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# The Canadian Mineral Industry Monthly Report

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Energy, Mines and  
Resources Canada

Énergie, Mines et  
Ressources Canada

Minerals

Minéraux

## PREFACE

This report is prepared in the Mineral Policy Sector of the Department of Energy, Mines and Resources. It is prepared from the best information available to us from many sources, but it is only intended to be a general review of the more important current developments in the Canadian mineral industry and of developments elsewhere that affect, or may affect, the Canadian industry. It should not be considered an authority for exact quotation or an expression of official Government of Canada views.

Ce rapport a été rédigé par le Secteur de la Politique Minérale du Ministère de l'Énergie, des Mines et des Ressources. Bien que nous ayons eu recours à de nombreuses sources pour vous fournir les meilleurs renseignements possibles, cet exposé n'a pour objet que de passer en revue les développements actuels les plus importants de l'industrie minière canadienne, de même que les progrès accomplis ailleurs qui peuvent intéresser l'industrie canadienne. On ne doit pas considérer cet exposé comme une source de renseignements précis ou comme l'expression des vues du Gouvernement canadien.

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## THE CANADIAN MINERAL INDUSTRY FOR MARCH

The following constitutes a brief summary of the Canadian mineral industry based upon information that became available in March.

### HIGHLIGHTS

1. Canada's unadjusted index of Real Domestic Product was 127.1 in January 1979, a decrease of 4.9 per cent from December 1978.
2. The January index for Mines, Quarries and Oil Wells was 103.6, a decrease of 6.2 per cent from the previous month.
3. Teck Corporation of Vancouver announced at the 1979 annual meeting that it will decide within a month whether to go ahead with the development of the Highmont mine in the Highland Valley.
4. East Rand Proprietary Mines Ltd. of South Africa said a fire at its gold mine on March 27 caused about 1 350 tonnes of lost ore production.
5. Lead prices established new highs in March.
6. Placer Development Limited announced early in March the decision to bring into production the Sam Goosly silver-copper-gold-antimony property near Houston, British Columbia.
7. Denison Mines Limited announced the purchase of the mining rights to the New Brunswick potash property of International Minerals & Chemical Corporation (Canada) Limited (IMCC).
8. Kaiser Resources Ltd. of Vancouver recently resumed shipments of coal on a Mexican contract that had been interrupted for more than a year.

## ECONOMIC TRENDS

Table 1 shows Canada's unadjusted indexes of Real Domestic Product (RDP). The overall index in January was 127.1, a decline of 4.9 per cent from December but an increase of 5.5 per cent over January 1978.

The RDP index for mines, quarries and oil wells was 103.6, down 6.2 per cent with placer and gold quartz mines, iron mines and asbestos mines showing decreases of 18.6 per cent, 26.7 per cent and 10.9 per cent, respectively.

Primary metal industries showed a 7.3 per cent increase over the period. The index for iron and steel mills and steel pipe and tube mills increased 11.1 per cent and 10.4 per cent in January. In comparison with January 1978, they showed increases of 23.4 per cent and 17.6 per cent respectively. An increase of 21.2 per cent was recorded in non-metallic mineral products industries over January 1978, but a 13.4 per cent decline for the month of January 1979.

Table 2 shows the volume of production of Canada's leading minerals. Substantial decreases were recorded over the month of January in iron ore (53.3 per cent), lead (28.5 per cent), uranium (53.5 per cent), gypsum (37.3 per cent) and cement (36.9 per cent).

Tables 3, 4 and 5 compare Canada's non-fuel mineral trade for 1977 and 1978. Total exports in 1978 amounted to \$8,840.0 million with imports at \$3,430.5 million. Tables 4 and 5 show the percentage distribution among crude, smelted and refined and semi-manufactured products.

TABLE 1

Canada, Indexes of Real Domestic Product, by Industries Unadjusted (1971=100)

Industry or Industry Group					Percentage Changes			
	1977		1978		1978		1979	
	Dec	Jan	Dec	Jan	Jan 1978	Dec 1978	Jan 1979	Dec 1979
Real Domestic Product	127.6	120.5	133.7	127.1	5.5	-4.9		
Primary Industries								
Agriculture	40.3	44.3	43.7	55.8	26.0	27.7		
Forestry	127.2	89.5	142.9	112.9	26.1	-21.0		
Fishing and Trapping	61.2	29.4	68.0	28.9	-1.7	-57.5		
Mines, Quarries and Oil Wells	115.4	103.5	110.5	103.6	0.1	-6.2		
Metal Mines	103.5	93.2	86.0	78.4	-15.9	-8.8		
Placer and Gold Quartz Mines	71.9	69.3	79.9	65.0	-6.2	-18.6		
Iron Mines	142.2	101.8	141.0	103.3	1.5	-26.7		
Other Metal Mines	95.4	92.2	72.8	72.9	-20.9	0.1		
Mineral Fuels	129.3	110.6	130.4	124.7	12.7	-4.4		
Coal Mines	188.0	182.6	248.8	238.7	30.7	-4.1		
Crude Petroleum and Natural Gas	124.5	104.7	120.7	115.4	10.2	-4.4		
Nonmetal Mines	116.7	116.9	128.9	119.7	2.4	-7.1		
Asbestos Mines	78.8	74.2	84.5	75.3	1.5	-10.9		
Secondary Industries								
Manufacturing	117.9	115.3	132.3	130.6	13.3	-1.3		
Nondurable Manufacturing	117.0	115.8	130.6	128.2	10.7	-1.8		
Petroleum and Coal Products Industries	144.0	135.9	145.6	143.2	5.4	-1.6		
Durable Manufacturing	118.8	114.9	133.9	133.1	15.8	-0.6		
Primary Metal Industries	105.5	116.3	118.9	127.6	9.7	7.3		
Iron and Steel Mills	104.9	119.7	132.9	147.7	23.4	11.1		
Steel Pipe and Tube Mills	101.4	121.9	129.9	143.4	17.6	10.4		
Iron Foundries	105.3	117.5	112.7	118.1	0.5	4.8		
Smelting and Refining	106.1	107.9	93.2	94.9	-12.0	1.8		
Nonmetallic Mineral Products Industries	111.8	92.5	129.5	112.1	21.2	-13.4		
Cement Manufacturers	85.7	55.2	109.7	69.4	25.7	-36.7		
Ready-mix Concrete Manufacturers	68.3	51.0	84.4	63.8	25.1	-24.4		
Construction Industry	101.3	90.1	93.8	85.6	-5.0	-8.7		
Transportation, Storage, Communication	133.2	130.2	141.7	136.8	5.1	-3.5		
Electric Power, Gas and Water Utilities	183.9	194.6	193.7	198.7	2.1	2.6		
Trade	157.3	113.5	162.9	117.7	3.7	-27.7		
Finance, Insurance, Real Estate	146.2	144.4	152.9	151.6	5.0	-0.9		
Community, Business and Personal Service	129.6	130.7	133.6	135.1	3.4	1.1		
Public Administration and Defence	121.6	121.6	121.5	120.6	-0.8	-0.7		



TABLE 2

Canada, Production of Leading Minerals  
( '000 tonnes except where noted)

		1977 December	1978 January	1978 December	1979 January	Percentage Changes	
						January 79 January 78	January 79 December 78
<b>Metals</b>							
Copper		54.1	56.2 <sup>r</sup>	48.4 <sup>r</sup>	43.6	-22.4	- 9.9
Gold	kg	4 616.6	4 104.3 <sup>r</sup>	4 550.5 <sup>r</sup>	4 019.5	- 2.1	-11.7
Iron Ore		4 337.2	1 870.4	4 916.7	2 297.8	+22.9	-53.3
Lead		31.8	21.7	28.4	20.3	- 6.5	-28.5
Molybdenum	t	1 150.0	1 360.7 <sup>r</sup>	1 025.7 <sup>r</sup>	1 101.1	-19.1	+ 7.4
Nickel		18.2	16.1	5.6	6.3	-60.9	+12.5
Silver	t	107.6	100.4 <sup>r</sup>	108.5 <sup>r</sup>	110.0	+ 9.6	+ 1.4
Uranium <sup>1</sup>	t	373.5	466.2	1 028.4	478.3	+ 2.6	-53.5
Zinc		83.1	72.9	88.0	87.4	+19.9	- 0.7
<b>Nonmetals</b>							
Asbestos		120.4	86.6 <sup>r</sup>	129.5	108.4	+25.2	-16.3
Gypsum		645.9	353.1	608.5	381.3	+ 8.0	-37.3
Potash K <sub>2</sub> O		371.7	503.5	544.0	539.5	+ 7.2	- 0.8
Salt		677.9	674.7	750.5	717.8	+ 6.4	- 4.4
Cement		465.3	319.6	569.6	359.5	+12.5	-36.9
Lime		149.1	157.9 <sup>r</sup>	174.2	..	..	..
<b>Fuels</b>							
Coal		2 297.9 <sup>r</sup>	2 490.8	2 883.8	2 880.3	+15.6	- 0.1
Natural gas	million m <sup>3</sup>	8 947.0	9 781.0 <sup>r</sup>	9 066.0	9 574.0	- 2.1	+ 5.6
Crude oil and equivalent	000 m <sup>3</sup>	8 448.0	6 759.0 <sup>r</sup>	8 026.0 <sup>r</sup>	7 441.0	+10.1	- 7.3

<sup>1</sup> Tonnes uranium (1 tonne U = 1.299 9 short tons U<sub>3</sub>O<sub>8</sub>)<sup>r</sup> Revised; .. Not available

TABLE 3  
Canada's Nonfuel Mineral Trade

	Imports		Exports	
	1977	1978	1977	1978
	(\$ million)			
Crude				
Ferrous	81.7	167.7	1,063.9	782.8
Nonferrous	94.4	133.4	816.6	828.1
Industrial	172.3	228.0	1,309.8	1,415.2
Total	348.4	529.1	3,190.3	3,026.1
Smelted and Refined				
Ferrous	87.5	102.4	173.4	216.6
Nonferrous	405.9	691.1	2,910.5	3,409.1
Total	493.4	793.5	3,083.9	3,625.7
Semi-Manufactured				
Ferrous	802.3	1,020.4	896.9	1,240.9
Nonferrous	323.7	388.1	359.3	410.7
Industrial	584.5	699.4	392.8	536.6
Total	1,710.5	2,107.9	1,649.0	2,188.2
Total mineral trade <sup>1</sup>	2,552.3	3,430.5	7,923.2	8,840.0

<sup>1</sup> Excluding scrap.

TABLE 4

Canada's Nonfuel Mineral Imports

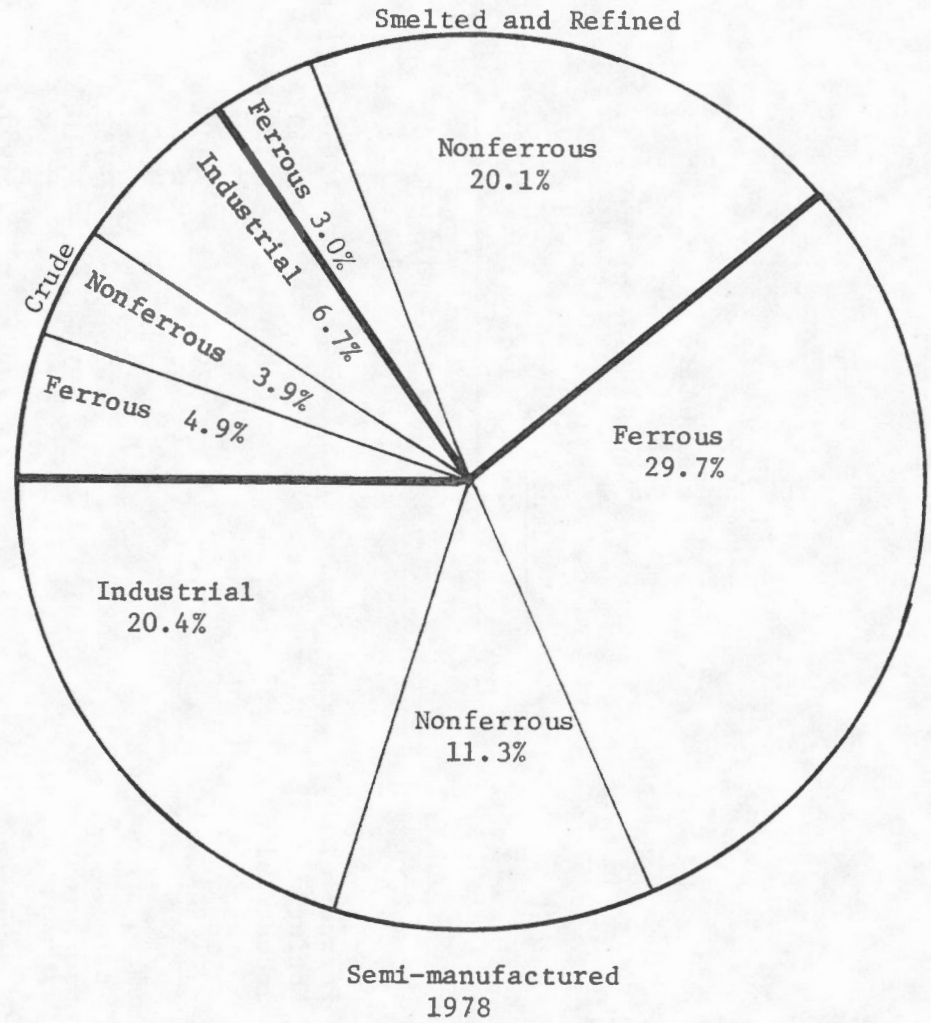
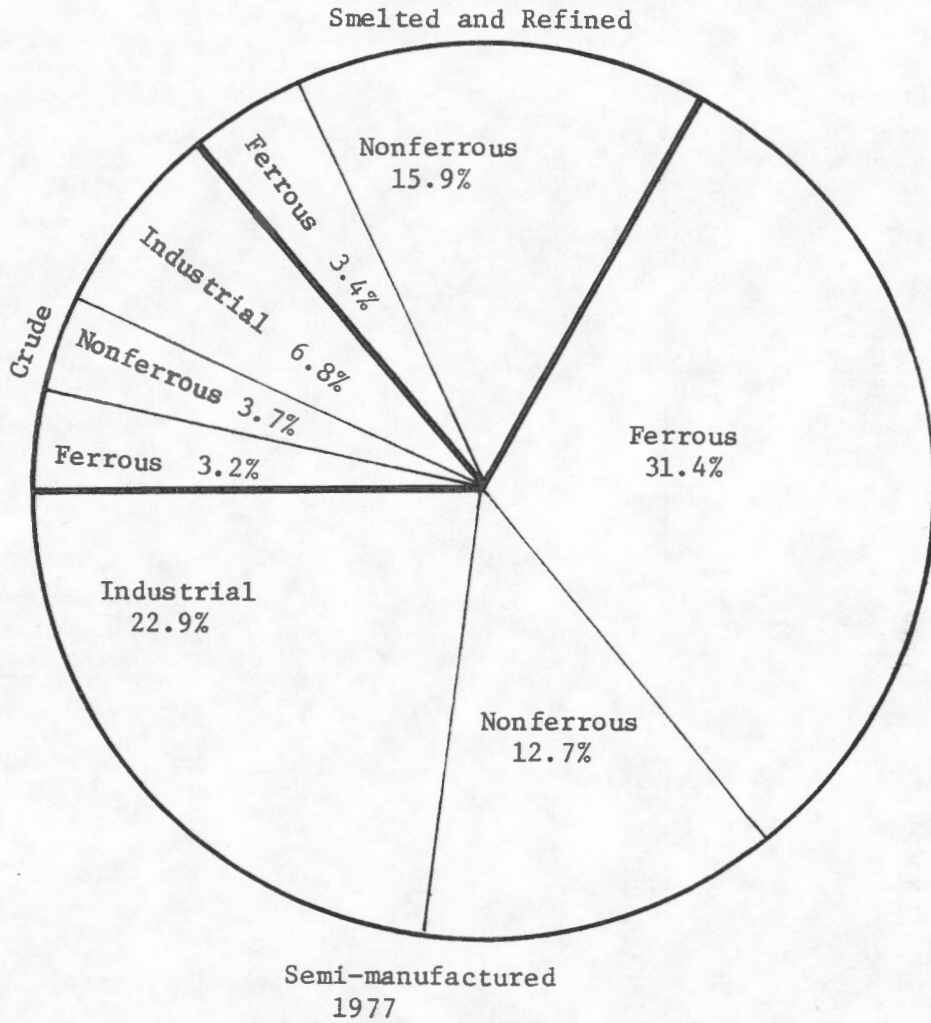
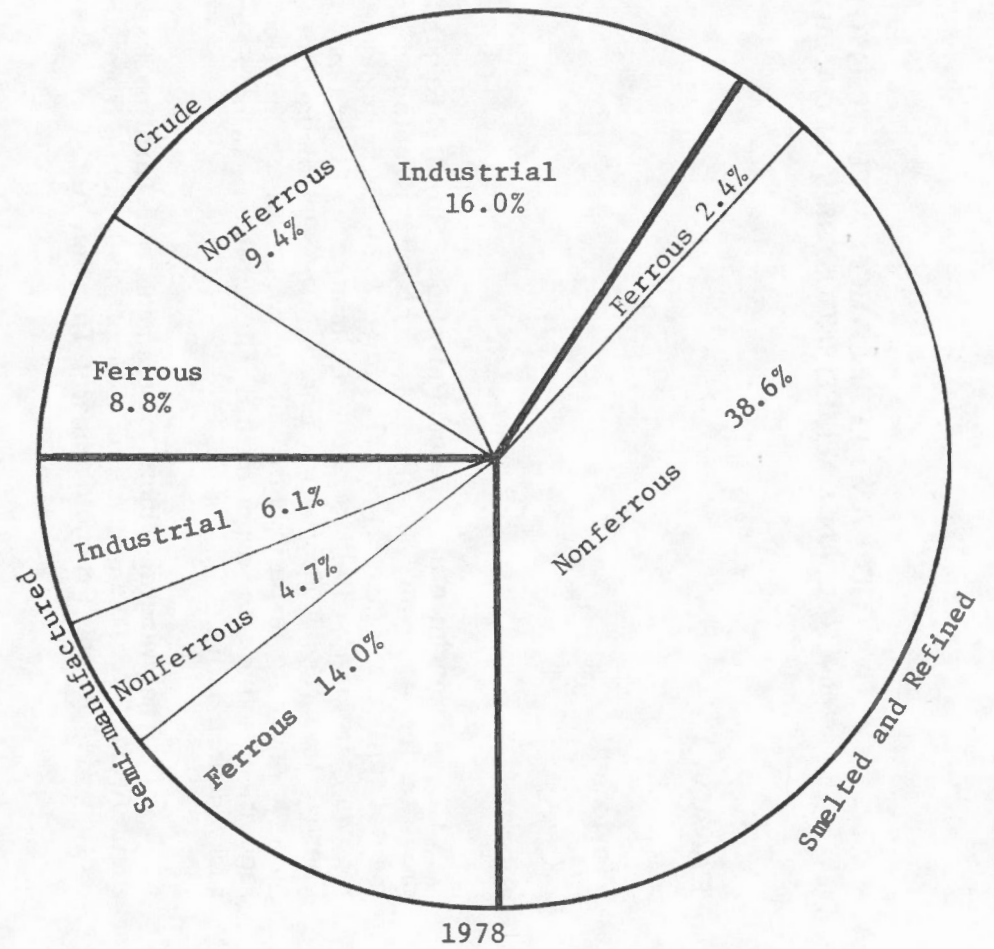
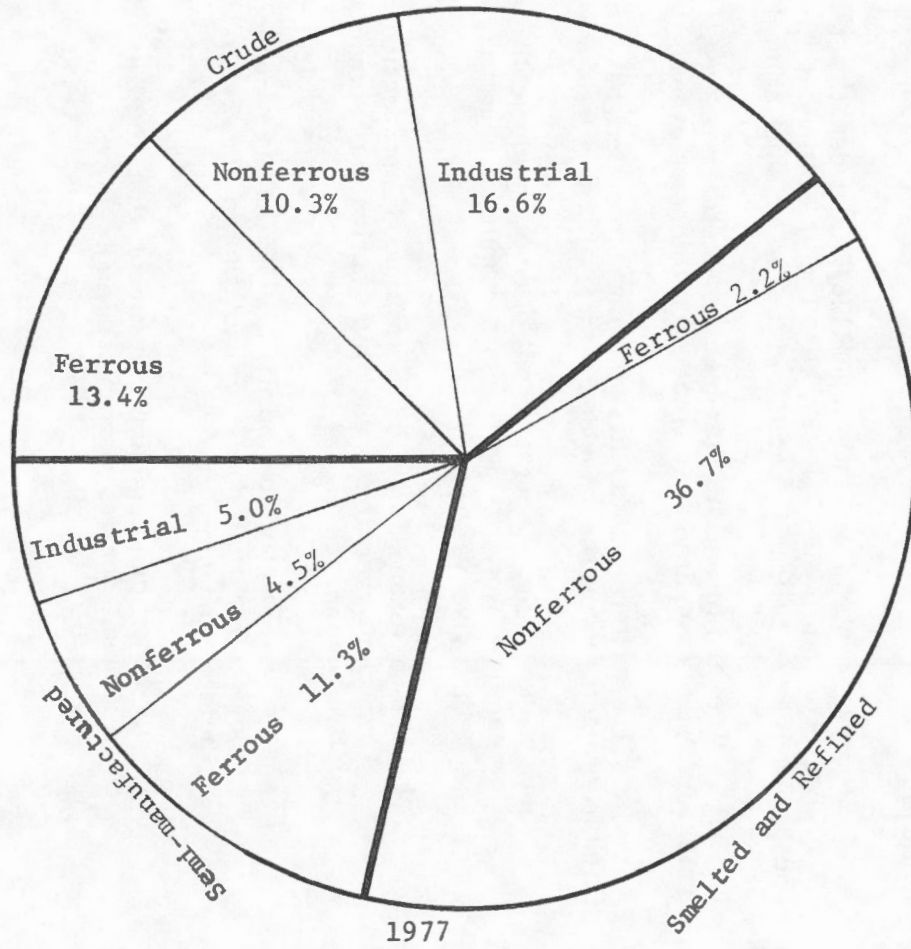


TABLE 5

Canada's Nonfuel Mineral Exports



**TAXATION AND LEGISLATION AFFECTING THE  
MINERAL AND ALLIED INDUSTRIES IN CANADA**

**CANADA**

**Provincial**

**Alberta**

**Experimental Project Petroleum Royalty Regulation, AR36/79**, provides for a royalty of five per cent on oil obtained from an experimental project. "Experimental project" means a scheme for enhanced recovery from any field or pool designated by a scheme approval by the Energy Resources Conservation Board. The Petroleum Royalty Regulations do not apply to experimental oil to which this regulation applies. This regulation applies to experimental oil obtained during February 1979 and subsequent months.

**The Mineral Rights Assessment and Taxation Exemption Regulation, AR345/77**, is amended to exempt coal rights from assessment under section 7(1) of the **Freehold Mineral Taxation Act**.

**Ontario**

The general regulation, OR126/75, under the **Mining Tax Act, 1972**, has been amended by OR89/79. The definition of "processing allowance" now relates to 'capital cost' instead of 'original capital cost'.

The definition of "processing assets" now reads 'social assets' instead of 'assets required to attract or retain employees'.

The criteria to qualify for disaggregation have been rewritten. Eligible projects under the amendment are:

- (1) a new mine separate and distinct geologically and having no common workings with another mine during the immediate preceding five years;
- (2) a mine expansion which increases ore production by at least 30 per cent over the annual high during the immediately preceding five years;
- (3) a mine, inactive on April 9, 1974 that is reopened, or if closed down after that date, remains closed for five consecutive years before reopening; or
- (4) any other major mining investment that the Lieutenant Governor in Council decides warrants disaggregation.

A new subsection requires that the mine assessor rule on the qualification of disaggregation or what the Lieutenant Governor in Council determines that disaggregation is warranted.

For purposes of depreciation under section 3(3)(K)(iii) of the Act, a new section provides that a new mine or a major expansion shall be deemed to have occurred after March 7, 1978 if the above criteria have been met. The date of completion of such projects shall be determined by the Minister.

In appraising the value of minerals, the mine assessor shall deduct the cost of processing. The restriction to cost of processing in Canada no longer applies.

Section 4(1)(ba) has been rewritten to allow as a deduction that proportion of the operating and maintenance expenses directly related to social assets in Ontario that is directly attributable to processing in Canada after deducting all related revenues, to the extent that such expenses are not otherwise deductible under the Act.

The allowance for depreciation (Sec. 4 (1)(e)) has been rewritten to delete the 5 per cent minimum and the restriction that processing must be completed in Canada.

A new subsection provides that, where processing assets or assets for transportation are used outside of Canada, the depreciation allowed on those assets shall be prorated on the basis of the amount of ore or mineral product handled.

A new subsection provides that, notwithstanding clause (e), no allowance for depreciation on a social asset may be deducted. Subsections 4(4) and (5) have been rewritten to redefine the undepreciated capital cost of processing assets.

A new section 4a prohibits deductions for the cost of processing or transporting uranium outside Canada.

A new section 4b details how transfers of depreciated assets between persons not dealing at arm's length are to be handled.

A new subsection 5(5a) provides that for taxation years ending on or after December 31, 1978, where a processing allowance is less than 65 per cent of the combined profit for the current year, processing allowance not previously claimed by reason of the 65 per cent limit in the three immediately preceding taxation years may be allowed, provided that the current year's allowance is first fully deducted.

Subsection 6(2) concerning disaggregation is rewritten to provide for apportioning profit where a new mine or a major expansion is involved.

## REGIONAL PROFILES

## New Brunswick

## Value of Mineral Production

The value of mineral production in 1978 amounted to about \$306.3 million, a 5.8 per cent increase over the previous year's figure of \$289.4 million. Zinc, lead, silver and copper were the province's leading commodities accounting for almost 80 per cent of total value. In the nonmetals, cement, peat moss and coal were the leading commodities. The province was the largest producer of antimony and bismuth, the second largest producer of peat moss and the third largest producer of lead, zinc and silver in Canada.

## Economic Indicators, 1978/79

		Amount	Change Over Previous Year	Proportion of Canada
Population, July 1978	'000	695.6	0.2	2.9
Labour force, Jan. 1979 seas. adj.	'000	277.0	3.0	2.5
Employment, Jan. 1979, seas. adj.	'000	245.0	4.3	2.4
Unemployment, Jan. 1979 seas. adj.	'000	32.0	-5.9	3.6
Employed in mining Oct. (est.)	'000	3.0	-3.2	2.0
Average weekly wages in mining and milling Oct. 1978 (est.)	\$	277.46	11.3	70.8
GPP (1977 preliminary)	\$000,000	3,975.0	9.1	1.9

## Principal Mineral Production, 1978 (preliminary)

Commodity	Value (\$'000,000)	Change 1977-78 (per cent)	Proportion of Canada ((per cent)
Zinc	131.50	-10.8	16.6
Lead	57.54	49.3	23.0
Silver	35.43	47.4	14.8
Copper	17.57	-4.6	1.6
Cement	15.79	7.3	3.3
Stone	10.15	6.4	3.2
Peat moss	8.73	3.3	29.0
Coal	8.45	35.2	1.2
Sand and gravel	6.60	7.5	1.8
Antimony	5.60	-15.8	73.1
Other	8.90	-	-
Metallics	250.33	4.9	4.5
Nonmetallics	10.37	3.3	0.7
Fuels	8.54	34.8	0.1
Structural materials	37.02	7.5	2.7
Tota., all minerals	306.26	5.8	1.6

- Nil.

### CURRENT DEVELOPMENTS

#### Uranium

Last fall the discovery of uranium mineralization at Consolidated Durham Mines & Resources Limited's Lake George antimony mine spurred exploration activity within the province.

A joint venture between Consolidated Durham and Eldorado Nuclear Limited is being negotiated. Uranium production will begin if sufficient ore-grade reserves are found to justify the project.

#### Potash

Potash Company of America will have invested about \$105 million in its potash mine (near Sussex) before production begins late in 1981 or early 1982. The operation will employ about 300 people.

International Minerals & Chemical Corporation (Canada) Limited of Toronto has sold its mining rights to a potash and salt property near Salt Springs to Denison Mines Limited. At the height of development and construction, 600 people will be employed. When production starts in 1983, 400 permanent jobs will be created.



## Nova Scotia

## Value of Mineral Production

The value of mineral production in 1978 was \$203.7 million, up 27.8 per cent over the previous year's figure of \$159.4 million. The prime contributing factor in this substantial rise was the approximately 27 per cent increase in the value per tonne of coal, the province's main mineral resource. In 1978 coal accounted for 55.8 per cent of the province's value of mineral production (up from 48.7 per cent in 1977). Nova Scotia was the country's third largest coal producing province in 1978 accounting for 15.5 per cent of national coal output (compared to 12.7 per cent in 1977). In 1978, Nova Scotia was the largest producer of barite and gypsum and second largest producer of salt.

## Economic Indicators, 1978/79

		Amount	Change Over Previous Year (per cent)	Proportion of Canada
Population, July 1978	'000	841.6	0.2	3.6
Labour force, Jan. 1979 seas. adj.	'000	357.0	7.5	3.2
Employment, Jan. 1979, seas. adj.	'000	316.0	6.4	3.1
Unemployment, Jan. 1979 seas. adj.	'000	41.0	17.1	4.6
Employed in mining Sept. 1978	'000	4.8	2.0	3.9
Average weekly wages in mining and milling Oct. 1978	\$	287.12	5.5	73.4
GPP (1977 preliminary)	\$000,000	5,560	7.7	2.6

## Principal Mineral Production, 1978 (preliminary)

Commodity	Value (\$'000,000)	Change 1977-78 (per cent)	Proportion of Canada (per cent)
Coal	113.60	46.4	15.5
Gypsum	23.65	13.6	64.3
Salt	19.23	10.3	18.5
Sand and gravel	18.49	1.5	4.9
Cement	14.34	27.5	3.0
Stone	7.59	9.7	2.4
Clay	4.72	3.8	4.4
Barite	1.05	-36.3	56.8
Peat	0.72	0.9	2.4
Quartz	0.32	1.6	1.6
Metallics	-	-	-
Nonmetallics	44.98	9.9	2.9
Fuels	113.60	46.4	1.0
Structural materials	45.14	10.3	3.3
Total, all minerals	203.71	27.8	1.0

CURRENT DEVELOPMENTS

Esso Resources Canada Limited's \$28 million lead-zinc mine at Gays River will begin commercial production in late 1979.

Also scheduled to begin operating this year is Barymin Explorations Limited's Yava lead mine near Sydney. Planned production is 1,000 tons per month of lead concentrate.

Feasibility studies regarding the Donkin coal mine are expected to be finished within the next couple of months.

Nova Scotia is currently building the first of four possible 150-megawatt, coal-fired electrical generating units at Lingan in Cape Breton. The project will be finished late in 1979. With the completion of the second unit in 1981, the province's oil dependence will be reduced significantly.

An explosion on February 24, 1979, at Cape Breton Development Corporation's (DEVCO) No. 26 colliery killed eleven miners and seriously injured five others. This was the worst mining disaster in the province for 20 years. A special investigation team concluded that methane gas and coal dust were ignited by a spark from the shearing machine.

In 1978, the Nova Scotia Department of Mines issued 1,634 mineral exploration licences to 160 prospectors, mining and exploration companies. In total more than 71,000 claims were filed covering 2.9 million acres. Exploration expenditures amounted to about \$6 million.

## METALLIC MINERALS AND PRODUCTS

### Aluminum

Canadian primary aluminum output in 1977 was 983 266 tonnes, compared with 633 430 in 1976. The operations of the Aluminum Company of Canada, Limited's (Alcan) smelters returned to normal following the labour strike settlement in February 1977. Canada produced 7.0 per cent of the noncommunist world's primary aluminum and ranks as the fifth largest producer. World production of primary aluminum increased by 8.7 per cent, from 13.1 million tonnes in 1976 to 14.2 million tonnes in 1977. Canadian exports, of aluminum, mainly ingot form (including some fabricated materials), were 698 800 tonnes, a 30 per cent increase over the 536 132 tonnes exported in 1976. The value of the 1977 exports of all sources was \$812.4 million, compared with \$497.4 million in 1976.

Two companies operate primary aluminum smelters in Canada; Alcan and Canadian Reynolds Metals Company, Limited. Alcan's Canadian smelters produced 826 500 tonnes of mining aluminum, compared with 492 600 tonnes in 1976. In May, Alcan announced that it would proceed with the first 57 200-tonne phase of a planned 171 600-tonne Grande Baie smelter complex in the Saguenay region of Quebec. Ground clearance at the new site was completed in 1977. Canadian Reynolds production in 1977 was 156 800 tonnes, an increase of 13 per cent from the 138 400 tonnes produced in 1976.

Canada's aluminum industry is totally dependent on the import of bauxite and alumina. No economic deposits of bauxite are found in Canada. Bauxite is also imported for the production of alumina (aluminum oxide), an intermediate product which is reduced in an electric furnace to aluminum metal. Approximately 4.5 tonnes of bauxite are refined to 2.0 tonnes of alumina, which in turn are smelted to obtain one tonne of aluminum. \*cp<sup>8,10</sup> ALCAN\*cp<sup>9</sup>, 10 s refinery at Arvida, Quebec, the only alumina refinery in Canada, supplies the company's four smelters with alumina. The process consumes from 7 to 8 kWh per 454 grams of aluminum produced. This high consumption of electric power explains the proximity of Canada's aluminum smelters to large hydroelectric power sources.

Canada's major import sources for bauxite ore are Guinea, Surinam, Guyana, Sierra Leone and Trinidad-Tobago. Suppliers of alumina are Australia, Jamaica, West Germany, United States and France. Export markets for Canadian primary aluminum are the United States, Japan, South Korea, Hong Kong, Thailand, United Kingdom, Brazil, Malaysia and Turkey.

The International Bauxite Association (IBA), was formed to further the interests of the bauxite-producing nation members. The producers' group was formally instituted at Conakry, Guinea in March 1974 by Australia, Guinea, Guyana, Jamaica, Sierra Leone, Surinam and

Yugoslavia. In November 1974, the Dominican Republic, Ghana and Haiti became members and Indonesia joined in 1975. Canada, a major producer and exporter of primary aluminum, is vitally interested in the activities and policies of the IBA.

### Copper

In March copper prices continued to rise. London Metal Exchange (LME) prices for cash wirebars rose from the equivalent of 94 to 96 U.S. cents a pound. U.S. producer prices ended the month at 99 cents to \$1.03 up 5-7 cents a pound. Canadian prices for wirebars rose during the month from the \$1.14 to \$1.20 a pound range to \$1.17 to \$1.20 a pound.

Stocks of copper continued to fall. At month-end LME warehouse stocks were 254 450 tonnes, compared with 290 300 tonnes at the end of February. In the same period, COMEX stocks fell from 143 740 tonnes to 122 980 tonnes.

Canada's largest copper producer, Inco Limited continued to be affected by a strike at the Sudbury operations at the end of March. The strike, which began in September 1978 has totally shut down Inco's copper production. An Ontario government mediator held meetings with Inco and the union late in March in an attempt to restart the bargaining process. A total of 11,700 members of the United Steelworkers of America are involved in the strike.

The agreement by Noranda Mines Limited to sell the Bell copper mine to Zapata Granby Corporation was terminated during March when FIRA approval had not been obtained by the twice-extended agreement deadline. Noranda refused a further extension and stated that in the new improved copper market circumstances consideration would be given to expansion of the mine.

At Noranda's Montreal copper refinery, contract negotiations with the United Steelworkers union and the company were still in progress at month-end. The union can legally strike any time after midnight April 3, 1979. This is Canada's larger of two copper refineries with a capacity of 400 000 tonnes a year. The other refinery is owned by Inco Limited and is closed due to that company's Sudbury strike.

Noranda has agreed to purchase the Lakeshore mine in Arizona from Hecla Mining Company and El Paso Natural Gas Company. Operations at Lakeshore have been suspended since September 1977. The Lakeshore concentrator has a capacity of 10 000 tonnes a day and copper production capacity is 27 000 tonnes a year.

The Highmont mine is likely to be British Columbia's next new copper mine. Teck Corporation of Vancouver announced at the 1979 annual meeting that it will decide within a month whether to go ahead with mine development. The mine is adjacent to the Lornex mine in the Highland Valley. Capital costs are estimated at \$150 million. Annual production would be 20 000 tonnes of copper and 3 000 tonnes of molybdenite.

Madeleine Mines Ltd. of the Gaspé area of Quebec will probably reopen its Ste. Anne des Monts mine in July 1979. The mine was closed in November 1976 due to low copper prices.

The UNCTAD Sixth Preparatory Meeting on copper was held in Geneva at the end of February 1979. This meeting and related development agreement for creation of a Common Fund are discussed in special items later in this report.

Japan decided during February to reduce the copper stockpile held in that country by about 30 000 tonnes to about 48 000 tonnes.

### Gold

The International Monetary Fund (IMF) held its thirty-first gold auction on March 7, 1979 under the bid price method and awarded 470,000 fine ounces of gold to successful bidders at prices ranging from \$241.28 (U.S.) a troy ounce to \$243.26 (U.S.) an ounce and averaging \$241.68 (U.S.) an ounce. The average price at the thirtieth gold auction on February 7, 1979 was \$252.53 (U.S.) an ounce. The afternoon fixing price on the London Gold Market on March 7 was \$242.25 (U.S.) an ounce. Competitive bids were received for a total of 1,534,000 ounces. Awards were made to 17 successful bidders out of a total of 18 bidders submitting competitive bids. The successful bidders were mainly European banks and bullion dealers.

There were no non-competitive bids submitted by eligible member countries.

On March 20, 1979 the Treasury Department of the United States held its eleventh auction under the new sales program and awarded 1,500,100 troy ounces of gold to successful bidders at an average price of \$240.90 (U.S.) an ounce. Awards of 1,000,000 ounces of high grade gold stock were made at prices ranging from \$240 (U.S.) an ounce to \$244 (U.S.) an ounce and averaging \$241.30 (U.S.) an ounce. Awards of 500,100 ounces of lower grade gold stock were made at prices ranging from \$238.74 (U.S.) an ounce to \$242.03 (U.S.) an ounce and averaging \$240.09 (U.S.) an ounce. The average gold price at the tenth auction held February 22, 1979 was \$252.06 (U.S.) an ounce. The afternoon fixing price on the London Gold Market on March 20 was \$242.10 (U.S.) an ounce. The major purchasers of gold were European banks and bullion

dealers but significant purchases were made by some North American banks and gold dealers. Also, some significant purchases were made by U.S. industrial consumers. The Dresdner Bank of West Germany was the largest purchaser, being awarded 274,000 ounces. Awards were made to 20 successful bidders. In all, bids were received for 2.9 million ounces.

Citibank N.A. said in New York it will begin selling gold certificates on April 2, 1979. The bank said the gold certificates will be sold in amounts of \$1,000 or more, compared with a \$2,500 minimum required elsewhere. Once an initial purchase is made, investors can add certificates in amounts as low as \$100. The amount of gold purchased will be determined by obtaining competitive quotes from bullion dealers, with a maximum commission fee of 3 per cent to be deducted prior to the purchase. The fee declines on a sliding scale, depending upon the size of the transaction. Citibank said it will store gold for investors without charge for the first calendar year after purchase. After that, an annual fee of 0.5 per cent of the gold's value will be charged. It said it will sell all or part of the gold represented by a certificate at a price reflecting competitive dealer bids less a 1 per cent sales fee. If a customer wishes to take possession of the gold, Citibank said it will deliver the metal upon surrender of the certificate and payment of a 1 per cent delivery charge.

East Rand Proprietary Mines Ltd. of South Africa said a fire at its gold mine on March 27 caused about 1 350 tonnes of lost ore production. The company said in a statement released March 28 that it expects to lose about 450 tonnes of ore production per day until the area of the mine closed by the fire is reopened.

The Johannesburg stock exchange will initiate and operate an open market in krugerrand gold coins, where prices and turnover will be published daily. This news was contained in the 1979/80 budget speech delivered by South African finance minister Owen Horwood.

### Lead

The lead price established new highs in March. In North America producers moved the price up four cents to 48 cents (U.S.) a pound at mid-month while in Canada the price jumped 4.5 cents to 54.5 cents (Cdn.) a pound. The London Metal Exchange (LME) spot price peaked at £611 a tonne (56.6 cents U.S. a pound) on March 12 but weakened thereafter to close the month at 54.3 cents (U.S.) a pound (£578 a tonne). LME inventory levels eased during the month as the increased availability of secondary material resulted in a 2 525 tonne increase to 17 750 tonnes.

Lead supplies remained tight in North America. Ozark Lead Co. operations in Missouri were struck on March 1 by the United Steelworkers of America, Local 994. Ozark produces about 60 000 tonnes a year of lead in concentrate, most of which goes to ASARCO Incorporated's Glover smelter, also in Missouri.

### Mercury

European mercury prices continued their upward trend in March, having risen from a level of about \$173 to \$183 a flask in equivalent \$U.S. at the beginning of January 1979 to \$248 to \$250 by the end of March. A combination of better demand and producers withholding supplies from the market in anticipation of higher prices were the main reasons for the rise in prices. Added to these pressures was the uncertainty over how well the Chinese producers will meet their contracted schedules in future months. The Metals Week New York mercury price, which remained steady in February at about a \$U.S. range of \$200 to \$210 a flask rose to \$220 to \$240 a flask by late March.

At its March 13, 1979 offering of mercury the United States General Services Administration (GSA) sold 1,000 flasks. The entire amount was sold to Minemet Metals, Inc., a metal trading company at New York. Each month GSA offers a maximum of 1,000 flasks of mercury for sale from its surplus stocks. These stocks do not require Congressional authorization prior to being sold and are exclusive of the 191,304 flasks of mercury contained in the U.S. strategic stockpile, none of which may be disposed of without Congressional approval.

### Silver

Early in March, Placer Development Limited announced the decision to bring into production the Sam Goosly silver-copper-gold-antimony property, near Houston, British Columbia, at an estimated cost of \$85 million. Placer Development holds a 70 per cent interest in Equity Silver Mines Limited, a new company formed to own the property. The remaining 30 per cent of the new company is owned by the shareholders of Equity Mining Corporation, a private company. Construction of the project is expected to begin in April 1979 with completion scheduled for July 1980 and production expected to begin in October 1980. According to press reports it is thought that the mine's output of concentrates will be shipped to Japanese smelters. Mineable ore reserves are estimated at 28 million tonnes averaging 106.3 grams of silver and 0.96 gram of gold a tonne, 0.384 per cent copper and 0.82 per cent antimony. Capacity of the concentrator, which will operate seven days a week, will be 4 500 tonnes of ore a day. With the concentrator operating at full capacity annual metal content of the concentrates produced is projected to be 177 300 kilograms (5.7 million troy ounces) of silver, 339 kilograms (10,900 ounces) of gold, 6 400 tonnes of copper and 1 700 tonnes of antimony. It is estimated that the mine will employ 200 people with an annual payroll of about \$4 million.

Dankoe Mines Ltd. continued work on its underground development program at its Horne silver mine near Keremeos, British Columbia. The program has been assisted by a \$140,000 grant from the B.C. Government. These funds provided for wages, enabling the company to hire about 14 additional workers for underground work for seven months. In the

course of the program, the lower adit at the 533-metre level was completed at a length of 1 340 metres. The program includes drifting and raising and was expected to be completed at the end of March at which time it was thought there could be a potential of 160 000 tonnes of ore developed. The company's concentrator is currently processing about 135 tonnes of ore a day, grading about 275 grams of silver a tonne. A total of 42 employees, including staff and hourly, work at the operation.

Canadaka Mines Limited, a wholly owned subsidiary of St. Joseph Explorations Limited, plans to carry out a program of surface drilling on the Gillies Limit silver property of Cam Mines Limited, two miles south of Cobalt, Ontario, which it holds under option. Canadaka has been carrying out considerable geophysical work in the area and apparently has come up with a strong conductor that extends on to the Cam Mines ground from adjoining claims of Canadaka. St. Joseph Explorations Limited is wholly owned by St. Joe Minerals Corporation of New York.

In January 1979, Representative Silvio Conte reintroduced a bill in the United States House of Representatives to dispose of the entire quantity of silver, 4 338.9 tonnes (139,500,000 ounces) contained in the nation's strategic and critical materials stockpile, all of which is surplus to the stockpile goal of zero. The bill is similar to others Representative Conte has repeatedly introduced in recent sessions of the U.S. Congress without success. It has already been sidetracked without action. Then about mid-March the U.S. General Services Administration (GSA) asked the Congress to authorize the sale of 466.55 tonnes (15,000,000 ounces) of silver from the strategic stockpile in fiscal year 1980 which begins October 1, 1979. Both the House and the Senate must give their approval before GSA can dispose of any such stockpiled silver.

In December 1978 St. Joe Minerals Corporation of New York said its subsidiary, Compania Minera San Jose Inc. had established the presence of a gold-silver-copper orebody at an elevation of about 427 metres in the Chilean Andes, some 500 kilometres northeast of Santiago. The deposit is known as the El Indio and is said to contain about 1.55 million tonnes averaging 16.1 grams of gold and 253.7 grams of silver a tonne in addition to 2.25 per cent copper. Late in March, Fluor Corporation announced that it was selected as the engineering, procurement and construction contractor to develop the El Indio project. Fluor will perform the work with its Chilean associate, Fluor-Briones Ltda. St. Joe Minerals had previously announced an investment of \$80 million to develop the deposit. The construction program will take about two years and will include a 1 270 tonne-a-day concentrator to produce gold, silver and copper concentrates, a cyanide plant to produce gold and silver bullion, and a roaster to remove impurities. Fluor said annual production is expected to be 15 150 tonnes of copper concentrates containing 44 per cent copper, 377.1 grams of gold and 2 488.5 grams of silver a tonne, and bullion containing about 15 550 kilograms of silver and 2 240 kilograms of gold.



## INDUSTRIAL MINERALS AND PRODUCTS

### Asbestos

#### Asbestos Sub Group - Canada-EEC Minerals and Metals Working Group

Interdepartmental meetings continued to outline details concerning the priority issues being defined for cooperative discussions. The emerging first priority is one of fibre definition and measurement methods. A group of experts met to discuss and formulate a Canadian position with regard to the harmonization of fibre definition and to discuss the need for research into techniques of measuring fibre concentrations in the environment and workplace.

Other subjects that may be included for cooperative study are: epidemiological research, emission control techniques and economic implications, research reference catalogues and how data may be made more available to both sides, the possible exchange of scientists and the organization of workshops and a World Conference, industrial cooperation, new safe product research and harmonization of labelling and transportation practices.

### Portland Cement

The United States International Trade Commission (ITC) determined, in a 3-1 vote September 19, 1978, that imports of portland cement from Canada at less than fair value are not injuring the industry in the United States. The petitioner (The Flintkote Company) has appealed the ruling and instituted other legal actions. In the interim, Genstar Limited has purchased 20 per cent of Flintkote stock and has sold Miron Company Ltd. one of the Canadian cement producers accused in the antidumping investigation.

At its St. Basile plant, 50 kilometres northwest of Quebec City, Ciment Quebec Inc., will install the first Fuller suspension preheater with precalciner flash furnace system in Canada. The 2,000 mtpd line will replace an existing wet process plant of approximately one half that capacity.

### Potash

Denison Mines Limited announced the purchase of the mining rights to the New Brunswick potash property of International Minerals & Chemical Corporation (Canada) Limited (IMCC).

IMCC explored the property during the last few years (?? exploratory holes) and outlined a deposit of sufficient tonnage and grade to permit a production decision. Denison plans to spend more than \$150 million over the next four years to bring the mine into production by 1983 at a rate of about 1.0 million tonnes a year of product (KC1).

The company said that about 600 people would be employed during the construction period and about 400 on a permanent basis for production. The company will pay a 6.25 per cent provincial royalty on potash for 10 years, on the basis of a production schedule of 630 000 to 1 000 000 tonnes. Royalty will be paid starting in April 1981 on the minimum 630 000 tonnes if a production decision is not made and from 1983 if a positive production decision is made. For the first few years the royalty will be based on the maximum published list price by IMCC in Canada or in the U.S.A.

Byproduct salt will have a royalty of 1 per cent of the selling price. The timing of production for 1983 fits well with expected world demand.

Development at the Potash Company of America mine at Sussex continues to be almost on schedule and production should start in the fall of 1981.

Potash markets are strong with prices advancing by more than 20 per cent from the beginning of the year. Standard grade was quoted at \$53 per tonne of product (60 per cent  $K_2O$ ) at the end of March compared to \$43 at the beginning of January.

Rail car shortage, particularly for shipments to the United States is reported to be the worst ever, with some deliveries this month deferred by as much as six weeks.

## Sulphur

Sulphur supplies tightened during the latter half of 1978 as a result of a world stagnant production situation which began in 1974. A deepening short supply is anticipated over the next four or five years since the major world suppliers have little scope for expansion in the short term.

On March 12 Cansulex, the offshore sulphur marketing body for a consortium of sulphur producers, declared **force majeure** on April and May shipments and earlier, Poland had declared **force majeure** on shipments to Morocco for a brief period. The two countries account for almost 70 per cent of world exports of sulphur and as such, these recent supply interruptions could be a harbinger of a more serious shortage than was anticipated. Cansulex states, however, that shipments will return to normal in June and the shortfall perhaps can be made up in the latter half of the year. With the shortage of railcars in North America and the limited capacity of the transportation and handling system, a less assuring outlook seems likely.

Since 55 per cent of all sulphur consumption is for the manufacture of phosphate fertilizers, a four to five year sulphur shortage could seriously affect world food production. Projecting phosphate requirements at 4 per cent to 5 per cent up to 1985, indicates cumulative shortfall in the period 1979-85 of between 14 and 24 million tonnes  $P_2O_5$  equivalent.

This shortage will be borne almost entirely by Asia, Africa, South America and Australia and represents 17 to 27 per cent of this group's requirement, assuming uniform growth among regions. In reality, a higher growth tendency is likely in the group and for individual countries like India, the problem could reach famine proportions.

Further aggravating the situation are the sharp price increases likely for sulphur and fertilizers under these conditions and political strife in Iran which is an important supplier of sulphur to India.

## MINERAL FUELS AND PRODUCTS

### Coal

Kaiser Resources Ltd. of Vancouver recently resumed shipments of coal on a Mexican contract that had been interrupted for more than a year. The amended contract provided for delivery of 285 000 tonnes of coal between 1979 and 1982. Deliveries on the original contract had been suspended in 1977 as a result of a decision to use domestically produced coal. Approximately one third of the original 690 000 tonnes contract had been delivered when shipments were interrupted.

During March, Fording Coal Limited of Calgary announced that it had started preliminary environmental and socio-economic studies on three thermal coal properties in southern Alberta. The properties are near Red Deer, Brooks and Lethbridge and would involve surface mining except for the last mentioned property which would use underground mining. The initial studies will provide the information required for preliminary disclosure to the provincial government. Preliminary disclosure is the first step in a review process leading to a formal application for mine development. Actual mine development would depend on obtaining markets and governmental approval.

A British Columbia Cabinet committee recently approved in principle the Elk River Coal Project of Elco Mining Limited. The project is owned by Elco Mining Limited (a corporation of six European steel mills) and by The Steel Company of Canada, Limited, Home Oil Company Limited and by Scurry-Rainbow Oil Limited. Development of the \$500 million, 4 million tonnes per year proposed open-pit mine will depend on development of long term contracts and final governmental approval.

## Uranium

The government of Australia has approved the development of the Narbarlek uranium deposit by Queensland Mines Limited. Development is expected to start in May and will take about 18 months. Production will be at a rate of 920 tonnes uranium per year over an eight to ten year period. Shikoku Electric Power Co. and Kyushu Electric Power Co. will, reportedly, provide \$(AUS) 56.25 million and \$(AUS) 18.75 million, respectively, toward financing the project.

Both the government of Australia and the state government of Western Australia have given their approval for the development of the Yeelirrie deposit by Western Mining Corporation Limited. Western Mining has appointed Kanematsu-Gosho Ltd. of Japan as its selling agents for 850 tonnes U, representing 40 per cent of the planned output of 2 125 tonnes U per year. The remaining output will be shared by the two minority partners in the project, Esso Exploration and Production Australia Inc. and Urangesellschaft mbH and Co. whose proposed equity interest (15 per cent and 10 per cent, respectively) is currently under review by Australia's Foreign Investment Review Board. It is envisaged that, following pilot plant studies, construction of the main plant will commence in 1982 for start-up in 1985.

Draft environmental impact statements have been submitted to the Australian government with respect to both Pancontinental Mining Limited's Jabiluka project, and Noranda Australia Limited's Koongarra project. These companies have still to reach satisfactory arrangements with the aboriginal people on whose land the projects are located.

## SPECIAL ITEM

### Sixth Preparatory Meeting on Copper

The Sixth Preparatory Meeting on Copper in the UNCTAD Integrated Program for Commodities was held in Geneva during the period February 26 - March 2, 1979.

Governments were anxious that enough progress should be made at the meeting to prevent copper from becoming a political issue at UNCTAD (V) to be held in May 1979. Following three years of little net progress in the talks, a number of countries felt it necessary to shift their position to ensure this progress.

As anticipated, the U.S. presented a paper on a price stabilization scheme with an international buffer stock as the sole instrument of stabilization. Export and production controls were excluded from the scheme on account of the associated economic, legal and administrative problems, and because they would inhibit defence of a price ceiling. The paper was general in nature and contained no information on the econometric work on which the scheme is based. Prices would be stabilized around a long term trend with semi-automatic adjustment to reflect shorter term market price trends and buffer stock activity. Buffer stock size was seen to be at least but not much greater than one million tonnes. The scheme represents a major policy shift on the part of the U.S. Although it was stated to be an approach only and not a commitment to negotiate an agreement on copper, the U.S. delegation defended the scheme strongly during subsequent discussions and appeared to be firmly committed to it.

Faced with the policy change on the part of the U.S. and the unwillingness of most other countries to oppose the idea of a buffer stock scheme, the developing copper exporting countries were able to see substantial progress towards acceptance of their goal: early negotiations leading to an ICA for copper with a buffer stock scheme as its central element. As a result there was a less confrontational atmosphere than at many previous meetings. There was also open and useful discussion of the real problems of the copper market.

Aside from the U.S., consuming countries made very little contribution to the meeting. After its opening statement, the EEC delegation made no further substantive interventions, being noncommittal on the U.S. buffer stock scheme and professing open-mindedness on all other measures. Individual member countries of the EEC remained essentially silent throughout the meeting. Japan deferred comment on the U.S. scheme suggesting that it be referred to an expert group for further study.

The Canadian delegation stressed that preparatory work done to date has been mostly descriptive with inadequate emphasis on analysis on the problems of the copper market. The focus of this work was too narrow with undue attention to buffer stock schemes. Canada expressed willingness to take part in studies of other measures or combinations of measures referred to in UNCTAD resolution 93 (IV), such as removal of impediments to trade, export earnings stabilization, improved information flows, coordinated national stocks and market development schemes.

The Canadian delegation questioned the effectiveness of the relatively small buffer stock in the U.S. scheme in light of the results of the CRA analysis carried out in 1977, and called attention to the enormous cost of even such a small buffer stock. Its anticipated stimulation of a supply response from producers which could aggravate market problems in periods of oversupply was also raised.

A clear consensus emerged that a further period of expert study was needed to analyze in detail the implications, effectiveness, costs and benefits of the measures which had been discussed. It was agreed that an intergovernmental group of experts on copper (IEGC) should meet for a two week period, no later than July 1979, to report back to a Seventh Preparatory Meeting on Copper, to be held no later than September 1979.

The topics for study by the IEGC include an international buffer stocking scheme; internationally coordinated national stocks; export controls; production controls; systematic international consultation; price ranges; stock sizes; financial requirements; scrap and co-production; other elements.

The Sixth Preparatory Meeting carried the participants closer to a negotiating conference and closer to an international commodity agreement on copper. The idea of using some form of stocking arrangement as an element of such an agreement now has wide support and few vocal opponents. It is almost the universal view however that a stocking arrangement alone is not an adequate basis for an agreement.

## SPECIAL ITEM

### UNCTAD COMMON FUND

The third negotiating session on the UNCTAD Common Fund was held in Geneva from March 12-20, 1979. This session concluded with agreement on the Fundamental Elements of the Common Fund (see below). Accordingly, the conference has adopted a resolution approving the text.

The next phase of the negotiations will consist of drafting and negotiating the detailed articles of agreement. Conflicts of view on a number of unresolved items could extend the negotiations well into 1980.

### FUNDAMENTAL ELEMENTS OF THE COMMON FUND

#### I. Objectives and Purposes

##### A. Objectives

1. The Common Fund would be established as a new entity and an effective and financially viable institution to serve as a key instrument in attaining the agreed objectives of the integrated programme for commodities as embodied in UNCTAD Resolution 93(IV). It would facilitate the conclusion and functioning of international commodity agreements and arrangements (ICAS), particularly on commodities of special interest to developing countries.

##### B. Purposes

###### (i) Stocks

2. The Common Fund through its first window would contribute to the financing of international buffer stocks and, under modalities to be determined, internationally co-ordinated national stocks, within the framework of international commodity agreements and arrangements representing producers and consumers covering the bulk of world trade in the commodities concerned. The fund would respect the autonomy of ICAS and would not intervene directly in commodity markets.

###### (i i) Other Measures

3. The Common Fund, through its second window, would finance measures other than stocking. These would be commodity development measures, aimed at improving the structural conditions in markets and at enhancing the long-term competitiveness and prospects of particular commodities.

4. The Common Fund, through its second window, would promote co-ordination and consultation with regard to measures other than stocking and their financing with a view to providing a commodity focus.
5. The measures to be financed by the second window would include research and development, productivity improvement, marketing and measures designed to assist, as a rule by means of joint financing or through technical assistance, vertical diversification. These measures could be undertaken alone, as in the case of perishable commodities and other commodities whose problems cannot be adequately solved by stocking, or in addition to, and in support of stocking activities. In financing these measures, the fund shall take into account the need for avoiding a disproportionate amount of the second window's total resources being used for the benefit of a single commodity.
6. The measures to be financed through the second window would be jointly sponsored and followed up by producers and consumers within the framework of international commodity bodies meeting agreed criteria. In determining these criteria, the importance of adequate coverage of commodities of particular export interest to developing countries should be taken into consideration.
7. The Common Fund, through its second window, would establish a close working relationship with existing international financial institutions and would as far as possible avoid duplication of their activities.
8. The Common Fund, through its second window, may participate in the financing of measures other than stocking in association with other entities.
9. Within the context of determining priorities in the use of resources, efforts should be made, through the second window, to give due emphasis to commodities of interest to poorer developing countries, particularly the least developed countries.

## II. Financial Resources and Capital Structure

10. The financial resources of the fund would consist of:
  - (a) Direct government contributions to enhance the funds credit-worthiness and to provide working capital to meet specified short-term liquidity needs (first window) and to cover the funds administration costs;
  - (b) Resources deriving from the association of ICAS with the fund (first window) as a proportion of their maximum financial requirements:



- (i) Cash deposits from ICAS;
  - (ii) Callable capital/guarantees for borrowing by the fund;
  
  - (c) Borrowing;
  - (d) Voluntary contributions;
  - (e) Net earnings.
11. The resources allocated to the first window from direct government contributions would be dollars 400 million of which dollars 150 million would be contributed in cash, dollars 150 million as capital on call and dollars 100 million as callable capital.
12. Direct government contributions to the fund would consist of:
- (a) Contribution of dollars 1 million by each member state, of which a part may be allocated by the contributing state to the second window, so that the total amount so allocated would be not less than dollars 70 million.
  - (b) An additional amount of dollars 320 million (assuming universal membership and the allocation of dollars 80 million to the first window under Para 12(A), (Footnote: if these assumptions prove to be incorrect, the adequacy of the financial resources would be reviewed as soon as possible after the entering into force of the articles of agreement). Whose contribution among the Group of 77, Group B, Group D and China would be:  
  

Group of 77	- 10 per cent
Group B	- 68 per cent
Group D	- 17 per cent
China	- 5 per cent.
- The distribution within the groups would be determined by the groups themselves. (Footnote: The assesment of contributions of any country not belonging to any of these groups shall be provided for in the articles of agreement).
13. The resources of the second window would be derived from initial direct government contributions of at least dollars 70 million allocated under Para 12(A) and in addition from voluntary contributions by member states and other sources with a target of dollars 280 million.
14. ICAS associated with the fund would deposit with it  $33 \frac{1}{3}$  per cent of their maximum financial requirements. The deposits would be paid either in full, or in stages on a basis to be agreed and would give rise to credit rights proportionately related to them. The deposits would be withdrawn when required for stocks purchases.

15. ICAS associated with the fund would be negotiated or re-negotiated to incorporate the principle of joint buffer stock financing by all producers and consumers participating in the ICAS.
16. Callable capital/guarantees would be pledged directly to the fund by ICA members to the value of each ICAS borrowing entitlement, and on modalities and conditions to be agreed. The ICAS and their members should be fully responsible for servicing and repaying their borrowings from the fund in accordance with the terms and conditions agreed with the fund. The members of ICAS will not be liable through their callable capital/guarantees, for the default of ICAS of which they are not members.
17. ICAS would assign all of their stock warrants to the fund on modalities to be agreed.
18. The procedure for calling up callable capital would be determined.
19. ICAS associated with the Common Fund would use the fund as their only banker for their bufferstocking operations.
20. Provision would be made for a pledging procedure for voluntary contributions to the second window and for arrangements for replenishment in the light of its activities.
21. The resources allocated to the first and second windows would be held in separate accounts without detracting from the character of the fund as an integral entity. Resources committed to one window should not be used to support the operations of the other.

### III. Organization, Management and Voting

22. The provisions relating to organization, management and voting would be based on the conclusions reached in negotiating group III.
23. Decisions in the fund would wherever possible, be taken without vote.
24. No group would have a simple majority of the total votes. Votes would be distributed between member countries of the fund on the basis of three elements (equality principle, direct contributions, and contributions of callable capital to the fund by country members of ICAS associated with the fund), the objective being to secure the following outcome: (Footnote: In case such system of allocation of votes would result in a voting structure significantly different from that described in Para 24, or not in conformity with the principles enunciated in Para 24, appropriate adjustments would be made by the governing council of the fund).

Group of 77 - 47 per cent  
Group B - 42 per cent  
Group D - 8 per cent  
China - 3 per cent

25. The most important decisions, including constitutional decisions and decisions with significant financial implications for member states, would be taken by a majority of  $3/4$  of total votes cast. Other decisions, depending on their relative importance, would be taken either by a majority of  $2/3$  of total votes cast or by a simple majority.
26. The governing council would establish a consultative committee on the second window to facilitate operations.

## SPECIAL ITEM

### Transportation

#### Roberts Bank, Port of Vancouver

National Harbours Board proposes to expand the present 20-hectare coal port terminal area at Roberts Bank to 130 hectares to make provision for future terminal facilities which would handle coal, sulphur, potash and possibly grain. The Environmental Assessment Panel for the port expansion proposal rejected the proposal and approved a limited expansion of port facilities consisting of a 40-hectare addition to the existing 20-hectare port site. The expansion would add two terminals to the single existing facility, plus a narrow ship channel without a turning basin. Environment Minister Len Marchand has released an environmental assessment panel study and has passed on his recommendations to Transport Minister Otto Lang who is in charge of the National Harbours Board. The Environmental Assessment Panel found that there is ample capacity in existing Port of Vancouver marine terminals, to handle grain, sulphur and potash. In addition, the Panel has concluded that the potential impacts on the Fraser River estuary, of which Roberts Bank is a part, are too great to recommend that port expansion be approved as proposed.

## INTERESTING INFORMATION FROM TRC

### NAME CHANGES

Monsanto Canada Limited changed their name to Monsanto Canada Inc. on January 1, 1979.

Darva Resources and Development Ltd. changed their name to Eldorado Minerals & Petroleum Corp. on January 11, 1979.

Ashland Oil & Gas Limited changed their name to Kaiser Oil Ltd. on January 24, 1979.

Pilkington Glass Industries Limited  
Pilkington Brothers (Canada) Limited changed their name to Pilkington Glass Industries Limited - Les Industries du Verre Pilkington Limitee on November 14, 1978.

Abbey Glen Property Corporation amalgamated with Genstar Limited under the name Genstar Limited - Genstar Limitee on January 1, 1979.

Zapata Canada Limited amalgamated with Granisle Copper Limited and Granby Mining Corporation to form a new company under the name of Zapata Granby Corporation effective January 1, 1979.

Noranda Mines Limited amalgamated with Orchan Mines Limited and will go under the name of Noranda Mines Limited - December 31, 1978.

Kordol Explorations Limited amalgamated with Dolmac Mines Limited and Turzone Explorations Limited under the name of Junction Explorations Limited as of December 12, 1978.

Nahatlatch Resources Ltd. amalgamated with L M C Resources Ltd. to form a new company under name of Seadrift Resources Ltd. on November 14, 1978.

Stetley Industries Limited amalgamated with Stetley of Canada (Holdings) Limited to form a new company under the name of Stetley Industries Limited on December 31, 1978.

Walker Exhausts Limited amalgamated with Speedy Muffler King Corporation, Walker Marketing of Canada Limited and Monroe Auto Equipment Co. of Canada Ltd. into a new company under name of Tenneco Canada Corp. as of December 30, 1978.

## NEW PUBLICATIONS

The following publications were prepared in the Mineral Policy Sector, Department of Energy, Mines and Resources and released for distribution in March.

Preprints, **Canadian Minerals Yearbook, 1977**, Antimony; Asbestos; Bentonite; Clays and Clay Products; Cobalt; Magnesium; Manganese; Platinum Metals; Rare Earths; Silicon, Ferrosilicon, Silicon Carbide and Fused Alumina; Stone; Tungsten; price 50¢ a copy.

The above publications are available from the Publishing Center, Department of Supply and Services, Ottawa.

### Production of Canada's Leading Minerals

This publication will be part of the Mineral Statistics Series published monthly by the Mineral Policy Sector of the Department of Energy, Mines and Resources. Inquiries concerning it should be addressed to:

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