Aluminum

Patrick Chevalier

Nonferrous Division Telephone: (613) 992-4401

Telephone: (613) 992-4401 E-mail: pchevali@nrcan.gc.ca

1996 metal production: \$4.7 billion[©]
World rank: Third
Exports (unwrought): \$4.1 billion
Installed capacity: 2.298 Mt/y

Canada	1996	1997 e	1998 ^f		
	(000 tonnes)				
	(000 10111100)				
Production Consumption Exports Imports	2 283 602 1 821 140	2 300 620 1 830 150	2 310 635 1 835 160		

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

1993	1994	1995	1996	1997 ^e
		(US\$/t)		
1 139	1 477	1 806	1 505	1 625

e Estimated.

CANADIAN OVERVIEW

- Alcan is to decide early in 1998 whether or not to proceed with a new 370 000-t/y smelter at Alma, Quebec. Public hearings on the project's potential environmental impact were completed and filed with the Ministry of Environment in October. Engineering studies are reportedly nearing completion.
- Alcan and the B.C. government settled their dispute over the cancellation of the Kemano Completion Project.
- Alcan restored its 272 000-t/y Kitimat, B.C. smelter to full capacity with the start-up of 22 000 t of capacity that had been idle since January 1994. The company also announced its intention to use all reasonable efforts to expand the Kitimat smelter by 225 000 t/y, subject to market and economic conditions, during the next decade.
- Reynolds Metals Company and Société générale de financement du Québec (SGF) entered into a joint-venture partnership to operate Reynolds' Cap-de-la-Madeleine, Quebec, aluminum rolling mill and its Weston Road, Toronto, Ontario, aluminum coil-coating facility. Each company will maintain a 50% interest in the joint venture.

WORLD OVERVIEW

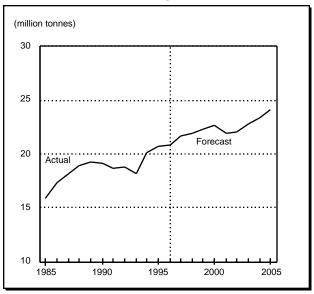
- South Africa's Gencor Ltd. is to invest in a 245 000-t/y primary aluminum smelter in southern Mozambique, subject to the securing of international equity investment by the end of 1997.
- Alcan is to spend US\$130 million on a new bauxite mine at Ely in northern Queensland, Australia.
- Pechiney of France plans to restart 125 000 t of idled capacity by the end of 1998.
- Nordic Aluminum Corp. of Iceland, a subsidiary of U.S. Columbia Ventures Corp., began work on a new 60 000-t/y aluminum smelter at Grundartangi in western Iceland that is scheduled to start production in mid-1998.

- A third potline being added to Iceland's Straumsvik 100 000-t/y smelter increased capacity to 160 000 t/y.
- A third potline being installed at Comalco's Boyne Island, Queensland complex in Australia is expected to reach full production, raising the smelter's capacity to 490 000 t/y by the end of the year.

CONSUMPTION OUTLOOK

Total world consumption of primary aluminum is expected to be an estimated 21.7 Mt in 1997, about 4% higher than the 20.8 Mt recorded in 1996. Western World demand is also expected to increase by about 4% to 18.6 Mt in 1997. In 1998, demand for primary aluminum is expected to be 2.4% higher in the United States, 3.0% higher in Europe, and 2.0% higher in Japan. Total world demand for aluminum is expected to increase between 2% and 3% to 22.2 Mt in 1998. Strong annual growth of about 3% is forecast for the remainder of the 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 1997 is expected to remain strong at about 600 000 t.

Figure 1
World Aluminum Consumption, 1985-2005



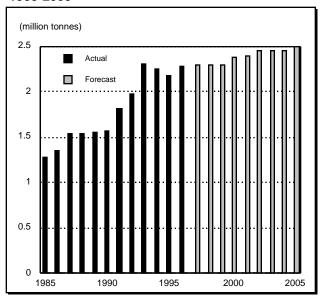
Source: Natural Resources Canada.

CANADIAN AND WORLD PRODUCTION OUTLOOK

Canada is forecast to produce about 2.315 Mt of primary aluminum in 1997. Canada produced 2.283 Mt in 1996 valued at an estimated \$4.7 billion, ranking

it third after the United States and Russia. Canadian aluminum production capacity increased substantially during the latter half of the 1980s; however, it is forecast to increase at a slower rate to the year 2005. Apart from the proposed projects by Alcan at Alma and Kitimat, a number of other smelter expansion projects in Quebec (at Alouette, A.B.I. and Lauralco) are dependent on new power supply contracts to be negotiated with Hydro-Québec. World production is expected to increase to 21.7 Mt in 1997 from 20.8 Mt in 1996. Western World production will increase to 16.3 Mt, up from 15.6 Mt in 1996. Aluminum production in 1997 is expected to reach 3.8 Mt in the United States, 3.4 Mt in Western Europe, and 2.7 Mt in Russia. The increases in Western World capacity expected in 1998 will come primarily from smelter expansions in Australia, Norway and Iceland, and from new smelter projects in Nigeria, Iceland and Iran.

Figure 2
Canadian Primary Aluminum Production,
1985-2005



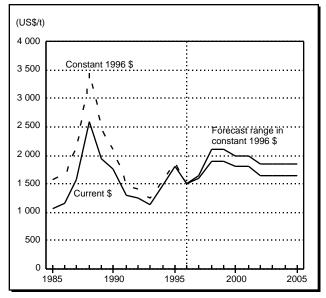
Source: Natural Resources Canada.

PRICE OUTLOOK

Cash settlement London Metal Exchange (LME) prices started the year low at US\$1508/t (68¢/lb), then rose to a peak of \$1776/t in August, only to fall back in the third quarter for a year-to-date average of \$1606/t (73¢/lb) by the end of October. The mid-year rise in prices was largely attributed to speculative buying by fund managers; however, the underlying strength in the fundamentals also contributed to the rise. LME inventories, which began the year at about 946 000 t, continued to fall through the first half of the year to 620 475 t in mid-August, before gradually

rising again to about 740 000 t at the end of October. Prices are expected to remain in the \$1650/t range for the remainder of 1997 as industrial activity increases in the last quarter and stocks start to fall. For 1998, prices are forecast to average between US\$1650 and \$1750/t. In the longer term, prices are expected to average between US\$1650 and \$1850/t (75¢ and 85¢/lb) in constant 1996 dollars.

Figure 3
Aluminum Prices, 1985-2005
Annual LME Settlement



Source: Natural Resources Canada.