New European Wood Market: Shortage or Surplus?

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FEP General Assembly and European Parquet Congress
Malmö, Sweden, 8 June 2007

Topics

I. Wood markets in the UNECE region

II. UNECE region's markets fit into the global situation

III. Forest resources

IV. Rise in demand for wood for energy in Europe

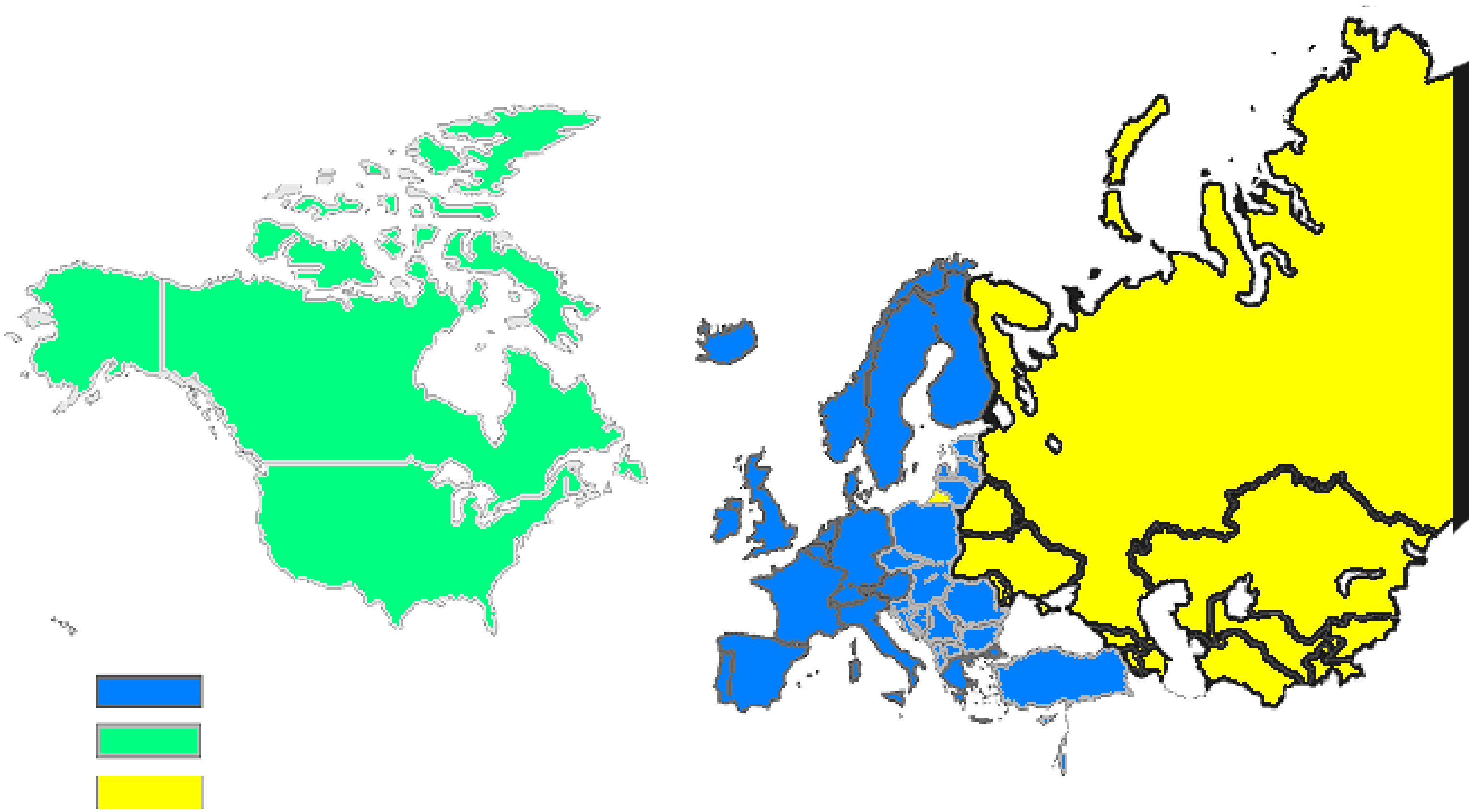
V. Availability of wood to meet elevated demands

VI. Shortage or surplus?

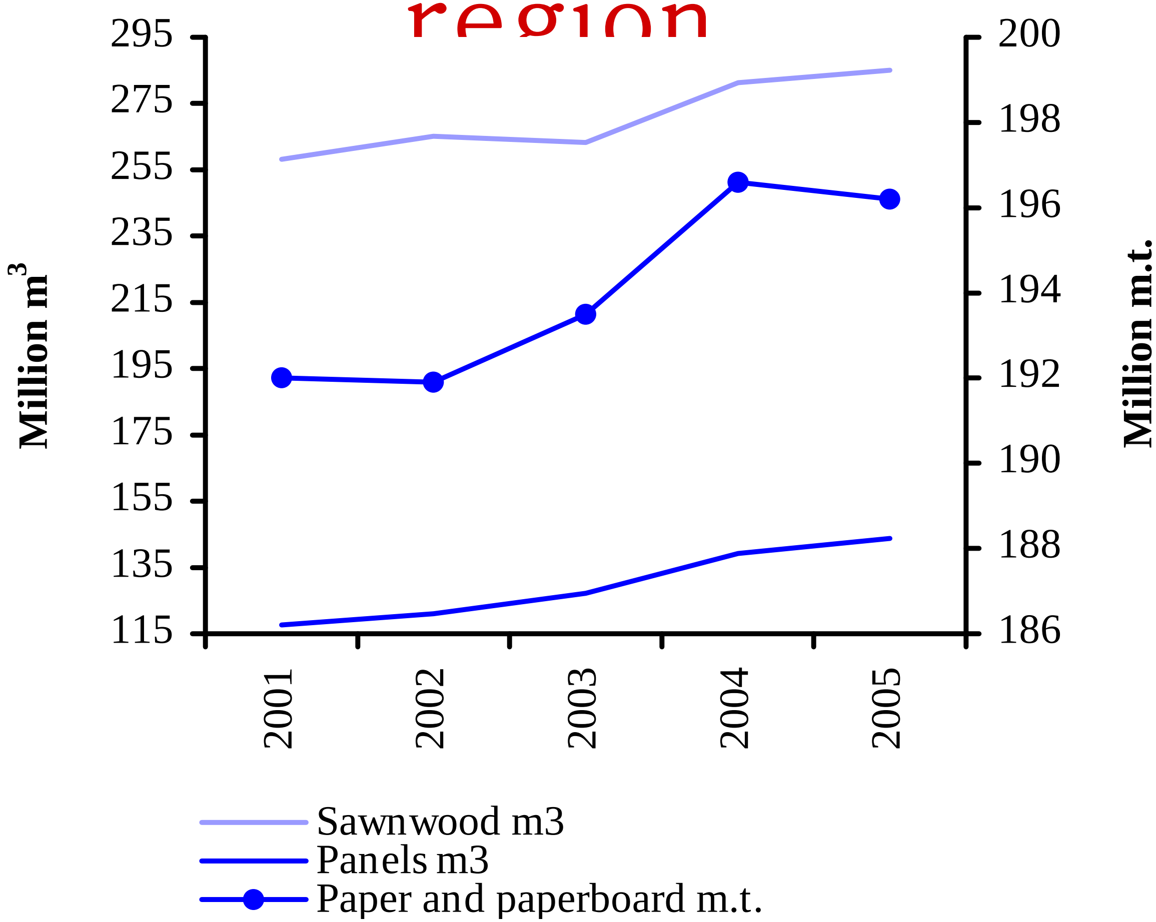
Info sources

- UNECE/FAO workshop proceedings
- UNECE/FAO European Forest Sector Outlook Study
- UNECE/FAO Forest Resources Assessment
- UNECE/FAO TIMBER Database
- *Forest Products Annual Market Review*
- FAOStat

I. Wood markets in the UNECE region

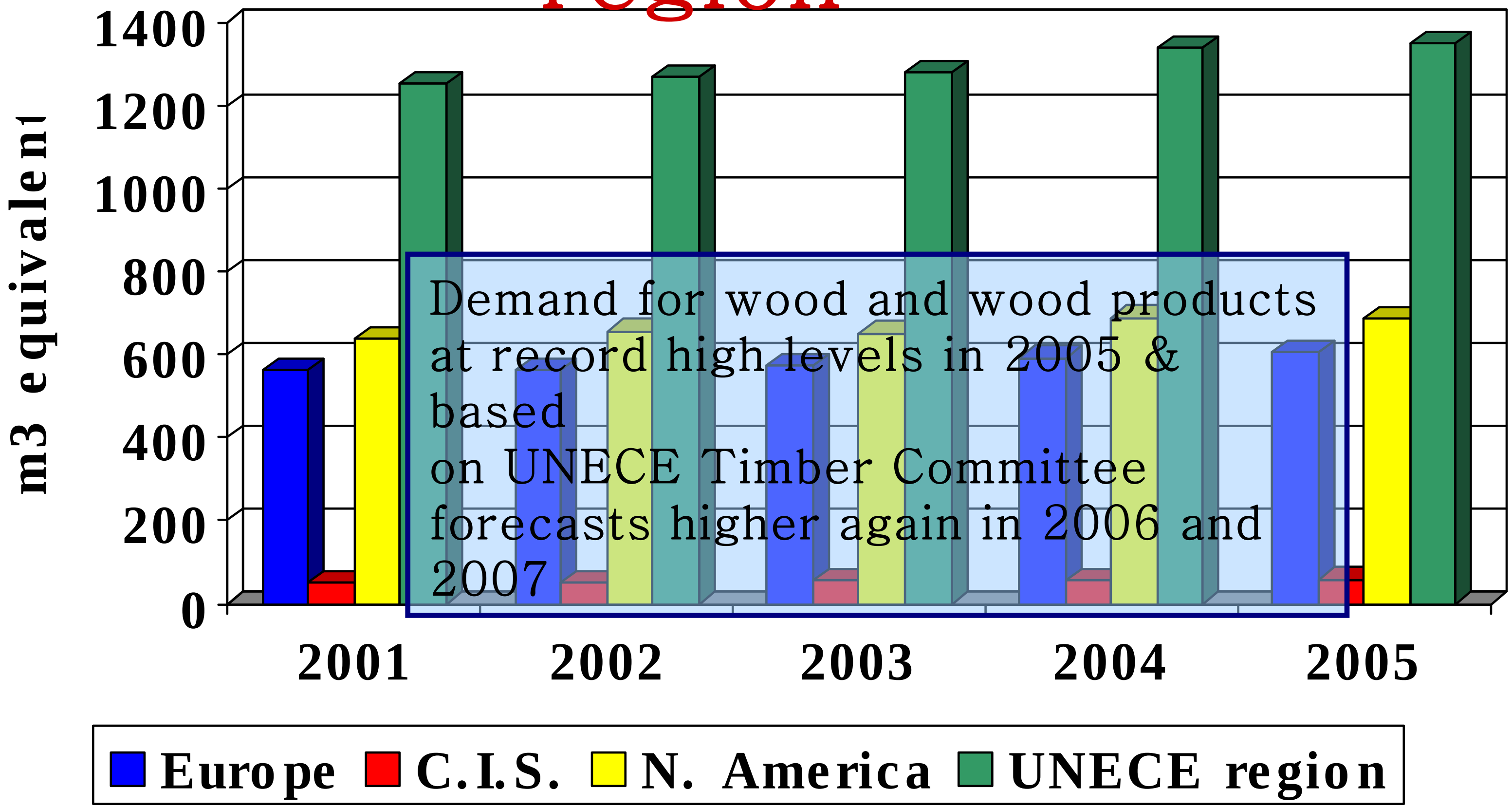


Consumption in UNECE region



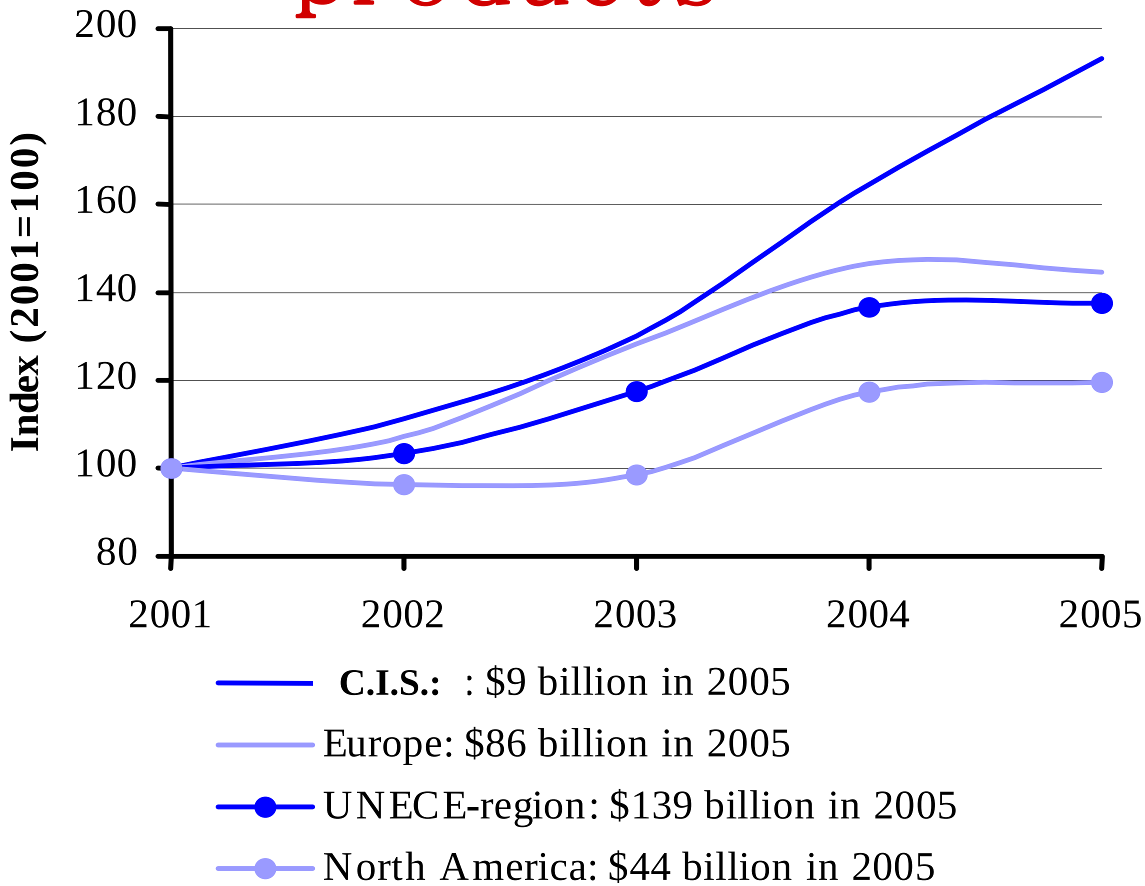
Source: UNECE/FAO *Forest Products Annual Market Review, 2005-2006*

Consumption in UNECE region



Source: UNECE/FAO *Forest Products Annual Market Review, 2005-2006*

Exports of primary products



Source: UNECE/FAO *Forest Products Annual Market Review, 2005-2006*

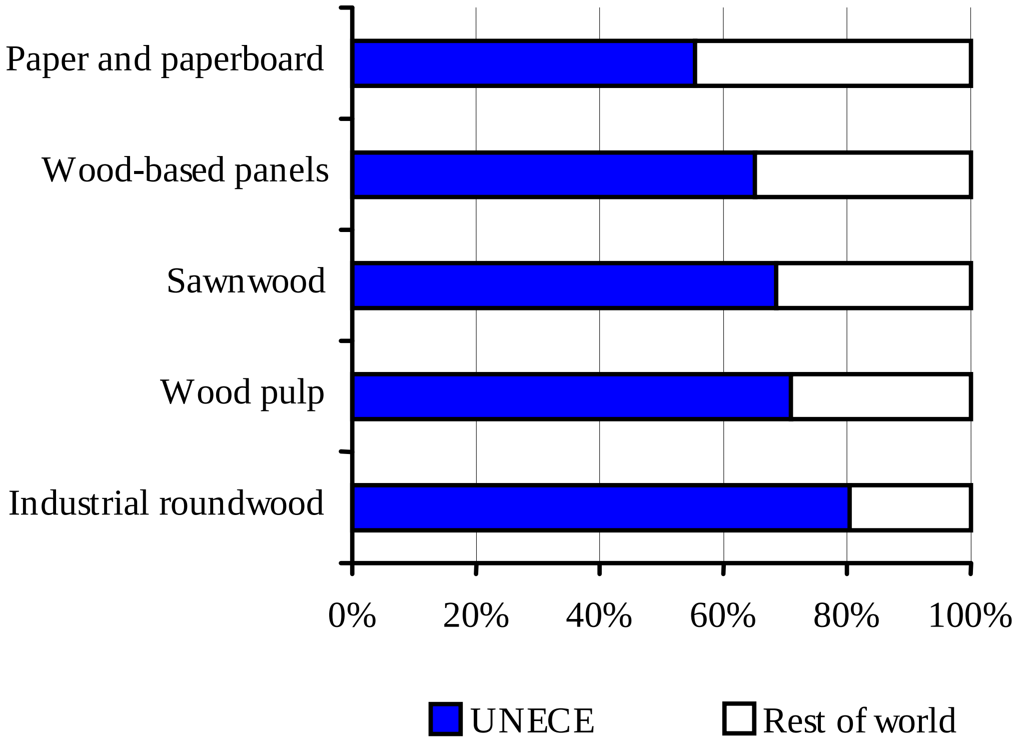



UNECE Timber Committee forecasts for 2007

- Forest products markets forecast at record levels in the UNECE region in 2006 and 2007
- Chinese forest industry rapidly reshaping marketplace
- Continuing concern about illegal logging, climate change
- Record high energy prices and energy policies driving wood energy markets
- Despite forest growth outstripping removals, increased competition for timber

II. UNECE region's markets fit into the global situation

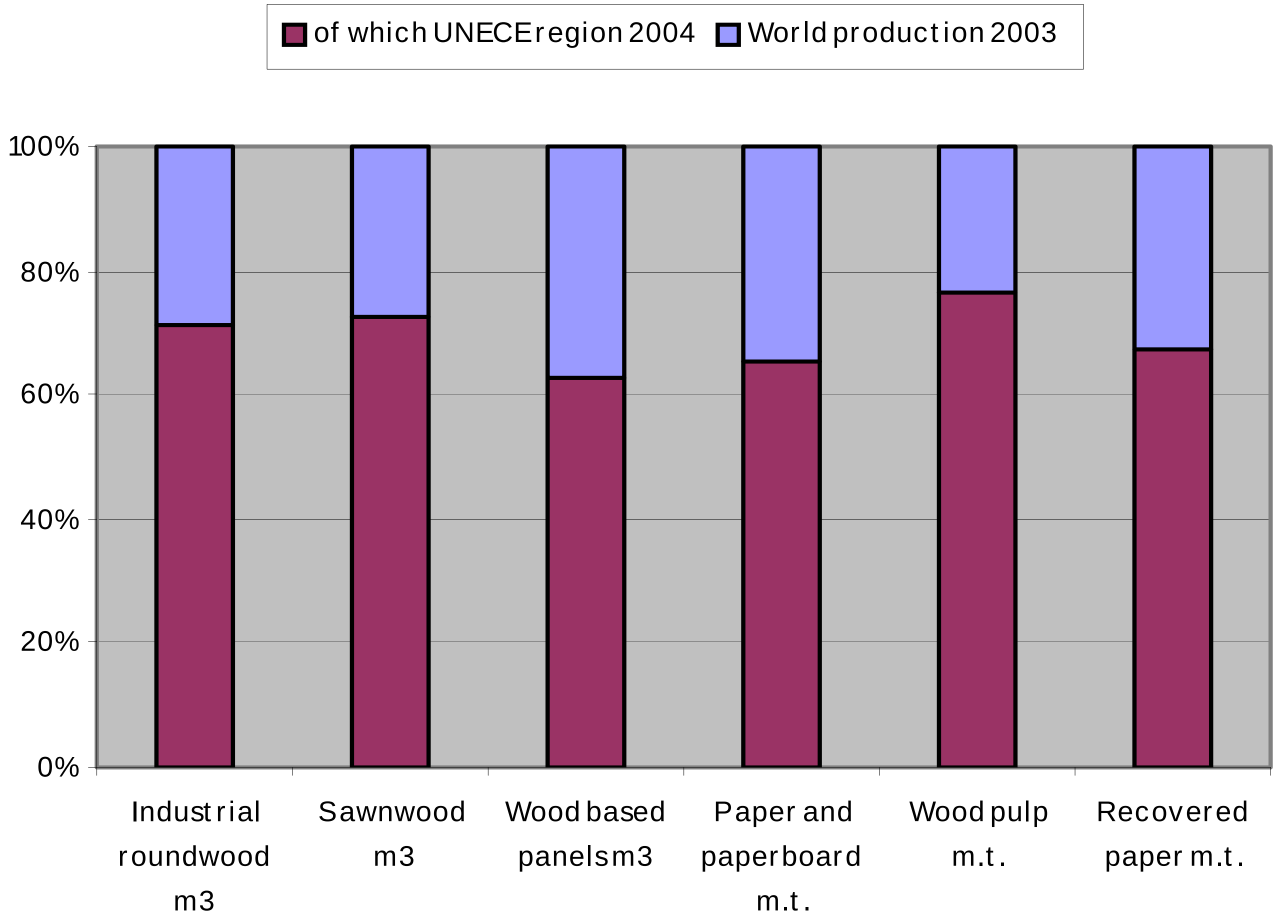
UNECE region's share of world consumption of primary forest products, 2005



55 to 80%

Sources: UNECE/FAO TIMBER database, FAO statistics, 2006.

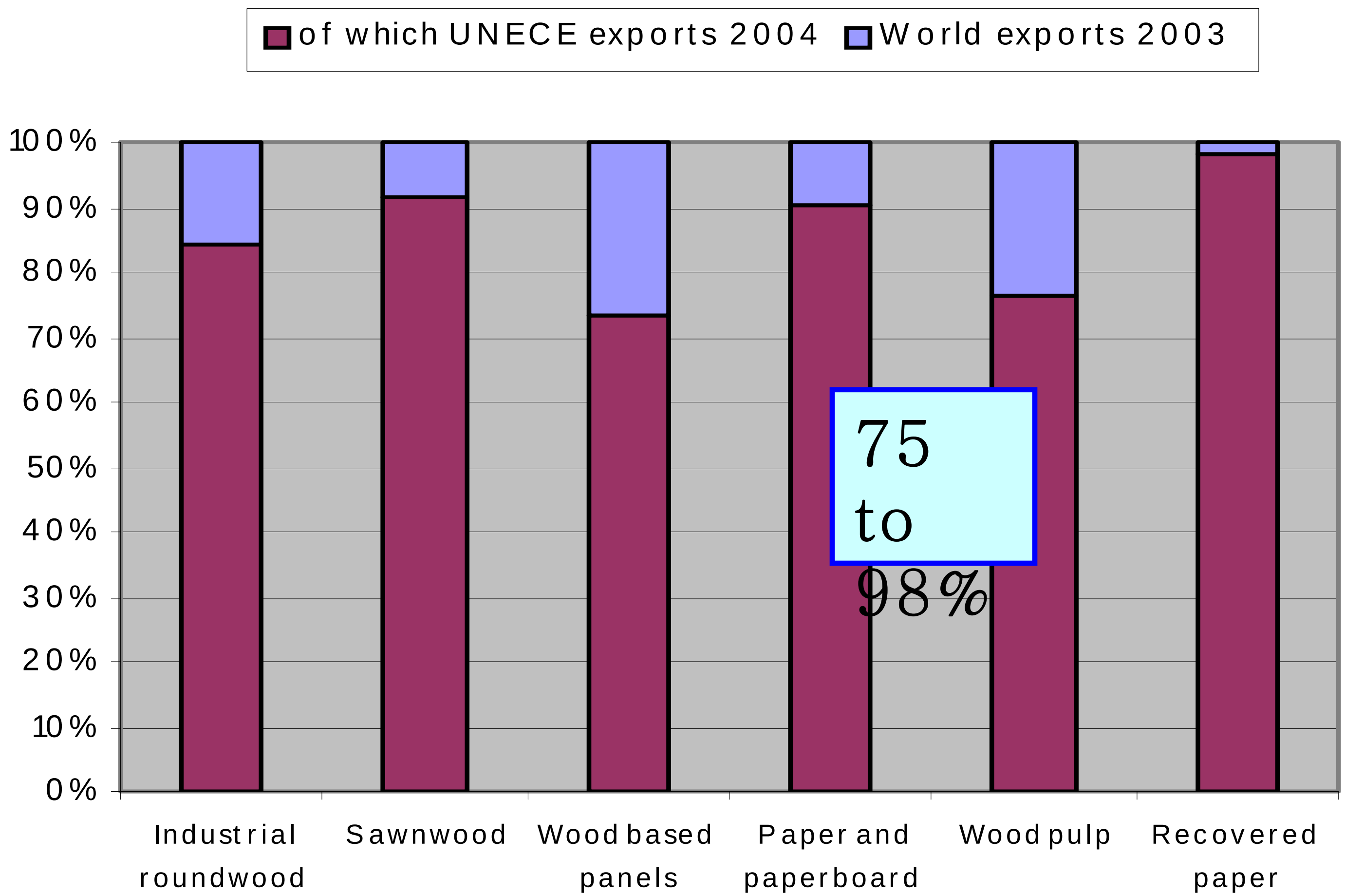
UNECE region's share of world production of primary forest products



62 to 78%

Sources: UNECE/FAO TIMBER database, FAO statistics, 2006.

UNECE region's share of world exports of primary forest products



Sources: UNECE/FAO TIMBER database, FAO statistics, 2006.

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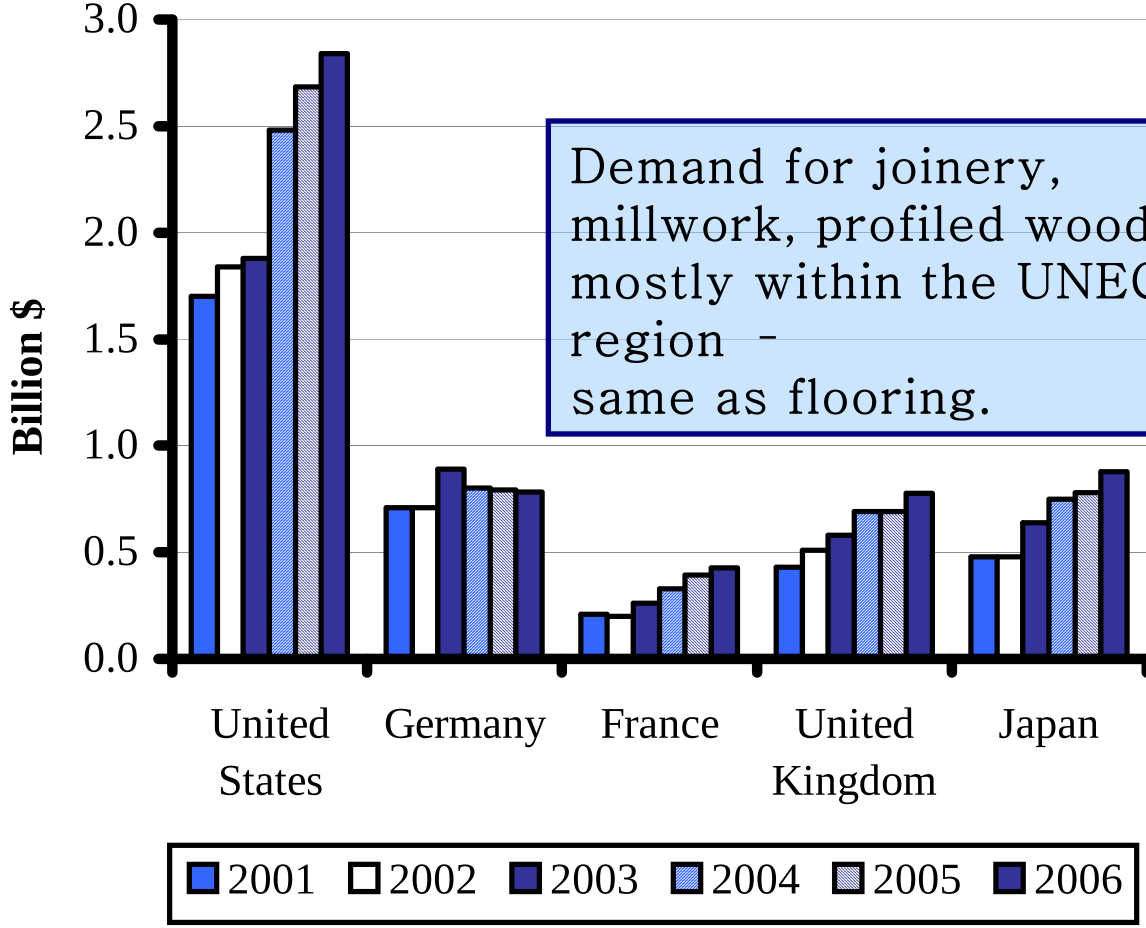
Top–5 importers of builders joinery and carpentry

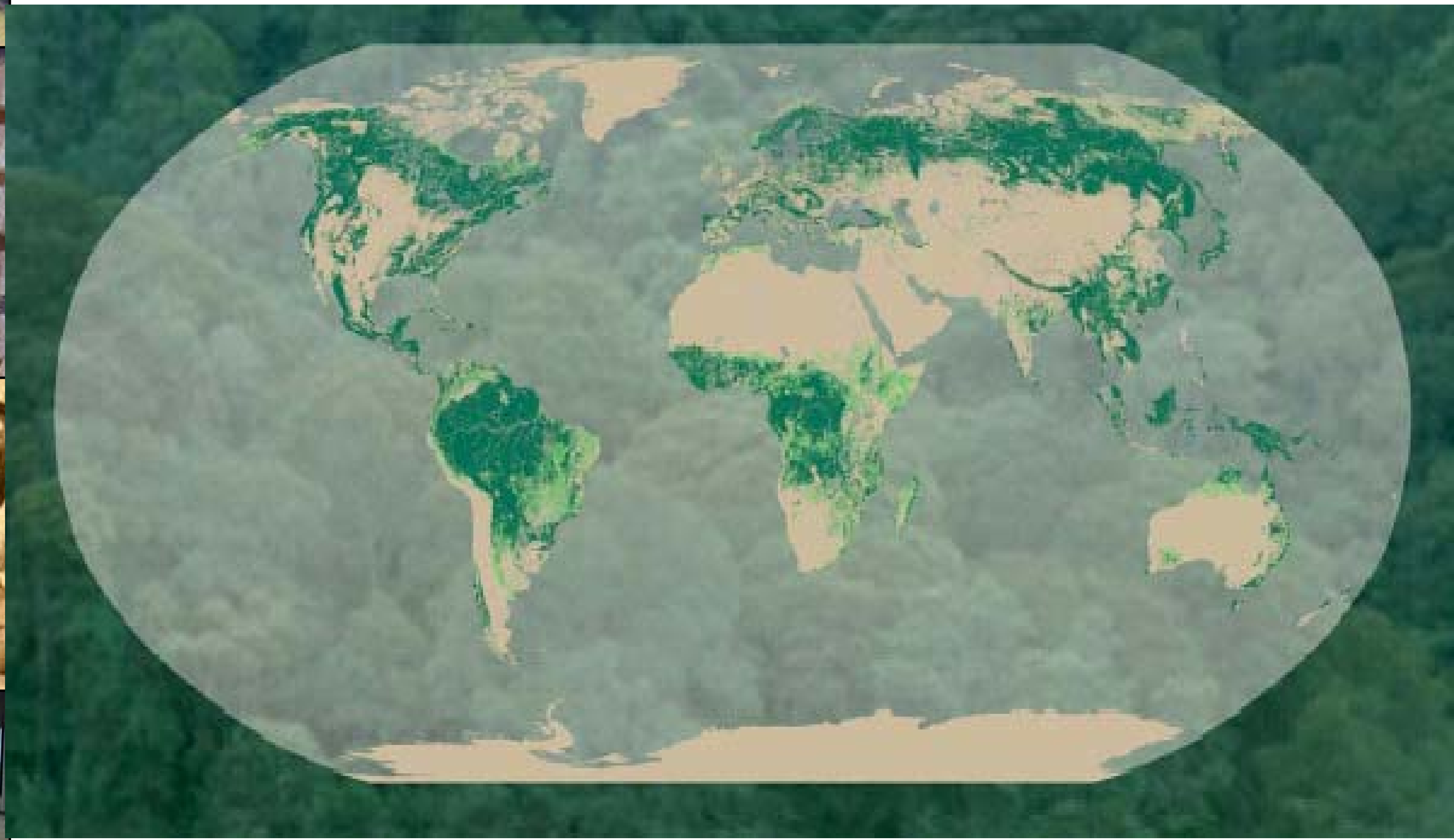


Demand for joinery, millwork, profiled wood, is mostly within the UNECE region –
same as flooring.

Sources: Eurostat, Trade Statistics of Japan by Ministry of Trade and Customs, USDA Foreign Agricultural Service




III. Forest resources



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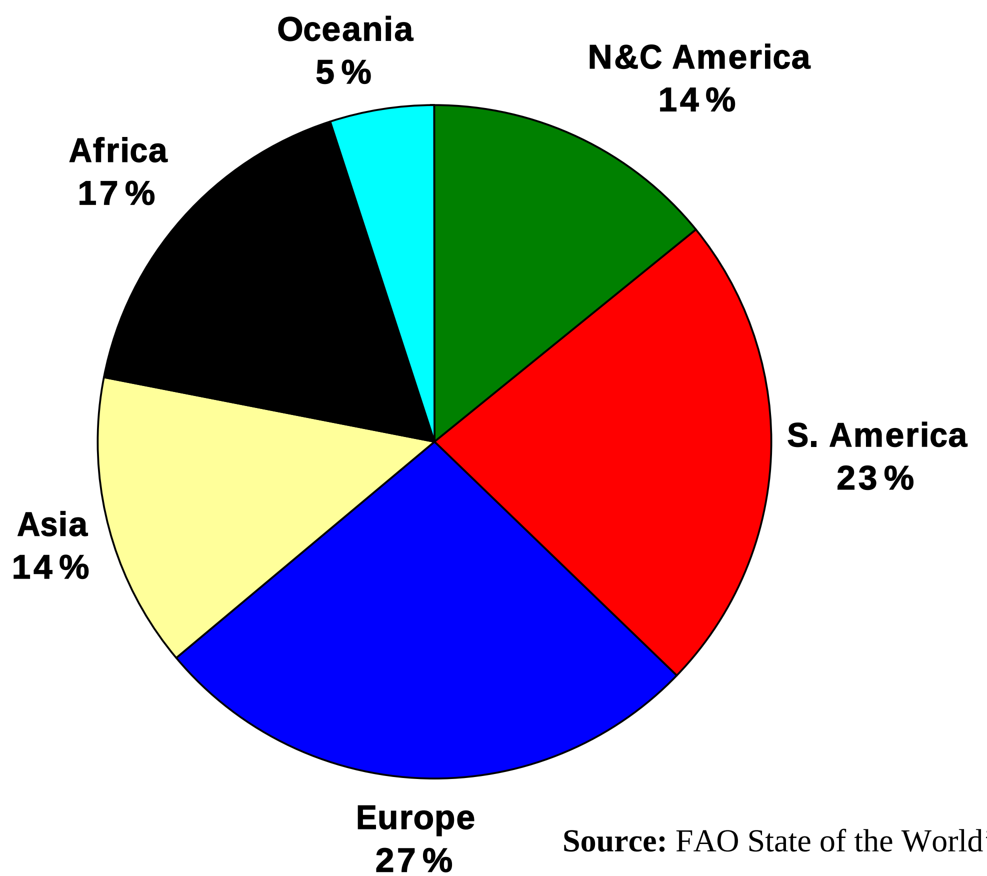
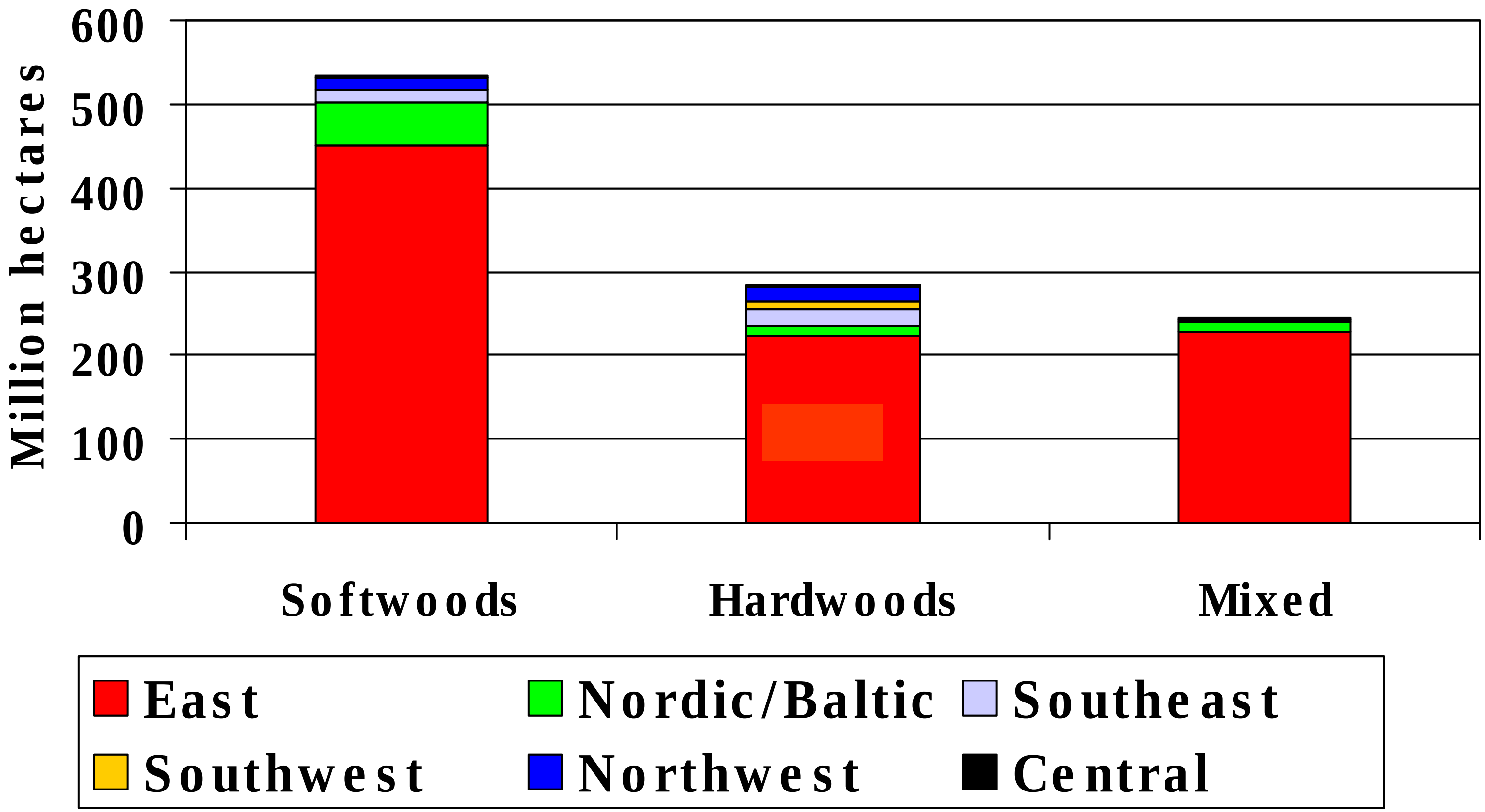
Where are the forests?



Source: FAO State of the World's Forests 2007

European forests, including Russia



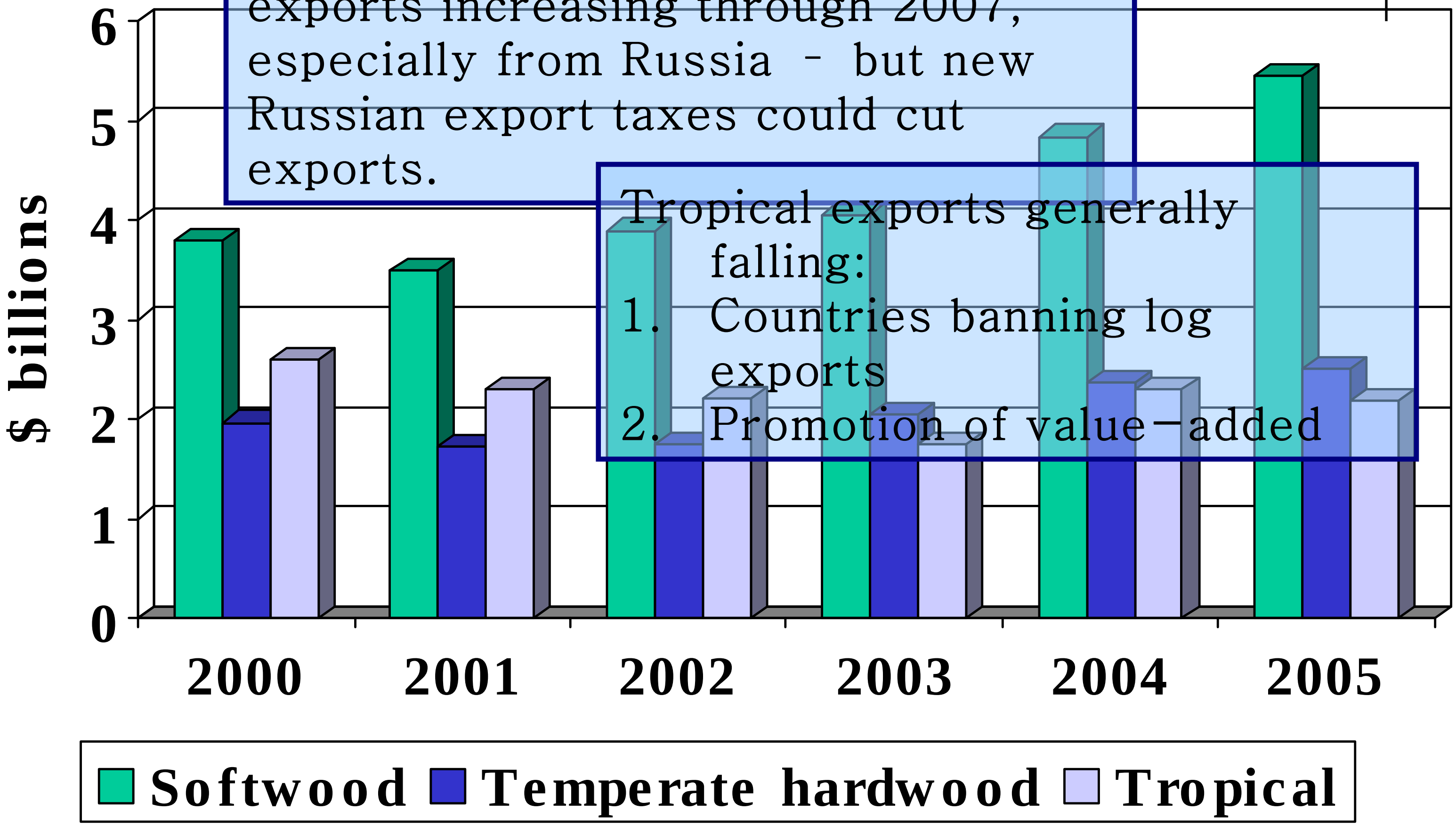
Source: UNECE/FAO Forest Resources Assessment




Industrial roundwood exports

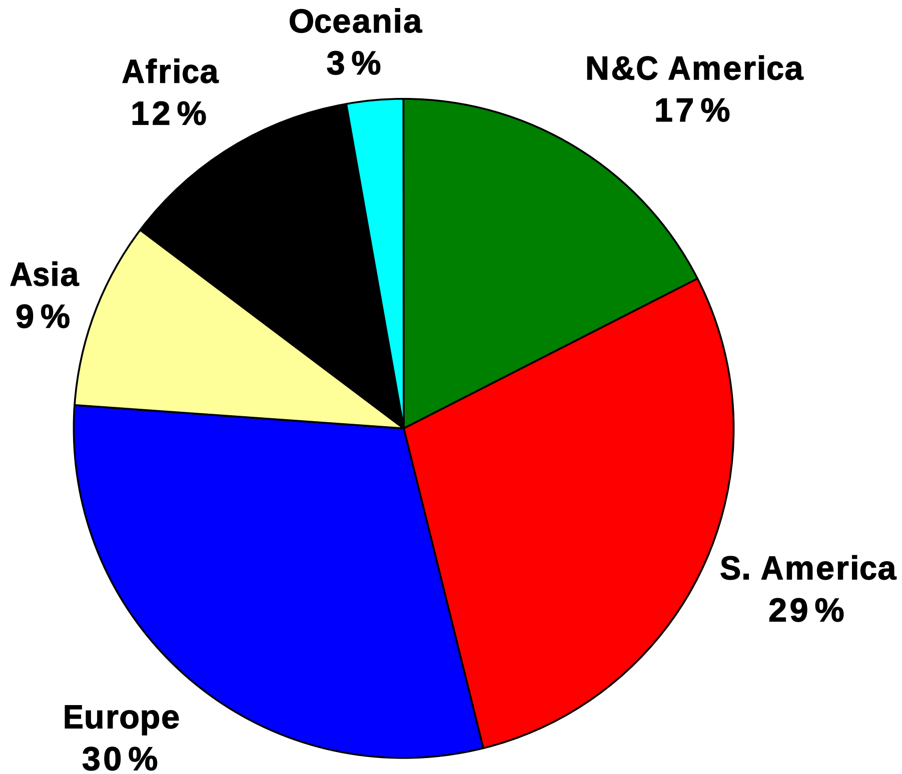
Softwood and temperate hardwood exports increasing through 2007, especially from Russia – but new Russian export taxes could cut exports.

Tropical exports generally falling:
1. Countries banning log exports
2. Promotion of value-added



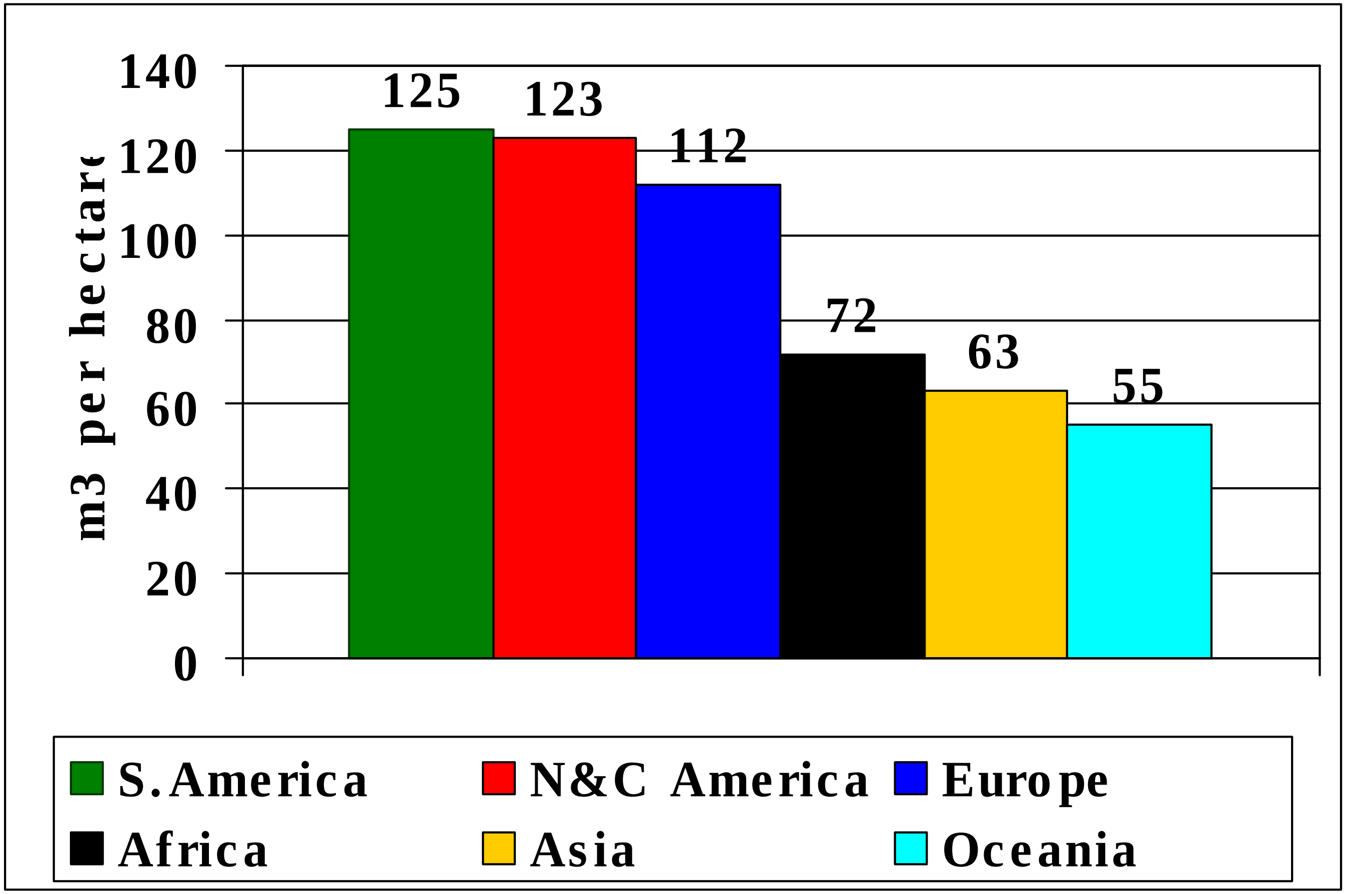
Source: FAO Stat

Where’s the wood?



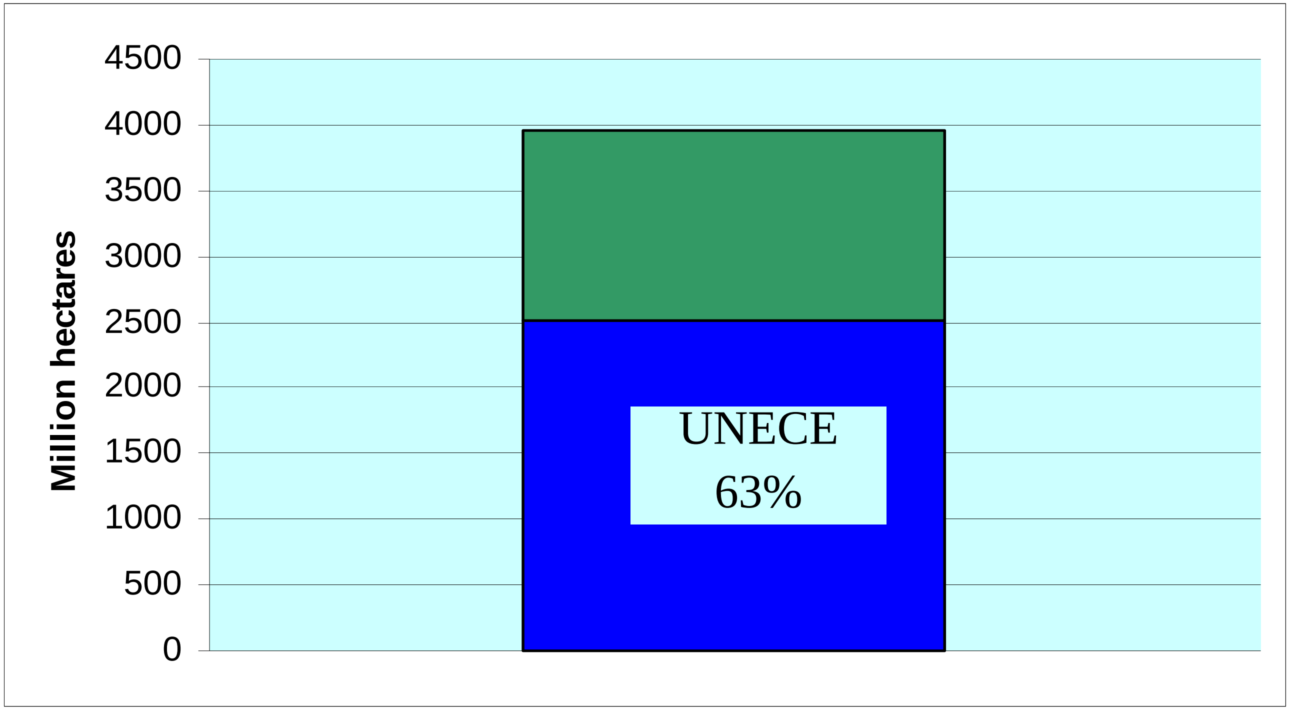
Source: FAO State of the World’s Forests 2007

Wood volume per hectare



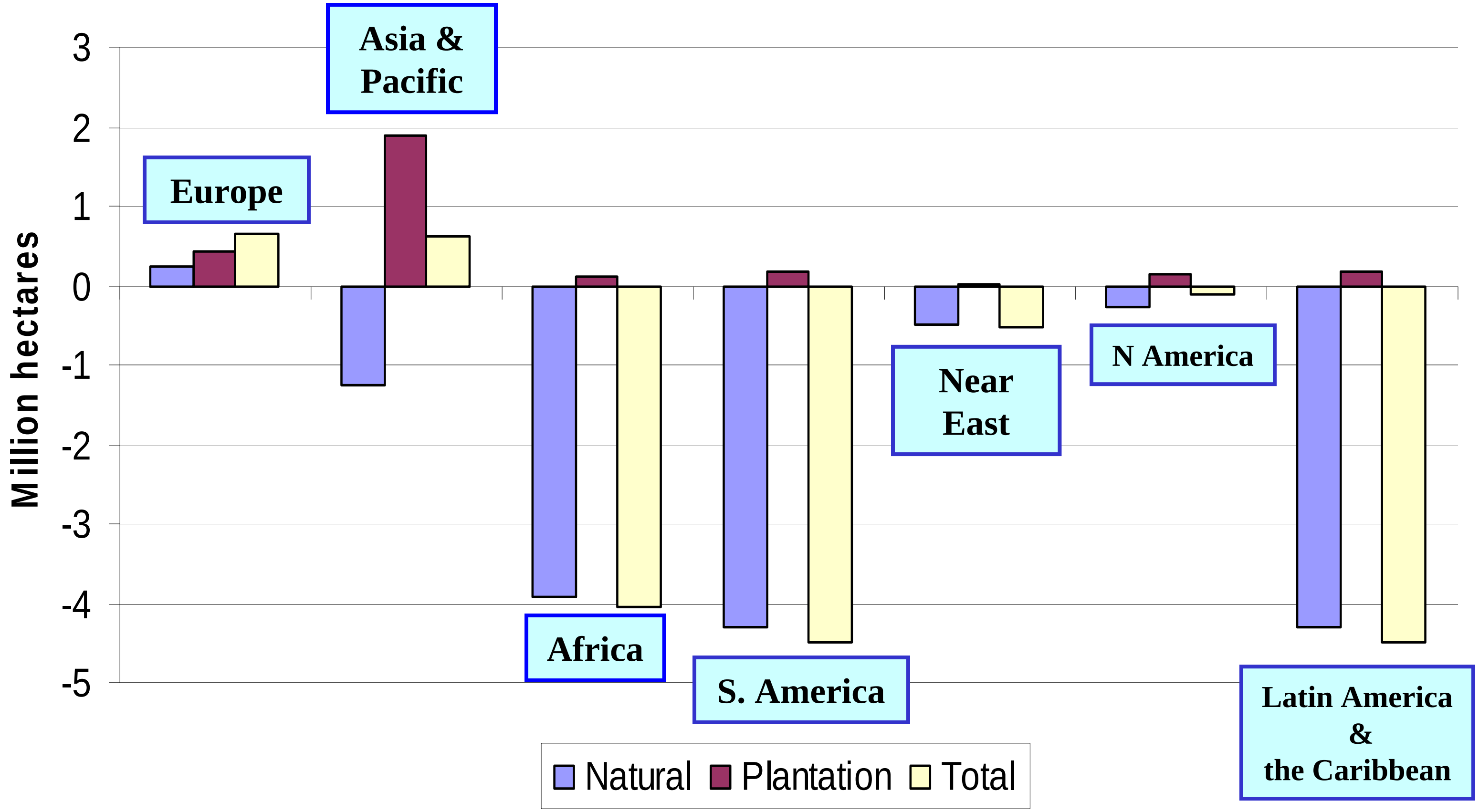
UNECE region's forests fit into the global situation

World forests vs. UNECE region forests



Source: State of the World's Forest, 2007.

Annual change in forest area, 2000–2005



Source: FAO State of the World's Forests 2007.

Annual change in forest area, 1990–2000, (million hectares)

	Deforestation	Increase in forest area	Net change in forest area
Tropics	-14.2	+1.9	-12.3
Non-tropics	-0.4	+3.3	+2.9
World	-14.6	+5.2	-9.4

Source: FAO Global Forest Resources Assessment 2000

Note: Annual change in forest area recalculated as –7.3 million Ha per year from 2000-2005 by FAO Global Forest Resources Assessment 2005

Reasons for deforestation

- Conversion to other land uses
  - Agricultural, including
    - Grazing
    - Conversion to palm oil
  - Urbanization
- Unsustainable silvicultural practices
  - Unmanaged harvesting
  - Poor regeneration
  - Fire, insects and diseases
  - Over harvesting fuelwood
- Poverty and overpopulation




Forest resources in Europe

- Only 60% of wood grown is harvested
- Forest volume increases ~2 million m^3 daily
- Forestland increases by 500,000 hectares per year

State of Europe’s Forests

- Resources and area increasing
- Forest health and vitality are critical
- Productive functions maintained
- Biodiversity is a focus
- Plantations are only 3%
- Protective forests are 12%
- Socio-economic functions important

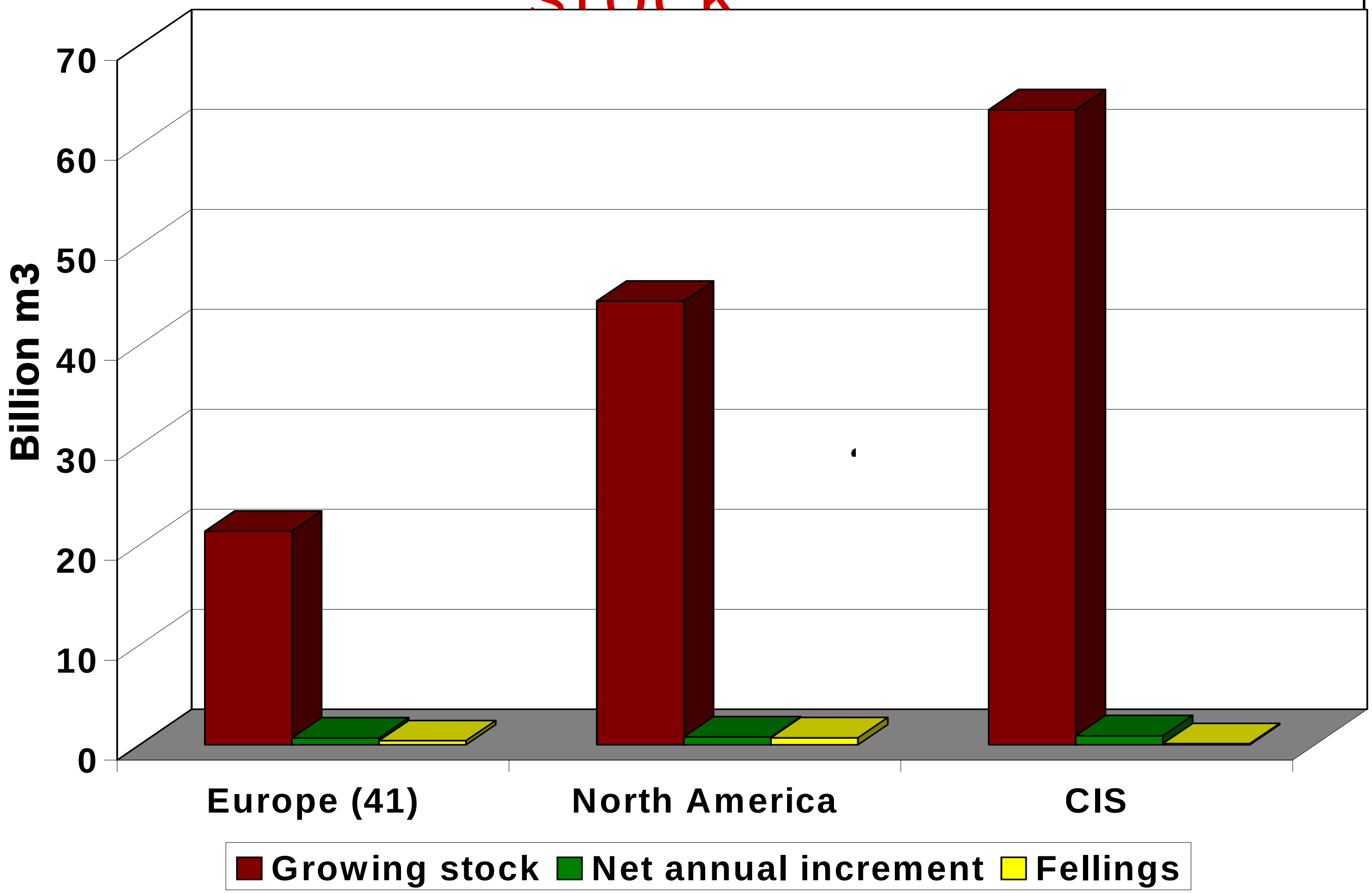
Forest resources in Russia

- Only 16% of wood grown is harvested
- Forest volume increases ~3 million m^3 daily
- Forest area 1990 to 2000: no significant change

Forest resources in N. America

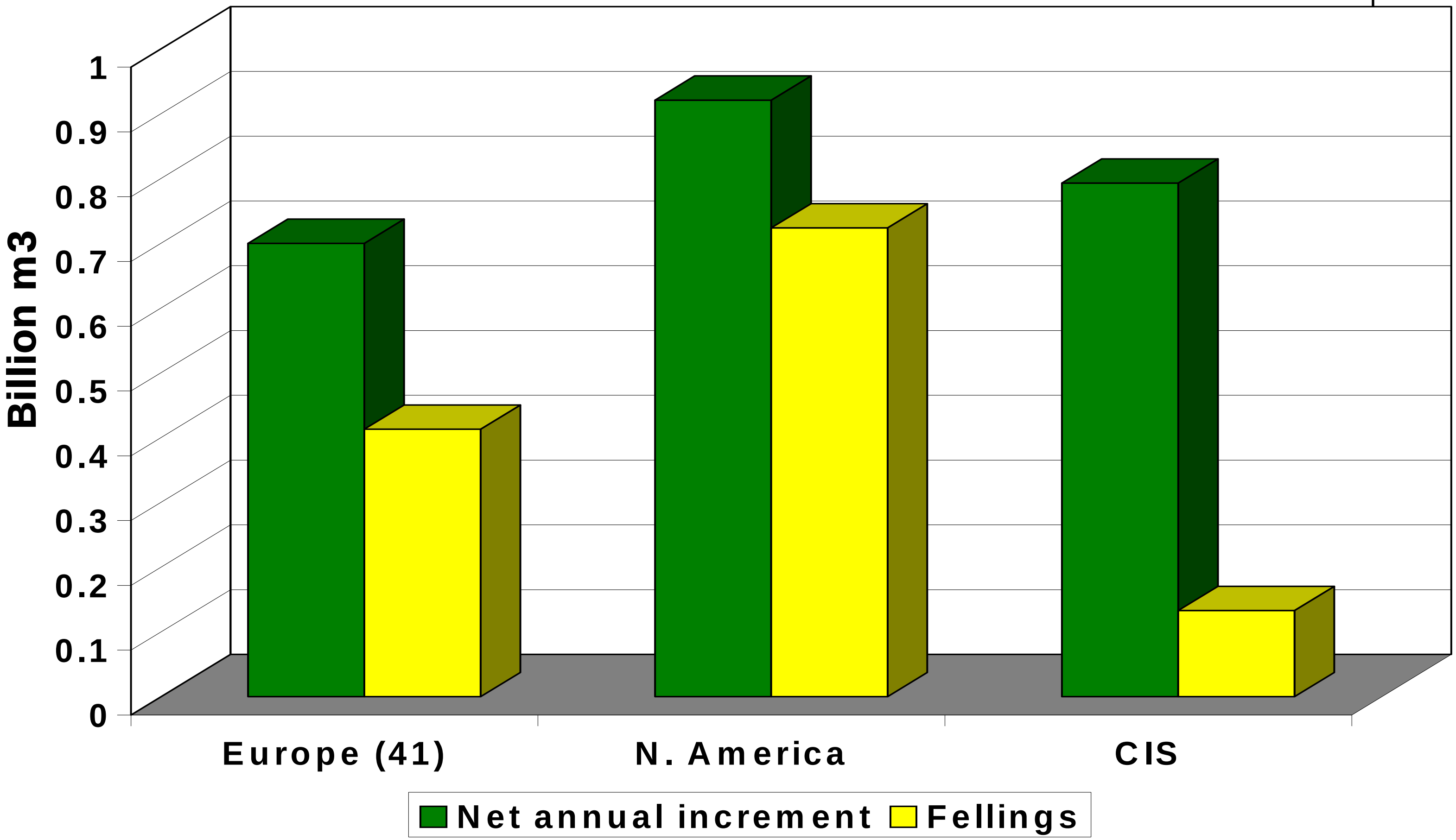
- 80% of net annual increment harvested
- Forest volume increases ~3 million m^3 daily
- Forest area 1990 to 2000
  - USA +0.2%
  - Canada, no significant change

Forest resources: growing stock



Source: *Temperate and Boreal Forest Resources Assessment 2000*

Net annual growth vs. fellings



Source: *Temperate and Boreal Forest Resources Assessment 2000*




Forests increasing

	Fellings as % of annual growth
Central Europe	61%
Nordics & Baltics	72%
Northwest Europe	53%
Southeast Europe	45%
EU 27	60%
Russia	34%
North America	80%

Sources: *State of the World's Forests*, 2007 and UNECE/FAO Forest Resources Assessment

Deforestation & the wood processing industry

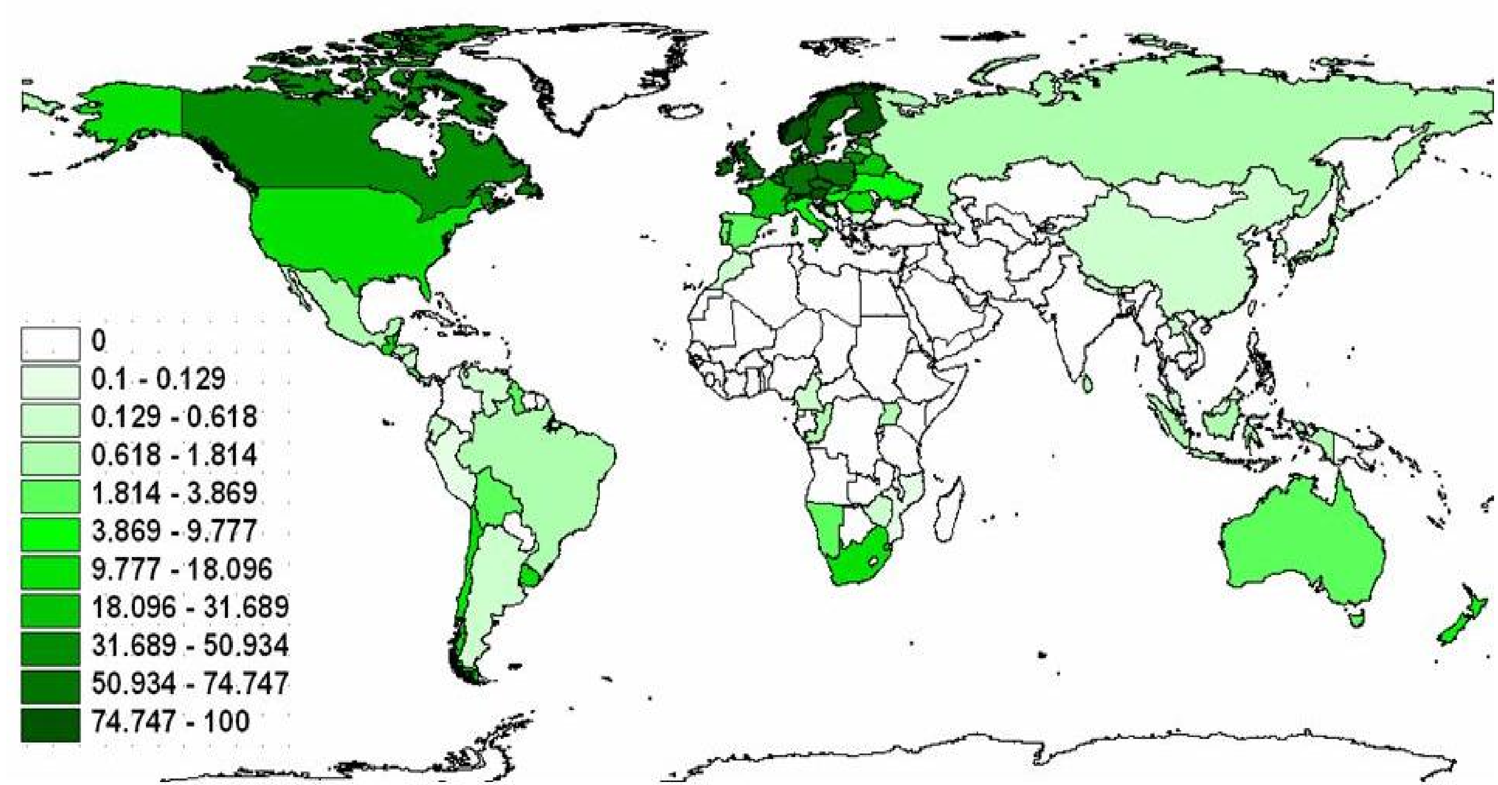
- Consumers confused about deforestation
- Middlemen asking for assurance of source
  - Sustainable forest management
  - Legality
- Retailers want to sell legal, sustainable
- Industry, governments, organizations want
  - Sustainable economic development
  - Sustainable forest management




Deforestation & the wood processing industry

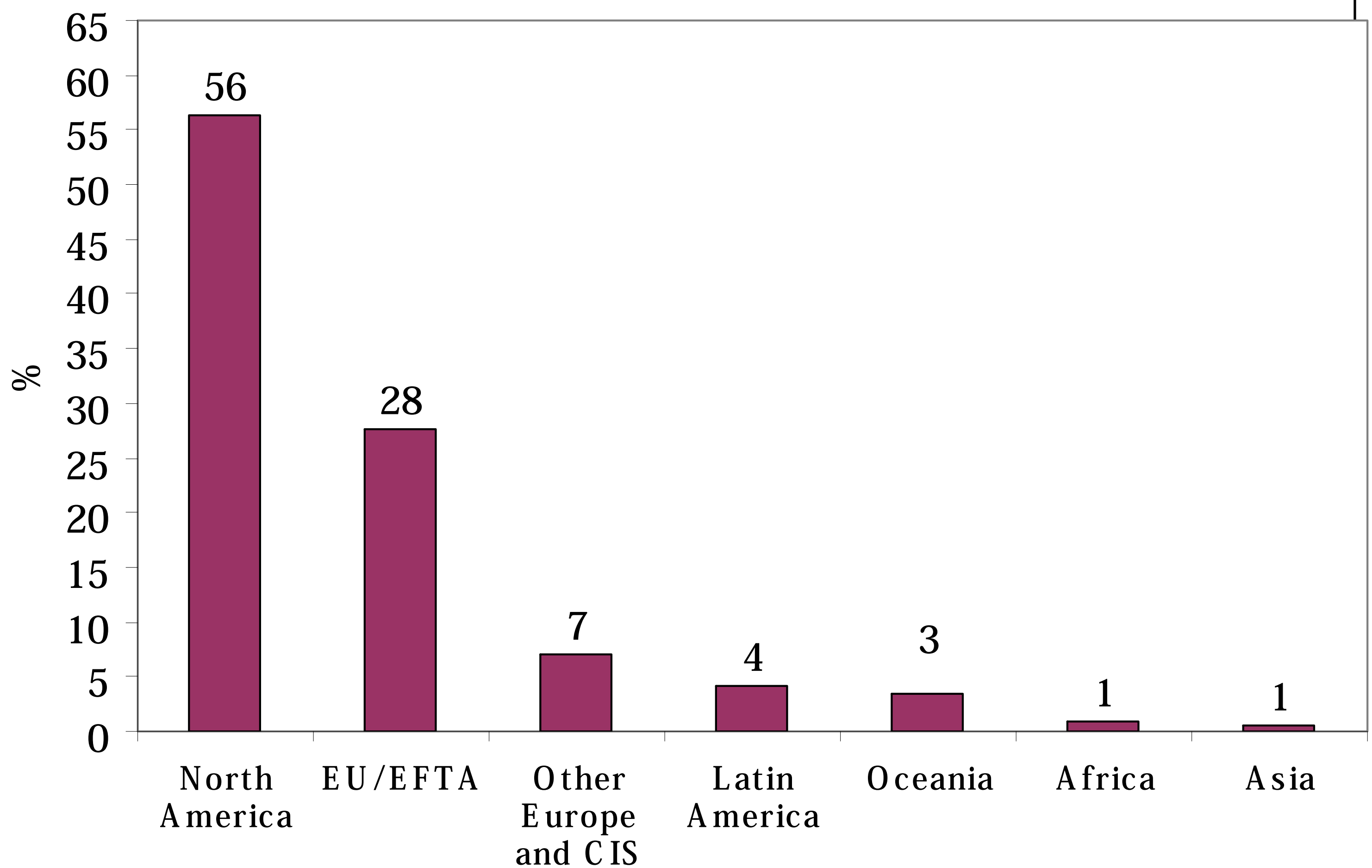
- Manufacturers' info, including labels
- Retailers' labels, e.g. IKEA
- Promotional campaigns' labels
- Certification systems' labels, including chain-of-custody certificates

Global distribution of certified forest area as a percentage of total forest area by countries, 2007



Sources*:* Individual certification systems, Forest Certification Watch, the Canadian Sustainable Forestry Certification Coalition, and FAO

Geographical distribution of total certified forest area, 2007



Sources: Individual certification systems, Forest Certification Watch and the Canadian Sustainable Forestry Certification Coalition, 2007.




Certification summary

- ~300 million hectares, 8% world's forests
- Mostly temperate, only ~6% tropic
- Equivalent of industrial roundwood
  - ~400 million m3
  - ~25% of world production
  - Mostly North America, 13%, then
  - Europe, 11%
- New driver: public procurement policies

Certification summary

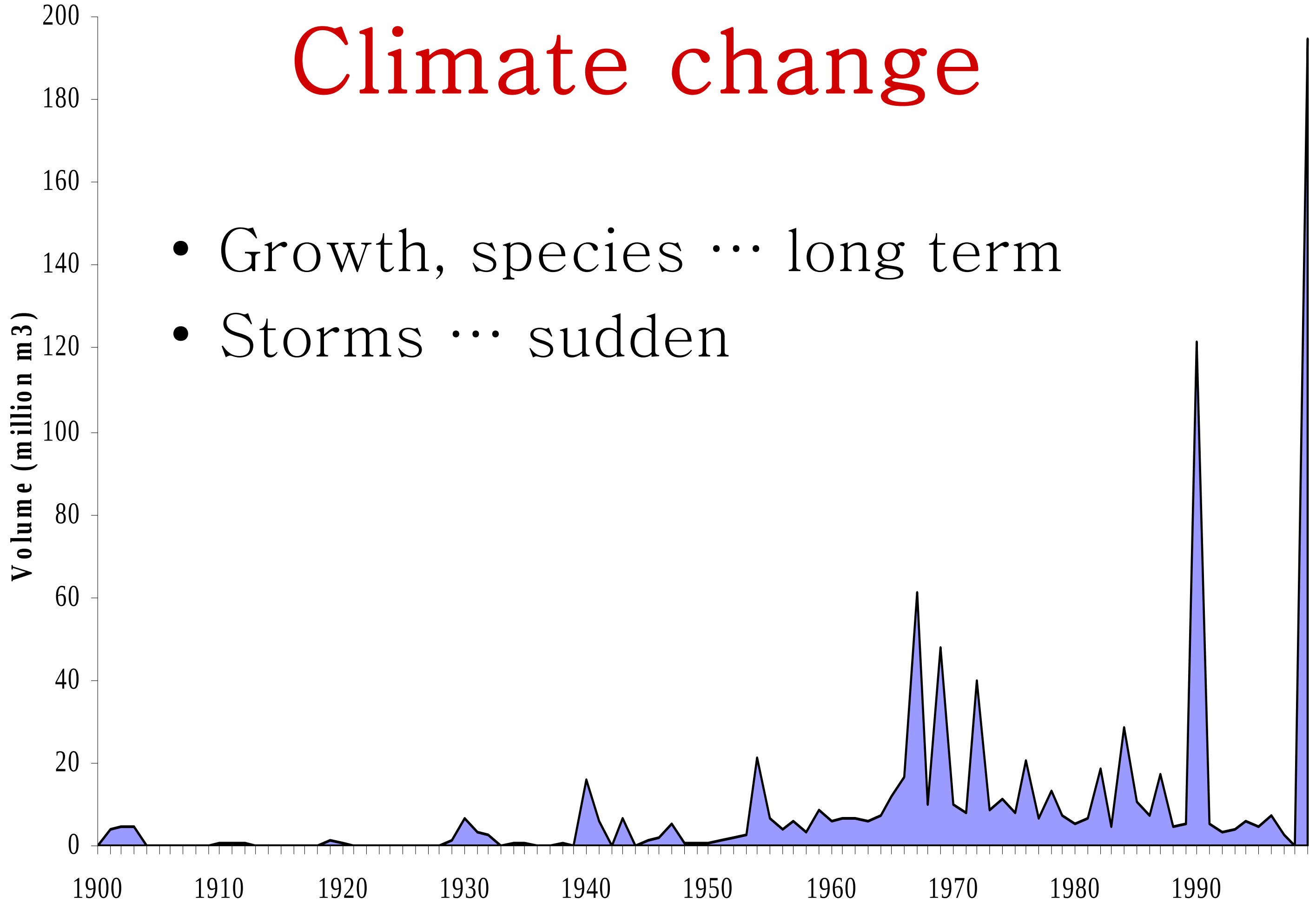
- UNECE Timber Committee: “Channel of communication” . But communication without labels?
- Expanding more slowly
- Conflict between schemes
  - Consumer confusion
  - Multiple certification of same forests and products (especially Sweden)

Forest resources summary

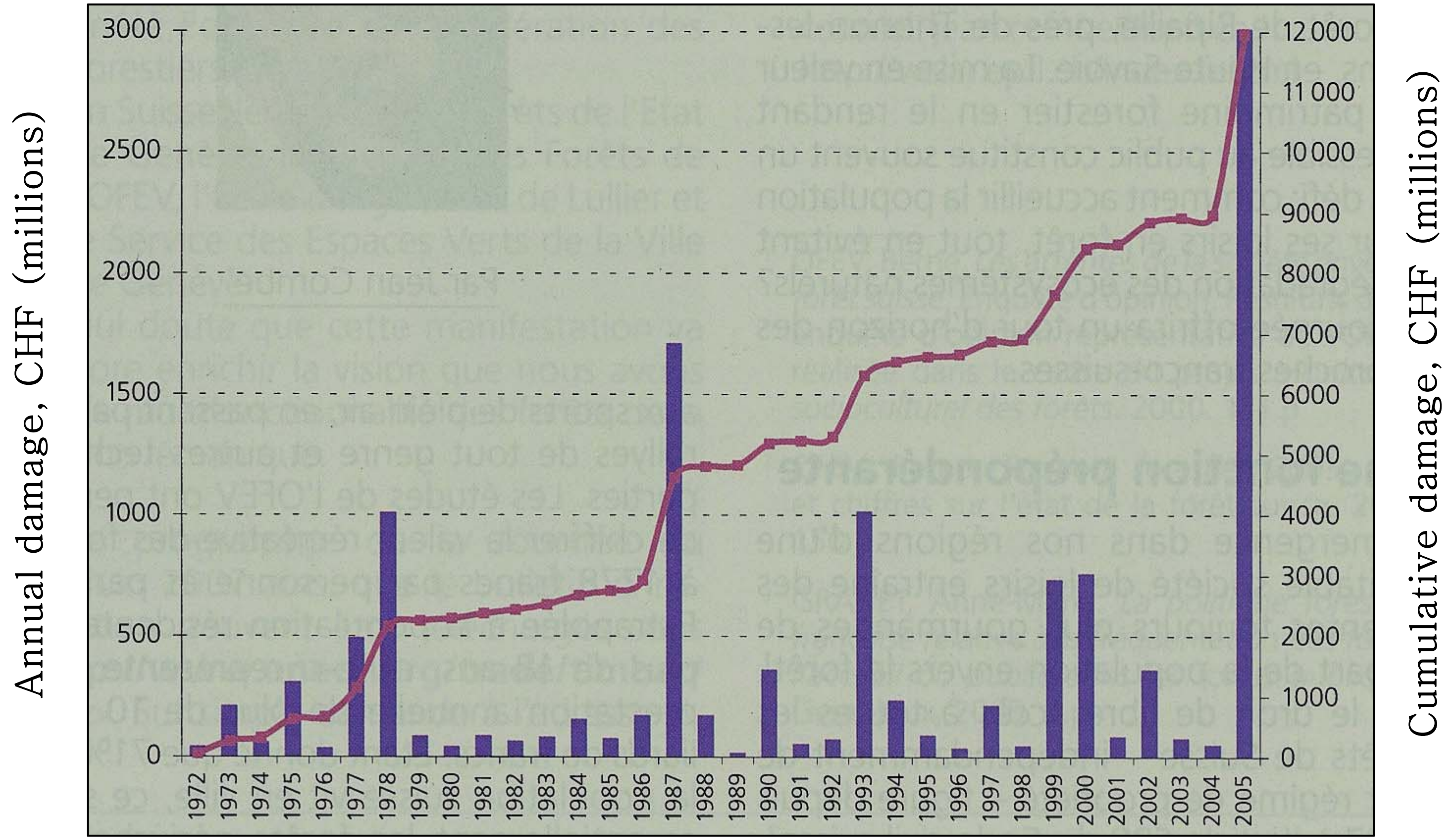
- Removals considerably below growth in temperate forests
- Wide variance in utilization rates of NAI
- Growing stock increasing in Europe
- Southern hemisphere plantations expanding
- Statistical oversupply compared to demand for wood
- Increasing alternative demands on forests, including for energy

X factor for resources: Climate change

- Growth, species … long term
- Storms … sudden



Swiss storm damage



Source: Swiss Federal Research Institute

IV. Rise in demand for wood for energy in Europe

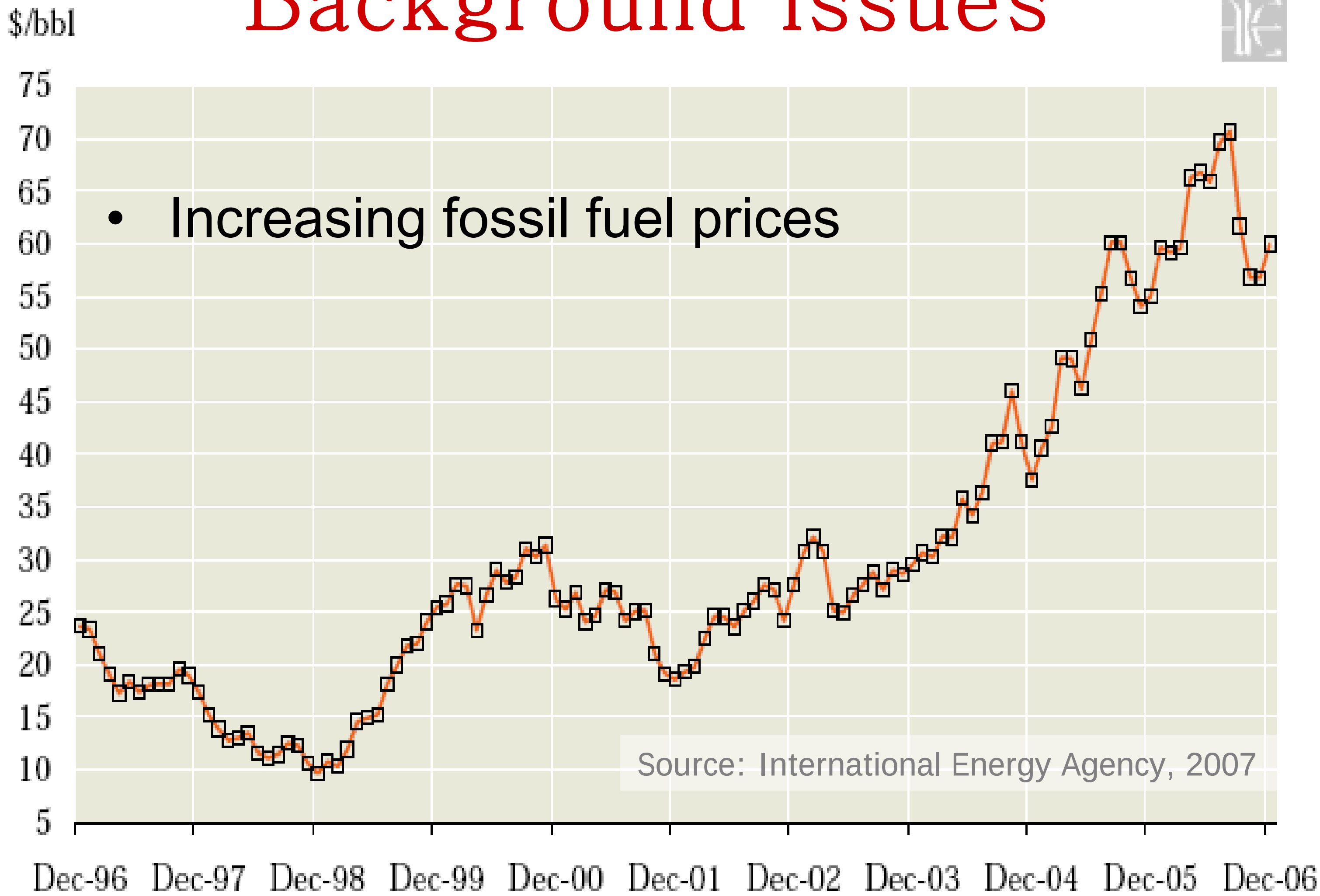
- Climate change awareness has increased political and public interest in wood energy
- EU launched ambitious energy policies
- Wood pellet markets are growing throughout Europe

Background issues

- Increasing fossil fuel prices
- Energy security
- Policies to reduce climate change
- Wood industries’ wood needs

Background issues

- Increasing fossil fuel prices



Background issues

- Increasing fossil fuel prices
- Energy security
  - Middle East instability
  - Russian supply interruptions
  - Growing consumption, e.g. China
  - Nuclear safety

Background issues

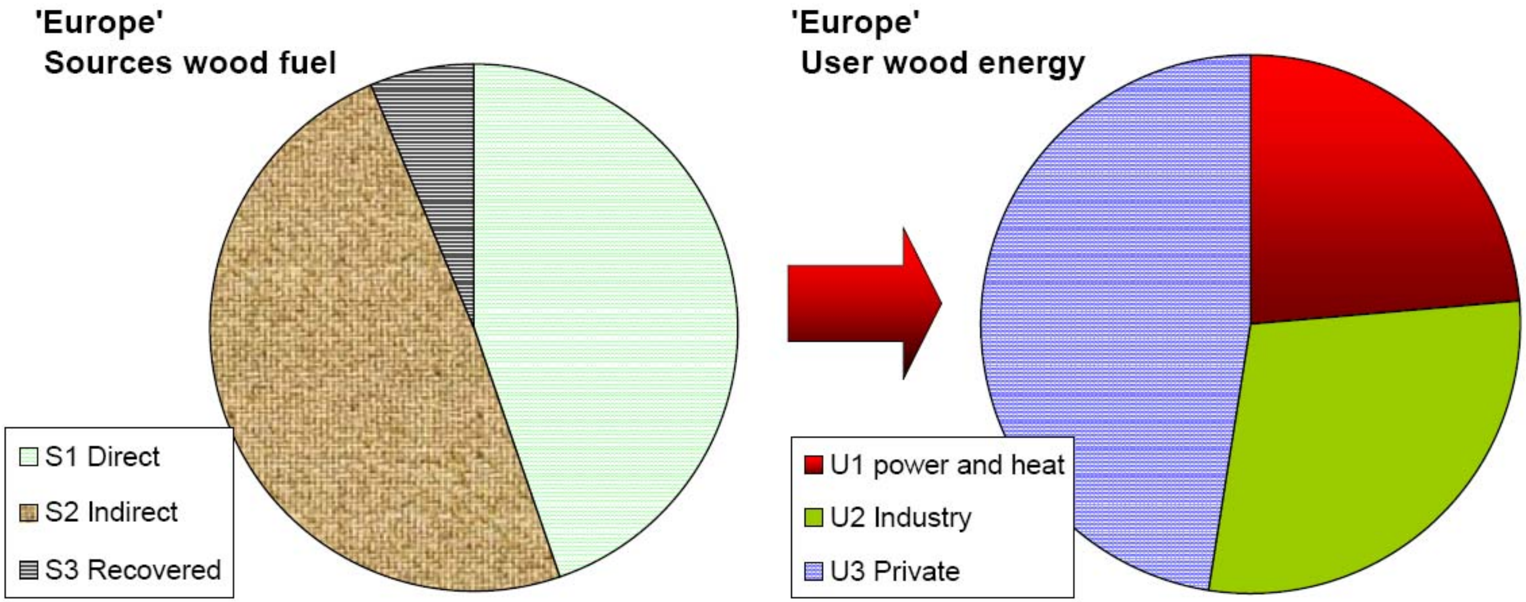
- Increasing fossil fuel prices
- Energy security
- Policies to reduce climate change
  - UNECE region
  - Kyoto Protocol
  - European Union & member countries
    - 20% renewable energy in 2020
  - G8
  - United States' government lagging behind




Background issues

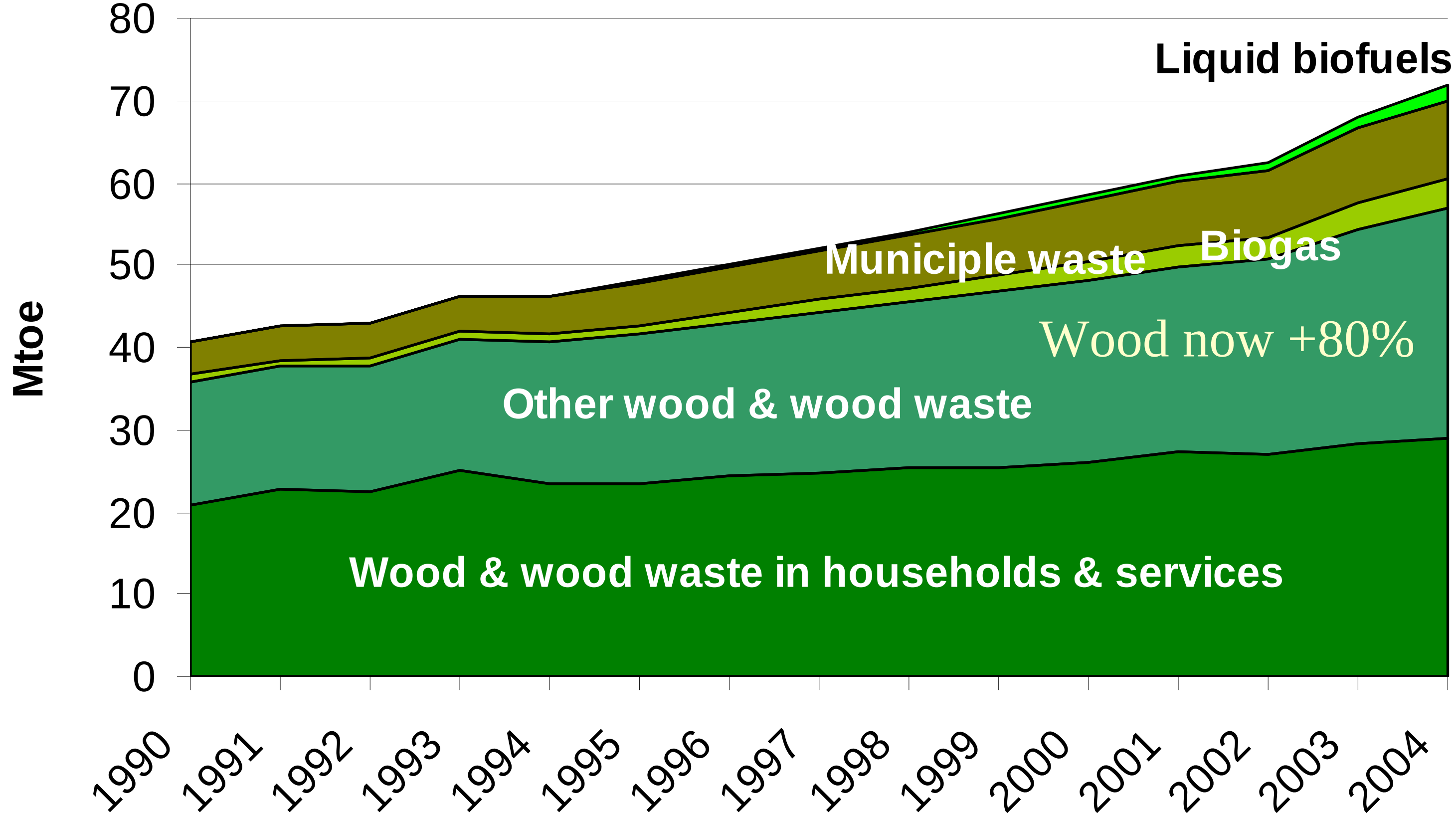
- Increasing fossil fuel prices
- Energy security
- Policies to reduce climate change
- Wood industries' wood needs
  - Increasing demand
  - Increasing raw material prices
  - Competition
    - Local can be intense
    - Short-term can be intense

Wood energy in 12 European countries, 2005



Source: UNECE/FAO, 2007.

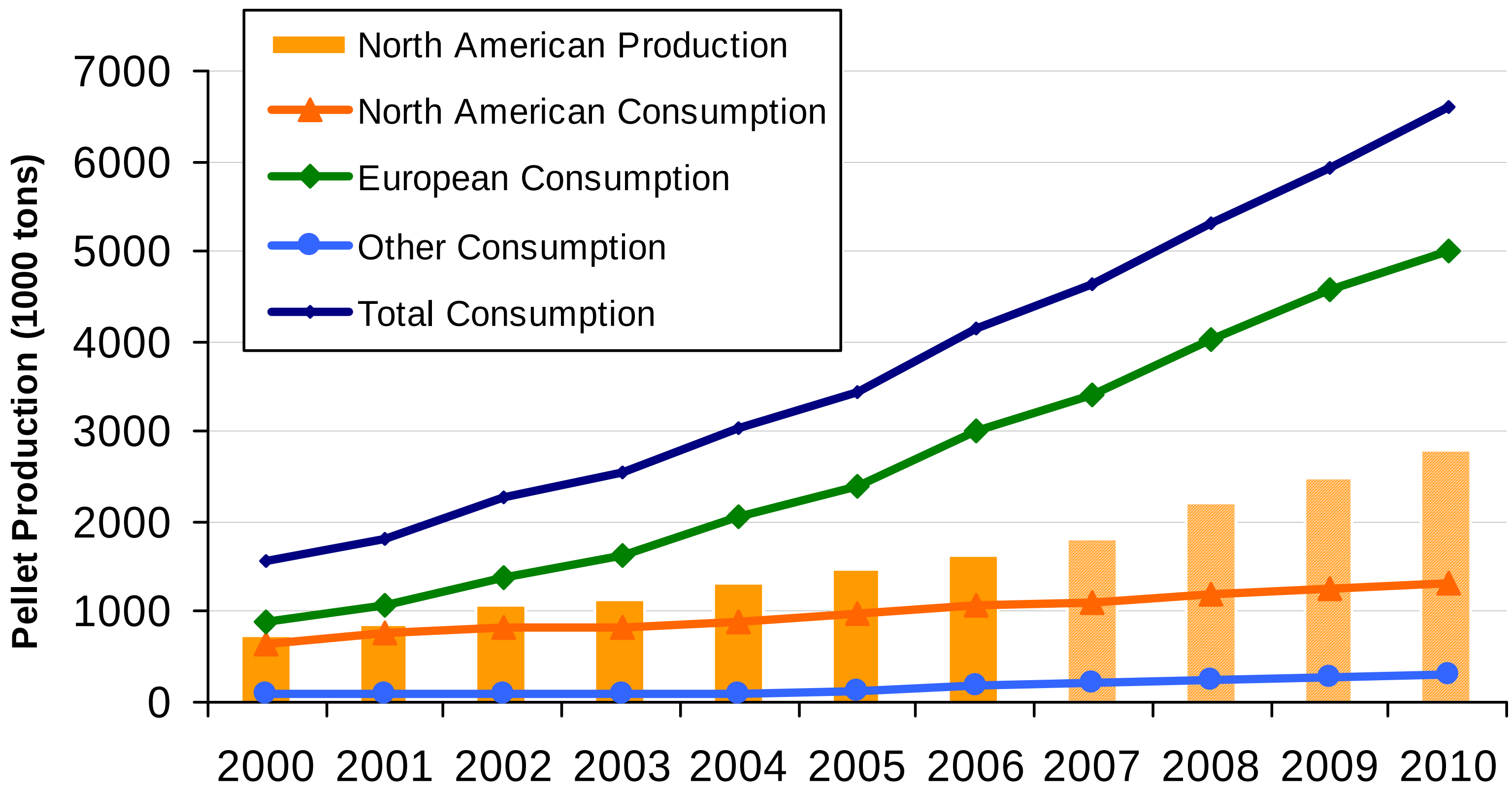
EU biomass use, 1990–2004



Source: Eurostat, 2007

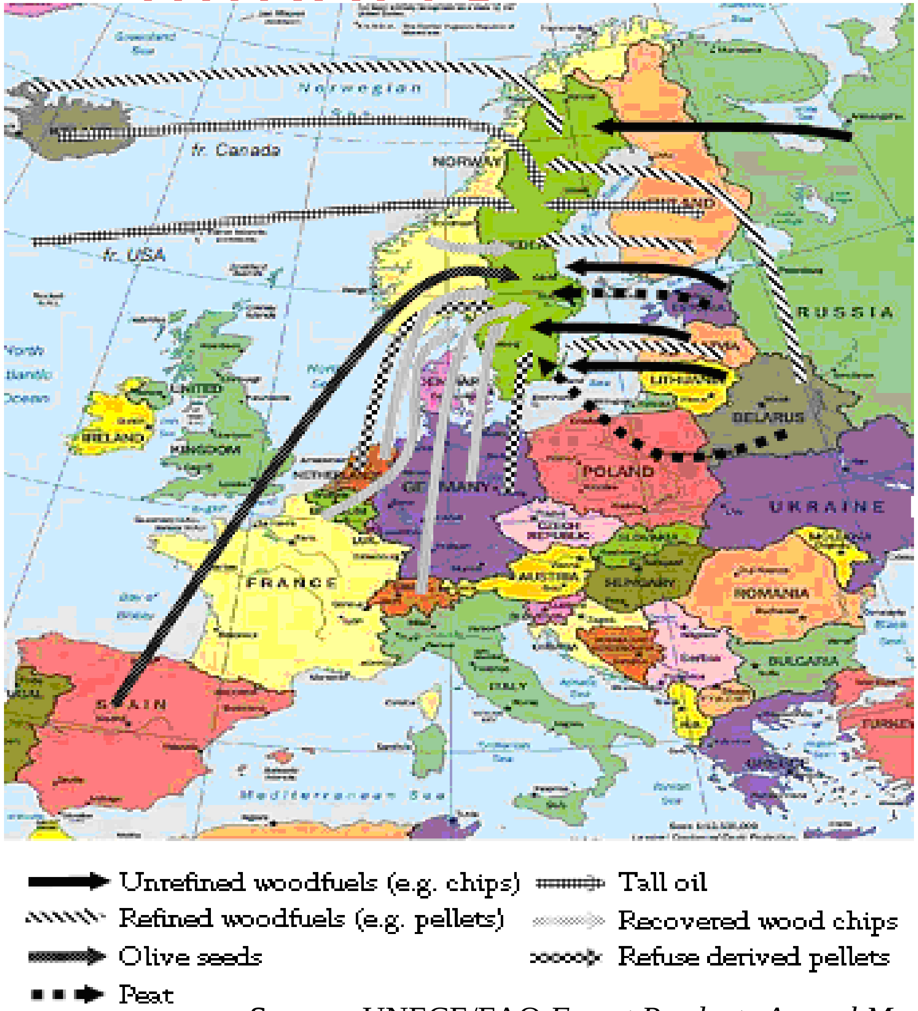



Pellet production and consumption



Source: Canadian Wood Pellet Association, 2007

Sweden's woodfuel imports



Source: UNECE/FAO *Forest Products Annual Market Review, 2005-2006*

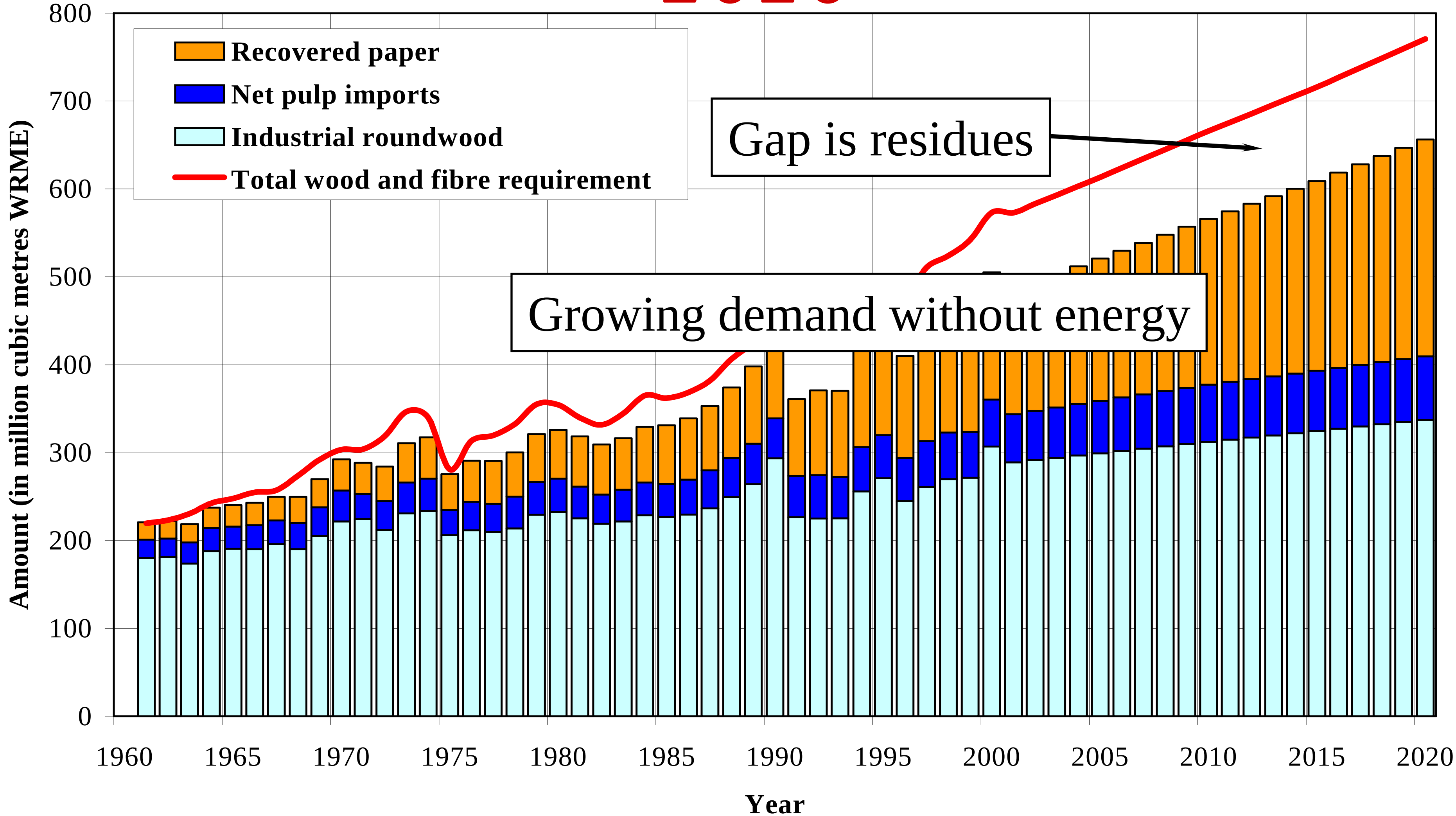
Sweden's woodfuel imports, 2005

	Volume, Gwh
Latvia	1200
Canada	460
Belarus	410
Holland	390
Estonia	325
Spain	115
Norway	48
Finland	39
Total	7 032

Source: UNECE/FAO *Forest Products Annual Market Review, 2005-2006*

V. Availability of wood to meet elevated demands

Western European wood and fibre requirements, 1960–2020



Source: UNECE/FAO European Forest Sector Outlook Study, 2005

WRME = Wood raw material equivalent

Supply and demand dilemma in western Europe in 2010

- Wood and paper industry – 312 million m^3 (wood raw material equivalent)
- Energy sector – 210 million m^3 (based on EU targets)
- Forests' annual growth – 505 million m^3 (net annual increment on forests available for wood supply)

International Seminar on Energy and the Forest Products Industry

October 2006, Rome

FAO, IEA, ICFPA, UNECE, ITTO, WBCSD

FEP General Assembly and European Parquet Congress
Malmö, Sweden, 8 June 2007

Energy and the Forest Products Industry Seminar

- Themes
  - Energy policies and trends
  - Role of wood as an energy source
  - Energy and material efficiency in the forest products industry

Energy & industry seminar conclusions from Rome, 2006

- Integrated and balanced energy and forest policies mitigate climate change
- Local actions with global vision
- Stable, sustainable regulatory frameworks needed for level playing field

Leveling the playing field

- Policies, legislation
- Environmental regulations
- Duties, tariffs, taxes
- Raw material costs
- Labor costs, benefits
- Manufacturing costs
- Rise in standard of living → consumption or wood products

Energy & industry seminar conclusions from Rome, 2006

- Forest products industry combats climate change by
  - Optimizing raw material usage
  - Increasing efficiency
  - Producing bioenergy
  - Expanding into biofuel production
  - Improving sector competitiveness
- Forest products industry could be a net supplier of energy




Energy & industry seminar conclusions from Rome, 2006

- Forest products industry suffers an image problem – must be proactive
- Developing countries need assistance to use forest and mill residues for energy
- International organizations can
  - collect, analyze and distribute data and information
  - Develop partnerships, provide forums
  - Coordinate research

Mobilizing Wood Resources Workshop

January 2007, Geneva

UNECE/FAO, FAO, CEPI, MCPFE, EFI

Mobilizing Wood Resources Workshop, Geneva 2007

- Can Europe’s forests satisfy the increasing demand for raw material and energy under SFM?
- Stakeholders, over 100, represented industry, government, international organizations, NGOs,

Mobilizing Wood Resources Workshop, Geneva 2007

- Potential for increased wood supply ?
- Opportunities for increased mobilization ?

Mobilizing Wood Resources Workshop, Geneva 2007

- Limits of sustainability
- Energy and resource efficiency
- Equal treatment (agriculture vs. forestry, imported vs. domestic)
- Respect regional variations

Mobilizing Wood Resources Workshop, Geneva 2007

- Coherence between different sector policies
- Integrate whole supply chain in biomass strategies
- Need for comprehensive reliable data
- Empower forest owners to form “clusters”
- Improve infrastructure and logistics
- Qualified workforce
- Capacity building and training




Mobilizing Wood Resources Implementation of findings

- MCPFE resolution on wood energy and mobilization
- UNECE/FAO activity
  - Wood energy data and information
  - Mobilization
  - Policy forum October 2007
- Opportunities for technical, policy assistance to developing countries, e.g. wood energy workshop in Balkan region




Mobilizing Wood Resources Workshop, Conclusions

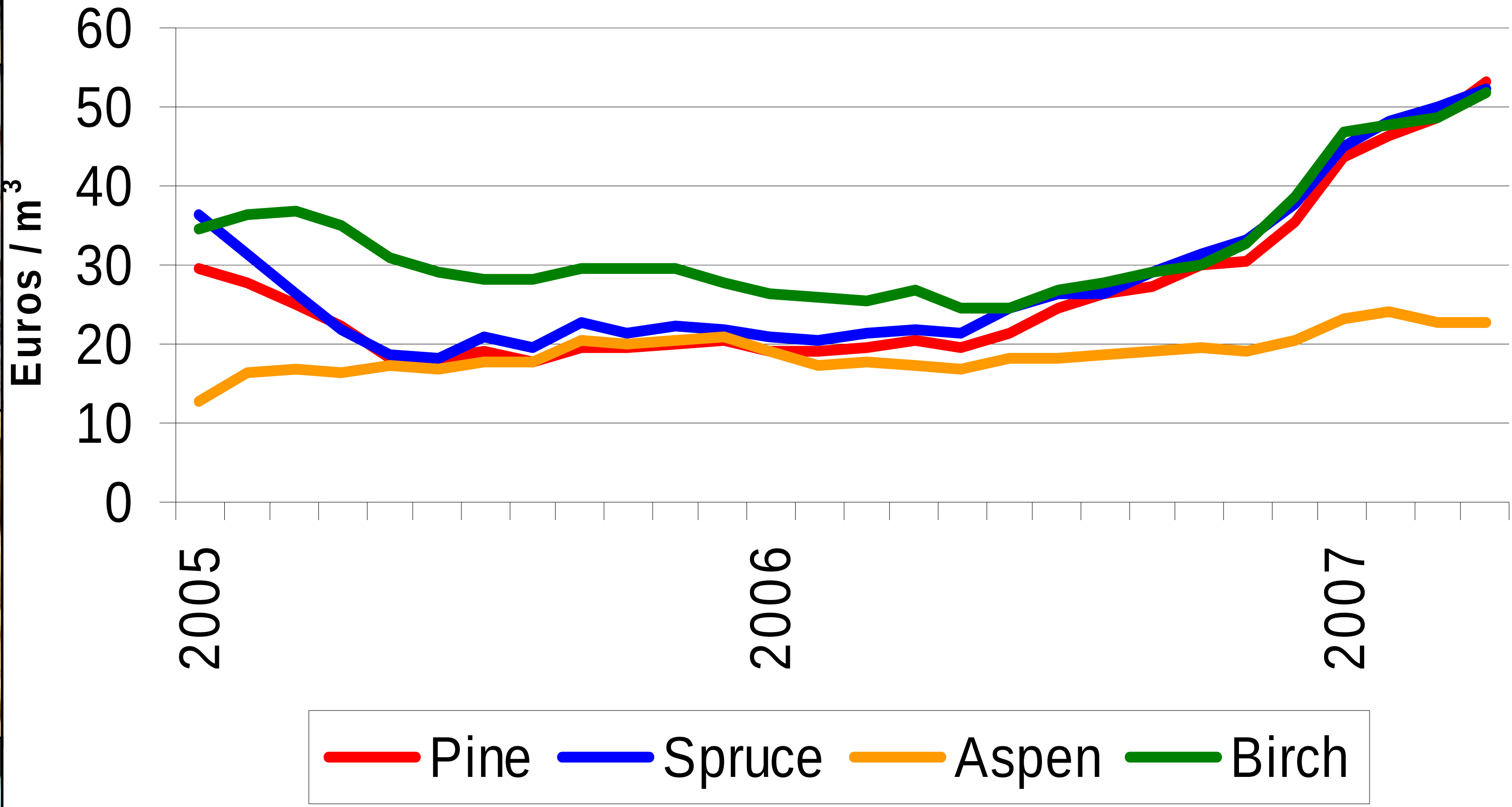
- Remember importance of climate change and energy security
- Increase in wood supply possible
- Realistic policy targets
- Requirement for reliable statistics and forecasts
- Consider impacts on other sectors
- Overall, an opportunity for the forest sector

VI. New European Wood Market: Shortage or Surplus?

Shortage or Surplus?

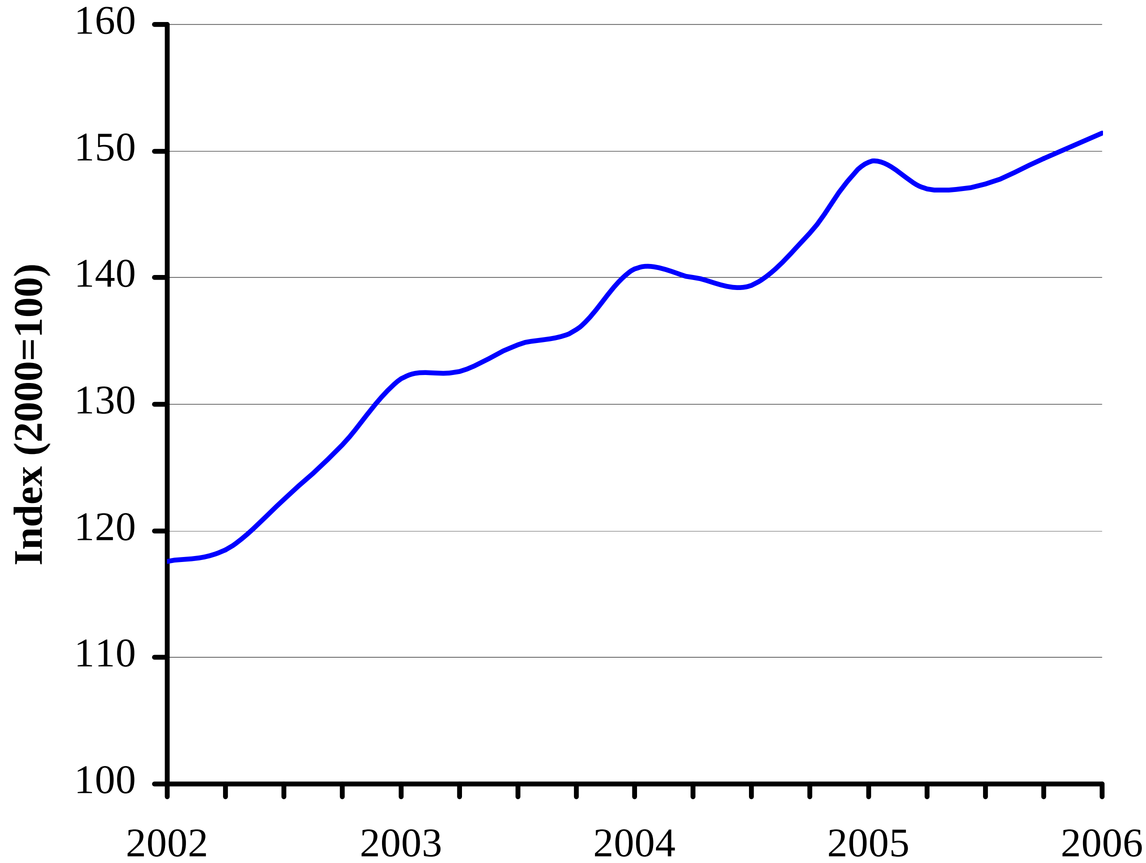
- Short term
  - Competition for wood raw materials
    - Roundwood
    - Byproducts
    - Recovered wood
  - Reduced Russian roundwood, or higher cost
  - Oversupply in North America
  - Rising costs

Latvian pulpwood prices



Source: Latvian Forest Industry Federation

Panel manufacturers' wood costs



Source: European Panel Federation, 2006.

Shortage or Surplus?

- Medium term
  - Increasing demand for wood raw materials for wood processing industry
  - Increasing demand for wood energy
  - Development of infrastructure
  - Additional imports
  - Price stability?

Shortage or Surplus?

- Long term
  - Increased harvests
  - Increased alternative wood sources
    - Wood outside forests
    - More recovered wood
    - Energy plantations
  - Greater trade




Shortage or Surplus?

- Studies underway
  - UNECE/FAO with partners
  - CEPI–commissioned study
- UNECE/FAO Policy Forum
  - 10 October 2007, Geneva
  - After joint Timber Committee and International Softwood Conference Market Discussions

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