

FACTS

The Facts About Trees & Wood

How it stacks up against other materials in our environment

Wood Products

One acre of forest can supply wood products for 250 people. About 1,664 pounds, or one log 18 inches across and 25 feet long will meet the needs of an average person annually for building supplies, newsprint, printing and writing paper, tissue paper, paper towels, product packaging and mail. Also, there are hundreds of products you might not think contained wood fiber like toothpaste, football helmets, scotch tape and milk shakes.

Source: Wisconsin DNR Forestry Page

Carbon by the Pound, and the Acre

To grow a pound of wood, a tree uses 1.47 pounds of carbon dioxide and gives off 1.07 pounds of oxygen. An acre of trees might grow 4,000 pounds of wood in a year, using 5,880 pounds of carbon dioxide and giving off 4,280 pounds of oxygen in the process. Source: <http://www.maine.gov/doc/foilage/kids/forestfacts.html>

Cars and Carbon

For every 10,000 miles driven in a vehicle that gets 20 mpg plant 15 trees to offset the CO₂ production. Maryland Forest Service). In Wisconsin 1 acre of forest absorbs the equivalent of 1 year of vehicle driving ~26,000 miles and 1.5 tons of carbon Source: USDA Forest Service and EPA

Wood and Water

Forests filter water to remove pollutants from rainfall before it enters our waterways and they also slow and hold stormwater runoff which can reduce flooding risk and keep surface pollutants out of the water. In fact, one acre of forest produces only 1/36th the storm runoff of 1 acre of parking lot. Source: Pennsylvania Forest Service and City of San Diego

Wood vs. Steel

- It takes 9 times as much energy to produce a steel stud than a wood one
- Steel consumes 4,000 times more coal, gas and oil to mine and produce than wood.
- Making steel releases 15 times the sulfur dioxide and 27 times the nitrous oxide as wood.
- Steel requires 25 times more water to manufacture than wood.
- Emissions from gas used in steel processing have increased 900% since 1950.
- Emissions from oil used in steel processing have increased 500% since then.
- Wood is more energy efficient in a building, with an R-rating (a measure of insulating ability) 413 times greater than steel.

Wood vs. Concrete

- It takes 21 times more energy to produce a concrete slab floor than a raised wood floor.
- Producing concrete emits up to 3 times more carbon dioxide, carbon monoxide and hydrocarbons than manufacturing lumber.
- Wood has an R-rating 8 times greater than concrete.

Wood vs. Aluminum

- It takes 5 times more energy to produce aluminum siding than wood siding.
- Producing aluminum generates 8 times more air emissions and 300 times more water emissions than lumber.
- Wood has an R-rating 2,000 times greater than aluminum.
- Aluminum requires large amounts of energy to recycle.
- It's estimated we'll run out of bauxite, the main ingredient in aluminum, in less than 200 years.

Wood vs. Plastic

- Plastic is made from non-renewable petrochemicals.
- Plastic is not biodegradable. It remains in its current form for at least 500 years.
- Plastic recycling requires toxic chemicals that can make the process dangerous and costly. Source: California Forest Products Association