

Recycling Steel Appliances

Washing Machines, Water Heaters, Air Conditioners, Refrigerators, Dryers...



◆ Appliances are made from steel

Appliances are, in fact, systems of mechanical and electrical components encased in steel shells or bodies. Various operating parts are made of steel or iron. An important part of our lives, appliances provide convenience and fulfill essential roles—from the kitchen (refrigerators, freezers, dishwashers, etc.) to the laundry room (washers and dryers) and other rooms in the home (air conditioning units). In many homes, most rooms contain a steel appliance of some type.

◆ Recycled steel content of appliances

By weight, the typical appliance consists of about 60 percent steel. This steel is continuously recyclable, as is all steel, and is recycled daily. (To find a recycling location near you, visit the Steel Recycling Locator.) The steel used in appliances is made with a minimum of 25 percent recycled steel. In addition, internal steel components may be made using either 25 percent or up to 90 percent recycled steel—depending on the grade of steel and steelmaking process. Steel scrap is a vital ingredient in making new steel; melting the scrap to make new steel is fundamental to energy and emissions savings and resource conservation. For this reason, all appliances contain recycled steel and are recyclable when they have reached the end of their current role. After being recycled, the steel recovered from these appliances can be made into different steel products and their continuous life cycle runs on, as steel can be recycled into any other steel product. This is known as open-loop recycling.

◆ Nationwide recycling efforts

Appliances with steel content are simply too valuable to landfill, and would take up a considerable amount of our nation's valuable landfill space. As a result, a vast infrastructure has been developed around the recycling of end-of-service steel appliances, as well as other steel materials. Recycling programs are constantly adding appliances to their accepted materials because of the value in maintaining this sustainable cycle. Local communities, counties and even statewide programs have been created to increase steel appliance recycling. Many locations offer rebates for the purchase of new, efficient ENERGY STAR® appliances as well. But most often, appliances are recycled through the retailer that delivers updated appliances to consumers.

**BY WEIGHT, THE TYPICAL
APPLIANCE CONSISTS OF
ABOUT 60 PERCENT STEEL.**

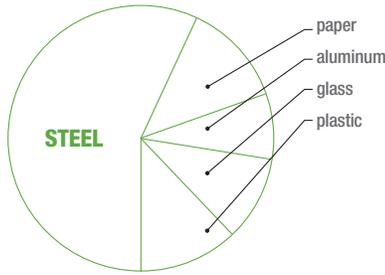


680 Andersen Drive, Pittsburgh, PA 15220
412.922.2772 | recycle-steel.org



By recycling one ton of steel, 2500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone are conserved.

Steel Recycling vs Other Materials



Environmental benefits

Recycling steel conserves energy and natural resources. In a year, the steel industry saves the equivalent energy to electrically power about 18 million households for that same amount of time. By recycling one ton of steel, 2500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone are conserved. The Clean Air Act of 1990 mandated that prior to recycling or disposal, chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) contained in air conditioners, refrigerators and freezers be removed for recycling. In some areas, scrap dealers have the CFC-removal equipment and certified technicians for this procedure. In other areas, specialty businesses provide this service, either independently, or in association with appliance dealers or the local government.

IN A YEAR, THE STEEL INDUSTRY SAVES THE EQUIVALENT ENERGY TO ELECTRICALLY POWER ABOUT 18 MILLION HOUSEHOLDS FOR THAT SAME AMOUNT OF TIME.

Landfill bans

All 50 states contribute to recycling appliances, with some working more aggressively than others to avoid unnecessary waste in landfills with these recyclable items. The purpose of these bans is to extend the life of the nation's landfills and to encourage private industry and the public sector to implement recycling of these goods. The large size of these appliances may make it seem more difficult than simple steel can recycling in the home but it is also the size of these steel products that makes it so important to treat them as a valuable, reusable material rather than waste or garbage.

About the Steel Recycling Institute

The Steel Recycling Institute (SRI), a unit of the American Iron and Steel Institute, educates the solid waste management industry, government, business and, ultimately, the consumer about the economic and environmental benefits of recycling steel. SRI works to ensure the continuing development of the steel recycling infrastructure.

