

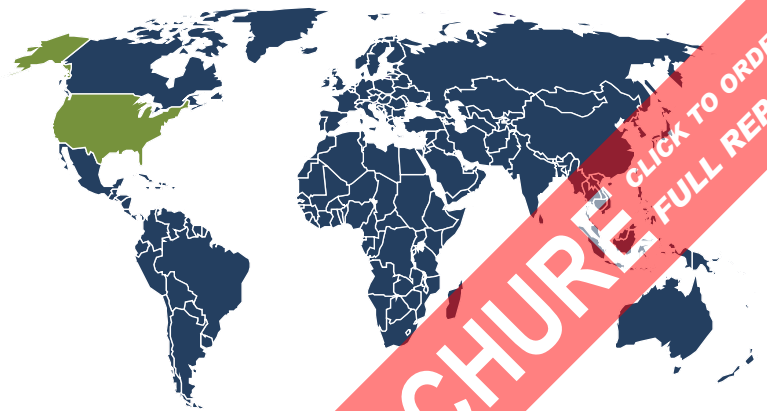


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# Aluminum:

## United States

June 2017



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# About This Report

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## Scope & Method

This report forecasts US aluminum demand and production in metric tons to 2021. Total demand is segmented by market in terms of:

- transport
- containers and packaging
- building and construction
- electrical
- other markets such as consumer products, non-transport machinery, and equipment.

To clarify industry terminology in the context of this report, bauxite is mined at mines, alumina is refined at refineries, and primary aluminum is produced at smelters. Aluminum refers to metallic aluminum and alloys thereof, and unless otherwise specified, does not include aluminum scrap. For the purposes of this report, secondary aluminum includes aluminum produced from both new and old scrap. Re-exports of aluminum are excluded from demand and trade figures.

Total production is segmented by type as follows:

- primary
- secondary.

To illustrate historical trends, total demand, total production, the various segments, and trade are provided in annual series from 2006 to 2016.

This report quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or  $r^2$ . The most stable data series relative to the trend carries an  $r^2$  value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading suppliers, are covered in this report. A full outline of report items by page is available in the Table of Contents.

## Sources

*Aluminum: United States* (FF65010) represents the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources including:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- national, regional, and international non-governmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group.

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

## Industry Codes

Table 6 | Industry Codes Related to Aluminum

NAICS/SCIAN 2007		SIC	
North American Industry Classification System		Standard Industry Codes	
331311	Alumina Refining	2819	Industrial Inorganic Chemicals, NEC
331312	Primary Aluminum Production	3334	Primary Production of Aluminum
331314	Secondary Smelting and Alloying of Aluminum	3341	Secondary Smelting and Refining of Nonferrous Metals
331315	Aluminum Sheet, Plate, and Foil Manufacturing	3353	Aluminum Sheet, Plate, and Foil
331316	Aluminum Extruded Product Manufacturing	3354	Aluminum Extruded Products
332431	Metal Can Manufacturing	3411	Metal Cans

Source: US Census Bureau

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## Resources

### The Freedonia Group

#### Freedonia Industry Studies

*Commercial Windows & Doors*, August 2016

*Residential Windows & Doors*, July 2016

*World Roofing*, May 2016

*Beverage Containers*, June 2015

#### Freedonia Focus Reports

*Beer: United States*

*Beverage Containers: United States*

*Beverages: United States*

*Civil Aircraft: United States*

*Fiber-Reinforced Plastic Composites: United States*

*Motor Vehicles: United States*

*Packaging: United States*

*Recovered Metals: United States*

*Sheet Metal: United States*

#### Freedonia Custom Research

### Trade Publications

*Aluminum Insider*

*American Metal Market*

*Engineering & Mining Journal*

*Industrial Minerals*

*Platts Metals Week*

*Recycling Today*

### Agencies & Associations

The Aluminum Association

Aluminum Extruders Council

American Chemistry Council

Can Manufacturers Institute

Institute of Scrap Recycling Industries

International Aluminum Institute

National Highway Traffic Safety Administration

United States Environmental Protection Agency

United States International Trade Commission

United States Geological Survey