

Aluminum

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1997 metal production: \$5.2 billion^e
 World rank: Third
 Exports (unwrought): \$7.1 billion
 Installed capacity: 2.320 Mt/y

Canada	1997	1998 ^e	1999 ^f
(000 tonnes)			
Production	2 327	2 360	2 360
Consumption	642	700	720

^e Estimated; ^f Forecast.

Aluminum, in both its pure and alloyed form, is used to make a wide variety of products for the consumer and capital goods markets. Aluminum's largest markets are transportation (29%), packaging (23%), building and construction (19%), electrical (8%), machinery and equipment (8%), and consumer goods (6%). North America is the largest consuming region in the world, accounting for 33% of total Western World demand. Europe accounts for another 30% and Asia accounts for 27%.

ANNUAL AVERAGE SETTLEMENT PRICES, LONDON METAL EXCHANGE

1994	1995	1996	1997	1998 ^e
(US\$/t)				
1 477	1 806	1 506	1 599	1 360

^e Estimated.

CANADIAN OVERVIEW

- In March, Alcan started construction of a new \$2.2 billion smelter at Alma, Quebec, to replace the Isle-Maligne smelter. When completed, the smelter will have an annual capacity of 375 000 t of primary aluminum produced with 620 MW of hydro-electric power. The Alma smelter is expected to start producing metal in the fall of 2000.
- In November, Alcan announced that it had signed a 10-year aluminum supply agreement with U.S.-based auto-maker General Motors for the integrated use of aluminum in automobile components and structures, including the development of more fuel-efficient vehicles.
- U.S. aluminum producer Alcoa returned to Canada in 1998 with its acquisition of Alumax. Alcoa now owns the 230 000-t/y Lauralco smelter and a 25% interest in the 372 000-t/y Aluminerie de Bécancour smelter.
- In February, Reynolds announced that it had completed the sale of its Canadian aluminum extrusion plants in Richmond Hill, Ontario, and Sainte-Thérèse, Quebec, to Tredegar Industries. The plants manufacture aluminum products used primarily in the construction, transportation, electrical, machinery and equipment, consumer durables, and climbing equipment markets.

WORLD OVERVIEW

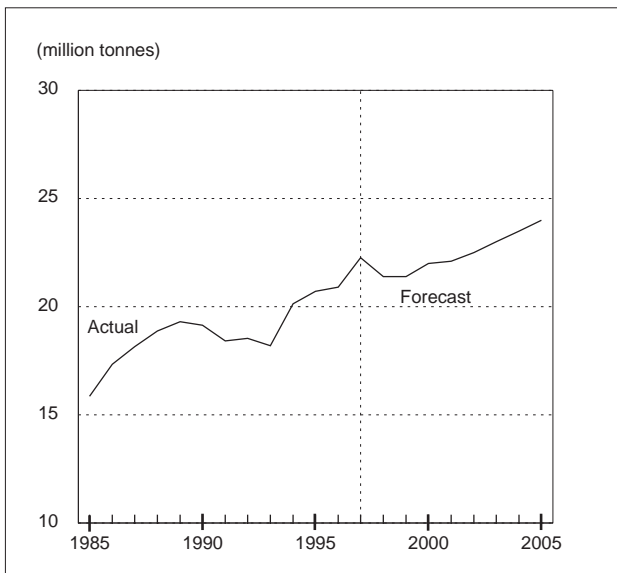
- In May, Billiton Plc, Mitsubishi Corporation and the Industrial Development Corporation of South Africa Ltd. announced the go-ahead of the 250 000-t/y Mozal smelter project near Maputo, Mozambique. The US\$1.3 billion smelter is expected to be commissioned in early 2001.
- In March, Alcoa announced that it was acquiring Alumax. The deal was finalized in July. In November, Alcoa reduced primary aluminum production at Eastalco Works in Frederick, Maryland, by 30 000 t/y. Alcoa is the world's largest producer of aluminum and alumina with 250 operating locations in 30 countries.

- Norsk Hydro of Norway announced that it had entered into a project agreement with the Government of Trinidad and Tobago to work towards the construction of a 474 000-t/y smelter in Trinidad and Tobago. The US\$1.5 billion project is expected to be built in two stages on Trinidad's west coast at Point Lisas. The first phase is planned for 2002 and will have a production capacity of 237 000 t/y, while the second phase is to be built at a later date.
- Nordurál's new 60 000-t/y smelter in Grundartangi, Iceland, began producing aluminum in June.

CONSUMPTION OUTLOOK

Total world consumption of primary aluminum is expected to be an estimated 21.4 Mt in 1998, which is less than 1% higher than the 22.2 Mt recorded in 1997. Western World demand is also expected to increase by less than 1% to 18.7 Mt in 1998. In 1999, demand for primary aluminum is forecast to be 0.5% higher in the United States, 0.8% lower in Europe and 3.5% lower in Japan. Total world demand for aluminum is expected to stay about the same as in 1998. In the longer term, annual growth of 2-3% is forecast for the early part of the next decade. The transportation and packaging (in particular, beverage can) markets are expected to lead the increase in demand for aluminum to the year 2005. Canadian consumption in 1998 is expected to remain strong at about 700 000 t.

Figure 1
World Aluminum Consumption, 1985-2005



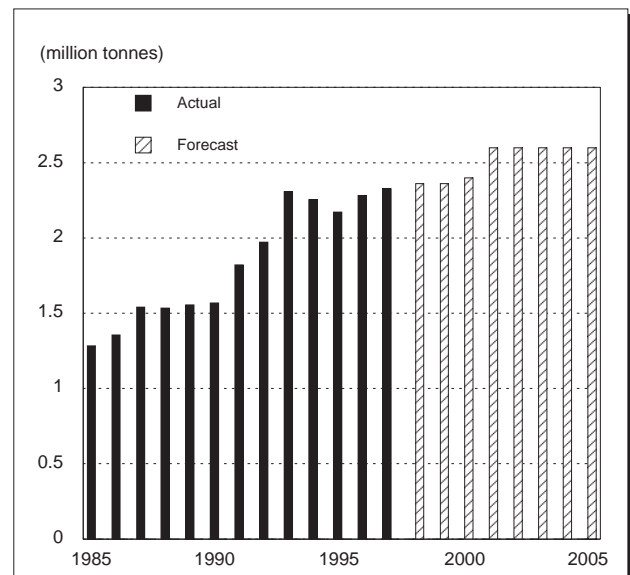
Source: Natural Resources Canada.

CANADIAN AND WORLD PRODUCTION OUTLOOK

Canada is forecast to produce about 2.360 Mt of primary aluminum in 1998. Canada produced 2.327 Mt in 1997 valued at an estimated \$5.2 billion, ranking it third after the United States and Russia. Canadian aluminum production capacity increased substantially during the latter half of the 1980s. Its production capacity is forecast to increase to over 2.6 Mt in 2000 with the completion of Alcan's Alma smelter. Other smelter expansion projects in Quebec (at Alouette, A.B.I. and Lauralco) are dependent on the negotiation of new long-term power supply contracts with Hydro-Québec. Other companies, including U.S.-based Alcoa, are exploring the possibility of new greenfield expansions in British Columbia.

World production of aluminum is expected to increase to 22.0 Mt in 1998 from 21.8 Mt in 1997. Western World production will increase to 16.3 Mt, up from 16.2 Mt in 1997. Aluminum production in 1999 is expected to be about 3.4 Mt in the United States, 3.8 Mt in Western Europe, and 2.9 Mt in Russia.

Figure 2
Canadian Primary Aluminum Production, 1985-2005



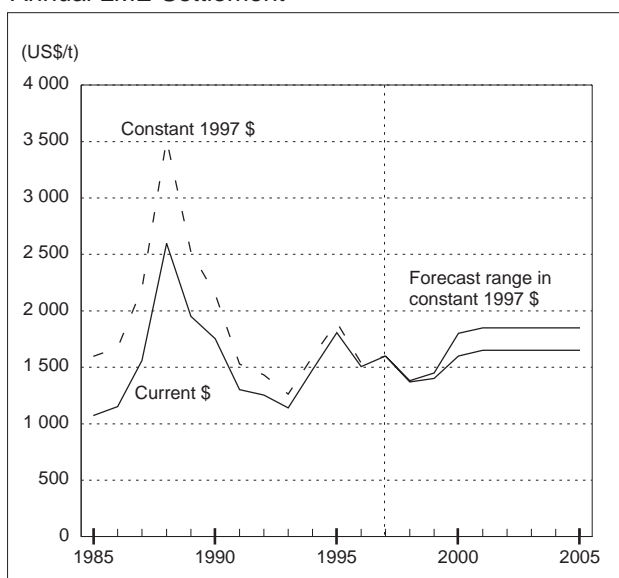
Source: Natural Resources Canada.

PRICE OUTLOOK

Cash settlement London Metal Exchange (LME) prices started the year at or below US\$1500/t (68¢/lb) and continued in a steady decline to a low of \$1261/t in July, rising to \$1395/t in August, only to resume

the overall yearly downward trend in the fourth quarter for a year-to-date average of \$1365/t (62¢/lb) by the end of November. LME inventories, which began the year at about 624 000 t, maintained a steady decline through to May, followed by a slight increase that in turn was followed by another steady decline to reach 452 000 t in September. Stocks continued to rise throughout the third quarter to peak at about 565 000 t by the end of November. Prices are expected to remain at or below the \$1300/t range for the remainder of 1998. For 1999, prices are forecast to average between US\$1350 and \$1400/t. In the longer term, prices are expected to average between US\$1650 and \$1850/t (75¢ and 85¢/lb) in constant 1997 dollars.

Figure 3
Aluminum Prices, 1985-2005
 Annual LME Settlement



Source: Natural Resources Canada.