

Recycling and composting more than 89 million tons of municipal solid waste (MSW) saved more than 1.1 quadrillion BTU of energy in 2014. That's the same amount of energy consumed by more than 25 million U.S. households per year.

-- U.S. EPA, Advancing Sustainable Materials Management: 2014 Fact Sheet, Nov. 2016

Recycling one ton of newspaper saves the equivalent of 100 gallons of gasoline.

Recycling one ton of glass saves the equivalent of 10 gallons of oil.

-- Wisconsin Department of Natural Resources, Recycling Facts & Figures (PUBL CE-163), 2002

Recycling an aluminum can saves 95 percent of the energy required to make the same amount of aluminum from virgin materials.

-- U.S. EPA, 2000

Recycling just one aluminum can saves enough energy to run a television set for 3 hours.

Every pound of recycled PET plastic used in place of virgin material reduces energy use in plastic production by 84 percent.

-- BYU Idaho, Recycling Statistics, viewed 11-28-16, <http://www.byui.edu/university-operations/facilities-management/recycling-and-sustainability/recycling-statistics>

Recycling one aluminum can saves enough energy to listen to a full album on your iPod. Recycling 100 cans could light your bedroom for two whole weeks.

-- Do Something.org, 11 Facts About Recycling, viewed 11-28-16, <https://www.dosomething.org/us/facts/11-facts-about-recycling>

Every ton of paper recycled can save the energy equivalent of 165 gallons of gasoline.

Manufacturing recycled paper uses only 60% of the energy needed to make paper from new materials.

Recycling steel and tin cans saves 74% of the energy used to make them from virgin materials.

By making new glass bottles from 50% recycled material, enough energy is saved to power 45,000 homes for a year.

-- Recyclingbin.com, Recycling Facts, viewed 11-28-16, <http://www.recyclingbin.com/Recycling-Facts>

Recycling one ton of plastic bottles saves the equivalent energy usage of a two person household for one year.

It requires 95% less energy and water to recycle a can than it does to create a can from virgin materials.

Recycling just one glass jar saves enough electricity to light an 11 watt CFL bulb for 20 hours.

Recycling cardboard only takes 75% of the energy needed to make new cardboard.

Recycling 1 ton of cardboard saves 46 gallons of oil.

-- Recycle Across America, Did You Know, viewed 11-28-16,

<http://www.recycleacrossamerica.org/recycling-facts>

By recycling one ton of aluminum cans, we conserve more than 207 million Btu, the equivalent of 36 barrels of oil or 1,665 gallons of gasoline.

While the amount of energy we save by recycling varies depending on what type of material we are recycling, almost all recycling processes save significant amounts of energy when compared with processes that use virgin materials.

In 2010, we recycled and composted nearly 85 million tons of municipal solid waste. By doing this, we saved more than 1.3 quadrillion Btu of energy, the equivalent of over 229 million barrels of oil.

-- American Geosciences Institute, How does recycling save energy?, viewed 11-28-16,

<http://www.americangeosciences.org/critical-issues/faq/how-does-recycling-save-energy>

Seattle economist Jeffery Morris estimated that manufacturing one ton of office and computer paper with recycled paper stock can save nearly 3000 kilowatt hours over the same ton of paper made with virgin wood products.

A ton of soda cans made with recycled aluminum saves an amazing 21,000 kilowatt hours by reducing the virgin bauxite (bozite) ore that would have to be mined, shipped, and refined. That's a 95% energy savings.

A ton of PET plastic containers made with recycled plastic conserves about 7,200 kilowatt hours.

The San Diego County Office of Education has figured out that recycling one glass bottle saves enough energy to light a 100 watt light bulb for four hours.

The Steel Recycling Institute has found that steel recycling saves enough energy to electrically power the equivalent of 18 million homes for a year.

The amount of lost energy from throwing away recyclable commodities such as aluminum cans and newspapers is equivalent to the annual output of 15 power plants. (See How much energy is saved by recycling? and How much energy is in a can? on website for detailed information about different commodities.)

-- Stanford University, Frequently Asked Questions: Benefits of Recycling, viewed 11-28-16,

[http://bgm.stanford.edu/pssi\\_faq\\_benefits](http://bgm.stanford.edu/pssi_faq_benefits)

Recycling one ton of (material) saves ? million Btu (? barrels of crude oil)

- Aluminum cans – 209 (36)
- Carpeting – 106 (18)
- Copper wire – 83.1 (14)
- HDPE milk jugs – 51.4 (8.9)
- Steel cans – 20.5 (3.5)
- Newspaper – 16.9 (2.9)
- Glass – 2.7 (0.47)

With recycling rate of 30.6% , country saves 1.5 quads of energy per year (one quad = one quadrillion or thousand-trillion Btu), or about 1.5% of our nation's total annual energy consumption. Boosting the national recycling rate to 35% would increase the total savings by another 0.23 quads – an amount equivalent to nearly 41 million barrels of crude oil.

-- Building Green, Saving Energy by Recycling, viewed 11-28-16,  
<https://www.buildinggreen.com/blog/saving-energy-recycling>

Waste Management has a bunch of facts (including kWh, barrels of oil and Btu for a variety of materials) on its website - <https://www.wm.com/location/california/ventura-county/west-hills/recycle/facts.jsp>.