ALCAN INC
Form 10-K
March 27, 2003

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

[x] **Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the fiscal year ended 31 December 2002

OR

[ ] **Transition Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
Commission file number 1-3677

Alcan Inc.

Incorporated in:
Canada
1188 Sherbrooke Street West,
Montreal, Quebec, Canada H3A 3G2
Telephone: (514) 848-8000

I.R.S. Employer Identification No.:
Not applicable

Securities registered pursuant to Section 12(b) of the Act:

Title	*Name of each exchange on which registered*
Common Shares without nominal or par value	New York Stock Exchange
Common Share Purchase Rights	New York Stock Exchange
4 7/8% Notes due 2012	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months and (2) has been subject to such filing requirements for the past 90 days: Yes **x** No __.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. **[x]**

The aggregate market value of the voting stock held by non-affiliates:	USD12,054 million, as of 28 June 2002
Common Stock of Registrant outstanding:	321,640,894 Common Shares, as of 24 March 2003
Documents incorporated by reference:	Portions of the Annual Report to security holders for the fiscal year ended 31 December 2002

(Parts I, II and IV)

Portions of the Management Proxy Circular for the Annual Meeting to be held on 24 April 2003 (Parts III and IV)

INDEX TO ALCAN INC.
2002 ANNUAL REPORT ON FORM 10-K

PART I

In this report, unless the context otherwise requires, the following definitions apply:

"Alcan", "Company" or "Registrant" means Alcan Inc. and, where applicable, one or more Subsidiaries,

"Algroup" means Alusuisse Group Ltd. (now Alcan Holdings Switzerland Ltd., a Subsidiary of Alcan following the Combination),

"Annual Report" means Alcan's Annual Report to shareholders for the year ended 31 December 2002,

"Combination" means the process by which Algroup became a Subsidiary of Alcan on 17 October 2000, through the completion of a share exchange offer by Alcan for the shares of Algroup,

"Dollars" or "$" means U.S. Dollars, unless otherwise specified,

"EVA®" Economic Value Added is the registered trademark of Stern Stewart & Co. and a key measure of financial performance. EVA represents the difference between the return on capital and the cost of using that capital over the same period,

"Joint Venture" means an association (incorporated or unincorporated) of companies jointly undertaking some commercial enterprise and proportionately consolidated to the extent of Alcan's participation,

"LME" means the London Metal Exchange,

"Management Proxy Circular" means the management proxy circular for Alcan's Annual Meeting of Shareholders to be held on 24 April 2003,

"Related Company" means a company in which Alcan owns, directly or indirectly, 50% or less of the voting stock and in which Alcan has significant influence over management, but does not include a company in a Joint Venture,

"Subsidiary" means a company controlled, directly or indirectly, by Alcan,

"tonne" means a metric tonne of 1,000 kilograms or 2,204.6 pounds, and

"UBC" means a used beverage can.

Unless otherwise expressly indicated, the financial and other information given in this report is presented on a consolidated basis.

Certain information called for by Items of this Form is incorporated by reference to the Annual Report and to the Management Proxy Circular. Such information is specifically identified herein, including by the reference "See Annual Report..." or "See Management Proxy Circular...". With the exception of such information specifically incorporated by reference, the Annual Report and the Management Proxy Circular are not to be deemed filed as part of this Form 10-K Report. Information incorporated by reference is considered to be part of this report, and information filed later with the SEC will automatically update and supersede this information.

Special Note Regarding Forward-Looking Statements

Certain statements made or incorporated by reference in this Report are forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Terms such as "believes", "expects", "may", "will", "could", "should", "anticipates", "estimates" and "plans" and the negatives of and variations on terms such as these signify forward-looking statements. Because these forward-looking statements include risks and uncertainties, readers are cautioned that actual results may differ materially from the results expressed in or implied by the statements.

Factors that could cause actual results or outcomes to differ from the results expressed or implied by forward-looking statements include, among other things:

- changes in global aluminum supply and demand conditions;
- changes in aluminum ingot prices;
- changes in raw materials costs and availability;
- changes in the relative values of various currencies;
- cyclical demand and pricing within the principal markets for Alcan's products;
- changes in government regulations, particularly those affecting environmental, health or safety compliance;
- fluctuations in the supply of and prices for power in the areas in which Alcan maintains production facilities;
- the effect of integrating acquired businesses and the ability to attain expected benefits;
- potential catastrophic damage, increased insurance and security costs and general uncertainties associated with the increased threat of terrorism or war;
- the effect of international trade disputes on Alcan's ability to import materials, export its products and compete internationally;
- relationships with and financial and operating conditions of customers and suppliers;
- economic, regulatory and political factors within the countries in which Alcan operates or sells products; and
- factors affecting Alcan's operations, such as litigation, labour relations and negotiations and fiscal regimes.

Additional information concerning factors that could cause actual results to differ materially from those in forward-looking statements include, but are not necessarily limited to, those discussed under the heading "Risks and Uncertainties" in the Management's Discussion and Analysis section of Alcan's Annual Report, on pages 38 and 39 thereof. The text under such heading is incorporated herein by reference.

Alcan undertakes no obligation to release publicly the results of any future revisions it may make to forward-looking statements to reflect events or circumstances after the date of this Report or to reflect the occurrence of unanticipated events.

Alcan files annual, quarterly and special reports and other information with the SEC. Any document so filed can be viewed at the SEC's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference rooms. Alcan's SEC filings are also available to the public over the Internet at the SEC's web site at http://www.sec.gov or through Alcan's website at http://www.alcan.com

ITEMS 1 AND 2 BUSINESS AND PROPERTIES

Alcan is the parent company of an international group involved in many aspects of the aluminum and packaging industries. Through Subsidiaries, Joint Ventures and Related Companies around the world, the activities of Alcan include bauxite mining, alumina refining, production of specialty chemicals, power generation, aluminum smelting, manufacturing, recycling, packaging, as well as related research and development. Alcan employs approximately 48,000 people.

In the 100 years since it was established, Alcan has developed a unique combination of competitive strengths. Alcan is a multicultural and multilingual market-driven company reflecting the differing corporate and social characteristics of the 38 countries in which it operates. Alcan is one of the most international aluminum and packaging companies and is the foremost global producer and marketer of rolled aluminum products.

1. OVERVIEW OF OPERATING SEGMENTS

In November 2001, the Company announced the realignment of its operating management structure from four to six Business Groups, each responsible for the value creation of the different business units of which they are comprised. The new operating management structure became effective 1 January 2002.

The six operating segments are Alcan's six Business Groups:

Bauxite, Alumina and Specialty Chemicals, headquartered in Montreal, Canada comprising Alcan's worldwide activities related to bauxite mining, alumina refining and the production of specialty chemicals, operating seven bauxite mines and deposits in five countries and five alumina plants in three countries;

Primary Metal, also headquartered in Montreal, comprising smelting operations, power generation and production of primary value-added ingot in the form of sheet ingot, extrusion billet, rod and foundry ingot, as well as engineering services and trading operations for alumina and aluminum, operating or having interests in 16 smelters in seven countries;

Rolled Products Americas and Asia, headquartered in Cleveland, U.S.A. encompassing aluminum sheet and light gauge products, operating 16 plants in six countries;

Rolled Products Europe, headquartered in Zurich, Switzerland comprising aluminum sheet, including automotive, can and lithographic sheet, plate and foil stock operating 11 plants in four countries;

Engineered Products, also headquartered in Zurich, producing fabricated aluminum products, including wire and cable, components for the mass transportation, automotive, building, display, electromechanical and other industrial markets, as well as sales and service centres throughout Europe, operating 47 plants in 17 countries; and

Packaging, also headquartered in Zurich, consisting of Alcan's worldwide food flexible, foil, specialty, pharmaceutical and cosmetics packaging businesses, operating 76 plants in 14 countries.

Alcan's corporate head office, located in Montreal, focuses on strategy development, while overseeing governance, policy, legal, compliance, human resources and finance matters.

Following the Combination and up to 31 December 2001, the four operating segments were:

Primary Metal, focusing on bauxite, alumina and specialty chemicals operations, the primary aluminum smelting facilities, power generation and the trading operations for alumina and aluminum.

Aluminum Fabrication, Americas and Asia, comprising the fabrication of aluminum sheet and light gauge rolled products as well as rod, cable and wire.

Aluminum Fabrication, Europe, comprising the European fabrication of rolled and engineered products.

Packaging, comprising Alcan's food flexible, foil, specialty, pharmaceutical, tobacco and cosmetics packaging businesses.

See Annual Report, pages 75 to 77, Note 28 to the Consolidated Financial Statements for selected information by operating segment.

Information is included for the current or an earlier period under the new basis consisting of six segments. Certain prior year amounts have been reclassified to conform with the 2002 presentation.

2. HISTORY / RECENT DEVELOPMENTS

Alcan is a limited liability Canadian company, incorporated on 3 June 1902, with its headquarters and registered office in Montreal, Canada. It was formed as a subsidiary of the Pittsburgh Reduction Company, one of the founding companies of the aluminum industry, to establish a smelter and hydroelectric power facility in Shawinigan, Quebec. In 1928, the international operations and domestic U.S. operations were separated into two competing companies that became Alcan and Alcoa Inc., respectively. During the Second World War substantial expansion of hydroelectric and smelting capacity took place in Quebec to supply aluminum for the war effort. In the 1950s, Alcan added hydroelectric and smelting capacity in British Columbia. During the postwar period, Alcan expanded internationally and invested in fabricating activities to stimulate demand for its primary metal production.

In 2000, Alcan entered into a combination agreement with Algroup which consisted of an independent exchange offer of Alcan's common shares for all of the outstanding shares of Algroup. On 17 October 2000, after clearance from competition authorities, the Combination was completed with Alcan acquiring over 99% of the shares of Algroup by virtue of its exchange offer. Alcan acquired the remaining shares in Algroup in 2001 by virtue of statutory right and caused Algroup to de-list from the Swiss Stock Exchange.

Today, Alcan is a multinational company engaged in all aspects of the aluminum and packaging industries on an international scale.

In the past two years Alcan reported the following major events related to its business and corporate governance:

Following Jacques Bougie's resignation as Chief Executive Officer on 10 January 2001, the Board of Directors appointed W.R.C. (Bill) Blundell as interim President and Chief Executive Officer. Effective 12 March 2001, Travis Engen, previously chairman and chief executive officer of ITT Industries, Inc. and a non-executive Director of the Company, was appointed as President and Chief Executive Officer of Alcan.

On 1 February 2001, Alcan announced that it had completed the $393 million acquisition of the remaining 30% interest in the Gove alumina refinery and related bauxite mine in Australia. On 12 February 2003, the Company announced a definitive feasibility study, a significant step towards a potential expansion of alumina production capacity at Gove. The proposed expansion would increase the capacity of the refinery from 2 million tonnes per year to 3.5 million tonnes per year using proprietary Alcan technology to increase operating efficiency.

On 1 March 2001, Alcan changed its corporate name from Alcan Aluminium Limited to Alcan Inc. to reflect the Company's increasingly diversified product mix and global character.

On 17 April 2001, the Company announced the retirement of Suresh Thadhani, Executive Vice President and Chief Financial Officer. Subsequently, on 28 June 2001, the Company announced the appointment of Geoffery E. Merszei to the position of Executive Vice President and Chief Financial Officer. Prior thereto, Mr. Merszei had been vice president and treasurer of The Dow Chemical Company.

On 27 April 2001, Alcan, in response to the conditions imposed by the European Commission in respect of the Combination, announced the sale of the Martinswerk, Germany, plant to Albermarle Corporation of Richmond, Virginia, U.S.A. As well, on 30 May 2001, the Palco foil container plant, located in Madrid, Spain, was sold to Aliberico S.A. of Spain and 12 presses for smooth wall containers in Ohle, Germany were sold to Alupak AG of Switzerland. On 18 June 2001, the Company announced the sale of its lithographic sheet production plant, Star Litho, located in the U.K. to Elval Hellenic Aluminium Industry S.A. of Greece.

On 31 May 2001, the Company completed the sale of its bauxite and alumina operations in Jamaica to Glencore AG, a privately held company based in Switzerland. These assets comprise two alumina refineries and related bauxite reserves and mine sites.

In October 2001, in light of increased competitive pressures and market outlook, the Company announced a restructuring program that would result in a series of plant sales, closures and divestments as well as a reduction of approximately 6% of the workforce. As part of this, changes were effected to the rolled products businesses in the U.K. and Italy as well as to the aluminum foil activities in the U.K. and Switzerland.

On 20 November 2001, the Company announced the establishment of the Office of the President and a realigned operating management structure comprised of six business groups and four corporate functions. The Office of the President, which is based at the Company's Corporate Head Office in Montreal, includes Travis Engen, President and Chief Executive Officer and Executive Vice Presidents Richard B. Evans and Brian W. Sturgell. It was intended that the new organizational and management structure effective 1 January 2002 will substantially raise Alcan's performance, move the Company closer to its markets and improve its responsiveness.

In February 2002, Alcan announced that it had concluded an agreement with the Société générale de financement du Québec (SGF) to purchase for approximately $165 million a 20% interest in the Aluminerie Alouette consortium, which operates a 243,000 tonne aluminum smelter in Sept-Iles, Quebec, Canada. The transaction was completed on 24 April 2002.

On 21 March 2002, the Board announced the appointment of Mr. L. Yves Fortier as a Director. He was subsequently elected as a Director at the Annual Meeting of Shareholders on 25 April 2002, and became Chairman of the Board. Mr. Fortier is chairman and a senior partner of the law firm Ogilvy Renault in Montreal. Also at the Annual Meeting on 25 April 2002, Mr. Roland Berger was elected as a Director. Mr. Berger is chairman and global managing partner of Munich-based Roland Berger Strategy Consultants.

On 22 March 2002, the Company received a demand for payment in the amount of $100 million from Powerex Corp. (a subsidiary of BC Hydro) ("Powerex") (see section entitled "Legal Proceedings" on page 25 of this report.) On 17 January 2003, the Company received a decision following arbitration hearings held in December 2002 on a contractual dispute between Powerex and Alcan. The arbitrator confirmed Powerex's claim for $100 million. A standstill agreement currently is in effect whereby Alcan and Powerex have agreed that no action will be taken to set aside or enforce the arbitrator's decision pending discussions between the parties.

On 6 June 2002, Alcan announced an agreement in principle to form a joint venture with Qingtongxia Aluminum Company (QTX), for participation in its smelter. The proposed joint venture is an opportunity for Alcan to acquire a 50% ownership position in the 130,000 tonne aluminum smelter located in the Ningxia Autonomous Region, China. In addition, Alcan has an option to secure a 50% interest in the planned and approved 150,000 tonnes expansion of this smelter.

On 6 September 2002, the Company announced a public offering in the U.S. of $500 million 4 7/8 % global notes, due 15 September 2012. Net proceeds to the Company from the sale of the notes were used to repay existing long-term debt and commercial paper borrowings.

On 17 September 2002, the Company announced that it had completed the $165 million acquisition of Corus Group plc's 20% interest in the Aluminerie Alouette consortium, bringing the Company's participation to 40%.

On 3 October 2002, the Board announced the appointment of Mr. William R. Loomis as a Director. Mr. Loomis is a limited managing director of Lazard Frères & Co., LLC.

On 17 October 2002, the Company announced that greenhouse gas emissions from its Quebec facilities would be reduced by an average of 285,000 tonnes from their 1999 levels based on equivalent production capacity. The new target was expected to be reached by the end of 2003, according to an agreement signed with the government of the province of Quebec.

On 20 December 2002, Alcan announced that it had signed a definitive agreement with Norsk Hydro to purchase VAW Packaging (FlexPac). FlexPac includes 14 high-quality flexible packaging plants in eight countries and 5,400 employees. On 24 February 2003, the European Commission gave the Company clearance to complete its previously announced agreement to purchase FlexPac from Norsk Hydro.

On 5 March 2003, the Company announced that it had entered into agreements to acquire Baltek Corporation, the world's leading supplier of balsa-based structural core materials, for approximately $35 million.

On 17 March 2003, Alcan announced that Messrs. L. Denis Desautels and Milton K. Wong would be candidates for election to the Board of Directors at the annual meeting to be held in Montreal on 24 April 2003. Mr. Desautels is executive director of the University of Ottawa Centre on Governance and was Auditor General of Canada from 1991 to 2001. Mr. Wong is chairman of HSBC Asset Management (Canada) Limited and Chancellor of Simon Fraser University in British Columbia.

3. BUSINESS GROUPS

1. Bauxite, Alumina and Specialty Chemicals

1.1 Products

1.1.1 ***Bauxite***: Aluminum is one of the most abundant metals in the earth's crust but is never found in its pure form. Bauxite is the basic aluminum-bearing ore.

1.1.2 ***Smelter-Grade Alumina***: Alumina (aluminum oxide) is produced from bauxite by a chemical process. Depending upon quality, between four and five tonnes of bauxite are required to produce approximately two tonnes of alumina. The alumina produced is generally used to supply the Company's own smelting requirements.

1.1.3 ***Specialty Chemicals***: Alcan produces a range of specialty aluminas and hydrates for different uses, such as ceramics, refractories, water treatment chemicals, catalysts, coagulants, flame-retardants and smoke suppressants.

1.2 Sales

The Bauxite, Alumina and Specialty Chemicals Business Group, with third-party revenues of $435 million, made up 3% of Alcan's 2002 revenues. Average realized prices for alumina decreased both in 2002 and 2001 in line with LME prices. The Company continues to attempt to lower its costs in the face of ongoing pricing pressure. Production costs improved by 6% in 2002, due to divestment of high-cost operations, lower raw material prices and ongoing cost reduction efforts. A decrease in production volumes and lower alumina prices, only partially offset by improved production costs, contributed to lower earnings in 2002.

In 2002, Alcan used 10.3 million tonnes of bauxite and had revenues of $99 million in third party bauxite sales. Alcan produced 4.1 million tonnes of smelter-grade alumina, of which some 3.4 million tonnes were transferred to its current smelting operations at market prices. The remainder was sold to third parties. It also produced approximately 200,000 tonnes of chemical-grade alumina, which was sold to third parties in the form of various alumina chemicals.

1.3 Production / Facilities

1.3.1 ***Canada:*** Alcan owns an alumina facility at Jonquière, Quebec. Bauxite for this operation is obtained from Brazil, Guinea, Ghana and Australia (see below). Alumina and alumina-based chemicals produced at Jonquière supply, in part, the smelters in Quebec and are also sold in chemical markets in the U.S.A. and Canada.

1.3.2 ***Australia:*** As a result of the Combination and subsequent acquisitions (see section titled "History / Recent Developments" above), Alcan acquired the entire 100% interest in the Gove bauxite mine and refinery plant in Northern Australia. In 2002, the amount of bauxite mined at Gove was 6.1 million tonnes and the refinery produced 1.9 million tonnes of smelter-grade alumina. Alcan has a 21.4% interest in Queensland Alumina Ltd., which operates an alumina plant at Gladstone (Queensland). Each participant in that plant supplies bauxite for toll conversion. Alcan's bauxite is purchased from Comalco Limited ("Comalco") in Australia under a long-term contract. Alcan's share of production from Gladstone is used to supply the Alcan smelter at Kitimat, British Columbia, with the balance being sold to third parties. Alcan and Comalco have an agreement providing for the future development of Alcan's Ely bauxite mine in Cape York, Queensland, Australia, with Comalco's adjacent operations.

1.3.3 ***Brazil:*** Alcan purchased approximately 1.2 million tonnes of bauxite in 2002 from a 12.5% owned company, Mineração Rio do Norte S.A. ("MRN"). MRN's Trombetas mine in the Amazon region has an operating capacity of about 16.3 million tonnes per year, following an expansion realized in the course of 2002. Bauxite purchased from MRN is processed at the Jonquière plant (see above) and at the Alumar alumina refinery in São Luis, Brazil, which has an annual capacity of about 1.3 million tonnes; Alcan owns a 10% interest in the Alumar refinery. Alcan also owns alumina facilities (and related bauxite mining facilities) with a capacity of about 135,000 tonnes of alumina per year at Ouro Preto, which supply smelters in Brazil.

1.3.4 ***Ghana:*** Alcan purchased about 700,000 tonnes of bauxite in 2002 from Ghana Bauxite Co. Ltd. in which it holds an interest of 80%. The bauxite purchased was used for processing at the Burntisland plant, which closed on November 2002 (see below), the Jonquière plant (see above) and is also sold to third parties.

1.3.5 ***Guinea:*** Alcan purchased about 4 million tonnes of bauxite in 2002 under contracts in effect through 2011 from Compagnie des Bauxites de Guinée S.A. ("CBG"). Alcan has a 33% interest in Halco (Mining) Inc.; Halco holds a 51% interest in CBG, the remaining 49% being held by the Republic of Guinea. CBG's mine in the Boké region of Guinea has an operating capacity of about 12.7 million tonnes per year. Bauxite purchased from CBG is processed at the Jonquière plant (see above) and is also sold to third parties.

1.3.6 ***India:*** Alcan holds a 35% interest in the proposed Utkal bauxite and alumina project in Orissa, India. The planned project would include a one million tonne integrated alumina plant and bauxite mine, with potential to further expand production capacity.

1.3.7 ***United Kingdom:*** Alcan operated an alumina plant in Burntisland, Scotland, which had an annual capacity of approximately 100,000 tonnes of specialty alumina and other chemicals for sale to the chemical market. This plant was closed on 30 November 2002.

With respect to smelter-grade alumina and specialty alumina, Alcan operates the following production facilities:

Alumina capacities -
As at 31 December 2002

Locations†		% of ownership by Alcan	Annual Capacity (thousands of tonnes)
Smelter - grade alumina			
Australia.....	Gladstone (Queensland)	21.4	800*
	Gove (Northern Territories)	100	1,900
Brazil.....	Ouro Preto (Saramenha, Minas Gerais)	100	135
	Alumar (São Luís)	10	130*
Canada.....	Vaudreuil (Jonquière, Quebec)	100	1,140
Total smelter-grade alumina			**4,105**
Specialty chemical aluminas and hydrates			
Brazil.....	Ouro Preto (Saramenha, Minas Gerais)	100	10
Canada.....	Vaudreuil (Jonquière, Quebec)	100	160
Total specialty chemical aluminas and hydrates			**170**
Total			**4,275**

† Includes Joint Ventures, proportionately consolidated.

* This represents Alcan's share of total plant capacity.

1.4 Source Materials

1.4.1 ***Bauxite***: Alcan obtains its bauxite from mining Subsidiaries, Joint Ventures, consortium companies and third-party suppliers. In 2002, the Company consumed 10.3 million tonnes of bauxite. Alcan has more than sufficient bauxite reserves to meet its needs over the next 30 years and, based on bauxite deposits in numerous locations around the world, does not believe that availability of bauxite will constrain its operations in the foreseeable future.

Bauxite Interests -
As at 31 December 2002

Locations	% of Ownership by Alcan	Annual Capacity (thousands of tonnes)

Australia.....	Gove	100	6,000
	Ely	100	0*
Brazil.....	Mineração Rio do Norte S.A.	12.5	2,000**
	Ouro Preto	100	500
Ghana.....	Ghana Bauxite Co. Ltd.	80	700**
Guinea.....	Compagnie des Bauxites de Guinée S.A.	16.8	2,100**
India.....	Utkal	35	0*
Total			**11,300**

* Bauxite deposits not yet in operation.
** This represents Alcan's share of total plant capacity.

1.4.2 ***Chemicals and Other Materials****:* Certain chemicals and other materials required for the production of alumina, such as caustic soda, fuel oil, fluorspar and petroleum coke, are purchased from third parties.

2. Primary Metal

2.1 Products / Business Units

The Primary Metal Business Group represents all Alcan primary aluminum facilities, power generation installations and trading operations worldwide.

2.1.1 ***Power Operations****:* The smelting of one tonne of aluminum requires between 13.5 and 18.5 megawatt-hours of electric energy to separate the aluminum from the oxygen in alumina. Alcan produces low-cost electricity at its own hydroelectric generating plants in Canada, Brazil and the U.K.

2.1.2 ***Smelter Operations***: Primary aluminum is produced through the electrolytic reduction of alumina. Approximately two tonnes of alumina yield one tonne of metal. Alcan operates and has interests in 16 smelters in seven countries. Products include sheet ingot, extrusion billet, wire bar and foundry ingot for conversion into fabricated products for end-use markets in consumer goods, transportation, construction and other industrial applications.

2.1.3 ***Trading***: Alcan Trading AG, a wholly-owned subsidiary of Alcan, trades on behalf of Alcan's aluminum and downstream Subsidiaries. It also engages in limited aluminum and related trading activities for third parties. In 2002, sales volumes for aluminum trading activities for third parties amounted to approximately 398,000 tonnes. Trading services include four main activities: sales of excess raw materials such as alumina and anodes, purchases of metal and other raw materials to cover requirements that exceed internal supplies, managing risk exposures through LME transactions and managing the supply logistics between smelters and fabricating plants. The Company's third party trading function has a focus on metal transactions.

2.1.4 ***Engineering***: Alcan Alesa Engineering AG ("Alesa") provides engineering services and custom-made engineering solutions on a global basis to Alcan Subsidiaries as well as to third parties. Alesa subsidiaries maintain engineering offices in Switzerland, Canada and Australia. The main areas of activity are:

- *Raw Materials Technologies,* including carbon and reduction technology, alumina refining, anode production and smelter technology;
- *Materials Handling Technologies,* including shiploaders and unloaders, silo systems, airlifts and air gravity conveyors, dense phase conveying systems, flyash handling and special applications; and
- *Process Automation,* including electrolytic cell control systems and general purpose automation.

The Australian office also provides technical services to the Gove alumina refinery on an ongoing basis.

2.2 Sales

The Primary Metal Business Group, with third-party revenues of $2.4 billion, made up 20% of Alcan's 2002 revenues. Earnings increased compared to 2001, as the Company's additional sales volumes, lower operating costs and benefits from merger synergies and the restructuring program more than offset a 6% reduction in LME prices and the unfavourable effects of foreign currency balance sheet translation.

The Company is the second largest aluminum producer in the Western World. 62% of its primary metal is produced using company-owned power, constituting a major competitive advantage. With its focus on continuous improvement in technology and cost, Alcan has a favourable low-cost primary metal position with more than 50% of its capacity in the world's lowest cost tier.

Approximately half of the primary aluminum produced in Alcan's North and South American smelters is sold at market prices to Alcan's fabricating facilities, primarily in the form of sheet ingot, extrusion billet, rod or molten metal. The remainder is sold to third party customers, primarily in North America and Asia, in the form of value-added ingot, primarily extrusion billet, sheet ingot or foundry ingot and remelt ingot, with North American sales focused on both customized extrusion billet and foundry ingot. In 2002, the Business Group sold 1.188 million tonnes of primary aluminum to third parties.

Although Alcan's fabrication of aluminum products in Europe exceeds its production of primary aluminum, the duty barrier for aluminum from outside the European Union, including Canada, and high logistics costs have made it uneconomical to ship significant tonnages of metal to Europe. Alcan's European smelter production is mainly consumed by Alcan's fabricating facilities. Alcan covers the remainder of its metal requirements in Europe with purchases of aluminum.

Alcan's average ingot product realizations were $1,507 per tonne in 2002 compared to $1,581 per tonne in 2001 and $1,667 per tonne in 2000.

2.3 Production / Facilities

2.3.1 ***Smelting***: Alcan operates and has interests in 16 primary aluminum smelters with a nominal rated annual capacity of 2.365 million tonnes. Eight of these smelters, having a total nominal rated capacity of 1.578 million tonnes, are located in Canada; the other smelters are located in Brazil, Iceland, Norway, Switzerland, the U.K. and the U.S. During 2002, Alcan's smelters produced 2,237,800 tonnes of primary aluminum: 1,457,000 tonnes in Canada, 193,200 tonnes in the U.S., 205,000 tonnes in the U.K., 102,000 in Brazil, 173,500 tonnes in Iceland, 66,900 tonnes in Norway and 40,200 tonnes in Switzerland.

For many years, Alcan has been engaged in smelter modernization and rebuilding programs to retrofit or replace some of its older facilities. It intends to continue these programs with a view to increasing productivity, improving working conditions and minimizing the impact of its operations on the environment. One of these steps was the acquisition of 40% of Aluminerie Alouette, which operates a modern aluminum smelter in Sept-Iles, Quebec, Canada. Alouette and Alma, Alcan's newest smelter, use the same smelting technology and present opportunities for value-creating synergies within Alcan's Quebec smelter system. Alouette is currently embarking on a cost-effective brownfield expansion to reach a capacity of 550,000 tonnes by 2005 as a result of being awarded a long-term supply of power from the provincial power authority. (See section 2.4.1)

Smelter capacities -
As at 31 December 2002

Locations		% of Ownership by Alcan	Annual Capacity (thousands of tonnes)
Canada.....	Alma (Quebec)	100	400
	Alouette (Sept-Iles, Quebec)	40	97*
	Arvida (Jonquière, Quebec)	100	248
	Grande-Baie (La Baie, Quebec)	100	196
	Laterrière (Chicoutimi, Quebec)	100	219
	Shawinigan (Quebec)	100	91
	Beauharnois (Melocheville, Quebec)	100	50
	Kitimat (British Columbia)	100	277
Total in Canada			**1,578**
Brazil.....	Ouro Preto (Saramenha, Minas Gerais)	100	51
	Aratu (Bahia)	100	58
Iceland.....	ISAL (Reykjavik)	100	172
Norway.....	SOERAL (Husnes)	50	66*
Switzerland.....	Steg (Valais)	100	40
United Kingdom.....	Lynemouth (Northumberland, England)	100	164

	Lochaber (Inverness-shire, Scotland)	100	40
United States.....	Sebree (Kentucky)	100	196
Total outside Canada			**787**
Total			**2,365**

* This represents Alcan's share of total plant capacity.

2.3.2 ***Other Aluminum Sources:*** Other sources of aluminum include the following: purchases of primary aluminum under contracts and spot purchases, purchases of UBCs and aluminum scrap for recycling and purchases of customer scrap returned against ingot or semi-fabricated product sales contracts. Alcan purchased in 2002 of aluminum of all types from all sources amounted to 1.804 million tonnes, compared with 1.822 million tonnes in 2001 and 1.67 million tonnes in 2000. Such purchases are mainly from third party smelters, traders and from the scrap from customers and dealers.

Alcan operates extensive recycling operations (see sections 3.4.2 and 4.4.2 below).

2.4 Source Materials

2.4.1 ***Electrical Power:*** In Canada, Alcan's plants have an installed generating capacity of 3,583 megawatts, of which about 2,759 megawatts may be considered to be hydraulically available over the long term. These facilities supply electricity to Alcan's Canadian smelters. All water rights pertaining to Alcan's hydroelectric installations are owned in perpetuity by Alcan, except for those relating to the Peribonka River in Quebec. An annual charge is payable to the Quebec provincial government based on total energy generation, escalating at the same rate as the Consumer Price Index in Canada. In 1984, Alcan and the Quebec provincial government signed a lease extending the Company's water rights relating to the Peribonka River to 31 December 2033, with an option to extend the term to 2058, against an annual payment based on sales realizations of aluminum ingot. In British Columbia, water rentals for electricity used in smelting and related purposes are directly tied to the sales realizations of aluminum produced at Kitimat. For electricity sold to third parties within that province, Alcan pays provincial water rentals at rates which are fixed by the British Columbia provincial government, similar to those paid by BC Hydro, the provincially-owned electric utility.

One third of Alcan's installed hydroelectric capacity in Canada was constructed prior to the end of 1943, another third by the end of 1956 and the remainder by the end of 1968. All these facilities are regularly maintained and are expected to remain fully operational over the foreseeable future.

In addition to electricity generated at its own plants, as described above, Alcan agreed to purchase, under a long-term agreement, between one billion and three billion kilowatt-hours of electrical energy annually from Hydro-Quebec, the provincially-owned electric utility, beginning in 2001. On 26 February 2002, the provincial power authority announced that Aluminerie Alouette was the successful bidder for a block of 500 megawatts of power to support the proposed expansion of the Sept-Iles smelter. A 25-year power purchase agreement was entered into with Hydro-Quebec on 27 September 2002 for the supply of this power with delivery starting in 2005.

Any electricity that is surplus to Alcan's needs is sold to neighbouring utilities or customers under both long-term and short-term arrangements.

For smelters located outside of Canada, electricity is obtained from a variety of sources. The smelters in England and Scotland operate their own coal-fired and hydroelectric generating plants, respectively. The smelters in Brazil obtain about 25% of their electricity requirements from owned hydroelectric generating plants and purchase the balance. The smelter in the U.S. purchases electricity under a long-term contract through 2011 as well as a short-term contract. The smelter in Iceland is supplied with hydroelectric power from Iceland's national power company. The Norwegian smelter has a number of contracts for energy supply. The smelter in Switzerland is supplied with power from Lonza Energie AG (the former Algroup energy division).

Electrical power capacities -
As at 31 December 2002

Locations		% of Ownership by Alcan	Installed Capacity (MW)
Canada.....	Isle Maligne (Quebec)	100	402
	Chute à Caron (Quebec)	100	224
	Shipshaw (Quebec)	100	896
	Chute du Diable (Quebec)	100	205
	Chute à la Savane (Quebec)	100	210
	Chute des Passes (Quebec)	100	750
	Kemano (British Columbia)	100	896
Total in Canada			**3,583**
Brazil.....	Ouro Preto Power Stations	100	32
England.....	Lynemouth Power Station*	100	420
Norway.....	Vigelands	50	20**
Scotland.....	Highlands Power stations	100	80
Total outside Canada			**552**
Total			**4,135**

* Coal-fired
** This represents Alcan's share of total plant capacity.

2.4.2 ***Anodes***: Anodes are used and consumed in the smelting process. Most of Alcan's smelters produce their anodes at their own on-site facilities. Anodes are also produced in a stand-alone facility in the Netherlands ("Aluchemie"). Alcan holds 66% of Aluchemie directly while SOERAL, its 50% joint venture, owns a further 13%. The remainder of the shares is held by Hydro Aluminium A.S.

Each of the shareholders of Aluchemie is entitled to a volume of anodes corresponding to their shareholding at prices determined by formula. Alcan's share of anodes produced by Aluchemie is currently used at the ISAL and SOERAL smelters or sold to third-party customers.

The main raw materials for anode production are calcined petroleum coke and pitch. The production process involves the mixing of the raw materials followed by cold shaping of the anode and baking of the anode at elevated temperature.

2.4.3 ***Chemicals and Other Materials****:* Certain chemicals and other materials, e.g., aluminum fluoride, required for the production of aluminum at Alcan's smelters, are also produced by its chemical operations. Other materials, e.g., caustic soda, fuel oil, fluorspar and petroleum coke, are purchased from third parties.

3. Rolled Products Americas and Asia

3.1 Products

Through an extensive network of 16 rolled products facilities in North and South America and Asia, the Rolled Products Americas and Asia Business Group manufactures aluminum sheet and light gauge products, including can stock, automotive sheet and industrial products. In addition, the Business Group manages Alcan's global can sheet business.

3.2 Sales

In 2002, the Rolled Products Americas and Asia Business Group shipped 1.613 million tonnes of rolled products that included 229,000 tonnes of customer-owned metal. The Business Group's third-party revenues for 2002 were $3.3 billion, representing 27% of Alcan's total revenues for the year.

Sales increases in 2002 were driven by higher volumes despite lower average realized prices. In 2002, record shipments in North America and Asia were made despite difficult economic and market conditions. Volumes increased by 4% in North America and 23% in Asia, offsetting market declines in South America caused largely by currency volatility.

Principal markets are beverage can sheet, containers and packaging, transportation (including automotive), building products, and other industrial applications.

3.3 Production / Facilities

At the end of 2002, Alcan's annual rolled products manufacturing capacity was:

a) North America, 1.25 million tonnes, divided among Saguenay (Quebec), Kingston (Ontario), Logan (Kentucky), Oswego (New York), Terre-Haute (Indiana), Fairmont (West Virginia), Louisville (Kentucky), Warren (Ohio);

b) Asia, 475,000 tonnes, divided among Yeongju (Korea), Ulsan (Korea), Bukit Raja (Malaysia), Rangsit (Thailand); and

c) South America, 280,000 tonnes, divided among Pindamonhangaba (Brazil), Utinga (Brazil).

At the partially-owned Logan plant, Alcan's capacity varies by production centre. Alcan's ownership of: a) the Yeongju and Ulsan plants correspond to its shareholding in Alcan Taihan Aluminum Ltd. ("ATA") (68%); b) the Bakit Raja plant corresponds to its shareholding in Aluminium Company of Malaysia Berhad (36%); and c) the Rangsit plant corresponds to its shareholding in Alcan Nikkei Siam Ltd. (60%).

3.4 Source Materials

3.4.1 ***Sheet Ingot***: In 2002, 319,000 tonnes of sheet ingot were purchased from the Primary Metal Business Group and 100,000 tonnes were purchased from third party suppliers for the North America Rolled Products Business Unit. In Brazil, 43,000 tonnes of sheet ingot were purchased from the Primary Metal Business Group. There were no purchases of sheet ingot from third party suppliers for Brazil. For operations in Korea, 46,000 tonnes were purchased from the Primary Metal Business Group and 59,000 tonnes from third party suppliers.

3.4.2 ***Recycling***: As a matter of course, Alcan operates facilities in many plants to recycle aluminum scrap generated internally by fabricating activities. Recycled metal is primarily utilized by Alcan's own rolling facilities to produce can sheet.

Alcan also has a dedicated UBC recycling plant, which has an ultimate capacity of 80,000 tonnes per year, at Pindamonhangaba, Brazil. In Korea, a recycling operation was started during March 2002 with an annual capacity of 22,000 tonnes. In addition, Alcan operates three specialized recycling plants in the U.S. for the recycling of UBCs and process scrap returned from customers. In the case of UBCs, Alcan has a well-established North American recycling network. In 2002, Alcan's U.S. plants processed more than 24 billion UBCs.

Recycling plant capacities -
As at 31 December 2002

Locations Sheet ingot from UBCs and customer process scrap		**% of Ownership by Alcan**	**Annual Capacity (thousands of tonnes)**
Brazil.....	Pinda (Pindamonhangaba, Sao Paulo)	100	80
Korea.....	ATA (Ulsan)	68	22
United States.....	Berea (Kentucky)	100 }	
	Greensboro	100 }	