

General Review

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THE CANADIAN ECONOMY

After showing unexpected strength in 1994, when Canada's Gross Domestic Product grew by a robust 4.6%, the Canadian economy expanded by a modest 2.2% in real terms in 1995.¹ Growth in real GDP dropped back to a disappointing annualized rate of 1.1% in the first quarter of 1995, a reflection not only of widespread weakening of demand in the interest-sensitive sectors of the Canadian economy, but also of a slowdown in the U.S. economy. The weakness experienced in the early part of the year continued into the second quarter with real GDP contracting by 0.8%. Third-quarter results were somewhat more encouraging as output increased by 1.2% in real terms. This turnaround was largely due to a strong rebound in exports of both goods and services, principally to the United States where an economic recovery appeared to be under way. Spending by Canadian consumers increased slightly in the third quarter but business investment in machinery and equipment pulled back following a surge in the second quarter, and government expenditures continued to shrink. The outlook at year-end remained subdued as real economic growth in the fourth quarter declined to less than 1% annualized. This mediocre performance for the year reflected the mixed impact on the economy of a very strong export performance being significantly dampened by weakness in both consumer and government spending.

There are mixed views on the outlook for the Canadian economy in 1996. Optimistic forecasters, among them the Organization for Economic Co-operation and Development (OECD), believe that the Canadian economy will rebound in 1996 and achieve real growth of about 3%. This forecast relies

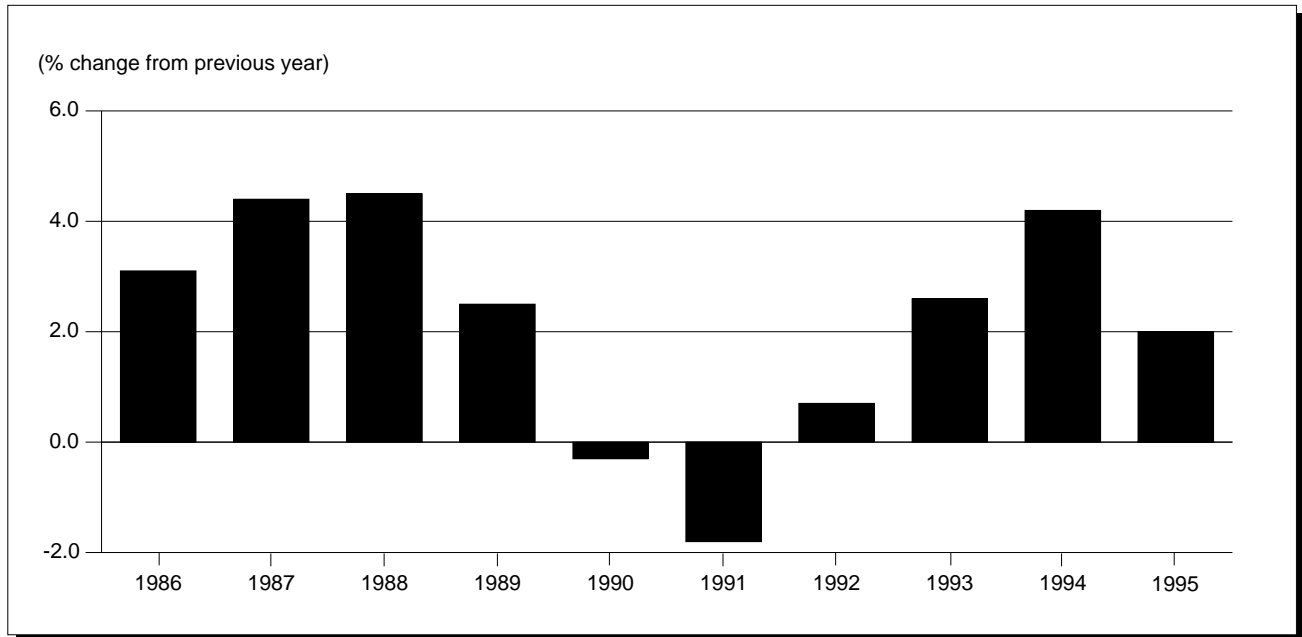
¹ In the context of this section, Canada's Gross Domestic Product is expressed in real terms and was measured using the expenditure-based method at 1986 prices.

heavily on the expectation of moderate but steady economic growth over the next several quarters in the United States, which is the market for nearly 80% of Canada's exports. Other forecasters are less optimistic and see strong export performance as the only bright light on an otherwise disappointing economic landscape. On average, GDP growth in 1996 is expected to be in the 2.3% range as consumers remain cautious and government expenditures continue to contract.

As was the case in both 1993 and 1994, exports continued to be the major factor stimulating growth in 1995. In fact, domestic exports totalled \$253.5 billion in 1995, up by 16.4% from a year earlier, a performance that some analysts consider nothing short of spectacular. This outstanding export performance was fuelled by a number of factors, among them the positive impact of a low Canadian dollar on Canada's export markets and sound productivity gains in domestic industries. As a result of strong export growth, Canada's merchandise trade surplus for 1995 was recorded at \$28.0 billion, up substantially from the \$15.1 billion recorded in 1994. Merchandise trade is one component of the current account of Canada's balance of payments. The other components are service transactions, investment income and transfer payments. These components, which have traditionally exhibited a negative trade balance, also improved in 1995 and, as a result, the current account deficit shrank from \$22.3 billion in 1994 to \$13.1 billion in 1995, the lowest level recorded since 1986.

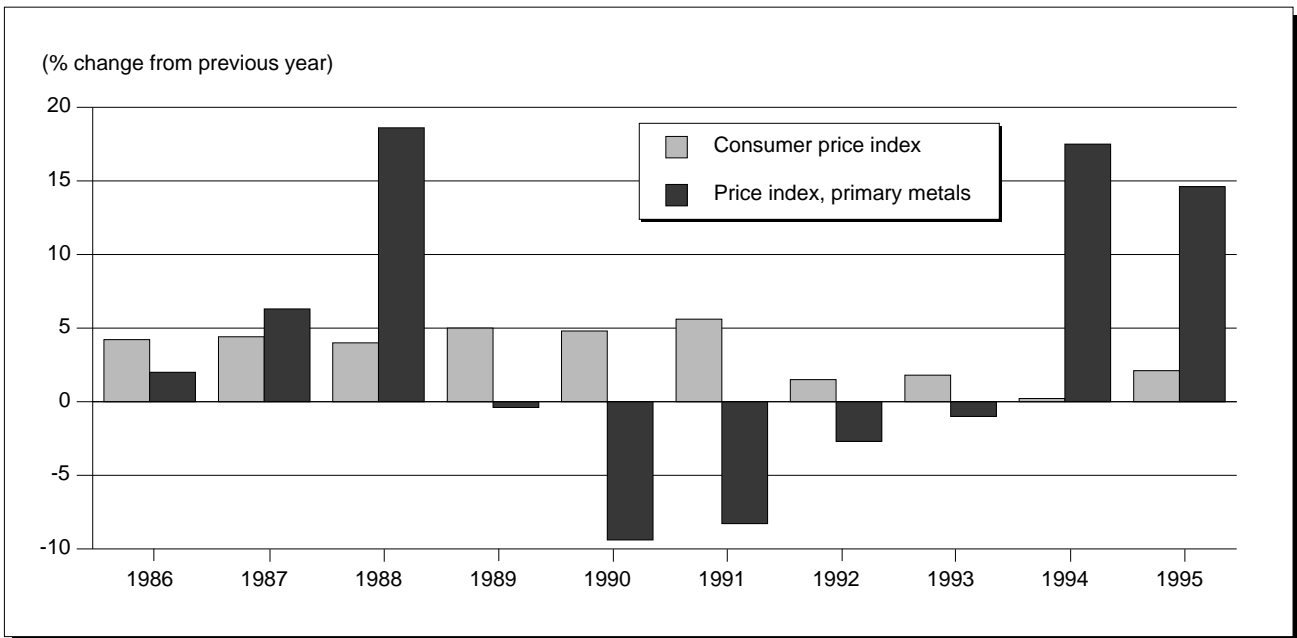
While the United States remains Canada's major export market, the trend to increasing reliance on the United States was reversed in 1995. The United States accounted for 79.6% of Canada's exports in that year, compared with 81.7% in 1994, a welcome signal that Canada's export markets are becoming more diversified. While the resource industries have always been heavily export oriented, changes in world trade rules have opened doors for other sectors of the economy. Manufacturers were expected to export nearly 60% of their output in 1995 compared with only 25% in 1980. Continued gains in the merchandise trade surplus are projected for 1996 and 1997, largely as a result of faster growth of the overseas industrialized economies and continued expansion in the United States.

Figure 1
Canadian Economic Activity, Percent Change in GDP, 1986-95
 (Factor Cost at 1986 Prices)



Source: Statistics Canada.
 Note: Data for 1995 are estimated.

Figure 2
Canadian Price Trends, 1986-95



Source: Statistics Canada (based on 1986 price indexes = 100).
 Note: Data for 1995 are estimated.

The effort to improve domestic cost performance continued in 1995. The ongoing restructuring in Canada's corporate sector has positively influenced productivity and unit labour costs. Following four quarters of double-digit growth in 1994, profit levels in 1995 plateaued at historically high levels.

Although profits in 1995 for all Canadian corporations reached a record \$95.2 billion, a substantial increase over that registered in 1994, results on an industry basis were mixed as half posted increased profits while the rest suffered declines. The corporate sector is likely to experience further growth in 1996/97, but at a more moderate pace as profit margins come under pressure from accelerated growth in wages and salaries. If this is the case, margins could be squeezed and growth in corporate profits could slow as a result.

The strong corporate performance in 1995 was accompanied by large outlays on machinery and equipment. This important component of business investment was driven by spending on telecommunications, transportation equipment, and purchases for the Hibernia east coast oil project, particularly in the second quarter when growth at an annualized rate of 20.5% was recorded. Investment in machinery and equipment dropped back to a negative annualized rate of 11.7% in the third quarter of 1995, breaking a trend of nine quarters of uninterrupted expansion. This specific contraction was, however, viewed as a return to a more normal level of spending. In the final quarter of the year the demand for machinery and equipment once again climbed, rendering this important sector of the economy a mainstay of growth. Growth in business investment is expected throughout 1996 and 1997, but the extent of this advance will be strongly dependent on growth in the corporate sector overall.

In contrast to the encouraging performance exhibited by the non-residential business investment sector, residential investment fared poorly in 1995. High mortgage rates and weak consumer confidence did little to strengthen the housing market, and housing starts in October 1995 fell to their lowest level since the 1981/82 recession. Despite a mild recovery in the resale housing market over the summer months, spending on the construction of new homes continued to languish in the face of persistently large inventories of unsold homes. Some analysts believe that a modest revival in housing construction may occur as improvements in consumer confidence, stronger employment growth and lower interest rates materialize in 1996.

The weak housing market in 1995 was a direct reflection of the poor financial position of consumers. Consumer spending was stagnant in the first quarter of 1995 and edged up by only 1.2% in the second quarter. An increase in spending of 2.4% in the third quarter was largely concentrated on motor vehicles. Consumer spending drew back in the fourth quarter in response to continuing employment insecurity that was exacerbated by lay-offs at all levels of govern-

ment. In 1995, personal household debt was at an all-time high, savings rates were at an all-time low, and real incomes had fallen steadily since the 1991/92 recession. Some analysts predict that, in an environment of such high debt and sluggish employment growth, consumers are unlikely to fuel any growth for some time and that weakness in total consumption could perhaps remain a feature of the Canadian economy throughout the remainder of the 1990s. Others suggest that the pace of consumer spending could quicken marginally in the 1996/97 period in response to lower interest rates and somewhat faster growth in disposable income.

Persistent unemployment was an important factor underlying the decline in consumer confidence in 1995. While overall employment grew in the private sector, this growth was largely offset by declining employment in the public sector. As a result, at the end of 1995, a high unemployment rate of 9.4%, a slight improvement over the 10.4% recorded in 1994, persisted. There is hope that the rate of unemployment peaked before 1995 and will continue to decline as the "baby boomers" begin to retire and the impact of technological restructuring levels off.

On a more positive note, Canada's inflation rate, as measured by the Consumer Price Index (CPI), has been at its lowest sustained level in three decades, firmly establishing Canada as a low-inflation country. Domestic price levels demonstrated some inflationary tendencies in 1995 as the CPI increased by 2.1%, significantly higher than the 0.2% increase reported in 1994. Higher prices for new automobiles, auto insurance, gasoline and paper supplies were the major contributors to the increase in 1995. Lower prices for such items as new houses and clothing, combined with weak consumer demand and minimal upward pressure on wages, exerted an offsetting and modifying effect. Records show that wage settlements rose by less than 1% in both 1994 and 1995, the lowest level on record. As a result, an acceptable level of inflation was a feature of the economy in 1995. With underlying inflationary pressures relatively dormant and a monetary policy dedicated to keeping price increases in Canada under control, there is reason to believe that a low-inflation environment will continue throughout 1996.

A low-inflation environment and a slowing economy usually co-exist with stable or declining interest rates. Such was the case in 1995 when, over the course of the year, the bank rate (the rate charged by the Bank of Canada to financial institutions) tumbled from about 8.5% at the beginning of the year to about 5.8% at year-end. With evidence of a sharp slowdown in the economy in the spring of 1995, the Bank of Canada took steps throughout the spring and early summer to ease monetary conditions. The launching of the referendum campaign in September triggered a period of heightened nervousness and volatility in Canadian financial markets, a situation that culminated in strong downward pressure on the Canadian dollar and sharp increases in interest rates in late

October. The quick recovery of money markets and foreign exchanges after the referendum led the Bank of Canada to once again slowly reduce interest rates. The interest policy of the Bank remained cautious, nevertheless, for the remainder of the year, as indications of a slowing economy and ongoing weakness in the Canadian dollar persisted. Forecasters do not expect interest rates to rise in 1996, given the country's improving fiscal situation and lessening concern, albeit temporary, over the possibility of market turmoil as the result of a future Quebec referendum.

The constitutional uneasiness following the inconclusive Quebec referendum and Canada's heavy foreign indebtedness did not help to inspire international confidence in the Canadian dollar. Following a pre-vote decline, the Canadian dollar strengthened to its pre-referendum level of about US73.90¢, a value that differed little from that recorded one year earlier. Barring unforeseen shocks or a significant heating-up in 1996 of the U.S. economy that could drive up interest rates in both the United States and Canada, the Canadian dollar is expected to remain in the US74¢ range in 1996.

The U.S. economy performed unevenly in 1995 with overall growth in real GDP for the year recorded at about 3.3%. Growth, or lack of it, in the United States has a major impact on the level of economic activity in Canada. There is therefore considerable interest in Canada in forecasts of future growth in the United States. The early part of 1996 revealed a

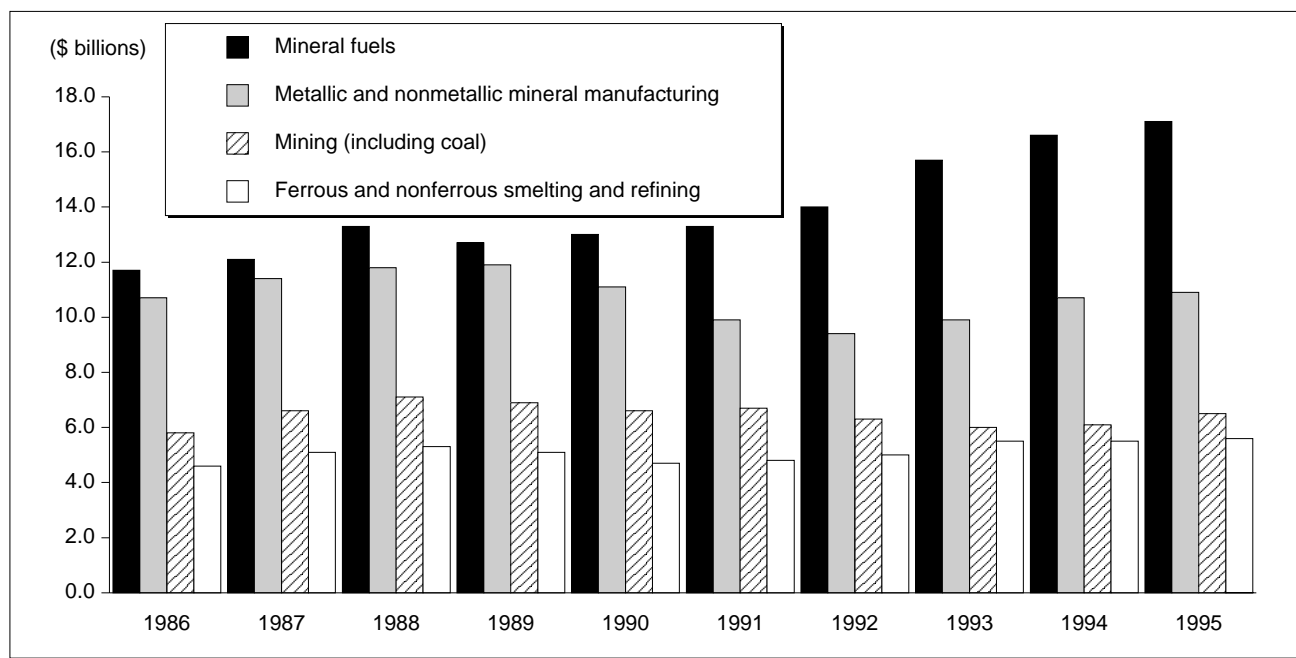
U.S. economy that, although not recessionary, was experiencing some difficulty. Companies were not hiring, consumers were not spending, and export growth was slowing. As a result, forecasters are predicting modest growth in the United States of about 2.7% in 1996, easing to about 2.1% in 1997. Should growth in the U.S. economy slow significantly in 1996, the expansion of overseas markets, such as those of European Union and Pacific Rim countries, will become increasingly important to the continued prosperity of Canada's minerals and metals sector.

THE MINERAL INDUSTRY IN 1995

The mineral industry, driven by the continued improvement in mineral prices, particularly for metals, performed soundly in 1995.

Powered by slowly depleting stock levels and strong global demand for many resource-based products, prices for most base metals rose during 1995. As a result, Canadian firms found themselves in a very competitive position to exploit opportunities for growth. The industry was also aided by a low Canadian dollar that helped boost the level of mineral exports. These factors, when combined with successful restructuring for many mineral-related operations and strong growth in the United States, resulted in greatly improved profit margins for most of Canada's mineral companies. A climate of low

Figure 3
Gross Domestic Product at Factor Cost at 1986 Prices, 1986-95



Source: Statistics Canada.

Note: Data for 1995 are estimated.

inflation combined with lower labour costs and a booming trade sector contributed to this encouraging result. Significant declines in profits were registered by some sectors, among them the nonferrous metals industry. This industry's profits dipped \$0.4 billion in the fourth quarter of 1995, the third consecutive quarterly decline. This trend reflected a weakening in the prices of most nonferrous metal products following a price peak recorded early in 1995.

The year 1995 will also be seen as the year in which balance returned to mineral and metal markets. In recent years, growing stocks, depressed prices and rising exports from the former Soviet Union, particularly Russia, had created an environment of uncertainty. In 1995, however, economic recoveries in the United States, Europe and, to a lesser extent, Japan, along with continued strong growth in the rest of South-East Asia, helped to foster demand for the major nonferrous metals. In the metals sector, strong demand, coupled with a continued rise in metal prices, led to a capacity utilization rate in 1995 for the mining and quarrying industries that surpassed 88%. Capacity utilization rates for primary metals, fabricated metals and nonmetallic mineral products also increased.

Canadian mining companies worldwide benefitted from the growth in mineral and metal markets in 1995. In fact, in November 1995, Canadian companies held interests in a portfolio of almost 2750 foreign mineral properties located in 99 countries around the world. Of these, at least 200 were active in South America while about 40 were active in seven countries in South-East Asia. Canada's worldwide presence is not confined to foreign investment. Canada is also notable for being the world's largest exporter of minerals. Almost 80% of Canada's minerals are shipped in the form of mineral ores or mineral products to other parts of the world, with the United States being the principal destination.

The notion that North America's mineral wealth had been exploited to its economic limit was disproved in 1995 when several major discoveries, including the massive high-grade Voisey's Bay nickel-copper-cobalt deposit in Newfoundland (Labrador), were made in areas of Canada that had previously undergone only limited exploration. The resulting surge in exploration spending was exceptionally good news for the Canadian mineral industry. The industry was similarly encouraged by the improving climate for the development of mineral resources. In 1995, while only 7 mines closed, 11 new mines and 10 re-opened mines came on stream. A similar scenario is foreseen for 1996 when 21 new or re-opened mines are expected to come into production.

The mineral industry continued to address concerns about the environment as apprehensions by some sectors of society persisted with regard to the activities of the mining and mineral production industry. The industry launched the Whitehorse Mining Initiative (WMI) in 1993, an undertaking intended to

assist the industry in adapting to new conditions and in steering a new course. The WMI Leadership Council Accord, signed in September 1994, recognized the value of the mining industry to the country's economic well-being. The goals of the Accord were focussed on the need to institute policy changes that would enhance the industry's ability to attract investment for exploration and development while recognizing its obligation to address environmental and social issues. Complementary to this initiative was the release by Natural Resources Canada of an issues paper entitled *Sustainable Development and Minerals and Metals*. This paper reflects the Government's support for the creation of a minerals and metals policy that fully integrates environmental, social and economic considerations.

A STATISTICAL PORTRAIT OF THE CANADIAN MINERAL INDUSTRY

The Canadian mineral industry can be characterized by the following four stages of processing activity:

- Stage I: Primary Mineral Production (mining and concentrating);
- Stage II: Metal Production (smelting and refining);
- Stage III: Minerals and Metals-Based Semi-Fabricating Industries; and
- Stage IV: Metal Fabricating Industries.

While much of the emphasis of this article tends to focus on Stage I activities (that is, the activities of the mining industry per se), many of the parts of the portrait that follows describe the mineral industry as a whole, providing a more comprehensive sketch of the overall importance of the activities of the mining industry to Canada.

Gross Domestic Product of the Mineral Industry

All four stages of the mineral industry, excluding the oil and natural gas industries, accounted for \$23.0 billion, or about 4.25%, of Canadian GDP in 1995. The growth in the value of Canadian mineral production in 1995 was reflected in increases in the level of the GDP for mining and the downstream industries. Each stage contributed roughly an equal share of the 1995 total with primary mineral production contributing 28% and metal production adding 24%. The third and fourth stages, the manufacture of semi-fabricated and fabricated products, accounted for 22% and 26% respectively.

Canadian Mineral Production

According to preliminary estimates, the total value of production of all mineral commodities, including mineral fuels, rose from \$41.2 billion in 1994 to \$43.4 billion in 1995, an increase of 5.4%. As the

table below shows, the total production value of the non-fuel minerals (metals, nonmetals and structural materials) grew in 1995 to reach \$17.4 billion, a significant increase of 16.7% over the 1994 value of \$14.9 billion.

CANADIAN MINERAL INDUSTRY VALUE OF PRODUCTION, 1994 AND 1995

	1994 ^r	1995 ^p	Change
	(\$ millions)		(%)
Metals	9 749.5	11 993.6	23.0
Nonmetals	2 610.1	2 840.6	8.8
Structural materials	2 582.4	2 609.7	1.1
Total nonfuels	14 942.1	17 443.9	16.7
Fuels	26 208.9	25 923.8	-1.1
Total	41 150.9	43 367.8	5.4

Sources: Natural Resources Canada; Statistics Canada.

P Preliminary; ^r Revised.

Note: Numbers may not add to totals due to rounding.

The metals group recorded the largest gain in value of production (23.0%), with copper and nickel accounting for the highest gains in production value of \$938.8 million and \$735.2 million respectively. Molybdenum (+86.2%) and silver (+60.8%) posted the highest percentage increases. Natural Resources Canada's Metal Price Index, which tracks the monthly prices of copper, nickel, lead, zinc, gold and silver, increased steadily from October 1993 through January 1995, posting its highest level since September 1990. During 1995 the index fluctuated and did not achieve the same level of growth as in 1994. The best performers in the index were copper (+30.0%), nickel (+29.9%) and lead (+14.9%). The average annual London Metal Exchange (LME) price for copper rose from US\$1.05/lb in 1994 to US\$1.33/lb in 1995, while nickel went from US\$2.88/lb in 1994 to US\$3.74/lb in 1995, and lead increased from US\$24.9c/lb to US\$28.6c/lb. In contrast to 1994 when producers cut back on the production of most metals, production output grew for all major metals except uranium and molybdenum.

The total value of nonmetallic mineral production rose by 8.8% from \$2.6 billion in 1994 to \$2.8 billion in 1995. According to the value of production, the leading nonmetallic minerals were potash, salt, asbestos, elemental sulphur and peat. The major contributors to the increase were potash (+13.6%) and elemental sulphur (+71.0%). For the second consecutive year, the strong performance of elemental sulphur was largely due to higher commodity prices. Production output increased for all of the leading nonmetallic minerals except salt and asbestos.

The value of production for structural materials increased slightly by 1.1% from a value of \$2.58 billion in 1994 to \$2.61 billion in 1995. Clay products,

sand and gravel, and stone experienced a reduction in production value as well as production volume, largely as the result of a decline in new housing starts in 1995.

The fuels sector, which includes crude oil and equivalent, natural gas, natural gas by-products and coal, accounted for nearly 60% of the total value of Canada's mineral production in 1995, down from 64% in 1994. The total value of output of mineral fuels declined by 1.1% from \$26.2 billion in 1994 to \$25.9 billion in 1995. While the production volume of natural gas rose by 6.9%, the decline of \$2.6 billion in its production value precipitated an overall reduction in the value of production of the mineral fuels group.

Based on value of production, the top ten mineral commodities in 1995 were crude oil and equivalent (\$15.42 billion), natural gas (\$6.85 billion), copper (\$2.85 billion), gold (\$2.53 billion), nickel (\$1.96 billion), coal (\$1.90 billion), natural gas by-products (\$1.75 billion), zinc (\$1.56 billion), potash (\$1.46 billion), and iron ore (\$1.21 billion).

On a provincial basis, Alberta's contribution to total Canadian mineral output represented the largest share based on value, amounting to \$20.8 billion, or 48.0% of the total, due to its dominant position in the fuel industry. Ontario ranked second with a value of \$5.8 billion, or 13.4% of the total. Saskatchewan accounted for \$4.6 billion (10.7%), British Columbia for \$4.5 billion (10.4%), Quebec for \$3.1 billion (7.1%), and Manitoba for \$1.05 billion (2.4%). The remaining provinces and territories accounted for the other 7.9%. The mined or quarried minerals (that is, the non-fuel minerals plus coal) accounted for slightly more than 44.6% of the total value of Canada's mineral production in 1995.

Employment in the Canadian Mineral Industry

After a decline in employment levels resulting from the effects of the recession and the corporate restructuring that occurred during the early 1990s, employment in the mineral industry seemed to enter a period of slow but steady growth, reflecting the more optimistic view that prevailed in 1995.

Total employment in the mineral industry in 1995 is estimated to have been about 341 000, up by 3.8% from the 328 000 registered in 1994 and accounting for some 2.5% of total national employment. The increase in employment in Stage I (metal mining, nonmetal mining, quarrying and coal mining) was estimated at 61 000, up by 2000 from 1994, reflecting the net increase in the number of mines opened during the year. Employment in Stage II (nonferrous smelting and refining), estimated at 57 000 in 1994, increased to just over 59 000, or about 4%, rebounding to 1993 levels. Total employment in Stages III and IV (the semi-fabricating and fabricating mineral industries) rose from 213 000 in 1994 to nearly

221 000 in 1995, an increase of about 3.8%. It is expected that, with further openings and re-openings of mining operations, employment in Stages I and II will increase somewhat in 1996, although not to pre-recession levels. An additional 9800 Canadians were employed in services incidental to the mining and quarrying industries, a marginal improvement over 1994.

Mineral Industry Trade

Canada remains the world's largest exporter of minerals and metals, a fact that has had a major impact on the national standard of living. The mineral industry continued to make a significant contribution to Canada's trade surplus position and thus to its merchandise trade balance. Mineral and mineral product exports,¹ including fuels, totalled \$61.3 billion in 1995, an increase of \$7.9 billion, or 14.8%, over 1994. Metals accounted for 59.3% of the increase in exports, fuels for 29.6%, nonmetals for 9.0%, structural materials for about 1.8%, and other minerals for 0.3%.

Imports of minerals and mineral products, including fuels, were valued at \$39.8 billion, or 17.6% of total Canadian imports in 1995. In terms of net trade, a surplus of approximately \$23.0 billion was recorded for minerals, including fuels, in 1995.

The value of exports of non-fuel minerals including coal was \$40.4 billion in 1995, an increase of 16.5% over 1994. These exports included crude minerals, smelted and refined products, and semi-fabricated and fabricated products. The United States is the primary destination for Canada's exports of non-fuel minerals and coal. Imports of non-fuel minerals and coal in 1995 amounted to \$31.1 billion, or 13.8% of total Canadian imports, resulting in a trade surplus for non-fuel minerals and coal of about \$9.3 billion.

Mineral Exploration by the Mineral Industry

Expenditures on new machinery and equipment and on the repair of existing production tools are a manifestation of an industry's vitality. The size of the investments made by the mineral industry, both in exploration and capital expenditures, provides an indicator of the strength that the Canadian mineral industry can be expected to show in the future.

Preliminary indications are that total expenditures for non-fuel mineral exploration in 1995 may exceed

\$750 million and may rise to more than \$900 million in 1996, substantial increases over the \$628 million spent in 1994 and the \$477 million spent in 1993. Several factors account for the recent revival of exploration activity. First, increases in the prices of precious metals since 1994 have encouraged higher levels of exploration activity. Secondly, interest in Canada's diamond mining potential has resulted in about \$138 million being invested in diamond exploration in each of 1994 and 1995, or a total of about \$377 million since 1992. It is expected that the first Canadian production of diamonds will commence in 1998. Finally, the discovery in late 1994 of the nickel-copper-cobalt deposit near Voisey's Bay is expected to sustain a high level of exploration activity in that area of the country for years to come. Despite the fact that Canadian exploration expenditures in 1992 had reached their lowest level since 1967, Australia and Canada have led the world for the past 16 years as areas targeted for investment in exploration activities.

Capital Expenditures by the Mineral Industry

Capital expenditure intentions reported by the non-fuel mineral industry (including coal) in 1995 totalled some \$3.9 billion. This level of spending, reflecting the investment intentions of the industry, was nearly 24% above the \$3.2 billion spent in 1994 on construction and machinery and equipment. When repair expenditures are included, total investment spending by the mineral industry was \$6.7 billion in 1993, the latest year for which repair expenses are available, compared with \$7.3 billion in 1992. This level of spending represented 4.2% of total capital and repair expenditures within the Canadian economy, down from the 4.5% recorded in 1992 and the 5.7% recorded in 1991.

According to company intentions, capital expenditures on construction and machinery and equipment in the mineral industry (excluding petroleum and natural gas) will total about \$5.2 billion in 1996, more than 10% above the \$4.7 billion recorded in 1995. The main contributors to this growth are the mining and primary metals sectors, with smaller increases in the fabricated metal and nonmetallic mineral products sectors. Relatively strong metal prices, robust exports and a continuing need to improve productivity and competitiveness were factors supporting the mineral and mineral processing industries. This contrasts with an anticipated reduction in spending for the total non-residential economy as the result of an expected 5% decline in capital spending on new construction. Expenditures on machinery and equipment are actually projected to increase by about 1%. The overall decline may reflect reduced business confidence, weak consumer confidence and sluggish economic growth during the latter part of 1995.

¹ Readers should note that Natural Resources Canada has upgraded its methodology for computing its minerals and mineral products export and import statistics, resulting in moderate shifts in the levels of trade data presented in previous articles. All trade data in this article reflect this new computational methodology.

Research and Development (R&D) by the Mineral Industry

Overall R&D expenditures in Canada are expected to total \$11.8 billion in 1995. Of this, about 59%, or \$7 billion, will be spent by business enterprises. At 0.9% of GDP, Canadian industrial spending on R&D paralleled that of the middle rank of OECD countries, but was lower than most G7 countries. This is due in part to Canada's relatively low defence spending. R&D spending for the mineral industry in 1995 is anticipated to be \$330 million, 4.7% of total business enterprise expenditures and a decline of 5.4% from 1994. As a percentage of company revenues in 1993, R&D expenditures in the mineral industry varied from 0.3% for ferrous primary metals to 1.7% for nonferrous primary metals, compared to 1.7% for the industrial sector as a whole.

Capacity Utilization in the Mineral Industry

After peaking at almost 86% in the first quarter of 1995, Canadian industrial capacity utilization declined somewhat throughout the remaining three quarters of the year to just under 83% as the result of weak consumer spending and reduced capital investment. This indicates that there was very little upward pressure on the prices of goods resulting from high capacity use. Production slowdowns due to inventory build-ups and a levelling of corporate profits in 1995 have reduced the incentive among industries to expand production capacity in 1996.

Following a dip in the second quarter, capacity utilization in the mining and quarrying industries increased by 1.8 percentage points in the third quarter of 1995 to 88.0%, mainly on the strength of increased activity in nonferrous metal mining. The fourth-quarter rate declined to 85.4%, mostly because of reduced drilling activity.

The nonferrous metal mining sector influenced the downstream primary metal industry where capacity peaked at over 96.0% early in 1995 and then fell off to 87.3% in the fourth quarter. The decline reflects lower levels of investment in non-residential construction. Capacity utilization in the fabricated metal industry also peaked in the first quarter of 1995 at nearly 84.4% and then slackened to 80.4% by the fourth quarter. The nonmetallic mineral industry, burdened by a very sluggish domestic housing market, operated at about 75.7% capacity for the year.

PROFILES OF THE LEADING MINERALS PRODUCED IN CANADA

Although Canada currently produces more than 60 minerals and metals, certain minerals dominate the

production of the Canadian mining industry. The following brief summaries highlight the year 1995 for Canada's leading minerals.

Copper

In 1995, the tonnage of copper shipped rebounded from the 591 000 t shipped in 1994 to about 705 000 t in 1995. Similarly, mine production levels rose from the 617 000 t recorded in 1994 to about 729 000 t. These increases in large measure resulted from the reactivation of capacity in British Columbia and from higher production levels from the Louvicourt mine in Quebec. Copper prices forged ahead, rising consistently in 1995 and averaging US\$1.33/lb over the year, significantly higher than the 1994 average of US\$1.05/lb. With notable increases in both copper prices and the volume of shipments, the value of 1995 copper shipments improved from \$1.910 billion in 1994 to \$2.848 billion, a striking increase of 49%. Canada remains the third largest producer of copper in the world behind Chile and the United States and ahead of Russia. Total world copper consumption (including refined copper from primary and secondary sources) rose slightly in 1995 from 11.6 Mt to 11.9 Mt as a result of continued demand, especially from the Asian market.

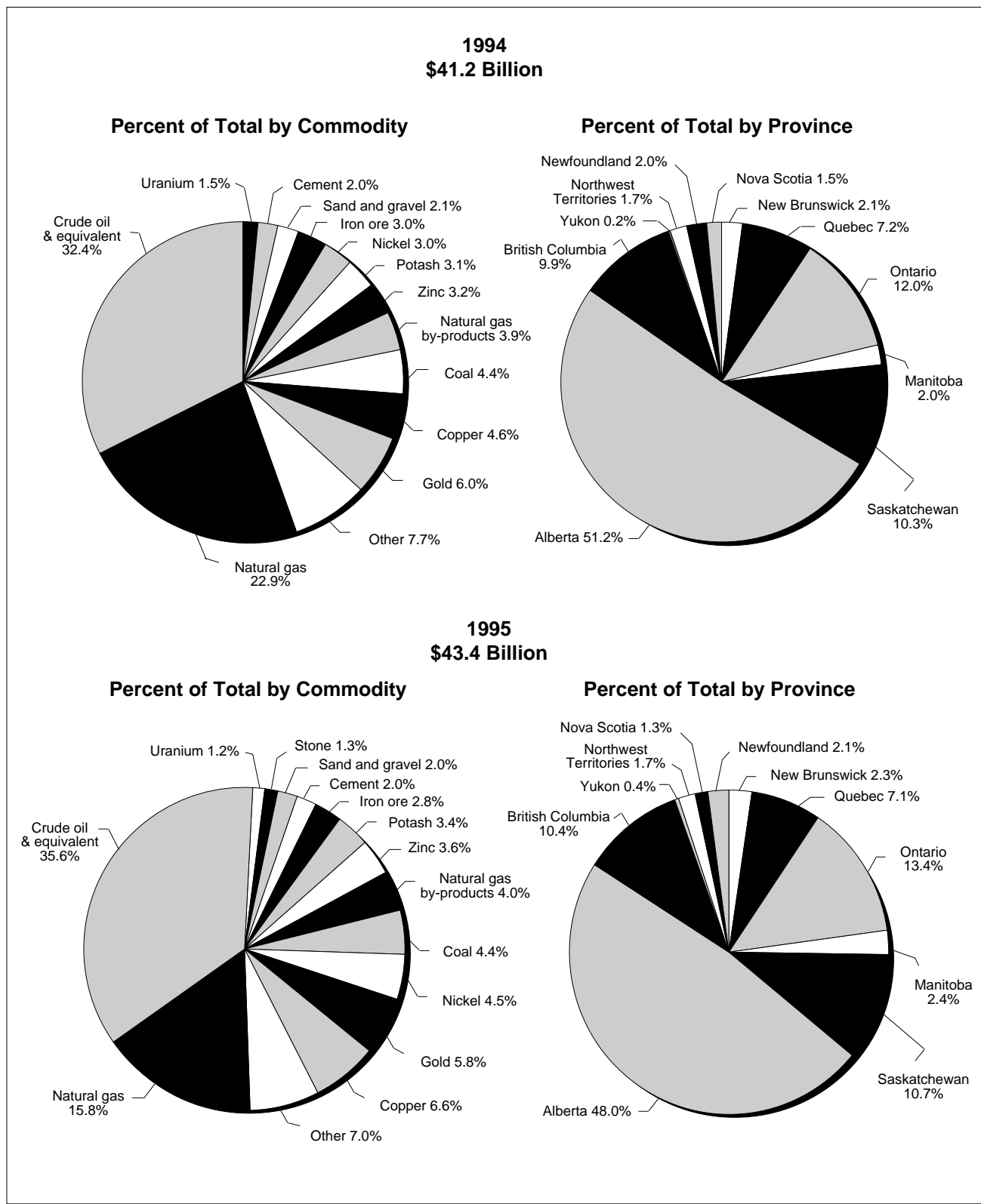
Gold

After three years of consecutive decline, Canada's gold production increased by 2.6 t from 146.4 t in 1994 to 149.0 t in 1995. The value of gold shipments remained at about \$2.5 billion in 1995. Canada continued as the fourth-ranked producer of gold in the world, trailing only South Africa, the United States and Australia. Gold prices started 1995 at approximately US\$379/oz, remaining generally stable over the year and reaching an average monthly high of US\$391/oz in April. The 1995 average price for gold was US\$384/oz, roughly the same as in 1994 and substantially higher than the US\$360/oz recorded in 1993. This price level was maintained by continued increased demand for this commodity, particularly from India and the Far East. Overall employment in gold mines is estimated to have increased from 8600 in 1994 to 8900 in 1995. As new projects come on stream in various regions of the country, the annual level of Canadian gold production will increase from the 149 t produced in 1995 to nearly 170 t by 1998, and will stay above that level until the end of the decade.

Nickel

After a year of reduced production in 1994, due mainly to cutbacks at INCO, Canadian nickel production volumes returned to more normal levels in 1995, increasing about 20% over 1994 levels. As a result of both increased production tonnage and prices, the value of nickel produced rose from \$1.229 billion in 1994 to an estimated \$1.965 billion in 1995, an

Figure 4
Value of Mineral Production, Percent Shares by Commodity and by Province, 1994 and 1995



Sources: Statistics Canada; Natural Resources Canada.

Notes: The provincial shares may not add to 100% due to rounding. Prince Edward Island's share is excluded as it is too small to be expressed.

increase of 60%. Worldwide consumption grew for the second straight year and, with demand exceeding production levels, nickel prices rose, providing an impetus for continuing growth in Canadian production levels. It is anticipated that both world consumption and production will continue to rise in 1996. With consumption remaining greater than production, decreasing stocks will drive nickel prices even higher. Canada's nickel production is expected to grow moderately until the development of the Voisey's Bay property results in a further substantial expansion of levels. Canada and Russia remain the two largest producers of nickel in the world, between them accounting for almost 50% of world production. Continued growth in demand for stainless steel, which accounts for nearly 70% of all primary nickel consumption, is anticipated, particularly as a result of demand from Pacific Rim countries, including China, Taiwan and Korea.

Zinc

Canada remained the world's largest producer of zinc concentrates in 1995. Canadian mine production of zinc increased by 11% over 1994 levels to reach 1.125 Mt in 1995. This increase was primarily due to the re-opening of mines in the Yukon, Quebec and British Columbia. The value of zinc production rose from \$1.330 billion in 1994 to about \$1.556 billion in 1995, an increase of almost 17.0%. The average LME price of zinc increased to US46.8¢/lb from the average 1994 price of US45.3¢/lb. It is anticipated that zinc prices will gradually increase from between US50¢ and 55¢/lb in 1997 to between US60¢ and 65¢/lb by 2001 as demand increases and LME stocks begin to decline. World consumption of zinc is expected to increase to 7.4 Mt in 1996 as demand strengthens in Western Europe, China and South-East Asia. Canadian zinc production should increase over the next few years as existing mining operations return to production or reach full production levels. After 1998, production levels are expected to decline as older mines become exhausted.

Iron Ore

Canadian shipments of iron ore grew by about 2.0% in 1995 in response to the growing demand for iron ore in support of a healthier world steel industry. Although the value of iron ore shipments remained the same in 1995, the tonnage of these shipments rose from 36.4 Mt to 37.1 Mt. Iron ore prices improved in 1995 for all grades of internationally traded iron ore and increased again in 1996 due to the medium-term scarcity of iron ore pellets and lumps. Exports account for more than three quarters of Canada's iron ore shipments and, although the largest single customer remains the United States, European destinations account for nearly 50% of all shipments of Canadian iron ore.

Uranium

Canada, the world's leading producer and supplier of uranium, exports over 80% of its uranium production and hosts four of the world's top ten uranium-producing companies. In 1995 shipments of uranium totalled an estimated 10 094 t, a decrease of about 9.9% from the 1994 total of 11 200 t. The value of 1995 shipments was estimated to be \$539 million, a 12.5% decrease over the previous year. The average price of Canadian export deliveries decreased from \$51/kgU in 1994 to \$47/kgU in 1995. Spot market prices, which developed when import restrictions were placed on uranium from the former Soviet Union in the United States and the European Union, increased in 1995, but the difference between the "restricted" market price and "unrestricted" market price narrowed appreciably. Canadian uranium marketers signed export contracts in 1995 for some 20 000 t, a level of business even greater than in 1994. The announcement that construction of the \$250 million McLean Lake uranium project in Saskatchewan will proceed has enhanced Canada's competitive position in the global uranium market.

Silver

Canada is one of the top six producers of silver in concentrate in the world. Silver is produced in several provinces including Ontario, British Columbia, New Brunswick, Quebec and Manitoba, normally as a co-product of base-metal mining or gold mining. Silver production rose in 1995 as silver-bearing base-metal and gold mines re-opened or came on stream. The greatest addition to production occurred with the opening of the Eskay Creek gold mine in British Columbia – Eskay Creek has become Canada's largest producer of silver with an expected annual production of about 340 000 kg. After declining for four consecutive years, shipments of silver rose to 1195 t in 1995 from 740 t in 1994, an increase of 61%. LME silver prices in 1995 averaged US\$5.20/oz, slightly lower than the US\$5.29/oz average in 1994. After reaching a peak average monthly price of US\$5.54/oz in May, silver closed the year at an average price of \$5.18/oz in December. As a result of increased production levels and a relatively stable price, the value of shipments rose by 60% to \$276 million from the \$172 million recorded in 1994.

Potash

For the second consecutive year, world potash consumption rose and the relative balance in world markets led to increases in trade volumes and international prices. World potash production in 1995 was estimated at 24.3 Mt K₂O, an increase of 7% from the previous year. All producing countries experienced increases in production, especially Canada and the C.I.S. Spurred by strong world demand and strong

prices, Canadian potash shipments rose by 10% to 9.0 Mt K_2O in 1995. China dominated offshore potash imports for another year resulting in record sales for Canadian exporters. Potash, used principally in the preparation of fertilizers, is produced in two Canadian provinces, Saskatchewan and New Brunswick, with Saskatchewan accounting for 88% of Canada's production volume. Canadian potash mines operated at about 68% of capacity in 1995, the same level recorded in 1994, while other major world producers operated at capacities between 70% and 90%.

Chrysotile

Chrysotile, regarded as the form of asbestos "least hazardous" to human health, is the only form of asbestos produced in Canada. Total shipments of chrysotile in 1995 were estimated at 510 800 t, down by 3.8% from the 1994 level of 530 857 t. Due to a 3% increase in the average price of chrysotile, the value of production rose from \$233 million in 1994 to \$234 million in 1995. Asbestos-cement products are still favoured by many users despite increased competition from substitute fibres and steel. However, the growing scrutiny of substitute fibres for health reasons will continue to help the chrysotile industry over the next couple of years. Canada exports chrysotile asbestos to markets in more than 60 countries, with Asia representing the main export market in 1995, receiving about 60% of Canadian exports.

Salt

Canadians are the highest per capita consumers of salt in the world, primarily due to the use of salt as a de-icing agent to improve driving in wintry conditions. Salt is mined in several Canadian provinces including Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan and Alberta. As a result of the mild winter of 1994/95 and the temporary closure of the mine in the Magdalen Islands, shipments of Canadian salt fell to 10.8 Mt in 1995 from 12.2 Mt in 1994, a drop of about 12%. The corresponding value of these shipments decreased from \$300.7 million to \$267.9 million over that period. The domestic production and consumption of salt are expected to remain stable in the medium term.

Coal

Canada's coal production tonnage reached a new record level of 74.9 Mt in 1995, surpassing the previous high of 72.8 Mt established in 1994 by 2.9%. Production was up in the western provinces (Saskatchewan, British Columbia and Alberta), with Alberta alone reaching a record level of 37.1 Mt. On the east coast, coal production fell in the provinces of Nova Scotia and New Brunswick. The value of coal produced grew to \$1.902 billion, higher by about 5% than the \$1.812 billion registered in 1994. Canadian coal production should increase as coal prices, which turned around in 1995, are expected to continue to

rise in 1996. Domestic consumption of coal, used primarily for the generation of electricity and the production of steel, continued at about the same level as in 1994 at almost 53 Mt, with half of that tonnage being used by the province of Alberta to generate electricity. In 1995, Canadian coal companies exported 34 Mt with much of those exports being directed to Pacific Rim countries, notably Japan and South Korea.

Structural Materials

The value of all structural materials produced in Canada, including sand, gravel, cement, clay products, lime, and stone, was \$2.6 billion in 1995, a very slight increase over the level of the previous year. Total shipments of mineral aggregates (mainly crushed stone and sand and gravel) decreased by about 2% to 316 Mt in 1995. Shipments of cement increased by 4.6% in value and by 1.3% in tonnage over 1994 to reach a value of \$876 million. The construction industry continued to benefit from the \$6 billion infrastructure renewal program supported by all levels of government that began in late 1993. The recycling of structural materials is expected to increase as a result of limitations on the use of landfill sites and growing expertise within the construction industry. It is anticipated that shipments of mineral aggregates will rise modestly as the recovery in the residential and engineering construction industry continues into 1996.

Diamonds

Although Canada does not currently produce diamonds commercially, the search for diamonds continued strongly in Canada in 1995. Exploration activity was focussed in the Northwest Territories, but also occurred in several provinces including Saskatchewan, Ontario, Quebec, and Newfoundland (Labrador). Diamonds recovered to date from the kimberlite pipes at Lac de Gras, northeast of Yellowknife in the Northwest Territories, compare favourably with those produced from other world diamond mines. At today's diamond prices, the project to develop these pipes seems economically feasible, offering prospects for new economic activity in both the mining and downstream processing of diamonds.

LOOKING AHEAD FOR THE MINERAL INDUSTRY

The year 1996 opened on an austere note as base-metal prices weakened. Copper prices declined, largely as a result of the struggling automotive and construction sectors, while nickel prices were adversely affected by an inventory surplus of stainless steel products. Lead concentrate prices also fell as the market for lead-acid batteries decreased in response to declining auto sales. Nevertheless, a strong South-East Asian market, which is expected to

continue on a path of supportable growth, will probably keep the market for nonferrous metals buoyant in 1996. This optimistic outlook is further supported by expectations of growth in East European countries as they begin to emerge from their transition away from a centrally planned economy. Prospects in 1996 for other economies, such as Russia's, remain uncertain and these economies cannot be relied upon to fuel significant demand for Canadian minerals and metals.

The outlook for the industrial minerals sector is expected to remain positive. Although this sector is anticipating continuing pressures from China and other competitors, Canada is well positioned in terms of its own industrial minerals resource base and in terms of its access to U.S. and other markets. As with the base metals, continuing emphasis will be placed on improved cost-competitiveness and on the further development of world markets.

Canada's mineral industry is primarily export-oriented with as much as 90% of the production of some commodities being exported. If the favourable exchange rate for the Canadian dollar experienced in 1995 continues into 1996, the industry's export capability will continue to be enhanced. Nonetheless, it should be remembered that a low dollar can have a negative effect. Since the cost of imported machinery and equipment increases as the value of the dollar declines, companies needing to replace worn-out machinery and equipment face an increased financial burden.

The United States will continue to be the major export market for Canada's minerals and metals in 1996. Any slowdown in that country's economy will adversely affect the level of Canada's mineral exports.

The healthy improvement in labour productivity (as measured by real output, or GDP per employee) that the Canadian mineral industry has experienced in recent years should be sustained in 1996. In fact, for the period encompassing the years from 1982 to 1995, labour productivity increases in all four stages of the mineral industry surpassed the corresponding productivity levels in the overall Canadian economy. These gains in productivity stem not only from business restructuring, but also from extensive improvements in mining methods and technologies at a time when Canadian companies were forced to deal with severe economic downturns and rigorous international competition.

Corporate profits in the Canadian mineral industry have also shown considerable improvement over the first half of the 1990s. The mineral sector is particularly sensitive to movements in the interest rate as a substantial lead-time for capital investment is required before the value of reserves can be realized. Provided that the Canadian dollar does not strengthen significantly and that interest rates remain stable, the trend to continued profitability should be sustained in 1996.

While prices and factors influencing supply and demand tend to vary from year to year, many of the challenges currently facing the mineral industry are longer term and will require an ongoing effort to find solutions. Major issues include ensuring the longevity and competitiveness of Canada's minerals and metals industry, and sustaining the country's ability to attract mineral investment. Increasingly, Canada is facing competition for mining investment from foreign countries that are aggressively enhancing their own investment climates. A country's ability to attract mineral investment depends on a number of factors, the most important being the prospect of identifying and developing new and profitable mineral reserves. Canada's leading position as a mineral producer also depends on political stability, a skilled workforce, an up-to-date infrastructure, and a positive investment climate. The investment climate for mineral development remains the subject of much discussion, both inside and outside governments in Canada. There have been welcome developments in this regard as both federal and provincial governments and other stakeholders move ahead with "regulatory reform," a process designed to encourage and facilitate mining investment in Canada. Investment appears to have increased in 1995 as the amount of spending on machinery and equipment was expected to be larger than had been the case for some time. This increased spending is largely attributable to the new mines that came on stream in 1995 and to significant new mine openings that are expected in 1996.

Mineral exploration and development remain crucial to the industry and, as might be expected, most companies target their exploration expenditures to regions with high mineral potential. The acquisition and dissemination of geological data and exploration guidelines and techniques will become increasingly important if Canada is to maintain its position among the leading world targets of mineral exploration capital.

Any decline in Canada's base-metal reserves concerns the industry because base-metal commodities provide the most valuable contribution of all non-fuel mineral commodities to the Canadian economy. More recently, the picture for base-metal reserves has improved significantly. Taking into account the mine production decisions announced since 1993 and deposit appraisals currently under way, it is anticipated that there may be increases in Canadian reserves of several major minerals by the end of 1995. An excellent example of an as yet untapped potential resource is the Voisey's Bay nickel-copper-cobalt discovery, a deposit that lends itself to the use of large-scale underground bulk-mining technologies. With the possibility of other new mineral deposits coming on stream, the mineral industry is well positioned to continue making an important contribution to the Canadian economy.

The industry must also face increasingly urgent demands for adequate protection of the environment

and must address the need to respond to the fact that sustainable development is a key goal of public policy. (Sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their needs.”) In order to address the challenge of rendering the concept of sustainable development operational, the Government has recognized that all decisions must integrate environmental, social and economic considerations. Coinciding with the pressing need to ensure an internationally competitive investment climate has been growing public concern and expectations pertaining to the environmental and social impacts of the mineral industry’s activities. Until recently there has been little discussion on how the concept of sustainable development should be applied to non-renewable resources such as minerals and metals. In response to a new imperative, an issues paper entitled *Sustainable Development and Minerals and Metals* released by Natural Resources Canada in September 1995 specifically addresses how sustainable development applies to minerals and metals. Should economies and living standards improve around the world, the global demand for minerals and metals will increase. The paper emphasizes that the activities of the minerals and metals industry must not place undue long-term stress on the environment. In line with this philosophy, Canadian companies recognize that environmental protection is part of good business practice and, as a result, mineral exploration and development projects in Canada operate according to some of the highest health and safety standards in the world.

Spurred on by concern for the environment and opportunities to implement technological changes, many Canadian mining companies are now engaged in reducing emissions through the Accelerated Reduction/Elimination of Toxins (ARET) program, a voluntary program strongly supported by The Mining Association of Canada. In fact, 13 mining companies representing 83% of the value of Canada’s base-metal production in Canada have voluntarily made commitments to dramatically reduce emissions of ARET-listed substances by the end of the decade. The ARET program represents an encouraging step forward towards a more cooperative, flexible approach to the advancement of environmental protection as an alternative to regulatory methods. A second initiative, the Canadian Industry Program for Energy Conservation (CIPEC), is a voluntary industry-led project involving 12 of the country’s manufacturing and mining sectors. As part of this initiative, an industry/government alliance has been formed to develop and collect accurate and impartial baseline data on energy use by these sectors. The focus of this alliance is the improvement of the energy efficiency and competitiveness of Canada’s industry while, at the same time, assisting the country in meeting its carbon dioxide stabilization target.

The fact that the environmental regulatory regime facing the mining industry is a complex set of rules

and regulations has been recognized by several groups and jurisdictions. In 1994, the report *Lifting Canadian Mining Off The Rocks* illustrated the fact that regulatory reform was urgently required to restore the Canadian mining industry to a competitive position. The interim report from the Standing Committee on Natural Resources, tabled in December 1995, contained 15 specific recommendations for regulatory reform. This report demonstrated not only that immediate action was required to streamline the regulatory regime, but also that the need for Canada’s mining industry to remain competitive must be balanced against the need to protect the environment.

Regulatory reform and other management strategies that have been undertaken to reduce the environmental and health risks presented by nonferrous metals are a major research focus of the International Council on Metals and the Environment (ICME). The ICME has suggested that much of the controversy that exists today on environmental issues can be traced to the lack of consensus on the levels of risk that are acceptable to society. The ICME has concluded that, while substantial progress has been achieved in the risk management of nonferrous metals, further progress will require more innovative and effective approaches that reduce significant risks without unduly sacrificing the important societal benefits provided by nonferrous metals.

Progress continues as a result of the work associated with the Whitehorse Mining Initiative (WMI). The signing of the WMI Leadership Council Accord in September 1994 marked the historic culmination of 18 months of collaboration among mining-related stakeholders on how to achieve sustainable mineral activities in Canada. These discussions produced consensus on a wide range of issues affecting the future of the minerals and metals industry among representatives from industry, the federal and provincial governments, environmental and Aboriginal organizations, and other interested groups and individuals. As the WMI initiative moves into its second phase, namely that of implementing the principles and goals, stakeholder groups are continuing to issue regular progress reports that focus on a broad spectrum of relevant issues.

Federal government involvement in the WMI process led to the announcement, in March 1996, of the creation of an Advisory Committee on WMI Implementation. This newly formed committee will provide the Minister responsible for Natural Resources Canada with advice on the development of an action plan designed to address WMI goals that fall under federal jurisdiction. An updated Minerals and Metals Policy will be the focus of this Committee’s attention in the immediate future.

While representatives of the Aboriginal community were participants in the WMI process, the president of the Canadian Aboriginal Minerals Association

stated his belief that there continued to be several obstacles to full Aboriginal participation in the activities of the mineral industry. Mining, by its very nature, operates in remote areas, often very near native communities, and frequently offers the only viable economic and employment opportunity. The Aboriginal people believe that, by tapping into their community-based knowledge, mining development and mining-related operations could be rendered more socially and environmentally responsible. A newly emerging working relationship between mining and native communities has the potential to provide many benefits to indigenous people.

Canada's mineral industry will continue to face a complex web of change and challenge as the turn of

the century approaches. Internationally, Canada continues to encounter exacting competition from many foreign countries for investment dollars. Domestically, there is the ongoing need to further improve productivity, to contain or lower costs, and to continue to address the new societal and environmental imperatives. Those involved in the resolution of these formidable undertakings are determined to respond in the most pro-active manner to ensure that the mineral industry will continue to be a major contributor to Canada's economy.

Note: Information in this review was current as of April 26, 1996.

TABLE 1. CANADA, PRODUCTION OF LEADING MINERALS, 1994 AND 1995

	Volume		Percent Change 1995/1994	Value		Percent Change 1995/1994	
	1994	1995 ^p		1994	1995 ^p		
	(000 tonnes except where noted)			(\$ millions)			
METALS							
Copper		590.8	704.9	19.3	1 909.6	2 848.4	49.2
Gold	kg	146 428.2	149 026.4	1.8	2 468.9	2 534.9	2.7
Nickel		142.0	166.8	17.5	1 229.4	1 964.6	59.8
Zinc		976.3	1 093.5	12.0	1 330.7	1 556.1	16.9
Iron ore		36 416.4	37 130.1	2.0	1 214.9	1 212.0	-0.2
Uranium	tU	11 200.0	10 093.8	-9.9	616.3	539.0	-12.5
Silver	t	740.3	1 194.7	61.4	171.8	276.1	60.8
Molybdenum		9 758.9	8 481.8	-13.1	113.4	211.1	86.2
Cobalt		1.8	2.1	16.3	134.7	187.3	39.1
Platinum group	kg	13 422.5	15 108.6	12.6	144.5	173.3	19.9
Lead		167.6	203.3	21.2	125.4	172.6	37.7
NONMETALS							
Potash (K ₂ O)		8 517.2	8 847.9	3.9	1 287.1	1 462.4	13.6
Salt		12 243.9	10 772.1	-12.0	300.7	267.9	-10.9
Asbestos		530.9	510.8	-3.8	232.7	233.7	0.4
Sulphur, elemental		7 899.9	7 977.3	1.0	121.0	206.9	71.0
Peat		914.0	1 010.2	10.5	133.3	143.6	7.7
STRUCTURAL MATERIALS							
Cement		10 584.4	10 722.0	1.3	838.1	876.5	4.6
Sand and gravel		245 278.1	239 870.5	-2.2	870.1	860.1	-1.2
Stone		92 502.2	92 223.5	-0.3	559.9	558.6	-0.2
Lime		2 449.0	2 515.7	2.7	200.3	210.1	4.9
Clay products		113.9	104.5	-8.3
MINERAL FUELS							
Petroleum, crude	000 m ³	110 451.6	114 802.4	3.9	13 345.1	15 424.5	15.6
Natural gas	million m ³	138 856.4	148 481.4	6.9	9 428.6	6 845.6	-27.4
Coal		72 824.0	74 720.0	2.6	1 811.7	1 902.6	5.0
Natural gas by-products	000 m ³	22 665.6	24 917.1	9.9	1 623.5	1 751.2	7.9

Sources: Natural Resources Canada; Statistics Canada.

.. Not available; ^p Preliminary.

Note: Numbers have been rounded.

TABLE 2. CANADA, STAGE I TO STAGE IV, VALUE OF MINERALS AND MINERAL PRODUCTS, IMPORTS BY COMMODITY, BY ORIGIN, 1995

	United States	EU	Japan	Mexico	Other	Total
	(\$000)					
METALS						
Aluminum	2 513 795	197 126	6 873	3 437	796 926	3 518 157
Antimony	8 823	2 676	—	—	1 914	13 413
Bismuth	2 512	13	—	198	78	2 801
Cadmium	777	585	—	1	10	1 373
Calcium metal	425	4 054	—	—	7 365	11 844
Chromium	21 413	7 155	658	938	67 353	97 517
Cobalt	16 952	10 529	505	—	47 003	74 989
Copper	1 599 926	118 022	11 520	37 331	193 807	1 960 606
Gold	551 476	3 539	137	850	199 500	755 502
Iron and steel	7 062 845	1 501 974	444 898	158 028	1 290 229	10 457 974
Iron ore	240 941	2 212	15	.. .	21 364	264 532
Lead	290 122	5 486	3 263	6 876	31 672	337 419
Magnesium and magnesium compounds	65 099	12 395	376	117	44 044	122 031
Molybdenum	43 633	7 797	—	6 693	15 358	73 481
Nickel	181 971	89 217	62 426	7 707	378 460	719 781
Platinum group metals	57 292	12 334	2	2 794	151 410	223 832
Silver	49 048	8 268	618	7 372	56 671	121 977
Tin	15 648	2 854	81	134	37 640	56 357
Tungsten	4 372	1 162	433	—	2 808	8 775
Uranium and thorium	41 506	7 706	—	—	121 618	170 830
Zinc	163 533	4 923	130	1 277	9 986	179 849
Other metals	3 960 197	528 628	172 831	405 406	762 469	5 829 530
Total metals	16 892 306	2 528 655	704 766	639 159	4 237 685	25 002 570
NONMETALS						
Asbestos	63 255	3 173	2 463	2 413	3 633	74 937
Barites and witherite	1 468	255	—	—	12	1 735
Diamonds	40 091	65 961	4	—	80 631	186 687
Graphite	251 862	28 127	15 352	1 007	10 662	307 010
Gypsum	17 004	1 572	51	1 760	695	21 082
Mica	7 243	1 330	150	1	686	9 410
Nepheline syenite	28	—	—	—	50	78
Peat	270	384	—	—	133	787
Potash and potassium compounds	25 518	1 767	26	65	1 899	29 275
Salt and sodium compounds	257 574	20 898	389	4 948	5 502	289 311
Sulphur and sulphur compounds	14 044	984	2	—	23	15 053
Talc, soapstone and pyrophyllite	13 359	76	71	—	142	13 648
Titanium oxides	114 094	97 659	709	—	2 178	214 640
Other nonmetals	2 303 226	284 575	64 198	58 298	231 236	2 941 532
Total nonmetals	3 109 036	506 761	83 415	68 492	337 482	4 105 185
STRUCTURALS						
Cement	131 787	4 855	363	347	609	137 961
Clay and clay products	293 893	202 101	28 868	13 709	147 374	685 945
Lime	6 721	51	2	—	4	6 778
Sand and gravel	10 448	48	1	20	35	10 552
Silica and silica compounds	80 727	14 747	1 228	62	3 581	100 345
Stone	48 293	27 574	31	848	22 470	99 216
Other structurals	108 656	11 050	2 298	1 171	3 198	126 373
Total structurals	680 525	260 426	32 791	16 157	177 271	1 167 170
FUELS						
Petroleum	1 493 866	1 738 166	12 789	111 811	4 477 082	7 833 714
Natural gas	115 850	103	60	—	220	116 233
Coal and coke	591 381	585	—	—	39 508	631 474
Other fuels	709 407	54 497	8 185	2 483	7 075	781 647
Total fuels	2 910 504	1 793 351	21 034	114 294	4 523 885	9 363 068
Other n.e.s. ¹	127 162	16 973	2 314	58	1 575	148 082
Total mining imports	23 719 533	5 106 166	844 320	838 160	9 277 898	39 786 075

Sources: Natural Resources Canada; Statistics Canada.

— Nil; . . . Amount too small to be expressed.

¹ Other n.e.s. is included in total mining imports and refers to data for any mineral product that cannot be assigned to one category because of the nature of the product, i.e., it may fall into two categories such as alumina/silica.

Note: Numbers may not add to totals due to rounding.

TABLE 3. CANADA, STAGE I TO STAGE IV, VALUE OF MINERALS AND MINERAL PRODUCTS, EXPORTS BY COMMODITY, BY DESTINATION, 1995

	United States	EU	Japan	Mexico	Other	Total
	(\$000)					
METALS						
Aluminum	5 601 672	391 984	453 488	79	346 038	6 793 261
Antimony	2 100	—	—	—	—	2 100
Bismuth	510	965	—	—	—	1 475
Cadmium	2 436	3 759	3 072	—	536	9 803
Calcium metal	436	853	90	—	487	1 866
Chromium	13 629	408	—	—	11	14 048
Cobalt	86 089	54 722	50 582	22	128 888	320 303
Copper	2 065 151	579 318	527 057	95	430 769	3 602 390
Gold	1 840 069	142 904	230 261	—	691 093	2 904 327
Iron and steel	7 280 626	167 015	21 334	58 596	503 028	8 030 599
Iron ore	386 108	469 970	19 329	—	49 719	925 126
Lead	242 708	39 790	1 796	—	35 532	319 826
Magnesium and magnesium compounds	112 815	32 610	22 178	616	28 512	196 731
Molybdenum	33 489	4 818	81 060	15	44 020	163 402
Nickel	625 201	757 208	100 636	6 605	650 320	2 139 970
Platinum group metals	41 129	109 992	27 384	1 792	4 637	184 934
Silver	273 102	14 253	27 460	—	21 530	336 345
Tin	20 224	2 223	53	—	1 233	23 733
Uranium and thorium	508 293	143 240	19 833	623	17 926	689 915
Zinc	818 412	392 342	20 430	—	136 731	1 367 915
Other metals	2 285 503	273 004	165 485	3 033	241 985	2 969 009
Total metals	22 239 702	3 581 378	1 771 528	71 476	3 332 995	30 997 078
NONMETALS						
Asbestos	52 217	48 571	51 787	10 099	193 801	356 475
Barites and witherite	3 958	—	13	—	294	4 265
Diamonds	8 223	8 455	—	—	2 468	19 146
Graphite	83 875	16 475	1 101	2	19 955	121 408
Gypsum	183 479	618	1 304	—	1 492	186 893
Mica	7 902	409	1 299	—	102	9 712
Nepheline syenite	37 292	943	483	71	3 520	42 309
Peat	219 277	19 755	24 870	5	11 688	275 595
Potash and potassium compounds	867 918	37 292	94 901	1 489	763 428	1 765 028
Salt and sodium compounds	472 077	50	5 837	118	48 647	526 729
Sulphur and sulphur compounds	229 192	3 146	2 977	18 585	302 013	555 913
Talc, soapstone and pyrophyllite	7 002	69	—	—	71	7 142
Titanium oxides	198 018	1 275	337	—	677	200 307
Other nonmetals	2 064 008	89 026	23 553	3 623	152 858	2 333 068
Total nonmetals	4 434 438	226 084	208 462	33 992	1 501 014	6 403 990
STRUCTURALS						
Cement	422 620	481	459	—	2 484	426 044
Clay and clay products	29 518	1 723	646	—	5 015	36 902
Lime	30 087	—	—	—	2	30 089
Sand and gravel	15 613	138	—	—	1 617	17 368
Silica and silica compounds	6 670	290	74	34	5 890	12 958
Stone	61 439	5 331	11 121	—	6 111	84 002
Other structurals	78 028	997	166	1 849	7 132	88 172
Total structurals	643 975	8 960	12 466	1 883	28 251	695 535
FUELS						
Petroleum	13 600 083	61 962	66 467	13 504	453 224	14 195 240
Natural gas	6 391 433	6	—	—	86	6 391 525
Coal and coke	108 585	275 932	1 229 190	38 426	591 260	2 243 393
Other fuels	273 632	35 485	10 687	186	26 878	346 868
Total fuels	20 373 733	373 385	1 306 344	52 116	1 071 448	23 177 026
Other n.e.s.1	49 156	2 329	1	—	1 675	53 161
Total domestic mining exports	47 741 004	4 192 136	3 298 801	159 467	5 935 383	61 326 790

Sources: Natural Resources Canada; Statistics Canada.

— Nil.

1 Other n.e.s. is included in total domestic mining exports and refers to data for any mineral product that cannot be assigned to one category because of the nature of the product, i.e., it may fall into two categories such as alumina/silica.

Note: Numbers may not add to totals due to rounding.

TABLE 4. CANADA, VALUE OF DOMESTIC EXPORTS, TOTAL EXPORTS (INCLUDING RE-EXPORTS), IMPORTS AND BALANCE OF TRADE OF MINERALS AND MINERAL PRODUCTS, STAGES I TO IV, 1993-95

	1993	1994	1995
	(\$000)		
TOTAL MINING, INCLUDING FUELS			
Domestic exports	46 534 787	53 440 188	61 326 790
Total exports	46 974 636	54 241 118	62 780 720
Imports	29 845 223	35 447 306	39 786 075
Balance of trade	17 129 408	18 793 816	22 994 647
NON-FUEL MINING			
Domestic exports	27 037 173	32 570 725	38 096 603
Total exports	27 430 505	33 053 808	38 749 609
Imports	22 148 113	27 053 815	30 274 925
Balance of trade	5 282 387	5 999 997	8 474 686
TOTAL NON-FUEL MINING, INCLUDING COAL			
Domestic exports	28 920 554	34 649 555	40 339 996
Total exports	29 314 010	35 132 669	40 994 949
Imports	22 632 323	27 576 997	30 906 399
Balance of trade	6 681 682	7 555 676	10 088 552
TOTAL ECONOMY			
Domestic exports	177 621 700	213 290 200	247 703 400
Total exports	181 251 000	217 854 000	253 536 000
Imports	170 121 865	202 737 100	225 493 300
Balance of trade	11 129 135	15 116 900	28 042 700

Sources: Natural Resources Canada; Statistics Canada.

Note: Numbers may not add to totals due to rounding.