



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Recycling

www.idem.IN.gov

Mitchell E. Daniels, Jr.

Thomas W. Easterly

Governor

Commissioner

100 North Senate Avenue, Mail Code 64-01, Indianapolis, IN 46204

Phone: (317) 232-8172

Toll Free: (800) 988-7901

Description:

- Recycling involves collecting, sorting and processing materials that would otherwise become waste and remanufacturing the materials into new products. Today, much of the aluminum, glass, paper and steel used in new packaging have been recycled. Half of the nation's aluminum cans are made from recycled aluminum and one-quarter of the raw fiber used in the paper industry is from recycled paper products. Glass, aluminum and steel containers can be recycled again and again.
- Do you know that Hoosiers generate approximately 8 million tons of municipal solid waste every year? The generation of all this waste uses energy and natural resources and creates pollution.
- The three Rs, "Reduce, Reuse, Recycle" are ways each person can save energy and natural resources, and reduce pollution in their daily living and work.
 - **Reduce** means buying in bulk, buying products with less packaging, and using refillable products; it helps to reduce consumer and business costs.
 - **Reuse** of products or packaging delays or avoids their entry back into the waste stream and saves consumer and business costs. According to the Reuse Development Organization (www.redo.org) there are more than 6,000 reuse centers in the United States.
 - **Recycling** takes what could become waste and cycles it back into new, useful products. It isn't a perfect system. Recycling requires resources and energy and facilities that do take up space, but recycling reduces the amount of material being stored in landfills or burned in incinerators. Other benefits of recycling include:
 - Creates more jobs than waste disposal;
 - Uses less energy than mining, harvesting, importing and otherwise processing raw materials;
 - Destroys less natural habitat; and,
 - Creates less pollution than waste disposal.

Environmental Impacts:

- By reducing the amount of energy used by industry, recycling reduces greenhouse gas emissions and helps reduce the impact of global climate change. This is because much of the energy used in industrial processes and transportation involves burning fossil fuels like gasoline, diesel and coal, the most important sources of carbon and other greenhouse gas emissions. Additional benefits are derived from reduced emissions from incinerators and landfills and by slowing the harvest of trees, which absorb carbon produced from the burning of fossil fuels.
- Recycling also reduces a range of pollutants from entering the air and water. By decreasing the need to extract and process new raw materials from the earth, recycling can eliminate the pollution associated with the initial stages of a product's development: material extraction, refining and processing. These activities create pollutants, such as ammonia, carbon monoxide, methane and sulfur dioxides. Further reductions are achieved as a result of reducing energy use, thus reducing greenhouse gas emissions and other air pollutants.
- In 2005, Americans generated 246 million tons of municipal solid waste while recycling only 58 million tons of materials. This rate of use and disposal takes a heavy toll on natural resources, especially the finite resources from mines.

- Reprocessing materials to make new products and packaging reduces the consumption of natural resources. By recycling 5 million tons of steel in 2005, Americans saved over 6 million tons of iron ore, 2.5 million tons of coal and 62,500 tons of limestone. By recycling 42 million tons of newsprint, office paper and paperboard, Americans saved 714 million trees and 292,026 million gallons of water. Recycling often produces better products than those made of virgin materials; for instance, the tin in "tin" cans is more refined (thus more valuable) after being processed for recycling.
- Energy savings are an important environmental benefit of recycling. Most energy production involves the consumption of fossil fuels and usually produces emissions of air, land and water pollutants. The steps in supplying recycled materials to industry (including collection, processing and transportation) typically use less energy than the steps in supplying virgin materials to industry (including extraction, refining, transporting and processing).
- Additional energy savings associated with recycling accrue in the manufacturing process itself. It requires less energy to manufacture products from recycled materials than from raw materials. In 2005, American's recycled enough municipal solid waste to reduce manufacturing energy use by more than 988,489,000 million BTUs, enough energy to power 10,721,139 homes. Other benefits to the manufacturing process include:
 - Recycling paper cuts energy usage in half;
 - Every pound of steel recycled saves 5,450 BTUs of energy, enough to light a sixty (60)-watt bulb for over twenty-six (26) hours;
 - Recycling a ton of glass saves the equivalent of nine (9) gallons of fuel oil;
 - Recycling used aluminum cans requires only about 5% of the energy needed to produce aluminum from bauxite; and,
 - Recycling just one (1) aluminum can saves enough electricity to light a one-hundred (100)-watt bulb for 3½ hours.

IDEM's Role:

- The Indiana Department of Environmental Management (IDEM) is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial and governmental operations vital to a prosperous economy.
- IDEM's Office of Pollution Prevention and Technical Assistance helps Indiana businesses, communities and local governments develop recycling collection programs and markets for recyclable materials.

Citizen's Role:

- Find out how you can recycle at your home or business. Contact your local solid waste management district, recycler, waste disposal company or community for information.
 - Set aside glass and plastic, cans, old newspaper, office paper, junk mail and cardboard for recycling.
 - Find out if your community has a curbside recycling program, or take your recyclables to a drop-off or drive-through recycling center.
 - Reduce waste by buying in bulk, donating items to reuse centers and reusing products whenever possible.
 - Purchase products made from recycled material to create a closed circle or loop that ensures the overall success and value of recycling.

Additional Information:

- For more information on recycling, visit IDEM's Web site at <http://www.Recycle.IN.gov>.
- For questions and concerns about recycling, call IDEM's Office of Pollution Prevention and Technical Assistance at (800) 988-7901.
- For information about recycling in the Indianapolis area, visit the City of Indianapolis' SustainIndy Web site at <http://www.sustainindy.org>, or the Keep Indianapolis Beautiful Web site at <http://www.kibi.org>.