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The Mineral Industries of Latin America and Canada

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The 33 independent countries and 13 territories in Latin America (which includes the Caribbean) and Canada covered in this volume encompass an area of 30.5 million square kilometers. The region, which is three times the size of the United States, had a population of 598 million, or 9% of the world total, in 2005 (U.S. Central Intelligence Agency, 2006§[1]; World Bank, The, 2006§).

A number of countries in Latin America and Canada were major producers and exporters of mineral and fuel commodities. Such countries as Argentina, Brazil, Canada, Chile, Cuba, Jamaica, Mexico, Trinidad and Tobago, and Venezuela derived a significant portion of their economic strength, export revenues, and direct foreign investment from the production and export of mineral and/or fuel commodities. In 2005, Latin America and Canada accounted for about 53% of the world's total mine output of copper and about 45% of the mine output of silver. The region also contributed about one-third of the world's mine production of nickel and zinc and 23% of the mine output of iron ore and lead. The region was rich in mineral resources and continued to attract a significant portion of the world's exploration capital.

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General Economic Conditions

In 2005, the gross domestic product (GDP) of Latin America and Canada based on purchasing power parity was about $5,600 billion. Latin America's real GDP increased by 4.5%, which was higher than the world's GDP growth rate of 3.4%. Canada's real GDP increased by 2.9%. The real GDP of Venezuela and Argentina grew significantly, by 9.3% and 9.2%, respectively, as both countries continued to recover from recent economic recessions. In the Caribbean, Cuba and the Dominican Republic reported increases in the real GDP of 11.8% and 9.3%, respectively. Brazil and Mexico, which were the two leading economies of Latin America, grew at a pace similar to or lower than that of Canada, or by 2.3% and 3.0%, respectively. Brazil and Mexico contributed 47% of Latin America and Canada's GDP in terms of purchasing power parity during the year (table 2; Economic Commission for Latin America and the Caribbean, 2006c, p. 14; International Monetary Fund, 2006§).

Latin America and Canada continued to benefit from strong international prices for raw materials and petroleum, low interest rates and inflation, a healthy world economy, and expansion of its export volumes. Canada, which was one of the world's leading mineral producers, benefited in particular from the strong prices of copper, potash, and uranium. High nonfuel and petroleum prices had varying effects on the region's economies. On the one hand, high petroleum prices had a positive impact on the economies of petroleum exporting countries, such as Mexico and Venezuela, because of low inventories and high world demand for these commodities. On the other hand, a number of countries in the region were net importers of fuel commodities and their trade balances were negatively affected by the high prices. Latin America's economy, in general, enjoyed an increase in domestic demand fueled by increased employment, low inflation, and fiscal revenues (Economic Commission for Latin America and the Caribbean, 2005, p. 9; 2006b, p. 26; 2006c, p. 9; International Monetary Fund, 2006§; Natural Resources Canada, 2006§).

[1]References that include a section mark (§) are found in the Internet References Cited section.

Investment Data and Political Risk

In 2005, foreign direct investment (FDI) in Latin America and the Caribbean (excluding financial centers) increased by 11% to $68 billion compared with that of 2004. This level, however, was significantly lower than that experienced during the period between 1990 and 2000 when rapid economic changes and privatization policies were the leading factors in an FDI upturn. In 2005, South America received about $44.5 billion in FDI, of which $20.4 billion went to the Mercado Común del Cono Sur (MERCOSUR), $16.9 went to the Andean Community, and $7.2 went to Chile. During the year, Mexico's FDI was $17.8 billion; this was a decrease from that of 2004. Still, Mexico received the largest amount of net inflow of FDI in Latin America, followed by Brazil ($15.1 billion) and Colombia ($10.2 billion). A significant portion of Colombia's FDI went to petroleum and natural gas exploration and production. Chile's main areas of FDI were mining, transportation and communication, and electricity. About 20% of Argentina's FDI in 2005 was for the acquisition of the cement producer Loma Negra, S.A; this company held almost 50% of the country's cement market share. In Ecuador, the largest investment was in the petroleum sector; in Peru, the largest investment was in mining, although significant activity continued in hydrocarbons. In Venezuela, FDI reached $2.9 billion, which was almost double that of 2004, despite changes in policies that were aimed at increasing the Government's participation in the hydrocarbons sector at the expense of reducing the profit of private foreign investors. The only country that saw a significant decrease in the inflows of FDI was Bolivia, whose inflows of FDI had been declining since 2000 (-$279.6 million in 2005). This continuing decline in FDI was attributed to the political and social instability of recent years and the announcement by the new Government of its intent to nationalize the hydrocarbons sector (Economic Commission of Latin America and the Caribbean, 2006a, p. 10, 22-23, 26, 30).

A large portion of the investment in mining in Latin America was in gold. However, investments were also being made in other projects of importance in the area for a variety of mineral commodities. In Bolivia, several operations were scheduled for completion by 2010, and the Mutun iron and steel project was scheduled to be completed in 2011. Of the operations scheduled to open by 2010, the San Cristobal lead, silver, and zinc property was expected to have the highest level of investment. Most of the investment in the mining sector in Chile continued to be for copper, although the largest single project, which was scheduled for completion by 2010, was the Pascua-Lama copper, gold, and silver property (a binational project with Argentina). Although most of the investment in Central America was for gold and silver, in Guatemala, the Fenix nickel project was scheduled for completion in 2009; about 90% of the project was owned by a Canadian company.

The United States was the leading foreign investor in the region, followed by the Netherlands, Spain, and France. More than 50% of FDI was in services, followed by manufacturing and natural resources (Economic Commission of Latin America and the Caribbean, 2006a, p. 21).

Legislation

Despite the Federal Government of Argentina's efforts to develop mining in the country, another Argentine Province passed a law to ban the use of cyanide in metal production in 2005. Law No. 3981 of the Province of Rio Negro passed in July was similar to law No. 5001 of the Province of Chubut, which passed in 2003.

Brazil's legal framework for implementation of the Kimberley Process Certification Scheme (KPCS) consists of a specific KPCS law adopted in 2003 (law No. 10743 of October 9, 2003) and regulations, such as regulation No. 397 of October 13, 2003; regulation No. 209 of August 5, 2005, and implementing regulation No. 295 of September 1, 2005. After violent clashes between garimpeiros and indigenous peoples in 2004, Brazil suspended diamond mining on indigenous lands. The Brazilian Government was attempting to clarify the status of garimpeiro mining through several measures. A draft Garimpeiro Law (Projecto de Lei No. 7505 de 2005) was under consideration by the Brazilian Congress. The draft law would establish a legal framework for garimpeiro activity in Brazil and identify garimpeiro rights and obligations (Departamento Nacional de Produção Mineral, 2006§).

During the year, the Government of Chile passed a new tax regulation specific to mining. The regulation, which was to become effective in January 2006, establishes a scaling tax rate based on the value of earnings by a company or group of companies; the tax rate starts at 0.5% as the value of the company's or group's production reaches a level equivalent to the value of 12,000 metric tons (t) of copper and increases to 5% as the value of its production reaches a level equivalent to the value of 50,000 t of copper.

In April, Mexico's Official Gazette published several modifications to the 1992 Mining Law. As part of the changes, the Consejo de Recursos Minerales became the Servicio Geológico Mexicano. With the change, the new decentralized entity was responsible for the geology, geophysics, geochemistry, and mining information of the country. Other changes to the Law included changes to the list of minerals covered under the Law, and simplification and updating of administrative requirements. Legislation of the Mexican mining sector was geared toward increased investment. Mining and exploration leases in Mexico were being granted in less than 6 months, and leases were freely tradable. Regional and commodity exploration restrictions were lifted as a result of this legislation (Flores, 2005).

At yearend, the Government of Venezuela created the Compañía Nacional de Industria Básica. The new company, which was under the authority of the Ministerio de Industrias Básicas y Minería, was to be a Government consortium in charge of the administration of the 16 companies that make up the Corporación Venezolana de Guayana (C.V.G.), which was the holding company responsible for the development of the Guayana region. The C.V.G. companies produced bauxite, alumina, aluminum, gold, iron ore, and other mineral commodities (Agencia Bolivariana de Noticias, 2005§). The creation of the Compañía Nacional de Industria Básica was one of many changes that were being considered or implemented in

Venezuela. A new national mining company that would produce mainly diamond and gold was being contemplated. Also, the Government was planning to begin participation in the mining industry as a majority partner in all mining activities.

Exploration

According to Metals Economics Group (MEG), Latin America maintained its position as the top destination for proposed exploration capital, and its share of the world's exploration budget increased to about 23% in 2005 from 21.8% in 2004 (Metals Economics Group, 2005). Based on data compiled by the USGS, Latin American countries with the greatest exploration activity were, in descending order by the number of sites for which data were compiled, Mexico, Peru, Brazil, Argentina, and Chile. Gold attracted about 55% of total exploration activity, but interest in base metals reached 27% and silver achieved about 12% of the total. Investment in 2005 was primarily used to further define newly discovered resources (74%), conduct further exploration at a producing site (9%), and conduct feasibility studies of promising deposits (8%). Table 3 shows selected exploration projects that were considered significant based on the amount of activity or exploration expenditures incurred in 2005.

The Andean countries of Argentina, Bolivia, Chile, and Peru continued to attract mineral exploration activity because of their promising geology and successful production history. Investment for mineral exploration and development during the next 5 years was expected to reach $4.5 billion in Argentina, and $10 billion each in Chile and Peru (Turner, 2005§). Copper, gold, and silver projects received the most interest. Several large deposits were being developed, most notably Barrick Gold Corp's Pascua-Lama gold deposit, which at an elevation of about 4,600 meters (reported as 15,000 feet) requires the removal of glacial ice prior to mining. Environmental concerns for this region typically were focused on the use of cyanide in gold ore treatment and water contamination issues. Exploration projects of note based on their level of drilling included Minera Andes Inc.'s San Jose gold-silver deposit (Argentina), Quadra Mining Limited's Sierra Gorda copper-molybdenum deposit (Chile), and several gold-silver-base metal deposits in Peru. The number of exploration claims that had been approved in Chile totaled about 29,000, and accounted for 12% of the country's territory (Mining Magazine, 2006).

As had been the pattern for many years, exploration activity in Mexico focused on gold and silver. Gammon Lake Resources, Inc. began development of its Ocampo gold-silver project. Large-scale drilling for base metals, gold, and silver continued to expand resources at new sites and in areas adjacent to producing sites.

The discovery of several large gold deposits in Peru during the past decade has been followed by aggressive exploration in the country. Higher metals prices encouraged extensive exploration in 2005 for base metals, gold, and silver in Peru. Three copper projects that had 2005 exploration budgets greater than $5 million were Chariot Resources Limited's Marcona project, Peru Copper Inc.'s Toromocho project, and Xstrata Copper Corp.'s Las Bambas project. Peruvian silver projects with extensive 2005 exploration included the Berenguela project of Silver Standard Resources Inc., the Corani project of Bear Creek Mining Corp., and the Morococha project of Pan American Silver Corp. Cambior Inc. also conducted extensive work at its La Arena project in Peru.

Statistics released by the Canadian Government in March 2005 showed anticipated 2005 exploration spending in Canada of $930 million,[2] which was up by 3% from an expenditure of $900 million in 2004 (Natural Resources Canada, 2005§). MEG reported budgeted exploration spending in Canada for 2005 was $929 million, or about 19% of the estimated total worldwide exploration expenditures.

Domestic exploration budget allocations as reported by the Canadian Government were greatest in Ontario (about 28% of the country's total exploration and deposit appraisal budget), Quebec (19%), Nunavut (14%), British Columbia (10%), and the Northwest Territories (10%) (Natural Resources Canada, 2005§). Canadian Provinces or Territories with more than a 20% increase in exploration activity in 2005 compared with 2004 (based on reported budget estimates) were Alberta, New Brunswick, Newfoundland and Labrador, Manitoba, Nova Scotia, and the Yukon Territory. The Province and the Territory with estimated reductions in their exploration budgets for 2005 were British Columbia and Nunavut, respectively. Canadian Provinces or Territories with the greatest exploration activity were, in descending order by number of sites as compiled by the USGS, Ontario, British Columbia, Quebec, Nunavut, and Saskatchewan. Based on the site data, exploration for gold accounted for approximately 52% of Canadian exploration; copper accounted for about 16%; diamond, 15%; nickel, 10%; and lead and zinc, about 3%. Approximately 94% of all reported exploration sites were considered early-stage sites.

In 2005, the amount of exploration attributed to nonproducing sites was about 68% of the total anticipated exploration expenditure (Natural Resources Canada, 2005§). The share of junior exploration companies reached 50% of total expenditures for the first time since 1988. Anticipated spending was primarily for gold, base metals, and diamond (in order of value). Canadian gold exploration activity based on the number of sites in 2005 for which data were collected focused primarily on British Columbia, Ontario, and Quebec; diamond exploration focused on the Northwest Territories, Nunavut, Quebec, and Saskatchewan. In recent years, De Beers Consolidated Mines Limited spent up to 40% of its US$100 million exploration budget in the search for diamond in Canada although that figure was expected to shrink dramatically in 2006 (Mining Review Africa, 2005). Noteworthy exploration projects in Latin America and Canada that were active in 2005 are listed in table 3.

Commodity Overview

This section summarizes the potential developments and production and consumption trends for leading mineral commodities in Canada and Latin America. The region's share

[2]Where necessary, values have been converted from Canadian dollars (Can$) to U.S. dollars (US$) at the rate of Can$1.1468=US$1.00.

of world production of selected commodities is listed by mineral commodity in table 4.

Estimates for production of major mineral commodities for 2007 and beyond have been based upon supply-side assumptions, such as announced plans for increased production and new capacity construction and bankable feasibility studies. The outlook tables in this summary chapter show historic and projected production trends; therefore, no indication is made about whether the data are estimated or reported and revisions are not identified. Data on individual mineral commodities in tables in the individual country chapters are labeled to indicate estimates and revisions. The outlook segments of the mineral commodity tables are based on projected trends that could affect current (2005) producing facilities and on planned new facilities that operating companies, consortia, or Governments have projected to come online within indicated timeframes. Forward looking information, which includes estimates of future exploration, mine development, production, cost of capital projects, and lead times to start operations, are subject to a variety of risks and uncertainties that could cause actual events or results to differ significantly from expected outcomes. Projects listed in the following section are presented as an indication of industry plans and are not a USGS prediction of what will occur.

Metals

Aluminum.—Only four countries in Latin America and Canada produced primary aluminum in 2005. Of these, Canada was the leading producer in the region with 54% of the total. Brazil, the second leading producer, contributed 28% of the total. The other two producers were, in decreasing order of output, Venezuela and Argentina. Latin America and Canada, which from 2000 to 2005 increased its primary aluminum production by 16%, contributed 16% of the world output and was expected to increase its production by 57% by 2011 (tables 4, 6). Production capacity increases were planned in all producing countries in the region; Brazil led the growth with plans to double its production by 2011 by increasing its aluminum production capacity by 1.5 million metric tons per year (Mt/yr). Much of the new production in Brazil was expected to come from Alcoa Alumínio S.A. (Alcoa) as part of the expansions of the Alumar project, which included the proposed Juruti bauxite mine in the State of Para, the expansion of the Sao Luis alumina refinery and aluminum smelter in the State of Maranhao, and the rehabilitation of the Pocos de Caldas smelter in the State of Minas Gerais. The remaining planned expansion was by Companhia Brasileira de Alumínio (CBA) (Departamento Nacional de Produção Mineral, 2006, p. 50-51).

Bauxite and Alumina.—Latin America was a significant producer of bauxite, and the region's output increased by about 35% from 2000 to 2005 (table 5). Latin America produced 27% of the world total and two countries in the region (Brazil and Jamaica) ranked among the top five bauxite producers in the world. Brazil and Jamaica combined produced about 74% of Latin America's bauxite output. In addition, four other countries—Dominican Republic, Guyana, Suriname, and Venezuela—produced bauxite during the year (table 5). Jamaica's production increased by about 6% and production from Suriname increased by about 17% from that of 2004. Production from Venezuela was estimated to have increased slightly. The Dominican Republic, which was the smallest producer in Latin America, reported a significant increase in production to 534,555 t in 2005 from that of 2004 when production was 79,498 t. The country reported the resumption of bauxite production (6,481 t) in 2003; production had ceased in 1982. It was not clear if all of the production was from new mining or a combination of new production and production from stockpiled material.

Production of bauxite in Latin America was expected to increase significantly in the near future and into 2011. A large portion of the increase was expected to come from Brazil where three new mines were scheduled to begin production in the next 3 years. Paragominas [a new mine that was owned by a subsidiary of Companhia Vale do Rio Doce (CVRD)] was scheduled to come onstream in the State of Para in 2007 with a capacity of 4.5 Mt/yr. Alcoa was developing the Juruti project, which was also located in the State of Para, and was scheduled to begin commercial mining operations in 2008. Juruti's production capacity was expected to reach 10 Mt/yr. CBA was planning to develop a new mine in the State of Minas Gerais. This mine, which was scheduled to begin operating in 2006, was expected to have a capacity of 1 Mt/yr (Departamento Nacional de Produção Mineral, 2006, p. 50-51). Additional production also was expected in Jamaica, although the increase would be significantly lower than that of Brazil. Other countries in the region were expected to increase their bauxite output modestly.

Copper.—Mine production of copper in Latin America and Canada increased by less than 1% from that of 2004, but by about 21% from that of 2000. The reason for the small increase in 2005 was that production from Chile, which was the world's leading producer, decreased by almost 2%. Latin America's output represented 51% of the world's output, and Chile accounted for about 35% of the world's output (tables 4, 8). Against a background of strong copper prices and higher demand for copper, especially in China, copper production was expected to increase in Latin America and Canada at a rate of about 1.7% per year to 2011. Chile's production was anticipated to increase by about 3% by 2007, and to remain at the same level until 2011. For other copper producing counties in the region, mine production of copper was expected to increase at a higher rate. In Argentina, which is a country that has been producing copper for several decades, production of copper was expected to almost double with the opening of a new mine in the Province of Catamarca; the mine could come onstream in 2009. In Brazil, production was expected to almost double by 2007 and to triple by 2011 because CVRD planned to open two new projects—Alemao and Cristalino—in Carajas, State of Para, in 2007 and 2010, respectively, and Mineraçao Maracá Industria e Comercio S.A. was scheduled to open a new mine in the State of Alto Horizonte in 2006 (Companhia Vale do Rio Doce, 2006§).

Six countries in Latin America and Canada produced refined copper in 2005; most of it was primary. Chile, which was the world's leading producer of refined copper, contributed about 63% of the region's total and 17% of the world's output. Production of refined copper in Latin America and Canada

was expected to increase by 6% in 2007 and by 15% in 2009, respectively, from that of 2005. Production of refined copper in Chile was expected to increase by 6% in 2007 and by 10% by 2009 and to remain unchanged from 2009 to 2011. As with mine production, output of refined copper from Brazil was expected increase dramatically by 2011. The country's copper refining capacity was expected to increase following the completion of CVRD's Corpo 118 and Salobo copper projects, which were expected to produce a combined 36,000 t of copper cathode in 2008 and 200,000 t of copper cathode in 2010. Almost all other producing countries were expected to increase production, although at lower levels that those expected for Brazil.

Production of refined copper from Mexico was expected to increase by 15% in 2007 and by 27% in 2011 from that of 2005 as two new solvent extraction-electrowinning (SX-EW) producers come onstream. The Milpillas Mine of Industrias Peñoles, S.A. de C.V. and the Piedras Verdes Mine of Frontera Copper Corp. are located in the State of Sonora and were expected to begin production in 2006 (Industrias Peñoles, S.A. de C.V., 2007, p. 24; Frontera Copper Corporation, 2006§). Refined production from Peru was expected to increase slowly to 540,000 t in 2011. Peru's increase would result from capacity expansion in several refineries and SX-EW plants.

Gold.—Latin America and Canada produced 23% of the world's gold output, and more than 20 countries contributed to this production (tables 4, 10). Peru and Canada were the first and second ranked producers, respectively, in the region. In 2005, Peru and Canada were among the world's 10 leading producers, ranking fifth and eighth, respectively, and contributed almost 60% of the regional production (table 10; George, 2006§). Production from Peru was expected to grow moderately after almost quadrupling during the past decade. In Canada, where production was decreasing because new production was insufficient to replace output from large mines that had closed recently, production was expected to increase moderately as a result of recent increased interest in exploration that was encouraged by the continued strong price of gold (table 10; Chevalier, 2006, p. 21-23). In general, mine production of gold in Latin America and Canada was expected to increase by about 25% by 2010. The largest increases were expected to come from Argentina, Brazil, Chile, and Venezuela; in addition, the Pueblo Viejo Mine, which was located in the Dominican Republic, was expected to reopen after years of remaining idle.

A significant portion of the new regional gold production was expected to come from the Pascua-Lama binational project, which is located on the border between Argentina and Chile. Exploration activity had increased dramatically in recent years in Argentina and several gold projects, which included the Gualcamayo, the Manantial Espejo, the Pirquitas, and the San Jose, were expected to significantly increase national gold production. In Venezuela, official gold production in recent years increased modestly despite years of development work at Las Cristinas by several international companies. Although the future of the Las Cristinas project continues to be uncertain, production from the planned mine, which was awaiting the final environmental permit to begin construction, could double Venezuela's official gold production.

Iron Ore and Iron and Steel.—In terms of iron content of ore, Brazil was the world's leading producer with more than 185 Mt, which represented 79% of the Latin America and Canada total. Canada and Venezuela were the second and third ranked producing countries in the region. Together, these two countries produced about 14% of the region's total. In terms of gross weight, the region produced 23% of the world output (table 4). Production in Latin America and Canada, in terms of iron content, was expected to increase at a rate of about 3% per year though 2011; Brazil was expected to provide the largest potion of the increase owing to CVRD's expansion of Minas Carajas in the State of Para and the Brucutu Mine in the State of Minas Gerais, although the company was in the process of closing the Caue Mine in the State of Minas Gerais, which had produced more than 1 billion metric tons of ore during its 64 years of operation. The Brucutu Mine was expected to start production in 2006 at a rate of 12 Mt/yr of iron ore (almost 8 Mt/yr in terms of iron content). Production from the mine was scheduled to reach production rates of 23 Mt/yr of iron ore (15 Mt/yr in terms of iron content) in 2007 and 30 Mt/yr of iron ore (almost 20 Mt/yr in terms of iron content) when the mine reaches full capacity in 2008 (Companhia Vale do Rio Doce, undateda§, b§). In addition, Mineraçoes Brasileiras Reunidas S.A. (MBR), which was a subsidiary of CVRD, recently opened the Capao Xavier, the Capitao de Mato, and the Tamandua Mines in the State of Minas Gerais where production was expected to reach 32 Mt/yr sometime between 2006 and 2007. MBR's principal markets were China, Japan, and the Republic of Korea. Exports of iron ore to China were expected to continue to increase.

Companhia Siderúrgica Nacional, which was Brazil's third ranked producer of steel, had plans to increase the iron ore production capacity of the Casa de Pedra Mine to 40 Mt by 2007 from 15.5 Mt (20.4 Mt run-of-mine). The expansion was part of the company's $820 million investment plan, which included expansion of its iron pellet capacity and its coal port facilities (Companhia Siderúrgica Nacional, 2005, p. 11, 22, 25).

Production of iron ore in Canada decreased in 2005 as a result of a 14-week strike at the Wabush Mines. Aided by the ongoing rehabilitation of the eight processing lines of Iron Ore Co. of Canada's concentration plant, Canadian iron ore production capacity was expected to increase moderately though 2011.

In the past few years, the continued demand for iron ore resulted in significant international price increases. In Venezuela, C.V.G. Ferrominera del Orinoco, C.A., which was the Government-owned iron ore producer, renegotiated its export price with Ternium (a subsidiary of Grupo Techint); Ternium was the majority owner of Siderúrgica del Orinoco C.A., which was Venezuela's leading steel producer (The Techint Group, 2006). Ferrominera was working on expanding its production capacity to 30 Mt/yr of iron ore. The company was constructing a concentration plant that would produce 8 Mt/yr of high-grade ore, which would allow the company to produce and beneficiate iron ore that originated from some of its large low-grade mines (less than 55% iron) in the San Isidro region that were not in production. With these efforts, Venezuela's iron ore output could exceed Canada's output.

Latin America and Canada contributed about 8% of the world's production of crude steel (tables 4, 12). By far, the

leading producer in the region was Brazil with 11 producers, followed by Canada (estimated), Mexico, Argentina, and Venezuela. These countries produced 94% of the region's total. Production of steel in Latin America and Canada was expected to increase at an annual average rate of less than 3% between 2005 and 2011. The largest expansion was expected to come from Brazil with 23%, followed by Canada (18%), and Mexico (14%).

Brazil's production of steel was expected to increase by about 14% by 2007. One of the reasons for the increase was that the country's leading producer, Gerdau S.A., planned to construct a specialty steel mill in the State of Rio de Janeiro, which would more than double the company's capacity in the State to 2.6 Mt/yr. The new mill would supply steel mainly to the domestic automotive market. In addition, the company was planning to expand the capacity of its Consigua mill by 600,000 metric tons per year (t/yr) (Gerdau, S.A., 2004).

In 2005, Latin America was a net exporter of iron and steel. The region's apparent consumption of rolled steel products decreased slightly. The per capita apparent consumption of finished steel products averaged 92.2 kilograms (kg). The highest per capita consumption was in Mexico (168.1 kg) followed by Trinidad and Tobago (167.1 kg), Chile (127.6 kg), Costa Rica (106.4 kg), and Venezuela (101.6 kg) (Instituto Latinoamericano del Fierro y el Acero, 2006).

Lead.—Latin America and Canada produced about 17% of the world's mined lead in 2005 (table 4). Peru was the leading producer in the region with almost 10% of the world output and more than 50% of the regional production, followed by Mexico and Canada, which produced about 23% and 14% of the region's total, respectively. Production from Latin America and Canada continued to decrease when compared with the region's output of 1990, 1995, and 2000. Between 2000 and 2005, Canada's output decreased by almost 47%. The downward trend of the region was minimized, however, by increased lead production from Peru, which grew by almost 70% when compared with that of 1990 and by 18% when compared with that of 2000. The overall downward trend of region's mined lead production of the past 15 years was expected to be reversed with a projected increase in the lead production capacity in several countries that would result in a 25% increase in capacity by 2011. Production from Peru was expected to continue to increase, as well as was that from Canada and Mexico, although the production of Canada and Mexico was not expected to reach the levels achieved in the 1990s, particularly Canada.

In terms of individual country significance, Bolivia's lead production capacity was expected to increase by more than threefold with the opening of Apex Silver Mines Limited's San Cristobal Mine. Production from this mine in Southern Bolivia was expected to begin in 2007 and would more than double Bolivia's production of lead, compared with 2005 (Apex Silver Mines Limited, undated§).

Five countries in Latin America and Canada produced primary refined lead and six produced secondary refined lead. They contributed about 10% of the total world production of primary and secondary refined lead; 95% of the primary refined lead came from Peru, Canada, and Mexico, and 81% of the secondary production originated in (in decreasing order of output) Canada, Mexico, and Brazil (tables 14, 15). Production of refined metal in the region was expected to increase because of low world stock levels and expected increased demand (Teck Cominco Limited, 2007, p. 3).

Nickel.—Six countries mined nickel in Latin America and Canada and contributed to about 33% of world production (table 4). In the region, Canada and Cuba were the leading producing countries, although expansions in the production capacities of Brazil and Colombia brought their production levels up significantly so that their production exceeded that of Cuba in 2005; production from the Dominican Republic increased more modestly. Nickel production from Venezuela began in 2000. Canada was the world's third ranked producer of mine nickel; its production in 2005 was about 40% of Latin America and Canada's total (table 16). Colombia's production was estimated to account for 16% of the region's output and that of Brazil and Cuba, about 15% each. Brazil's production represented a 64% increase from that of 2000; most of the increase was in 2005. Production increases from Brazil and Canada were expected to result in a 20% increase in production from the region by 2011.

During 2005, the nickel market was tight. It was characterized by historically low inventories and a demand that outpaced supply (Anglo American plc, 2005b§).

In August, the highly anticipated Voisey's Bay project began producing nickel in Canada's Province of Newfoundland and Labrador. Production from this mine was expected to increase Canada's production by 31% in 2007. In the longer term, plans called for underground mining to begin by about 2018 (Voisey's Bay Nickel Company Limited, 2004§; Infomine Inc., 2006§).

Brazil's production of nickel was expected to increase with the development of Codemin S.A.'s two nickel projects, Barro Alto and Codemin II, which are located in Niquelandia in the State of Goias. Production from Barro Alto was scheduled to begin in 2010, with full capacity of 36,000 t/yr planned for 2011. In 2005, Barro Alto's feasibility study was being reviewed and was expected to be completed in 2006 (Anglo American plc, 2005a§; 2006§).

Platinum-Group Metals.—Only two countries, Canada and Colombia, produced platinum-group metals (PGM) in the Latin America and Canada region in 2005. Canada produced about 7% of the world's output of palladium and 3% of the world's output of platinum. Canada supplied about 90% of the region's estimated mine output of platinum and 100% of the reported mine production of palladium. Canada's production came from only one primary PGM mine and two byproduct producers. The country's PGM production capacity would increase with the planned development of an additional underground zone at the Lac des Iles Mine of North American Palladium Ltd. The deepening of the Lac des Iles Mine was expected to increase Canadian platinum output by about 35%. Production of platinum was expected to remain at the same level as that of 2005.

Zinc.—Latin America and Canada produced 29% of the world's mined zinc in 2005 (table 4). Peru was by far Latin America and Canada's leading producer of mined zinc, producing 43% of the region's total; it was the third ranked producer worldwide after China and Australia with 12% of total

production (table 19; Bi, 2007§). Since 2000, production in the region had increased by about 5% despite a large decrease in production from Canada (more than 30%), which was the second leading producer in Latin America and Canada. During the same 5-year period, production from Peru increased by 32% and Mexico, which was the third ranked producer in the region, recorded a 21% increase.

Mine production of zinc in Latin America was expected to increase to 3 Mt in 2007 with increases from Bolivia, Brazil, Canada, and Peru. Production capacity was expected to increase to 3.2 Mt by 2011. In Bolivia, mining was expected to increase despite concerns about the possibility of nationalization. Production increases were not expected from the active producers, however, but from Apex Silver's San Cristobal Mine, which was scheduled to begin operation in 2007. This new production would compensate in part for the decrease in production from Sinchi Wayra S.A. (a subsidiary of Glencore International AG), that was expected to result from a lack of investment in production and exploration owing to the uncertainty about the property's future. As a result of production from the San Cristobal mine, zinc production in Bolivia was expected to increase by about 39% from 2005 to 2011.

Although Brazil produced 6% of Latin America and Canada's zinc mine output, it was a net importer of zinc concentrates (tables 19, 20). The only zinc producer in Brazil was Votorantim Metais Zinco S.A., which was evaluating the potential of its Vazante deposit. Mine production from Brazil was expected to increase by 5% by 2007 and by 10% by 2011.

Canada produced about 24% of Latin America's mined zinc in 2005; however, the country's output was 16% lower than that of 2004 and 33% lower than that of 2000 (table 19). Despite the low production level in 2005, production from Canada was expected to return to the 2004 level and to remain at that level until 2011.

Mine production of zinc from Peru was expected to continue to increase at a slower pace than in recent years. Increased output from Volcán Minera S.A.A., which was the leading producer of mined zinc in Peru, was the reason for this increase. Production was expected to increase by 4% in 2007 and by 14% in 2011 compared with that of 2005.

Only five countries in Latin America and Canada produced refined zinc, and three of these countries produced only primary refined zinc. The region produced more than 30% of the world's production that was identified as primary refined zinc, but only a small amount of secondary refined zinc. Because a large amount of zinc production was not identified as primary or secondary, when all refined zinc production is accounted for, Latin America and Canada contributed only 14% of the world total (Bi, 2007§).

Production of refined zinc in Latin America and Canada was expected to increase by 2% per year to 2011. Peru, which was the region's leading producer of mined zinc, had the second lowest production of refined zinc in the region. Sociedad Minera Refinería de Zinc Cajamarquilla S.A., which was bought by Votorantim Metais Zinco of Brazil in 2004, was Peru's leading refined zinc producer and planned to double its refined zinc production capacity by 2008 (Bi, 2007§).

Industrial Minerals

Diamond.—Only four countries in Latin America and Canada produced diamond in 2005 (table 21). Regional production was estimated to be 13.1 million carats; of this, Canada produced almost 95%; Brazil, Guyana, and Venezuela produced the remainder. Canada was also the world's fourth ranked producer of natural diamond after Botswana, Russia, and Australia (Olson, 2006§). Canada's diamond production began in the late 1990s after the discovery of major kimberlite deposits in the 1980s. From 2000, diamond production in Canada has increased dramatically and was expected to continue to increase with three more mines coming into production in the near future. The Tahera Mine Corporation began construction of the Jericho Mine in the Territory of Nunavut in March 2005. By yearend, construction was nearly finished and commercial production was scheduled to begin in mid-2006. Production from the mine was expected to exceed 500,000 carats per year (Tahera Mine Corporation, 2006§, 2007§).

Two De Beers Canada mines were near production. The Snap Lake Mine, which is located 220 kilometers northeast of Yellowknife in the Northwest Territories, was to be the first De Beers mine outside of Africa and was expected to begin production in 2007. Production from this underground mine was expected to be 1.4 million carats per year. The other De Beers Canada project was the Victor project in James Bay, Ontario. Construction of the mine was expected to begin in 2006, and output from the open pit mine was expected to be 600,000 carats per year with a mine life of 12 years (De Beers Canada Inc., 2007a§, b§).

Diamond production in Brazil, which had significantly decreased since 2000 because of decreased production from garimpeiros, was expected to increase by 67% in 2007 and to more than triple by 2009 from that of 2005. Elkedra Diamonds NL had plans to begin production from the Chapada Alluvial Diamond Project in the State of Mato Grosso in 2006. The company planned eventually to produce 100,000 carats per year with an original mine life of 9 years, but continued its exploration program with the purpose of increasing reserves of the project (Elkedra Diamonds NL, undated§). Another company, Brazilian Diamonds Limited, was exploring properties that had previously been owned by De Beers. The company expected to reach a decision in 2007 on whether to begin large-scale dredging from one of these properties, Santo Antonio de Bonito (Brazilian Diamonds Limited, 2007§).

Estimated production from Guyana and Venezuela was expected to remain at the 2005 levels.

Phosphate Rock.—In terms of phosphorus pentoxide, the region of Latin America and Canada was a small producer (table 4). The leading producer in the region was Brazil, which produced 80% of the region's total; it was also the world's sixth ranked producer but produced only about 5% of the world's output. Canada was the second ranked producer in the region with 15% of the region's total and less than 1% of the world's total. Brazil's expansion was expected to increase by almost 13% by 2007 and by 22% by 2011. Fosfertil (which was the company that was formed from the merger of Fertilizantes Fosfatados S/A and Ultrafertil S/A in 2004) planned to expand

production capacity, and Bunge Brasil S.A. planned to increase its phosphate rock concentrate production capacity by 10% (table 21; Departamento Nacional de Produção Mineral, 2006, p. 165).

Production of phosphate rock from Canada was expected to decrease by 2007. This decrease was expected owing to the lower grade of the ore that was being mined from Kapuskasing Mine in Ontario (Agrium Inc., 2007, p. 4).

Peru was positioned to become a phosphate rock producer. In 2005, Brazil's CVRD won a bid to develop the Bayovar phosphate rock deposit in Piura, Peru. The terms of the concession called for a feasibility study to be completed in 2 years and for production to begin in 5 years. Under these terms, Peru would begin production in 2012. The company was considering an output of 3 Mt/yr of phosphate rock concentrate (Fertilizer Week, 2005).

Mineral Fuels and Related Materials

Coal.—Latin America and Canada produced only 2% of the world's coal production total (table 4). In the region, Canada was the leading producer of coal followed closely by Colombia. These two countries produced 83% of the region's total. Production from the region was expected to increase by less than 5% by 2007 but by 30% by 2011 (table 23). The majority of the increase was expected to come from Colombia and Venezuela where the expansion of mining capacity had been planned for years. Both the Colombian and the Venezuelan Governments proposed higher production-capacity expansions than those expected by coal industry analysts. Among the issues limiting the planned expansion was the infrastructure necessary to bring the coal to the export markets, which accounted for most of the coal produced in both countries.

Uranium.—Only two countries in Latin America and Canada produced uranium. Canada was by far the leading producer in the region with more than 99% of the total. The country was also the world leader in uranium production. Brazil was the other producer, although Argentina has produced uranium in the past and had announced plans to resume uranium production.

Production of uranium was expected to increase in Canada with the development of the Cigar Lake underground mine. Construction of the mine was approved in 2004 by the Canadian Nuclear Safety Commission. Production, which originally was planned to begin in 2007, was delayed until 2010 (Cameco Corporation, 2004§, 2007§).

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TABLE 1
THE AMERICAS: AREA AND POPULATION IN 2005[1]

	Area (square kilometers)	Estimated population (millions)
North America:		
Canada	9,984,670	32.3
Mexico	1,972,550	103
United States	9,826,630	296
Total	21,800,000	431
Central America and the Caribbean:		
Antigua and Barbuda	443	0.081
Aruba	193	0.101
Bahamas, The	13,940	0.323
Barbados	431	0.27
Belize	22,966	0.292
Bermuda	53	0.065
Costa Rica	51,100	4.33
Cuba	110,860	11.3
Dominica	754	0.072
Dominican Republic	48,730	8.895
El Salvador	21,040	6.88
Grenada	344	0.107
Guadeloupe	1,780	0.453
Guatemala	108,890	12.6
Haiti	27,750	8.59
Honduras	112,090	7.21
Jamaica	10,991	2.66
Martinique	1,100	0.436
Montserrat	102	0.009
Netherlands Antilles	960	0.183
Nicaragua	129,494	5.49
Panama	78,200	3.23
Saint Kitts and Nevis	261	0.048
Saint Lucia	616	0.166
Saint Vincent and the Grenadines	389	0.119
Trinidad and Tobago	5,128	1.31
Other[2]	16,385	4.07
Total	765,000	79.3
South America:		
Argentina	2,766,890	38.7
Bolivia	1,098,580	9.18
Brazil	8,511,965	186
Chile	756,950	16.3
Colombia	1,138,910	45.6
Ecuador	283,560	13.2
French Guiana	91,000	0.200
Guyana	214,970	0.751
Paraguay	406,750	6.16
Peru	1,285,220	28.0
Suriname	163,270	0.449
Uruguay	176,220	3.5
Venezuela	912,050	26.6
Total	17,800,000	375
Americas total	40,365,000	885
Share of world total	27	14
World total	149,000,000	6,438

[1]Table includes data available as of February 28, 2007. Population and totals are rounded to no more than three significant digits.

[2]Includes Anguilla, British Virgin Islands, Cayman Islands, Puerto Rico, Turks and Caicos Islands, and U.S. Virgin Islands.

Sources: U.S. Central Intelligence Agency, World Factbook 2006; World Bank,The, 2006 World Development Indicators database.

TABLE 2
THE AMERICAS: ECONOMY IN 2005[1, 2]

	Gross domestic product based on purchasing power parity		Real gross domestic product growth rate (percentage)
	Total (billion dollars)	Per capita (dollars)	
North America:			
Canada	$1,104.701	34,273	2.9
Mexico	1,072.563	10,186	3.0
United States	12,277.583	41,399	3.2
Total	14,500	XX	XX
Central America and the Caribbean:			
Antigua and Barbuda	0.938	11,523	5.0
Aruba	NA	NA	NA
Bahamas, The	6.524	20,076	2.7
Barbados	4.857	17,610	3.9
Belize	2.098	7,832	3.5
Bermuda	NA	NA	NA
Costa Rica	45.137	10,434	5.9
Cuba	NA	NA	NA
Dominica	0.468	6,520	3.4
Dominican Republic	65.042	7,627	9.3
El Salvador	31.078	4,518	2.8
Grenada	0.861	8,198	5.0
Guadeloupe	NA	NA	NA
Guatemala	57.000	4,155	3.2
Haiti	14.917	1,791	0.4
Honduras	21.740	3,009	4.2
Jamaica	11.657	4,381	1.4
Martinique	NA	NA	NA
Montserrat	NA	NA	NA
Netherlands Antilles	4.220	22,750	0.7
Nicaragua	20.996	3,636	4.0
Panama	23.495	7,283	6.4
St. Kitts and Nevis	0.609	14,649	6.7
Saint Lucia	1.062	6,444	5.4
Saint Vincent and the Grenadines	0.799	7,493	2.2
Trinidad and Tobago	18.352	14,258	7.9
Other[3]	NA	NA	NA
Total	332	XX	XX
South America:			
Argentina	533.722	14,109	9.2
Bolivia	25.684	2,724	4.1
Brazil	1576.728	8,561	2.3
Chile	193.213	11,937	6.3
Colombia	337.286	7,326	5.1
Ecuador	57.039	4,316	4.7
French Guiana	NA	NA	NA
Guyana	3.489	4,612	-3.0
Paraguay	28.342	4,888	2.9
Peru	167.212	5,983	6.4
Suriname	2.898	5,683	5.1
Uruguay	34.305	10,720	6.6
Venezuela	163.503	6,186	9.3
Total	3,120	XX	XX
Americas total	18,000	XX	XX
World total	61,028	XX	XX

NA Not available. XX Not applicable.

[1]Table includes data available as of February 28, 2007.

[2]Gross domestic product (GDP) based on purchasing power parity. Totals are rounded to no more than three significant digits.

[3]Includes Anguilla, British Virgin Islands, Cayman Islands, Puerto Rico, Turk and Caicos Islands, and U.S. Virgin Islands.

Source: International Monetary Fund, World Economic Outlook Database, September 2006.

TABLE 3
LATIN AMERICA AND CANADA: SELECTED EXPLORATION SITES IN 2005[1]

Location	Type[2]	Site	Commodity	Company	Resource[3]	Exploration[4]
Argentina	D	San Jose	Au, Ag	Minera Andes Inc.	288,000 oz Au, 15 Moz Ag	Extensive drilling.
Brazil	E	Araguaia	Ni	Falconbridge Ltd.	Data not released	Do.
Do.	E	Aripuanã	Zn	Karmin Exploration Inc.	Data not released	Do.
Do.	F	Jacobina	Au	Desert Sun Mining Corp.	2.3 Moz Au	Do.
Canada	E	Aviat	Diamond	Stornoway Diamond Corp.	Data not released	Extensive work program.
Do.	E	Bachelor Lake	Au	Halo Resources Ltd.	211,000 oz Au	Extensive drilling.
Do.	E	Black Fox	Au	Apollo Gold Corp.	457,000 oz Au	Do.
Do.	P	Casa Berardi	Au, Cu	Aurizon Mines Ltd.	1.7 Moz Au	Do.
Do.	E	Churchill	Diamond	Shear Minerals Ltd.	Data not released	Extensive work program.
Do.	E	Dundonald	Ni, Cu	First Nickel Inc.	22,000 t Ni, 14,000 t Cu	Extensive drilling.
Do.	D	East Amphi	Au	Richmont Mines Inc.	241,000 oz Au	Do.
Do.	E	Eleonore	Au	Virginia Gold Mines Inc.	Data not released	Extensive work program.
Do.	F	Fort a la Corne/Star	Diamond	Kensington Resources Ltd.	Data not released	Do.
Do.	F	Gahcho Kue	Diamond	De Beers Canada Exploration Inc.	Data not released	Do.
Do.	E	Galore Creek	Au, Ag, Cu	NovaGold Resources Inc.	5.9 Moz Au, 75 Moz Ag, 3 Mt Cu	Extensive drilling.
Do.	E	Gold Eagle	Au	Exall Resources Inc.	Data not released	Do.
Do.	F	Hope Bay	Au	Hope Bay Gold Corp.	2.1 Moz Au	Do.
Do.	P	Levack	Ni, Cu	FNX Mining Company Inc.	Data not released	Do.
Do.	E	McFinley	Au	Rubicon Minerals Corp.	do.	Do.
Do.	E	Meliadine West	Au	Comaplex Minerals Corp.	1.2 Moz Au	Do.
Do.	F	New Afton	Cu, Au, Ag	New Gold Inc.	742,000 t Cu, 1.8 Moz Au, 5.7 Moz Ag	Do.
Do.	E	Raglan South area	Ni, Cu, Co, PGM	Canadian Royalties Inc.	105,000 t Ni, 127,000 t Cu, 4,000 t Co, 1 Moz PGM	Do.
Do.	E	Rambler	Au, Cu	Rambler Metals and Mining plc.	Data not released	Do.
Do.	P	Red Lake	Au	Goldcorp Inc.	6.1 Moz Au	Do.
Do.	E	Renard area	Diamond	Ashton Mining of Canada Inc.	18 million carats diamond	Do.
Do.	F	Wolverine	Zn, Ag, Cu, Au, Pb	Yukon Zinc Corp.	544,000 t Zn, 51 Moz Ag, 52,000 t Cu, 244,000 oz Au, 71,000 t Pb	Extensive work program.
Chile	E	Sierra Gorda	Cu, Mo	Quadra Mining Ltd.	1.5 Mt Cu, 142,000 t Mo	Extensive drilling.
Colombia	F	Angostura	Au, Ag	Greystar Resources Ltd.	5.8 Moz Au, 24.6 Moz Ag	Do.
Ecuador	F	Mirador	Cu, Au, Ag	Corriente Resources Inc.	2.15 Mt Cu, 2.2 Moz Au, 18 Moz Ag	Do.
Do.	E	Quimsacocha	Au, Ag, Cu	Iamgold Corp.	2.8 Moz Au, 18 Moz Ag, 36,000 t Cu	Do.
French Guiana	F	Camp Caiman	Au	Cambior Inc.	1.1 Moz Au	Do.
Guatemala	E	Cerro Blanco	Au, Ag	Glamis Gold Ltd.	1.27 Moz Au, 5.87 Moz Ag	Do.
Do.	F	Fenix	Ni	Skye Resources Inc.	154,000 t Ni	Do.
Do.	E	Sechol	Ni, Co	Jaguar Nickel Inc.	401,000 t Ni, 6,000 t Co	Do.
Guyana	E	Tassawini	Au	StrataGold Corp.	Data not released	Do.
Mexico	P	Bolivar	Zn, Ag, Au, Cu	Dia Bras Exploration Inc.	32,000 t Zn, 734,000 oz Ag, 4,700 oz Au, 9,000 t Cu	Do.
Do.	E	Campo Morado	Au, Ag, Cu, Pb, Zn	Farallon Resources Ltd.	962,000 oz Au, 60 Moz Ag, 83,000 t Cu, 211,000 t Pb, 522,000 t Zn	Do.
Do.	E	Cozamin	Cu, Ag	Capstone Gold Corp.	67,000 t Cu, 9.8 Moz Ag	Do.
Do.	P	Guanacevi	Ag	Endeavour Silver Corp.	4.8 Moz Au	Do.
Do.	D	Ocampo	Au, Ag	Gammon Lake Resources Inc.	2.8 Moz Au, 133 Moz Ag	Do.
Do.	P	Palmarejo	Au, Ag	Bolnisi Gold NL	495,000 oz Au, 70 Moz Ag	Do.
Do.	F	Peñasquito	Ag, Au, Zn, Pb	Western Silver Corp.	614 Moz Ag, 8.7 Moz Au, 4 Mt Zn, 1.7 Mt Pb	Do.
Do.	E	San Anton/Cerro del Gallo	Au, Ag, Cu	Kings Minerals NL	1 Moz Au, 44 Moz Ag, 117,000 t Cu	Do.

See footnotes at end of table.

TABLE 3--Continued
LATIN AMERICA AND CANADA: SELECTED EXPLORATION SITES IN 2005[1]

Location	Type[2]	Site	Commodity	Company	Resource[3]	Exploration[4]
Peru	E	Berenguela	Ag	Silver Standard Resources Inc.	66 Moz Ag	Extensive drilling.
Do.	E	Corani	Ag, Pb, Zn	Bear Creek Mining Corp.	44 Moz Ag, 220,000 t Pb, 64,000 t Zn	Do.
Do.	E	La Arena	Au, Cu	Cambior Inc.	536,000 oz Au	Do.
Do.	E	Las Bambas	Cu	Xstrata Copper Corp.	Data not released	Do.
Do.	E	Marcona/Mina Justa	Cu, Ag, Au	Chariot Resources Ltd.	2.5 Mt Cu, 50 Moz Ag, 428,000 oz Au	Do.
Do.	E	Morococha	Ag, Zn, Pb	Pan American Silver Corp.	11 Moz Ag, 65,000 t Zn, 30,000 t Pb	Do.
Do.	E	Toromocho	Cu, Ag, Mo	Peru Copper Inc.	8.6 Mt Cu, 400 Moz Ag, 293,000 t Mo	Do.
Suriname	P	Rosebel/Royal Hill	Au	Cambior Inc.	2.5 Moz Au (reserve)	Extensive work program.

[1]Abbreviations used in this table for commodities are as follows: Au, gold; Ag, silver; Co, cobalt; Cu, copper; Mo, molybdenum; Ni, nickel; Pb, lead; PGM, platinum-group metals; and Zn, zinc. Abbreviations used in this table for units of measurement are as follows: Moz, million troy ounces; Mt, million metric tons; oz, troy ounces; t, metric tons.
[2]D Approved for development; E Active exploration; F Feasibility work ongoing/completed; P Exploration at producing site.
[3]Based on 2005 data reported from various sources, values vary from measured reserves to identified resources. Data not verified by U.S. Geological Survey.
[4]Significance of activity defined by either quantity of drilling or investment expenditure for exploration work program.

TABLE 4
LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED COMMODITIES IN 2005[1]

(Thousand metric tons unless otherwise specified)

	Metals									
	Aluminum		Copper, mine	Gold,	Iron and steel		Lead, mine	Nickel, mine	Silver,	Tin, mine output,
Country	Bauxite	Metal, primary	output, Cu content	Au content (kilograms)	Iron ore, gross weight	Steel, crude	output, Pb content	output, Ni content	Ag content (metric tons)	Sn content (metric tons)
Argentina	--	271	187	27,904	--	5,382	11	--	264	--
Bolivia	--	--	1	7,803	--	--	11	--	419	18,433
Brazil	21,000	1,498	133	41,154 p	280,862	31,631	16	74	81	11,739
Chile	--	--	5,321	40,447	7,862	1,534 p	1	--	1,400	--
Colombia	--	--	1	35,785	499	830 e	--	81 e	7	--
Costa Rica	--	--	--	150 e	--	--	--	--	(2) e	--
Cuba	--	--	--	500 e	--	245	--	74	--	--
Dominican Republic	535	--	--	--	--	60 e	--	46 e	--	--
Ecuador	--	--	(2)	5,416	--	85 e	--	--	(2)	--
El Salvador	--	--	--	--	--	51	--	--	--	--
French Guiana	--	--	--	1,955	--	--	--	--	--	--
Guatemala	--	--	--	740	--	197	--	--	7	--
Guyana	1,405	--	--	11,102	--	--	--	--	--	--
Honduras	--	--	(2)	3,600 e	--	--	10	--	54	--
Jamaica	14,118	--	--	--	--	--	--	--	--	--
Mexico	--	--	429	30,356	11,687	16,195	134	--	2,894	NA
Nicaragua	--	--	--	4,000 e	--	--	--	--	2 e	--
Panama	--	--	--	--	--	--	--	--	--	--
Paraguay	--	--	--	--	--	103	--	--	--	--
Peru	--	--	1,010	207,822	6,810	750	319	--	3,193	42,145
Suriname	4,757	--	--	10,619	--	--	--	--	--	--
Trinidad and Tobago	--	--	--	--	--	783 e	--	--	--	--
Uruguay	--	--	--	3,151	12	64	--	--	--	--
Venezuela	5,900 e	615	--	10,000 e	20,000 e	4,907	--	20 e	--	--
Other[3]	--	--	--	--	--	--	--	--	--	--
Total	47,700	2,380	7,080	443,000	328,000	62,800	503	295	8,320	72,300
Share of world total	28%	7%	47%	18%	21%	6%	15%	20%	40%	24%
Canada	--	2,894	595	119,225	28,343	17,000 e	79	198	1,122	--
Share of world total	--	9%	4%	5%	2%	2%	2%	13%	5%	--
United States	NA	2,481	1,140	261,000	54,400	93,300	426	--	1,230	--
Share of world total	NA	8%	8%	11%	4%	8%	13%	--	6%	--
Total Western Hemisphere	47,700	7,760	8,820	822,000	410,000	173,000	1,010	493	10,700	72,300
Share of world total	28%	24%	59%	33%	27%	15%	30%	33%	51%	24%
World total	172,000	31,900	15,000	2,470,000	1,530,000	1,130,000	3,360	1,500	20,800	303,000

See footnotes at end of table.

TABLE 4—Continued
LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED COMMODITIES IN 2005[1]

(Thousand metric tons unless otherwise specified)

						Mineral fuels and related materials				
									Petroleum	
	Metals—Continued	Industrial minerals					Natural gas			
Country	Zinc, mine output, Zn content (metric tons)	Cement, hydraulic	Gypsum	Phosphate rock, P_2O_5 content	Salt	Coal, all grades	Dry (million cubic meters)	Plant liquids (thousand 42-gallon barrels)	Crude, including condensate (thousand 42-gallon barrels)	Refinery products (thousand 42-gallon barrels)
Argentina	30,227	7,595	1,050	--	1,700	320	41,000 e	18,000 e	242,743	200,288
Bolivia	158,582	1,440	--	--	45	--	12,536	4,600 e	15,417	10,400 e
Brazil	171,434	36,673	1,582	2,044	7,297	6,000 e	17,699	4,700	614,697	641,670
Chile	28,841	3,999	661	3	6,068	732	2,294	3,500 e	1,208	75,879
Colombia	-- e	9,959	700 e	8 e	474	59,064	6,708	2,600 e	191,990	109,213
Costa Rica	--	2,000 e	--	--	20 e	--	--	--	--	5,400 e
Cuba	--	1,567	--	--	173	--	704 e	--	26,400 e	6,300 e
Dominican Republic	--	2,779	370	--	50 e	--	--	--	--	12,000 e
Ecuador	--	3,000 e	(2)	--	75	--	262	458	194,169	47,179
El Salvador	--	1	6 e	--	31 e	--	--	--	--	6,300 e
French Guiana	--	62	--	--	--	--	--	--	--	--
Guatemala	--	2,400 e	350	--	60 e	--	1 e	--	6,728	--
Guyana	--	--	--	--	--	--	--	--	--	--
Honduras	42,698	1,800 e	60 e	--	42 e	--	--	--	--	--
Jamaica	--	845	302	--	19 e	--	--	--	--	11,600 e
Mexico	476,307	37,452	6,252	(2)	9,508	11,750	32,539	158,978	1,216,654	488,480
Nicaragua	--	600 e	30 e	--	52 e	--	--	--	--	6,000 e
Panama	--	820 e	--	--	18 e	--	--	--	--	--
Paraguay	--	650 e	5 e	--	--	--	--	--	--	2,660 e
Peru	1,201,671	4,600 p	150	14	250	22	857	9,724	34,500	63,640
Suriname	--	65 e	--	--	--	--	--	--	4,380	2,700
Trinidad and Tobago	--	686	--	--	--	--	31,348	9,889	52,740	55,219
Uruguay	--	1,050 e	1,130 e	--	--	--	--	--	--	15,000 e
Venezuela	--	10,000 e	--	110	500 e	8,200 e	34,000 e	58,400 e	1,110,000 e	401,000 e
Other[3]	--	1,062	--	--	2,019	--	13	--	380	164,800
Total	2,110,000	131,000	12,600	2,180	28,400	86,100	180,000	271,000	3,710,000	2,330,000
Share of world total	22%	6%	11%	5%	11%	1%	6%	12%	14%	9%
Canada	666,654	14,267	9,400 p	380 e	14,125	67,341	170,335	68,800 e	928,500	771,197
Share of world total	7%	1%	8%	1%	6%	1%	6%	3%	3%	3%
United States	748,000	101,000	17,200	10,400	46,500	1,030,000	537,000	627,000	1,890,000	5,690,000
Share of world total	8%	4%	15%	22%	4%	18%	19%	28%	7%	21%
Total Western Hemisphere	3,520,000	246,000	39,200	13,000	89,000	1,180,000	887,000	966,000	6,530,000	8,780,000
Share of world total	37%	11%	34%	28%	37%	21%	31%	44%	24%	33%
World total	9,560,000	2,310,000	116,000	46,900	249,000	5,740,000	2,820,000	2,210,000	27,300,000	26,600,000

See footnotes at end of table.

TABLE 4—Continued

LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED COMMODITIES IN 2005[1]

[e]Estimated; estimated data, U.S. data, and world totals are rounded to no more than three significant digits. [p]Preliminary. NA Not available. -- Zero or zero percent.

[1]Totals may not add due to independent rounding. Percentages are calculated on unrounded data. Table includes data available as of March 2007.

[2]Less than 1/2 unit.

[3]Includes Aruba, Barbados, Belize, Guadeloupe, Haiti, Martinique, and the Netherlands Antilles.

TABLE 5
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED BAUXITE MINE PRODUCTION, 1990-2011

(Thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Brazil	9,680	10,200	13,800	21,000	25,500	26,000	29,500
Dominican Republic	--	--	--	535 [1]	--	--	--
Guyana	1,420	2,020	2,470	1,405	1,500	2,000	2,000
Jamaica	10,900	10,900	11,100	14,118	14,250	15,600	15,600
Suriname	3,280	3,530	3,610	4,757	5,000	5,000	5,000
Venezuela	771	5,020	4,360	5,900	6,000	6,000	6,000
Other	85	--	--	--	--	--	--
Total	26,100	31,700	35,300	47,700	52,000	55,000	58,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.
[1]Sales from stockpiles.

TABLE 6
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PRIMARY ALUMINUM PRODUCTION, 1990-2011

(Thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	166	186	262	271	300	350	375
Brazil	931	1,180	1,280	1,498	2,000	2,000	3,500
Canada	1,570	2,170	2,370	2,894	3,000	3,000	3,500
Mexico	68	10	61	--	--	--	--
Suriname	32	28	--	--	--	--	--
Venezuela	590	630	571	615	630	840	880
Total	3,360	4,200	4,540	5,280	5,900	6,200	8,300

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 7
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED SECONDARY ALUMINUM PRODUCTION, 1990-2011

(Thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	6	10	16	16	16	16	16
Brazil	60	92	210	253	300	300	300
Canada	83	NA	148	50	60	65	70
Mexico	60	129	287	574	600	600	600
Total	209	231	661	893	980	980	990

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. NA Not available.

TABLE 8
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED COPPER MINE PRODUCTION, 1990-2011

(Metal content in thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	--	--	145	187	200	200	350
Brazil	36	49	32	133	260	296	410
Canada	794	726	634	595	630	670	670
Chile	1,590	2,490	4,600	5,321	5,500	5,500	5,500
Mexico	294	335	365	429	450	490	500
Peru	318	444	554	1,010	1,030	1,050	1,060
Other	--	2	3	3	2	2	2
Total	3,030	4,050	6,330	7,680	8,100	8,200	8,500

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 9
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED REFINED COPPER PRODUCTION, 1990-2011

(Thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina[1]	11	16	16	16	16	16	16
Brazil	199	219	233	224	240	245	450
Canada	516	614	613	515	560	600	610
Chile[2]	1,190	1,490	2,670	2,824	3,000	3,100	3,100
Mexico	153	212	411	416	480	520	530
Peru[2]	318	444	452	510	520	530	540
Total	2,390	3,000	4,400	4,510	4,800	5,000	5,200

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.
[1]Secondary only.
[2]Primary only.

TABLE 10
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED GOLD MINE PRODUCTION, 1990-2011

(Metal content in kilograms)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	1,200	837	26,000	27,904	48,000	50,000	50,000
Belize	1	5	7	--	--	--	--
Bolivia	5,200	14,400	12,000	7,803	8,000	8,100	8,200
Brazil	102,000	63,300	50,400	41,154	49,000	50,000	50,500
Canada	169,000	152,000	156,200	119,225	120,000	125,000	135,000
Chile	27,500	44,600	54,100	40,447	40,000	50,000	63,000
Colombia	29,400	21,100	37,000	35,785	40,000	40,000	40,000
Costa Rica	460	400	50	150	1,800	2,600	3,400
Cuba	--	184	1,000	500	500	500	500
Dominican Republic	4,350	3,280	--	--	--	24,900	24,900
Ecuador	10,100	7,410	2,870	5,416	5,400	6,400	7,300
French Guiana	870	3,000	3,490	1,955	2,000	2,500	2,500
Guatemala	62	30	140	740	7,500	7,700	7,700
Guyana[2]	1,500	9,010	13,500	11,102	4,000	4,000	4,000
Honduras	156	111	878	3,600	3,500	2,600	1,000
Jamaica	--	--	--	--	--	--	--
Mexico	9,680	20,300	26,400	30,356	37,000	40,000	40,000
Nicaragua	1,200	1,320	3,670	4,000	3,000	2,200	2,200
Panama	85	1,100	--	--	--	--	1,500
Peru	10,400	56,000	139,000	207,822	210,000	215,000	220,000
Suriname	30	300	300	10,619	11,000	12,000	12,000
Uruguay	--	900	2,180	3,151	3,200	3,500	3,500
Venezuela	7,700	7,260	7,330	10,000	15,000	20,000	20,000
Total	381,000	407,000	537,000	562,000	610,000	670,000	700,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 11
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED IRON ORE PRODUCTION, 1990-2011[1]

(Iron content in thousand metric tons)

Country	Iron content	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	68%	680	--	--	--	30	30	30
Bolivia	65%	80	--	--	--	--	--	1,000
Brazil	66%	100,000	113,000	141,000	185,369	198,000	200,000	220,000
Canada	64%	22,000	24,600	22,700	19,500	20,000	20,500	21,000
Chile	61%	5,040	5,200	5,400	4,707	4,700	4,600	4,500
Colombia	55%	283	300	363	274	270	270	270
Guatemala	65%	4	1	10	--	--	--	--
Mexico	60%	7,110	5,630	6,800	7,012	7,000	7,000	7,000
Peru	68%	2,150	3,950	2,810	4,565	4,785	4,900	5,000
Uruguay	65%	3	3	4	8	8	8	8
Venezuela	65%	13,100	12,600	11,100	13,200	15,000	20,000	20,000
Total	XX	150,000	165,000	190,000	235,000	250,000	260,000	280,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. XX Not applicable.
--Negligible or no production.
[1]Includes beneficiated and direct-shipping ore.

TABLE 12
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED CRUDE STEEL PRODUCTION, 1990-2011

(Thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	3,640	3,620	4,470	5,382	5,400	5,500	5,700
Brazil	20,600	25,100	27,900	31,631	36,000	37,500	39,000
Canada	12,300	14,400	15,900	17,000	18,000	19,000	20,000
Chile	800	1,010	1,350	1,534	1,600	1,500	1,400
Colombia	703	792	660	830	850	900	900
Cuba	270	207	327	245	250	250	250
Dominican Republic	36	--	36	60	60	60	60
Ecuador	20	35	58	85	88	90	90
El Salvador	21	28	41	51	78	80	80
Guatemala	21	NA	166	197	290	290	290
Jamaica	24	25	--	--	--	--	--
Mexico	8,710	12,100	15,600	16,195	18,000	18,200	18,500
Paraguay	48	96	77	103	105	105	105
Peru	284 [1]	515 [1]	749	750	750	750	750
Trinidad and Tobago	631	738	753	783	800	800	800
Uruguay	38	40	38	64	65	65	65
Venezuela	2,680	3,630	3,840	4,907	5,000	5,200	5,500
Total	50,800	62,300	72,000	79,800	87,000	90,000	93,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. NA Not available.
-- Negligible or no production.
[1]Ingots and castings.

TABLE 13
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED LEAD MINE PRODUCTION, 1990-2011

(Metal content in metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	23,400	10,500	14,100	10,683	12,000	12,000	12,000
Bolivia	19,900	20,400	9,520	11,231	26,000	65,000	70,000
Brazil	9,300	11,600	8,830	16,063	16,800	17,000	18,000
Canada	241,000	211,000	149,000	79,252	81,200	85,000	90,000
Chile	1,120	944	785	878	1,200	1,200	1,200
Colombia	331	300	226	--	--	--	--
Ecuador	200	200	200	--	--	--	--
Honduras	5,790	2,620	4,810	10,488	9,000	8,900	8,800
Mexico	187,000	164,000	138,000	134,388	140,000	145,000	150,000
Peru	188,000	238,000	271,000	319,345	345,000	360,000	375,000
Total	676,000	660,000	596,000	582,000	630,000	690,000	730,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 14
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PRIMARY REFINED LEAD PRODUCTION, 1990-2011

(Metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina		2,430	8,700	10,200	11,500	11,500	11,500
Brazil	30,200	14,000	6,500	6,500	6,500	6,500	6,500
Canada	87,200	178,000	159,000	109,795	120,000	130,000	135,000
Mexico	167,000	166,000	143,000	103,691	120,000	125,000	125,000
Peru	69,300	221,000	116,000	122,079	125,000	125,000	125,000
Total	354,000	581,000	433,000	352,000	383,000	400,000	400,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 15
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED SECONDARY REFINED LEAD PRODUCTION, 1990-2011

(Metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	14,600	26,300	27,000	35,000	40,000	40,000	40,000
Brazil	45,300	65,000	50,000	104,904	140,000	145,000	150,000
Canada	96,500	103,000	125,000	119,613	125,000	130,000	140,000
Colombia	3,500	8,000	12,000	12,000	15,000	15,000	15,000
Mexico	65,000	10,000	110,000	110,000	110,000	110,000	110,000
Venezuela	14,000	16,000	30,000	30,000	30,000	30,000	30,000
Total	239,000	228,000	354,000	412,000	460,000	470,000	490,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 16
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED NICKEL MINE PRODUCTION, 1990-2011

(Metal content in metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Brazil	22,800	29,100	45,300	74,198	84,000	85,000	90,000
Canada	196,000	182,000	191,000	198,369	260,000	260,000	260,000
Colombia	22,400	24,200	59,000	81,000	80,000	80,000	80,000
Cuba	30,400	41,000	68,100	73,753	74,000	87,000	90,000
Dominican Republic	28,700 [1]	46,500	39,900	45,900	46,000	46,000	46,000
Venezuela	--	--	2,540	20,000	22,000	22,000	22,000
Total	300,000	323,000	406,000	493,000	570,000	580,000	590,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.
[1]Nickel content of ferronickel.

TABLE 17
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PLATINUM MINE PRODUCTION, 1990-2011

(Metal content in kilograms)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Canada	5,000	7,000	5,700	9,000	9,000	9,000	9,000
Colombia	1,600	973	339	1,082	1,200	1,200	1,200
Total	6,600	7,970	6,040	10,100	10,000	10,000	10,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 18
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PALLADIUM MINE PRODUCTION, 1990-2011

(Metal content in kilograms)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Canada	6,200	8,900	10,400	13,500	15,000	20,000	20,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 19
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED ZINC MINE PRODUCTION, 1990-2011

(Metal content in metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	38,700	32,100	34,900	30,227	33,000	40,000	40,000
Bolivia	104,000	146,000	149,000	158,582	190,000	200,000	220,000
Brazil	158,000	189,000	100,000	171,434	180,000	185,000	190,000
Canada	1,200,000	1,120,000	1,000,000	666,654	790,000	795,000	800,000
Chile	25,100	35,400	31,400	28,841	29,000	29,000	28,000
Colombia	356	--	40	--	--	--	--
Ecuador	100	100	100	--	--	--	--
Honduras	29,600	27,100	31,200	42,698	34,000	32,000	30,000
Mexico	307,000	364,000	393,000	476,307	475,000	475,000	475,000
Peru	598,000	692,000	910,000	1,201,671	1,250,000	1,300,000	1,370,000
Total	2,460,000	2,610,000	2,650,000	2,780,000	3,000,000	3,100,000	3,200,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 20
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED ZINC METAL PRODUCTION, 1990-2011

(Metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	31,500	35,800	39,300	40,634	43,000	45,000	45,000
Brazil	154,000	206,000	199,000	267,374	275,000	280,000	300,000
Canada[1]	592,000	720,000	780,000	722,951	750,000	800,000	850,000
Mexico[1]	199,000	223,000	235,000	327,205	330,000	350,000	350,000
Peru[1]	121,000	159,000	200,000	163,603	205,000	215,000	225,000
Total	1,100,000	1,340,000	1,450,000	1,520,000	1,600,000	1,700,000	1,800,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.
[1]Primary only.

TABLE 21
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED DIAMOND MINE PRODUCTION, 1990-2011

(Thousand carats)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Brazil	1,540	1,280	1,600	300	500	1,000	1,000
Canada	--	--	2,530	12,300	13,500	16,000	17,000
Guyana	18	52	82	340	350	350	350
Venezuela	333	296	110	115	100	100	100
Total	1,890	1,630	4,320	13,100	14,000	17,000	18,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

TABLE 22
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PHOSPHATE ROCK PRODUCTION, 1990-2011

(P_2O_5 content in thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Brazil	625	1,360	1,690	2,044	2,300	2,400	2,500
Canada[1]	NA	NA	125	380	300	300	300
Chile	4	3	4	3	3	3	3
Colombia	10	10	8	8	10	10	10
Mexico	187	187	316	(2)	--	--	--
Peru	47	89	6	14	15	16	18
Venezuela	34	23	105	110	115	115	115
Total	907	1,670	2,250	2,560	2,700	2,800	2,900

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. NA Not available. -- Negligible or no production.

[1]Sources: Natural Resources Canada and Jasinski, S.M., 2007, Phosphate rock, *in* Metals and minerals, U.S. Geological Survey Minerals Yearbook 2005, v. I, p. 56.1-56.10.

[2]Less than 1/2 unit.

TABLE 23
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED SALABLE COAL PRODUCTION, 1990-2011

(Thousand metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	270	305	246	320	400	600	800
Brazil	4,170	2,780	6,000	6,000	6,000	6,000	6,000
Canada[1]	68,300	75,000	69,200	67,341	68,500	70,000	75,000
Chile	2,730	1,490	509	732	230	220	210
Colombia	20,500	26,000	38,200	59,064	65,000	75,000	80,000
Mexico[1]	10,000	11,200	14,300	11,750	12,000	12,000	12,000
Peru[1]	175	80	27	22	25	25	25
Venezuela	2,190	4,260	7,910	8,200	12,000	22,000	25,000
Total	108,000	121,000	136,000	153,000	160,000	190,000	200,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

[1]Run of mine.

TABLE 24
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED URANIUM PRODUCTION, 1990-2011

(U_3O_8 content in metric tons)

Country	1990	1995	2000	2005	2007[e]	2009[e]	2011[e]
Argentina	1	68	--	--	--	--	--
Brazil[1]	--	--	20	129	260	300	300
Canada	10,300	12,400	12,600	14,900	15,300	16,500	17,700
Total	10,300	12,500	12,600	15,000	16,000	17,000	18,000

[e]Estimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. --Negligible or no production.

[1]Source: Anuário Mineral Brasileiro 2001-2006.