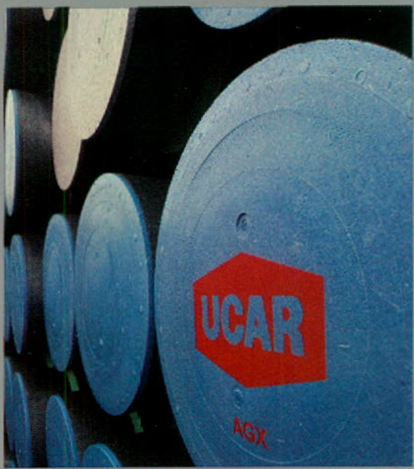
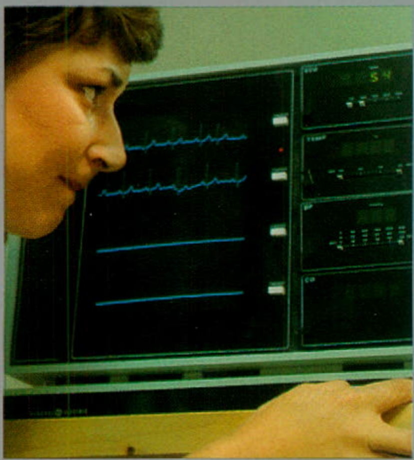
# Union Carbide Canada Limited
# 1981 Annual Report

UNION CARBIDE



## Directors

**Douglas F. S. Coate**
Vice-President, Secretary and General Counsel
Union Carbide Canada Limited
Toronto

†***Jacques de Billy**
Senior Partner, Messrs. Gagnon, de Billy, Cantin, Martin, Beaudoin & Lesage
Quebec City

***John S. Dewar**
Chairman and Chief Executive Officer
Union Carbide Canada Limited
Toronto

**Alexander I. Hainey**
Senior Vice-President
Union Carbide Canada Limited
Toronto

†***Richard J. Hughes**
Executive Vice-President
Union Carbide Corporation
Danbury, Ct.

**W. Norman Kissick**
President and Chief Operating Officer
Union Carbide Canada Limited
Toronto

†***J. Wallace Madill**
Chief Executive Officer
Alberta Wheat Pool
Calgary

†***Ian D. Sinclair**
Chairman and Chief Executive Officer
Canadian Pacific Enterprises Limited
Montreal

†***Elio E. Tarika**
Executive Vice-President
Union Carbide Corporation
Danbury, Ct.

†***James C. Thackray**
President
Bell Canada
Montreal

†***Richard M. Thomson**
Chairman and Chief Executive Officer
The Toronto-Dominion Bank
Toronto

*Audit Committee
†Compensation Committee

## Executive Officers

**John S. Dewar**
Chairman and Chief Executive Officer

**W. Norman Kissick**
President and Chief Operating Officer

**Ralph C. Addison**
Senior Vice-President

**Alexander I. Hainey**
Senior Vice-President

**Bob G. Perry**
Senior Vice-President

**Robert H. Rastorp**
Senior Vice-President

**Douglas F. S. Coate**
Vice-President, Secretary and General Counsel

**Vernon V. Garlick**
Vice-President and Treasurer

**George A. Kelly**
Controller

## About Union Carbide Canada

Union Carbide Canada Limited is a diversified manufacturing company with a balanced portfolio of businesses in plastics and chemicals; gases, metals and carbon; and consumer and related products. It is 25 per cent Canadian owned, its common shares being held by approximately 3,700 shareholders. The remaining 75 per cent of the common equity is owned by Union Carbide Corporation, of Danbury, Connecticut. Approximately 5,000 people are employed in Union Carbide plants and offices across Canada.

The Annual Meeting of Shareholders will be held at 11.00 a.m. on Tuesday, April 27, 1982, at the Royal York Hotel, Toronto.

Sur demande, il nous fera plaisir de vous envoyer l'édition française de ce rapport.

## Vice-Presidents and General Managers

**David R. Barclay**
Battery Products

**Robert J. Brema**
Home and Automotive Products

**J. Robert Frank**
Food Casings

**André G. Lapalme**
Hydrocarbons

**E.J. Peter Matzen**
Chemicals

**F. Gordon Murphy**
Carbon Products

**Thomas R. Pezzack**
Films

**William D. E. Phillips**
Polyethylene

**George W. T. Richardson**
Metals

**Neil F. Weaver**
Gas Products

## Functional Unit Directors

**James P. Gracie, M.D.**
Health and Environmental Affairs

**George T. Harrap**
Safety and Loss Prevention

**James M. Neelands**
Computing and Telecommunications

**Stewart N. Playford**
Purchasing and Materials Services

**Robert A. Seath**
Corporate Communications

**Charles W. van Winsen**
Human Resources

Union Carbide Canada Limited entered a period of accelerated capital expansion in 1981 in readiness for the improved business opportunities we anticipate as we look beyond the current economic pressures that are depressing earnings.

Total 1981 sales improved modestly, by four per cent over the previous year, to $827.3 million. Gases, Metals and Carbon recorded gains while Plastics and Chemicals were hard pressed to maintain 1980's record sales levels and the Consumer and Related businesses achieved results that were slightly below the previous year.

Sales volumes lost ground during a year of recession in which there was a world-wide glut of hydrocarbon-derived products, notably polyethylene. To compound the problem, the price of ethylene, the most important feedstock and major cost factor in petrochemical production, increased sharply in Canada as a consequence of the Federal Government's energy policy while declining in the United States, Europe and Japan.

Rising operating costs, in the face of over-supplied petrochemical markets with weak product prices, squeezed profit margins, resulting in 1981 net income of $36.1 million, or $1.50 per common share. This compared with $79.6 million, or $3.72 per common share, a year earlier, allowing for the two-for-one stock split last May.

Net income in 1981 included $3.2 million from the settlement of physical damage and business interruption insurance claims at the Beauharnois, Quebec, metals plant. An extraordinary gain of $3.4 million from the sale of a former battery manufacturing facility in Toronto was offset by a loss of similar magnitude incurred in the disposal of the Company's interest in a British Columbia aquaculture operation.

We expect the pressure on sales and earnings to continue in the current year, particularly in Plastics and Chemicals. In many respects, the present situation parallels our experience in the mid-1970's when net income was restrained by lacklustre business conditions during a similar period of major expansion. Historically, petrochemical production has followed a pattern of aggressive growth, followed by a phase of consolidation and then revived progress to new levels of performance.

Last year, we devoted $100 million to the creation of new assets, including engineering and site preparation for our planned world-scale ethylene glycol plant at Prentiss, Alberta; completion of a major expansion to the Fort Saskatchewan air separation facility in Alberta; and consolidation of our battery business into an expanded manufacturing operation at Walkerton, Ontario.

During 1982, we expect to spend in excess of $200 million on new construction, principally for the Alberta ethylene glycol venture and a related air separation plant. This higher level of capital expenditure is part of a previously-announced $750 million commitment during the 1980-85 period.

It is worth noting that, as our organization enters its 75th anniversary year, we are equipped with modern, sophisticated facilities in all of our businesses. Currently, 65 per cent of our investment in manufacturing facilities is less than five years old and 85 per cent is less than ten years old. With such up-to-date plant and equipment, Union Carbide's net worth and cash flow should attain record levels when world economies revive and the Company enters its next cycle of strong growth.

During the past year, we further strengthened our management team through various senior management appointments. These included the naming of W. Norman Kissick as President and Chief Operating Officer. Mr. Kissick joined Union Carbide in 1955 and has been a Vice-President and Director since 1975.

On behalf of the Directors, I would like to congratulate all employees for their record 1981 safety achievement and thank them for their productive contributions during an unusually challenging year. Special acknowledgement should also be paid to Alec Flamm, recently-appointed President of Union Carbide Corporation, who retired from our Board of Directors in 1981 after five years of valued service. In January, 1982, Mr. Flamm was replaced on the Board by J. Wallace Madill, Chief Executive Officer of the Alberta Wheat Pool.

J. D. Dewar

Chairman and
Chief Executive Officer

Net working capital decreased during 1981 from $228.1 million at the beginning of the year to $147.3 million at year-end. The major factor in the reduction was a change in the Company's cash position. At the beginning of the year, Union Carbide had cash and marketable securities on hand amounting to $26.8 million and no short-term debt. By year-end, the cash and marketable securities had been drawn down and short-term borrowings had increased to $49.2 million.

Two factors caused this change: depressed earnings, resulting from an inability to pass through production cost increases (79 cents per sales dollar in 1981, against 73 cents in 1980); and higher construction and investment expenditures of $115.4 million, compared with the previous year's $67.8 million.

Inventories remained essentially constant while receivables declined by $1.9 million to $147.3 million, largely as a result of the lower fourth-quarter sales. A $32.3 million reduction in accrued tax liabilities was almost totally offset by an increase of $30.4 million in current maturities of long-term debt, reflecting the maturity of an issue of five-year notes on May 1, 1982.

Through Union Carbide's investment program, positions are taken in both upstream and downstream businesses which are strategically important to the Company's operations. No additional cash investments were required as part of this program in 1981 in either of two joint venture ethylene suppliers, Petrosar Limited in Sarnia and Pétromont and company, limited, Montreal.

In preparation for a significantly higher capital program during a period of volatile capital markets, Union Carbide arranged a $300 million line of credit with its two principal bankers in order to provide a flexible financing resource pending an opportunity to enter long-term financial markets. In January, 1982, a $50 million Canadian debenture issue was completed in Europe, with annual interest at 16 per cent and maturity in 1989.

Return on sales for the year was 3.7 per cent, return on invested capital five per cent and return on common shareholders' equity 8.2 per cent. During the period 1977-81, return on sales, invested capital and equity averaged 5.8 per cent, 7.6 per cent and 13 per cent respectively.

The common share dividend was increased, effective June 1, to an annual rate of 70 cents, taking into account the May two-for-one stock split. Common dividends for the year amounted to $13.3 million, or 66 cents per share. Over the past five years, the dividend payout has averaged 35 per cent of earnings for common shareholders. The book value per common share at year-end improved to $18.85 from $18.00 a year ago.

## The Year at a Glance

| | **1981** (thousands of dollars) | 1980 (thousands of dollars) | **1981*** (per common share) | 1980 (per common share) |
|---|---|---|---|---|
| Sales | **$827,306** | $794,824 | | |
| Net income | **36,139** | 79,612 | | |
| Earnings for common shareholders | **30,200** | 74,503 | **$1.50** | $3.72 |
| Dividends on common shares | **13,253** | 10,750 | **0.66** | 0.54 |
| Funds from operations | **81,307** | 116,395 | **4.05** | 5.55 |
| Fixed asset additions | **100,017** | 58,913 | | |
| Total assets | **920,362** | 864,050 | | |
| Common shareholders' equity | **378,656** | 361,124 | **18.85** | 18.00 |
| Return on sales | **3.7%** | 9.4% | | |
| Return on invested capital** | **5.0%** | 13.8% | | |
| Return on common shareholders' equity** | **8.2%** | 22.6% | | |

*Effective May 15, 1981, the common shares were subdivided on a two-for-one basis. All references to common shares in this annual report give effect to this subdivision.

**Based on average of beginning and end-of-year figures. Invested capital includes short-term debt, long-term debt and shareholders' equity.

Plastics and chemicals registered a marginal sales decline in 1981, following the dramatic improvements recorded during the previous two years.

The group's performance was restrained by a world-wide oversupply of petrochemical feedstocks and products that resulted from an international glut of crude oil. In sharp contrast with other world petrochemical production centres, the cost of ethylene, the principal raw material for polyethylene and more than 20 different groups of chemicals manufactured by the Company, rose substantially in Canada as a consequence of energy pricing policies. This additional cost could not be recovered in selling prices.

Export prices for polyethylene resins declined through the year and, at year-end, were 20 per cent below 1980 levels. In the domestic market, prices softened by as much as 25 per cent. Volumes, however, posted gains both in Canada and offshore.

An $18 million construction and modification program began at the Company's world-scale polyethylene plant in Moore Township, Ontario, and is scheduled for completion in mid-1982. The program will introduce to Canada Union Carbide's proprietary, energy-efficient UNIPOL linear low-density polyethylene technology and increase the plant's capacity by 50 million pounds to 450 million pounds a year.

The Moore Township plant, near Sarnia, Ontario, is currently being modified to utilize Union Carbide Corporation's proprietary UNIPOL process which produces linear low-density polyethylene with only one quarter of the energy required by conventional systems.


This shipment of polyethylene was bound for Shanghai in the People's Republic of China. Polyethylene was shipped to 35 countries in 1981 as export volume increased six per cent over the previous year.

Chemicals sales also were affected by global over-supply and pressure on pricing. In Canada, the problem was heightened by a low demand for automotive anti-freeze, which uses ethylene glycol as its major ingredient.

Initial expenditures were incurred for the new, $320 million plant at Prentiss, Alberta. The Prentiss facility will convert ethylene from the province's abundant ethane supply into ethylene glycol for use in the production of polyester fibre and anti-freeze. The bulk of its output will be exported. Major approvals for the plant were received and site preparation began in the fall. Start-up is scheduled for mid-1984.

Union Carbide's two joint-venture, oil-based feedstock suppliers in Eastern Canada, Petrosar Limited and Pétromont and company, limited, performed satisfactorily under mounting competition from U.S. producers, who relied primarily on price-controlled natural gas as a feedstock.

Gases, Metals and Carbon achieved a 13 per cent sales gain despite a weakening economy and a lengthy labour disruption at a major steel producing customer.

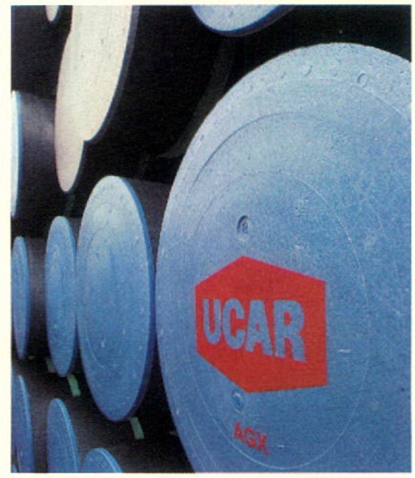
The gases business produces atmospheric gases for wide-ranging uses in such fields as oil and gas recovery and processing, steelmaking and health care. As well, it manufactures and markets welding and cutting equipment and high-technology stream separation systems.

Sales of gases and related products advanced in response to continuing market demand for products and processes that improve productivity, reduce costs or conserve energy resources. Margins reflected an inability to increase prices sufficiently to totally offset higher costs.

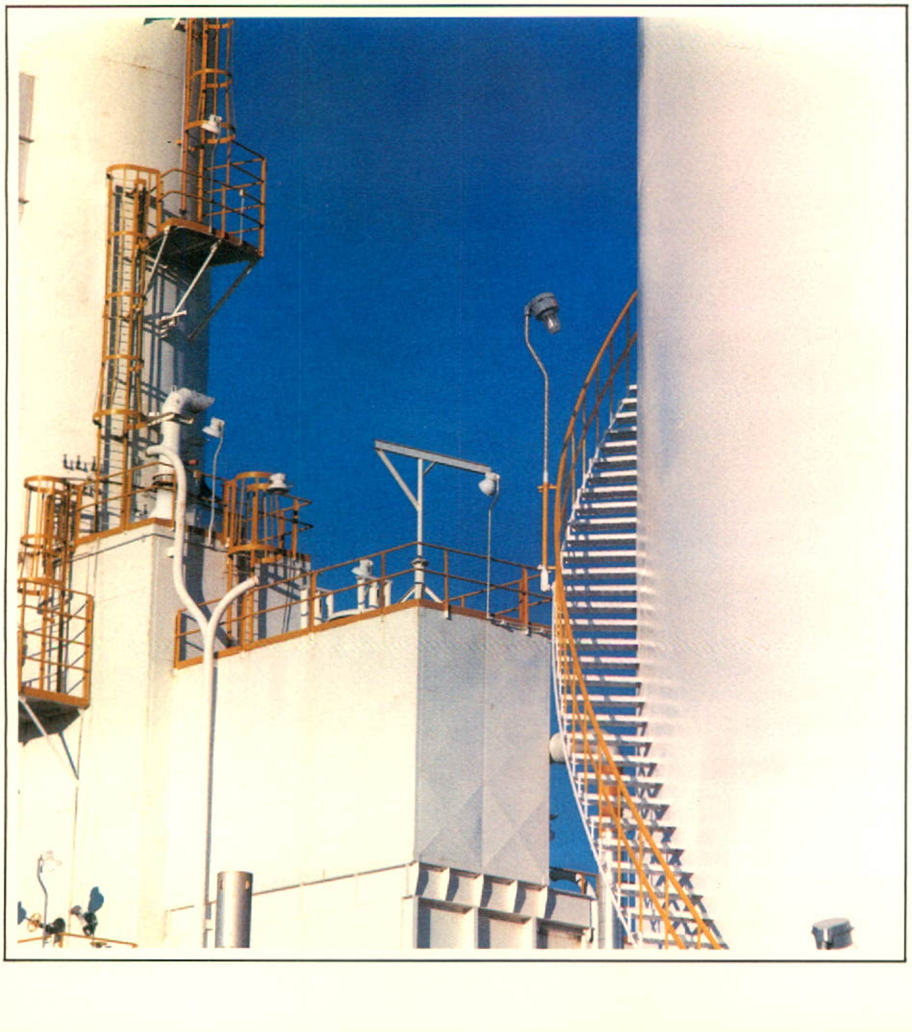
An air separation plant at Fort Saskatchewan, Alberta, which is the largest in Western Canada, was further expanded. Liquid oxygen and nitrogen capacity was more than doubled to serve rapidly-growing Western markets.

Design engineering commenced for a $50 million air separation plant on the site of the Prentiss, Alberta, chemical facility. It will supply gaseous oxygen and nitrogen to the chemical plant, beginning in mid-1984, and liquid oxygen and nitrogen to customers throughout Western Canada.

At Oakville, Ontario, construction started on a hydrogen facility to serve the specialty steel, food processing and oil refining industries. The plant, which will be completed in mid-1982, will further broaden the Company's product line of gases.




Graphite electrodes, manufactured at the Welland, Ontario, plant, are used in electric arc steel furnaces. The output of the electric arc process has grown at more than twice the rate of steel production generally during the last ten years.



Increasing demand from Alberta markets prompted a major expansion of the Fort Saskatchewan, Alberta, air separation plant that more than doubled liquid oxygen and nitrogen production capacity.

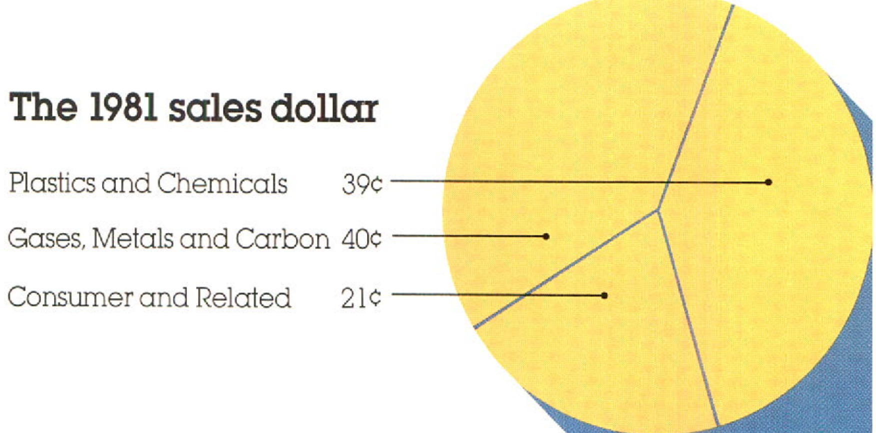
Ferroalloys are Union Carbide's principal metal product and their demand is directly related to the level of activity in the steel, aluminum and iron foundry industries in which they are used. Although Canadian steel output declined in 1981, primarily because of a prolonged strike at a major producer and increased activity by offshore steelmakers following a world downturn in demand for steel products, sales of ferroalloys moved ahead in both export and domestic markets. An agreement was signed early in the year with a group headed by Elkem a/s, of Norway, giving Elkem the option to purchase the Company's Canadian ferroalloy operations by the end of 1987. Concurrently, the ferroalloy business of Union Carbide Corporation in the U.S. and Norway was sold to the same group. In a related transaction, $28 million of Union Carbide Canada's ferroalloy inventory was sold to Elkem at mid-year.

Union Carbide's major carbon product is graphite electrodes, which are used to carry power into electric arc steel furnaces. The Company also produces other carbon and graphite products for the iron, ferroalloy, aluminum and artificial abrasive industries.

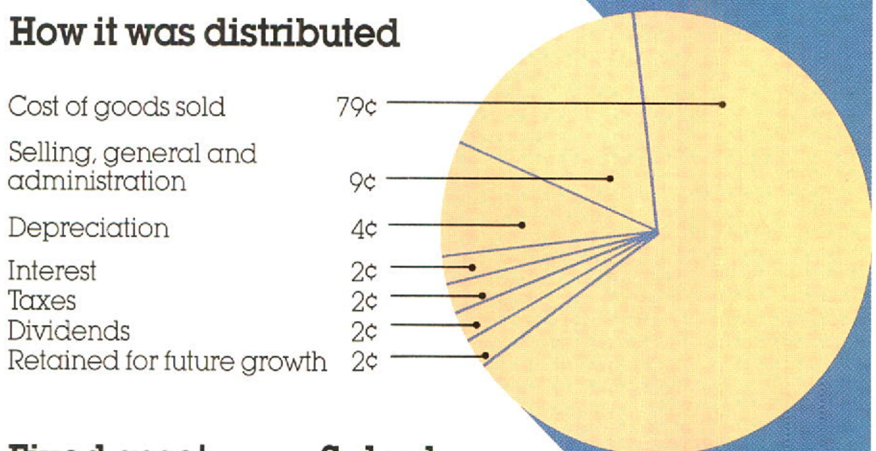
High market demand for carbon products at the outset of 1981 eased as the year progressed, largely because of general economic conditions and the steel strike. As a result, overall sales virtually repeated 1980's performance with prices remaining generally firm.

The weakened environment for steel and construction is expected to continue through the first half of 1982. This, coupled with a higher level of competitive activity and a heavy labour bargaining schedule at major customers, is expected to constrain graphite electrode shipments to 1981 levels.

## The 1981 sales dollar

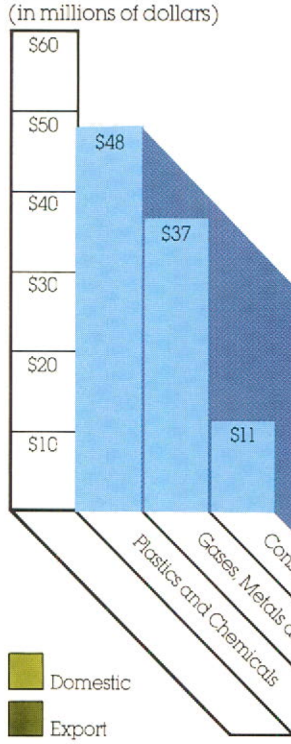



## How it was distributed



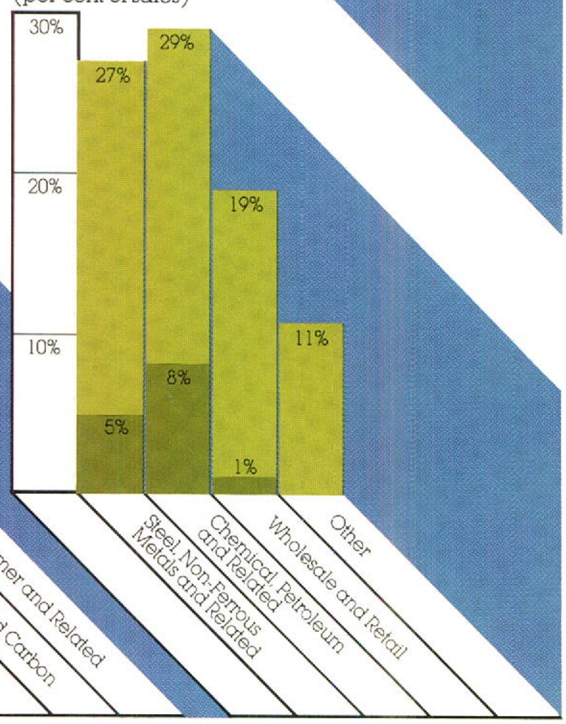

## Fixed asset additions

(in millions of dollars)




## Sales by markets

(per cent of sales)



The 1981 performance of Union Carbide's consumer products businesses reflected the cautious consumer buying attitudes that accompany a period of economic downturn and high inflation. Sales were two per cent below the prior year and earnings declined significantly, particularly in the anti-freeze business.

GLAD home product sales outpaced the industry average, however, and volume increases were particularly evident in the rolled wrap and freezer bag categories. A new garbage bag was introduced in Ontario late in the year under the trade name SŪRTEC. Made of thinner gauge but extremely tough high-density polyethylene, the product met with encouraging consumer acceptance.

ENERGIZER AND EVEREADY batteries achieved higher sales, although the performance of this business was affected by the costs of consolidating manufacturing into a single, modern plant at Walkerton, Ontario. By year-end, a $9 million expansion of that facility, which was part of the consolidation program, was essentially complete. New, specialized lithium batteries were introduced for use in calculators, watches and cameras and a line of ENERGIZER flashlights also was launched during the year.

New contender in the garbage bag market is SŪRTEC. The first such product in Canada to be manufactured from high-density polyethylene, it is tougher and more puncture resistant than conventional bags.

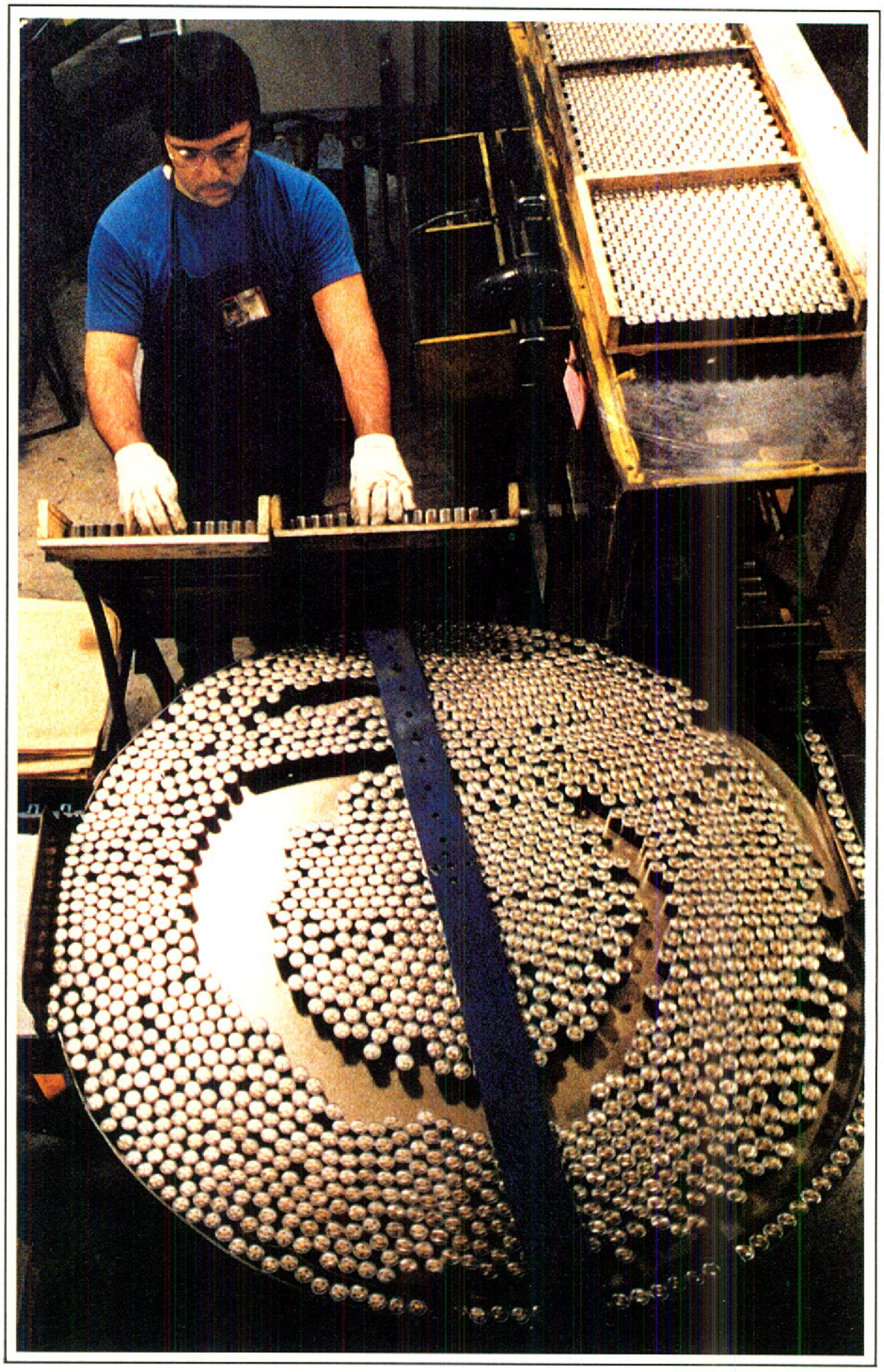
Sales of PRESTONE II and UCAR anti-freeze declined as a result of a combination of lower market demand, an increase in Canadian antifreeze production capacity and an inventory cutback by retailers. Prices were constrained by the world-wide, over-supply of hydrocarbon-based products.

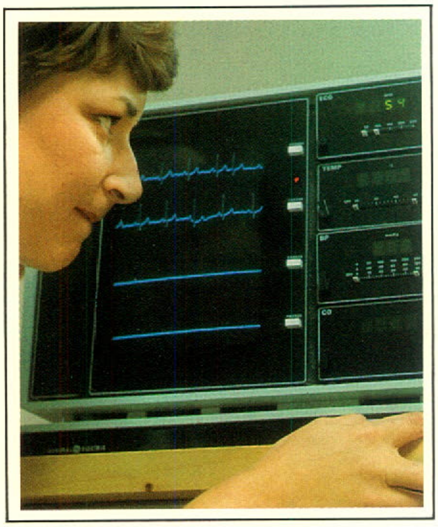
A refurbishing of anti-freeze mixing facilities at Montreal East was completed during the year to ensure efficient mixing of the complex formulas demanded by today's automobile engines, with their higher operating temperatures and increased aluminum content.

Film product sales showed an appreciable improvement, although margins were reduced by higher raw material costs early in the year. Programs were initiated to expand embossed film capacity at Lindsay, Ontario, and install high-density film manufacturing equipment at Cowansville, Quebec. Both will be completed in 1982.

Food casing sales were comparable to those of the previous year as the Canadian processed meat industry recorded little growth and exports declined. Efficiency improvements implemented in the Lindsay casings operation are expected to have a positive influence on performance in 1982.

Manufacturing of ENERGIZER and EVEREADY batteries, previously located at Walkerton, Ontario, and Toronto, was consolidated at Walkerton following a $9 million expansion there.





A computerized cardiac monitor donated by Union Carbide to a Welland, Ontario, hospital has several functions but, most importantly, it allows the medical staff to detect potential heart failure much earlier than before.

Union Carbide is committed to improving the skills and knowledge of its employees to meet the ever-increasing business need for superior performance. To this end, about 1,000 employees took part in a broad spectrum of seminars and workshops during 1981. In particular, strong emphasis was placed on programs designed to assist first-line supervisors in further improving their effectiveness.

The Company's performance appraisal program continued to receive wide-spread acceptance and has contributed greatly to human resource planning and equitable compensation programs. The appraisal program has been in operation for a decade and now encompasses all salaried employees.

The Company's pension plan was significantly enhanced during the year and a pre-retirement planning program, introduced in 1980, was extended to more locations across Canada.

The health and safety of employees remained a major priority and, in 1981, important improvements were made in the effort to reduce work-related accidents. Even though the previous year established a record for safety performance, a new record was achieved as the total number of work-related accidents in 1981 was reduced by a further 27 per cent and injuries that caused absence from work were cut by 55 per cent.

The Company also continued its work to provide healthy conditions in and around its plants and to ensure the safe handling and use of its products after they leave these facilities. A new initiative in 1981 was the introduction of an advanced technique of noise measurement to supplement the overall program of hearing conservation and noise control.

Union Carbide remains at the forefront of industrial energy conservation in Canada and is a major contributor to the national drive to reduce energy demand. There were intensified activities to build on the Company's already impressive recurring energy savings of $11.3 million a year that had been achieved by year-end 1981. As well as optimizing energy efficiency at its own plants, Union Carbide continued to encourage and assist other Canadian organizations in their conservation programs.

Union Carbide's vital and creative role as a responsible citizen extends well beyond energy conservation. In addition to supporting health, welfare, cultural and educational bodies on a corporate level, the Company takes part in a wide range of local community activities; in 1981, these varied from the donation of a computerized cardiac monitoring unit needed for patients in a Welland, Ontario hospital to the formulation of a program to preserve a bird sanctuary at Prentiss, Alberta.

## Management Report



Union Carbide Canada Limited's 1981 Annual Report and the financial statements, included therein, were prepared by the Company's management and approved by its Board of Directors. The Audit Committee of the Board is responsible for reviewing and monitoring the Company's accounting and reporting practices, audit plans and findings and internal controls.

The consolidated financial statements contained in the 1981 Annual Report have been prepared in accordance with generally accepted accounting principles appropriate in the circumstances. The Company's auditors, Thorne Riddell, are responsible for auditing and reporting on these statements.

All information in the Annual Report is consistent with the financial statements included therein.

## Auditors' Report

To the Shareholders of Union Carbide Canada Limited

We have examined the consolidated balance sheet of Union Carbide Canada Limited as at December 31, 1981 and the consolidated statements of income and retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the Company as at December 31, 1981 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Thorne Riddell
Chartered Accountants

Toronto, Canada
January 22, 1982



The notes on pages 14 to 19 are an integral part of this statement.

## Consolidated Statement of Income and Retained Earnings



| | Year ended December 31 1981 | 1980 |
|---|---|---|
| | (thousands of dollars) | |
| **Sales** | **$827,306** | $794,824 |
| Cost of goods sold | **657,716** | 577,581 |
| Selling, general and administrative expenses | **75,078** | 58,908 |
| Depreciation | **33,084** | 29,168 |
| Interest | **22,060** | 15,391 |
| Interest capitalized during construction | **(3,058)** | (304) |
| | **784,880** | 680,744 |
| | **42,426** | 114,080 |
| Investment and other income | **5,447** | 6,075 |
| Share of income of companies carried at equity | **2,414** | 2,107 |
| Share of income of Pétromont and company, limited | **6,590** | 2,045 |
| | **14,451** | 10,227 |
| Income before income taxes | **56,877** | 124,307 |
| Income taxes | **20,749** | 44,695 |
| Income before extraordinary items | **36,128** | 79,612 |
| Extraordinary items (note 4) | **11** | — |
| **Net income** | **36,139** | 79,612 |
| Retained earnings at beginning of year | **300,754** | 237,001 |
| | **336,893** | 316,613 |
| Dividends — preferred | **5,939** | 5,109 |
| — common | **13,253** | 10,750 |
| | **19,192** | 15,859 |
| **Retained earnings at end of year** | **$317,701** | $300,754 |
| **Earnings per common share (in dollars)** | **$ 1.50** | $ 3.72 |



The notes on pages 14 to 19 are an integral part of this statement.

# Consolidated Statement of Changes in Financial Position



| | Year ended December 31 1981 | 1980 |
|---|---|---|
| | (thousands of dollars) | |
| **Working capital derived from** | | |
| Operations | | |
| Income before extraordinary items | **$ 36,128** | $ 79,612 |
| Items not affecting working capital | | |
| Depreciation | **33,084** | 29,168 |
| Deferred income taxes | **21,748** | 10,894 |
| Share of unremitted income of investments carried at equity | **(7,572)** | (2,352) |
| Gain on disposal of capital assets | **(2,081)** | (927) |
| Funds from operations | **81,307** | 116,395 |
| Proceeds from common shares | **585** | 478 |
| Proceeds on disposal of capital assets | **5,620** | 5,393 |
| Other | **351** | 2,251 |
| | **87,863** | 124,517 |
| **Working capital applied to** | | |
| Fixed assets | **100,017** | 58,913 |
| Dividends | **19,192** | 15,859 |
| Investments | **15,408** | 8,874 |
| Long-term debt | **34,086** | 5,250 |
| | **168,703** | 88,896 |
| **Increase (decrease) in working capital** | **(80,840)** | 35,621 |
| Working capital at beginning of year | **228,116** | 192,495 |
| **Working capital at end of year** | **$147,276** | $228,116 |
| **Changes in components of working capital** | | |
| Cash and short-term investments | **$(26,798)** | $(13,416) |
| Receivables | **(1,851)** | 31,185 |
| Inventories | **(588)** | 64,477 |
| Prepaid expenses | **679** | 2,264 |
| Accounts payable | **(4,989)** | (21,689) |
| Short-term debt | **(49,200)** | — |
| Current portion of long-term debt | **(30,350)** | (400) |
| Income and other taxes | **32,257** | (26,800) |
| | **$(80,840)** | $ 35,621 |



The notes on pages 14 to 19 are an integral part of this statement.

# Consolidated Balance Sheet

| | December 31 1981 | 1980 |
|---|---|---|
| | (thousands of dollars) | |
| **Assets** | | |
| **Current assets** | | |
| Cash and short-term investments | **$ —** | $ 26,798 |
| Receivables | **147,270** | 149,121 |
| Inventories | **193,048** | 193,636 |
| Prepaid expenses | **8,124** | 7,445 |
| Total current assets | **348,442** | 377,000 |
| Fixed assets | **482,234** | 415,884 |
| Investments | **84,307** | 68,379 |
| Other assets | **5,379** | 2,787 |
| | **$920,362** | $864,050 |
| **Liabilities** | | |
| **Current liabilities** | | |
| Accounts payable | **$118,522** | $113,533 |
| Short-term debt | **49,200** | — |
| Current portion of long-term debt | **31,500** | 1,150 |
| Income and other taxes | **1,944** | 34,201 |
| Total current liabilities | **201,166** | 148,884 |
| Long-term debt | **112,750** | 148,000 |
| Deferred income taxes | **167,790** | 146,042 |
| | **481,706** | 442,926 |
| **Shareholders' equity** | | |
| Capital stock | **120,955** | 120,370 |
| Retained earnings | **317,701** | 300,754 |
| | **438,656** | 421,124 |
| | **$920,362** | $864,050 |

Approved by the Directors
Signed: "J.S. Dewar"
"J. de Billy"



The notes on pages 14 to 19 are an integral part of this statement.

Financial Statements (tabular amounts in thousands of dollars) 14

| | | December 31 1981 | 1980 |
|---|---|---|---|

## 1. Supplementary balance sheet detail

| | | 1981 | 1980 |
|---|---|---|---|
| Inventories | Raw materials and supplies | **$ 39,767** | $ 37,082 |
| | Work in process | **60,943** | 48,693 |
| | Finished goods | **92,338** | 107,861 |
| | | **193,048** | 193,636 |
| Fixed assets | Land | **12,434** | 8,446 |
| | Buildings | **105,349** | 99,782 |
| | Machinery and equipment | **615,383** | 532,908 |
| | Gross fixed assets | **733,166** | 641,136 |
| | Accumulated depreciation | **250,932** | 225,252 |
| | Net fixed assets | **482,234** | 415,884 |
| Long-term debt | Unsecured debentures | | |
| | 8⅜% due May 1, 1992 | **21,250** | 22,000 |
| | 10¾% due June 15, 1995 | **69,000** | 72,000 |
| | 9¼% due May 1, 1982 | **—** | 30,000 |
| | 9¾% due May 1, 1986 | **22,500** | 24,000 |
| | | **112,750** | 148,000 |

Maturities and sinking fund requirements for the next five years are as follows:
1982 - $31,500,000; 1983 - $5,250,000; 1984 - $5,250,000;
1985 - $5,250,000; 1986 - $20,250,000.

| | 1981 | 1980 |
|---|---|---|
| Interest on long-term debt | **14,924** | 15,391 |

Capital stock

Effective May 15, 1981, the common shares were subdivided on a two-for-one basis. All references to common shares in these consolidated financial statements have been adjusted to give retroactive effect to this subdivision.

Authorized
Preferred — 6,000,000 shares issuable in series
Common — unlimited

| Issued | 1981 Shares | 1981 Amount | 1980 Shares | 1980 Amount |
|---|---|---|---|---|
| Preferred Series A | **2,400,000** | **$ 60,000** | 2,400,000 | $ 60,000 |
| Common | **20,088,536** | **60,955** | 20,058,402 | 60,370 |
| | | **120,955** | | 120,370 |

The preferred shares Series A are redeemable at the option of the Company and are retractable at the option of the holder on June 1, 1987, in each case at a price of $25 per share plus any unpaid dividends. They have a cumulative preferential floating rate dividend which is adjusted and payable quarterly at a rate which is applied to $25 and is equal to the sum of 1¼% plus ½ of commercial bank prime interest rate.

In 1981, under the long-term stock purchase plan, 30,134 common shares were issued for $585,000 (32,172 shares for $478,000 in 1980) to the trustee holding shares for participating senior management employees. The Company, under the terms of this plan, made interest-free loans to such employees of the full purchase price of the shares.

## 2. Summary of significant accounting policies

**Principles of consolidation**

The financial statements of all significant subsidiaries are consolidated with those of the Company. Investments carried at equity in net assets comprise entities owned 25 to 50 per cent as well as subsidiaries which are not significant. Other investments are carried at cost.

**Short-term investments**

Short-term investments are carried at cost, which approximates market.

**Inventories**

Inventory values do not include depreciation of fixed assets and are stated at the lower of average cost and net realizable value.

**Fixed assets and depreciation**

Fixed assets are carried at cost. Cost includes interest on debt attributable to major projects under construction. Expenditures for replacements are capitalized and the replaced items are retired. Maintenance and repairs are charged to current operations. Fixed assets are depreciated on the straight-line method over their estimated useful service life after they become operative. This results in a composite depreciation rate of 6%.

**Income taxes**

The Company uses the deferral method of tax allocation to provide for income taxes. The time in which transactions affect taxable income frequently differs from the time in which they enter into the determination of income in the financial statements. The cumulative differences between taxes provided and taxes payable are shown under deferred income taxes on the consolidated balance sheet.

Investment tax credits are included in income in the year they are claimed for tax purposes as a reduction in the current income tax provision.

**Translation of foreign currencies**

Cash, receivables and accounts payable denominated in foreign currencies are translated into Canadian dollars at year-end exchange rates. All other assets and liabilities, as well as income and expenses, are translated at rates prevailing at the month-end prior to the transaction date.

## 3. Investments

| | 1981 | 1980 |
|---|---|---|
| Petrosar Limited, at cost | **$48,367** | $48,367 |
| Other investments, at cost | **5,288** | 3,789 |
| Pétromont and company, limited, a limited partnership, at equity | **13,576** | 6,980 |
| Other investments, at equity | **17,076** | 9,243 |
| | **84,307** | 68,379 |

The Company has a 20% common share interest in Petrosar Limited which had net income of approximatly $38 million in 1981 ($47 million in 1980) before the provision for preference share dividends of approximately $45 million ($38 million in 1980).

Petrosar Limited has issued Class "A" preference shares which carry the right to a cumulative preferential floating rate dividend and are retractable over a period expiring December 31, 1987. The Company is committed to advance 30.4% of any funds necessary to make up any deficiency in meeting the financial obligations of Petrosar to pay dividends on and redeem these shares. Union Carbide Corporation has agreed to advance to the Company 33.2% of any funds the Company is required to pay under this commitment. The net funds advanced by the Company were nil in 1981 and $1,218,000 in 1980.

The following is a financial summary of those entities carried at equity:

| | 1981 | 1980 |
|---|---|---|
| Total assets | **$215,136** | $213,544 |
| Total liabilities | **105,739** | 121,398 |
| Net assets | **109,397** | 92,146 |
| UCCL equity in net assets | **30,652** | 16,223 |
| UCCL equity in income | **9,004** | 4,152 |

## 4. Extraordinary items

| | 1981 |
|---|---|
| Gain on sale of property, net of related income taxes of $238,000 | **$3,437** |
| Loss of disposal of investment, net of related income taxes of $1,852,000 | **(3,426)** |
| | **11** |

## 5. Related party transactions

| | Union Carbide Corporation | | Companies accounted for by equity method | |
|---|---|---|---|---|
| | **1981** | 1980 | **1981** | 1980 |
| Sales to | **$18,288** | $81,986 | **$32,967** | $29,801 |
| Purchases from | **99,334** | 86,000 | **15,955** | 23,561 |
| Royalties paid to | **11,955** | 11,103 | **—** | — |
| Balances with related parties | | | | |
| Accounts receivable from | | | **$ 9,112** | $33,004 |
| Accounts payable to | | | **26,773** | 27,563 |
| Short-term debt | | | **46,200** | — |

Settlements with related parties are made on terms similar to those made with non-related parties.

## 6. Commitments

a) The Company has granted an option for the purchase of the inventories and plants of its metals business at Beauharnois and Chicoutimi, Quebec. The option expires December 31, 1987. In the month following the expiry of the option, the Company may require the option holder to purchase these assets. The sale transaction will be subject to allowance under the Foreign Investment Review Act. The transaction is not expected to significantly affect the financial performance of the Company.

In a related transaction, the Company sold U.S. $23 million of the inventory of its metals business and agreed to pay the purchaser's cost of financing this inventory.

b) The Company has commenced construction of a petrochemical plant at Prentiss, Alberta, which will involve additional expenditures of approximately $300 million (excluding capitalized interest) to the completion of the plant in 1984.

## 7. Employee retirement program

The Company charges to operations annually current service costs, and a portion of past service costs of the employee retirement program. Pension expense is calculated as a percentage of annual payroll costs. Experience gains will be applied to maintain the percentage, while experience losses will be added to the unfunded liability. Total pension expense for the year was $9,772,000 ($8,336,000 in 1980).

The unfunded liability is the excess of the actuarial liability over the actuarial value of plan assets. During the year, changes were made in the funding method, actuarial assumptions and plan provisions resulting in an unfunded liability at January 1, 1981 of $20,503,000 ($21,795,000 in 1980) which is being amortized over fifteen years in accordance with current pension legislation.

## 8. Segmented information

The Company has three major business segments, as determined by the Board of Directors and recorded in the minutes of a meeting thereof: (1) Plastics and Chemicals, (2) Gases, Metals and Carbon and (3) Consumer and Related. These segments were determined based upon the similarity or close relationship in each segment of certain factors, including the following: nature of markets, common production and distribution facilities, and type of raw materials used. Inter-segment sales are accounted for at prices comparable to open market prices for similar products and services. The following is a summary of financial information for each segment:

| | Plastics and Chemicals | | Gases, Metals and Carbon | |
|---|---|---|---|---|
| | **1981** | 1980 | **1981** | 1980 |
| **Sales to customers** | **$320,486** | $322,800 | **$333,606** | $294,839 |
| Inter-segment sales | **53,899** | 63,484 | **3,212** | 3,359 |
| Total sales | **374,385** | 386,284 | **336,818** | 298,198 |
| **Operating profit** | **16,612** | 85,267 | **62,933** | 55,141 |
| General corporate expense | | | | |
| Interest on debt | | | | |
| Share of income of companies carried at equity | | | | |
| Income taxes | | | | |
| Extraordinary items | | | | |
| Net income | | | | |
| **Identifiable assets** | **449,807** | 402,731 | **308,421** | 299,025 |
| Fixed asset additions | **47,589** | 9,817 | **36,560** | 38,300 |
| Depreciation | **15,047** | 14,466 | **14,385** | 12,082 |
| Export sales | | | | |

## 9. Subsequent event

In January, 1982 the Company sold, in Europe, $50,000,000 aggregate principal amount of 16% Debentures due January 15, 1989.

| Consumer and Related | | Corporate | | Consolidated | |
|---|---|---|---|---|---|
| **1981** | 1980 | **1981** | 1980 | **1981** | 1980 |
| **$173,214** | $177,185 | | | **$827,306** | $794,824 |
| **373** | 277 | | | | |
| **173,587** | 177,462 | | | | |
| **4,399** | 22,226 | | | **83,944** | 162,634 |
| | | | | **(10,479)** | (25,347) |
| | | | | **(19,002)** | (15,087) |
| | | | | **2,414** | 2,107 |
| | | | | **(20,749)** | (44,695) |
| | | | | **11** | — |
| | | | | **36,139** | 79,612 |
| **104,626** | 92,938 | **57,508** | 69,356 | **920,362** | 864,050 |
| **11,162** | 9,016 | **4,706** | 1,780 | **100,017** | 58,913 |
| **3,008** | 2,232 | **644** | 388 | **33,084** | 29,168 |
| | | | | **113,654** | 104,008 |

## Five Year Summary

| **For the Year** (thousands of dollars) | **1981** | 1980** | 1979 | 1978 | 1977 |
|---|---|---|---|---|---|
| **Sales** | | | | | |
| Plastics and Chemicals | **$320,486** | $322,800 | $290,967 | $195,967 | $124,771 |
| Gases, Metals and Carbon | **333,606** | 294,839 | 236,911 | 209,015 | 178,071 |
| Consumer and Related | **173,214** | 177,185 | 158,041 | 123,225 | 103,694 |
| | **827,306** | 794,824 | 685,919 | 528,207 | 406,536 |
| **Net Income** | **36,139** | 79,612 | 57,814 | 20,089 | 20,500 |
| **Dividends** | | | | | |
| Preferred | **5,939** | 5,109 | 4,232 | 3,359 | 804 |
| Common | **13,253** | 10,750 | 9,251 | 9,000 | 9,000 |
| Net income reinvested | **16,947** | 63,753 | 44,331 | 7,730 | 10,696 |
| Funds from operations | **81,307** | 116,395 | 122,436 | 55,205 | 45,182 |
| Fixed asset additions | **100,017** | 58,913 | 30,074 | 46,270 | 82,299 |
| Depreciation | **33,084** | 29,168 | 32,032 | 24,992 | 18,104 |
| **At Year-End** (thousands of dollars) | | | | | |
| Total assets | **920,362** | 864,050 | 745,286 | 672,668 | 619,331 |
| Working capital | **147,276** | 228,116 | 192,495 | 118,780 | 130,083 |
| Common shareholders' equity | **378,656** | 361,124 | 296,893 | 252,270 | 244,540 |
| **Per Common Share** (in dollars) | | | | | |
| **Earnings** | **1.50** | 3.72 | 2.68 | 0.84 | 0.97 |
| **Dividends** | **0.66** | 0.54 | 0.46 | 0.45 | 0.45 |
| Net income reinvested | **0.84** | 3.18 | 2.22 | 0.39 | 0.54 |
| Funds from operations | **4.05** | 5.55 | 5.91 | 2.59 | 2.22 |
| Equity | **18.85** | 18.00 | 14.83 | 12.62 | 12.23 |
| Market price (Toronto Stock Exchange)* | | | | | |
| High | **24.00** | 22.00 | 13.63 | 9.66 | 9.63 |
| Low | **13.50** | 12.75 | 8.75 | 8.31 | 8.13 |
| **Financial Ratios** (per cent) | | | | | |
| Return on sales | **3.7** | 9.4 | 7.8 | 3.2 | 4.8 |
| Return on invested capital*** | **5.0** | 13.8 | 10.9 | 3.6 | 4.7 |
| Return on common shareholders' equity*** | **8.2** | 22.6 | 19.5 | 6.7 | 8.1 |
| Common dividends as per cent of earnings | **43.9** | 14.4 | 17.3 | 53.8 | 46.3 |
| **Other** | | | | | |
| Number of common shareholders at year-end | **3,700** | 3,800 | 4,200 | 4,900 | 5,200 |
| Average number of employees | **5,095** | 5,004 | 4,791 | 4,704 | 4,695 |
| Wages and salaries (thousands of dollars) | **$133,483** | $115,187 | $ 94,566 | $ 85,880 | $ 80,621 |

* On May 15, 1981 the Company's common shares were subdivided on a two-for-one basis.
** Changes in accounting policies effective January 1, 1980 favourably affected net income by $11.3 million ($0.57 per common share).
*** Based on average of beginning and end of year figures. Invested capital includes short-term debt, long-term debt and shareholders' equity.

| Plants | Products |
|---|---|
| **Plastics and Chemicals** | |
| Moore Township, Ontario/ Montreal East, Quebec | UNION CARBIDE Low- and High-Density Polyethylene Resins/Co-Polymers/ Vulcanizable and Semi-Conductive Compounds/Polyethylene Powders/ Cellular Polyethylene/Polysulfone Resins |
| Montreal East, Quebec | UNION CARBIDE Organic Chemicals, including Ethylene Oxide, Alkanolamines, Glycols and Glycol Ethers/Silicone Chemicals and Oils/Urethane Foam Intermediates/UCAR Solution Vinyl Resins/CELLOSIZE/CARBOWAX Polyethylene Glycols/ UCON Lubricants/UCAR Latices/Propylene |
| **Gases, Metals and Carbon** | |
| Vancouver and Vernon, British Columbia/Calgary, Edmonton and Fort Saskatchewan, Alberta/Saskatoon, Saskatchewan/Selkirk and Transcona, Manitoba/Brampton, London, Mississauga, Oakville, Ottawa, Sarnia, Sault Ste. Marie and Thunder Bay, Ontario/ Arvida, Contrecoeur, Lauzon, Montreal, Montreal East, Noranda, Sept-Iles, Tracy and Varennes, Quebec/Saint John, New Brunswick/Halifax, Nova Scotia | LINDE Oxygen, Nitrogen, Hydrogen, Argon, Helium, Carbon Dioxide and Rare Gases/Specialty Gas Mixtures/Fumigants and Sterilants/Calcium Carbide and Acetylene/Liquefied Hydrocarbon Fuel Gas/Gas and Electric Welding, Cutting, Forming and Heat-Treating Apparatus/Welding Rods, Wire and Electrodes/Power Sources/ Heat Exchangers/Steel-Conditioning Machines/Rock-Piercing and Shaping Equipment/Medical and Home Care Gases/Inhalation and Suction Therapy Equipment/Cryogenic Equipment/Cryogenic Equipment Repair Facilities/Food Freezing Equipment/Molecular Sieves/Hydrogen Upgrading and other Refinery Systems/High-Flux Tubing/Distillation Trays |
| Beauharnois and Chicoutimi, Quebec | Ferroalloys, Alloying Metals, Pure Metals and Metal Compounds produced from the elements Boron, Calcium, Chromium, Manganese, Silicon, Titanium, Tungsten, Vanadium and Zirconium |
| Mississauga and Welland, Ontario | Electric Arc Furnace Electrodes/Cathode Blocks/Electrolytic Cell Anodes/Furnace Linings/Electric Motor and Generator Brushes/Carbon and Graphite Products for chemical, electrical, mechanical and metallurgical applications |
| **Consumer and Related** | |
| Lindsay, Orangeville and Walkerton, Ontario/ Cowansville, Quebec | ENERGIZER and EVEREADY Batteries, including Alkaline, Manganese, Carbon Zinc, Silver Oxide, Mercuric Oxide, Nickel Cadmium and Lithium/EVEREADY and ENERGIZER Flashlights, Lanterns and Bulbs/GLAD Food Wrap, Bags and Garbage Bags/GLAD Cupboard Unit/SORTEC Garbage Bags/PRESTONE II Anti-Freeze and Summer Coolant/PRESTONE Car Care Products/Polyethylene Film/VISKING Cellulose Food Casings/VISTEN and PERFLEX S Specialty Films |

**Union Carbide Canada Limited**

| | |
|---|---|
| Head Office | 123 Eglinton Avenue East<br>Toronto, Canada<br>M4P 1J3 |
| Stock Transfer Agent and Registrar | Canada Permanent Trust Company |
| Stock Exchange Listings | Montreal, Toronto and Alberta |
| Auditors | Thorne Riddell |