

**ALUMINUM<sup>1</sup>**

(Data in thousand metric tons of metal, unless otherwise noted)

**Domestic Production and Use:** In 2000, 12 companies operated 23 primary aluminum reduction plants. Montana, Oregon, and Washington accounted for 35% of the production; Maryland, New York, Ohio, and West Virginia, 20%; and other States, 45%. Based upon published market prices, the value of primary metal production in 2000 was \$6.1 billion. Aluminum consumption, by an estimated 25,000 firms, was centered in the East Central United States. Transportation accounted for an estimated 37% of domestic consumption in 2000; packaging, 22%; building, 15%; consumer durables, 8%; electrical, 8%; and other, 10%.

<b>Salient Statistics—United States:</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000<sup>e</sup></b>
Production: Primary	3,577	3,603	3,713	3,779	3,700
Secondary (from old scrap)	1,570	1,530	1,500	1,550	1,600
Imports for consumption	2,810	3,080	3,550	4,000	4,200
Exports	1,500	1,570	1,590	1,640	1,750
Shipments from Government stockpile excesses	—	57	( <sup>2</sup> )	—	—
Consumption, apparent <sup>3</sup>	6,610	6,720	7,090	7,740	7,900
Price, ingot, average U.S. market (spot), cents per pound	71.3	77.1	65.5	65.7	75.0
Stocks: Aluminum industry, yearend	1,860	1,860	1,930	1,870	1,700
LME, U.S. warehouses, yearend <sup>4</sup>	33	8	13	14	2
Employment, primary reduction, number	18,200	18,000	18,400	18,200	18,100
Net import reliance <sup>5</sup> as a percent of apparent consumption	22	23	27	31	33

**Recycling:** Aluminum recovered in 2000 from purchased scrap was about 4 million tons, of which about 60% came from new (manufacturing) scrap and 40% from old scrap (discarded aluminum products). Aluminum recovered from old scrap was equivalent to about 20% of apparent consumption.

**Import Sources (1996-99):** Canada, 61%; Russia, 18%; Venezuela, 5%; Mexico, 3%; and other, 13%.

<b>Tariff:</b>	<b>Item</b>	<b>Number</b>	<b>Normal Trade Relations 12/31/00</b>
	Unwrought (in coils)	7601.10.3000	2.6% ad val.
	Unwrought (other than aluminum alloys)	7601.10.6000	Free.
	Waste and scrap	7602.00.0000	Free.

**Depletion Allowance:** Not applicable.<sup>1</sup>

**Government Stockpile:** None.

## ALUMINUM

**Events, Trends, and Issues:** Domestic primary aluminum production decreased owing in large part to the smelter production cutbacks caused by increased energy costs, particularly in the Pacific Northwest. Domestic smelters operated at about 87% of rated or engineered capacity.

The mergers of Alcoa Inc. with Reynolds Metals Company<sup>6</sup> and Alcan Aluminium Limited with Algroup (the aluminum division of Alusuisse Lonza Group Inc.),<sup>7</sup> announced in 1999, were approved by the U.S. Department of Justice and the European Union. Stock option plans and required facility divestments were initiated by both groups during 2000. Century Aluminum Co. reached a definitive agreement with Southwire Co. to acquire Southwire's 237,000-ton-per-year primary aluminum smelter in Hawesville, KY. The acquisition was subject to the completion of a labor agreement, the arrangement of financing, and the receipt of regulatory approval.<sup>8</sup>

Imports for consumption continued to increase, a trend that began in 1996. Canada and Russia accounted for more than three-fourths of the total imports. U.S. exports also continued to increase in 2000.

The price of primary aluminum ingot fluctuated through September 2000. In January, the average monthly U.S. market price for primary ingot quoted by Platt's Metals Week was 80.1 cents per pound; in September, the price was 77.2 cents per pound. Prices on the London Metal Exchange (LME) followed the trend of U.S. market prices. The monthly average LME cash price for September was 72.6 cents per pound. Prices in the aluminum scrap markets paralleled the general trend of primary ingot prices.

World production increased slightly compared with that for 1999. Inventories of metal held by producers, as reported by the International Primary Aluminium Institute, and LME inventories decreased significantly during the first half of 2000.

### **World Smelter Production and Capacity:**

	Production		Yearend capacity	
	<u>1999</u>	<u>2000<sup>e</sup></u>	<u>1999</u>	<u>2000<sup>e</sup></u>
United States	3,779	3,700	4,270	4,270
Australia	1,720	1,740	1,770	1,770
Brazil	1,250	1,260	1,220	1,260
Canada	2,390	2,370	2,300	2,300
China	2,450	2,600	2,640	2,640
France	400	450	430	430
Norway	1,030	1,030	1,000	1,020
Russia	3,150	3,200	3,190	3,200
South Africa	687	690	676	676
Venezuela	570	580	640	640
Other countries	<u>5,650</u>	<u>6,240</u>	<u>7,240</u>	<u>7,480</u>
World total (rounded)	23,100	23,900	25,400	25,700

**World Resources:** Domestic aluminum requirements cannot be met by domestic bauxite resources. Potential domestic nonbauxitic aluminum resources are abundant, and could meet domestic aluminum demand. However, no processes for using these resources have been proven economically competitive with those now used for bauxite. The world reserve base for bauxite is sufficient to meet world demand for metal well into the 21<sup>st</sup> century.

**Substitutes:** Copper can replace aluminum in electrical applications; magnesium, titanium, and steel can substitute for aluminum in structural and ground transportation uses. Composites, wood, and steel can substitute for aluminum in construction. Glass, plastics, paper, and steel can substitute for aluminum in packaging.

<sup>e</sup>Estimated.

<sup>1</sup>See also Bauxite and Alumina.

<sup>2</sup>Less than ½ unit.

<sup>3</sup>Domestic primary metal production + recovery from old aluminum scrap + net import reliance.

<sup>4</sup>Includes aluminum alloy.

<sup>5</sup>Defined as imports - exports + adjustments for Government and industry stock changes.

<sup>6</sup>Alcoa Inc., 2000, Alcoa completes merger with Reynolds Metals: Pittsburgh, PA, and Richmond, VA, Alcoa Inc. press release, May 3, 1 p.

<sup>7</sup>Alcan Aluminium Limited, 2000, Alcan and Algroup to merge: Montreal, Canada, and Zurich, Switzerland, Alcan Aluminium Limited press release, June 1, 2 p.

<sup>8</sup>Platt's Metals Week, 2000, Century/Southwire reach deal: Platt's Metals Week, v. 71, no. 36, September 4, p. 9.