

ALUMINUM¹

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

Domestic Production and Use: In 2001, 12 companies operated 23 primary aluminum reduction plants. The 11 smelters east of the Mississippi River accounted for 77% of the production; whereas the remaining 12 smelters, which included the 10 Pacific Northwest smelters, accounted for only 23%. Based upon published market prices, the value of primary metal production was \$4 billion in 2001. Aluminum consumption, by an estimated 25,000 firms, was centered in the East Central United States. Transportation accounted for an estimated 35% of domestic consumption in 2001; packaging, 25%; building, 15%; consumer durables, 8%; electrical, 7%; and other, 10%.

Salient Statistics—United States:	1997	1998	1999	2000	2001^e
Production:					
Primary	3,603	3,713	3,779	3,668	2,600
Secondary (from old scrap)	1,530	1,500	1,570	1,370	1,300
Imports for consumption	3,080	3,550	4,000	3,910	3,600
Exports	1,570	1,590	1,640	1,760	1,500
Shipments from Government stockpile excesses	57	(²)	—	—	—
Consumption, apparent ³	6,720	7,090	7,770	7,530	6,000
Price, ingot, average U.S. market (spot), cents per pound	77.1	65.5	65.7	74.6	70.0
Stocks:					
Aluminum industry, yearend	1,860	1,930	1,870	1,550	1,500
LME, U.S. warehouses, yearend ⁴	8	13	14	(²)	20
Employment, primary reduction, number	18,000	18,400	17,900	17,200	15,700
Net import reliance ⁵ as a percentage of apparent consumption	23	27	31	33	35

Recycling: In 2001, aluminum recovered from purchased scrap was about 3.2 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 (1997-2000): Canada, 58%; Russia, 19%; Venezuela, 4%; Mexico, 3%; and other, 16%.

Tariff:	Item	Number	Normal Trade Relations 12/31/01
	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 decreased significantly owing to smelter production cutbacks caused by increased energy costs and reduced energy supply in the Pacific Northwest. By mid-year, about 1.6 million tons per year of smelter capacity in Montana, Oregon, and Washington was closed. All but a token 25,000 tons per year of capacity at Goldendale, WA, had been closed in the region. Most of the smelters outside of this region were operated at or near their rated or engineered capacity.

Both U.S. imports for consumption and U.S. exports decreased in 2001. Canada continued to be the largest trading partner, accounting for about two-thirds of total aluminum imports and one-half of the exports. Imports from Russia, which had been on the increase over the last couple of years, decreased significantly in 2001.

Although the price of primary aluminum ingot fluctuated through August 2001, it generally trended downward. In January, the average monthly U.S. market price for primary ingot quoted by Platts Metals Week was 75.2 cents per pound; by August, the price was 66.1 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 August was 62.5 cents per pound. Prices in the aluminum scrap markets paralleled the general trend of primary ingot prices.

World production decreased slightly compared with that for 2000. At the end of June 2001, inventories of metal held by producers, as reported by the International Aluminium Institute, were at approximately the same level as those at the end of 2000; whereas LME inventories had doubled.

World Smelter Production and Capacity:

	Production		Yearend capacity	
	2000	2001 ^e	2000	2001 ^e
United States	3,668	2,600	4,270	4,280
Australia	1,770	1,800	1,770	1,770
Brazil	1,280	1,200	1,260	1,260
Canada	2,370	2,500	2,370	2,550
China	2,550	2,700	2,640	2,640
France	441	450	450	450
Norway	1,030	1,000	1,020	1,020
Russia	3,240	3,200	3,200	3,200
South Africa	671	680	676	676
Venezuela	570	570	640	640
Other countries	6,440	6,680	7,500	7,670
World total (rounded)	24,000	23,400	25,800	26,200

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. — Zero.

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.