The Scrap Recycling Industry: The Original Recyclers

From the earliest uses of scrap thousands of years ago, to the optical scanners, x-rays, and air jets separating materials (see bottom image) in today’s high-tech shredders, scrap recycling has evolved as the major industry dedicated to transforming materials to create new products and driving economies by making the old, new again. Today, the U.S. scrap recycling industry directly employs 156,000 men and women.

As the original recyclers, for decades — and indeed, centuries — the scrap recycling industry has been purchasing, processing, and brokering old materials to be remade into new products, providing critical resources for America’s manufacturing industries. Now, with a continuing societal focus on protecting our natural resources and reducing greenhouse gas emissions, the scrap recycling industry is being recognized as one of the world’s first green industries, while playing a prominent role as an economic leader, job creator, major exporter, and environmental steward.

Imagine a world without recycling

The world would be a dramatically different place, with more pollution and greenhouse gases, increased energy use, and dramatically faster depletion of our virgin natural resources. The scrap recycling industry annually transforms more than 130 million metric tons of obsolete materials from consumers, businesses, and manufacturers into useful raw materials. Without scrap recycling, more mining and use of virgin natural resources would be required. The world would be headed in a dangerous direction. Scrap recycling protects the earth’s air, water, and land, allowing society to have less impact on the planet and positively contributing to our quality of life.

THE SCRAP RECYCLING INDUSTRY

Two-thirds of the iron and steel made in the United States is manufactured using ferrous scrap.

Recycling one ton of steel conserves 2,500 lbs. of iron ore, 1,400 lbs. of coal and 120 lbs. of limestone.

Recycling one ton of aluminum conserves up to five metric tons of bauxite ore and 14 megawatt hours of electricity.

In 2017, the U.S. made more aluminum products from scrap than primary aluminum.

110 million tires were processed in 2016 for reuse in a variety of industries.

Nearly 77 percent of U.S. paper makers use some recovered paper and fiber.

Recycling one ton of paper saves 3.3 cubic yards of landfill space.

Energy saved using recycled materials versus virgin materials up to:
- 95 percent for aluminum
- 75 percent for copper
- 88 percent for plastic
- 60 percent for iron and steel
- 60 percent for paper

Sources: EPA, International Aluminum Institute, Recycling Research Institute, SRI, USGS.