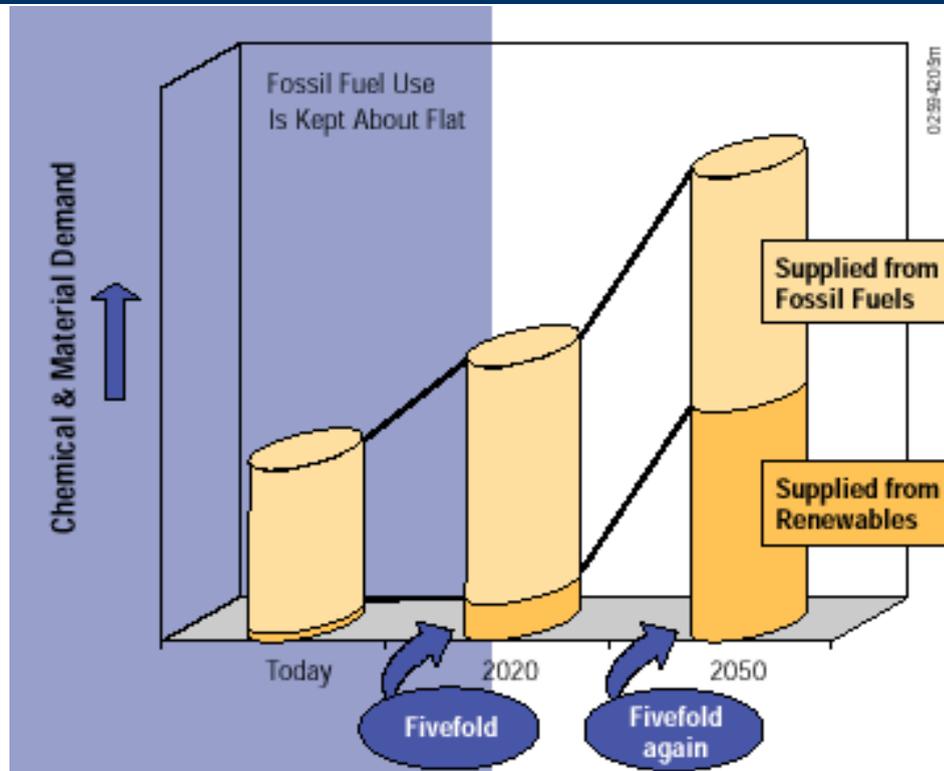
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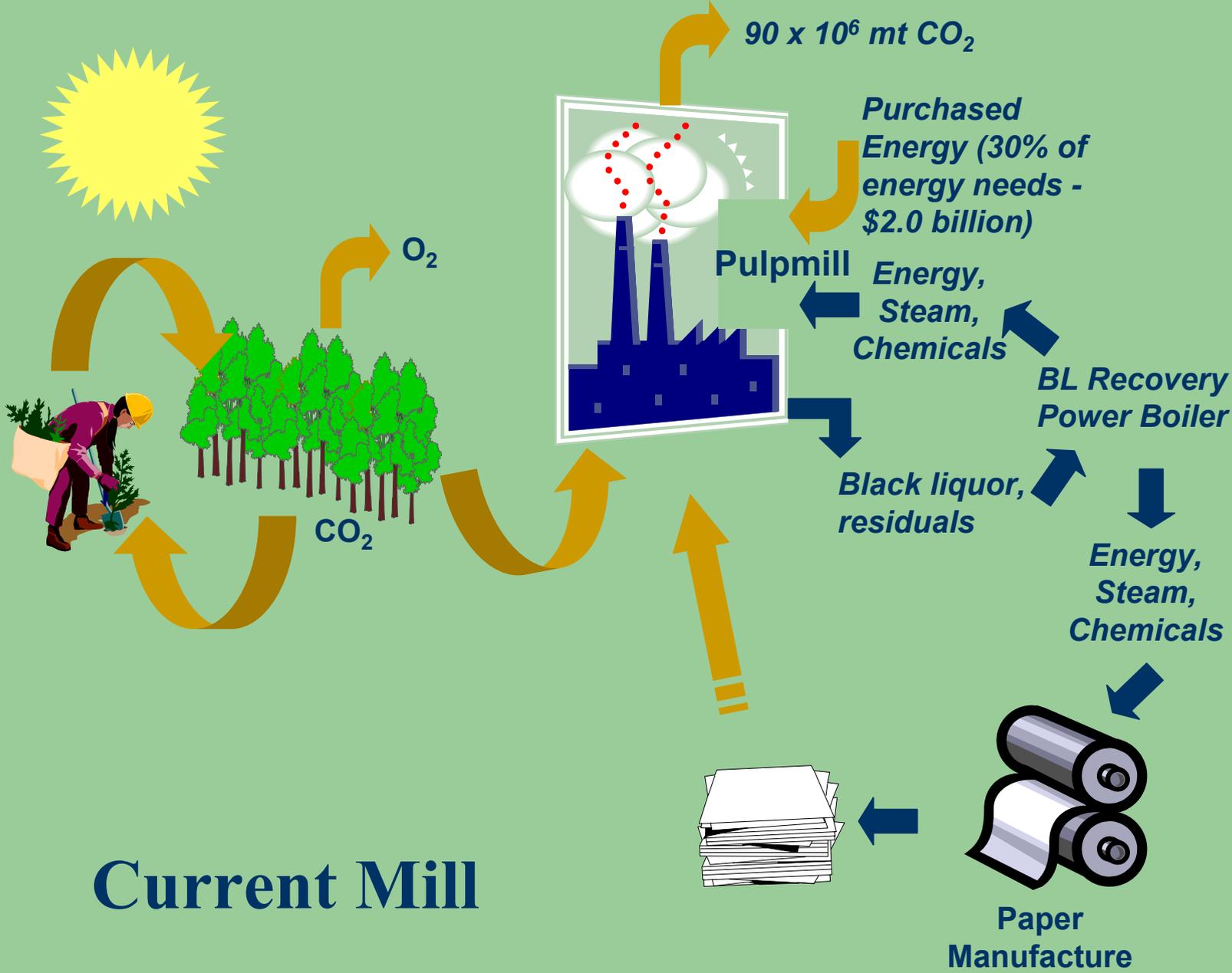
Industry Competitiveness and Investment Policy

- One reaction to new competitive challenges is total rethinking of present modes of operation. North American paper manufacturers are, for example, on the verge of a major transformation to bio-refineries in which wood will be but one of several forms of raw material and paper but one of many products.

Chemical and Material Demand 10% from Renewable Resources by 2020 ~\$400 billion/ year in Products (2 Times Current Forest Products)



US DOE Technology Roadmap for Plant/Crop based Renewable Resources 2020, Renewable Vision, February 1999 www.oit.doe.gov/agriculture/



Current Mill

90×10^6 mt CO_2

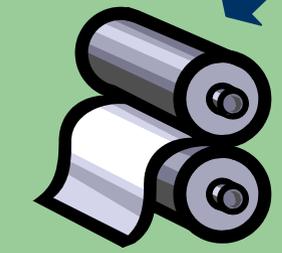
Purchased Energy (30% of energy needs - \$2.0 billion)

Pulpmill
Energy, Steam, Chemicals

BL Recovery Power Boiler

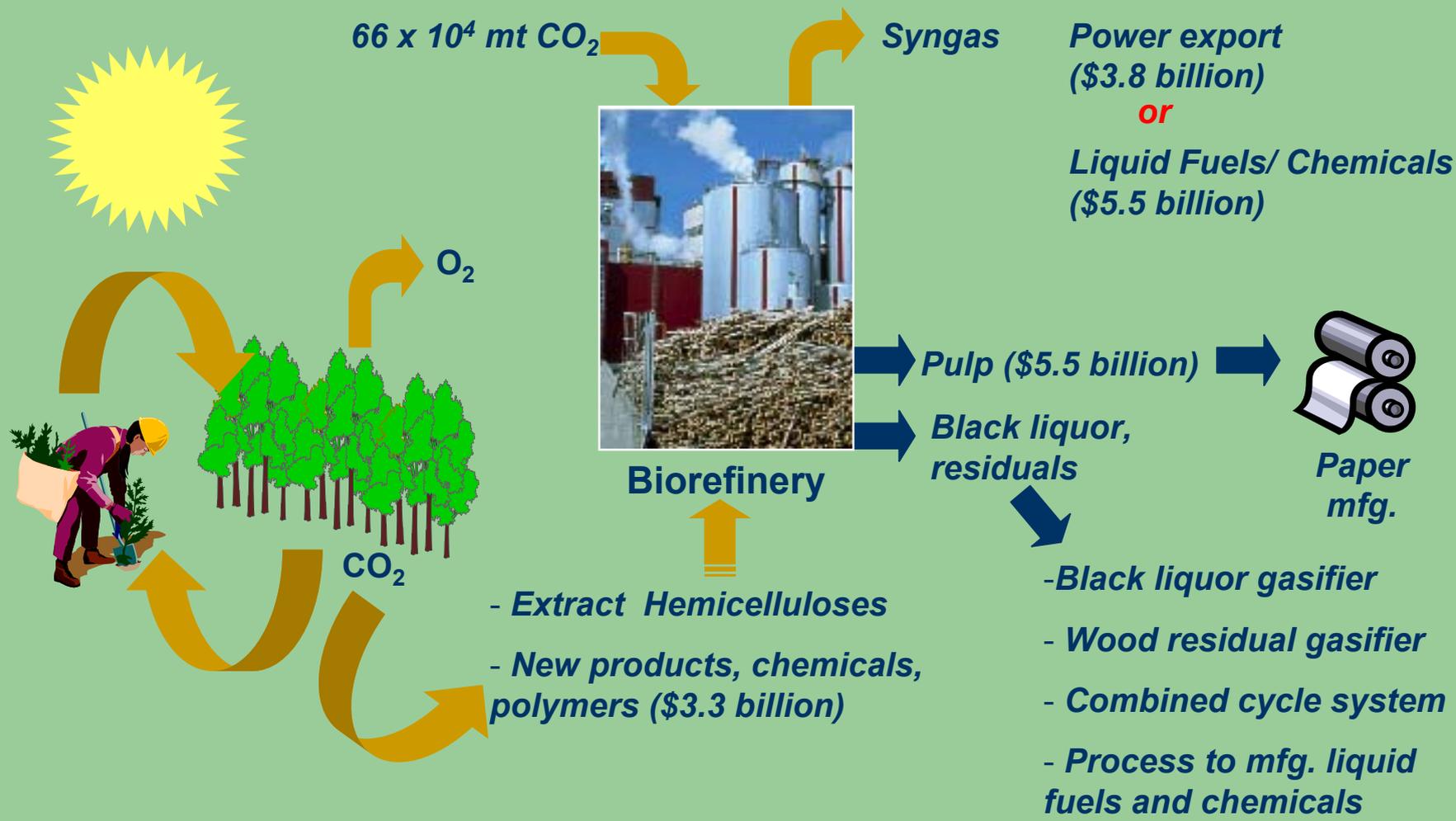
Black liquor, residuals

Energy, Steam, Chemicals



Paper Manufacture





The Forest Biorefinery

Industry Competitiveness and Investment Policy

- Wood buyers will soon have to compete with energy industry for raw material.

Climate Change Policy

Topic Six

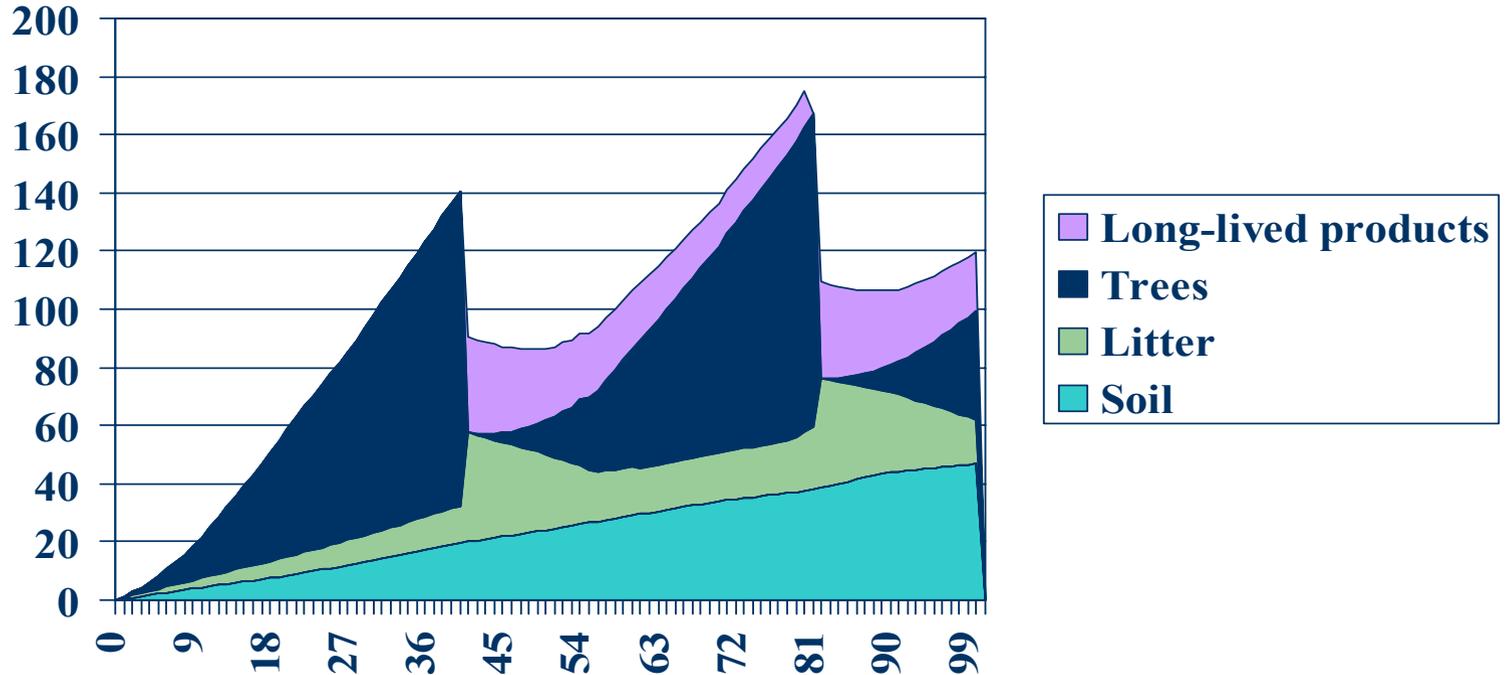
Climate Change Policy

- Carbon trading markets are growing rapidly.
- The “official” role of forests in international carbon mitigation initiatives is still uncertain.
- Still little action in the U.S. vis-à-vis climate change, but considerable research related to carbon storage in forests and forest management options.

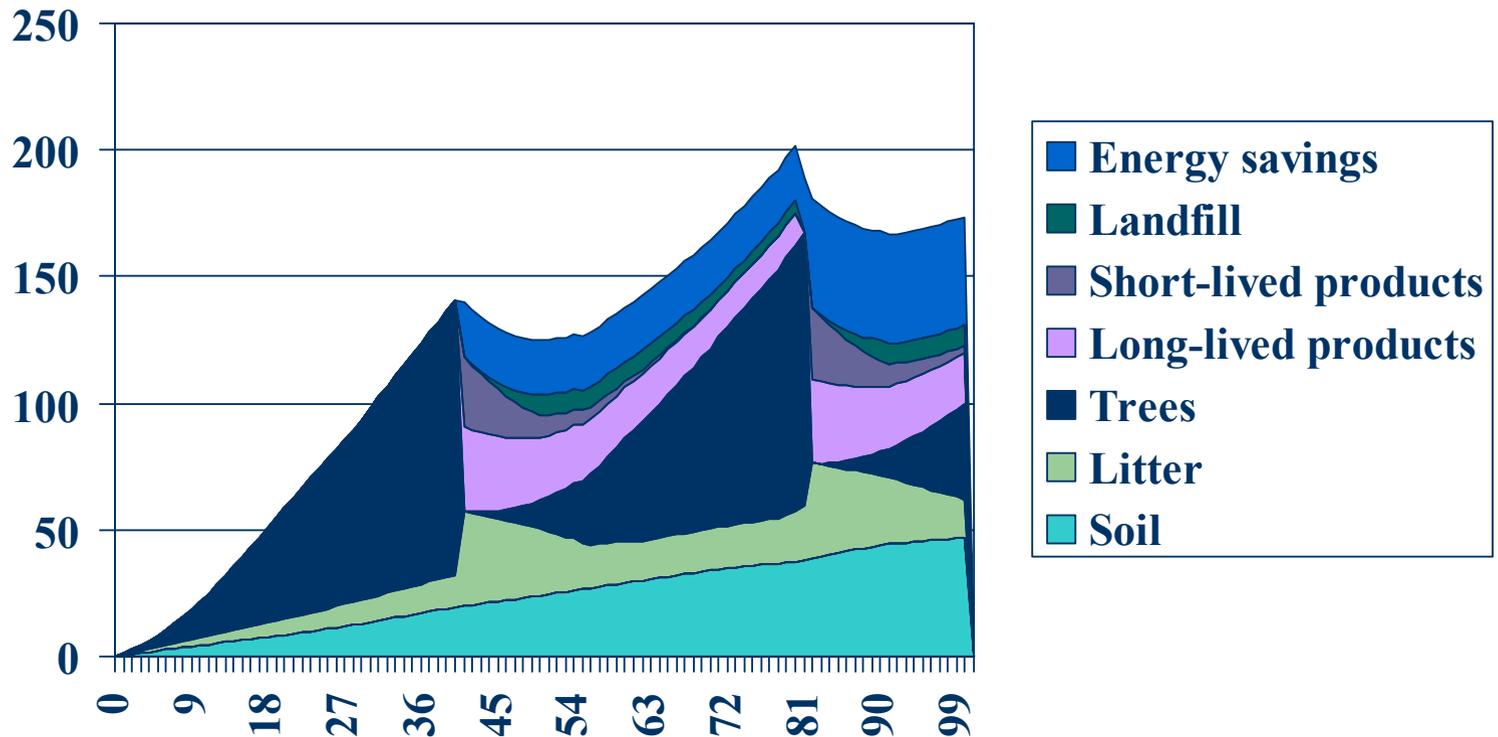
Climate Change Policy

- In both Europe and North America attention of policy-makers has been drawn to the carbon sequestration benefits associated with substitution of wood for non-wood materials. Potential impacts of wider use of wood are large.

Cumulative Changes in Carbon Stocks with Afforestation and Subsequent Harvest After 40 Year Rotation



Cumulative Changes in Carbon Stocks with Afforestation and Subsequent Harvest After 40 Year Rotation



Wood Energy Promotion Policy

Topic Seven

Wood Energy Promotion Policy

- Bio-energy production is likely to increase substantially in UNECE nations in the near future.
- Production of electricity in mobile wood-fueled generators is seen as a potential solution to pressing forest thinning needs in the Western U.S.

Wood Energy Promotion Policy

- European wood products manufacturers are steadily increasing the portion of manufacturing energy provided by renewables.
- Wood costs in the near future will have to reflect the value of wood as an energy source.

Trade Policy and Tariff and Non-tariff Barriers

Topic Eight

Trade Policy and Tariff and Non-tariff Barriers

- Many governments have programs to promote foreign trade of wood products.
- Such programs will likely expand as global competition increases . . . but these are not without risk:
 - EU/US trade dispute
 - US/China dispute RE furniture

Trade Policy and Tariff and Non-tariff Barriers

- Barriers to trade include:
 - Tariffs
 - Logs, primary products
 - Value-added products
 - Non-tariff barriers
 - Environmental standards
 - Phytosanitary measures
 - Safety, and health restrictions

Phytosanitary Measures

Topic Nine

Phytosanitary Measures

- Exotic pests are proliferating as the volume of wood in international trade rises.
- Problems have arisen between both long-standing and newer trading partners in global wood markets.
- Regulations are only likely to increase as wood trade flows from Asia and the southern hemisphere grow in volume.

Russia Develops a New Forest Code

Topic Ten

Russia Develops a New Forest Code

- New measures will privatize as much as 30% of Russia's forests by 2006.
- The move to privatization is seen as positive in attracting foreign investment to the forest sector.
- The impact on forest management within Russia is uncertain.

Concluding Remarks



Summary

Forest products markets are affected by **government policies** as well as traditional market forces.

Markets and policies are also influenced by **available technology** that can serve to change the range of options available to policymakers, manufacturers, and marketers.

The image features a decorative background with a light green vertical bar on the left side and a white rounded rectangular area on the right. A thick, dark blue horizontal bar spans across the white area. The word "Questions?" is centered in a dark blue, italicized serif font.

Questions?