

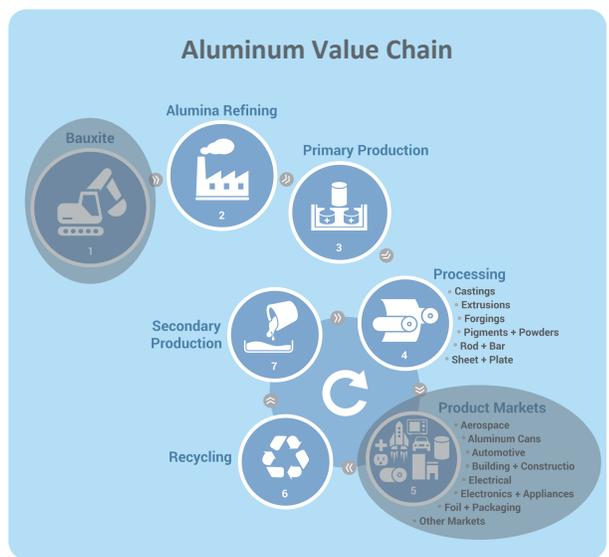
# ALUMINUM SECTOR SNAPSHOT

Outlining the Aluminum Industry's Environmental Progress

## WHAT IS THE US ALUMINUM INDUSTRY?

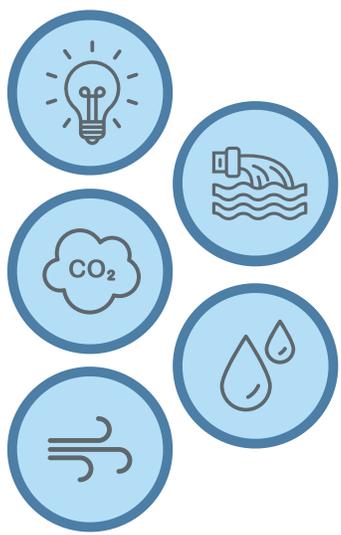
Aluminum is the most abundant metal in the earth's crust and, when processed and refined, a vital part of America's essential manufacturing base. The US aluminum industry represented by this data is comprised of companies and facilities across the supply chain that refine bauxite into alumina, produce primary aluminum for alumina (smelting), produce secondary aluminum from scrap (recycling), and produce semi-fabricated aluminum products like sheet, foil, extrusions, and cable.

As a lightweight, infinitely recyclable and durable material with a remarkable variety of industrial and consumer applications, aluminum provides an innovative solution to many 21st century challenges. Our aluminum products are typically sent to industrial customers for final fabrication into finished products like cans, window frames, automobile parts, and aircraft components.



*Note: Bauxite mining is not occurring in the United States. Additional manufacturing activities by producers in downstream sectors are not covered by this report.*

## WHAT DOES ENVIRONMENTAL PROGRESS LOOK LIKE IN THE US ALUMINUM INDUSTRY?



Over the past three decades, the aluminum industry has made significant progress in five key environmental metric areas: air, water, waste, energy, and greenhouse gasses. Aluminum producers have reduced environmental impact while increasing output, meeting the growing demand for the material while prioritizing sustainability. The data shown below was extracted by the Aluminum Association from publicly available U.S. government databases.

This data is for manufacturing activities U.S. facilities only. It does not include manufacturing activities related to imported aluminum. The snapshot is for the U.S. industry, not for aluminum products.

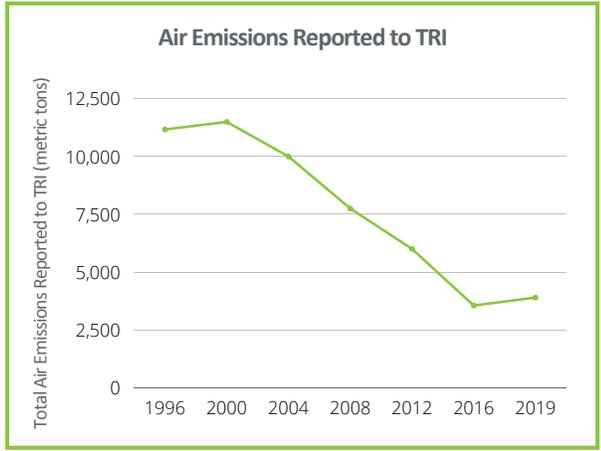
## AIR



**65%**  
CLEANER  
AIR



Total TRI air emissions for this sector decreased from just over 11k metric tons in 1996 to just under 4k metric tons in 2019. Total air emissions reported to TRI are EPCRA Section 313 chemicals and include both fugitive air emissions and point source air emissions. Criteria Air Pollutant (CAP) emissions from metals processing overall decreased from 2.3 million tons in 1996 to 873,000 tons in 2017. CAPs and precursors include lead, carbon monoxide, nitrogen oxide, sulfur dioxide, particulate matter (PM) 10 microns in diameter or less, PM 2.5 microns in diameter or less, and ozone.



*This information is modeled on EPA's Sector Snapshot Program, about which more information can be found [here](#).*

## ENERGY



**55%**  
LOWERED  
ENERGY  
CONSUMPTION



The Energy Information Administration's Manufacturing Energy Consumption Survey reported decreased energy usage in the aluminum sector from 750 trillion btu in 1998 to 334 trillion btu in 2018. Energy consumption for all purposes, also referred to as energy use, is the amount of primary energy consumption by the aluminum industry for its manufacturing and business activities.

## GREENHOUSE GAS



**59%**  
REDUCED  
GHG  
EMISSIONS



EPA's inventory of U.S. Greenhouse Gas Emissions and Sinks shows greenhouse gas (GHG) emissions from this sector decreased from 7.5 million metric tons in 2005 to 3.1 million metric tons of carbon dioxide equivalent in 2018. Aluminum manufacturing operations generate GHG emissions, which are subject to regulatory requirements under the Clean Air Act.

## WASTE



**93%**  
LESS  
HAZARDOUS  
WASTE



Hazardous waste is regulated by EPA through the Resource Conservation and Recovery Act (RCRA). Biennial Report data from that program shows a decrease in US aluminum industry hazardous waste generation from 480,000 metric tons in 2001 to 36,000 metric tons in 2019. Hazardous waste in the aluminum sector is currently regulated by RCRA, while generators of hazardous waste are subject to EPA's national system for solid waste control.

## WATER



**84%**  
CLEARER  
WATER



EPA'S TRI showed a decrease in chemical discharges to surface water from 235 metric tons in 1996 to 37 metric tons in 2019. Surface water discharges include discharges from contained sources, such as industrial process outflow pipes or open trenches, to streams, rivers, lakes, oceans and other bodies of water.

This snapshot is based on a more comprehensive dataset of environmental progress reported by the US aluminum industry. The full report can be found [here](#).