

ALUMINUM¹

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

Domestic Production and Use: In 1999, 12 companies operated 23 primary aluminum reduction plants. Montana, Oregon, and Washington accounted for 40% of the production; Maryland, New York, Ohio, and West Virginia, 20%; other States, 40%. Based on published market prices, the value of primary metal production in 1999 was \$5.5 billion. Aluminum consumption, by an estimated 25,000 firms, was centered in the East Central United States. Transportation accounted for an estimated 38% of domestic consumption in 1999; packaging, 24%; building, 14%; electrical, 8%; consumer durables, 7%; and other, 9%.

Salient Statistics—United States:	1995	1996	1997	1998	1999^e
Production: Primary	3,375	3,577	3,603	3,713	3,800
Secondary (from old scrap)	1,510	1,570	1,530	1,500	1,400
Imports for consumption	2,980	2,810	3,080	3,550	4,000
Exports	1,610	1,500	1,570	1,590	1,700
Shipments from Government stockpile excesses	—	—	57	(²)	—
Consumption, apparent ³	6,300	6,610	6,720	7,090	7,500
Price, ingot, average U.S. market (spot), cents per pound	85.9	71.3	77.1	65.5	65.5
Stocks: Aluminum industry, yearend	2,000	1,860	1,860	1,930	1,950
LME, U.S. warehouses, yearend ⁴	45	33	8	13	20
Employment, primary reduction, number	17,800	18,200	18,000	18,200	17,500
Net import reliance ⁵ as a percent of apparent consumption	23	22	23	27	30

Recycling: Aluminum recovered in 1999 from purchased scrap was about 3.5 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 (1995-98): Canada, 62%; Russia, 17%; Venezuela, 5%; Mexico, 3%; and other, 13%.

Tariff: Item	Number	Normal Trade Relations 12/31/99
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.¹

Government Stockpile: None.

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Events, Trends, and Issues: Domestic primary aluminum production continued to increase, a trend which began in 1995. Domestic smelters operated at about 90% of rated or engineered capacity.

Two merger agreements involving major aluminum companies were announced during the year. Alcoa Inc. and Reynolds Metals Co. announced plans to merge,⁶ and a three-way merger involving Alcan Aluminium Ltd., Pechiney, and Algroup of Alusuisse-Lonza Holding AG was also announced.⁷ At the beginning of October, both groups were still awaiting approval from the U.S. Department of Justice.

Once again, U.S. imports for consumption increased significantly. Russia remained second only to Canada as a major shipper of aluminum materials to the United States. By the end of August, U.S. imports of aluminum ingots from Russia were close to the level of Russian ingot imports for all of 1998. U.S. exports of aluminum also continued to increase in 1999.

The price of primary aluminum ingot in the United States trended upward through September 1999. In January, the average monthly U.S. market price for primary ingot quoted by Platt's Metals Week was 58.8 cents per pound; by September the price had risen to 71.3 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 67.7 cents per pound. Prices in the aluminum scrap markets paralleled the general trend of primary ingot prices. The buying price for aluminum used beverage can scrap, as quoted by American Metal Market, increased from a 44- to 45-cent-per-pound range at the beginning of the year to a 48- to 50-cent-per-pound range at the end of September.

World production continued to increase as temporarily idled capacity and new capacity expansions were brought on-stream. Aluminum demand in the United States and Western Europe remained strong with indications that the economic crises in Asia were easing. Despite fluctuations during the year, inventories of metal held by producers, as reported by the International Primary Aluminium Institute, and LME inventories were at approximately the same levels at the end of September as they were at the beginning of the year.

World Smelter Production and Capacity:

	Production		Yearend capacity	
	1998	1999 ^e	1998	1999 ^e
United States	3,713	3,800	4,210	4,260
Australia	1,630	1,700	1,760	1,770
Brazil	1,200	1,200	1,220	1,220
Canada	2,370	2,380	2,360	2,360
China	2,100	2,200	2,580	2,640
France	400	400	430	430
Norway	996	1,000	996	996
Russia	3,010	3,100	3,160	3,190
South Africa	650	650	676	676
Venezuela	580	570	640	640
Other countries	5,470	5,740	7,040	7,240
World total (rounded)	22,100	22,700	25,100	25,400

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 21st 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.

^eEstimated.

¹See also Bauxite and Alumina.

²Less than ½ unit.

³Domestic primary metal production + recovery from old aluminum scrap + net import reliance.

⁴Includes aluminum alloy.

⁵Defined as imports - exports + adjustments for Government and industry stock changes.

⁶Alcoa Inc., 1999, Alcoa and Reynolds agree to merge: Pittsburgh, PA, Alcoa news release, August 19, 1 p.

⁷Alcan Aluminium Ltd., 1999, Alcan, Pechiney, and Algroup sign definitive three-way combination agreement: Montreal, Canada, Alcan press release, September 16, 2 p.