Union Carbide Canada Limited 1980 Annual Report





Directors

Douglas F.S. Coate

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

President Union Carbide Canada Limited Toronto

†*Alec Flamm

Senior Vice-President Union Carbide Corporation New York

Alexander I. Hainey

Vice-President Union Carbide Canada Limited Toronto

†*Richard J. Hughes

Senior Vice-President Union Carbide Corporation New York

W. Norman Kissick

Vice-President Union Carbide Canada Limited Toronto

†*lan D. Sinclair

Chairman and Chief Executive Officer Canadian Pacific Limited Montreal

†*Elio E. Tarika

Senior Vice-President Union Carbide Corporation New York

†*James C. Thackray

President Bell Canada Montreal

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

Executive Officers

John S. Dewar

President '

Ralph C. Addison

Vice-President

Vernon V. Garlick

Vice-President and Treasurer

Alexander I. Hainey

Vice-President

W. Norman Kissick

Vice-President

Robert H. Rastorp

Vice-President

Douglas F.S. Coate

Secretary and General Counsel

George A. Kelly

Controller

About Union Carbide Canada

Union Carbide Canada Limited is a uniquely diversified manufacturing company with component businesses in plastics, chemicals, gases, metals, carbon and consumer products. It is 25 per cent Canadian owned, its common shares being held by approximately 3,800 shareholders. The remaining 75 per cent equity is owned by Union Carbide Corporation, of New York. More than 5,000 people are employed in Union Carbide plants and sales offices across Canada.

Operating and Functional Management

Robert J. Brema General Manager, Home and Automotive Products

Richard C. Kugelman

General Manager, Battery Products

Robert J. Kulperger General Manager, Gas Products

André G. Lapalme

General Manager, Hydrocarbons

E.J. Peter Matzen

General Manager, Chemicals

F. Gordon Murphy General Manager, Carbon Products

Thomas R. Pezzack

General Manager, Casings and Films

William D.E. Phillips

General Manager, Polyethylene

George W.T. Richardson General Manager, Metals

David R. Barclay

Director, Distribution

James P. Gracie, M.D.

Director, Health and Environmental **Affairs**

George T. Harrap

Director, Safety and Loss Prevention

James M. Neelands

Director, Computing and Telecommunications

Stewart N. Playford
Director, Purchasing and Materials Services

Robert A. Seath
Director, Corporate Communications

John A. Steinmiller

Director, Executive Staff

Charles W. van Winsen

Director, Human Resources

The Annual Meeting of Shareholders will be held at 11.00 a.m. on Wednesday, April 29, 1981, at the Chateau Lacombe, Edmonton.

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

President's Letter

Union Carbide Canada Limited experienced another year of record earnings in 1980 which will enable the Company to build further on Canada's current competitive advantage in hydrocarbon costs by reinvesting in new capital projects.

Total sales improved 16 per cent to a new high of \$794.8 million. All business areas — Plastics and Chemicals; Gases, Metals and Carbon; and Consumer and Related — registered gains. Export sales were \$104 million, an increase of 36 per cent.

Strong sales impacted positively on net income. The abrupt earnings recovery of 1979 was more than sustained as net income reached \$79.6 million, or \$7.43 per common share, compared with \$57.8 million, or \$5.35 per common share, a year earlier.

Accounting changes introduced in 1980 and detailed in the notes appended to the financial section of this report contributed \$1.13 per share to the improvement. These changes affected depreciation, investment tax credits, goodwill amortization and interest capitalization.

The chemical industry currently is Canada's fastest growing major industrial sector. The industry's planned 1981 capital expenditures amount to a 72 per cent increase over 1980. Totalling more than \$1 billion, they represent approximately 13 per cent of all reported new investment by Canadian manufacturers.

For its part, Union Carbide expects to invest more than \$750 million over the next five years. Immediate capital projects include a world-scale ethylene glycol plant at Prentiss, Alberta, and the phased expansion of polyethylene production in Moore Township, Ontario.

This commitment to increased capital investment is based on the expectation that the industry will continue to be able to offset the higher investment and distribution costs inherent in the Canadian environment with favourable domestic pricing of hydrocarbon supplies.

In this regard, the federal government's National Energy Program is a laudable move to provide a basis for long-term planning. Both the federal and Alberta governments have proposed constructive measures that recognize the importance of petrochemicals to the economy and their great potential in international markets. A Canadian crude oil price maintained at 75 to 85 per cent of the average U.S. or world price would maintain the competitive position of the industry, enabling it to continue to efficiently produce the chemical building blocks upon which so much of our economy depends.

For the coming year, we anticipate stronger pressure on earnings as hydrocarbon feedstock costs rise and the projected slow rate of economic growth inhibits further substantial sales gains.

On behalf of the Directors, I would like to extend a special thanks to Union Carbide's employees whose efforts, productivity and ingenuity contributed greatly to 1980's achievements.

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Financial Highlights

While Union Carbide earned substantially more in 1980, fixed asset additions almost doubled to reach \$58.9 million. The Company's cash position declined at year-end to \$26.8 million from \$40.2 million in 1979.

Receivables rose by \$31.2 million to \$149.1 million as a result of higher sales. Inventories also increased, by \$64.5 million to \$193.6 million, reflecting weak mid-year market conditions for some of the Company's products and the building of battery inventories in preparation for a consolidation of manufacturing. Inventories are expected to return to more normal levels in 1981.

The current ratio (total current assets: total current liabilities) was a healthy 2.5:1 at year-end which, although down from the 2.9:1 at the end of 1979, still held much of the strength it gained the previous year.

The Company's investment in Petrosar Limited, in which it has a 20 per cent equity interest. was increased by \$1.2 million to support that company's commitment to its bankers. bringing Union Carbide's total Petrosar investment to \$48.4 million. The comparable 1979 increase was \$2.2 million. Petrosar, which supplies ethylene to the Moore Township polyethylene plant, operated profitably during 1980 and no further investments are anticipated.

The most significant new investment was Pétromont and Company, Limited, a limited partnership formed in association with Gulf Canada Limited and Ethylec Inc., a wholly-owned subsidiary of la Société générale de financement du Québec. Ethylene requirements for Union Carbide's Montreal East petrochemical plant are purchased from Pétromont.

During 1980, the Company revised the estimated useful lives of machinery and

equipment to correspond more closely with their actual service lives. Depreciation as a result was reduced by a pre-tax \$4.3 million to \$28.6 million. This and the other accounting changes in 1980 increased earnings by \$11.3 million, or \$1.13 per common share. After adjusting for these changes, return on sales for the year was 7.9 per cent, return on invested capital 11.7 per cent and return on common shareholders' equity 19.2 per cent. During the fiveyear period 1976-80, return on invested capital averaged 8.4 per cent.

Common dividends amounted to \$10.8 million, or \$1.07 per share. While this represents 17 per cent of adjusted earnings, the dividend payout over the last five years has averaged 29 per cent of net income and quarterly dividends have been paid without interruption since Union Carbide's shares were offered to the public in 1964. The book value per common share at year-end improved to \$36.01 from \$29.65 a year ago.

The Year at a Glance	Thousands 1980 1979		Per Common Shar 1980 197	
Sales	\$794,824	\$685,919		
Net Income	79,612	57,814		
Earnings for Common Shareholders	74,503	53,582	\$ 7.43	\$ 5.35
Dividends on Common Shares	10,750	9,251	1.07	0.92
Funds from Operations	116,395	122,436	11.10	11.81
Fixed Asset Additions	58,913	30,074		
Total Assets	864,050	745,286		
Common Shareholders' Equity	361,124	296,893	36.01	29.65
Return on Sales Return on Invested Capital* Return on Common Shareholders' Equity*	9.4% 13.8% 22.6%	7.8% 10.9% 19.5%		

^{*}Based on average of beginning and end of year figures. Invested Capital includes Short-Term Debt, Long-Term Debt and Shareholders' Equity.

Shoppers' bags, made from strong, attractive, polyethylene, represent one of the fastest-growing applications for this versatile plastic. Union Carbide is Canada's leading polyethylene producer.

Operations Review

Plastics and Chemicals



Plastics and Chemicals recorded a sales increase of 11 per cent, following a 48 per cent improvement the previous year.

Sales of polyethylene, the most widely used plastic and Union Carbide's leading single product, improved modestly despite the economic recession which tempered 1979's strong demand. By mid-year, both domestic and export demand had dropped sharply, depressing prices. Markets recovered late in the year, however, and export sales gained significantly, reflecting Canada's lower-than-world hydrocarbon feedstock costs and the Canadian foreign exchange advantage.

Union Carbide continued to upgrade and broaden the flexibility of its polyethylene facilities. Developmental quantities of UNIPOL linear lowdensity resins were produced for the first time and engineering modifications to the Moore Township plant are under way to allow commercial production of these revolutionary new resins to complement Union Carbide's current broad range of low- and high-density polyethylene. The new product line is expected to facilitate entry into several new market areas.

Further gains in polyethylene sales in the coming year will hinge on the state of the Canadian economy and the stability of world markets. Escalated feedstock costs will narrow profit margins.

Chemicals recorded stronger revenue gains as 1979's positive pricing trends were maintained. Union Carbide manufactures more than 20 different families of ethylene-derived chemicals at its Montreal East petrochemical complex for a diverse range of industrial uses.



Graphite electrodes are manufactured by Union Carbide to withstand enormous electrical, thermal and mechanical stresses as they conduct electric power into giant electric arc steel making furnaces.

Gases, Metals and Carbon

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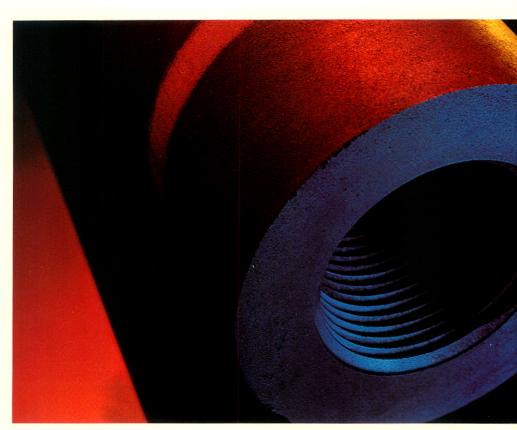
Ethylene glycol is the Company's largest volume chemical and, while its demand for anti-freeze production declined, this drop was offset by increased shipments of the product as a key component in the production of polyester fibre.

A new high-efficiency catalyst was installed at the Montreal East ethylene oxide production facilities early in the year, providing a significant increase in unit capacity.

In Alberta, provincial and county government approvals are being sought for a world-scale plant to upgrade ethylene produced from natural gas into ethylene glycol. With an annual capacity of more than 500 million pounds, the proposed plant will use a new-generation, improved catalyst and be the world's most efficient facility of its kind. Most of the output will be directed to export markets. Plans call for the \$300 million plant to be under construction in 1981 and in production by late 1984.

In Quebec, Pétromont and Company, Limited was formed. Union Carbide is a limited partner with one third of the equity of this Montreal-based venture which has the capability of producing an annual 1.5 million pounds of such basic petrochemicals as ethylene, propylene and aromatics. Pétromont's assets include Union Carbide's former Montreal East ethylene unit and a larger olefins plant previously operated by Gulf Canada at nearby Varennes. The partnership will study the practicality of expanding its petrochemical output to meet the growing needs of derivative producers in Quebec and Ontario.

A modest increase in chemicals volume is anticipated in 1981 with income gains being dependent on economic conditions and hydrocarbon cost increases.



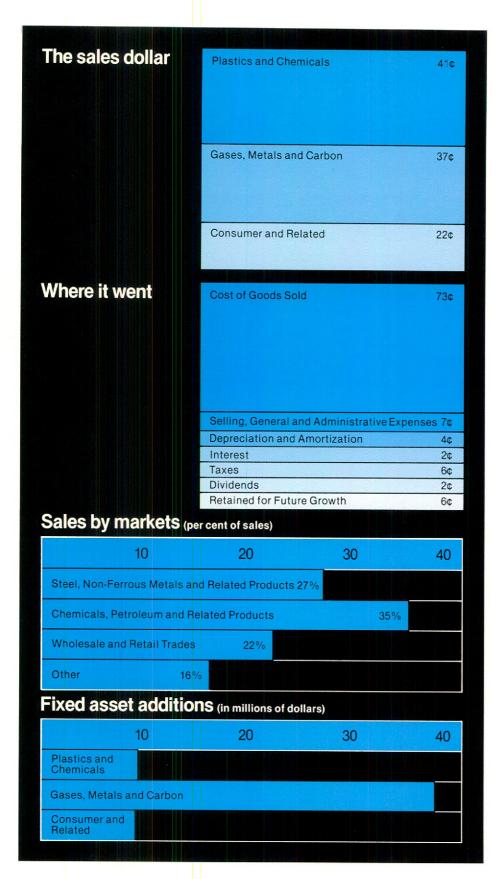
Gases, Metals and Carbon posted the largest sales increase of Union Carbide's businesses in 1980, improving 24 per cent over the previous year.

Gases' sales growth was aided by the first full year's output of a new air separation plant at Fort Saskatchewan, Alberta. This facility, the largest of its type in Western Canada, supplies oxygen and nitrogen in both liquid and gaseous forms for industrial and medical applications and oil well servicing throughout the West. Although it became operational only in late 1979, work has already started on a \$12 million expansion.

Union Carbide operates 11 other air separation plants across the country, as well as manufacturing and marketing welding and cutting equipment and high-technology stream separation systems.

The product line was broadened in 1980 with the completion of the Company's first carbon dioxide facility, a \$4 million plant at Montreal East. Carbon dioxide is principally used in the welding, beverage and food freezing industries and in oil and gas enhanced recovery programs.

An additional air separation plant is in the planning stage to supply gaseous oxygen to Union Carbide's proposed Alberta ethylene glycol facility. Subject to required government approvals, the \$30 million plant will be completed in 1984. It will also produce liquid oxygen and nitrogen to meet the growing needs of the Western Canadian market in the latter half of the decade.



Research and development activities during the year focussed on opportunities for greater utilization of atmospheric gases in the energy industries and on the broadening of current gas applications in food processing. Moderate sales improvement is expected in 1981 in line with the economic recovery.

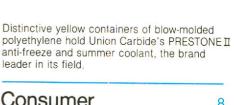
Agreement in principle was reached during the year to sell Union Carbide's metals business to a group headed by Shielding Investments Ltd. and a Norwegian company, Elkem a/s. Negotiations are continuing and the result of the sale is not expected to significantly affect the Company's financial performance.

Union Carbide's principal carbon product is graphite electrodes which are used to power electric arc furnaces in the steel industry. Although total ingot steel production in Canada declined slightly in 1980, the electric furnace component improved. Electrode sales trended higher as a result, contributing to the strong performance of this area of the Company's operations.

Graphite electrode capacity at the Welland, Ontario, plant was upgraded and enlarged by 30 per cent in a \$17 million program. New processes introduced to the facility enhanced environmental protection and achieved new energy efficiencies, in addition to expanding output.







Consumer and Related

Union Carbide's Consumer and Related business includes **ENERGIZER and EVEREADY** batteries, GLAD home products. PRESTONE II anti-freeze, plastic film products and food casings, which are used in processed meat production. The business achieved a 12 per cent sales increase.

Batteries recorded healthy growth with the introduction of the high-performance ENERGIZER line, which made a successful debut in a highlycompetitive retail market. Further gains are anticipated in 1981. Work started during the year on a \$10 million expansion of the Walkerton, Ontario, plant to consolidate battery manufacturing. When the expansion is completed in mid-1981, an older Toronto production facility will be phased out of operation.

GLAD home products enjoyed another highly successful year, steadily increasing market share in the food wrap, sandwich bag and freezer bag market segments. Garbage bag sales volume matched industry growth trends.

New products introduced in 1980 included a re-formulated plastic wrap with improved toughness and clarity which received encouraging consumer acceptance. Completion of a \$2.5 million expansion at the Orangeville, Ontario, home products plant enlarged capacity by 35 per cent.



Sales of anti-freeze declined with industry growth being inhibited by a lower level of automobile production and competition from imported product. Construction of a facility to mix the sophisticated anti-freeze formulas required by the coming generation of fuel-

Montreal East. Completion is scheduled for the spring of 1981. Film products experienced an

efficient cars started at

appreciable sales increase in the face of an overall market decline. Developmental work continued on new highperformance films for packaging applications. Sales in 1981 are

applications. Sales in 1981 are expected to outpace industry growth projections.

Food casings achieved moderate sales improvement. Future volume gains are forecast to parallel population growth.

Resources and Responsibilities

In a variety of ways, Union Carbide continued to meet its responsibilities in three major areas: human resources; safety, health and environmental protection; and energy utilization and conservation.

The men and women who work for the Company represent a valuable fund of skills and talents and developing these abilities still further is always an important priority. In this regard, the Company continuously monitors six essentials — personnel planning; selection and placement; training and development; performance evaluation; compensation; and communications. New elements were introduced in all of these in 1980.

The additions included a review program that allows employees to fully express their career aspirations, a process that more accurately matches potential candidates to specific job openings; regular performance coaching on an individual basis and the broadened utilization of a compensation approach that keys salary increases to employees' contributions.

The development of organizational techniques and motivational methods to improve productivity and job satisfaction continued during the year. Pre-retirement counselling was provided at selected locations and will be extended during 1981.

The dental assistance plan was upgraded, paid holidays were increased from 11 to 12 days and employees who retired before July 1 received pension increases of from three to 12 per cent, depending on their retirement date.

Union Carbide maintained its emphasis on the highest standards of health and safety for its employees and for the protection of the environment.

The Company experienced its most satisfactory safety year ever, achieving significant reductions in the number of accidents that occurred both on and off the job. To ensure that the best available technology is used to provide healthy and safe conditions in and around all new facilities and major process modifications, a pre-construction review system was expanded and improved. Health and environmental expertise was actively shared with other industries.

Union Carbide continued its leadership role in energy conservation, exchanging information with other companies and offering counsel to government on energy policy formation. In its submission to the National Energy Board, for example, the Company urged that growth in the supply of indigenous energy resources be balanced with growth in the industries that upgrade these resources for optimal domestic value addition and employment.

Management Report

Union Carbide Canada Limited's Annual Report and the accompanying financial statements are prepared by the Company's management and have been approved by the Board of Directors. The financial statements have been prepared in accordance with generally accepted accounting principles applied, except for the changes described in Note 5 to the financial statements, on a basis consistent with that of the preceding year. Management acknowledges responsibility for the fairness, integrity and objectivity of all financial information contained in the Annual Report, including the financial 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, 1980 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. 1980 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, except for the changes in the method of accounting for investment tax credits and interest on longterm debt attributable to capital projects as explained in note 5(a) and (b) to the financial statements, on a basis consistent with that of the preceding year.

Main Hurdman & Cranstoun Chartered Accountants

Toronto, Canada January 23, 1981

Consolidated Statement of Income and Retained Earnings

	(thousand Year Ended D 1980	ls of dollars) ecember 31 1979
Sales	\$794,824	\$685,919
Cost of Goods Sold Selling, General and Administrative Expenses Depreciation and Amortization Interest on Long-Term Debt	577,581 58,908 29,168 15,087	500,238 46,790 32,032 15,712
	680,744	594,772
	114,080	91,147
nvestment and Other Income Share of Income of Pétromont and Company, Limited	6,075 2,045	3,934
	8,120	3,934
Income Before Income Taxes Income Taxes	122,200 44,695	95,081 38,806
Share of Income of Companies carried at Equity	77,505 2,107	56,275 1,539
Net Income Retained Earnings at Beginning of Year	79,612 237,001	57,814 192,670
	316,613	250,484
Dividends — Preferred — Common	5,109 10,750	4,232 9,251
	15,859	13,483
Retained Earnings at End of Year	\$300,754	\$237,001
Earnings per Common Share (in dollars)	\$7.43	\$5.35

Consolidated Statement of Changes in Financial Position

	(thousand Year Ended D 1980	s of dollars) ecember 31 1979
Working Capital derived from		
Operations Net Income Items not Affecting Working Capital	\$ 79,612	\$ 57,814
Depreciation and Amortization Deferred Income Taxes Equity Income (net of dividends) Gain on Disposal of Capital Assets	29,168 10,894 (2,352) (927)	32,032 32,863 82 (355)
Proceeds from Common Shares Proceeds on Disposal of Capital Assets Other — Net	116,395 478 5,393 2,251	122,436 292 870 (1,820)
	124,517	121,778
Working Capital applied to Fixed Assets Dividends Investments Long-Term Debt	58,913 15,859 8,874 5,250	30,074 13,483 2,256 2,250
	88,896	48,063
Increase in Working Capital Working Capital at Beginning of Year	35,621 192,495	73,715 118,780
Working Capital at End of Year	\$228,116	\$192,495
Changes in Components of Working Capital Cash and Marketable Securities Receivables Inventories Prepaid Expenses Payables Notes Payable to Affiliates Current Portion of Long-Term Debt	\$ (13,416) 31,185 64,477 2,264 (48,489) — (400)	\$ 25,444 28,910 16,769 (26) (5,063) 7,831 (150)
	\$ 35,621	\$ 73,715

Consolidated Balance Sheet

	(thousands of dolla December 31	
	1980	1979
Assets		
Current Assets Cash and Marketable Securities Receivables Inventories Prepaid Expenses	\$ 26,798 149,121 193,636 7,445	\$ 40,214 117,936 129,159 5,181
Total Current Assets Fixed Assets Investments Other Assets	377,000 415,884 68,379 2,787	292,490 390,234 57,285 5,277
	\$864,050	\$745,286
Liabilities Current Liabilities Payables Current Portion of Long-Term Debt	\$147,734 1,150	\$ 99,245 750
Total Current Liabilities Long-Term Debt Deferred Income Taxes	148,884 148,000 146,042	99,995 153,250 135,148
	442,926	388,393
Shareholders' Equity Capital Stock Retained Earnings	120,370 300,754	119,892 237,001
	421,124	356,893
	\$864,050	\$745,286

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

Notes to the Consolidated Financial Statements (tabular amounts in thousands)

		Dece 1980	ember 31 1979
I. Supplementary Bal	ance Sheet Detail		
Cash and Marketable Securities	Cash and Deposits Short-Term Securities	\$ 1,982 24,816	\$ 32,761 7,453
		26,798	40,214
Receivables	Trade Affiliated Companies — Trade Miscellaneous	108,123 33,004 7,994	91,651 18,402 7,883
		149,121	117,936
Inventories	Raw Materials and Supplies Work in Process Finished Goods	37,082 48,693 107,861	28,590 38,714 61,855
		193,636	129,159
Fixed Assets	Land Buildings Machinery and Equipment	8,446 99,782 532,908	7,967 90,733 514,557
	Gross Fixed Assets Accumulated Depreciation	641,136 225,252	613,257 223,023
	Net Fixed Assets	415,884	390,234
Investments	Petrosar Limited Companies carried at Equity in Net Assets Pétromont and Company, Limited Other Investments	48,367 9,243 6,980 3,789	47,149 6,180 — 3,956
		68,379	57,285
Other Assets	Unamortized Commissions and Debt Discount Deferred Charges Unamortized Goodwill	1,815 295 677	2,193 2,324 760
		2,787	5,277
Payables	Trade Payables & Accrued Liabilities Affiliated Companies — Trade Income and Other Taxes Payable	85,970 27,563 34,201	68,646 23,198 7,401
	2	147,734	99,245

Long-Term Debt

a) 83/8 % Unsecured Debentures maturing May 1, 1992. Mandatory sinking fund payments of \$750,000 22,000 22,750 annually to May 1, 1991. b) 103/4 % Unsecured Debentures maturing June 15, 1995. Mandatory sinking fund payments of 75,000 72,000 \$3,000,000 annually commencing June 15, 1981. 30,000 30,000 c) 91/4 % Unsecured Notes maturing May 1, 1982. d) 93/4 % Unsecured Debentures maturing May 1, 1986. Mandatory sinking fund payments of \$1,500,000 annually to May 1, 1985. 24,000 25,500 148,000 153,250

Maturities and sinking fund requirements for the years 1981 through 1985 are \$1,150,000, \$35,250,000, \$5,250,000, \$5,250,000, and \$5,250,000 respectively.

Capital Stock

Authorized

Preferred — 6,000,000 shares issuable in series

Common — Unlimited

	19	80	1979	
Issued	Shares	Amount	Shares	Amount
Preferred Series A Common	2,400,000 10,029,201	\$ 60,000 60,370	2,4000,000 10,013,115	\$ 60,000 59,892
		\$120,370		\$119,892

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 1980, under the long-term stock purchase plan, 16,086 common shares were issued for \$478,000 (1979 - 13,115 shares for \$291,898) to the trustee holding shares for participating senior management employees and the Company made interest-free loans to such employees of the full purchase price of the shares.

Notes to the Consolidated Financial Statements

2. Summary of Accounting Policies

Principles of Consolidation	The financial statements of all significant subsidiaries are consolidated with those of the Company. Investments, including Pétromont and Company, Limited, carried at equity in Net Assets include entities owned 25 to 50 per cent as well as subsidiaries which are not significant. The	Company's share of earnings of s investments is included in the inconstatement. Goodwill is amortized ten years. Other investments (including Petrosar Limited referred in Note 3) are carried at cost. The following is a financial summary of those entities carried at equity:	ome over ed to
	Total Assets Less: Total Liabilities	\$213,544 \$ 42	2,050 8,106
	Net Assets		3,944
	UCCL Equity in Net Assets		6,180
	UCCL Equity in Net Income	4,152	1,539
Short-Term Securities	Short-term securities are carried at cost, which approximates market.		
Inventories	Inventory values, which do not include depreciation of fixed assets, are stated at the lower of cost and net	realizable value. Cost is determine on the average cost method.	ed
Fixed Assets and Depreciation	Fixed assets are carried at cost. Expenditures for replacements are capitalized and the replaced items are retired. Maintenance and repairs are charged to operations. Fixed assets are depreciated on the straight line method over their estimated useful	service lives. This results in an over depreciation rate of 6% (1979 - 7% Depreciation is not charged on ne assets until they become operative Beginning January 1, 1980, interest long-term debt attributable to major capital projects is capitalized.	o). W e. st on
Research and Development	Research and development costs are charged to operations as incurred.		
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 provide and taxes payable are shown under Deferred Income Taxes on the Consolidated Balance Sheet. Investment tax credits are include income in the year they are claime for tax purposes as a reduction in current income tax provision.	er d in ed
Employee Retirement Program	The unfunded actuarial liability for past service costs under the retirement program, estimated to be \$21,795,000 as at January 1, 1980, will	be amortized over not more than fifteen years in accordance with current pension legislation.	
Translation of Foreign Currencies	Foreign currencies are translated into Canadian dollars as follows: a) Cash, receivables and payables at year-end exchange rates. b) All other assets and liabilities as well as income and expenses at	rates prevailing at the month-en prior to the transaction. Realized and unrealized exchange gains and losses are credited or charged to operations and are not material in amount.)
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3. Commitments

- a) The Company has a 20% equity interest in Petrosar Limited with which the Company has entered into long term take or pay contracts for the purchase of ethylene and atmospheric residual oil. The atmospheric residual oil contract was entered into by the Company as accommodation purchaser for Union Carbide Corporation which has undertaken to protect the Company for all losses which may be incurred thereunder.

 Petrosar Limited has issued Class
 - 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. During 1980, pursuant to this commitment, the Company subscribed for \$1,824,000 of Class "B" preference shares which, in all respects, rank behind the Class "A" preference shares and Union Carbide Corporation in turn purchased from the Company \$605,600 of the Class "B" Shares.
- b) In 1980, Union Carbide Corporation signed a letter of intent for the sale of a portion of its Metals Business. The proposed sale would involve plants at Beauharnois and Chicoutimi, Quebec. Negotiations are continuing and the transaction is not expected to significantly affect the financial performance of the Company.
- c) Commitments under noncancellable leases with a term extending for one year or more will require the following future payments:

1981 1982 1983 1984 1985	\$ 3,898 2,661 2,207 1,666 1,248
Thereafter	3,588
	\$15,268

d) The Company has commenced activities with respect to the construction of a petrochemical plant at Prentiss, Alberta, which will involve expenditures of \$300 million over the period to the completion of the plant in 1984.

4. 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. Intersegment 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:

Notes to the Consolidated Financial Statements

Segmented Information (continued)

Sales to Customers Inter-Segment Sales Total Revenue Segment Operating Profit

Plastics &	Chemicals	Ga Metals 8	ises, & Carbons	Consume	r & Related
1980	1979	1980	1979	1980	1979
\$322,800 63,484	\$290,967 53,980	\$294,839 3,359	\$236,911 2,848	\$177,185 277	\$158,041 288
386,284	344,947	298,198	239,759	177,462	158,329
85,267	71,526	55,141	31,996	22,226	18,432

Identifiable Assets Fixed Asset Additions Depreciation and Amortization

402,731	354,665	299,025	235,311	92,938	69,209
9,817	4,581	38,300	18,969	9,016	6,264
14,466	15,920	12,082	12,416	2,232	2,646

5. Accounting Changes

Effective January 1, 1980, the Company made the two changes in accounting principles described in paragraphs a) and b) of this note 5 and two other changes in amortization periods described in paragraphs c) and d) hereof. The total net positive effect of these changes is \$11.3 million, or \$1.13 per common share.

- a) Investment Tax Credits (\$8.7 million): c) Depreciation (\$2.3 million): The Rather than being deferred and recognized in income over the average useful lives of the related fixed assets, the Company has adopted the flow-through method which takes investment tax credits into income in the year they are claimed for tax purposes as a reduction in the current income tax provision.
 - Company has revised the estimated useful lives of machinery and equipment to correspond more closely with their actual useful lives. The adoption of new estimates results in more realistic depreciation costs, thus producing a better matching with the revenue producing capabilities of the assets.
- b) Interest Capitalization (\$0.2 million): The Company now capitalizes interest on long-term debt attributable to capital projects. The interest is amortized over the average useful life of the assets.
- d) Goodwill Amortization (\$0.1 million): Goodwill purchased subsequent to January 1, 1980 is amortized over 10 years, rather than the 5 years used in prior years. The new amortization period matches more accurately with management's expectation for return on the related long-term investments.

	Co	rporate	Consolidated	
	1980	1979	1980	1979
			\$794,824	\$685,919
			162,634	121,954
General Corporate Expense Interest Expense Equity Income Income Taxes			(25,347) (15,087) 2,107 (44,695)	(11,161) (15,712) 1,539 (38,806)
Net Income			79,612	57,814
	69,356	86,101	864,050	745,286
	1,780	260	58,913	30,074
	388	1,050	29,168	32,032
Export Sales			104,008	76,204

6. Related Party Transactions

a) Affiliated Companies	Union Carbide Corporation		Accou	Companies Accounted for By Equity Method	
	1980	1979	1980	1979	
Sales to Purchases from Royalties paid to	\$ 81,986 86,000 11,103	\$ 66,599 131,113 10,255	\$ 29,801 23,561	\$ 20,990 2,585	
Settlements with affiliate companies are normally			nilar to those on-related partie	S.	
b) Pétromont Effective October 1, 1980, the Company, Gulf Canada Limited and la Société générale de financement du Québec entered into an agreement to form Pétromont and Company, Limited, a limited partnership for the production and marketing of basic petrochemicals. Under this		existing ethy producing as Montreal Easthird interest \$34 million. I sold will be in Company's s	he Company sole viene and propyle ssets located at stand obtained at in the partnership gain on the ancluded in the share of income ver fifteen years.	ene a one nip for ssets from	

7. Comparative Figures

The present auditors were appointed at the last annual meeting of the shareholders of the Company. The 1979 comparative

figures are based on financial statements reported upon by the former auditors.

Five Year Summary

For the Year (thousands of doll	ars)	1980	1979	1978	1977	1976
Sales Plastics and Chemica Gases, Metals and Ca Consumer and Relate	rbon	\$322,800 294,839 177,185	\$290,967 236,911 158,041	\$195,967 209,015 123,225	\$124,771 178,071 103,694	\$114,593 183,969 95,173
		794,824	685,919	528,207	406,536	393,735
Net Income Dividends		79,612	57,814	20,089	20,500	32,121
Preferred Common		5,109 10,750	4,232 9,251	3,359 9,000	9,000	8,875
Net Income Reinvested		63,753	44,331	7,730	10,696	23,246
Funds from Operations		116,395	122,436	55,205	45,182	69,460
Fixed Assets Additions		58,913	30,074	46,270	82,299	110,207
Depreciation and Amortization		29,168	32,032	24,992	18,104	17,012
At Year-End (thousands of dolla	ars)					
Total Assets Working Capital Common Shareholders'	Equity	864,050 228,116 361,124	745,286 192,495 296,893	672,668 118,780 252,270	619,331 130,083 244,540	546,064 136,289 233,844
Per Common Share (dollars)						
Earnings Dividend Net Income Reinvested Funds from Operations Equity	ook (Tyohongo)	7.43 1.07 6.36 11.10 36.01	5.35 0.92 4.43 11.81 29.65	1.67 0.90 0.77 5.18 25.23	1.94 0.90 1.07 4.44 24.45	3.21 0.89 2.32 6.95 23.38
Market Price (Toronto St High Low	ock Exchange)	44.00 25.50	27.25 17.50	19.12 16.62	19.25 16.25	24.00 17.62
Financial Ratios (per cent)						
Return on Sales *Return on Invested Capi *Return on Common Sha Common Dividends as p	reholders' Equity	9.4 13.8 22.6 14.4	7.8 10.9 19.5 17.3	3.2 3.6 6.7 53.8	4.8 4.7 8.1 46.3	8.2 9.1 14.5 27.6
Other						
Number of Common Sha Average Number of Emp Wages and Salaries (thou	loyees	3,800 5,004 \$115,187	4,200 4,791 \$ 94,566	4,900 4,704 \$ 85,880	5,200 4,695 \$ 80,621	5,500 4,819 \$ 75,168

^{*}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

Montreal East, Quebec

UNION CARBIDE Low- and High-Density Polyethylene Resins/ Co-Polymers/Vulcanizable and Semi-Conductive Compounds/ Polyethylene Powders/Cellular Polyethylene/Polysulfone Resins 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/Food Freezing Equipment/Molecular Sieves/Hydrogen Upgrading and other Refinery Systems/High-Flux Tubing/ Distillation Trays

Beauharnois and Chicoutimi, Quebec

Toronto and Welland, Ontario

Ferroalloys, Alloying Metals, Pure Metals and Metal Compounds produced from the elements Boron, Calcium, Chromium, Manganese, Silicon, Titanium, Tungsten, Vanadium and Zirconium

Electric Arc Furnace Electrodes/Cathode Blocks/Electrolytic Cell Anodes/Furnace Linings/Electric Motor and Generator Brushes/Theatre Projector Carbons/Carbon and Graphite Products for chemical, electrical, mechanical and metallurgical applications

Consumer and Related

Lindsay, Orangeville, Toronto and Walkerton, Ontario/ Cowansville, Quebec ENERGIZER and EVEREADY Batteries, including Alkaline, Manganese, Carbon Zinc, Silver Oxide, Mercuric Oxide, Nickel Cadmium and Lithium/EVEREADY Flashlights, Lanterns and Bulbs/GLAD Food Wrap, Bags and Garbage Bags/GLAD Cupboard Unit/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

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Stock Transfer Agent and

Registrar

Canada Permanent Trust Company Halifax, Montreal, Toronto, Winnipeg and Vancouver

Stock Exchange Listings

Montreal and Toronto

Auditors

Main Hurdman & Cranstoun

Toronto