

# RECYCLING:

## A WORLD OF REASONS TO JUST DO IT

Most people are aware of the most talked about reasons why recycling is so vitally important. They understand the limited space available for landfills, and the limited quantities of natural resources.

These days, there are environmental tips popping up everywhere from grocery bags to 30-second spots during Saturday cartoons. Still some of the most significant and far reaching advantages of recycling often go unmentioned.

So we've provided some details on a couple of very important reasons to recycle.

### RECYCLING IS A GREAT ENERGY SAVER

Recycling saves energy because making new products from secondary rather than virgin materials is more efficient since much of the processing has already taken place. This bypasses energy-intensive and environmentally damaging steps, such as strip mining, refining ores, and grinding pulpwood.

Secondary ingredients only require the removal of contaminants, such as inks from paper, lacquer from cans and the return of already-refined material to a useable condition, such as re-melting metals or glass or re-pulping paper.

Just how much energy is saved through recycling? Take a look:

- Recycling 1 aluminum can saves enough energy to keep a 100 watt bulb burning for 3-1/2 hours.
- By recycling 1.7 billion pounds of aluminum cans in 1990, it saved enough energy to serve Pittsburgh's power needs for 6 years.
- For every pound of steel recycled, 5450 BTU of energy are conserved, enough to light a 60-watt bulb for 26 hours.

- It takes 49,000 BTU to produce one pound of new PET plastic (the kind found in soft drink bottles). But it only takes 6,000 BTU to make one pound of recycled PET plastic.
- Recycling one pound of HDPE plastic, (milk jugs) saves about 38,000 BTU.
- Each ton of recycled paper requires 4,100 kwh less of energy than producing paper made from virgin materials.
- Recycling one ton of glass saves 9 gallons of fuel oil because the cullet (ground recycled glass) melts at a lesser temperature than the raw ingredients.

It's especially appropriate to focus on energy savings right now with a proposed increase in energy and BTU taxes being discussed in Washington. Regardless of the outcome in D.C., hopefully the proposed tax has prompted manufacturers to begin exploring new ways to reduce energy consumption in the future - namely by using more recyclable materials in their production processes. That would be good news to cities because there would be expanded markets for recyclables collected.

### RECYCLING CUTS DOWN ON POLLUTION

And just one additional, but not often discussed benefit of recycling...it cuts down significantly on pollution. Using recyclable materials in manufacturing processes can cut air pollution by up to 22% for glass, 72% for paper and 95% for aluminum.

Recycling more of these materials will help to slow the "greenhouse effect" caused by the build-up of gasses, mainly carbon dioxide, from burning oil and coal that's disrupting the earth's atmospheric balance.

The combined benefits of greatly reduced energy use and significantly reduced environmental pollution makes recycling a "win-win" situation!

Sources: Resource Recycling, January/February 1989, Institute of Scrap Recycling Industries, Inc., ALCOA and Aluminum Association, U.S. Environmental Protection Agency, and the Glass Packaging Institute.

### MANUFACTURING ENERGY SAVED THROUGH USE OF RECYCLABLE MATERIALS

Material	Million BTUs Saved Per Ton Recycled	Percent Of Savings
Aluminum	23	95%
Plastic	86	88%
Steel and Iron	12	60%
Newsprint	10	34%
Glass	4	22%