

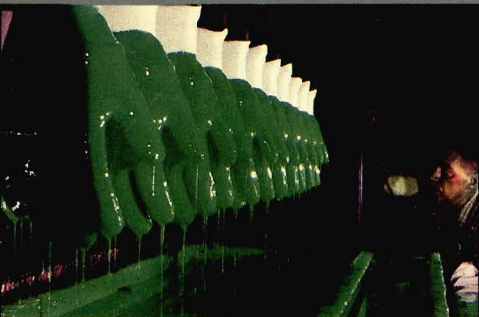
... RECOVERY IN PRIMARY METALS



... REORGANIZATION IN ELECTRICAL ENERGY



... STRENGTH IN FORMED METALS



... PROGRESS IN OTHER BUSINESS

## THE COMPANY

Inco Limited is a diversified company engaged in three principal businesses: primary metals, electrical energy and related products, and formed metal products.

**Inco Metals Company**, a major operating unit of Inco Limited, is the world's leading producer of primary nickel and a substantial producer of copper and precious metals.

**Inco ElectroEnergy Corporation**, a wholly-owned subsidiary, is a worldwide manufacturer of automotive, dry-cell and industrial batteries, and related products.

The **Formed Metal Products Group** is an international group of companies producing rolling mill, forged and machined products.

**Other Business** of the Company covers a wide variety of interests, including new businesses, safety products, resource development and research.

Inco Limited is incorporated in Canada, and at year-end Canadian residents of record held 62 per cent of the voting shares. The Company and its subsidiaries employed, at year-end, 53,460 people in 27 countries.

Inco Limited is in accord with the essential principles of the Guidelines issued in 1976 by the Organization for Economic Cooperation and Development for multinational companies.

### Annual meeting

The Company's Annual Meeting will be held in Toronto on April 16, 1980.

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## RESULTS IN BRIEF

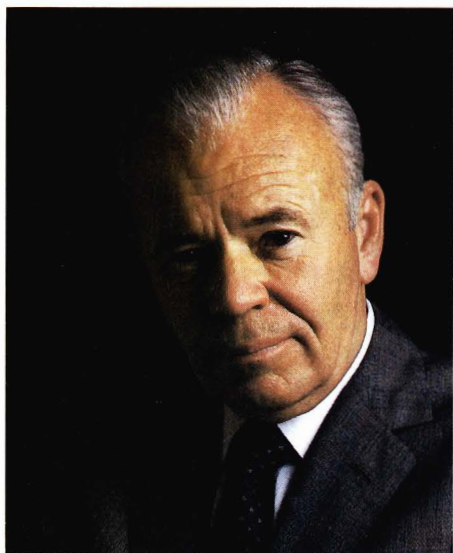
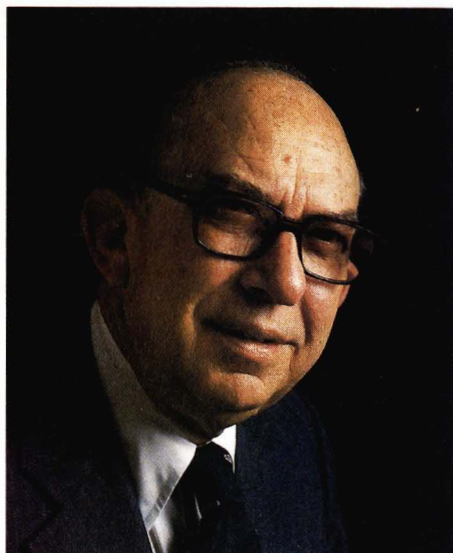
(in thousands except where noted by asterisk)	1979	1978
Net sales	<b>\$2,488,543</b>	\$2,083,094
Net earnings	<b>\$ 141,725</b>	\$ 77,809
Net earnings applicable to common shares	<b>\$ 118,451</b>	\$ 57,298
Per common share*	<b>\$1.58</b>	\$0.77
Common dividends paid	<b>\$ 37,380</b>	\$ 52,216
Per common share*	<b>\$0.50</b>	\$0.70
Income and mining taxes	<b>\$ 138,242</b>	\$ 87,070
Capital expenditures	<b>\$ 128,848</b>	\$ 219,934
Employees*	<b>53,460</b>	52,581
Common shareholders*	<b>74,541</b>	75,067

Contribution to sales (\$millions)	1979	1978
Inco Metals Company	<b>\$1,054 42%</b>	\$ 866 41%
Inco ElectroEnergy Corporation	<b>842 34</b>	755 36
Formed Metal Products Group	<b>553 22</b>	429 21
Other Business	<b>40 2</b>	33 2
Total	<b>\$2,489 100%</b>	\$2,083 100%

Contribution to operating earnings (\$millions)	1979	1978
Including equity in affiliates		
Inco Metals Company	<b>\$ 340 79%</b>	\$ 167 70%
Inco ElectroEnergy Corporation	<b>45 10</b>	45 19
Formed Metal Products Group	<b>50 12</b>	25 11
Other Business	<b>(1) —</b>	— —
Consolidation adjustments	<b>(5) (1)</b>	1 —
Total	<b>\$ 429 100%</b>	\$ 238 100%

Dollar figures in this Report are expressed in United States currency, unless otherwise stated.

## MESSAGE TO SHAREHOLDERS



Chairman J. Edwin Carter (top) and  
President Charles F. Baird

**T**he measured optimism of last year's message was largely realized during the past twelve months, as results for 1979 demonstrate. Earnings for the year improved significantly, particularly in the second half. Both Inco Metals and the Formed Metal Products Group achieved substantial improvements over 1978. However, operating earnings of Inco ElectroEnergy (formerly ESB Ray-O-Vac Corporation) were the same as in the previous year.

Several internally-generated ventures continued to progress toward full operational status. Though small, they demonstrate the significance of our research programs and have real potential for growth. These developments are described elsewhere in this Report.

### Financial results

Earnings for 1979 of \$141.7 million, or \$1.58 per Common Share, improved significantly over the previous year, but still were not at a satisfactory level. The improvement is attributable largely to higher prices for our primary metals and formed metal products and an important tax credit resulting from a tax change in the United Kingdom. These factors were partially offset by charges (consisting principally of interest expense) applicable to the Guatemalan and Indonesian projects, by a higher level of expenses attributable to the Sudbury strike and by the adverse effect of currency translation adjustments. For the first half of the year earnings were extremely low, due principally to low nickel prices and to costs and expenses attributable to the Sudbury strike which began in September 1978 and was settled in June 1979. Second half earnings showed a marked improvement.

The improvement in earnings, together with continuation in 1979 of

our program of cash conservation, contributed to a strengthening of our financial position. Capital expenditures in 1979 declined to \$129 million from \$220 million in 1978, largely because of reduced expenditures on the Guatemalan and Indonesian projects. In 1980 capital expenditures are expected to approximate \$220 million.

### Inflation

Inflation is, and should be, of overriding concern to governments, industry and individuals. In the Supplementary Financial Information section appearing on page 35 of this Report we have provided information relative to the effects of general inflation on our results and financial position. We encourage your review of this supplemental financial information and the related explanations and comments. The approach is essentially experimental, and in time we expect a more precise measurement will evolve.

Conventional financial reporting based on historical costs has long served a worthwhile purpose and should probably continue as an important form of financial reporting. In periods of high inflation, however, conventional financial reporting does not adequately disclose the effect of inflation on a company's past and prospective performance. Simply to stay in business without growing requires ever-increasing investment to replace plant, equipment and inventories. Taxes, nevertheless, must be paid on earnings measured in a way that does not adequately reflect the impact of inflation. Industry must seek recognition of this fact from the public and from governments so that changes in tax legislation will be made. We hope

that the reporting of supplemental financial information dealing with the effects of inflation will accelerate this process.

### **Common Share dividends**

In the decade of the 1960s, Inco's earnings were rising, cash requirements were lower and inflation was moderate. During this period, the Company was able to finance its business growth largely by reinvestment of earnings while at the same time paying out a substantial percentage of earnings as dividends. Since then, competition has intensified; cash requirements to maintain and expand our investment in plant, equipment and inventories have increased substantially; rates of inflation have risen sharply; and there has been a consequent decline in levels of profitability. As a result, the Company has had to rely heavily on external financing, including preferred shares and long term debt, to finance new and replacement plant, equipment and inventories.

We recognized that, due to these rapidly changing conditions, a greater proportion of our earnings should be reinvested. However, as a result of the cyclicity of Inco's business, our dividend payout rate, while fluctuating significantly, still accounted for a high proportion of reported earnings in the 1970s. When inflation is taken into account, the proportion was even higher, because inflation-adjusted earnings, particularly for a capital intensive company such as Inco, were substantially less than reported earnings.

When considering any dividend, your Board of Directors must, of course, weigh a number of factors, not the least of which is the need to insure that the Company has adequate funds to finance its short

and long term needs. Looking ahead, the Board currently believes that, under normal circumstances, dividends averaging approximately one-third of reported earnings per common share over a period of years would represent an appropriate level of payout. Within this framework, regular quarterly dividends would be paid at a rate which would be sustainable, but total payout would be adjusted, when appropriate, by year-end extra dividends. Your Board and your management are convinced that this approach will promote the sound long term growth of the business and consequently the growth of earnings, dividends, and the value of the shareholders' investment.

In December a 10 cent year-end extra dividend on common shares brought the total dividend for 1979 to 50 cents a share as compared with 70 cents a share in 1978. The extra and regular dividends in 1979 represented 32 per cent of reported earnings applicable to common shares. Earlier this month the Board of Directors increased the regular quarterly dividend from 10 cents to 15 cents a share.

### **Outlook**

The past few years have been difficult for Inco. Stringent financial constraints have been required to insure your Company's future good health. These constraints have imposed severe strains on employees and shareholders alike, but we have survived with our basic strengths intact and with the feeling that better days lie ahead.

In assessing 1980 we are encouraged by the fact that our primary metals business is off to an especially good start. Nevertheless, forecasts of recession, political instability in many areas, and continuing high inflation are reasons for caution.

We see the decade of the eighties, however, as a period of substantial

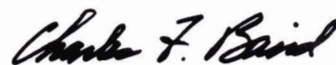
growth for Inco: a growth that will reflect increased utilization of existing production capacity, a more diversified range of products, and an early return to satisfactory levels of profitability.

Improved communications with employees and the public and continuing advances in our occupational safety, health and environmental control programs, are high priority corporate goals. We expect to achieve them all.

We know that society expects more of a corporation than earning a profit, but it must be understood that profitability enhances a company's capacity to provide other social benefits. In fact, we can accomplish nothing unless we maintain Inco's profitability and thus its financial good health.



Chairman and Chief Executive Officer



President

February 14, 1980

# INCO METALS COMPANY

## Operating highlights

Operating earnings (\$millions)	1979	1978
Net sales to customers	\$1,054	\$ 866
Intersegment sales	135	135
Total	1,189	1,001
Costs and expenses	849	834
Operating earnings, including equity in affiliates	\$ 340	\$ 167

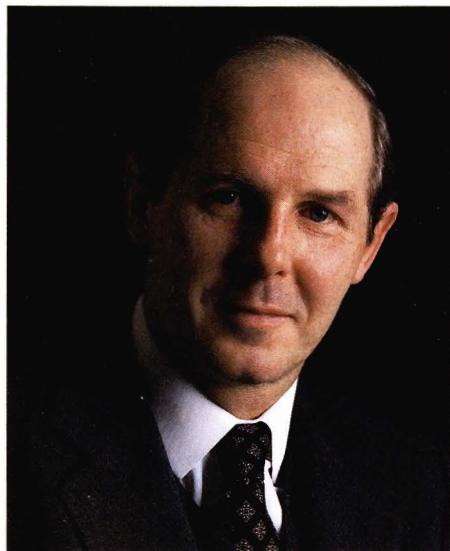
## Sales by product (\$millions)

Primary nickel	\$ 807	77%	\$615	71%
Refined copper	115	11	135	16
Precious metals	87	8	81	9
Other metals	45	4	35	4
Net sales to customers	\$1,054	100%	\$866	100%

## Deliveries (in thousands)

Primary nickel and intermediates	332,090	319,070
Nickel contained in formed metal products	61,540	58,360
Total nickel (pounds)	393,630	377,430
Copper (pounds)	129,090	224,560
Platinum-group metals* and gold (troy ounces)	326	468
Silver (troy ounces)	790	1,140
Cobalt (pounds)	1,240	1,700
Iron ore (long tons)	166	355

\*Platinum, palladium, rhodium, ruthenium and iridium.



Donald J. Phillips  
President and Chief Executive Officer,  
Inco Metals Company

The year 1979 was one of recovery for Inco Metals Company – a recovery from very low nickel prices, continued recovery in nickel demand, and recovery from the long strike at the company's Sudbury, Ontario operations. Prices improved for other products, with copper, cobalt, platinum-group metals, gold and silver all averaging substantially higher levels than in the previous year.

These other products are principally associated with Ontario Division production and, due to the Sudbury strike, their availability in 1979 was severely limited.

Significantly higher quantities are expected to be available in 1980.

In 1979, operating earnings increased 104 per cent from \$167 million in 1978 to \$340 million.

### Marketing

Marketing results for Inco's primary metals during the year compared with 1978 are shown in the tables above.

**Nickel** Inco's total nickel deliveries in 1979 were 394 million pounds

(including nickel in intermediate products), an increase of 5 per cent over 1978.

Nickel demand in the non-communist world in 1979 is provisionally estimated at about 1,350 million pounds, 13 per cent higher than the 1,200 million pounds for 1978. Production of stainless steel in 1979 set an all time record, and industrial activity worldwide was at a high level. Strong demand and curtailed production of nickel, due in part to the Sudbury strike, resulted in a reduction of total producer inventories of primary nickel by year-end to about 300 million pounds from 550 million pounds at the end of 1978.

Inco Metals' inventories of nickel at year-end 1979 stood at 89 million pounds, a reduction of 141 million pounds from year-end 1978.

Prices for primary nickel recovered throughout the year. Inco's average net realized price, including deliveries of intermediate products, was \$2.43 per pound compared with \$1.98 per pound in 1978.

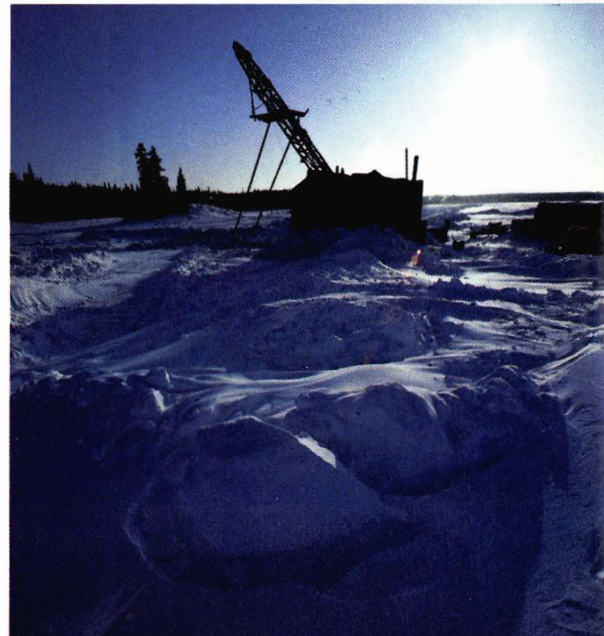
**Copper** Deliveries of ORC\* copper in 1979 were severely affected by the Sudbury strike. Following resumption of production in June, deliveries for the balance of the year totalled 129 million pounds. Inco Metals, which markets ORC\* copper in Canada and in Europe, realized an average price of 91 cents per pound in 1979 compared with 61 cents per pound in 1978.

**Precious metals** Higher world prices for all precious metals resulted in record sales even though deliveries of platinum, palladium, gold and silver were adversely

The Manitoba Division, in cooperation with a Winnipeg company and the National Research Council, has developed an improved muffler that reduces sound levels of pneumatic drills and other equipment. At right, sound pressure levels from a prototype muffler are recorded at Thompson Mine.

\*Inco Trademark





affected by the Sudbury strike. Sales of \$87 million in 1979 exceeded the previous high of \$81 million in 1978.

**Cobalt** Inco Metals' deliveries of cobalt decreased 27 per cent from 1978 as a result of the Sudbury strike and a strike at the Clydach, Wales operation. Despite these production difficulties, higher prices increased sales 86 per cent to \$38 million. Cobalt recoveries were increased substantially at the Thompson and Sudbury smelters.

### **Production**

During the year production was reduced primarily by the Sudbury strike and, to a lesser extent, by technical problems in Indonesia, a strike at the Clydach nickel refinery, and a short work stoppage at the Exmibal operations in Guatemala.

Nickel production for the year totaled 255 million pounds in 1979 compared with 267 million pounds in 1978 and 417 million pounds in 1977.

Production of copper, which originates mainly from Ontario ores, was 146 million pounds compared with 197 million pounds in 1978 and 328 million pounds in 1977.

Production in the Ontario Division was close to planned levels within two months of the end of the strike in June. Eleven mines are now in operation in the Division, including Shebandowan, which was brought back on stream in June.

In the Manitoba Division, operations continued during the year,

and productivity improvements were achieved throughout the Division.

Significant technical problems at P.T. International Nickel Indonesia impeded production. Nevertheless, output in 1979 was 19 million pounds of nickel in matte, up from 10 million pounds in 1978.

The difficulties relate to corrosion of the refractory linings in the electric furnaces due to the acidity of the ore planned to be processed. Substantial progress has been made in identifying and rectifying the problems involved and work is continuing. Significant increases in production are anticipated this year.

The Larona hydroelectric power plant, which was completed by P.T. International Nickel Indonesia early in 1978, has operated well and provides about 50 per cent of the total energy requirements for the operations.

By the second half of the year operations at the Exmibal facility in Guatemala had operated at or near design throughput rates. Production for the year was 14 million pounds of nickel in matte form compared with four million pounds in 1978.

At Clydach, Wales a new fluid bed roaster and associated acid plant were commissioned. On December 27 severe flooding damaged the refinery and some of the inventories of metals and supplies. The full extent of the damage is still being assessed. As a result of this, and a strike which started in October, Inco Europe Limited declared force majeure on cobalt salts on January 11, 1980, and on battery-grade nickel powders with effect from the end of February 1980.

A drop in supplies of precious metals concentrates from Sudbury due to the strike reduced production of precious metals at the Acton, England refinery.

Throughout all of our production operations the main goals continued to be improvements in occupational safety and health programs, employee relations, metal recoveries, productivity, environmental control and energy conservation.

### **Research and development**

Six years of basic research at Inco's J. Roy Gordon Research Laboratory at Sheridan Park, Ontario revealed a possible method of further decreasing Inco's sulphur dioxide emissions to the atmosphere. It involves a new process for physically separating additional pyrrhotite, a sulphur-bearing waste material, from nickel concentrates prior to smelting. The process is now being tested on a pilot scale in Sudbury. Preliminary results are encouraging.

In addition, a novel process for smelting nickel concentrates has been developed. It has the potential for producing a continuous stream of high-strength sulphur dioxide gas suitable for the production of sulphuric acid, thereby permitting a reduction of emissions of this gas to the atmosphere. This technology also has the important potential for improving workplace conditions and metals recovery. The process is now being tested at the Research Stations in Port Colborne, Ontario, and plant modifications are underway in Thompson, Manitoba to permit evaluation on a commercial scale. It is planned to complete the test and a technical and economic feasibility study by the end of 1981.

A new process to improve Inco's gold, silver and platinum metals treatment in Canada has been developed by the J. Roy Gordon Research Laboratory. Further pilot scale tests are scheduled for 1980.

Expenditures on research and development at Inco Metals' process laboratories and research stations in 1979 were \$14 million, compared with \$12 million in 1978.

### **Environmental control**

The Sudbury smelter continues to operate under an Order, dated July 27, 1978, issued by the Ontario Ministry of the Environment which, in part, limits emissions of sulphur

**Top:** At the Sudbury smelter a furnace was brought into operation to test a process to improve cobalt recovery from converter slag.

**Bottom left:** At P.T. International Nickel Indonesia another section of the orebody was developed during 1979 to provide blended ores.

**Bottom right:** Changes in Manitoba mining taxation have prompted Inco Metals to expand its exploration program in the Manitoba Division.

dioxide to 3,600 tons per day on an annualized basis. The company is in compliance with this requirement and substantially in compliance with other requirements of the Order, which expires June 30, 1982. Inco Metals has intensified its continuing investigations aimed at making additional reductions in sulphur dioxide emissions. If the test programs previously described in the Research and Development section of this Report produce favorable results, further significant reductions in sulphur dioxide emissions could be achieved. Implementation of the new processes would require substantial capital expenditures, and in the case of the smelting process, a solution to the problem of disposing of large quantities of sulphuric acid.

The Thompson smelter continues to operate under an Order of the Manitoba Clean Environment Commission, dated July 7, 1978, which, in part, limits sulphur dioxide emissions to 1,250 tons per day. At current production rates, emissions are well within this limit.

### **Occupational safety and health**

Occupational safety and health are receiving increased attention. In Ontario, a major occupational safety and health law passed in 1978, was proclaimed in 1979 and new regulations applicable to mining were passed. In Manitoba the company cooperated fully with a government committee inquiring into occupational safety and health.

Inco Metals Company continues to comply with the occupational safety and health guidelines and standards applicable to all its operations. Workplace exposures are being monitored in each operating unit.

In the United States, the Occupational Safety and Health Administration (OSHA) has announced its intention to establish new standards for workplaces where nickel is present. The company has undertaken three epidemiological studies of its workers and has encouraged other producers and

consumers of nickel to do the same. Altogether, 19 epidemiological studies have been initiated. Results from most of these should be available in 1980 and should play an important role in OSHA's rulemaking.

Again in 1979, the Manitoba Division continued its trend of improved safety performance.

In 1979 considerable improvements were achieved in safety performance in the Ontario Division. These improvements reflect continuing attention to safety organization and efforts, as well as a massive re-instruction program undertaken to reacquaint employees with the safety aspects of their jobs upon their return to work following the Sudbury strike.

### **Exploration**

Inco Metals spent \$13 million on exploration in 1979, the same as in 1978. About 70 per cent of these amounts were spent in Canada. A large portion of exploration was in the vicinity of Inco's Canadian mines with some geological targets being drilled to a depth of 10,000 feet.

A potentially significant uranium discovery was made in Saskatchewan on a property owned jointly by Inco Metals Company and Canadian Occidental Petroleum Ltd. Drilling is in progress to define in more detail the tonnage, grade and distribution of the mineralization.

### **Ore reserves**

At year-end Inco had proven ore reserves in Canada of 436 million short tons, containing 6.9 million short tons of nickel and 4.3 million short tons of copper. This compares with reserves at year-end 1978 of 397 million short tons containing 6.6 million short tons of nickel and 4.2 million short tons of copper. Only material that has been sampled in sufficient detail to enable a reliable calculation is classified as reserves.

At Soroako, on the Island of Sulawesi in Indonesia, and in the Lake Izabal area of eastern Guatemala, Inco has outlined large resources of nickeliferous laterite. At each location, these resources are adequate to supply operations at

design capacity for the expected lives of the facilities.

### **Consulting**

The company continued to sell consulting services through INCO TECH\* on projects in Canada, the United States, South America, Africa and the People's Republic of China.

### **Industrial relations**

In the Ontario Division a new three-year agreement covering production and maintenance employees in the Sudbury area was ratified on June 3, 1979, ending a strike of 8½ months. Staff employees continued to work during the shutdown of the Sudbury operations. During the strike, the Port Colborne nickel refinery continued operations under a one-year agreement which expired July 10, 1979. This contract was renegotiated prior to its expiry date.

Both the Sudbury and Port Colborne agreements terminate on May 31, 1982.

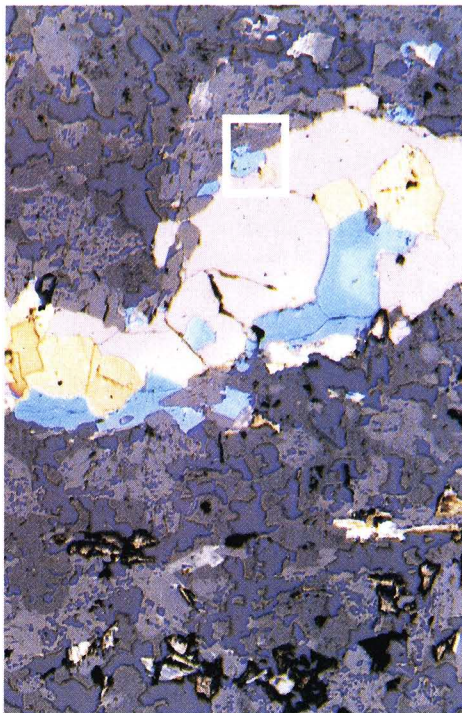
Nearly 99 per cent of the production and maintenance workforce reported to work at the end of the Sudbury strike. Special training preparations for an orderly startup on June 5 and recovery from the strike proved successful.

Efforts to restore positive company-union relations continued through joint, co-operative committees active in the areas of occupational safety and health, drug and alcohol counselling, employee training and financial counselling.

A communications program, which was introduced in the Manitoba and Ontario Divisions, entails presentations to all employees, union leaders, government representatives and the communities at large. The program reviewed aspects of Inco's operations and was designed to develop a better understanding of the company's operations, policies and objectives.

In the Manitoba Division, a new collective bargaining agreement for production and maintenance employees was negotiated successfully

\*Inco Trademark



As part of a corporate commitment to reduce its emissions of sulphur dioxide, Inco has developed a novel process for reducing the amount of sulphur in the feed to its Sudbury smelter. The top left photo shows a piece of Sudbury ore. Our concentrators presently separate the ore into four streams: a nickel concentrate containing most of the pentlandite (yellow); a copper concentrate containing most of the chalcopyrite (blue); a sulphur-rich nickel-poor pyrrhotite concentrate (purple/pink); and tailings containing most of the rock (grey). The object of the new process, now being tested in a pilot plant at Sudbury, is to reduce the amount of pyrrhotite in the nickel concentrate. The intimate intergrowth of pentlandite and pyrrhotite shown in the highly magnified photo on the right is one reason why improved separation is difficult.

prior to the March 1, 1979 termination date. The new agreement will expire on September 15, 1981.

In the United Kingdom, one-year agreements were negotiated with unions representing staff employees at the Acton and Clydach refineries. Production and craft workers at Clydach rejected the contract proposal accepted by staff workers and went on strike October 18, 1979. The strike continued at the date of this Report.

In Guatemala a dispute between some workers and Exmibal resulted in a work stoppage. The 17-day dispute was settled on November 22, 1979 with the signing of a collective agreement, which is in effect until September 30, 1981.

### Officers

Donald J. Phillips was elected President and Chief Executive Officer of Inco Metals Company on June 15, 1979. Prior to his election he was President and Chief Operating Officer. He joined Inco in London in 1956.

Effective January 1, 1980 Edward R. Burrell became President of the International Nickel Company, Inc., responsible for the company's primary metals marketing in the United States and Latin America.

### Employees

At year-end 1979, Inco Metals had a total of 24,376 employees. Of this total 17,933 were in Canada; 3,649 in Indonesia; 1,425 in the United Kingdom; 967 in Guatemala; 293 in the United States; and 109 in other countries. At year-end 1978, Inco Metals employed 23,795.

## Officers

### Inco Metals Company

Donald J. Phillips  
President and Chief Executive Officer

Walter Curlook  
Senior Vice-President

Charles E. O'Neill  
Senior Vice-President

Johannes P. Schade  
Senior Vice-President

William A. Correll  
Vice-President

William I. Gordon  
Comptroller

James D. Guiry  
President, INCO TECH

Daniel Kelly  
Vice-President

Donald B. MacDermott  
Chief Legal Officer

Terrence Podolsky  
Vice-President

Ronald R. Taylor  
Assistant to the President

### Principal marketing operations

Edward R. Burrell  
President, The International Nickel Company, Inc., New York

Robin B. Nicholson  
Managing Director, Inco Europe Limited, London

J. A. Keith McPhail  
General Manager, Canadian Marketing Division

Kevin H. Belcher  
Managing Director-Marketing, International Nickel Australia Limited, Melbourne

### Principal production operations

Winton K. Newman  
President, Ontario Division, Sudbury

Charles F. Hews  
President, Manitoba Division, Thompson

W. Roy Aitken  
President, P. T. International Nickel Indonesia, Jakarta

Harold A. Laine  
President, Exmibal, Guatemala City

## Principal properties, plants, laboratories

**Operating mines**  
Sudbury, Ontario; Shebandowan, Ontario; Thompson, Manitoba; Soroako, Indonesia; El Estor, Guatemala

**Smelters**  
Sudbury, Ontario; Thompson, Manitoba; Soroako, Indonesia; El Estor, Guatemala

**Iron ore plant**  
Sudbury, Ontario

**Matte processing**  
Sudbury, Ontario; Clydach, Wales

**Refineries**  
Sudbury, Ontario; Port Colborne, Ontario; Thompson, Manitoba; Clydach, Wales; Acton (London), England

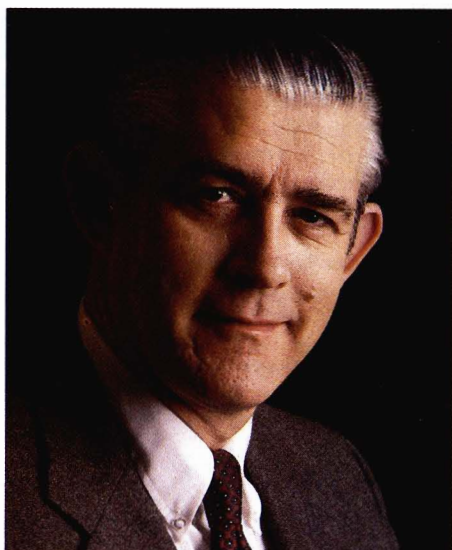
**Research laboratories and pilot plants**  
Sheridan Park (Mississauga); Sudbury and Port Colborne, Ontario; Thompson, Manitoba; Clydach, Wales

# INCO ELECTROENERGY CORPORATION

## Operating highlights

Operating earnings (\$millions)	1979*		1978*	
Net sales to customers	\$842		\$755	
Intersegment sales	—		1	
Total	842		756	
Costs and expenses	797		711	
Operating earnings, including equity in affiliates	\$ 45		\$ 45	
Sales by product (\$millions)				
Batteries and related products				
Automotive	\$303	36%	\$282	37%
Dry cells	268	32	246	33
Industrial	173	20	127	17
Total	744	88	655	87
Other products	98	12	100	13
Net sales to customers	\$842	100%	\$755	100%

\*Does not include Safety Products which was transferred to Inco United States, Inc.



David C. Dawson  
President and Chief Executive Officer,  
Inco ElectroEnergy Corporation

The reorganization of ESB Ray-O-Vac Corporation in 1979 was followed early in 1980 by the change of the company's name to Inco ElectroEnergy Corporation. This new identity establishes a direct relationship with the parent company and clearly defines the electrical energy field as the primary business.

Subsidiary companies have retained their identity to maintain the high visibility of brand names in the consumer market: Exide Corporation (automotive and industrial batteries); Exide Electronics Corporation (power conversion and related products); Ray-O-Vac Corporation (primary batteries and portable lighting devices) and Universal Electric Company (fractional horsepower electric motors).

Inco ElectroEnergy sales increased to \$842 million during the year, up more than 11 per cent from sales of \$755 million in 1978, but operating earnings were disappointing.

Increasing and fluctuating lead prices were a major factor affecting profitability in battery markets. Lead prices peaked at over 60 cents per pound during the year, up from about 40 cents per pound at year-end 1978. Keen competition prevented the recovery of increased lead prices and other cost increases.

Results in the United States and Canada in dry cells and micro power products were adversely affected by severe competition.

Industrial battery operations had a record year, increasing market share and building a leadership position in the industry. The company's sales in the rapidly growing uninterruptible power supply (UPS) market increased 50 per cent.

Electric motor sales reached record levels for the fourth consecutive year.

Foreign operations were strong, and the company reinforced its position in Latin America.

In 1979 Inco ElectroEnergy continued to concentrate efforts on its principal businesses and divested minor product lines.

## Exide Corporation

During the year Exide Corporation established its headquarters in Philadelphia, Pennsylvania. This consolidation was part of the reorganization that streamlined the subsidiary to group automotive, industrial and specialty operations.

United States and Canadian automobile battery unit volume declined, but sales were up 4 per cent from 1978 principally as a result of higher lead prices.

A new automotive battery, the Exide Edge\*, is lighter in weight than its predecessors, provides greater capacity and has greater cranking ability. The Exide Edge is the most powerful battery of its size on the market.

A new electric vehicle (EV) battery was introduced in 1979. The PV-23 lead-acid unit is more powerful than its predecessor and provides faster acceleration.

Exide industrial battery sales rose

The armature baking process for electric motors at Universal Electric's Owosso, Michigan operations.

\*Trademark of Inco ElectroEnergy Corporation



to record levels, increasing 36 per cent over 1978.

A new industrial battery plant was opened in Woodstock, Ontario to serve the growing Canadian market. The Scarborough, Ontario plant will be phased out.

### **Exide Electronics Corporation**

The newly-formed Exide Electronics Corporation shipped and installed its first 415 Hz static frequency charger in 1979. This equipment provides power for large, modern computer mainframes using improved techniques.

A new line of inverters for emergency lighting and minicomputer applications was developed. The Linebacker\* utilizes a new high frequency transistor technology resulting in small size and low cost.

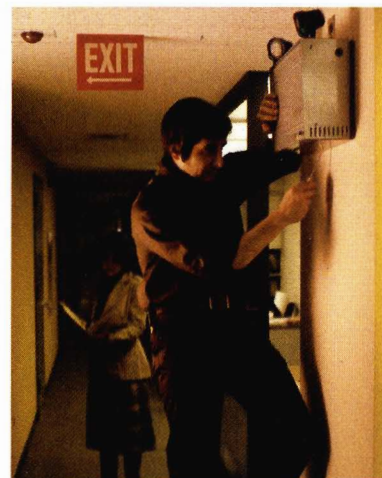
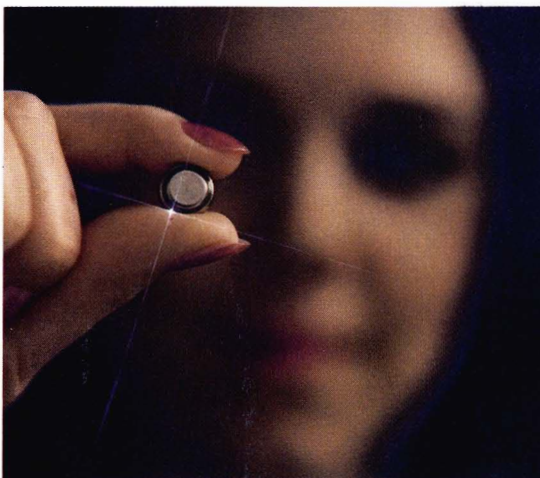
Exide Electronics completed a 65,000 square foot expansion at its Raleigh, North Carolina plant, which increased capacity from 30 to 55 UPS systems per month.

A new plant was opened in Bridgewater, U.K., and Exide Electronics' Canadian operations were expanded.

### **Ray-O-Vac Corporation**

Sales were up 9 per cent in the United States, and worldwide sales experienced a strong increase.

During the year, the Ray-O-Vac Corporation restructured its organization to compete more effectively in worldwide markets for dry cells and portable lighting devices. The reorganization established a new, worldwide button cell division titled the Micro Power Group; placed greater emphasis on sales to and relationships with the manufacturers of devices that use dry cells; focused on consumer brand marketing in North America; and intensified technology programs aimed at product innovation,



\*Trademark of Inco ElectroEnergy Corporation

improved manufacturing processes and cost reductions.

In response to rapidly increasing demand for alkaline manganese batteries in North America, Ray-O-Vac's Fennimore, Wisconsin plant was expanded.

As well, a new 154,000 square foot plant in Kinston, North Carolina was completed to manufacture plastic lighting devices. Production is scheduled to begin in early 1980.

### **Universal Electric Company**

Universal Electric motor sales for 1979 were 14 per cent higher than 1978. Record sales were attributed to two markets, the garage door opener industry and the ventilating business.

Universal introduced a new energy efficient permanent magnet motor with more power in a smaller package.

### **Technology**

Each subsidiary company manages its own engineering and development programs and maintains appropriate staff and facilities. Advanced battery research is conducted at Inco Limited's corporate laboratories.

Research on a zinc-air miniature battery system was completed in 1979, and commercial production is scheduled for 1980. This system is

intended for powering small electronic devices.

Two energy related battery research contracts were granted in 1979 to Exide by the U.S. Department of Energy. They include work on the Vibrocel\* nickel-zinc battery for use in electric vehicles and the lead-acid battery for load-leveling applications.

Exide Electronics developed a UPS system for the U.S. Social Security Administration. It is the world's largest uninterruptible power supply system, rated at 8000 KVA.

Universal Electric continued its on-going development program to increase efficiency of its motors. Since 1975, Universal has increased efficiency 42 per cent over previous models.

### **Occupational safety and health and environment**

Inco ElectroEnergy is in substantial compliance with the regulations of both the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA). The OSHA lead standard is scheduled to become increasingly stringent over the next four years. However, its validity is currently being determined by the U.S. Court of Appeals. If the standard is upheld, compliance will require substantial future investments by all storage-battery manufacturers.

### **Industrial relations**

Eighteen labor contracts with unions representing employees in the United States and Canada were concluded by Inco ElectroEnergy during the year. Three settlements were preceded by strikes.

Elsewhere, two contracts were concluded, one of which followed a short strike.

### **Employees**

At year-end, Inco ElectroEnergy had 18,751 employees compared with 18,410 on December 31, 1978. Of these, 11,490 were employed in the United States, 896 in Canada, and 6,365 in 20 other countries.

## **Officers**

### **Inco ElectroEnergy Corporation**

David C. Dawson  
President and Chief Executive Officer

Richard T. Nalle, Jr.  
Senior Vice-President

Lawrence S. Driever  
Vice-President, Administration

Samuel A. Stewart  
Director, Financial Services

Howard J. Strauss  
Vice-President, Operations and Engineering

Dyer S. Wadsworth  
Vice-President and Chief Counsel

### **Principal Operations**

Benno A. Bernt  
President, Ray-O-Vac Corporation, Madison, Wisconsin

Robert Kent  
President, Exide Corporation, Philadelphia, Pennsylvania

Warren G. Mang  
President, Exide Electronics Corporation, Philadelphia, Pennsylvania

Bruce C. Nash  
President, Universal Electric Company, Owosso, Michigan

### **Principal properties, plants, laboratories**

#### **Headquarters**

5 Penn Center Plaza, Philadelphia, Pennsylvania 19103, U.S.A.

#### **75 plants in 21 countries**

Batteries and related electrical and electronic products

29 plants in the U.S.; 4 in Canada and Japan; 3 in Brazil; 2 each in Colombia, Greece, Guatemala, Mexico and Venezuela; and one each in the following countries: Austria, Dominican Republic, India, Iran, Nicaragua, Peru, South Africa, Spain, Sweden, United Kingdom, West Germany and Zaire

#### **Electric motors**

4 plants in the U.S.; one in India, and one in the United Kingdom

#### **Plastics and others**

6 plants in the U.S.; one in the United Kingdom

**Top: Dramatic illustration of one of Exide's maintenance-free automobile batteries.**

**Bottom left: Ray-O-Vac introduced six new sizes of button cell batteries. These smaller and thinner cells have a wide range of applications.**

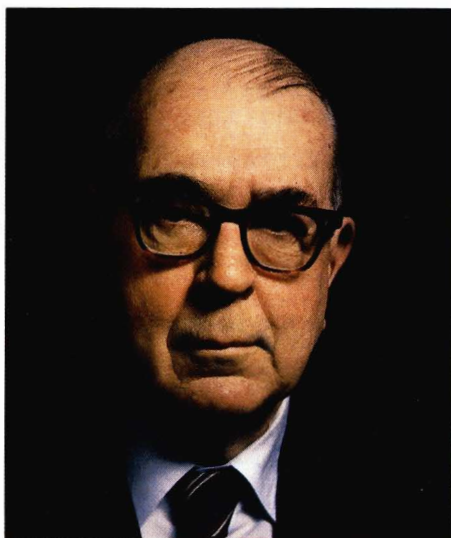
**Bottom right: The Light Guard\*, produced by Exide Electronics Corporation, provides emergency lighting for industrial and consumer use.**

\*Trademark of Inco ElectroEnergy Corporation

# FORMED METAL PRODUCTS GROUP

## Operating highlights

Operating earnings (\$millions)	1979	1978
Net sales to customers	\$553	\$429
Intersegment sales	7	9
Total	560	438
Costs and expenses	510	413
Operating earnings, including equity in affiliates	\$ 50	\$ 25
<b>Sales by market (\$millions)</b>		
Transportation		
Aerospace	\$156 28%	\$ 96 22%
Other	54 10	45 11
Total	210 38	141 33
Process industries	138 25	118 28
Power and utilities	86 16	70 16
Consumer durables	69 12	65 15
Other	50 9	35 8
Net sales to customers	\$553 100%	\$429 100%



John H. Page  
President, Formed Metal Products Group

**R**esults for the Formed Metal Products Group (FMPG) improved significantly during 1979 due primarily to market demands for gas turbines, environmental control equipment and high performance alloys in the chemical and energy fields. The Group ended the year with a healthy backlog of orders.

Sales reached a record high of \$553 million, an increase of nearly 29 per cent over 1978. Operating earnings doubled from \$25 million in 1978 to \$50 million in 1979 – a welcome improvement, but not yet a satisfactory return on investment.

### Huntington Alloys, Inc.

Net sales of \$301 million were up 29 per cent from 1978. Profit performance was adversely affected by the difficulty in realizing higher prices rapidly to compensate for the very sharp rise in the cost of materials.

Deliveries of products during the year reached 72 million pounds, compared with 1978 deliveries of 65 million pounds. The value of open orders at the end of 1979 was \$247 million. This was unevenly distributed over the product and alloy range, but was some 30 per cent higher in volume than at the end of 1978. Markets with the best sales potential continue to be the

power industry and high-technology equipment in energy production, aircraft gas turbines and pollution control equipment.

To increase product flow and reduce production time, a new computer-controlled materials flow system was installed at Huntington Alloys.

An interest was acquired in a distribution and manufacturing company in Brazil to expand Huntington Alloys' marketing operations in South America.

### Henry Wiggin & Company Limited

Net sales of \$134 million were up 24 per cent from 1978. Product deliveries in 1979 were 29 million pounds, about the same level as in 1978.

The backlog of open orders at the end of 1979 reflected strong demand for aero engine products and stood at a record level of \$138 million.

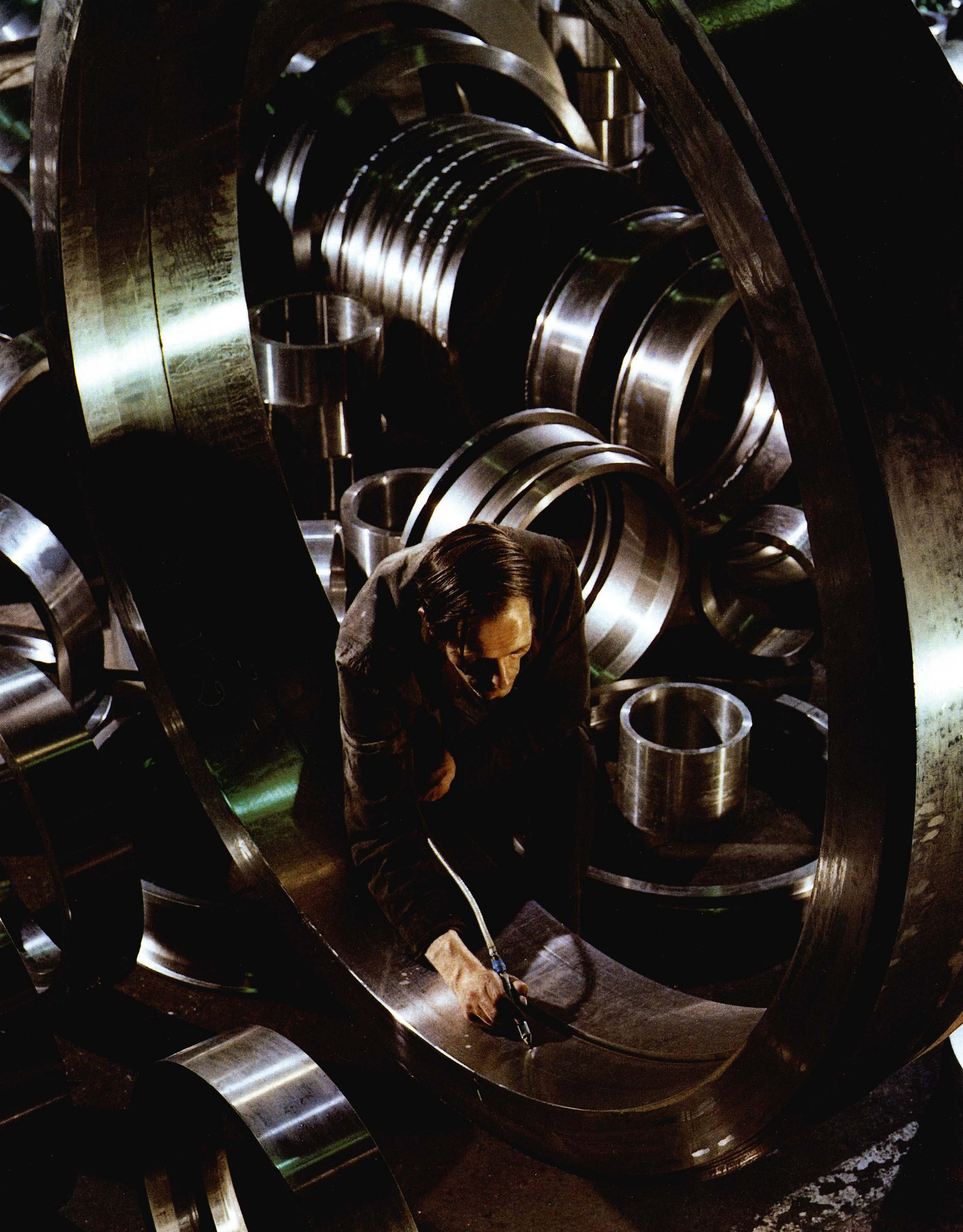
Capital investments included the acquisition of facilities for additional melting capacity to match rolling capabilities. These facilities will also permit significant cost savings in recovery of revert metals.

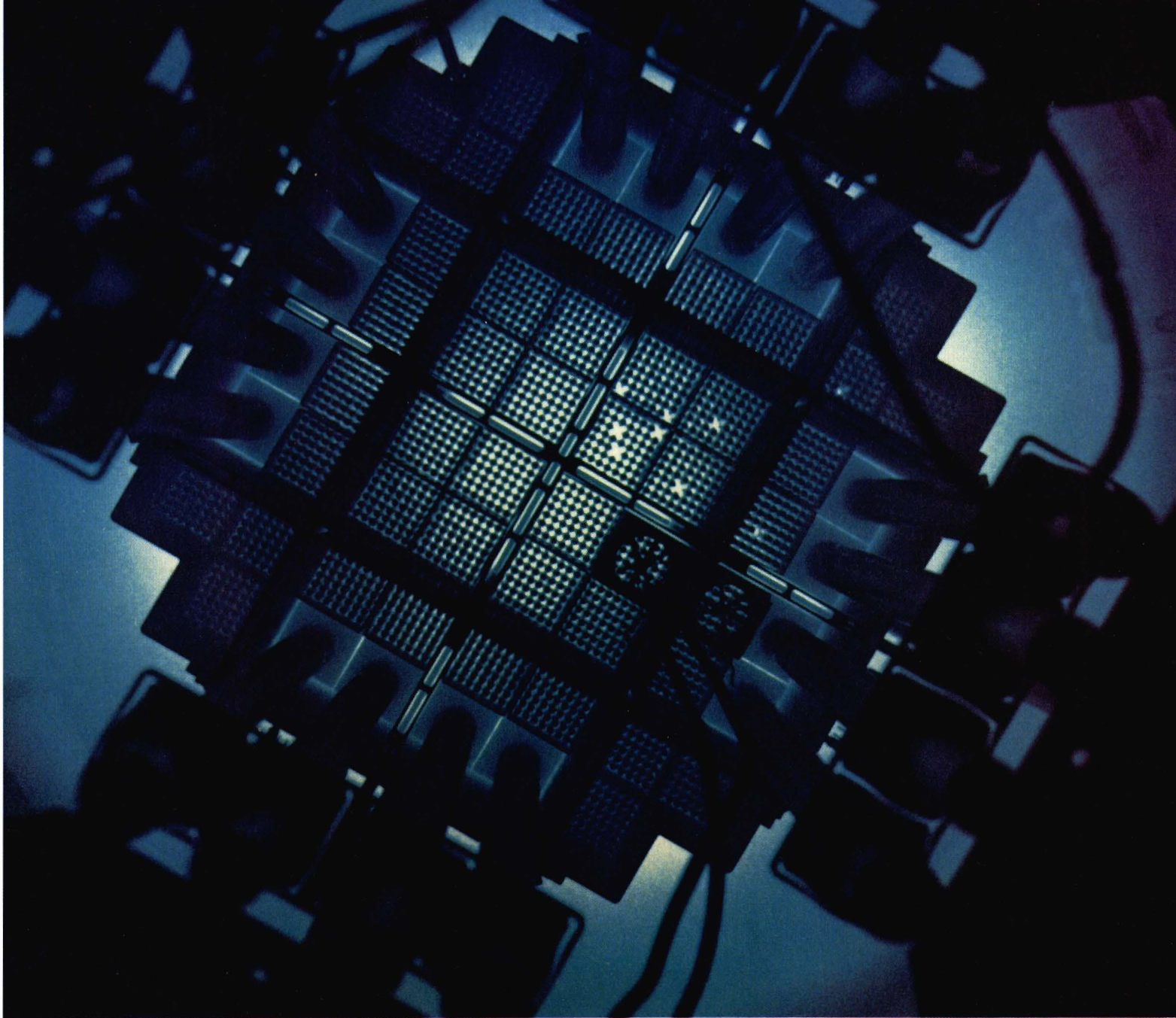
To improve market coverage in Europe, Wiggin invested in distribution companies in France and Switzerland.

### Daniel Doncaster & Sons Limited

Net sales in 1979 were \$118 million, an increase of 36 per cent from 1978. Value of the backlog of open orders at the end of 1979 was some \$183 million, significantly higher than at year-end 1978, reflecting the exceptional increase in Doncasters' turbine components business in the aero engine and industrial gas turbine industries.

**Marking identification codes on every ring is part of rigorous quality control procedures at Daniel Doncaster & Sons Limited.**





To support this surge in business and to provide long-range capability to service the market, new facilities for the manufacture of flash butt-welded rings were installed in 1979, and a capital program is underway to expand and modernize facilities for manufacturing other turbine components.

The company continued market development activities aimed at broadening its sales base in Europe, North America and Scandinavia. In addition, a new subsidiary, Doncaster Special Alloy Products Limited, was established to coordinate company skills and experience in promoting sales of special alloy products in United Kingdom and export markets.

### **Canadian Alloys**

The new \$25 million Canadian Alloys rolling mill in Walden Industrial Park, Ontario was dedicated in September 1979 by Douglas C. Frith, Chairman of the Regional Municipality of Sudbury. The mill produces nickel and copper-nickel strip for the coinage market using a new process developed by Inco.

Commercial quantities of products have been produced and trial lots sold to mints for coinage.

### **Daido Special Alloys Ltd.**

Sales by Daido Special Alloys Ltd., equally owned by Inco and Daido Steel, Japan totalled \$13 million in 1979, more than double the 1978 sales level.

**A light-water test reactor core (top). Critical components in all types of nuclear reactor designs rely on high-nickel alloys.**

**Some 6,700 visitors turned out for the open house held at the new Canadian Alloys Division rolling mill at the Walden Industrial Park near Sudbury, Ontario.**

This growth results from increasing demands for high-nickel alloys produced by Huntington Alloys and Henry Wiggin, as well as FMPG alloys melted and fabricated by Daido Steel.

### **Industrial relations**

Operating activities at Daniel Doncaster & Sons Limited were seriously affected by strikes in the road transport and engineering industries.

At Henry Wiggin & Company Limited, 120 craftsmen and maintenance workers commenced a strike action in July and returned to work in October. Despite the strike the plant continued production. Annual contract negotiations with all union groups were concluded satisfactorily at the beginning of November 1979.

At Huntington Alloys two long term labor agreements with production and maintenance employees are in effect. One, involving 1,530 employees, expires December 1980. The other affecting 270 employees expires April 1981.

### **Officers**

Effective January 1, 1980 John H. Page was elected President of the Formed Metal Products Group, succeeding Harold F. Hendershot who is retiring. Mr. Page continues as President of Inco United States, Inc.

Richard T. Doncaster retired February 28, 1979 from his position as Chairman of Daniel Doncaster & Sons Limited and was succeeded by Anthony T. Shadforth.

Benjamin W. Durrant and John L. Shaw were elected Vice-Presidents of FMPG effective January 1, 1980. Mr. Durrant had been General Manager, Marketing and Director of Henry Wiggin & Company Limited. Mr. Shaw had been Director, Planning and Administration of FMPG.

William F. Bissett was elected President of Huntington Alloys, Inc., effective January 1, 1980, succeeding Robert W. Simmons who is retiring.

### **Employees**

At year-end 1979, the Formed Metal Products Group had 8,489 employees, compared with 8,676 on December 31, 1978. Of the total, 5,492 were employed in the United Kingdom, 2,924 in the United States and 73 in other countries.

### **Officers**

#### **Formed Metal Products Group**

John H. Page  
President

Benjamin W. Durrant  
Vice-President

John L. Shaw  
Vice-President

#### **Principal Operations**

William F. Bissett  
President, Huntington Alloys, Inc.  
Huntington, West Virginia

Derek O. Herbert  
Deputy Chairman and Managing Director  
Henry Wiggin & Company Limited, Hereford, England

I. David Balchin  
Group Managing Director  
Daniel Doncaster & Sons Limited, Sheffield, England

C. Bruce Goodrich  
General Manager, Canadian Alloys, Lively, Ontario

Saburo Minato  
President, Daido Special Alloys Ltd., Tokyo, Japan

Kevin H. Belcher  
Managing Director, International Nickel Australia Limited,  
Melbourne, Australia

### **Principal properties, plants and laboratories**

Rolling mills  
Huntington, West Virginia and Burnaugh, Kentucky,  
U.S.A.; Hereford, England; Lively (Sudbury), Ontario

Forging plants  
Sheffield, Hull, Dudley, Leeds and Oldham, England;  
Blaenavon, Wales

Research and development laboratories  
Huntington, West Virginia, U.S.A.; Hereford and  
Sheffield, England

## OTHER BUSINESS

### Inco Safety Products Company

Sales for 1979 were \$35 million, a record level, and 16 per cent higher than in 1978. Profit performance was strong and significant investments were made to reduce product costs and to produce new and improved products.

### INMETCO

The International Metals Reclamation Company, Inc., which converts waste from specialty steel companies into a stainless steel remelt pig, gradually increased shipments to customers in 1979.

While progress in bringing the plant on stream was slower than expected, acceptance of the company's product has been very satisfactory.

INMETCO, located at Ellwood City, Pennsylvania, and its subsidiary, the Pittsburgh Pacific Processing Company (PPPC), represent Inco's initiative to apply profitably its technology to the rapidly growing metals and related recycling fields.

Sales and earnings of PPPC continued to increase in 1979. The company's advanced binder and briquetting technology, coupled with INMETCO's technology, provide industry with solutions to many long standing problems of solid waste disposal and recovery of metals.

### Growth from internal development

Business activity of MPD Technology, formed to manage new ventures based on Inco's research technology, was encouraging in 1979. Sales, while still small, increased fourfold.

Sales included:

NOVAMET\* metal flake for the manufacture of industrial paints requiring high heat and corrosion resistance and an attractive appearance;

\*Trademark of MPD Technology, an Inco company

CAPREZ\*-DPP, a directly plateable plastic, for consumer and automotive applications;

MA9051, a mechanically-alloyed aluminum alloy for evaluation in aircraft structures, diesel engines, heat exchangers, compressor blades and lightweight armor plate;

HYSTOR\* metal hydride alloys for energy storage and conversion and in prototype systems for the recovery of waste heat and vented hydrogen;

MAXORB\* strip for the selective absorption of solar energy;

SKYSORB\*, a colored stainless steel solar heating panel having long term durability and selectivity for absorption of solar radiation.

### Venture capital

Inco's venture capital investments, approximating \$9 million in book value at year-end, appreciated significantly during the year.

One of Inco's current venture capital investments is a 24 per cent ownership interest in Biogen N.V., a company engaged in recombinant

DNA technology. Biogen recently announced the achievement of laboratory production of human leukocyte interferon. Interferon is potentially important in the treatment of a wide range of viral infections and possibly some forms of cancer.

While another shareholder in Biogen holds commercialization rights relative to interferon, Inco possesses rights to fund the development of future projects undertaken by Biogen relating to certain fields of interest and to receive licences and other commercialization rights covering developments arising out of such projects.

LIC Industries, Inc. will apply its proprietary laser technology to the development of improved industrial chemical processes.

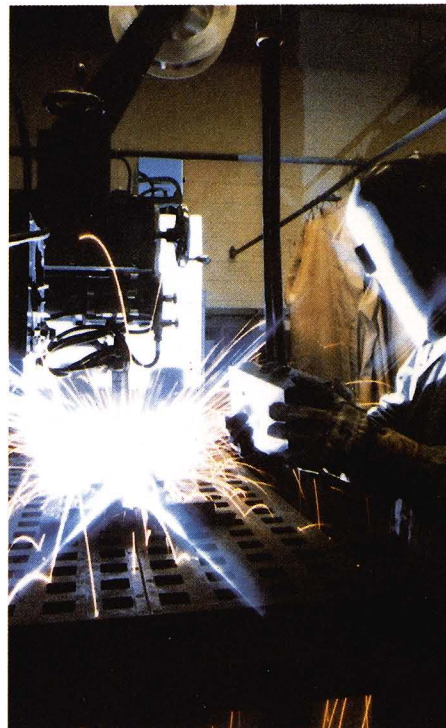
### Oil and gas

Late in the year a modest program was launched in Alberta to examine opportunities in the hydrocarbon field. During 1980 an office will be opened in Calgary, and a more



This mini-leaching circuit at the J. Roy Gordon Research Laboratory in Ontario is being used to develop a process to recover cobalt from by-products of Sudbury's Iron Ore Recovery Plant.

Right: Inco has well-equipped welding research laboratories.



substantial presence will be established in Alberta.

Inco continues to hold 4.5 per cent of the common shares of Panarctic Oils Ltd., which is involved in oil and gas ventures in the Canadian Arctic islands.

Results of exploration ventures in Central America were disappointing, and Inco's activities in this area will likely terminate in 1980.

### **Ocean mining**

The consortium of equal partners, including Inco and companies from the United States, Germany and Japan, continued to study the commercial feasibility of recovering metals from deep sea manganese nodules.

### **Corporate R & D**

Work continued on battery systems which might be useful in electric vehicles. Inco's multifoil nickel electrodes have been found by independent organizations to increase the specific energy capacity of such batteries.

Two new forms of mechanically-alloyed aluminum have been developed for use in aircraft.

Inco has obtained an option to acquire rights to a novel hot-sheet rolling process for titanium and superalloys. Development will continue in 1980 at the Inco Research and Development Center at Sterling Forest, New York.

Corrosion research responded to major new markets emerging for nickel-containing alloys for modern power plants, deep sour natural gas wells, coal processing and polymer production.

A program on the behavior of alloys in the technology of deriving energy from the ocean was begun at Inco's LaQue Center for Corrosion Technology in North Carolina.

IN-939, a nickel-base, highly corrosion-resistant alloy, has now been used to replace more expensive cobalt-base alloys for vanes and blades in industrial gas turbines.

Commercial interest in MA6000E among aircraft and industrial turbine builders has continued to grow. This

mechanically-alloyed superalloy surpasses all others in its combination of high strength and corrosion resistance at high temperatures. Commercial application of other mechanically-alloyed materials, MA754 and MA956 for turbine manufacture, continues to expand.

During the year Inco's European Research and Development Centre celebrated its 50th anniversary at the Birmingham, U.K. site. This occasion demonstrated the Company's long-standing commitment to technology leadership.

### **Reclamation operations**

Inmetco, Ellwood City, Pennsylvania, U.S.A.  
Pittsburgh Pacific Processing Company, Pittsburgh, Pennsylvania, U.S.A.

### **Research and development centres**

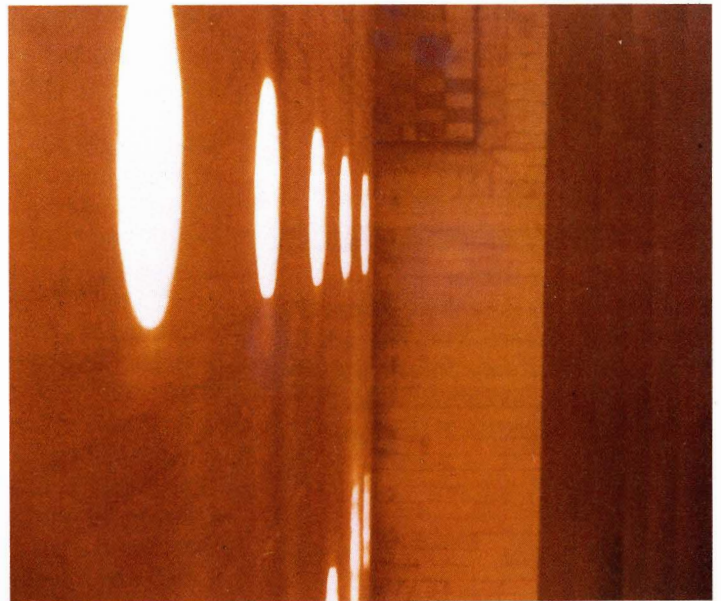
Sterling Forest, New York, U.S.A.  
Wrightsville Beach, North Carolina, U.S.A.  
Birmingham, England

### **Safety products**

7 plants in the U.S., one in Canada, one in Mexico

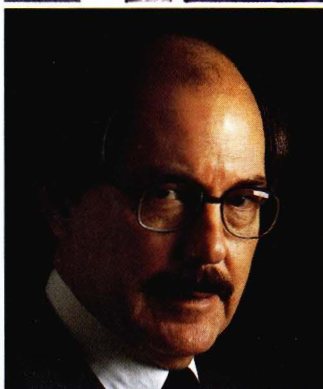
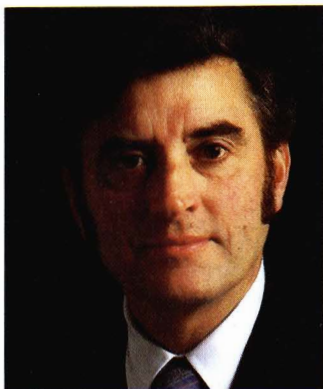


Above: Resource reclamation research at Inco's laboratories seeks to recover valuable metals from industrial effluents.



Right: The tubes of this ethylene pyrolysis furnace are made from extruded nickel-chromium-iron alloy, one of the many alloy systems developed by Inco technologists.

## CORPORATE ORGANIZATION



The Company's Senior Vice-Presidents (and their corporate responsibilities) are, from top: Ian McDougall (finance); William Steven (development and technology); and Ashby McC. Sutherland (corporate affairs).

J. Peter Gordon, who had been a Director since December 1973, resigned from the Board of Directors on December 3, 1979.

Albert P. Gagnebin retired from the Board on February 4, 1980. Mr. Gagnebin, who was Chairman of the Board from April 1972 to January 1974, and former President of the Company, had served as a member of the Board for nearly 15 years. He started his career with Inco in 1930.

On February 4, 1980, the following were elected to the Board:

Edmund B. Fitzgerald, Managing Director of Hampshire Associates and former Chairman and Chief Executive Officer of Cutler-Hammer Inc.

Walter F. Light, President and Chief Executive Officer of Northern Telecom Limited;

Donald J. Phillips, President and Chief Executive Officer of Inco Metals Company.

### Employees

On December 31, 1979, Inco Limited employed a total of 53,460 people, compared with 52,581 at year-end 1978. The number of employees in each of the Company's major sectors is reported in their respective sections of this Report.

### Shareholders

At year-end 1979, the Company had 74,541 Common Shareholders of record and 1,994 Preferred Shareholders of record, compared with 75,067 Common Shareholders of record and 2,041 Preferred Shareholders of record at year-end 1978.

According to the Company's records, 72 per cent of the shareholders had addresses in Canada, 26 per cent in the United States and 2 per cent elsewhere. Of the shares having general voting rights, the Common Shares and Series B Preferred Shares, Canadian residents of record held 62 per cent, United States residents of record 23 per cent, and residents of record in other countries 15 per cent.



John McCreedy, Vice-Chairman and a Director of Inco Limited, died on December 7, 1979. He joined Inco at Copper Cliff in 1949 and, prior to his election as Vice-Chairman in June of 1979, had been Chairman and Chief Executive Officer of Inco Metals Company. At the time of his death, he was President of The Mining Association of Canada and a member of The National Advisory Committee on The Mining Industry. He also was widely known as a former player with the Toronto Maple Leafs of the National Hockey League.

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## Management's Statement on Financial Reporting

The information and representations in this Annual Report have been prepared by management. The consolidated financial statements have been prepared in conformity with generally accepted accounting principles and, where appropriate, reflect management's best estimates and judgments. The financial information presented throughout this Report is consistent with the data presented in the financial statements.

Systems of internal accounting control are maintained in order to assure on a reasonable basis the reliability of this financial information. These systems include formal policies and procedures, the careful selection and training of qualified personnel, and an organization providing for appropriate delegation of authority and segregation of responsibilities. These systems are monitored by our internal auditors who perform extensive tests and related procedures at major locations worldwide. Our independent auditors, whose report on their examination of the consolidated

financial statements appears on page 26, also review our systems of internal accounting control in accordance with generally accepted auditing standards for the purpose of expressing their opinion on the consolidated financial statements.

Financial management personnel, our internal auditors and our independent auditors meet with the Audit Committee of the Board of Directors at least four times a year to report on accounting, auditing, internal accounting control and financial reporting matters. The Audit Committee also has other duties which are described on page 38.

The consolidated financial statements in this Annual Report have been reviewed and approved by the Board of Directors.

*J. E. Carter*

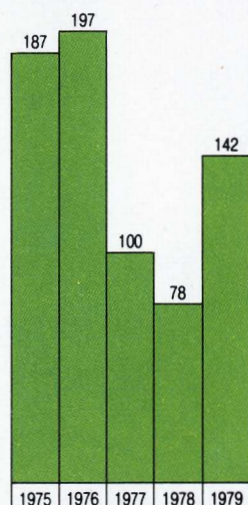
Chairman and Chief Executive Officer

*Jan M'Dougall*

Senior Vice-President  
(Chief Financial Officer)

## Net earnings

\$ millions

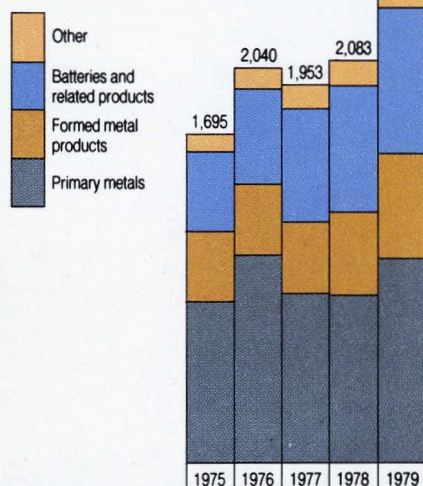


Per common share \$

1975	2.51
1976	2.64
1977	1.24
1978	.77
1979	1.58

## Net sales

\$ millions



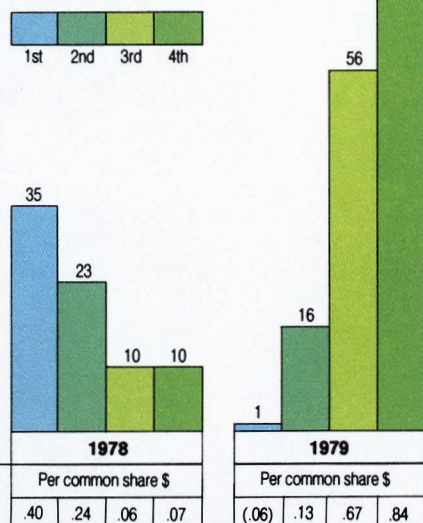
Primary nickel	569	762	558	615	807
Refined copper	194	227	211	135	115
Precious metals	44	57	63	81	87
Other primary metals	21	31	37	35	45
<b>Total primary metals</b>	<b>828</b>	<b>1,077</b>	<b>869</b>	<b>866</b>	<b>1,054</b>
Formed metal products	370	365	377	429	553
Batteries and related products	413	486	585	655	744
Other products	84	112	122	133	138
<b>Total</b>	<b>1,695</b>	<b>2,040</b>	<b>1,953</b>	<b>2,083</b>	<b>2,489</b>

## Nickel and copper deliveries

Pounds in millions	1975	1976	1977	1978	1979
Primary nickel and intermediates	285	354	257	319	332
Nickel contained in formed metal products	66	56	55	58	62
<b>Total nickel</b>	<b>351</b>	<b>410</b>	<b>312</b>	<b>377</b>	<b>394</b>
Copper	335	356	341	225	129

## Quarterly net earnings

\$ millions



## Summary of Operations

### 1979 results compared with 1978

**Net earnings** Net earnings in 1979 were \$141.7 million, or \$1.58 a common share after allowance for preferred dividends of \$23.3 million, compared with \$77.8 million in 1978, or 77 cents a common share after allowance for preferred dividends of \$20.5 million. The improvement results primarily from increased prices for primary metals and formed metal products, and a \$43.4 million credit resulting from a tax change in the United Kingdom. These benefits were partially offset by increased charges, consisting principally of interest expense, applicable to the Company's Guatemalan and Indonesian projects, a higher level of expenses attributable to the Sudbury strike, which began on September 16, 1978 and was settled on June 3, 1979, and the adverse effect of currency translation adjustments. A review of quarterly earnings in these two years depicts in even sharper detail the recovery in the Company's earnings performance in 1979. Earnings were under downward pressure throughout 1978 and into the early part of 1979, reflecting steady deterioration in nickel prices compounded by the Sudbury strike expenses and the start of expensing interest on the borrowings of the Guatemalan and Indonesian projects. Nickel prices began to strengthen

towards the end of the first quarter of 1979 and further improved over the course of the year. This recovery in nickel prices, coupled with higher copper, cobalt and precious metals prices led to the improved earnings in the latter part of the year. The credits resulting from the tax change in the United Kingdom improved earnings by \$6.6 million in the second quarter, \$24.1 million in the third quarter, and \$12.7 million in the fourth quarter of 1979.

**Net sales** Net sales for the year were \$2,489 million, or 19 per cent above 1978. Primary metals sales were \$1,054 million, compared with \$866 million in 1978. The increase of 31 per cent in primary nickel sales resulted principally from improved prices. The Company's average net price realized for its primary nickel products, including intermediate products, was \$2.43 a pound in 1979, compared with \$1.98 a pound in 1978. Intense competition in the nickel market resulted in a decline in nickel prices in 1978. In 1979, however, the nickel market improved due to strong demand, particularly in the stainless steel sector. The Company's average net price realized for copper products increased from 61 cents a pound in 1978, to 91 cents a pound in 1979; deliveries of copper, however, declined by 43 per cent in 1979. Copper is produced principally from the Company's mines in Ontario and was not available for sale during most of the period of the Sudbury strike. The prices of cobalt and precious metals increased substantially in 1979, but deliveries were lower due to the Sudbury strike.

Sales of formed metal products were \$553 million in 1979, compared with \$429 million in 1978. The increase of 29 per cent reflects both higher deliveries and improved prices, primarily resulting from the increased demand for these products in the turbine, environmental control equipment, chemical and energy fields.

Sales of batteries and related products were \$744 million in 1979, compared with \$655 million in 1978. The increase reflects mainly higher prices, although cost increases, particularly for lead, could not be fully recovered due to competitive conditions.

<b>Costs and expenses</b>					
\$Millions	1975	1976	1977	1978	1979
Cost of sales and operating expenses	1,143	1,402	1,488	1,616	1,799
Selling, general and administrative expenses	157	184	204	214	244
Research and development	39	43	50	42	40
Exploration	27	34	23	14	14
Interest	49	66	66	76	134
Currency translation adjustments	(14)	(2)	(18)	(15)	13
Total	1,401	1,727	1,813	1,947	2,244

<b>Exchange rates</b>					
U.S.\$	1975	1976	1977	1978	1979
Canadian dollar					
Beginning of year	1.009	.984	.991	.914	.843
End of year	.984	.991	.914	.843	.856
Average for year	.983	1.014	.941	.877	.854
Pound sterling					
Beginning of year	2.346	2.024	1.700	1.917	2.042
End of year	2.024	1.700	1.917	2.042	2.219
Average for year	2.222	1.805	1.745	1.920	2.117

**Costs and expenses** Costs and expenses continued to reflect increases in labor, supply and energy costs. Cost of sales and operating expenses also reflect higher Sudbury strike expenses and excess production costs relative to the Indonesian project. Sudbury strike expenses increased from \$61 million in 1978 to \$76 million in 1979. Strike expenses are those ongoing costs, such as employment costs of salaried staff at Sudbury and depreciation, which normally are treated as production costs and charged to inventory. In the absence of production because of the strike, however, these costs were expensed. Technical problems encountered in starting up the Indonesian project resulted in lower-than-planned production in 1979. Costs in excess of those normally attributable to the related production amounted to \$25 million and were expensed.

Interest expense increased from \$76 million in 1978 to \$134 million in 1979 mainly as a result of interest expense on the borrowings related to the nickel projects in Guatemala and Indonesia. The expensing of interest with respect to the Guatemalan project commenced in June 1978, and with respect to the Indonesian project commenced in August 1978 for Stage I and in January

1979 for Stage II. Prior to these dates, interest had been capitalized while the projects were under construction.

Currency translation adjustments reduced earnings by \$13 million in 1979 while such adjustments increased 1978 earnings by \$15 million. The unfavorable currency translation adjustments in 1979 reflect principally an appreciation in value of the pound sterling and the Canadian dollar in relation to the U.S. dollar.

**Income and mining taxes** Income and mining taxes increased from \$87 million in 1978 to \$138 million in 1979. The effective income and mining tax rates were 49.4 per cent in 1979 compared with 52.8 per cent in 1978. The lower effective income and mining tax rate in 1979 results from tax changes in the United Kingdom and Canada, largely offset by the effect of increased losses relative to the nickel projects in Guatemala and Indonesia. Effective from the year 1973, legislation in the United Kingdom provided tax relief on increases in the value of inventories, subject to recapture if such value declines. Accordingly, tax payments have been reduced each year, but deferred tax liabilities were established simultaneously to provide for the possibility of recapture. Legislation enacted in 1979 removed such recapture for the years 1973 and 1974 and limited to six years the period during which tax relief on increases in the value of inventories occurring subsequent to 1974 could be recaptured if such value declines. As a result, income and mining taxes in 1979 were reduced by \$43.4 million, of which \$25.7 million represents the reversal of deferred tax liabilities established in prior years.

Two changes in Canadian tax legislation reduced the Company's taxes in 1979. The Province of Manitoba replaced its two-tiered mining tax system with a reduced single tax rate retroactive to January 1, 1979, and the Province of Ontario removed the two highest marginal mining tax rates effective April 11, 1979.

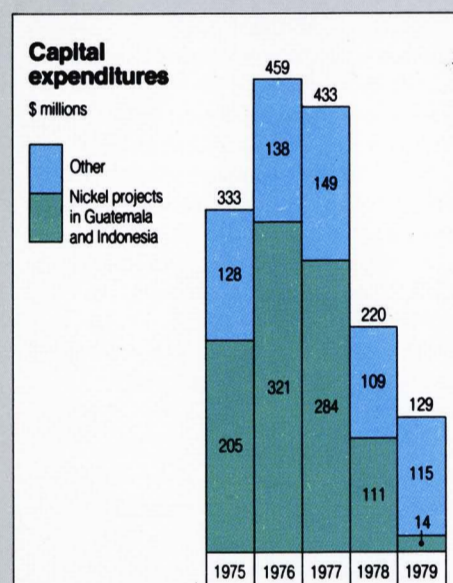
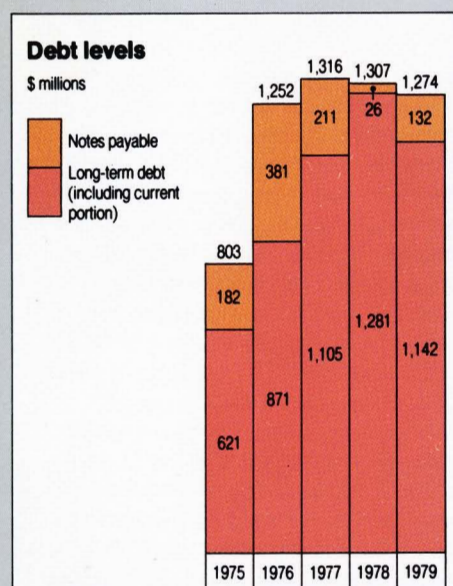
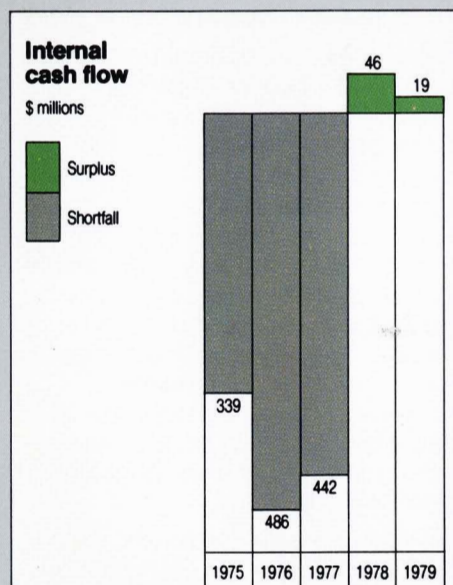
No tax benefit is recognized relative to the losses incurred by the Company's nickel projects in Indonesia and Guatemala. Such losses can be carried forward indefinitely to offset taxable income of the respective projects in future years.

## 1978 results compared with 1977

**Net earnings** Net earnings in 1978 were \$77.8 million, or 77 cents a common share after allowance for preferred dividends of \$20.5 million, compared with \$99.9 million in 1977, or \$1.24 a common share after allowance for preferred dividends of \$7.5 million. Major factors contributing to this decline were costs and expenses attributable to the Sudbury strike, significantly lower prices for primary nickel, and charges applicable to the Guatemalan and Indonesian projects, partially offset by a substantial increase in nickel deliveries and higher prices for platinum-group metals and cobalt.

**Net sales** Net sales for the year were \$2,083 million, or seven per cent above 1977. Primary metal sales were \$866 million, compared with \$869 million in 1977. Primary nickel sales increased by 10 per cent on the strength of higher deliveries resulting from increased demand, particularly from increased production of stainless steel. However, the nickel market remained extremely competitive and prices continued to decline. The Company's average net price realized for its primary nickel products, including intermediate products, was \$1.98 a pound in 1978, compared with \$2.17 a pound in 1977. Copper sales fell about 36 per cent principally as a result of the reduced production attributable to the Sudbury strike. Since the Company had only small quantities of copper available for sale in the fourth quarter of 1978, it could not benefit from the increases in price that became effective during that time. Prices for cobalt and platinum-group metals increased sharply during 1978. Sales of formed metal products were \$429 million in 1978, compared with \$377 million in 1977. This 14 per cent increase resulted from higher deliveries. Sales of batteries and related products were \$655 million in 1978, as compared with \$585 million in 1977. The increase is primarily attributable to higher prices, which largely reflect the recovery of increased costs rather than improved profit margins.

**Costs and expenses** Costs and expenses increased in 1978 reflecting the constant pressure of escalating



labor, supply and energy costs. Cost of sales and operating expenses in 1978 include \$61 million attributable to the strike at the Sudbury District facilities. Expenditures for research and development, which had totalled \$50 million in 1977, were reduced to \$42 million in 1978. Interest expense increased from \$66 million in 1977 to \$76 million in 1978 mainly as a result of expensing \$12 million of interest on certain borrowings related to the nickel projects in Guatemala and Indonesia.

Currency translation adjustments, which in the Company's case arise mainly from fluctuations in the relative values of the Canadian dollar, the pound sterling and U.S. dollar, increased earnings by \$15 million in 1978 and by \$18 million in 1977.

**Income and mining taxes** Income and mining taxes were \$87 million in 1978 and \$75 million in 1977. The effective income and mining tax rates in the two years were 52.8 per cent and 43.1 per cent, respectively. The increased rate reflects several factors. Income subject to mining tax in Ontario in 1978 was greatly reduced by the costs and expenses attributable to the Sudbury strike. As a result, a larger proportion of income in 1978 was subjected to the higher mining tax rates prevailing in Manitoba. Additionally, the effective tax rate was increased by a larger amount of taxable exchange gains in 1978 compared with 1977. Such exchange gains do not enter into the determination of pretax earnings as expressed in U.S. dollars. During 1978, the Company began to expense interest relative to the Guatemalan project and Stage I of the Indonesian project. No tax benefit has been recognized on these losses, although such losses can be carried forward to reduce taxable income in future periods. Partially offsetting these effects was the favorable settlement of tax issues relating to prior years.

### Other Financial Highlights

**Cash flow and financings** The improvement in earnings and the continuation in 1979 of the Company's cash conservation measures contributed to a strengthening of the Company's

financial position. For the first time since 1976, retained earnings increased appreciably. Again as in 1978, the Company generated a modest internal cash surplus, totalling \$19 million in 1979. The Company's total debt declined by \$33 million from \$1,307 million at year-end 1978 to \$1,274 million at year-end 1979. Long-term debt declined by \$152 million. Notes payable, however, rose significantly due in large part to the prepayments of long-term debt made during 1979 which were financed, in effect, by short-term borrowings. These prepayments were made in conjunction with the restructuring of the financial arrangements for the projects in Indonesia and Guatemala and with the repurchase of the Company's debentures to meet future sinking and purchase fund obligations.

In June 1979, P.T. International Nickel Indonesia, a 97 per cent owned subsidiary, implemented a three-part plan which provided for equity contributions by the Company, the rescheduling of principal payments under a \$200 million Eurodollar credit facility and the prepayment of \$65 million outstanding under another Eurodollar credit facility. Reduced production levels and depressed nickel prices had impaired the ability of the project's operating cash flow to meet near-term debt service requirements. In December 1979, Exmibal, an 80 per cent owned subsidiary, prepaid \$25 million of its senior loans as part of a restructuring of its financial arrangements. The principal amounts prepaid would have otherwise been due, for the most part, in 1980 and 1981.

At the Annual and Special General Meeting of Shareholders held on April 18, 1979, the shareholders authorized the continuance of the Company under the Canada Business Corporations Act and approved a new general by-law, By-law No. 1. The shareholders also approved amendments to the Company's charter which, among other things, removed the then existing limit of 100,000,000 shares on the authorized number of Common Shares of the Company, and fixed the number of the class of authorized Preferred Shares of the Company at 30,000,000 shares.

**Capital expenditures** Capital expenditures in 1979 declined to \$129 million from \$220 million in 1978 largely because of reduced expenditures on the

# TEN-YEAR REVIEW

	1979	1978	1977	1976	1975	1974 <sup>a</sup>	1973	1972	1971	1970
<b>Summary of operations</b> (in thousands)										
Net sales	\$2,488,500	2,083,100	1,953,300	2,040,300	1,694,800	1,684,600	1,172,800	900,300	789,200	1,055,800
Cost of sales and operating expenses	\$1,799,600	1,615,700	1,488,100	1,401,600	1,142,800	956,500	693,300	617,600	541,500	603,500
Interest, net of amounts capitalized	\$ 133,700	75,900	66,300	66,400	49,400	45,000	42,300	43,800	33,900	17,100
Income and mining taxes	\$ 138,200	87,100	75,500	150,400	135,200	248,400	120,500	42,600	23,500	121,400
Net earnings	\$ 141,700	77,800	99,900	196,800	186,900	298,600	225,600	112,100	90,300	207,400
Net earnings applicable to common shares	\$ 118,500	57,300	92,300	196,800	186,900	298,600	225,600	112,100	90,300	207,400
Per common share	\$ 1.58	0.77	1.24	2.64	2.51	4.01	3.02	1.50	1.21	2.78
Common dividends	\$ 37,400	52,200	93,200	119,300	119,300	119,300	89,400	74,500	96,900	104,200
Per common share	\$ 0.50	0.70	1.25	1.60	1.60	1.60	1.20	1.00	1.30	1.40
Common shares outstanding (weighted average)	74,762	74,595	74,593	74,576	74,552	74,541	74,535	74,525	74,499	74,435
<b>Other financial data</b> (in thousands)										
Capital expenditures	\$ 128,800	219,900	432,800	459,100	332,700	149,200	88,800	125,200	244,200	272,500
Depreciation and depletion	\$ 131,700	108,600	116,600	113,300	111,000	97,400	76,800	56,300	50,600	37,600
Research and development expense	\$ 40,000	42,500	50,300	43,100	39,600	34,500	26,700	25,700	27,200	24,600
Exploration expense	\$ 13,900	14,200	22,400	34,100	26,500	18,200	15,200	13,700	20,600	21,100
Working capital	\$ 943,100	961,900	826,200	595,300	589,500	648,000	537,800	395,700	387,300	375,800
Net property, plant and equipment	\$2,523,400	2,540,500	2,436,700	2,119,400	1,785,000	1,560,200	1,395,400	1,402,200	1,351,900	1,167,700
Total assets	\$4,335,400	4,145,600	4,075,800	3,628,300	3,025,700	2,799,700	2,248,800	2,078,300	2,094,800	1,827,400
Common shareholders' equity	\$1,657,900	1,566,700	1,561,600	1,562,400	1,484,400	1,416,400	1,236,900	1,100,700	1,062,800	1,067,900
Return on total assets	3.3%	1.9%	2.5%	5.4%	6.2%	10.7%	10.0%	5.4%	4.3%	11.3%
Return on common shareholders' equity	7.1%	3.7%	5.9%	12.6%	12.6%	21.1%	18.2%	10.2%	8.5%	19.4%
<b>Operating data</b> (in thousands)										
Ore mined — short tons	9,900	10,900	19,600	19,800	21,200	22,000	19,700	19,200	27,600	27,700
Nickel production — pounds	255,000	267,300	416,700	461,600	458,900	509,600	469,200	401,200	463,400	500,900
Nickel deliveries — pounds	393,600	377,400	312,300	409,800	351,100	549,100	517,000	425,100	342,500	518,900
Copper deliveries — pounds	129,100	224,600	341,200	356,000	334,600	367,200	327,100	308,200	340,300	348,100
Platinum-group metals and gold deliveries — troy ounces	326	468	438	554	301	317	413	452	437	388
<b>Other statistics</b>										
Employees at year end	53,460	52,581	56,922	55,767	53,515	48,962	31,311	32,082	36,089	37,313
Common shareholders at year end	74,541	75,067	77,875	78,014	84,369	86,795	90,660	92,024	92,217	84,320

<sup>a</sup> Includes applicable data relating to Inco ElectroEnergy Corporation for the five months since its acquisition effective August 1, 1974.

Guatemalan and Indonesian projects. In 1980 capital expenditures are expected to be approximately \$220 million.

**Dividends** On February 4, 1980, the Board of Directors increased the quarterly dividend from 10 cents to 15 cents a Common Share, payable March 13 to shareholders of record on February 14. The Board of Directors also on the same day declared a quarterly dividend at an annual rate of 8.065 per cent on the Company's floating rate Series A Preferred Shares, payable March 3 to shareholders of record on February 20, and declared a quarterly dividend on the Company's 7.85 per cent Series B Preferred Shares, payable March 3 to shareholders of record on February 14.

## Inco Optional Stock Dividend

**Program** Under the Inco Optional Stock Dividend Program which was adopted by the Board of Directors on December 4, 1978, common shareholders have the right to elect to receive a stock dividend in lieu of a cash dividend. On July 19, 1979, the Board adopted an amendment to the plan which stipulates that stock dividends will be valued at a five per cent discount from the market price of the Company's Common Shares. On December 31, 1979, shareholders of about 30 per cent of the Company's outstanding Common Shares were participating in the Program. The Program permits many shareholders to receive tax benefits similar to those previously available to holders of the Company's former Class B Common Shares and also provides common

shareholders with a simple and convenient method of obtaining additional Common Shares without payment of brokerage commissions or service charges.

Those who wish to participate or desire additional information should write to Shareholder Services, Inco Limited, at either the Company's Toronto or New York address.

## CONSOLIDATED STATEMENT OF EARNINGS (in thousands)

Year ended December 31	1979	1978*
<b>Revenues</b>		
Net sales	\$2,488,543	\$2,083,094
Other income	35,056	28,637
	<b>2,523,599</b>	2,111,731
<b>Costs and expenses</b>		
Cost of sales and operating expenses	1,799,650	1,615,731
Selling, general and administrative expenses	243,667	213,533
Research and development	40,053	42,468
Exploration	13,865	14,159
Interest, net of amounts capitalized	133,718	75,917
Currency translation adjustments	12,679	(14,956)
	<b>2,243,632</b>	1,946,852
Earnings before income and mining taxes	279,967	164,879
Income and mining taxes	138,242	87,070
Net earnings	141,725	77,809
Dividends on preferred shares	23,274	20,511
Net earnings applicable to common shares	\$ 118,451	\$ 57,298
Net earnings per common share	\$1.58	\$0.77

\*Reclassified

## CONSOLIDATED STATEMENT OF RETAINED EARNINGS (in thousands)

Year ended December 31	1979	1978
Retained earnings at beginning of year	\$1,408,607	\$1,403,525
Net earnings	141,725	77,809
Preferred dividends	(23,274)	(20,511)
Common dividends—\$.50 per share (1978—\$.70 per share)	(37,380)	(52,216)
Retained earnings at end of year	\$1,489,678	\$1,408,607

The Explanatory Financial Section on pages 29 through 33 is an integral part of these statements.

## AUDITORS' REPORT

To the Shareholders of Inco Limited:

We have examined the consolidated financial statements and explanatory financial section appearing on pages 26 through 33 of this report. Our examinations were 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 Inco Limited at December 31, 1979 and 1978 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles applied on a consistent basis.

Toronto, Ontario  
New York, New York  
February 14, 1980

PRICE WATERHOUSE & CO.

# CONSOLIDATED BALANCE SHEET (in thousands)

December 31	1979	1978
<b>Current assets</b>		
Cash	\$ 37,956	\$ 25,940
Marketable securities, at cost (market \$36,000,000; 1978 — \$67,800,000)	36,018	59,322
Accounts receivable	518,260	394,937
Inventories	1,081,644	985,286
Prepaid expenses	11,548	10,892
Total current assets	1,685,426	1,476,377
<b>Property, plant and equipment</b>	3,794,506	3,705,335
Less — Accumulated depreciation and depletion	1,271,123	1,164,825
	2,523,383	2,540,510
<b>Other assets</b>		
Investments in and advances to affiliates, on an equity basis	62,170	59,627
Miscellaneous securities	23,373	23,702
Charges to future operations	11,344	12,614
Unamortized cost in excess of net assets of business acquired	29,693	32,792
	126,580	128,735
Total assets	\$4,335,389	\$4,145,622
<b>Current liabilities</b>		
Notes payable	\$ 131,731	\$ 26,236
Long-term debt due within one year	70,073	56,833
Accounts payable and accrued expenses	415,907	327,790
Income and mining taxes payable	124,594	103,581
Total current liabilities	742,305	514,440
<b>Other liabilities</b>		
Long-term debt	1,072,326	1,223,955
Deferred income and mining taxes	446,000	417,100
Pension benefits	49,493	48,271
Minority interest	19,010	23,508
	1,586,829	1,712,834
<b>Preferred shares</b> issued, \$25(Cdn.) par value:		
Series A floating rate — 10,000,000 shares	239,250	239,250
Series B 7.85% — 4,784,090 shares; 1978 — 4,928,515 shares	109,066	112,366
	348,316	351,616
<b>Common shareholders' equity</b>		
Common shares without nominal or par value, issued 75,134,327 shares; 1978 — 74,597,925 shares	107,225	97,089
Capital surplus	61,036	61,036
Retained earnings	1,489,678	1,408,607
Total common shareholders' equity	1,657,939	1,566,732
Total liabilities and shareholders' equity	\$4,335,389	\$4,145,622

The Explanatory Financial Section on pages 29 through 33 is an integral part of these statements.

Approved by the Board of Directors:

J. Edwin Carter

Charles F. Baird

# **CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION** (in thousands)

Year ended December 31	1979	1978
<b>Financial resources were provided by</b>		
Net earnings	\$141,725	\$ 77,809
Charges (credits) to earnings not affecting working capital		
Depreciation and depletion	131,711	108,601
Deferred income and mining taxes	28,900	29,900
Equity in earnings of affiliated companies	(3,768)	(3,575)
Amortization of cost in excess of net assets of business acquired	3,099	3,099
Currency translation adjustments not affecting working capital	6,539	(7,153)
Other — net	(1,363)	710
Working capital provided by operations	306,843	209,391
Long-term borrowings	42,785	287,525
Shares issued in lieu of cash dividends	10,048	147
Other — net	9,926	7,918
Total	369,602	504,981
<b>Financial resources were used for</b>		
Preferred dividends	23,274	20,511
Common dividends	37,380	52,216
Capital expenditures	128,848	219,934
Reduction of long-term debt	198,916	76,599
Total	388,418	369,260
Increase (decrease) in working capital	\$ (18,816)	\$135,721
<b>Analysis of changes in working capital</b>		
<b>Increase (decrease) in current assets</b>		
Cash and marketable securities	\$ (11,288)	\$ 42,237
Accounts receivable	123,323	13,280
Inventories	96,358	(95,429)
Prepaid expenses	656	(1,805)
Total	209,049	(41,717)
<b>Increase (decrease) in current liabilities</b>		
Notes payable and other debt	118,735	(212,801)
Accounts payable and accrued expenses	88,117	(257)
Income and mining taxes payable	21,013	35,620
Total	227,865	(177,438)
Increase (decrease) in working capital	\$ (18,816)	\$135,721

The Explanatory Financial Section on pages 29 through 33 is an integral part of these statements.

# EXPLANATORY FINANCIAL SECTION

## Note 1. Summary of Significant Accounting Policies

This summary of the major accounting policies of Inco Limited and subsidiaries is presented to assist the reader in evaluating the financial statements contained in this Report. These policies have been followed consistently in all material respects for the periods covered in the financial statements.

**Principles of consolidation** The financial statements consolidate the accounts of the Company and its subsidiaries and are prepared in conformity with generally accepted accounting principles as established in Canada which, in the Company's case, generally conform with those established in the United States.

**Translation of financial statements into United States dollars** The financial statements are expressed in United States currency. Cash, accounts receivable, current liabilities, the liability for pension benefits and long-term debt are translated at year-end rates of exchange. The translation of all other assets and liabilities generally recognizes the rates historically applicable. Revenues, expenses and certain costs are translated at monthly average rates during each year; inventoried costs, depreciation and depletion are translated at historical rates. Realized exchange gains and losses and currency translation adjustments are included in earnings currently.

**Inventories** Inventories are stated at the lower of cost or net realizable value. Cost for certain metals inventories in the United States is determined by the last-in, first-out method. Cost for other metals is average production or purchase cost, and for supplies is average purchase cost. Cost for batteries and related products is determined principally on a first-in, first-out basis.

**Property, plant and equipment** Property, plant and equipment, which includes preproduction costs associated with major new facilities, is stated at cost. Such cost in the case of the Company's mines represents related acquisition and development expenditures.

**Depreciation and depletion** Depreciation is calculated using the straight-line method and, for the nickel projects in Guatemala and Indonesia, the unit-of-production method based on the estimated economic lives of property, plant and equipment. Such lives are generally limited to a maximum of 20 years and are subject to annual review. Preproduction costs incurred in the development of the Guatemalan and Indonesian projects are depreciated over 20 years using the unit-of-production method. Depletion is calculated by a method which allocates the related recorded costs ratably to the tons of ore mined. Depletion is the systematic amortization of the recorded cost of the Company's mines and does not represent the decrease, if any, in the value of ore reserves as a result of ore mined.

**Cost in excess of net assets acquired** The excess of purchase cost over the fair value of acquired net assets, relating to the acquisition in 1974 of Inco ElectroEnergy Corporation (formerly ESB Ray-O-Vac Corporation), is amortized on a straight-line basis over 15 years.

**Exploration** Expenditures for mineral exploration are expensed as incurred.

**Pension plans** The Company and its subsidiaries have pension plans covering most employees. Pension expense, which totalled \$63,536,000 in 1979 and \$56,114,000 in 1978, is calculated, and funded, based on actuarial estimates. The increase in pension expense is due mainly to improved benefits granted to hourly employees in Canada in 1979. Past service costs at December 31, 1979 approximated \$200 million, the major portion of which will be charged to operations within the next 15 years. At December 31, 1979, vested benefits exceeded the assets of one major Canadian pension trust fund by approximately \$30 million. The aggregate of the assets of all other pension trust funds, at market, and balance sheet accruals exceeded total related vested benefits by approximately \$130 million. The liability for pension benefits comprises supplements for pensioners and certain pension liabilities of acquired companies.

**Income and mining taxes** Deferred taxes are provided for timing differences that exist in reporting depreciation and other expense and revenue items for financial statement and income and mining tax purposes. Investment tax credits are accounted for by the "flow-through" method. Income taxes have not been provided on undistributed earnings of subsidiaries because only a minor portion of such earnings has not been or will not be permanently reinvested.

**Net earnings per common share** Net earnings per common share is calculated by dividing net earnings less preferred dividends by the weighted average number of common shares outstanding. The common stock equivalents of outstanding stock options do not dilute earnings per common share.

## Note 2. Other Income

Other income includes net gains on sales of assets, gains on retirement of long-term debt, interest, dividends, income from equity interests in affiliates and joint ventures, and realized exchange gains and losses which were not material in 1979 and 1978. Included in other income are gains on sales of marketable equity securities of \$8,630,000 in 1979 and \$9,470,000 in 1978.

## Note 3. Inventories

Inventories consist of the following:

December 31	1979	1978
	(in thousands)	
Metals (at average cost)		
Finished and in-process	\$ 610,198	\$577,756
Supplies	119,057	100,021
	729,255	677,777
Metals (at last-in, first-out cost)		
Finished and in-process	84,950	118,873
Batteries and related products (at first-in, first-out cost)		
Finished and in-process	174,064	111,201
Raw materials and supplies	67,981	50,624
	242,045	161,825
Other products (principally at first-in, first-out cost)	25,394	26,811
Total	\$1,081,644	\$985,286

During 1979, the quantity of inventories accounted for by the last-in, first-out method was reduced. The resultant liquidation of inventories valued at lower costs prevailing in prior years, as compared with 1979 costs, had the effect of reducing cost of sales and operating expenses by approximately \$8,500,000.

#### Note 4. Property, Plant and Equipment

Property, plant and equipment consists of the following:

December 31	1979	1978
	(in thousands)	
Mines and mining plants	\$1,083,853	\$1,081,645
Processing facilities	1,578,372	1,551,697
Other	447,225	449,393
Primary metals facilities	3,109,450	3,082,735
Formed metal products facilities	348,336	337,205
Battery and related product facilities	232,772	194,857
Other	103,948	90,538
	3,794,506	3,705,335
Accumulated depreciation	1,002,475	905,020
Accumulated depletion	268,648	259,805
	1,271,123	1,164,825
Net property, plant and equipment	\$2,523,383	\$2,540,510

In 1979 the provision for depreciation amounted to \$121,591,000 (1978—\$96,702,000) and the provision for depletion amounted to \$10,120,000 (1978—\$11,899,000).

At December 31, 1979, net property, plant and equipment amounted to \$813 million relative to the Indonesian nickel project and \$225 million relative to the Guatemalan nickel project, including capitalized preproduction costs of \$187 million and \$72 million, respectively. The Company believes that, based on current price/cost relationships, these projects, when operating at capacity, will make a positive contribution to operating earnings. Net property, plant and equipment also includes \$145 million applicable to standby mines in Canada.

#### Note 5. Interest Expense

Interest expense, net of amounts capitalized, on long-term debt was \$118,598,000 in 1979 and \$61,265,000 in 1978. The expensing of interest commenced in June 1978 for the Guatemalan project, and with respect to the Indonesian project commenced in August 1978 for Stage I and in January 1979 for Stage II; such interest expense totalled \$65,354,000 in 1979 and \$11,617,000 in 1978. Interest capitalized totalled \$1,606,000 in 1979, relating to a metals reclamation facility in the United States, and \$45,988,000 in 1978, relating principally to the Company's Guatemalan and Indonesian projects.

#### Note 6. Long-Term Debt

The Company's long-term debt consists of the following (the applicable weighted average interest rates and repayment periods as at December 31, 1979 are shown in parentheses):

December 31	1979	1978
	(in thousands)	
<b>Inco Limited</b>		
6.85% U.S. \$ Debentures (1983-1993)	\$ 123,820	\$ 143,150
8.625% Cdn. \$ Debentures (1981-1991)	57,194	58,137
9.25% Cdn. \$ Debentures (1981-1990)	54,784	56,497
9.0% Eurodollar Debentures (1981-1992)	93,744	97,544
8.25% Eurodollar Notes (1984)	50,000	50,000
<b>P. T. International Nickel Indonesia</b>		
Eurodollar Bank loans (13.9%) (1980-1989)*	215,385	284,231
Export & supplier credits (8.7%) (1980-1989)	193,243	188,022
Export & supplier credits (16.1%) (1980-1984)**	22,608	26,150
8.0625% U.S. \$ Production sharing loan (1980-1986)	23,400	27,807
<b>Inco ElectroEnergy Corporation and subsidiaries</b>		
U.S. \$ Bank term loan (9.0%) (1981)	50,000	50,000
U.S. \$ Revolving credit loans (15.5%) (1981)**	38,000	25,000
8.5% U.S. \$ Senior notes (1985-1997)	45,000	45,000
Other (10.1%) (1980-1997)	19,920	19,132
<b>Exmibal</b>		
Export & supplier credits (8.7%) (1980-1988)	38,906	60,369
9.5% U.S. \$ International agency loans (1980-1988)	12,600	19,950
Eurodollar Bank loans (15.9%) (1980-1983)*	9,882	18,000
U.S. \$ Subordinated completion loan	4,000	4,000
<b>Inco Europe Limited and subsidiaries</b>		
Sterling Bank loans (15.9%) (1980-1982)*	28,841	53,079
Other (9.6%) (1980-2002)	4,087	3,838
<b>Other indebtedness (4.5%) (1980-2002)</b>	<b>56,985</b>	<b>50,882</b>
	<b>1,142,399</b>	<b>1,280,788</b>
Long-term debt due within one year	70,073	56,833
Long-term debt	\$1,072,326	\$1,223,955

\* Interest is based on the London Interbank Offered rate.

\*\* Interest is based on U.S. and Canadian banks' prime commercial lending rates.

The average interest rate on long-term debt at December 31, 1979 was 9.9%. Approximately 30% of the Company's long-term debt carries interest rates that are subject to periodic adjustments based on market interest rates. The long-term debt is payable in the following currencies: 73%—U.S. dollars, 14%—Canadian dollars, 4%—pound sterling, and 9%—other currencies.

In June 1979, P.T. International Nickel Indonesia ("P.T. Inco") implemented a three-part financing plan which provided for additional equity contributions by the Company, the rescheduling of principal payments under a \$200 million Eurodollar credit facility, and the prepayment of \$65 million outstanding under another Eurodollar credit facility. The plan resulted in the reduction and deferment of the debt service requirements of P.T. Inco.

The Company has not extended a financial guarantee of the debt of P.T. Inco. However, the Company has agreed, subject to force majeure, to provide sufficient funds in the form of equity and senior loans to enable the project company to achieve project completion, which, as defined in the security documents for the project's financing, is not currently forecast to be achieved until the late 1980's. In addition, the Company has agreed to purchase approximately two-thirds of the pro-

ject's production at a formula price based on the price for nickel oxide sinter 75.

In December 1979, Exmibal prepaid \$25 million of its senior loans as part of a restructuring of its financial arrangements. The principal amounts prepaid would have otherwise been due, for the most part, in 1980 and 1981.

The Company has agreed to purchase Exmibal's production at a formula price based on the price for nickel oxide sinter 75 with the provision that until the formula price has risen sufficiently to sustain the project or until the senior loans have been repaid in full, the Company will pay variable prices intended to meet Exmibal's operating and debt service costs. The Company has also agreed to make certain payments in respect of Exmibal's long-term debt if Exmibal fails to make payments when due on such debt, in return for which the Company would receive credits against its future purchases of Exmibal's production.

At December 31, 1979, the Company and its subsidiaries had unused committed credit facilities of approximately \$330 million. Approximately \$295 million of this amount was available for Inco Limited's and Inco ElectroEnergy's commercial paper borrowings in the United States and Canada as well as for general corporate purposes. Included in the latter amount are two revolving term loan facilities totalling \$250 million that provide for revolving credits through June 1981, at which time the Company has the option to convert the \$250 million to term loans for periods ranging from five to eight years.

Long-term debt maturities and sinking fund requirements for each of the five years through 1984 are: 1980—\$70,073,000; 1981—\$140,817,000; 1982—\$57,041,000; 1983—\$82,614,000; 1984—\$129,765,000. These five year amounts include \$192,365,000 for P.T. Inco borrowings and \$35,093,000 for Exmibal borrowings.

## Note 7. Income and Mining Taxes

The provisions for income and mining taxes were as follows:

Year ended December 31	1979	1978
	(in thousands)	
Current taxes	<b>\$146,742</b>	\$51,970
Current deferred	<b>(37,400)</b>	5,200
Future deferred	<b>28,900</b>	29,900
Total deferred taxes	<b>(8,500)</b>	35,100
Total income and mining taxes	<b>\$138,242</b>	\$87,070
Canada	<b>\$133,311</b>	\$58,284
Other (principally United States and United Kingdom)	<b>4,931</b>	28,786
	<b>\$138,242</b>	\$87,070

The reconciliation between the combined federal-provincial statutory income tax rate in Canada and the effective income and mining tax rate follows:

Year ended December 31	1979	1978
	Percentage of pretax earnings	
Combined Canadian federal-provincial statutory income tax rate	<b>49.3%</b>	49.2%
Resource and depletion allowances	<b>(15.0)</b>	(16.1)
Adjusted income tax rate	<b>34.3</b>	33.1
Mining taxes	<b>13.8</b>	18.0
	<b>48.1</b>	51.1
Losses of nickel projects in Guatemala and Indonesia	<b>13.5</b>	4.0
Effect of U.K. tax change — prior years	<b>(9.2)</b>	—
— current year	<b>(6.3)</b>	—
Currency translations	<b>4.4</b>	11.1
Tax rate differential outside Canada	<b>2.7</b>	0.3
Investment tax credits	<b>(1.9)</b>	(4.0)
Inventory allowance — Canada	<b>(1.4)</b>	(3.5)
Prior year tax adjustments	<b>0.9</b>	(6.9)
Statutory exemptions	<b>(0.9)</b>	(3.1)
Other	<b>(0.5)</b>	3.8
Effective income and mining tax rate	<b>49.4%</b>	52.8%

The lower effective income and mining tax rate in 1979 results from tax changes in the United Kingdom and Canada, largely offset by the effect of increased losses of the nickel projects in Guatemala and Indonesia. Effective from the year 1973, legislation in the United Kingdom provided tax relief on increases in the value of inventories, subject to recapture if such value declines. Accordingly, tax payments have been reduced each year, but deferred tax liabilities were established simultaneously to provide for the possibility of recapture. Legislation enacted in 1979 removed such recapture for the years 1973 and 1974 and limited to six years the period during which tax relief on increases in the value of inventories occurring subsequent to 1974 could be recaptured if such value declines. As a result, income and mining taxes in 1979 were reduced by \$43.4 million, of which \$25.7 million represents the reversal of deferred tax liabilities established in prior years.

Two changes in Canadian tax legislation reduced the Company's taxes in 1979. The Province of Manitoba replaced its two-tiered mining tax system with a reduced single tax rate effective January 1, 1979, and the Province of Ontario removed the two highest marginal mining tax rates effective April 11, 1979.

No tax benefit is recognized relative to the losses incurred by the Company's nickel projects in Indonesia and Guatemala. Such losses, which have aggregated \$105 million since the inception of the projects, can be carried forward indefinitely to offset taxable income of the respective projects in future years. Similarly, unutilized investment tax credits relative to the Indonesian project, which totalled \$53 million at December 31, 1979, can be carried forward indefinitely to reduce future tax payments.

The cumulative tax effect of timing differences relating to items of a non-current nature is shown separately as deferred income and mining taxes of \$446,000,000 in the Consolidated Balance Sheet. The cumulative tax effect of timing differences relating to items of a current nature of \$600,000 is included in the current liability for income and mining taxes payable. Investment tax credits reduced income and mining taxes by \$5,279,000 in 1979 and \$6,629,000 in 1978.

## Note 8. Stock Option Plans

The Key Employees Incentive Plan ("1968 Plan") and the 1979 Key Employees Incentive Plan ("1979 Plan") each authorized the granting of options to purchase up to 1,000,000 common shares at prices not less than 100% of their market value on the day the option is granted. The Plans provide that no shares subject to option shall be purchasable after ten years from the date of grant. With respect to stock options, the 1968 Plan terminated in 1978 except as to options then outstanding, and no further options may be granted thereunder. At December 31, 1979, outstanding options for 199,175 shares under these Plans also carry share appreciation rights.

Directors who are not officers of the Company are not entitled to participate in the Plans. Changes during the year 1979 in options outstanding are summarized as follows:

	Number of Shares	
	1979 Plan	1968 Plan
Outstanding at December 31, 1978	—	957,069
Options granted at an average price of \$19.47 a share	433,400	—
Exercised at average option price of \$15.93 a share	—	12,025
Expired	13,700	315,480
Outstanding at December 31, 1979	419,700	629,564
Shares available for grant at December 31, 1979	580,300	—

At December 31, 1979, options to purchase 306,646 shares were exercisable, all under the 1968 Plan. At December 31, 1979, the average option price per share of options outstanding was \$21.60 (range \$15.57 - \$45.88) under the 1968 Plan and \$19.45 (range \$19.13 - \$20.13) under the 1979 Plan.

## Note 9. Preferred and Common Shares

At December 31, 1979, the authorized share capital of the Company consisted of 30,000,000 preferred shares and an unlimited number of common shares. Effective January 1, 1979, the Company reclassified all of its outstanding Class A and Class B Common Shares as a single class of Common Shares.

In May 1977, the Company sold 10 million Series A Preferred Shares for an aggregate of \$250 million (Cdn.). The Series A Preferred Shares, which do not have general voting rights, have a cumulative floating rate dividend equal to half of the Canadian bank prime rate plus 1 1/4 per cent. The shares are redeemable at the option of the Company commencing in March, 1980 at a premium of three per cent over their \$25.00 (Cdn.) par value, such premium declining thereafter by 3/4 of one per cent per annum, and are redeemable at par commencing in 1984. The shares are retractable at par, at the option of the holders, in 1987. The dividends of \$15,076,000 paid in 1979 on these preferred shares reflected an average annual dividend rate of approximately 7.1 per cent compared with a dividend rate of 5.6 per cent applicable to dividends of \$12,272,000 paid in 1978.

In December 1977, the Company sold five million 7.85% Series B Preferred Shares for an aggregate of \$125 million (Cdn.). The Series B Preferred Shares have general voting

rights and are not redeemable before December, 1982, after which they are redeemable at a premium of four per cent over their \$25.00 (Cdn.) par value, such premium declining by 1/4 of one per cent per annum until December 1987, and redeemable at par thereafter. The Company is required to repurchase 150,000 Series B Preferred Shares annually if such shares are available at a price not greater than par value; such purchases totalled 149,300 shares in 1979 and 75,000 shares in 1978.

Series B Preferred shareholders have the right to elect to receive Series B Preferred Shares or Common Shares in lieu of cash dividends. Under the Inco Optional Stock Dividend Program, common shareholders may elect to receive Common Shares, valued at a five per cent discount from the market price of the shares, in lieu of cash dividends. In 1979, 4,875 Series B Preferred Shares and 524,377 Common Shares were issued as stock dividends in lieu of \$10,048,000 of cash dividends.

## Note 10. Quarterly Financial Information (Unaudited)

Quarterly financial information follows (in thousands, except per share amounts):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
<b>1979:</b>					
Net sales	\$555,022	\$574,561	\$604,401	\$754,559	\$2,488,543
Cost of sales and operating expenses (1)	\$446,107	\$416,405	\$415,003	\$522,135	\$1,799,650
Currency translation adjustments — loss (gain)	\$ 5,346	\$ 6,320	\$ 3,200	\$ (2,187)	\$ 12,679
Earnings before income and mining taxes	\$ 15,712	\$ 54,366	\$ 85,865	\$124,024	\$ 279,967
Net earnings (2)	\$ 537	\$ 16,036	\$ 55,933	\$ 69,219	\$ 141,725
Net earnings (loss) per common share	\$(.06)	\$ .13	\$ .67	\$ .84	\$1.58
Dividends per common share	\$ .10	\$ .10	\$ .10	\$ .20 (4)	\$ .50
<b>1978:</b>					
Net sales	\$517,132	\$538,898	\$487,914	\$539,150	\$2,083,094
Cost of sales and operating expenses (1)	\$388,408	\$404,224	\$382,170	\$440,929	\$1,615,731
Currency translation adjustments — loss (gain)	\$ (10,895)	\$ 4,227	\$ (10,702)	\$ 2,414	\$ (14,956)
Earnings before income and mining taxes	\$ 60,773	\$ 55,004	\$ 32,355	\$ 16,747	\$ 164,879
Net earnings (3)	\$ 34,906	\$ 23,028	\$ 9,780	\$ 10,095	\$ 77,809
Net earnings per common share	\$ .40	\$ .24	\$ .06	\$ .07	\$ .77
Dividends per common share	\$ .20	\$ .20	\$ .20	\$ .10	\$ .70

(1) Includes Sudbury strike expenses of \$18,670,000 in the third quarter and \$42,790,000 in the fourth quarter of 1978; and \$40,480,000 in the first quarter and \$35,060,000 in the second quarter of 1979.

(2) After tax benefits of \$6,580,000, \$24,140,000 and \$12,720,000 in the second, third and fourth quarters of 1979, respectively, applicable to United Kingdom tax legislation enacted in 1979 (see Note 7).

(3) Fourth quarter 1978 net earnings include \$8,740,000 relating to the favorable settlement of prior years' tax issues and \$6,620,000 relating to gains on sales of securities.

(4) Consists of a regular quarterly dividend and a year-end extra dividend of 10 cents each.

## Note 11. Replacement Cost Information (Unaudited)

Quantified replacement cost data will be disclosed in the Company's 1979 Annual Report on Form 10-K to be filed with the Securities and Exchange Commission. See page 35 for comments on the effects of inflation on selected financial data for the Company.

## Note 12. Financial Data by Business Segment

Financial data by business segment and geographic area for the three years 1977-1979 follow (in millions of dollars):

Data by Business Segment	Year 1979					Year 1978					Year 1977				
	Primary metals	Formed metal products	Batteries & related products	Other	Total after eliminations	Primary metals	Formed metal products	Batteries & related products	Other	Total after eliminations	Primary metals	Formed metal products	Batteries & related products	Other	Total after eliminations
Net sales to customers	\$1,054	\$553	\$744	\$138	\$2,489	\$ 866	\$429	\$655	\$133	\$2,083	\$ 869	\$377	\$585	\$122	\$1,953
Intersegment sales	135	7	3	1	—	135	9	2	1	—	112	13	2	1	—
Total net sales	\$1,189	\$560	\$747	\$139	\$2,489	\$1,001	\$438	\$657	\$134	\$2,083	\$ 981	\$390	\$587	\$123	\$1,953
Operating earnings	\$ 336	\$ 51	\$ 36	\$ 7	\$ 425	\$ 172	\$ 25	\$ 33	\$ 3	\$ 234	\$ 189	\$ 26	\$ 15	\$ 7	\$ 242
Equity in earnings of affiliates	\$ 4	\$ (1)	\$ 1		4	\$ (5)		\$ 9		4	\$ (6)		\$ 7		1
Non-operating expenses*					(149)					(73)					(68)
Earnings before income and mining taxes					\$ 280					\$ 165					\$ 175
Capital expenditures	\$ 56	\$ 15	\$ 40	\$ 18	\$ 129	\$ 155	\$ 13	\$ 24	\$ 28	\$ 220	\$ 371	\$ 27	\$ 28	\$ 7	\$ 433
Depreciation and depletion	\$ 94	\$ 15	\$ 18	\$ 5	\$ 132	\$ 72	\$ 16	\$ 16	\$ 5	\$ 109	\$ 84	\$ 13	\$ 17	\$ 3	\$ 117
Identifiable assets at Dec. 31 (1)	\$2,863**	\$ 725	\$608	\$134	\$4,221	\$2,887	\$ 622	\$480	\$116	\$4,002	\$2,936	\$ 592	\$456	\$ 94	\$4,002
Other assets (1)					114					144					74
Total assets at December 31					\$4,335					\$4,146					\$4,076
Data by Geographic Area	Canada	United States	Europe	Other	Total after eliminations	Canada	United States	Europe	Other	Total after eliminations	Canada	United States	Europe	Other	Total after eliminations
Net sales to customers	\$ 234	\$1,264	\$745	\$ 246	\$2,489	\$ 214	\$1,107	\$610	\$ 152	\$2,083	\$ 234	\$1,011	\$567	\$ 141	\$1,953
Sales between geographic areas	879	62	23	73	—	842	45	10	4	—	725	44	8	4	—
Total net sales	\$1,113	\$1,326	\$768	\$ 319	\$2,489	\$1,056	\$1,152	\$620	\$ 156	\$2,083	\$ 959	\$1,055	\$575	\$ 145	\$1,953
Operating earnings	\$ 336	\$ 27	\$ 62	\$ 21	\$ 425	\$ 156	\$ 44	\$ 27	\$ 19	\$ 234	\$ 151	\$ 37	\$ 28	\$ 9	\$ 242
Equity in earnings of affiliates					4					4					1
Non-operating expenses*					(149)					(73)					(68)
Earnings before income and mining taxes					\$ 280					\$ 165					\$ 175
Identifiable assets at Dec. 31 (1)	\$1,750	\$1,012	\$517	\$1,326**	\$4,221	\$1,757	\$ 916	\$413	\$1,247	\$4,002	\$1,948	\$ 832	\$397	\$1,116	\$4,002
Other assets (1)					114					144					74
Total assets at December 31					\$4,335					\$4,146					\$4,076

\*Includes interest expense, general corporate expenses, general corporate income and currency translation adjustments.

\*\*Includes assets relating to the Company's nickel projects in Indonesia and Guatemala of \$891 and \$253 respectively.

(1) 1978 and 1977 restated.

The Company's business is organized around three principal product groups: primary metals, formed metal products and batteries and related products. The Company's principal primary metals are nickel and copper. Wrought nickel, high-nickel alloys in rolling mill forms, and forgings are the Company's major formed metal products. Automotive, dry-cell and industrial batteries and related products are the Company's major battery products. Other products comprise mainly fractional horsepower motors and safety products.

The Company's intersegment sales generally are made at approximate prices used for sales to unaffiliated customers. Other assets include \$62 (1978 - \$60) of investments in and

advances to affiliated companies and \$52 (1978 - \$84) of corporate assets, principally cash, marketable securities and certain fixed assets.

Sales between geographic areas generally are made at prevailing market prices, except that sales of primary metals from Canada to other primary metals locations are net of discounts. In 1979 sales to customers include \$42 (1978 - \$46) exported from Canada and \$68 (1978 - \$49) exported from the United States. The sales from Canada include \$419 (1978 - \$425) exported to the United States and \$428 (1978 - \$389) exported to Europe.

# SUPPLEMENTARY FINANCIAL INFORMATION

## Lines of Business Data

The Company's sales and earnings before income and mining taxes, by lines of business, for the years 1975 and 1976 are shown below. In these years, the metals business comprised both primary metals and formed metal products. Additionally, the business segment financial data presented on page 33 reports operating earnings while the table below reports earnings before income and mining taxes. Primarily for these reasons the business segment financial data are not comparable with the lines of business data set forth below.

	1976	1975
	(in millions)	
<b>Sales</b>		
Metals	\$1,442	\$1,198
Batteries and related products	486	413
Other products*	112	84
Net sales	\$2,040	\$1,695
<b>Earnings before taxes</b>		
Metals	\$ 309	\$ 305
Batteries and related products	37	18
Other products*	1	(1)
Earnings before income and mining taxes	\$ 347	\$ 322

\*Comprises, principally, fractional horsepower motors and safety products.

## Sales by Principal Products

	1979	1978	1977	1976	1975
	(in millions)				
<b>Primary metals</b>					
Primary nickel	\$ 807	\$ 615	\$ 558	\$ 762	\$ 569
Refined copper	115	135	211	227	194
Precious metals	87	81	63	57	44
Other metals	45	35	37	31	21
	1,054	866	869	1,077	828
<b>Formed metal products</b>	553	429	377	365	370
<b>Metals business</b>				1,442	1,198
<b>Batteries and related products</b>					
Automotive and electric vehicle batteries and related products	303	282	262	207	169
Dry-cell batteries and portable lighting devices	268	246	214	204	174
Industrial batteries	173	127	109	75	70
	744	655	585	486	413
<b>Other products*</b>	138	133	122	112	84
Net sales	\$2,489	\$2,083	\$1,953	\$2,040	\$1,695

\*Comprises, principally, fractional horsepower motors and safety products.

## Pension Trust Funds

The Company and its subsidiaries have pension plans covering most employees. Irrevocable pension trust funds, which are separate and distinct from the accounts of the Company and its subsidiaries, have been established to implement most of these pension plans. The funds consist of marketable securities at cost, cash and other assets. Trust fund operations are summarized as follows:

Year ended December 31	1979	1978
	(in thousands)	
Balance in funds at beginning of year	\$453,481	\$412,803
Company contributions	57,902	44,122
Employee contributions	939	389
Income from investments	71,818	47,380
Currency translation adjustments*	6,717	(16,716)
	590,857	487,978
Benefits paid	36,767	34,497
Balance in funds at end of year	\$554,090	\$453,481
Market value of funds at end of year	\$637,900	\$506,100

\*Currency translation adjustments result from translating assets in Canadian and other currencies into U.S. dollars at year-end exchange rates. Trust fund assets are denominated principally in those currencies in which corresponding retirement benefits are paid.

## Market Price Range

Market price range for Common and Series B Preferred Shares

Year ended December 31	1979	1978
<b>New York Stock Exchange</b>		
(Composite transactions)		Common Shares
First quarter	\$21½ - 15%	\$17% - 13%
Second quarter	22½ - 19%	19 - 15½
Third quarter	24 - 18%	18 - 15¼
Fourth quarter	23¾ - 18	19% - 14%
<b>Toronto Stock Exchange</b>		
(Canadian dollars)		
First quarter	\$24% - 18%	\$19¼ - 15¼
Second quarter	25½ - 22%	21¼ - 17%
Third quarter	27% - 21½	21 - 17
Fourth quarter	27% - 21	23% - 17¼
		Series B Preferred Shares
First quarter	\$25% - 24%	\$24¼ - 24%
Second quarter	26% - 25	25% - 24
Third quarter	25% - 24%	25½ - 24¼
Fourth quarter	24% - 22¼	25¼ - 24¼

## Effect of Inflation on Selected Financial Data

In an attempt to provide information relative to the effects of changing prices, Financial Accounting Standards Statement No. 33 was issued in 1979 requiring that historical cost financial statements of large companies be supplemented by selected information that reflects the more significant impacts of inflation on an enterprise's results of operations and financial position. The statement prescribes two supplementary income computations, one dealing with the effects of general inflation (constant dollars) and the other dealing with the effects of changes in the specific prices of resources used by an enterprise (current cost). Disclosure of constant dollar supplementary information is required beginning with the year 1979. Consideration is still being given to special problems relative to the application of the current cost requirements of certain types of assets, such as natural resources. Proposals regarding these problems will be addressed by the Financial Accounting Standards Board with a view to implementation in 1980 annual reports issued on or after December 25, 1980. Accordingly, the supplementary information set forth below reflects only the effect of general inflation in constant dollars.

The following definitions included in Statement No. 33 may be helpful in understanding the supplementary information presented:

**Historical cost/nominal dollar accounting** — The generally accepted method of accounting, used in the primary financial statements, based on measures of historical prices.

**Constant dollar accounting** — A method of reporting financial statement elements in dollars each of which has the same (i.e., constant) general purchasing power.

**Current cost accounting** — A method of measuring and reporting assets and expenses associated with the use or sale of assets at their current cost or lower recoverable amount at the balance sheet date or at the date of use or sale.

The accompanying statement of income from continuing operations adjusted for general inflation compares the Company's results as reported in the primary financial statements which are expressed in historical/nominal dollars with the results adjusted for general inflation which are expressed in average 1979 constant dollars.

The historical/nominal dollar value of cost of sales and operating expenses has been restated into average 1979 constant dollars by applying the Consumer Price Index for All Urban Consumers (CPI-U), published by the Bureau of Labor Statistics of the U.S. Department of Labor. Restatement of depreciation and depletion expense has been calculated by first converting the annual net additions for each of the last 20 years as well as the depreciated net fixed asset balance at December 31, 1959, into average 1979 constant dollars and then applying the Company's depreciation policy.

The gain from decline in purchasing power of net monetary liabilities derives from the concept that monetary assets and

monetary liabilities decrease in value with inflation. The gain is calculated by measuring the decrease in purchasing power for the year attributable to general inflation having taken into account net balances of monetary liabilities at the beginning and end of the year and transactions for the year.

The information included in the accompanying five-year comparison of selected supplementary financial data adjusted for effects of general inflation is expressed in average 1979 constant dollars. As required, net sales and other income, dividends per common share and market price per common share at year end, are restated for each of the five years shown, with loss from continuing operations and the gain from decline in purchasing power of net amounts owed being reported only for the year 1979. Net assets at year end is a restatement of common shareholders' equity at year-end 1979, as reported in the primary financial statements, into average 1979 constant dollars and adjusted to reflect the excess of the constant dollar values for inventory and property, plant and equipment over the respective historical/nominal dollar amounts.

### Comments on Inflation-Adjusted Data Statement of income from continuing operations adjusted for general inflation

Income from continuing operations of \$142 million based on historical/nominal dollars is shown as a loss from continuing operations of \$60 million in constant dollars, after adjusting cost of sales and operating expenses, including depreciation and depletion expense, for general inflation. These adjustments, during inflationary periods, will always result in constant dollar income from continuing operations being lower than income from continuing operations based on historical/nominal dollars but will not necessarily always result in a loss from continuing operations. In addition to the adjustments for general inflation, the loss for the year 1979 is attributable to the same factors which resulted in the unsatisfactory profit performance in historical/nominal dollars, i.e., depressed prices for nickel, particularly in the first half of the year, costs and expenses attributable to the Sudbury strike, and the charges applicable to the Guatemalan and Indonesian projects. The Company's average net realized price for its primary nickel products, even in historical/nominal dollars, was lower in the first half of 1979 than in the year 1976. When adjusted for inflation, the Company's realized price for its primary nickel products in the first half of 1979 was comparable to the average price realized in 1970 in historical/nominal dollars.

A loss in constant dollars for any one year should not be interpreted to mean that the Company will be unable to replace its productive capacity, particularly if the year's results were adversely affected by unusual factors, as was true in

the case of the Company's 1979 results. The Company is particularly well positioned with respect to its productive capacity for mining and processing primary metals in that very substantial expenditures have been made in recent years to expand and modernize these facilities. Approximately 80 per cent of the Company's gross investment in property, plant and equipment has been made in the last 12 years.

It is also worth noting that income and mining tax expense is reported as the same amount in constant dollars as in historical/nominal dollars despite the significant reduction in pretax constant dollar income. This treatment, which highlights the hidden tax being borne by companies due to inflation, is in accordance with Statement No. 33 and reflects the fact that tax legislation does not give adequate recognition to the effects of inflation.

Since the Company's monetary liabilities were substantially in excess of its monetary assets at year end, there was a purchasing power gain of \$251 million in net amounts owed in 1979.

#### **Five-year comparison of selected supplementary financial data adjusted for effects of changing prices**

Net sales and other income for the five years 1975 to 1979, expressed in average 1979 constant dollars, show an annual rate of growth of 0.5 per cent as compared with an 8 per cent annual growth rate calculated on an historical/nominal dollar basis. This small constant dollar growth rate is due primarily to reduced deliveries of nickel in 1975 and 1977, depressed nickel prices in 1978 and reduced copper deliveries due to the Sudbury strike in 1978 and 1979.

Net assets at year-end 1979 of \$3,544 million, which is expressed in average 1979 constant dollars, have been adjusted to reflect the excess of constant dollar values over the respective historical/nominal dollar value amounts for inventories and property, plant and equipment. The significant increase in net assets in terms of average 1979 constant dollars reflects mainly the adjustment of property, plant and equipment values and is indicative of the enormously high capital cost requirements for mineral resource development at 1979 prices.

Dividends per common share were unchanged in 1975 and 1976 and were reduced in 1977, 1978 and 1979 as earnings declined. The annual rate of decline of 27 per cent in dividends compares with 32 per cent annual rate of decline when calculated on the basis of restating dividends for the five years into average 1979 constant dollars. Similarly, the market price per common share declined over the five-year period at an annual rate of 8 per cent in actual dollars compared with an annual rate of decline of 15 per cent in terms of 1979 constant dollars.

The supplementary financial information and related commentary disclosed by companies in annual reports to shareholders should assist financial statement users in developing an understanding of the more significant impacts of inflation on business enterprises. The Company supports this approach in which the dominant focus will continue to be on present financial statements based on historical costs while the considerable effort still required in the experimentation process of evaluating the effects of changing prices is conducted.

#### **Statement of Income from Continuing Operations Adjusted for General Inflation**

	As reported in the primary statements	Adjusted for general inflation
Year ended December 31, 1979 (dollars in millions)	(Historical/ nominal dollars)	(Average 1979 constant dollars; 1967 = 100)
Net sales and other income	\$2,524	\$2,524
Cost of sales and operating expenses	1,799*	1,995*
Selling, general and administrative expenses	244*	248*
Research and development	40*	42*
Exploration	14	14
Interest	134	134
Currency translation adjustments	13	13
Total costs and expenses	2,244	2,446
Earnings before income and mining taxes	280	78
Income and mining taxes	138	138
Income (loss) from continuing operations	\$ 142	\$ (60)
Gain from decline in purchasing power of net amounts owed		\$ 251
<i>*Includes depreciation and depletion, which for the year 1979 totalled</i>	\$ 132	\$ 225

## Five-Year Comparison of Selected Supplementary Financial Data

### Adjusted for effects of general inflation (Average 1979 constant dollars)

Year ended December 31	1975	1976	1977	1978	1979
	(dollar amounts in millions, except per share amounts)				
Net sales and other income	\$2,324	\$2,646	\$2,381	\$2,350	<b>\$2,524</b>
Loss from continuing operations					<b>\$ 60</b>
Loss from continuing operations per common share					<b>\$ 1.11</b>
Net assets at year end (common shareholders' equity)					<b>\$3,544*</b>
Gain from decline in purchasing power of net amounts owed					<b>\$ 251</b>
Dividends per common share	\$ 2.16	\$ 2.04	\$ 1.50	\$ 0.78	<b>\$ 0.50</b>
Market price per common share, New York Stock Exchange, at year end	\$34.05	\$41.61	\$20.52	\$17.67	<b>\$23.75</b>
Average consumer price index (1967 = 100)	161.2	170.5	181.5	195.4	<b>217.4</b>

### Comparable historical data (Historical/nominal dollars)

Net sales and other income	\$1,723	\$2,075	\$1,988	\$2,112	<b>\$2,524</b>
Net earnings					<b>\$ 142</b>
Net earnings per common share					<b>\$ 1.58</b>
Common shareholders' equity					<b>\$1,658</b>
Dividends per common share	\$ 1.60	\$ 1.60	\$ 1.25	\$ 0.70	<b>\$ 0.50</b>
Market price per common share, New York Stock Exchange, at year end	\$25.25	\$32.63	\$17.13	\$15.88	<b>\$23.75</b>

\*Net assets at year end is a restatement, into average 1979 constant dollars, of common shareholders' equity at year-end 1979 adjusted to reflect the excess of constant dollar values for inventory and property, plant and equipment over the respective historical/nominal dollar amounts.

## DIRECTORS AND OFFICERS

**The Board of Directors** consists of 21 members of whom six are Officers of the Company. Each year 15 meetings are scheduled to be held, and special meetings may be called from time to time. In 1979 the Board held 15 meetings.

Each year the Board holds a meeting at an operational site. On October 1 the Board met at Huntington Alloys, Inc. in Huntington, West Virginia. Members toured operations there and the nearby Burnaugh, Kentucky plant.

The activities of the Board are supported by its various committees.

The Executive Committee, which held 10 meetings during 1979, consists of the Chairman, the President and five non-employee Directors. During intervals between meetings of the Board, the Executive Committee, with certain exceptions, has all the powers vested in the Board.

The Audit Committee, which held four meetings during 1979, consists of five non-employee Directors. This committee meets with the Company's financial management personnel, its internal auditors and its independent auditors at least four times a year to review financial reporting practices, internal accounting controls and procedures, the planned scope of examinations by both the internal auditors and the independent auditors and their findings and recommendations, and the non-auditing services performed by the independent auditors. It reviews the financial statements in the Company's Annual Report and monitors the results of reviews covering employee compliance with the Company's policies on business conduct and other internal control policies. It also recommends to the Board the independent auditors to be proposed to the Shareholders for appointment at the Annual Meeting.

The Nominating Committee, which held four meetings during 1979,

consists of the same Directors who comprise the Executive Committee and has the function of recommending to the Board nominees for election as Directors.

The Salary and Incentive Plan Committee, which held eleven meetings during 1979, consists of five non-employee Directors. This committee advises and consults with the Chairman and makes recommendations to the Board on the remuneration of senior executives of the Company. The committee also administers and makes recommendations to the Board with respect to the Company's incentive compensation plans.

The Pension Committee, which held five meetings during 1979, consists of five non-employee Directors. This committee advises the Board, the Executive Committee, the Chairman, the President and other executive officers regarding the financial aspects of the pension programs of the Company and its subsidiaries, including actuarial assumptions, the adequacy of funding and the implementation of sound investment of pension funds. In addition, this committee recommends to the Board or the Executive Committee the appointment of trustees and investment advisers or managers.

### Directors (Term expires 1980)

**Harold Bridges**  
Former President and Chief Executive Officer  
Shell Oil Company,  
Lausanne, Switzerland

**J. Edwin Carter**  
Chairman and Chief Executive Officer

**Peter D. Curry**  
Deputy Chairman, Power Corporation of Canada,  
Limited, Montreal, (investment, management and  
transportation)

**Edmund B. Fitzgerald**  
Managing Director, Hampshire Associates,  
Milwaukee, Wisconsin (industrial consulting firm),  
former Chairman and Chief Executive Officer,  
Cutler-Hammer Inc. (electrical equipment)

**Allen T. Lambert, O.C.**  
Former Chairman of the Board,  
The Toronto-Dominion Bank, Toronto

**Walter F. Light**  
President and Chief Executive Officer, Northern  
Telecom Limited, Montreal (manufacturer of  
telecommunications equipment)

**Ian McDougall**  
Senior Vice-President

**The Rt. Hon. Lord Nelson of Stafford**  
Chairman of the Board, The General Electric  
Company Limited, London, England

**George T. Richardson**  
President, James Richardson & Sons, Limited,  
Winnipeg, (financial, grain and management  
holding company)

**Lucien G. Rolland**  
President, Rolland inc., Montreal (specialists in  
coated and uncoated printing papers)

**Ashby McC. Sutherland**  
Senior Vice-President



J. Edwin Carter



Peter D. Curry



G. Arnold Hart, M.B.E.



Donald J. Phillips



Allen T. Lambert, O.C.



David W. Barr



Wm. Ward Foshay



Ian McDougall

## Directors (Term expires 1981)

Charles F. Baird  
President

David W. Barr  
Chairman of the Board, Moore Corporation  
Limited, Toronto (business forms)

Robert W. Bonner, Q.C.  
Chairman of the British Columbia Hydro & Power  
Authority, Vancouver

Wm. Ward Foshay  
Lawyer-Partner in the firm of Sullivan &  
Cromwell, New York

Reva Gerstein, O.C.  
Psychologist and educator, Toronto

G. Arnold Hart, M.B.E.  
Former Chairman of the Board and Chief  
Executive Officer, Bank of Montreal, Montreal

Donald J. Phillips  
President and Chief Executive Officer,  
Inco Metals Company

William Steven  
Senior Vice-President

Donald G. Willmot  
Chairman of the Board, The Molson Companies  
Limited, Toronto, (brewing, retailing and  
distribution)

Samuel H. Woolley  
Former Chairman of the Board, The Bank of New  
York, New York

## Executive committee

J. Edwin Carter, Chairman  
Charles F. Baird  
David W. Barr  
Wm. Ward Foshay  
G. Arnold Hart, M.B.E.  
Allen T. Lambert, O.C.  
Donald G. Willmot

## Audit committee

Samuel H. Woolley, Chairman  
Robert W. Bonner, Q.C.  
Harold Bridges  
Walter F. Light  
Lucien G. Rolland

## Nominating committee

J. Edwin Carter, Chairman  
Charles F. Baird  
David W. Barr  
Wm. Ward Foshay  
G. Arnold Hart, M.B.E.  
Allen T. Lambert, O.C.  
Donald G. Willmot

## Salary and Incentive Plan committee

G. Arnold Hart, M.B.E., Chairman  
David W. Barr  
Wm. Ward Foshay  
Allen T. Lambert, O.C.  
Donald G. Willmot

## Pension committee

Peter D. Curry, Chairman  
Edmund B. Fitzgerald  
Reva Gerstein, O.C.  
The Rt. Hon. Lord Nelson of Stafford  
George T. Richardson

## Officers

### Inco Limited

J. Edwin Carter, Chairman and Chief  
Executive Officer  
Charles F. Baird, President  
Ian McDougall, Senior Vice-President  
William Steven, Senior Vice-President  
Ashby McC. Sutherland, Senior  
Vice-President  
Frank C. Burnet, Vice-President  
Raymond F. Decker, Vice-President  
Robert T. deGavre, Treasurer  
Philip C. Jessup, Jr., Vice-President,  
General Counsel & Secretary  
Dean D. Ramstad, Vice-President  
Anthony J. Sabatino, Comptroller  
Alfred P. Statham, Vice-President  
J. Stuart Warner, Vice-President  
Shane MacKay, Regional Vice-President

### Principal regional officers

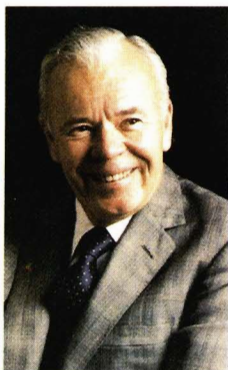
John H. Page, President  
Inco United States, Inc., New York

Anthony T. Shadforth, Chairman  
Inco Europe Limited, London, England  
and Chairman of Inco's other major  
companies in the United Kingdom

Dean D. Ramstad, General Manager  
Inco Limited, Japan Branch, Tokyo



The Rt. Hon. Lord Nelson  
of Stafford



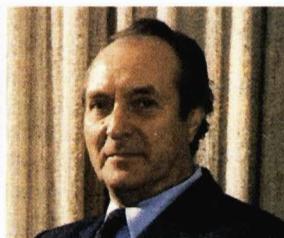
Charles F. Baird



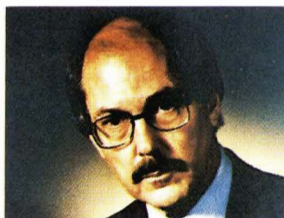
Reva Gerstein, O.C.



Samuel H. Woolley



Harold Bridges



Ashby McC. Sutherland



Edmund B. Fitzgerald



Lucien G. Rolland



Walter F. Light



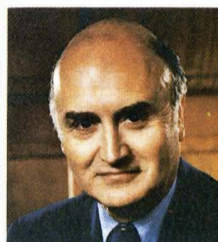
William Steven



Donald G. Willmot



George T. Richardson



Robert W. Bonner, Q.C.



## Principal executive offices

1 First Canadian Place, Toronto, Ontario M5X 1C4  
(416) 361-7511

## Other executive offices

One New York Plaza, New York, N.Y. 10004, U.S.A.  
(212) 742-4000

## Principal subsidiaries and operating units

### Inco Metals Company

1 First Canadian Place, Toronto, Ontario M5X 1C4

The International Nickel Company, Inc.

One New York Plaza, New York, N.Y. 10004, U.S.A.

Inco Europe Limited

Thames House, Millbank, London, SW1P4QF, England

P.T. International Nickel Indonesia

Jalan Melawai V 1/8, Kebayoran Baru, Jakarta, Indonesia

Exmibal

Edificio Valenzuela, 14 Calle6-12, Zona 1, Guatemala City, Guatemala

### Inco ElectroEnergy Corporation

5 Penn Center Plaza, Philadelphia, Pa. 19103, U.S.A.

Ray-O-Vac Corporation

101 East Washington Avenue, Madison, Wisconsin 53703, U.S.A.

Exide Corporation

5 Penn Center Plaza, Philadelphia, Pa. 19103, U.S.A.

Exide Electronics Corporation

2 Penn Center Plaza, Philadelphia, Pa. 19102, U.S.A.

Universal Electric Company

300 East Main Street, Owosso, Michigan 48867, U.S.A.

### Formed Metal Products Group

One New York Plaza, New York, N.Y. 10004, U.S.A.

Huntington Alloys, Inc.

Huntington, West Virginia 25720, U.S.A.

Henry Wiggin & Company Limited

Holmer Road, Hereford HR49SL, England

Daniel Doncaster & Sons Limited

Birley House, Wadsley Bridge, Sheffield, S61ET, England

Canadian Alloys Division

Walden Industrial Park, Lively, Ontario P0M 2E0

Daido Special Alloys Ltd.

Daido Building, 7-13, Nishi-Shinbashi, 1-Chome, Minato-ku, Tokyo, Japan

## Regional subsidiaries or operating unit

Inco United States, Inc.

One New York Plaza, New York, N.Y. 10004, U.S.A.

Inco Europe Limited

Thames House, Millbank, London SW1P4QF, England

Inco Limited, Japan Branch

Shin-Muromachi Building 3F, 4-7, Nihonbashi Muromachi 2-Chome  
Chuo-ku, Tokyo 103, Japan

International Nickel Australia Limited

14 Queen's Road, Melbourne, Victoria, Australia 3004

## Other subsidiaries include

### Canada

Canadian Nickel Company Limited, Toronto

International Sales Limited, Toronto

### United States

Inco Safety Products Company, Inc.

Philadelphia, Pennsylvania

The International Metals Reclamation Company, Inc.

Ellwood City, Pennsylvania

Pittsburgh Pacific Processing Co.

Pittsburgh, Pennsylvania

American Copper & Nickel Company, Inc.

New York, N.Y.

### Europe

International Nickel B.V. The Hague

International Nickel Deutschland G.m.b.H. Dusseldorf

International Nickel France S.A. Paris

International Nickel Iberica Limited, Madrid

International Nickel Italia Srl, Milan

International Nickel Océanie S.A. Paris

Wiggin Alloys S.A. Brussels

Wiggin Alloys G.m.b.H. Dusseldorf

### South America

International Nickel do Brasil Comercial Ltda. Sao Paulo

Mineração Serras do Sul Ltda. Rio de Janeiro

### Asia

International Nickel Japan Ltd. Tokyo

Inco East Asia Ltd. Tokyo

Inco Gulf, E.C., Bahrain

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**Counsel**

Osler, Hoskin & Harcourt, Toronto,  
Ontario  
Sullivan & Cromwell, New York, N.Y.

**Auditors**

Price Waterhouse & Co., Toronto,  
Ontario; New York, N.Y.

**Transfer agents for the Common Shares**

Canada Permanent Trust Company,  
Toronto, Ontario and Calgary,  
Alberta  
The Royal Trust Company, Montreal,  
Quebec  
Morgan Guaranty Trust Company of  
New York, New York, N.Y.  
The Royal Trust Company of Canada,  
London, England

**Registrars for the Common Shares**

Montreal Trust Company, Toronto,  
Ontario; Montreal, Quebec; and  
Calgary, Alberta  
Morgan Guaranty Trust Company of  
New York, New York, N.Y.  
Lloyds Bank Limited, London, England

**Transfer agent and registrar for the 7.85% Preferred Shares Series B**

Canada Permanent Trust Company,  
Toronto, Ontario; Montreal, Quebec;  
Calgary, Alberta; and Winnipeg,  
Manitoba

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**10-K report available**

A copy of the 1979 Annual Report on Form 10-K to be filed with the United States Securities and Exchange Commission may be obtained from the Company upon request. Requests should be addressed to The Secretary, Inco Limited at 1 First Canadian Place, Toronto, Ontario M5X 1C4 or at One New York Plaza, New York, New York 10004.

**Rapport Annuel**

La version française du Rapport Annuel sera fournie sur demande.

