Why Use Wood?

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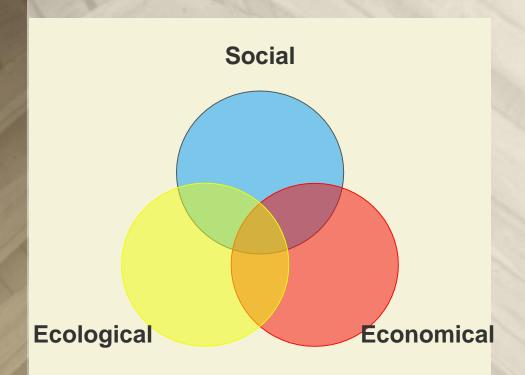


Overview

Wood and the three pillars of sustainability

- Economic
- Social
- Environmental

The 3 Pillars of Sustainability:



Meeting the needs of today without compromising the forest resource's ability to provide for the needs of tomorrow

We Depend on Wood

Flooring Railroad ties Roofs

Lumber Energy for Stairways

Pressboard electricity Baseball bats

MDF Firewood Garden stake

Veneer Christmas treesBackyard play sets

Plywood Tool handles Charcoal

Dowels Animal bedding Bowling alley lanes

Paper Fence posts Toys

Paneling Houses Signs

Window frame Furniture Syrup

Doors Crafts Pallets

Source: http://www.idahoforests.org/wood_you.htm

We Depend on Wood

Cardboard

Grocery bags

Chewing gum

Paper towels

Oil spill control

agents

Hockey sticks

Wildlife habitat

Cosmetics

Baby foods

Cider

Vitamins

Cooking utensils

Lacquer

Rubber gloves

Golf tees

Nail polish

Antacids

Shampoo

Menthol

Medicines

Plates and bowls

Rulers

Oars

Computer casings

Stain remover

Coffee filters

Toothpicks

Imitation bacon

Diapers

Postcards

Tax forms

Sponges

Mulch

Postage stamps

Colognes

Fruit pie filling

Golf balls

Game boards

Suspending agent for

drinking soda

Pencils

Dry wall

Baby cribs

Decoys

Kites

Magazines

Ice cream thickener

Step ladders

Birthday cards

Broom sticks

Source: http://www.idahoforests.org/wood_you.htm

We Depend on Wood

Candy wrappers

Scenery

Party invitations

Disinfectants

CD inserts

Gummed tape

Fruit

Puzzles

Swings

Baking cups

Buttons

Cutting boards

Benches

Billboards

Disposable medical clothing

Church pews

Totem poles

Desks

Not convinced we all use Wood Products?

■ Toilet paper

■ Food packaging

■ Toothpaste

■ Toilet Seats

Source: http://www.idahoforests.org/wood_you.htm

Why Use Wood?

Simply Put:

We all use wood to increase our quality of life

Wood and wood products fit needs



Economic Significance

- The forest industry built
 Wisconsin's cities and Chicago in the 1800s
- The forest industry is critical to Wisconsin's economy today





Economic Significance

■ 800-900 loggers statewide

55 Master Loggers account for roughly 28% of the annual harvest





Economic Significance

Number of Companies:

1,292

Employees:

58,136

Value of Shipments: \$19.8 Billion

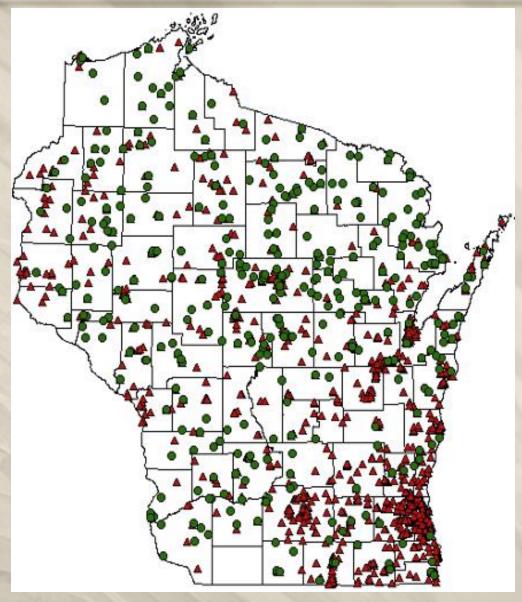


Forest Product Industry Locations



Legend

- Secondary Wood Industry
- Primary Wood Industry



Economics

- Wisconsin's Wood Products are Vast and Diverse
- Our Wood Products Reach International Markets
- Without the Wood Products Industry We Would not be able to Maintain Healthy Forests
- Wisconsin is the #1 Paper Making State and Has Been for 50 Years

Some Things are Obvious...



The Environmental Benefits of Wood

■ Forests are a Sustainable Resource

■ Wood is a Renewable Resource

Healthy Forests Provide Eco-System Services such as Clean Air and Water

■ Responsible wood harvests support sustainable forest amenities

Forests are a Productive Sustainable Resource:

Of Wisconsin's land base, 16 million acres (46%) are productive forest land

■ While significant forest lands are being lost in other states, Wisconsin's forest lands have increased by 640,000 acres since 1985.

■ Wisconsin grows more wood than it removes- about 490 million cubic feet is grown each year, while only 332 million cubic feet is removed.

Forests sequester carbon- a major contributor to green house gasses.

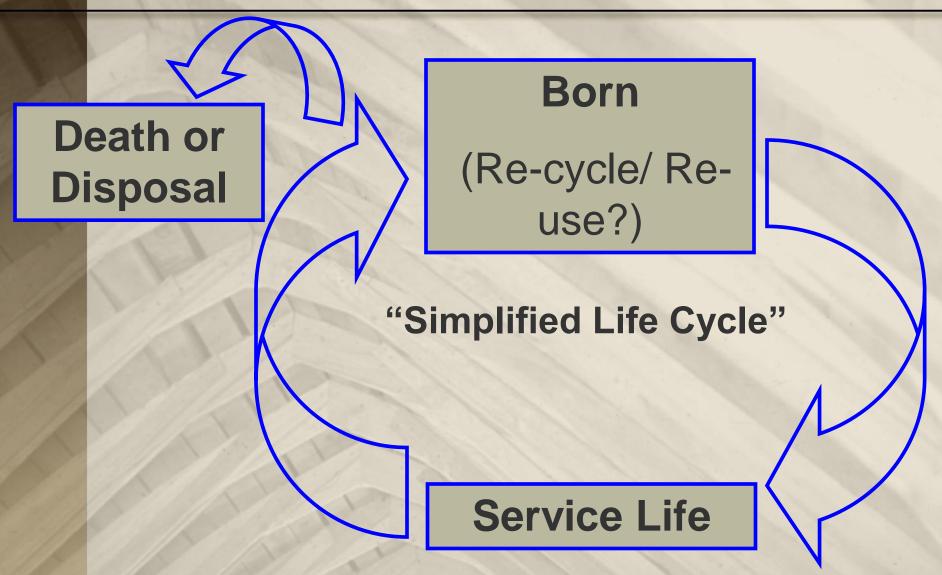
■Forest products lock up the stored carbon- often for 100's if not 1000's of years.

What about other Resources?

"Decisions that discourage the use of wood and other non-wood building products are made each day at all levels of industry and government. While many decisions may be motivated by a desire to protect the environment, individuals making these decisions may not consider the negative consequences associated with using non-wood substitutes."

CORRIM Website http://www.corrim.org

Life Cycle Thinking



Life-Cycle Assessment (LCA):

Systematic approach to uncover the impacts associated with a product or process

Comprehensively quantify inputs and outputs required to manufacture a product:

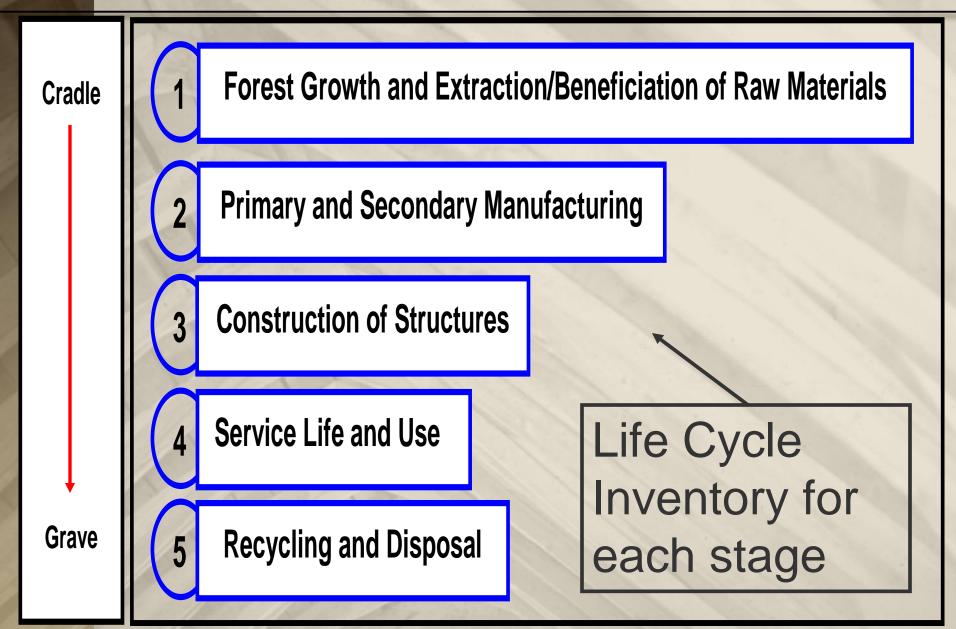
Raw materials, Energy, Products, Coproducts, and Emissions

Origins of life-cycle works:

- Traced to the late 1960's and early 1970's
- Coca-Cola Company is generally credited with the first use of LCA methodology during efforts to compare various beverage packaging materials in 1969
- Motivation for 15 early life-cycle efforts partially tied to the oil crisis of the early and mid 1970's
- Today practiced worldwide by many disciplines

- Life-Cycle Inventory (LCI)
 - Gate to gate vs. Cradle to gate
 - Boundary's (on-site and cumulative)
 - Modules

- Impact assessment
 - How does the product impact global warming potential, water quality, human toxicity, etc.



Considerations:

- Woody biomass generated on-site is beneficial
 - Value added furnish
 - Wood for on-site fuel (reduced fossil fuels use)
 - Fiber board furnish etc.
- Kiln drying
 - Energy intensive; necessary for stable flooring
 - Innovative use of drying methods represents potentially large energy savings
 - Easier said than done

Take Home Points:

- Many LCA's Completed
- They Can Scientifically Substantiate Environmental Claims
- Wood Products Have Been Shown to be a Preferable Choice for Many Industrial and Residential Applications

Example of Woods' Story

Nutrition Facts Serving Size 1 cup (228g) Servings Per Container 2 **Amount Per Serving** Calories 250 Calories from Fat 110 % Daily Value⁴ Total Fat 12g 18% 15% Saturated Fat 3g Trans Fat 3g Cholesterol 30mg 10% Sodium 470mg 20% Total Carbohydrate 31g 10% Dietary Fiber 0g 0% Sugars 5g Protein 5g Vitamin A 2% Vitamin C Calcium 20% Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on vour calorie needs. Calories: 2.000 2.500 Total Fat Less than 65q 80g Sat Fat Less than 25g 20g Cholesterol Less than 300mg 300mg Sodium Less than 2.400ma 2.400ma Total Carbohydrate 300a 375g Dietary Fiber 25g 30a

Environmental Product Declarations (EPDs)

- Qualified environmental data for a product from a LCA conducted according to ISO standards
- Emerging labels?

Summary

Perhaps the Question Why Use Wood, Should be: "Why Wouldn't We?"

- Wood is a Renewable Resource
- Healthy Forests Provide a Wide Variety of Amenities- it Takes Harvesting to Achieve Forest Management Goals
- Products Made From Wood Often Have Smaller Footprints Compared to Alternatives.

Why Use Wood?

- We all use wood to increase our quality of life
- Wood is a renewable resource
- Responsible wood harvests support sustainable forest amenities
- Wood products production is a key component of Wisconsin's economy
- Wood products are environmentally friendly
- Wood fits needs

Wood Fits Needs

Wood moves the world: A large % of wood manufacture in Wisconsin is pallet production.



Summary

- Overall WI is doing better than many other states in retaining forest industries.
- Challenges facing the forest industry.
 - Global competition
 - Slump in the economy
 - Consolidations
- One company closing can devastate a town
- Look for new niche markets



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Questions?

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http://www.woodindustry.forest.wisc.edu