

SUSTAINABILITY IN STEEL RECYCLING



Steel is 100 percent recyclable, which means it can be recycled into the same material of the same quality again and again. A steel beam can become another steel beam, or a refrigerator, car door or roof panel. When you buy steel you are buying recycled. In addition to being continually recyclable, steel's durable characteristics enable many common products to be reused.

Steel recycling is important to the circular economy as it conserves valuable resources and diverts useful materials from going to landfills. Millions of tons of steel are diverted from waste streams to recycling streams every year due to steel's magnetic properties that make it easy to separate from solid waste.

Domestic steel mills recycle their own steel scrap, as well as scrap from downstream product manufacturing processes and end-of-life products, to conserve energy, emissions and natural resources. There are typically 60 to 80 million tons of steel scrap recycled per year into new steel products in North America. In the past 30 years, more than one billion tons of steel scrap have been recycled into new steel by the North American steel industry. On average, the United States processes enough ferrous scrap daily, by weight, to build 25 Eiffel Towers every day of the year!

Steel's attributes, including its inherent durability and recyclability, make it vital to modern society. The North American steel industry is committed to manufacturing innovative products and implementing processes that achieve environmental, social and economic sustainability.



Recycling the steel from a single car reduces greenhouse gas emissions by an equivalent of consuming more than 150 gallons of gasoline. Recycling a single refrigerator reduces the resulting greenhouse gas emissions by 215 pounds of CO₂. Each year, the steel industry recycles steel from about 12 million appliances. Even recycling one steel food can conserves enough energy to light a 10-watt LED light bulb for more than 24 hours. Spread this over the 20 billion steel cans that are recycled each year and the savings are astounding.



Through recycling, the steel industry saves enough energy to supply the annual electricity needs of more than 18 million homes. A single ton of steel recycled conserves 2,500 pounds of iron ore, 1,400 pounds of coal and 120 pounds of limestone.* The steel industry's need for steel scrap is a job creator, supporting more than 531,000 scrap recycling jobs and generating more than \$110 billion in economic activity.

Steel Sustains. For more information on steel's sustainable properties and performance, please follow us on social media @AISISteel, @EnviroMetal, or contact Mark Thimons, AISI Vice President of Sustainability (mthimons@steel.org).

*Updated statistics on this data point will be available in late 2020.

