



## As a Matter of Fact

### Fun Tidbits About Recycling, Energy and Climate Change

Sometimes using the right statement can help change a person's behavior for the better. Try some of these when you need a little extra something in brochures, presentations, educational materials, or just want to convince a friend that recycling is the right thing to do!

#### *Recycling & Jobs*

- Incinerating 10,000 tons of waste creates one job; landfilling 10,000 tons of waste creates six jobs; recycling 10,000 tons of waste creates 36 jobs. ( *EPA, "Resource Conservation Challenge: Campaigning Against Waste," EPA 530-F-02-033, 2002* )
- In 2000, the U.S. recycling industry employed over 1.1 million people and generated an annual payroll of \$37 billion, representing a significant force in the country's economy, job creation and economic development. ( *National Recycling Coalition, "US Recycling Economic Information Study, Final Report," Prepared for the National Recycling Coalition by R.W. Beck Inc., July 2001* )
- The global recycling industry employs more than 1.5 million people. ( *Worldwatch Institute, State of the World 2004 Special Focus: The Consumer Society, January 2004, ISBN: 0-393-32539-3* )

#### *Kilowatt Hours/Watts/Electricity*

- Manufacturing one ton of office and computer paper with recycled paper stock can save between 3,000 and 4,000 kilowatt hours over the same ton of paper made with virgin wood products. (EPA)
- The energy saved from recycling one glass bottle will operate a 100-watt light bulb for four hours. (EPA)
- Recycling one aluminum beverage can saves enough energy to run a 14 watt CFL bulb (60 watt incandescent equivalent) for 20 hours, a computer for 3 hours, or a TV for 2 hours. (EPA)
- Recycling a single aluminum can saves enough energy to power a TV for three hours. (Pepsi)
- Recycle this can and save enough energy to power a 100-watt light bulb for four hours. (Pepsi)
- According to the Steel Recycling Institute, steel recycling in the United States saves the energy equivalent to electrical power for about one-fifth of American households for one year. (EPA)
- Recycling aluminum cans in the United States in 1996 saved enough energy to power a city the size of Philadelphia for one year. From World Watch Institute, December 1998

- The energy saved from recycling one wine bottle will operate a 100-watt light bulb for three hours. (*Calculation*, courtesy of Robert Kirby, manager for R & D, Sandhill Industries, June 2003)
- If you recycled all the aluminum cans the average person consumed in their lifetime it could power a TV for 130,000 hours or in other words 14 years. (Unknown)

### *Energy in General*

- Producing recycled paper requires about 60 percent of the energy used to make paper from virgin wood pulp. (EPA)
- Recycling steel and tin cans saves between 60 and 74 percent of the energy used to produce them from raw materials. (EPA)
- Producing new plastic from recycled material uses only two-thirds of the energy required to manufacture it from raw materials. (EPA)
- Producing glass from virgin materials requires 30 percent more energy than producing it from crushed, used glass. (EPA)
- Aluminum can be recycled using less than 5 percent of the energy used to make the original product. (EPA)
- Used glass or "cullet" melts at a lower temperature than raw materials, reducing the demand for energy and lowering production costs. (*Clean Washington Center*, "Saving Energy with Cullet and Preheating," November 1996)
- If all our newspaper was recycled, we could save about 250,000,000 trees each year! Each ton of recycled paper can save 17 trees, *380 gallons of oil*, three cubic yards of landfill space, *4000 kilowatts of energy*, and 7000 gallons of water. This represents a 64% energy savings, a 58% water savings, and 60 pounds less air pollution! That's because one tree can filter up to 60 pounds of pollutants from the air each year.

### *Climate Change/Greenhouse Gases*

- Recycling one ton of aluminum is equivalent to not releasing 13 tons of carbon dioxide (a greenhouse gas) into the air. (Oregon Department of Environmental Quality, "Rethinking Recycling: An Oregon Waste Reduction Curriculum," 2001)
- By recycling all of its paper, plastic, and corrugated waste generated in a year, an office building of 7,000 workers could reduce greenhouse gas emissions by 1,200 metric tons of carbon equivalent. This is equivalent to taking 900 cars off the road in one year. (EPA, "Solid Waste and Emergency Response," EPA 530-F-02-034, 2002)
- Learn about the specific environmental benefits [Connecticut](#) residents and businesses made by recycling. (NERC)

### *Saving Oil/Gasoline*

- One ton of recycled steel saves the energy equivalent of 3.6 barrels of oil and 1.49 tons of iron ore over the production of new steel. (EPA)
- In 2000, the national recycling rate of 30 percent saved the equivalent of more than five billion gallons of gasoline, reducing dependence on foreign oil by 114 million barrels.

(EPA, "Resource Conservation Challenge: Campaigning Against Waste," EPA 530-F-02-033, 2002)

- Recycling a PC consumes 20 times more energy than reusing it ( *Computers and the Environment: Understanding and Managing their Impacts* , United Nations University, 2003)
- Recycling 35 percent of U.S. trash saves enough energy to fuel six million homes annually, generates \$5.2 billion in raw materials each year, and reduces global warming emissions equivalent to taking 36 million cars off the road. (*Office of the Federal Environmental Executive, White House Task Force on Recycling, "Recycling for the Future," June 1999*)

## More Facts

Recycling Economic Information Study, December 2020 [RSS Infographic](#), [RSS Full Study](#)

[Envirofacts](#) (EPA)

[Questions, Answers & Myths About Recycled Paper](#) (Conservatree)

[The Cheeseburger Footprint](#) (Jamais Cascio, Open the Future)

Disclaimer: The Connecticut Department of Energy and Environmental Protection (DEEP) maintains the content on this web site to enhance public access to information and facilitate understanding of waste reduction, reuse and recycling. The DEEP is not recommending these resources over any others and recognizes these represent only a partial listing of resources on this subject.