







Worldwide Supply of Certified Forests

- 150 million hectares, 4% of world forest*
- Over 70 national and international certification standards but PEFC, SFI, FSC, and CSA dominate
- · >90% of total certified in northern hemisphere
 - 50% in Europe
 - 40% in North America
 - 10% in developing countries (dominated by Brazil, Gabon, South Africa and Bolivia)
- · Majority of certified forests are industrial plantations
- 300 million m3/year certified timber supply

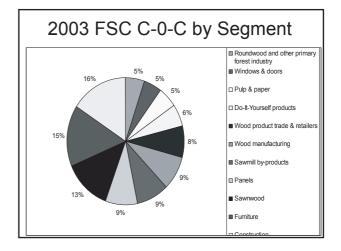
*Based on 2003 statistics

Worldwide Supply of Certified Forests

- Round-wood supply from several European countries up to 100% certified (Example: Finland) while in the U.S., less than 15% of timberlands are certified
- Globally, majority of certified wood is temperate softwood; tropical certified wood available in much smaller quantities, from a less stable supply base
- Europe and Canada- estimated < 5% of forest products certified by volume
- US estimated <2% forest products certified
- · Japan-around 0.02% forest products certified

Worldwide Supply of Certified Forests

- Chain-of-Custody –auditing the tracking of wood from forest to final product such that a label can be applied to product
 - PEFC >1500 certificates
 - FSC >3000 certificates, in over 66 countries
 - CSA > 40 certificates
 - SFI no chain-of-custody offered but participants are required to know where all wood originates from through an auditable system



Challenges to Future Certification and Chain-of-Custody in US

- 60-70% of fiber controlled by small, unorganized, independent family forest owners
 - Certification cost:benefit unfavorable
 - High turnover of land-ownership
 - Lack of domestic demand
 - Image not as important to forest owners as it is to retailers and industry
 - Retailer and industry not willing to pay extra for certified fiber ---becoming a market access issue

Addressing Certification Challenges in US

- American Tree Farm Group Certification Program
 - · Modeled on PEFC group certification
 - Oldest voluntary, third party forest management verification process in the United States. Longstanding relationship with and trust of family forest owners
 - 65,000 landowners and 23,000,000 acres currently part of program
- Certified Master Logger Program certifying at the time of harvest. New concept to address small ownerships with low environmental impacts and infrequent harvesting

Mutual Recognition of Standards

- Driven by customers, industry and environmental groups
- · The Forest Dialogue
- · The WBCSD-WWF International Framework
 - · Evaluate various comparison matrices
 - · Discussion of Lowest Threshold Model

The End-Use Consumer

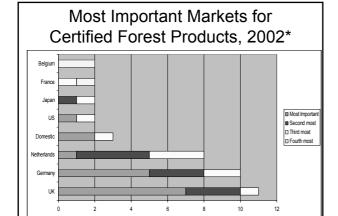
- Research shows no real demand and general unwillingness of end-use consumer to pay more for certified forest products
- All things being equal, consumers prefer certified over non-certified products
- But, still a low logo recognition of even longstanding FSC

Business-to-Business

- Greater demand for certified forest products from high profile businesses versus end-use consumers
 - Pressure from environmental activists to "prove" wood fiber comes from sustainably managed forests
 - Pressure began with focus on tropical forests, moved to old-growth, and today centers on "endangered forests" which are loosely defined and can exist anywhere in the world
 - Pressure started with wood products segment but has moved to coated and uncoated paper, bleach board, tissue, newspaper, etc. All Segments impacted today.

Building Market Demand

- Global Forest & Trade Network designed by WWF to create demand for FSC certified products
- 800 member companies active in 30 countries, but over ½ in Europe
- Large retail and brand conscious customers who want to protect image
 - Make unilateral policies
 - · Most accept several certifications, inclusive
 - · Some want mutual recognition framework
- Some business developing alliances to address common environmental issues. Example: Metafore
- Becoming a market access issue with some leading customers (ex. TetraPak, Time PaperCo.)



Business-to-Business

- Today, more customer policies, across segment, require or prefer certified fiber
- But most do not want label; want their own brand to stand for environmental quality
- Some customers asking vendor to increase certified fiber in product over time
- Most customer policies are inclusive, accepting several types of certification
- Some FSC-preference policies are not enforced, probably because of lack of FSC fiber supply

Examples of Inclusive Procurement Policies

- Lowe's
- MASCO Cabinets
- Lanoga
- Pella Windows
- 84 Lumber
- Masterbrand
 Cabinets
- Staples
- Office Depot

- The Home Depot
- Hallmark Cards
- AOL/Time Warner
- Marvin Windows
- Wickes Lumber
- Centex Homes
- Xerox
- McCoy's
- Kinko's
- Bank of America

Customer Expectations

- Credible standard, with independent governance and ENGO participation
- Third-Party Certification from reliable and independent auditing
- Consumer Communication Program and public relations to bolster against attacks from activists

Public Policy

- · National governments-
 - Europeans favoring certified products, especially from tropical countries (UK, Netherlands, Denmark, France, Germany)
 - USG favoring certified products through green building standards and paper procurement
- State and municipal governments in both US and Europe following suit
- Many countries, much of the demand for certified products comes from government procurement:
 - UK up to 40% demand from government
 - Netherlands up to 25%
 - · Also a driver in US

Legality "Certification"

- Overall level of illegal logging is significant at least 10 % world trade (US \$ 150 billion p.a. = WB/FAO estimate)
- EU –developing separate, independent "legality licensing procedure" for wood coming from countries where illegal logging is perceived to be a problem