The Scrap Recycling Industry: 
**Aluminum, Copper, and Other Nonferrous Metals**

Nonferrous metals, including aluminum, copper, lead, nickel, tin, zinc and others, are among the few materials that do not degrade or lose their chemical or physical properties in the recycling process. As a result, nonferrous metals have the capacity to be recycled an infinite number of times. As society's awareness of the economic, environmental and energy savings associated with using recycling materials improves, along with the rapid growth in consumer demand for nonferrous metal-bearing products, the critical role of the reservoir of nonferrous metals in use becomes increasingly apparent. In the United States alone, the value of the nonferrous metal scrap industry, including precious and rare metal scrap, approached $50 billion in 2012.

While in terms of volume, nonferrous scrap makes up a relatively small percentage of the total quantity of material recycled in the United States, by value nonferrous metal scrap — including precious metal scrap — accounts for more than half of total U.S. scrap recycling industry earnings. More than 9.5 million metric tons of nonferrous scrap was processed in the United States last year from a wide array of consumer, commercial and industrial sources: everything from copper and precious metal circuitry in electronic devices, to soft-drink containers, automobile batteries and radiators, aluminum siding, airplane parts and more. Nonferrous scrap is then consumed by secondary smelters, refiners, ingot makers, fabricators, foundries and other industrial consumers in the United States and in more than 90 countries worldwide. These consumers rely on nonferrous scrap as a competitive, environmentally preferable and energy efficient input to manufacture brand new products, continuing the nonferrous metals lifecycle.

**INDUSTRY STATS**

**COPPER**
Copper is the best non-precious metal conductor of electricity.

The United States annually recycles enough copper to provide the copper content for 25,000 Statues of Liberty.

Copper and copper alloy scrap provides almost half of the copper consumed in the United States each year.

The United States provides more than 20 percent of the world supply of recovered copper.

**ALUMINUM**
The recycling rate for aluminum cans jumped seven points to 65.1 percent in 2011 as nearly 61 billion cans were recycled in the U.S.

In 2011 the United States domestically recycled aluminum cans saved the energy equivalent of 17 million barrels of gasoline — enough to fuel more than one million vehicles on the road for 12 months.

Energy saved using aluminum scrap vs. virgin materials is up to 92 percent.

**NONFERROUS SCRAP**
In recent years, domestically recycled content has provided more than 90 percent of apparent aluminum consumption.

Lead-acid batteries, a primary use for lead, have a 98 percent recycling rate.

A used aluminum can is recycled and back on the grocery shelf in as little as 60 days.

An estimated 85 to 90 percent of all automotive aluminum is recovered and recycled.

In 2012, the U.S. scrap industry processed (exports plus domestic recycled):
- 5.4 million metric tons of aluminum
- 2.0 million metric tons of copper
- 1.2 million metric tons of lead
- 240,000 metric tons of zinc
- 2 million tons of nickel/stainless steel

The United States exported nearly $14 billion worth of nonferrous scrap to more than 90 countries in 2012, including China, Canada, Mexico, South Korea, Japan, Taiwan, Belgium, India, and Germany.

According to the USGS, in 2012 the United States recovered approximately 9.5 million metric tons of nonferrous scrap. ISRI estimates that this nonferrous scrap was worth $49 billion.