# Focus On

# Wood Consumption



Every year, society's appetite for materials increases. A growing world population, expanding industrialization, and rising incomes, is driving raw material extraction to an increasingly unsustainable rate.

Industrialized countries—particularly the United States—are disproportionately large consumers. People in industrialized countries comprise only about 20 percent of the global population, yet they consume 81 percent of the world's paper and 76 percent of its timber. The average American now consumes twice as many goods and services as in 1950. Sustaining world consumption at the same rate as America would require three times the land on Earth.

Global wood consumption is projected to increase by more than 50 percent by 2050.

Contributing to the unsustainable rise in materials consumption is the overwhelming demand for wood products. Global wood consumption is projected to increase by at least 20 percent by 2010 and by more than 50 percent by 2050.

The drastic rise in wood consumption propels the depletion of the world's forests. Nearly a fifth of the earth's forested areas have been cleared since 1950 alone. Industries that benefit from logging tout the benefits of tree plantations, identifying trees as a renewable resource. In reality, however, 10 times more forests are lost globally each year than are gained through regrowth—a net destruction of 40 million acres annually. Moreover, tree plantations ignore the unique benefits of natural forests—biodiversity, climate control, flood control, soil conservation, and other benefits.

#### **Wood Products**

Our lifestyles are becoming increasingly reliant on paper—which accounts for nearly half of all commercial wood—from office paper, to newspapers, to books, to catalogues, to mail. With the advent of computers and electronic equipment, many envisioned a "paperless office." In reality,

personal computer users alone are estimated to consume more than 115 billion sheets of paper annually. Half of the world's paper is turned into packaging such as corrugated boxes and food containers. The packaging industry has more than tripled in the past 40 years. Paper consumption is currently more than six times the 1950 level, and has more than doubled since the 1970s. The amount of paper used globally each year could fill the Empire State Building almost 400 times or make a pile that could reach to the moon and back more than eight times.

Construction and building industries account for 25 percent of the world's wood harvest. The number of buildings and homes increased drastically over the past 25 years. By 2010 there will be 81 million more buildings than in 1996. The average size of homes has increased significantly, with floor space per person more than doubling in new homes between 1949 and 1993.

Pallets comprise one of the most wasteful uses of wood. Nearly half of the country's hardwood is made into crates and pallets which are often used once and thrown away.

To conserve the world's forests, we must reinvent our wood use at every step: production, consumption, and disposal.

#### Paper Reduction Strategies:

- Eliminate needless copies
- Reuse the back side of paper
- Use dual-sided printing & copying
- Reuse folders and envelopes
- Use lighter weight papers
- Post documents online
- Purchase reusable cups and plates

#### **Production**

Reduce Waste: In the United States, 25 percent of wood that is cut never enters the commercial flow due to wasteful manufacturing operations. Often, wasteful practices

Changing 75

percent of the 4

million tons of

in the United

copy paper used

States each year

from 20-pound

weight to 18-

pound weight

would trim paper

use by 300,000

tons per year.

can be modified to realize wood conservation and cost savings to manufacturers. For example, some industrial mills started using smaller blades to saw logs, thus reducing the amount of wood lost as sawdust.

Wood Efficiency: Redesigning products to be more compact or lightweight can reduce wood use through efficiency without compromising performance.

Product Durability: We must shift from disposable products toward durable and easily repaired and/or reused products.

Recovered Waste: Wood products should contain the maximum amount of post-consumer fiber possible. Recovering wood reduces the waste stream and the demand for virgin wood. Additionally, products should be made to be easily recyclable.

Non-Wood Fibers: Manufacturers should use alternative, non-wood materials. Non-wood buildings include rammed earth, adobe and straw bale. Paper can blend in kenaf, straw, hemp and other agricultural fibers.

Green Labeling: Product labeling should include or reflect environmental information such as materials origin, recycled content, capacity for reuse and recycling, and the environmental cost of production, so that consumers can make educated purchasing decisions.

## Consumption

Government: Government purchasing accounts for 20 percent of the U.S. Gross Domestic Product. This huge purchasing power can be leveraged to create and stabilize markets for environmentally preferable wood products.

Universities: College campuses operate as microcosms of society with offices, residences, hospitals, stores, labs, restaurants, etc. In each of these domains, universities have the opportunity to make "forest-friendly" purchases, including the paper sold in notebooks, their construction practices and their janitorial supplies.

Businesses: Businesses are increasingly "greening" purchases and finding the practices to be cost-effective. Bank of

America saved more than \$500,000 by reducing the weight of ATM receipts. Time Inc. conducted environmental reviews of its suppliers on recycling, paper manufacturing, forest management and other practices.

Publishers: As large paper consumers, publishers must demand more environmental papers. They can also use lighter weight papers and computer assisted layout to maximize printing efficiency.

Individual Consumers: Consumers are bombarded daily with thousands of advertising images linking material goods with happiness. Consumers rarely, however, see the logging operations that supply wood products. Increased consumer awareness about materials conservation will promote environmentally responsible purchases.

#### Disposal

We must change our view of "trash" and begin implementing strategies for using wood to its fullest before throwing it away.

Reuse: Products such as office paper, shipping containers, lumber, and packaging should be reused. UPS created a reusable shipping envelope, which not only cut down on materials, but makes it easier for the recipient to respond to the sender.

Repair/Remanufacture: Wood products such as furniture and pallets should be repaired or remanufactured and then reused rather than sent to the landfill.

Recycle: At the true end of a wood product's useful life, it should be recycled and reintegrated into the economy.

### **Policies**

Government agencies must change counterproductive policies. Policies must provide incentives to promote materials efficiency. Subsidies for logging must be eliminated and timber companies forced to pay the true cost of logging the world's forests.

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