

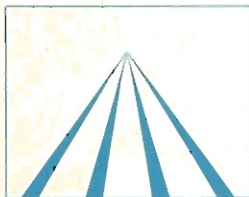
c.
sta

ALUMINIUM LIMITED 1963 ANNUAL REPORT



MAR 17 1964

McGILL UNIVERSITY



ALUMINUM IN TRANSPORTATION On land and sea, and in the air, noteworthy advances in the transportation industry have been made with the use of aluminum. Aluminium Limited's participation in the development of many new applications in this field resulted from a modern sales approach based on economic studies, engineering knowledge and applied research. Some recent successful developments of aluminum applications in several countries are illustrated in color in the four-page centre section of this report.

ALUMINIUM LIMITED 36TH ANNUAL REPORT

for the year ending
December 31, 1963

Directors and Officers	2
The Year 1963 at a Glance	3
The President's Summary of Results	4
Review of the Year 1963	
Operations	8
Markets and Sales	11
Expenditures and Financing	15
Research and Development	15
Employees	16
Source and Application of Funds	21
Financial Statements	22
Financial Statistics	32
Principal Subsidiaries and Affiliates	33

HEAD OFFICE: 1, PLACE VILLE MARIE, MONTREAL, CANADA

MAIL ADDRESS: P. O. BOX 6090

On pourra se procurer le texte français de ce rapport annuel en s'adressant
au secrétariat de la Compagnie, case postale 6090, Montréal 3, Québec,
Canada.

DIRECTORS

FIELD-MARSHAL THE RT. HON.
THE EARL ALEXANDER OF TUNIS, K.G.
DANA T. BARTHOLOMEW
FRASER W. BRUCE
DR. DONALD K. DAVID
NATHANAEL V. DAVIS
JAMES A. DULLEA
N. BAXTER JACKSON
PAUL LAROQUE
EDWIN J. MEJIA
R. E. POWELL
H. H. RICHARDSON
M. B. DE SOUSA PERNES
JOHN L. SULLIVAN
M. P. WEIGEL

OFFICERS

NATHANAEL V. DAVIS, President
DANA T. BARTHOLOMEW,
Vice President and Chief Financial Officer
FRASER W. BRUCE, Vice President
PAUL LAROQUE,
Vice President, Secretary and Legal Officer
H. H. RICHARDSON,
Vice President and Chief Technical Officer
M. P. WEIGEL,
Vice President and Director of Operations
DAVID M. CULVER, Chief Sales Officer
HOLBROOK R. DAVIS,
Chief Employee Relations Officer
J. F. EVANS,
Chief Administrative Officer
ERIC A. TRIGG,
Treasurer and Planning Officer
DUNCAN C. CAMPBELL,
Public Relations Officer
K. C. BALA, Assistant Secretary
D. K. PETAPIECE, Assistant Secretary
DOROTHY CASSELMAN ROSS,
Assistant Secretary
O. E. COLLING, Assistant Treasurer
D. M. KERTLAND, Assistant Treasurer

THE YEAR 1963 AT A GLANCE

RESULTS

	For Year Ending 31st December	
	1963	1962
Sales and operating revenues	\$ 669.8 million	\$ 559.0 million
Income before income taxes	\$ 68.8 million	\$ 73.7 million
Depreciation and reserve for future income taxes	\$ 64.7 million	\$ 58.3 million
Net income	\$ 32.7 million	\$ 37.8 million
Aluminium Limited preferred dividends	\$ 1.3 million	(nil)
Common shares outstanding	31,024,054	30,724,158
Profit per common share (after preferred dividends)	\$ 1.01	\$ 1.23
Common dividends per share	(U.S.) 60¢	(U.S.) 60¢

BALANCE SHEET ITEMS

	As at 31st December	
	1963	1962
Net current assets	\$ 297.5 million	\$ 235.5 million
Lands, plants and facilities (gross)	\$1,659.0 million	\$1,596.7 million
Additions to fixed capital	\$ 67.5 million	\$ 59.8 million
Common shareholders' equity	\$ 488.8 million	\$ 470.1 million

OTHER

	1963	1962
Sales of aluminum products (short tons)	861,554	729,672
Number of employees	53,737	49,855
Number of common shareholders (year-end)	51,080	54,274

REPORT TO THE SHAREHOLDERS

The 36th Annual Report of Aluminium Limited covering the affairs and the financial results of the Company for the year 1963 is submitted on behalf of the Board of Directors. The financial statements of Aluminium Limited and its consolidated subsidiaries for the year ended December 31st, 1963, together with the report of the auditors, Price Waterhouse & Co., form a part of this report.

SUMMARY OF RESULTS

NET INCOME of Aluminium Limited consolidated after all charges, including dividends on preferred shares of subsidiaries, was \$32.7 million in 1963 as compared with \$37.8 million for the year 1962.

EARNINGS applicable to the common shares (after allowing for the dividends on the new Aluminium Limited preferred shares issued in 1963) were \$1.01 per share on the 31.0 million outstanding shares, as compared with \$1.23 per share on the 30.7 million shares outstanding at the end of 1962.

CONSOLIDATED SALES of aluminum in all forms were at an all-time high of 861,600 tons,* compared with 729,700 tons in 1962.

SALES AND OPERATING REVENUES were \$670 million compared with \$559 million in 1962. After deducting "cost of sales and operating expenses" there remained \$218 million in 1963 compared with \$206 million in 1962.

CASH GENERATION, consisting mainly of net income and depreciation, was \$97.4 million or \$3.14 per share, substantially unchanged from the \$96.1 million or \$3.13 per share in 1962.

COMMON DIVIDEND payments during 1963 were U.S. 15 cents per share in each quarter. Total common dividends disbursed were equivalent to \$20 million in Canadian funds compared with \$19.6 million in 1962.

* Short tons of 2,000 lbs. are used throughout this report.

On a consolidation basis, plant and investments increased by \$68 million during the year.

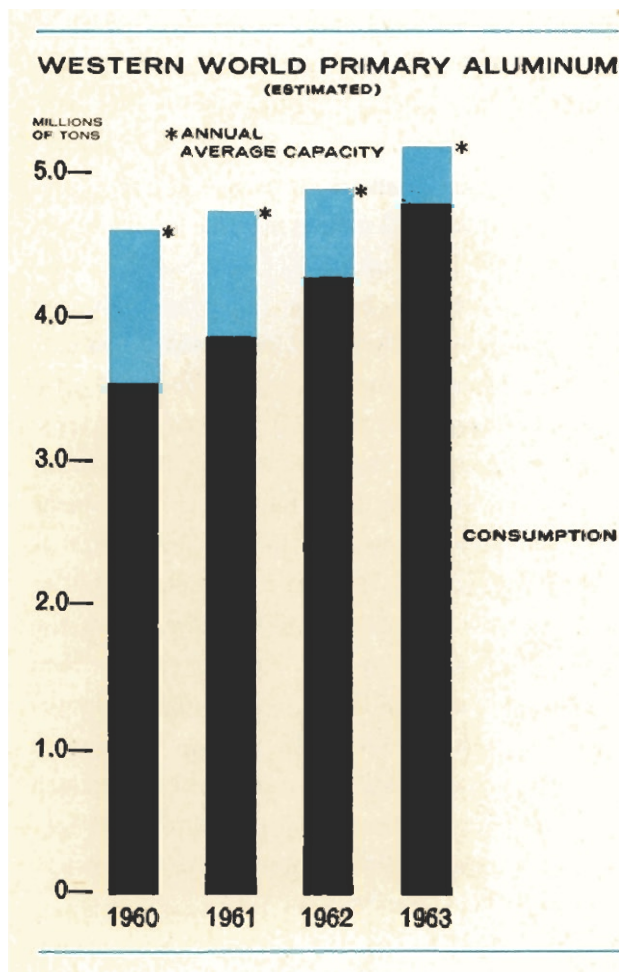
* * * *

Considering that Aluminium Limited marked up a record year in volume of sales in 1963, the Company's reduced earnings can only be termed disappointing and inadequate in relation to invested capital. Despite considerably increased consumption of aluminum and a consequent reduction in idle capacity for the industry as a whole, prices deteriorated even below the levels prevailing in 1962. This lower level of prices, combined with the increased costs of doing business, is largely responsible for the decline in the Company's earnings from 1962. In short, the Company and the industry experienced a tightening of the cost-price squeeze in 1963.

Price levels have inevitably been influenced by the forces of supply and demand. The chart on the opposite page, showing our estimates of free-world consumption and capacity, indicates that the gap between supply and demand has narrowed still further and perhaps to a point where higher basic prices can be sustained. Prices did strengthen modestly in the final quarter of 1963 but so late in the year as to have little effect on the Company's earnings. At the time of writing, the slightly higher level of prices for ingot and semi-fabricated products continues to hold and may therefore mark a turning point.

The reactivation of idle potlines and the starting-up costs incurred in new or enlarged fabricating facilities added to costs of production. In addition, overhead expenses (defined in the financial statements as selling, research and administrative expenses) increased by \$7.6 million as compared with 1962, continuing the upward trend over the

past several years. The bulk of the Company's increased overhead expenses is the result of larger selling expenses and greater forward integration, including the consolidation of new fabricating companies into the accounts. In 1963 the consolidation of seven fabricating companies, four of them recently acquired as fully owned subsidiaries, accounted for approximately 44 percent of the total increase in overhead expenses for the year. Finally, increased research expenditures, which are referred to later, accounted for approximately 16 percent of the increase in 1963 as compared with 1962.



During the first half of the year, Alcan's Canadian smelters were operated at an annual rate of approximately 600,000 tons. In the course of the second half, potlines were reactivated at Arvida, Isle Maligne and Shawinigan in Quebec and at Kitimat in British Columbia, giving a production of 626,000 tons for the year. Sales of Alcan produced metal during the year exceeded production, resulting in a reduction of aluminum inventories. By the year end, the Company's Canadian plants were running at an annual rate of slightly over 700,000 tons with some additional potlines due to come into production subsequently. At the end of February 1964, 20,000 tons of new capacity at Kitimat entered production, bringing Alcan's operations to over 90 percent of its expanded capacity. As potlines are reactivated, production costs are temporarily burdened; however at the higher level of operating rates production costs can be expected to benefit over a period.

The Company's sales last year were made in more than 50 countries against a background of prosperous national economies but in a climate of vigorous international competition. Sales of aluminum products in all forms, by Aluminium Limited's consolidated subsidiaries, reached a record level of 861,600 tons, or 18 percent higher than in 1962, which was the previous record year. Factors contributing to this substantial increase were the continued rise in free-world demand and the steady progress of the Company's program of forward integration both by the expansion of its own fabricating activities and by acquisition of facilities new to the Company.

The free world aluminum industry continued to show progress in increasing consumption and production rates. In 1963 we estimate that the consumption of aluminum in all forms in the free

world rose by more than 550,000 tons or some 11 percent over 1962. Free world primary consumption reached 92 percent of average capacity compared with 87 percent in 1962 and 80 percent in 1961. We estimate that free world capacity at the year end also showed an increase of about 8 percent compared with the previous year.

In the United States, which accounts for one-half of the free world consumption, total shipments of aluminum in all forms, including exports, rose to a new high of over 3,100,000 tons or 11 percent higher than in 1962. Among other areas showing expanded consumption in 1963 were the United Kingdom, Canada, Germany, Japan, Australia and South Africa.

During 1963 several important additions were made to our fabricating facilities. In the United States the Company acquired Central Cable Corporation, with three plants, and Metals Disintegrating Company, with two plants. The large \$35 million hot rolling mill at Oswego, New York, in which we have three partners in the United States, started operations in March. In Canada, a new cold rolling mill was opened as a major addition to Kingston Works. Significant capacity increases were made to rolling mills in Germany and Argentina and pioneer mills were opened in Nigeria and Malaysia. An interest was acquired in a fabricating company in Italy and a new fabricating company was formed in Denmark in conjunction with an existing Danish fabricator. The Company increased its 50 percent participation in Australia's largest fabricating company into full ownership during the year.

During the past four years the Company has invested approximately \$145 million in new or enlarged fabricating facilities and 1963 can be considered the year during which this program began

to show substantial results. During the fourth quarter of 1963 all of the fabricating units within the Group, both consolidated and non-consolidated, operated at a volume rate of slightly over 550,000 tons per annum. For the entire year, shipments of semi-fabricated products increased by almost 30 percent. The growth in the Group's fabricating activities has provided significantly enlarged outlets for primary metal produced within the Group, even though some fabricating units, because of the existence of import restrictions, were prevented from obtaining their import requirements from Group smelters.

In July of 1963, Aluminium Limited issued in Canada \$60 million of new 4¼ percent preferred shares of \$40 par value which are convertible into common shares on a share-for-share basis until July 1973. This share issue provides greater flexibility for our financial planning. The proceeds contributed to a \$62 million increase in net current assets at the close of 1963.

The Company's bauxite mines and alumina plants in Jamaica, India and Brazil and the bauxite mines in Malaysia and France were operated satisfactorily throughout the year. In British Guiana, operations at the bauxite and alumina installations were brought to a halt for twelve weeks by a country-wide general strike. The impact of the strike reduced 1963 after-tax income by an amount now estimated at \$3 million. Since the end of the strike in July, production has been maintained at high levels. Preliminary arrangements were made during the year for Aluminium Limited to participate with certain other aluminum producers in the development of a 670,000 ton-per-year alumina plant scheduled for completion in Queensland, Australia, in 1967.

The installation at Arvida for producing alu-

minum by a basically new process which we predicted would be in operation by the end of 1963 has been somewhat further delayed but is now complete. Because the establishment of detailed operating practices and the training of staff and operating crews is essential before commencing round-the-clock operation of a plant of this size, it is expected that several months will elapse before full operation is achieved.

The design and construction of this plant have been carried on concurrently with continued pilot-plant improvement of various steps in the process. This has indicated the advisability of certain modifications to the design as originally conceived and the process of incorporating such modifications has added to the cost of the installation and the time required to complete it. Although designed to be capable of sustained continuous production of alu-

minum, its early operation will be aimed primarily at determining what capital and production costs are to be expected from large-scale operation of the process. In spite of the extra time which has proved necessary to prepare for complete experimental operation, we consider that we have been generally successful in solving the design problems which arose in scaling up from our pilot plant to this production facility.

As we enter 1964 with a healthier relationship between supply and demand and an enlarged base for primary metal outlets, the goal of sounder profit levels is clearly before us. All of the Company's personnel can be expected to work towards this goal with the same high degree of effort and enthusiasm which has marked their conduct in the past and for which I wish to express appreciation on behalf of the Board.

Montreal, Canada.
March 4th, 1964.



President

REVIEW OF THE YEAR 1963

OPERATIONS

CANADIAN SMELTER OPERATIONS

Aluminum Company of Canada, Limited produced 625,600 tons of primary aluminum in 1963, compared with 596,200 tons in 1962, 569,200 tons in 1961 and 672,500 tons in 1960.

For the year as a whole, Alcan's average rate of smelter operation was just under 80 percent of capacity. As a result of reactivation of some idle facilities in the second half, Alcan was producing at year end at the rate of about 90 percent of its total rated capacity of 788,000 tons.

At Kitimat, British Columbia, additional smelter capacity of 20,000 tons was almost ready to enter production by the year end. This newly-completed capacity did in fact come into production at the end of February 1964, bringing into full operation Kitimat's present installed capacity of 212,000 tons per annum. The eventual total capacity of this smelter, for which the power and raw material bases are already provided, is 310,000 tons. The 100,000 tons of future capacity, for which a substantial portion of the expenditure had been incurred prior to suspension of expansion in 1957, could be brought to completion in about three years, or alternatively in convenient stages of 20,000 tons each, depending on requirements as foreseen from time to time. This would still leave

approximately 150,000 horsepower available for outside needs, including a pulp and paper industry which may be undertaken by other interests.

Alcan enjoyed satisfactory industrial relations with its employees at all locations during the year. A three-year collective labour agreement was signed with the smelter employees at Kitimat. The present union contracts at the Quebec smelters expire at intervals in the coming few months.

OTHER SMELTER OPERATIONS

In 1963, Aluminium Limited's smelting subsidiaries and affiliates outside of Canada operated at near capacity, to produce a total of 214,000 tons compared with 193,900 tons in 1962. The total rated capacity of these overseas smelters is now 244,000 tons, reflecting various expansions of their primary capacities to meet the requirements of their domestic markets.

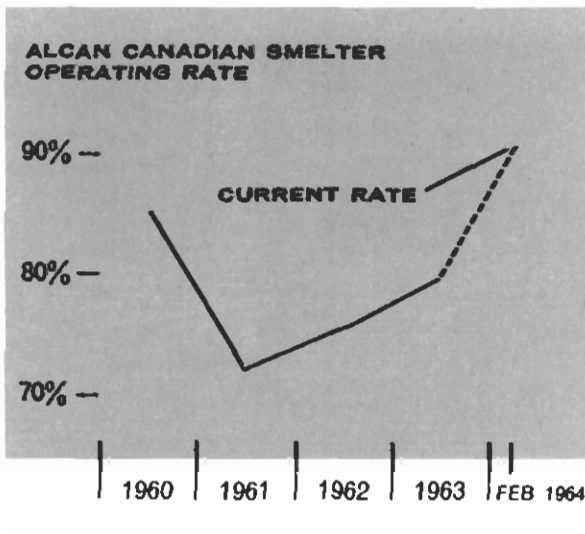
In Brazil, Alumínio Minas Gerais S.A., a subsidiary, increased the capacity of the Saramenha smelter to 15,000 tons per annum.

In India, good progress was made in the engineering and construction of a two-stage 11,000 ton expansion of the Indian Aluminium Company's smelter at Alupuram which will increase that company's total primary capacity to 42,000 tons per annum in mid-1966. The first half of this expansion is expected to be completed in mid-1965.

In Japan, the Nippon Light Metal Company, an affiliate, embarked on a flexible program for the expansion of capacity, by stages, at the smelters at Niigata and Kambara. Plans call for combined capacity of these two smelters to reach 138,000 tons after 1966.

In Norway, A/S Norsk Aluminium Company, an affiliate, continued work on its long-term program for the doubling of power and smelting facilities at Hoyanger in 1965.

In Sweden, A/B Svenska Metallwerken, an affiliate, doubled its smelter facilities at Kubikenborg to 30,000 tons.



On February 22nd, 1963, the Quebec Hydro-Electric Commission, acting on behalf of the

Government of the Province of Quebec, offered to purchase all the outstanding shares of Saguenay Electric Company, a subsidiary of Aluminium Limited engaged in the retail distribution of power in the Saguenay District of Quebec. This offer, involving one of a group of eleven investor-owned electric utility companies taken over by the Province, was for an amount of \$3,225,000, which was in excess of the book value of the investment in the subsidiary. The offer was accepted and the transfer of ownership was completed in 1963.

Total group power sales in Canada, including both primary and interruptible power, amounted to \$19.5 million in 1963, an increase of 9 percent over 1962.

RAW MATERIALS

In British Guiana, Demerara Bauxite Company, Limited produced 1,694,000 tons of bauxite of all grades, and 245,000 tons of alumina. A general strike which affected all business, industry and government services in British Guiana shut down that company's bauxite and alumina operations from April 21st until July 11th, with a financial loss which has already been mentioned. No loss of metal production resulted from this general strike. Plant modifications and process changes underway are expected to increase the capacity of the Mackenzie alumina plant to 385,000 tons per annum in 1964.

In Jamaica, the alumina plants of Alcan Jamaica Limited produced a total of 795,000 tons. Plant modification in progress at the Kirkvine plant is expected to increase its capacity in 1964.

In France, Société Anonyme des Bauxites et Alumines de Provence, a subsidiary, produced 359,000 tons of bauxite in 1963.

In Malaysia, Southeast Asia Bauxites Limited, a subsidiary in Malaya, and Sematan Bauxites Limited, an affiliate in Sarawak, continued satisfactory operations.

In Australia, plans have been made for the Company to obtain a 20 percent share in the output of a 672,000 ton per annum alumina plant to be completed in Queensland in 1967. This plant is being built jointly with Kaiser Aluminum and

Chemical Corporation, Pechiney of France, and Conzinc Riotinto of Australia, Limited.

Sales of calcined bauxite to the refractory and abrasive industries were maintained at high levels during the year, despite the 12-week interruption of production in British Guiana.

Alumina shipments were continued to Scandinavian aluminum smelters, to Europe, the United States, and elsewhere, for sale or under long term metal exchange contracts.

Fluorspar shipments by Newfoundland Fluorspar Limited from St. Lawrence, Newfoundland to Arvida, Quebec amounted to 85,000 tons.

FABRICATING

Consolidated sales of 330,700 tons of semi-fabricated products surpassed the 1962 level by about 28 percent, reflecting the progress of the Company's program of forward integration. Thus the fabricating operations increased the profitable movement of ingot although the profit margins in fabricating were reduced and competition remained strong throughout the year.

Total shipments from the fabricating plants in which Aluminium Limited owns an equity interest, including those of all non-consolidated fabricating affiliates, amounted to 497,000 tons compared with 370,400 tons in 1962.

The expansion of the Company's fabricating plants continued in 1963, with a cash outlay of \$45 million, and several major units were brought into production during the year. Over \$145 million has been invested in fabricating facilities since the end of 1959. The principal developments in this field in 1963, in 15 countries, were:—

NORTH AMERICA

CANADA — A major expansion of Alcan's sheet plant at Kingston opened, as planned, in May, with a rated additional capacity of 20,000 tons. Two new die-casting machines were installed at Etobicoke. A second paint line and a new 2750-ton extrusion press were installed at Kingston.

U.S.A. — The 120-inch hot rolling mill and 100-inch hot finishing train at Oswego, New York, built by Alroll Inc., came into operation early in

ALUMINUM CONSUMPTION AND ALUMINIUM LIMITED FABRICATING

LEGEND

WESTERN WORLD ESTIMATED CONSUMPTION OF PRIMARY ALUMINUM

* ALUMINIUM LIMITED AND AFFILIATES FABRICATING VOLUME



MILLIONS OF TONS

2.5—

2.0—

1.5—

1.0—

.5—

.0—

1960

1961

1962

1963

1960

1961

1962

1963

1960

1961

1962

1963

NORTH AMERICA

UNITED KINGDOM,
GERMANY & JAPAN

REST OF WESTERN WORLD

the year and is producing "reroll stock" for Aluminium Limited and its three partners. This new facility has exceeded expectations in its first nine months of production. By the end of 1963, it was operating near its original capacity of 100,000 tons of reroll coils per annum. This capacity is being increased through the addition of certain ancillary equipment. Facilities for a plate production unit adjacent to Alroll's plant are nearing completion. Also in the United States, Aluminium Limited acquired ownership of Central Cable Corporation, with a capacity to produce 18,000 tons of aluminum wire and cable, and Metals Disintegrating Corporation, capable of producing 5,000 tons of aluminum powder and paste a year.

LATIN AMERICA

ARGENTINA — Alcan Argentina S. A. I. C. started production of sheet and extrusions at its expanded El Palomar plant in the latter half of 1963, with a total annual capacity of 8,700 tons.

EUROPE

GERMANY — Alcan Aluminiumwerke G.m.b.H. completed the expansion of its sheet mill in Göttingen to an annual capacity of 25,000 tons, trebling its previous size.

FRANCE — Aluminium Alcan de France placed orders for a second extrusion press and auxiliary equipment.

NORWAY — A/S Nordisk Aluminiumindustri made satisfactory progress in expanding its sheet rolling capacity to 25,000 tons which is expected to be operative early in 1964.

DENMARK — Negotiations were completed for obtaining a minority interest in Aluminord A. S., a new Danish company which has acquired existing fabricating facilities with a rated capacity of 12,000 tons per annum, and plans to expand them at once.

UNITED KINGDOM

Alcan Industries Limited completed its 3,000 ton per annum plate finishing facilities at Roger-

stone. An additional extrusion press was ordered for the Birmingham plant.

AFRICA

NIGERIA — Alcan Aluminium of Nigeria Limited brought its new 5,000 ton per annum sheet mill into production in August.

REPUBLIC OF SOUTH AFRICA — Alcan Aluminium of South Africa Limited made satisfactory progress with the 6,800 ton expansion of its Pietermaritzburg sheet mill. Completion is expected early in 1964. A new Alpaste plant was brought into operation in 1963.

ASIA

INDIA — Indian Aluminium Company, Limited began construction of the new foil mill at Kalwa on the west coast of India.

JAPAN — Toyo Aluminium K. K. completed the 1,200 ton addition to its foil capacity, and an expansion of its aluminum powder and paste facilities.

MALAYSIA — Alcan Malayan Aluminium Company Limited brought its new sheet mill into operation in January, 1963.

OCEANIA

AUSTRALIA — Aluminium Limited acquired full ownership of Australian Aluminium Company Limited, having previously held a half interest. An additional 11,000 tons per annum of sheet capacity was brought into operation in 1963. Additional extrusion capacity is planned.

NEW ZEALAND — Alcan Industries Limited expects to bring a new extrusion press at the Wiri plant into operation early in 1964. Aluminium Conductors Limited completed its new cable plant at Christchurch.

MARKETS AND SALES

Free world consumption of aluminum increased by some 11 percent in 1963, again attaining a new record level. While no large new smelters came into operation during the year the start up of several smaller ones, and improvements in the

efficiency of many existing smelters, added an estimated 400,000 tons of new capacity in 1963. The record demand enabled production to increase to about 92 percent of average rated capacity during the year, but surplus capacity continued to be a major influence on international trading patterns.

Estimated free world consumption in 1963 was approximately 5,850,000 tons, made up of 4,750,000 tons of primary aluminum and 1,100,000 tons of secondary metal, compared with 5,300,000 tons in 1962. Free world primary production in 1963 was approximately 4,650,000 tons, compared with 4,260,000 tons in 1962 and 3,870,000 tons in 1961.

As in 1962, the largest tonnage gain took place in the U.S., where total domestic consumption rose by some 12 percent to 3,150,000 tons. Canadian consumption increased by about 15 percent.

In the European Common Market, the rate of growth in demand was lower than in North America reflecting a levelling off in the economy, but consumption rose by approximately 8 percent. In the United Kingdom, an uptrend in the economy gave impetus to the demand for aluminum in the second half of the year.

In Japan, aluminum consumption increased by more than 20 percent, thereby reversing the slowdown caused by the overall economic restrictions imposed by the government in 1962.

In India, consumption, which is controlled by the government, increased, although no new domestic smelter capacity was brought into operation. Imports of aluminum continued under the aid programs of Canada and the United States.

In Australia, consumption continued the upward trend that started in 1962, and showed a substantial gain in 1963.

In Latin America, despite continued economic problems, overall consumption increased slightly although there were declines in some local markets.

PRICE competition remained severe in 1963, although supply and demand moved into better balance as the year progressed. The ingot price remained under pressure in all markets through most of the year, but the published "world price" remained at U.S. 22.5¢ a pound until October. On September 24th, the United States producers increased the ingot price in their home market from U.S. 22.5¢ a pound to U.S. 23¢ a pound, effective October 2nd, and the Company immediately followed suit. On October 2nd the Company initiated parallel increases to U.S. 23¢ a pound in markets outside of North America and to Can. 24.75¢ a pound in Canada.

Although prices of semi-fabricated products were also depressed in most important markets during the first half of the year, they strengthened substantially towards the year end, and many of

ALUMINIUM LIMITED AND CONSOLIDATED SUBSIDIARIES

Analysis of Consolidated Sales

	Ingot and Ingot Products		Semi-Fabricated Products		All Other Products	Operating Revenues	Totals	
	Tons	\$'000	Tons	\$'000	\$'000	\$'000	Tons	\$'000
1959.....	440,128	187,440	205,873	178,540	27,109	54,473	646,001	447,562
1960.....	486,767	210,425	229,389	206,942	35,147	56,117	716,156	508,631
1961.....	429,514	193,161	241,606	226,585	40,465	56,720	671,120	516,931
1962.....	470,419	212,047	259,253	250,284	41,237	55,407	729,672	558,975
1963.....	530,854	233,185	330,700	326,037	53,543	57,044	861,554	669,809

the Company's fabricating subsidiaries were able to increase prices for some semi-fabricated products during the last quarter.

SALES of aluminum by Aluminium Limited's consolidated subsidiaries, in all forms, and from all sources, amounted to 861,600 tons in 1963, as compared to 729,700 tons in 1962 and 671,100 tons in 1961.

Consolidated shipments of semi-fabricated products amounted to 330,700 tons in 1963, compared with 259,300 tons in 1962. In addition, shipments of ingot products by consolidated companies to partially-owned but not consolidated semi-fabricating affiliates totalled 95,400 tons, compared with 47,100 tons in 1962. In the aggregate, therefore, the Company's primary aluminum moving through consolidated and affiliated fabricating companies grew from 306,400 tons in 1962 to 426,100 tons in 1963, or an increase of 40 percent. This increase was achieved even though trading regulations in certain countries restricted imports of primary aluminum and some group companies were obliged to purchase their requirements from local sources at current domestic market prices. Purchases of non-Company metal from third parties, for these and other local reasons, were some 35,000 tons higher than in 1962.

Consolidated sales of ingot products, other than to affiliated semi-fabricating plants, totalled

435,500 tons, an increase of 12,100 tons over the previous year's total of 423,400 tons. The sales of ingot to other aluminum producers, which are included in these totals, decreased substantially from 1962, when certain renegotiated long-term contracts were fulfilled. Ingot sales to independent customers not affiliated with other aluminum producers showed a favourable trend during the year.

In 1963, consumption continued to increase in the many varied fields of its application, reflecting, among other factors, the result of development work in previous years. Computed on a total free world basis, the transportation industry currently leads the field in the use of aluminum. It is the subject of a special report starting on page 17.

The Company's sales of industrial chemicals continued their steady pattern of growth during the year and contributed in a greater measure to the consolidated net income.

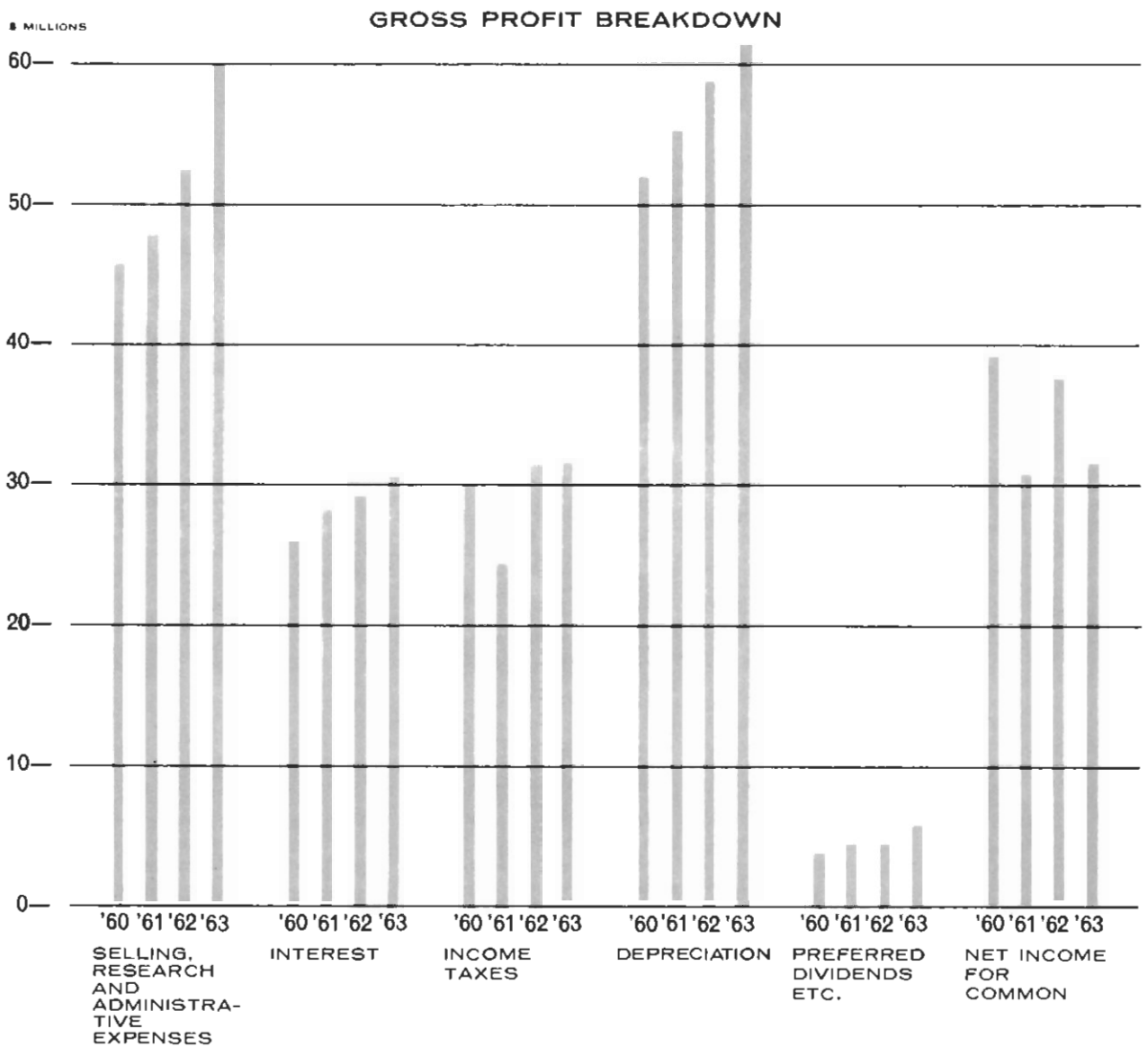
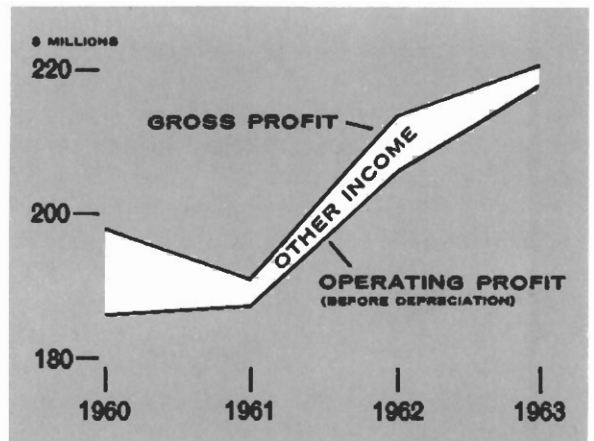
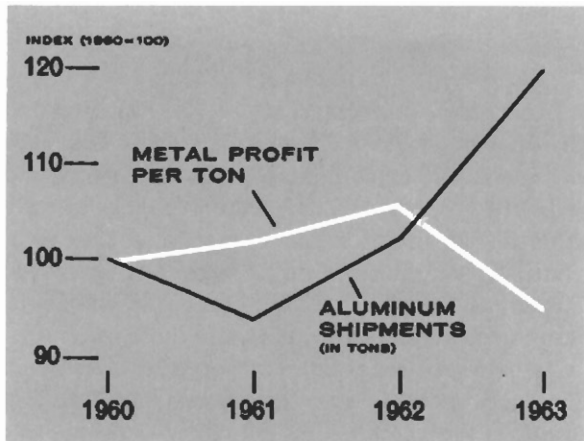
The Company maintained its sales of magnesium at a satisfactory level in 1963. Magnesium prices continued to weaken and competition was particularly severe in Europe, the Company's major market. Successful efforts were made to increase sales in other world markets. The Company shared in the further penetration made by magnesium

ALUMINIUM LIMITED GEOGRAPHICAL DISTRIBUTION OF CONSOLIDATED SALES OF ALUMINUM

	In Short Tons				
	1959	1960	1961	1962*	1963
Canada	75,500	70,200	75,000	83,200	93,800
United States	182,700	109,100	129,300	211,400	258,000
United Kingdom	128,500	145,600	139,600	133,600	145,700
All Others	259,300	391,300	327,200	301,500	364,100
TOTAL	646,000	716,200	671,100	729,700	861,600

*As adjusted

ALUMINIUM LIMITED CONSOLIDATED



die-casting ingot in the automotive and related industries.

SHIPPING

Despite dislocations such as the long strike in British Guiana, and the unusually heavy demands on world shipping for movement of grain, the Company's integrated shipping arm, Saguenay Shipping Limited, maintained stability in the cost and execution of its major ocean operations.

CAPITAL EXPENDITURE FINANCING

In order to provide additional flexibility for future financial planning, Aluminium Limited issued \$60 million 4¼ percent Cumulative Redeemable Convertible Preferred Shares in Canada in July. These shares, with a par value of \$40 each, are convertible share for share into Common Shares at any time up to July 1973. The proceeds of this issue supplemented cash income of \$97 million, derived from operations, and other sources of funds, to provide a total cash inflow of \$170 million.

In 1963, plant and investments increased by \$68 million, which takes into account the consolidation of new companies, and the sale of Saguenay Electric Company, during the year.

The Company's total outstanding debt, both long and short term, was, in aggregate, reduced during the year by \$12 million, principally through planned debt redemptions by the major operating subsidiary — the Aluminum Company of Canada, Limited.

Cash, time deposits and investments in short-term government securities on hand at the close of the year amounted to \$72 million, or \$31 million higher than at the end of 1962.

Capital expenditures of approximately \$80 million are planned for 1964 of which some 50 per cent will be devoted to continuing expansion of fabricating facilities.

RESEARCH AND DEVELOPMENT

Progress with the facility for the production of aluminum by a basically new method is recorded in the Report to Shareholders at page 7.

Research on the conventional smelting and alumina processes continued. Mathematical and physical studies of the electromagnetic phenomena in reduction cells have resulted in useful new knowledge of the factors affecting the efficiency of the cells. Research aimed at reducing impurities in alumina has resulted in significant improvement in metal purity.

The research referred to above has contributed to several significant improvements in alumina plant and smelter design, the value of which has been demonstrated during the year. The Company's present alumina and smelter installations obviously deserve continuing effort to improve them wherever possible. This activity is not inconsistent with the Company's programme aimed at establishing the potentialities of the basically new method.

Work in the fabricating sector has resulted in advances in techniques for the casting and rolling of large sheet ingots. In the field of continuous cast ingot, a Hazlett machine, integrated with a hot mill for rolling sheet, has been installed in a Company plant and initial production operations have shown good results.

During the year, a high speed, low cost, continuous process was developed for treating sheet and strip prior to coating. Testing methods were developed for improving the control of casting characteristics which have led to the production of improved foundry alloys. A highly efficient aluminum anode, Alcan 420, for cathodic protection of steel, was developed to the point of production and sale.

Refinements in previously developed welding techniques were achieved in 1963. The longitudinal seam welding of aluminum line pipe has been brought to the production stage. The first pipeline of this type will be installed in Nigeria early in 1964.

Detailed geological work continued in Jamaica, British Guiana, Brazil, India, France and Australia and the Company's strong reserve position was

further improved. A satisfactory arrangement was concluded with the Queensland State Government regarding the maintenance of the Company's bauxite rights at Cape York, Australia.

EMPLOYEES

The operations of the Company's consolidated subsidiaries on all continents required the services of an average number of 53,737 employees in the last six months of 1963. Their geographic distribution by major areas was as follows:

CANADA	18,034
UNITED KINGDOM	7,457
CARIBBEAN	
Jamaica ..	2,846
British Guiana	4,288
Trinidad	645
	<u>7,779</u>
EUROPE	
Italy	620
Switzerland	928

Germany	3,216
France	375
Other	90
	<u>5,229</u>

LATIN AMERICA

Argentina	335
Brazil	3,948
Mexico	903
Uruguay	171
Other	219
	<u>5,576</u>

ASIA

India	4,848
Other	458
	<u>5,306</u>

AFRICA

1,512

UNITED STATES

720

OCEANIA

2,124

TOTAL

53,737

ALUMINUM IN TRANSPORTATION



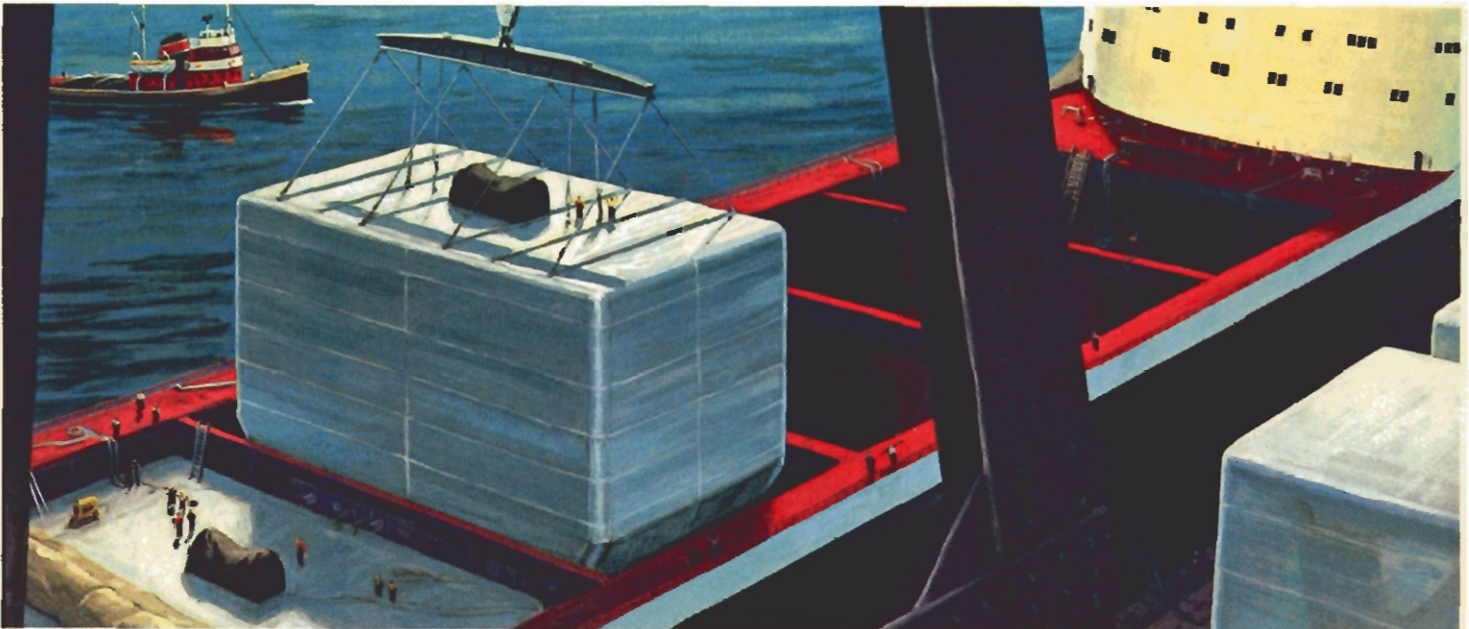
The movement of masses, both human and material, has accelerated with rising standards of living throughout the world. The need for faster and more economical modes of transit for people, and for moving more products to widespread markets in less time, has placed new demands on the transportation industry. Traffic specialists, designers, and builders, look to strong, lightweight aluminum alloys for more efficient equipment to reduce deadweight and increase both carrying-capacity and speed. Evidence of success is the fact that some 25 percent of the free-world's annual output of aluminum is now used in some phase of transportation. Alcan's industrial sales studies first established the economic feasibility of the use of the metal for numerous applications. Prototypes, made possible in many cases by new Alcan-developed techniques in welding and by progress in metallurgy, underwent thorough testing programs. From these materialized many of today's advances in land, sea and air transportation.

AUTOMOTIVE APPLICATIONS INCREASE Aluminum has become more attractive to automotive builders because of marked improvement in fabricating techniques and metallurgy. Passenger cars now account for more than half the metal used in road transportation and many have the following aluminum parts: body components such as window frames, decorative trim and radiator grilles, engine blocks, cylinder heads, pistons, intake manifolds, fan and pump parts. In the London scene below is the new Rover "2000" which has 90 pounds of aluminum parts including the hood and trunk lid. Between it and the aluminum-clad double-decker bus is the Rootes Group's new "Imp" which has a rear-engine cast of aluminum. The high performance Aston Martin, on the left, sports an all-aluminum body.



PROGRESS IN SHIPBUILDING New concepts, using the marine advantages of aluminum, have been adopted by the shipbuilding industry. A noteworthy innovation is a type of vessel built to transport to the United Kingdom, liquid methane obtained from distant lands where formerly it was dissipated as a gas at the well-head. The methane is contained in huge aluminum tanks, each 50 feet high, 70 feet wide, and 35 feet long, carried in specially designed "cryogenic tankers". It is liquefied at minus 258 degrees F., its volume thus reduced to 1/600th. Aluminum alloy was used as, unlike many metals, it retains its original mechanical properties of ductility and strength at extremely low temperatures and was the most economical material suitable. Alcan supplied most of the metal because it has the mills to roll the extra-wide plate, is able to provide the service and metallurgical information required by the shipbuilders, and made available newly developed welding techniques. Illustrated below is one of the tankers which contains nine tanks using 1,200 tons of aluminum and capable of holding 12,200 tons of liquefied methane. The fuel is discharged to aluminum tanks on shore through pipes made from aluminum strips helically wound and machine welded.

ALUMINUM TRUCKS DROP DEADWEIGHT Another new market for aluminum resulted from a desire by dump truck operators to improve the economic factors in transporting materials both on and off the highway. The use of aluminum truck bodies has achieved not only increased payloads but also long-term savings in service and maintenance. Over 2,500 aluminum dump truck bodies have been built in Canada, the result of Alcan's sales group working in close cooperation with the builders. Some fleet owners have over 75 of these in operation and Canada leads the world in design, development and production of aluminum off-highway dump trucks. One of these, similar to the 35-ton capacity body shown here, has proven its strength and economy of operation by already carrying a total of 1,000,000 tons of payload.



MARINE APPLICATIONS VARY Appreciation by naval architects of aluminum's quality of corrosion resistance and its capability of reducing top-side deadweight has led to an increasingly wide variety of sea-going applications. These vital factors account for aluminum being selected for the superstructures of most new large passenger liners. Almost every type of marine construction, from barge to hydrofoil, has an aluminum counterpart, especially equipment for commercial fishing. In the pleasure boat line, an estimated 135,000 aluminum craft were sold in 1963 in the U.S.A. alone. This market is dominated by the outboard-motor boat where aluminum's maintenance-free and ease of handling characteristics are also appreciated by small-boat owners and marina operators. Illustrated is the popular Australian 14-foot De Havilland Tempest which is also used for fast patrol work by the Maritime Services Board in New South Wales. Docking in the background is the "Oriana" with its aluminum superstructure.

ALUMINUM ON THE RAILS It is the freight rolling stock of rail transportation that has accounted for the marked increase in aluminum consumption in this field. While there has been some manufacture of passenger train cars, and considerable interest in aluminum subway cars, the large tonnage has gone into tank and hopper cars, and components for box and refrigerator cars. In this group, the outstanding success story is the application of Alcan's knowledge of railroad economics, technical research, and engineering, that created the Alcan-type covered hopper car, illustrated here. Canadian National Railways and Alcan worked together from basic principles to produce a superior covered hopper car of which 560 are already in use by Canadian railways.





THE FLIGHT OF ALUMINUM The vast aviation and air travel industry relies greatly on aluminum. The development of stronger, better aluminum alloys and construction techniques has accompanied all aviation progress into the jet age. The demands of the future supersonic era are the challenges of today. A new mode of transport, the hovercraft, uses considerable aluminum in both the 150-ton version, being developed to carry 24 cars across the English Channel, and the 16-seater type. New medium-size passenger jets scheduled to make their appearance are the BAC 111, DC 9, Hawker Siddeley Trident and 125. The Vickers VC 10, shown here, is now ready for service as Europe's largest jet transport, carrying 135 to 163 passengers, depending on the type. About 140 tons of aluminum are required for the machining operations which produce the finished components of the aircraft, much of this being thick plate from Alcan's new 144-inch mill in Great Britain.

ALUMINIUM LIMITED
AND CONSOLIDATED SUBSIDIARIES

SOURCE AND APPLICATION OF FUNDS*

IN MILLIONS OF CANADIAN DOLLARS

	1963	1960-1963 Inclusive
Cash, Time Deposits and Short-term Investments (beginning of period)	\$ 41	\$ 75
 SOURCE OF FUNDS:		
Net income	33	141
Straight-line depreciation	61	227
Reserve for future income taxes	3	7
Aluminium Limited preferred shares	60	60
Aluminium Limited common shares	6	14
Increase in short-term bank loans	3	17
Other	4	13
	170	479
	\$211	\$554
 APPLICATION OF FUNDS:		
Plant	\$ 67	\$257
Investments	1	25
Net decrease in debt not maturing within one year	15	19
Alcan preferred share redemptions	2	6
Dividends on Aluminium Limited preferred shares	1	1
Dividends on Aluminium Limited common shares	20	80
Increase in working capital (excluding cash, time deposits and short-term investments, short-term borrowings and funded debt payable within one year)	33	94
	139	482
Cash, Time Deposits and Short-term Investments (end of period)	72	72
	\$211	\$554

*Including the initial impact from the consolidation of certain subsidiaries for the first time in 1963 and the sale of Saguenay Electric Company.

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

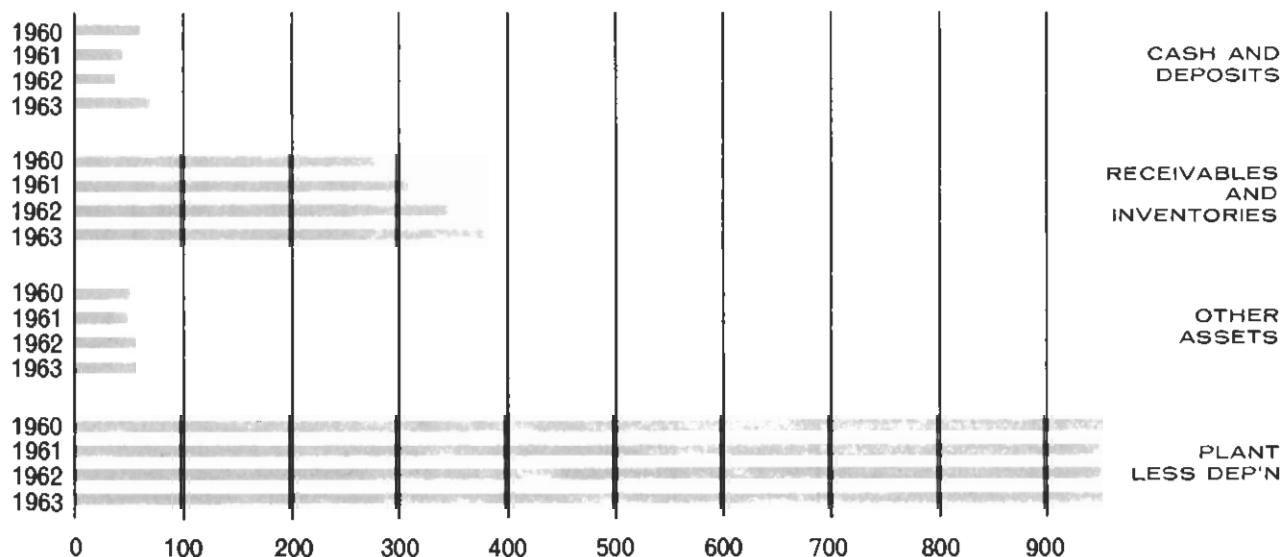
ASSETS

31st December 1963

IN CANADIAN DOLLARS

	1963	1962
CURRENT ASSETS:		
Cash	\$ 33,294,844	\$ 34,590,489
Time deposits and short-term investments, at cost	39,171,312	6,900,407
Receivables	146,246,491	120,623,707
Inventories of aluminum, materials and supplies (note 3)	235,399,224	228,684,526
	454,111,871	390,799,129
Deferred receivables	9,149,222	8,208,333
Prepaid expense and deferred charges	10,903,621	10,870,136
Investments in companies not consolidated, at cost (note 4)	39,777,198	39,277,553
Lands, plants, riparian rights, and facilities, at cost (note 5)	1,659,035,396	1,596,666,478
Less: Accumulated depreciation and depletion (note 6)	703,658,487	645,931,542
	955,376,909	950,734,936
Signed on behalf of the Board:	\$1,469,318,821	\$1,399,890,087
NATHANAEL V. DAVIS, Director		
DANA T. BARTHOLOMEW, Director		

FOUR YEAR SUMMARY 1960-1963



ALUMINIUM LIMITED AND CONSOLIDATED SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

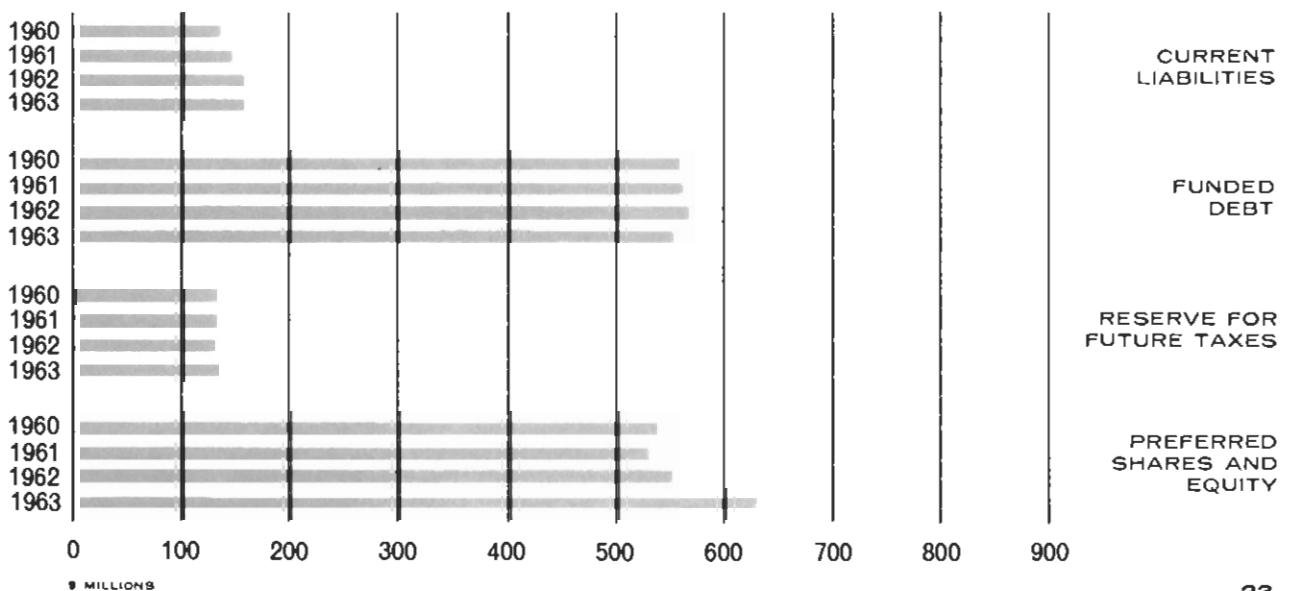
LIABILITIES

31st December 1963

IN CANADIAN DOLLARS

	1963	1962
CURRENT LIABILITIES:		
Payables	\$ 69,946,703	\$ 68,164,721
Short-term borrowings (principally in foreign currencies)	54,433,873	51,246,103
Income and other taxes	26,088,425	27,147,392
Other debt payable within one year (note 7)	6,111,220	8,707,441
	156,580,221	155,265,657
Debt not maturing within one year (note 7)	552,052,412	565,406,016
Reserve for future income taxes (note 6)	133,622,310	130,448,954
Preferred shares of consolidated subsidiaries, etc. (note 8)	78,223,165	78,646,589
CAPITAL STOCK AND SURPLUS:		
4¼% Cumulative redeemable convertible preferred shares par \$40 — 1,500,000 shares outstanding (note 9)	60,000,000	—
Common shares — without nominal or par value 31,024,054 shares outstanding (note 9)	153,111,830	147,079,153
Earned surplus (note 10)	335,728,883	323,043,718
	548,840,713	470,122,871
	\$1,469,318,821	\$1,399,890,087

FOUR YEAR SUMMARY 1960-1963



ALUMINIUM LIMITED
AND CONSOLIDATED SUBSIDIARIES

CONSOLIDATED STATEMENT OF INCOME

For the year ending 31st December 1963

IN CANADIAN DOLLARS

SALES AND REVENUES:	1963	1962
Sales	\$612,765,067	\$503,568,110
Operating revenues (transportation services, power sales, etc.)	57,044,419	55,407,244
Income from companies not consolidated	2,741,604	2,868,203
Other income (note 11)	2,750,021	7,067,372
	675,301,111	568,910,929
COSTS AND EXPENSES:		
Cost of sales and operating expenses	451,824,678	353,278,874
Provision for depreciation and depletion (note 6)	61,441,517	58,914,178
Selling, research and administrative expenses	60,063,120	52,466,504
Interest on debt not maturing within one year	26,534,590	25,069,045
Other interest	4,188,970	4,059,008
Other expenses (note 12)	2,421,100	1,392,628
	606,473,975	495,180,237
Income before income taxes	68,827,136	73,730,692
Provision for current income taxes	28,234,826	31,966,765
Reserve for future income taxes (note 6)	3,304,128	(567,810)
	31,538,954	31,398,955
Income after income taxes	37,288,182	42,331,737
Dividends on preferred shares of consolidated subsidiaries, etc.	4,554,414	4,551,029
Net income	\$ 32,733,768	\$ 37,780,708

ALUMINIUM LIMITED
AND CONSOLIDATED SUBSIDIARIES

CONSOLIDATED STATEMENT
OF EARNED SURPLUS

For the year ending 31st December 1963

IN CANADIAN DOLLARS

Earned surplus — 31st December 1962		\$323,043,718
Surplus, since acquisition, of subsidiaries not previously consolidated (note 1)	\$ 1,253,584	
Net income for the year	<u>32,733,768</u>	<u>33,987,352</u>
		357,031,070
Aluminium Limited dividends:		
Preferred	1,275,000	
Common (1962 — \$19,555,350)	<u>20,027,187</u>	<u>21,302,187</u>
Earned surplus — 31st December 1963 (note 10)		<u>\$335,728,883</u>

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

NOTES TO FINANCIAL STATEMENTS

1. PRINCIPLES OF CONSOLIDATION:

The consolidated financial statements include the accounts of all subsidiaries (companies more than 50% owned) with the exception of three partially owned foreign subsidiaries, the inclusion of which would have no significant effect. All intercompany items and transactions, including profits in inventories, have been eliminated. Intercompany profits on sales to subsidiaries not consolidated are not significant.

The consolidation of certain subsidiaries for the first time in 1963 resulted in the addition of \$1.3 million to consolidated earned surplus as of 1st January 1963 representing Aluminium Limited's equity in their earnings since acquisition, but in the aggregate had no significant effect on net income for the year.

Accounts, other than Canadian currency accounts, included in the consolidated balance sheet are translated into Canadian dollars at rates of exchange current at 31st December 1963, except that (a) certain bank balances, inventories, investments and fixed assets with related reserves are at rates current at dates of acquisition, and (b) debts not maturing within one year are at rates current at dates of original borrowing except that the Aluminum Company of Canada, Ltd. first mortgage 3½% sinking fund bonds, due 1974, payable in United States currency, are stated on a dollar for dollar basis.

2. GEOGRAPHICAL DISTRIBUTION OF ASSETS AND LIABILITIES:

A condensed analysis of the balance sheet at 31st December 1963, according to the domicile of the constituent companies and their branches, follows:

	North America	South America & Caribbean	United Kingdom & Continental Europe	All other	Total
	(in millions of dollars)				
ASSETS					
Current assets	\$ 239	\$ 46	\$ 116	\$ 53	\$ 454
Investments	9	1	23	7	40
Fixed assets	1,220	241	103	95	1,659
Less: Depreciation, etc.	(539)	(97)	(41)	(27)	(704)
Other assets	15	3	1	1	20
	<u>944</u>	<u>194</u>	<u>202</u>	<u>129</u>	<u>1,469</u>
LIABILITIES					
Current liabilities	52	22	58	24	156
Funded debt	490	12	23	27	552
Reserve for future income taxes	121	5	6	2	134
Preferred shares, etc.	127	—	—	11	138
	<u>790</u>	<u>39</u>	<u>87</u>	<u>64</u>	<u>980</u>
Common shareholders' equity	<u>\$ 154</u>	<u>\$ 155</u>	<u>\$ 115</u>	<u>\$ 65</u>	<u>\$ 489</u>

3. INVENTORIES OF ALUMINUM, MATERIALS AND SUPPLIES:

Inventories, as summarized below, are stated at lower of cost or market.

	1963	1962
Aluminum	\$136,013,857	\$143,599,984
Raw materials	69,415,453	67,387,832
Supplies	32,148,777	27,124,710
	<u>237,578,087</u>	<u>238,112,526</u>
Deductions for advance payments from customers against aluminum held for future delivery	<u>2,178,863</u>	<u>9,428,000</u>
	<u>\$235,399,224</u>	<u>\$228,684,526</u>

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

4. INVESTMENTS IN COMPANIES NOT CONSOLIDATED:

	1963	1962
Companies more than 50% owned	\$ 9,587,779	\$ 7,732,584
Companies 50% owned	17,312,890	26,766,404
	26,900,669	34,498,988
Companies less than 50% owned	12,876,529	4,778,565
	\$ 39,777,198	\$ 39,277,553

Aluminium Limited's interest in the net assets of those of the above companies owned 50% or more (located primarily in Japan, Scandinavia and the United States), in which its investment amounted to \$26.9 million at 31st December 1963, aggregated \$43 million as indicated by the following summary of the assets and liabilities of these companies.

ASSETS	(in millions of dollars)		LIABILITIES
Current assets	\$ 95	Current liabilities	\$ 62
Investments	29	Funded debt	90
Fixed assets	175	Equity and advances:	
Less: Depreciation, etc.	(57)	Aluminium Limited	43
	<u>\$242</u>	Other shareholders	47
			<u>\$242</u>

Aluminium Limited's equity in the aggregate net income of these companies, which amounted to \$3.5 million in 1963, was included in consolidated income only to the extent of dividends received as follows:

	Equity in Net Income	Dividends Received
Companies more than 50% owned	\$.1	\$.1
Companies 50% owned	3.4	1.7
	<u>\$3.5</u>	<u>\$1.8</u>

5. LANDS, PLANTS, RIPARIAN RIGHTS, AND FACILITIES:

	1963	1962
Land and water rights	\$ 58,629,946	\$ 58,651,531
Mineral properties, rights and development	13,989,263	13,480,029
Buildings, machinery and equipment	1,521,031,137	1,440,786,551
Uncompleted facilities	31,791,364	46,894,613
	1,625,441,710	1,559,812,724
Construction work in progress	33,593,686	36,853,754
	<u>\$1,659,035,396</u>	<u>\$1,596,666,478</u>

The expenditure for uncompleted facilities represents the cost of certain smelter facilities in British Columbia the construction of which was suspended in 1957. Construction was subsequently resumed at a slow pace and during 1963 the work on some of these facilities was accelerated in preparation for operation early in 1964. In recognition of the degree of their completion at the year-end the appropriate expenditure was transferred to construction work in progress.

Capital projects envisaged for the next few years are expected to involve the expenditure of some \$80 million during 1964.

6. DEPRECIATION POLICY AND RESERVE FOR FUTURE INCOME TAXES:

With minor exceptions, depreciation recorded in the accounts is calculated on a straight-line basis in respect of all completed facilities and the smelter facilities in British Columbia referred to in Note 5.

Income tax regulations in Canada, and in certain other countries, permit the use (for the purpose of determining income taxes) of various forms of capital cost allowances which do not coincide with the amount of depreciation recorded in the accounts. These allowances generally exceed straight-line depreciation during the early life of new assets and later fall short of it.

When capital cost allowances utilized for determining income taxes exceed straight-line depreciation, an amount equivalent to the resultant reduction in current income taxes is charged to income and credited to Reserve for Future Income Taxes. When the allowances so utilized fall short of straight-line depreciation, resulting in higher current income taxes than would otherwise be payable, an appropriate portion of the reserve is transferred back to income.

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

7. DEBT NOT MATURING WITHIN ONE YEAR:

	<u>1963</u>	<u>1962</u>
Aluminum Company of Canada, Ltd.:		
Revolving credit loans from banks, under U.S. \$60,000,000 credit agreement, convertible at the Company's option on or before maturity (1st May 1966) into term loans repayable in five equal consecutive annual installments beginning one year from date of conversion (U.S. \$35,000,000)	\$ 35,490,903	\$ 37,518,955
First mortgage 3½% sinking fund bonds, due 1974:		
Series "A"	4,132,000	4,334,000
Series "B" (U.S. \$8,478,000)	8,478,000	9,478,000
Commutation value of contractual obligation for annual payments secured by second hypothec — payable in Canadian currency and in United States currency in equal parts	6,225,000	6,525,000
3½% Sinking fund debentures, due 1971	28,446,000	29,964,000
3⅞% Sinking fund debentures, due 1970 (U.S. \$41,390,000)	40,730,347	51,353,302
4½% Sinking fund debentures, due 1973	36,145,000	38,550,000
4½% Sinking fund debentures, due 1980 (U.S. \$99,992,000)	96,769,618	103,721,136
5.10% Notes, due 1968/1992 (U.S. \$100,000,000)	97,586,489	97,586,489
Redeemable notes — payable to the U.K. Government — interest and \$47,973,750 of principal abatable in certain circumstances as provided in the contracts under which they were issued:		
3% Notes, due 1971	54,950,000	54,950,000
3½% Notes, due 1971	24,975,000	24,975,000
3½% Notes, due 1974	40,000,000	40,000,000
Alcan Aluminiumwerke G.m.b.H.:		
Mortgage loans (D.M. 25,875,000)	6,792,518	6,955,575
Alcan Industries Limited:		
5% Debentures, due 1964 (£250,000)	768,125	1,536,250
6% Debentures, due 1983 (£3,000,000)	9,421,512	9,421,512
Bank loan, due 1967 (£1,500,000)	4,534,500	3,778,875
Other debt (£240,625)	725,798	—
Alcan Jamaica Limited:		
Bank loans, due 1965 (£4,000,000)	10,815,620	10,815,620
Australian Aluminium Company Limited:		
7% Mortgage debenture stock, due 1965/73 (A£3,000,000)	6,489,948	—
7% Unsecured notes, due 1964/67 (A£2,560,000)	5,921,792	—
Non-interest bearing unsecured note, due 1968 (A£465,000)	1,075,651	—
Indian Aluminium Company, Ltd.:		
6½% Bank loans (Rps. 7,257,782)	1,567,625	9,526,714
6¼% Debenture stock, due 1970/1975 (Rps. 29,811,000)	5,825,285	5,991,000
Other debt (Rps. 10,052,400 and £500,000)	3,788,683	3,488,623
Saguenay Power Company, Ltd.:		
First mortgage 3% sinking fund bonds, due 1971 (U.S. \$11,482,000)	11,482,000	12,422,000
3% Serial debentures, due 1964/1965	600,000	900,000
Other debt	14,337,478	9,768,223
	<u>558,074,892</u>	<u>573,560,274</u>
Less: Debt payable within one year included in current liabilities (equivalent to \$6,111,220 at year-end rates of exchange)	6,022,480	8,154,258
	<u>\$552,052,412</u>	<u>\$565,406,016</u>

Allowing for payments already made, sinking fund requirements over the next five years against the above debt, other than bank loans, amount to approximately \$5.7 million in 1964 (\$16.9 million previously redeemed), \$21.2 million in 1965, \$21.4 million in 1966, \$21.7 million in 1967 and \$25.5 million in 1968.

8. PREFERRED SHARES OF CONSOLIDATED SUBSIDIARIES, ETC.:

	<u>1963</u>	<u>1962</u>
Cumulative Redeemable Preferred Shares:		
Aluminum Company of Canada, Ltd.:		
4% Sinking fund first preferred shares	\$ 9,283,075	\$ 9,752,875
4½% Sinking fund second preferred shares	53,235,500	54,892,800
Indian Aluminium Company, Ltd. 5% preferred shares	1,329,200	1,329,200
	<u>63,847,775</u>	<u>65,974,875</u>
Minority interest in equity of consolidated subsidiaries	14,375,390	12,671,714
	<u>\$ 78,223,165</u>	<u>\$ 78,646,589</u>

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

9. CAPITAL STOCK:

(Number of common shares and prices adjusted, where applicable, to reflect 1957 3 for 1 split).

The outstanding common shares were increased during 1963 as a result of the issuance, under the 1962 offering of the first Employee Share Purchase Plan, of 35,499 shares at \$22. The offering price was fixed, under the terms of the Plan, at approximately 85% of the market price current at the time of the offering. At 31st December 1963, 6,069 shares remained to be purchased by employees at \$22 under the 1962 offering. Prior to 1963, 494,469 common shares were issued under the Plan at prices of \$12.33, \$34.66, \$23.00, \$25.00 and \$22.00. The plan having expired in September 1963 no further offerings may be made under the first plan.

Further increases in 1963 resulted from the exercise of options for common shares as indicated in the following tabulation, which also summarizes other changes during the year in the status of outstanding options. These options were granted to officers and other employees under the first and second Share Option Plans, the option prices having been fixed, under the terms of the Plans, at the market prices ruling when the options were granted.

Option price and year of grant	Shares under option 1st January 1963	Year 1963			Shares under option 31st December 1963
		Exercised	Granted	Cancelled	
\$15.84 - 1953	60,082	60,082	—	—	—
31.25 - 1955	181,314	—	—	2,500 (a)	178,814
36.50 - 1959	127,850	—	—	7,700 (b)	120,150
30.75 - 1960	63,705	—	—	3,000 (c)	60,705
33.875 - 1961	1,500	—	—	—	1,500
25.875 - 1963	—	—	80,000 (d)	—	80,000
26.75 - 1963	—	—	33,500 (e)	—	33,500
	<u>434,451</u>	<u>60,082</u>	<u>113,500</u>	<u>13,200</u>	<u>474,669</u>

(a) Not available for further options.

(b) Including 5,000 shares re-optioned for five years at \$26.75.

(c) Re-optioned for five years at \$26.75.

(d) Not exercisable until 21st November 1964.

(e) Not exercisable until 19th December 1964.

The number of common shares available for the granting of options decreased during 1963 from 102,900 to 100. Prior to 1963, 490,418 shares were issued at \$15.84, 20,286 shares at \$31.25 and 4,045 shares at \$30.75 upon the exercise of options.

204,315 common shares were issued in January 1963 in exchange for the outstanding shares of Central Cable Corporation.

The 4¼% cumulative redeemable convertible preferred shares were issued in July 1963 for cash.

There were 28,975,946 authorized common shares unissued at 31st December 1963, of which 1,500,000 are reserved for issuance under the conversion privileges of the preferred shares.

10. DIVIDEND RESTRICTIONS:

Consolidated earned surplus at 31st December 1963 includes approximately \$133 million which, pursuant to the provisions of certain debt issues of Aluminum Company of Canada, Ltd., is not available for payment of cash dividends to Aluminium Limited.

Consolidated earned surplus at 31st December 1963 also includes \$12.5 million, representing the par value of the preferred shares of Aluminum Company of Canada, Ltd. purchased for cancellation since 1946 (\$2.1 million in 1963), which, under the requirements of the Companies Act of Canada, has been designated as capital surplus and is not available for the payment of dividends to Aluminium Limited unless certain formalities are observed.

11. OTHER INCOME:

	1963	1962
Cancellation fee	\$ —	\$5,320,642
Gain on disposal of fixed assets	(18,767)	415,995
Gain from sale of investments	923,374	43,348
Income from time deposits and short-term investments	1,655,494	976,433
Other	189,920	310,954
	<u>\$2,750,021</u>	<u>\$7,067,372</u>

12. OTHER EXPENSES:

	1963	1962
Exchange loss on redemption of debt	\$1,972,233	\$ 699,515
Financing expenses	218,732*	693,113
Other	230,135	—
	<u>\$2,421,100</u>	<u>\$1,392,628</u>

*No commission was paid on the issuance of the new preferred shares in 1963; these were sold at par to underwriters who offered them in Canada at a premium of \$1.125 per share.

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

13. COMMITMENTS:

A consolidated subsidiary company, Saguenay Shipping Limited, has charter hire commitments amounting to \$11.0 million in 1964 (\$18.9 million paid in 1963), \$8.6 million in 1965, \$5.2 million in 1966, \$3.1 million in 1967, \$3.0 million in 1968, \$2.7 million in 1969 and lesser amounts up to 1976.

Aluminum Company of Canada, Ltd. has undertaken to make certain purchases of aluminum products annually until 1973 from two U.S. companies. Aluminium Limited has a 50.1% interest in one and 50.0% in the other. Under certain exceptional circumstances Aluminum Company of Canada, Ltd. could be required to advance to these companies up to an estimated aggregate amount of U.S. \$4.3 million in 1964 and lesser amounts through 1972 without obtaining an equivalent value in aluminum products.

See also reference to capital expenditure program in note 5.

14. SUPPLEMENTAL COMPENSATION PLAN:

Under the Supplemental Compensation Plan, approved by the shareholders in 1963, a compensation reserve would be established, from which allotments to certain employees could be made. The amount to be credited to the reserve would in general represent one-tenth of the excess, if any, of the consolidated net income over a 6% return on the capital investment, both as defined under the terms of the plan. The consolidated net income for the year 1963 was not at a level sufficient to produce a credit to the reserve at 31st December 1963.

15. STATUTORY INFORMATION (parent and consolidated subsidiaries):

Executive salaries for the year 1963 were \$4,191,990, legal fees \$401,500, directors' fees \$82,437, Canadian income taxes \$5,930,143.

ALUMINIUM LIMITED
AND CONSOLIDATED SUBSIDIARIES

AUDITORS' REPORT

PRICE WATERHOUSE & CO.

CANADA CEMENT BUILDING
PHILLIPS SQUARE
MONTREAL 2
3RD MARCH 1964

TO THE SHAREHOLDERS OF ALUMINIUM LIMITED:

We have examined the consolidated balance sheet of Aluminium Limited and consolidated subsidiaries as at 31st December 1963 and the related consolidated statements of income and earned surplus for the year then ended and have obtained all the information and explanations which we have required. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion and according to the best of our information and the explanations given to us and as shown by the books of the companies, the accompanying consolidated balance sheet and related consolidated statements of income and earned surplus, supplemented by the notes thereto, are properly drawn up so as to exhibit a true and correct view of the combined state of affairs of Aluminium Limited and consolidated subsidiaries as at 31st December 1963 and the results of their combined operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Pursuant to section 118 of the Companies Act, we report that the interest of Aluminium Limited in the profits for the year of the non-consolidated subsidiaries has been included in consolidated income to the extent of dividends received.



Chartered Accountants

ALUMINIUM LIMITED

AND CONSOLIDATED SUBSIDIARIES

COMPARATIVE FINANCIAL STATISTICS

AS ADJUSTED

Year	Total Assets before Reserves	Sales and Operating Revenues	Net Income before Depreciation and Income Taxes	Current Income Taxes	"Cash Income" (1)	Number of Common Shares (2) (Millions)	PER COMMON SHARE		
							Capital Stock & Surplus	Profit (3)	Cash Dividends
(Millions of Canadian Dollars)						(Canadian Dollars)			
1930	75	26	3	1	2	18.9	1	.03	0
1931	81	22	1	1	0	19.5	1	— .08	0
1932	81	13	1	0	1	19.6	1	— .08	0
1933	84	14	2	0	2	19.6	1	— .05	0
1934	83	21	2	0	2	19.6	1	— .02	0
1935	84	26	2	0	2	19.6	1	.01	0
1936	88	32	4	0	4	20.7	1	.09	0
1937	98	49	13	2	11	22.3	2	.36	0
1938	144	66	20	5	15	22.3	2	.49	0
1939	158	92	28	8	20	22.3	3	.69	.14
1940	209	82	38	22	16	22.3	3	.49	.27
1941	324	132	53	15	38	22.3	3	.65	.33
1942	446	198	75	12	63	22.3	4	.69	.33
1943	528	290	96	14	82	22.3	4	.52	.33
1944	523	259	81	11	70	22.3	4	.49	.27
1945	480	114	26	8	18	22.3	4	.52	.27
1946	490	111	28	10	18	22.3	5	.54	.30
1947	514	153	38	15	23	22.3	5	.72	.33
1948	587	209	56	20	36	22.3	6	1.22	.44
1949	612	197	57	20	37	22.3	6	1.21	.43
1950	698	226	73	26	47	22.3	7	1.56	.59
1951	809	283	92	36	56	24.6	9	1.51	.62
1952	972	332	95	35	60	24.6	9	1.44	.65
1953	1,124	336	96	26	70	27.0	10	1.41	.66
1954	1,180	327	94	21	73	27.1	11	1.29	.65
1955	1,310	414	123	26	97	29.9	12	1.61	.71
1956	1,468	481	138	31	107	30.0	13	1.85	.77
1957	1,629	454	112	8	104	30.2	14	1.37	.84
1958	1,734	421	80	9	71	30.3	14	.74	.73
1959	1,820	448	91	13	78	30.4	14	.79	.53
1960	1,906	509	122	25	97	30.6	15	1.28	.68
1961	1,952	517	110	25	85	30.7	15	1.00	.61
1962	2,046	559	128	32	96	30.7	15	1.23	.64
1963	2,173	670	125	28	97	31.0	16	1.01	.65

(1) 1950 and thereafter is before reserve for future income taxes — see note 6 to financial statements.

(2) Outstanding at end of each year, adjusted for stock dividends and splits.

(3) After preferred dividends.

ALUMINIUM LIMITED

PRINCIPAL SUBSIDIARIES AND AFFILIATES

Main Countries of Operations	Company Name	Products of Activity	Aluminium Limited's Equity	Chief Executive or Operating Officer
OPERATING SUBSIDIARIES AND AFFILIATES				
NORTH AMERICA				
CANADA	Aluminum Company of Canada, Limited	Alumina, smelting, fabricating, chemicals	100%	Fraser W. Bruce, President
	Aluminum Goods Limited	Manufactures of aluminum	100%	N. F. Russell, President
	Alcan Design Homes Limited	Design, build and sell dwellings	100%	J. C. Neely, President
	Newfoundland Fluorspar Limited	Mining of fluorspar	100%	Rupert Wiseman, General Manager
	Roberval & Saguenay Railway Company, The	Transportation	100%	F. A. Dagg, President
	Saguenay Shipping Limited	Transportation	100%	F. L. Parsons, President
	Saguenay Terminals Limited	Terminal facilities	100%	F. A. Dagg, President
	Alma & Jonquieres Railway Company, The	Transportation	93.6%	B. A. Walker, Manager
	Saguenay Power Company, Ltd.	Hydro-electric power generation	93.6%	N. S. Crerar, President
	Saguenay Transmission Company, Limited	Power transmission and sales	93.6%	N. S. Crerar, President
	Roslyn Metal Products Limited	Custom roll-forming, building products	66.6%	S. P. Jones, President
		*Supreme Aluminum Industries Limited	Sheet, cooking utensils	25%
UNITED STATES	*Alroll, Inc.	Sheet re-roll stock	50.1%	Richard W. Summey, President
	*Alplate, Inc.	Plate	50%	James A. Dullea, President
	Metals Disintegrating Corporation	Metal powders and pigments	100%	Don O. Noel, President
	Central Cable Corporation	Wire and cable	100%	John G. Detwiler, President
LATIN AMERICA				
ARGENTINA	Alcan Argentina S.A.I.C.	Fabricating	98.3%	G. Ostner, President
BRAZIL	Aluminio do Brasil S.A.	Fabricating	100%	F. A. Sievert, Director-President
	Aluminio Minas Gerais S.A.	Bauxite, alumina, smelting	100%	F. A. Sievert, Director-President
COLOMBIA	Aluminio Alcan de Colombia S.A.	Fabricating	91.3%	John P. Lee, President
MEXICO	Aluminio Industrial Mexicano, S.A.	Fabricating	60.9%	E. A. Grassby, General Manager
	*Fluoresqueda, S.A.	Fluorspar mining	33.3%	James W. Swent, President
URUGUAY	Aluminio del Uruguay S.A.	Fabricating	85.8%	Hans B. Tafelmacher, Managing Director
CARIBBEAN				
BRITISH GUIANA	Demerara Bauxite Company, Limited	Bauxite, alumina	100%	J. G. Campbell, Managing Director
	Sproston, Limited	Trading, misc. services	100%	J. C. Batzold, Managing Director

*Not consolidated.

ALUMINIUM LIMITED

PRINCIPAL SUBSIDIARIES AND AFFILIATES

Main Countries of Operations	Company Name	Products or Activity	Aluminium Limited's Equity	Chief Executive or Operating Officer
JAMAICA	Alcan Jamaica Limited	Bauxite, alumina	100%	J. F. Horwood, Managing Director
	Alcan Products of Jamaica Limited	Fabricating	100%	J. C. Batzold, Managing Director
	Sprostons (Jamaica) Limited	Trading, misc. services	100%	J. C. Batzold, Managing Director
TRINIDAD	Chaguaramas Terminals Limited	Storage and transfer facilities	100%	John Macindoe, Manager
	Sprostons (Trinidad) Limited	Trading, fabricating	100%	J. C. Batzold, Managing Director
EUROPE				
BELGIUM	Alcan Aluminium Raeren S.A.	Fabricating	84.4%	Jacques Charles Guillard, Managing Director
DENMARK	*Dansk Aluminium Industri A/S	Utensils, tanks, job shop	46.15%	Alf Janke, General Manager
	*Aluminord A/S	Fabricating	46.15%	Robert C. Peck, Managing Director
FRANCE	Aluminium Alcan de France	Extrusions, paste	100%	Paul Fréault, President, General Manager
	S. A. des Bauxites et Alumines de Provence	Bauxite mining	100%	Louis Gallay, General Manager
GERMANY	Alcan Aluminiumwerke G.m.b.H.	Fabricating, foundries	100%	Dr. Kurt Schneider, General Manager
ITALY	Alcan Alluminio Italiano S.p.A.	Primary and secondary ingot	100%	I. Barontini, General Manager
	*Angeletti & Ciucani Fonderia Laminatoio S.p.A.	Fabricating	26%	P. G. Angeletti and Augusto Ciucani, Joint Managing Directors
NETHERLANDS	*Nederlandse Aluminium Maatschappij	Fabricating	40%	G. J. J. Both, Sr., President
NORWAY	*A/S Nordisk Aluminiumindustri	Fabricating	50%	Nils Ramm, Managing Director
	*A/S Norsk Aluminium Company	Alumina, smelting	50%	Nils Ramm, Managing Director
	*Det Norske Nitridaktieselskap	Smelting	50%	Egil Kollenborg, Managing Director
SPAIN	*"Alcan" Aluminio Iberico, S.A.	Fabricating	52.5%	D. A. Corbett-Thompson, General Manager
SWEDEN	*A/B Svenska Metallverken	Fabricating, smelting	22%	Göran Philipson, Managing Director
SWITZERLAND	Aluminiumwerke A.-G. Rorschach	Fabricating	100%	Dr. Chas. Meiner, President
	*Fabrique d'Emballages Métalliques S.A.	Can making	26%	Paul Sieber, Managing Director
UNITED KINGDOM	Alcan Industries Limited	Fabricating	100%	S. E. Clotworthy, Managing Director
	*Alcan Enfield Alloys Limited	Secondary ingot	50%	W. W. Kee, Managing Director
AFRICA				
GHANA	Ghana Aluminium Products Limited	Corrugating	60%	W. R. Coles, Managing Director
NIGERIA	Nigeria Aluminium Products Limited	Corrugating	60%	B. A. Platt, Managing Director
	Alcan Aluminium of Nigeria Limited	Fabricating	87.5%	F. Layton, Managing Director

*Not consolidated.

ALUMINIUM LIMITED

PRINCIPAL SUBSIDIARIES AND AFFILIATES

Main Countries of Operations	Company Name	Products or Activity	Aluminium Limited's Equity	Chief Executive or Operating Officer
REPUBLIC OF SOUTH AFRICA	Alcan Aluminium of South Africa Limited	Fabricating	100%	N. H. Custers, Managing Director
INDIA	Indian Aluminium Company, Limited	Bauxite, alumina, smelting fabricating	65.1%	A. J. Zullig, Managing Director
JAPAN	*Nippon Light Metal Company, Ltd.	Alumina, smelting	50%	Kikuo Yasuda, President
	*Toyo Aluminium K.K.	Fabricating	50%	Y. Oyamada, President
	*Nikkei Aluminium Company, Ltd.	Fabricating	33.6%	Nakazo Nakagawa, President
MALAYSIA	Southeast Asia Bauxites Limited	Owns bauxite mine	75%	Allan R. Chin-Bing, General Manager
	Johore Mining and Stevedoring Co. Ltd.	Operates bauxite mine	75%	Allan R. Chin-Bing, General Manager
	Alcan Malayan Aluminium Company Limited	Fabricating	84.7%	A. H. Swift, Managing Director
	*Sematan Bauxite Limited	Bauxite mining	33.3%	H. M. Knudson, General Manager
AUSTRALIA	Australian Aluminium Company Limited	Fabricating	100%	J. F. Hatton, Managing Director
NEW ZEALAND	Alcan Industries Limited, Branch	Fabricating	100%	Denis Pinn, General Manager
	*Aluminium Conductors Limited	Wire and cable	51%	J. D. Bull, Manager
RESEARCH AND SELLING SUBSIDIARIES				
CANADA	Aluminium Laboratories Limited	Research, engineering, exploration. Laboratories in Canada and England.	100%	H. H. Richardson, President
	Alcan International Limited	Sales Management for fully owned Companies	100%	D. M. Culver, President
	Magnesium Company of Canada Limited	Magnesium ingot and semi-fabricated product sales	100%	J. E. Pepall, President
AFRICA	Alcan Africa Limited	International sales of products of Aluminium Limited Group of Companies	100%	J. Bueb, President, Montreal
FAR EAST	Alcan Asia Limited	As above	100%	J. Boetschi, Managing Director, Hong Kong
OCEANIA	Alcan Australia Limited	As above	100%	John D. Runkle, Managing Director, Sydney
EUROPE, NEAR EAST, NORTH AFRICA	Alcan S.A.	As above	100%	R. D. Hamer, Managing Director, Zurich
U.K. AND SCANDINAVIA	Alcan (U.K.) Limited	As above	100%	P. J. Elton, Managing Director, London
U.S.A., CARIBBEAN, LATIN AMERICA	Aluminium Limited Sales, Inc.	As above	100%	Eric F. West, President, New York

*Not consolidated.

TRANSFER AGENTS

PREFERRED SHARES

National Trust Company, Limited

Montreal
Toronto
Vancouver

COMMON SHARES

National Trust Company, Limited

Montreal
Toronto
Vancouver

Mellon National Bank and Trust Company

Pittsburgh

First National City Bank

New York

Morgan Grenfell & Co. Limited

London (England)

REGISTRARS

The Royal Trust Company

The Royal Trust Company

Pittsburgh National Bank

Manufacturers Hanover Trust Company

The Royal Trust Company





ALUMINIUM LIMITED MONTREAL 3, CANADA