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The Mineral Industries of Latin America and Canada

By Philip M. Mobbs, David R. Wilburn, Susan Wacaster, Glenn J. Wallace, Steven T. Anderson, Omayra Bermúdez-Lugo, Alfredo C. Gurmendi, and Alberto Alexander Perez

The countries and territories in Latin America (which includes the Caribbean) and Canada covered in this volume encompass an area of about 30.5 million square kilometers. Excluding the United States and its territories, the region had a population of 607 million, or 9.1% of the world total, in 2008.

Regional economic organizations include the Caribbean Community (CARICOM), which was composed of 15 Caribbean basin countries. The member states of the Sistema de la Integración Centroamericana (Central American Integration System), which included the Central American Bank for Economic Integration and the Central American Common Market, were Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. The Dominican Republic-Central America Free Trade Agreement (CAFTA-DR) promoted trade between Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and the United States. Argentina, Brazil, Paraguay, and Uruguay were members of the Mercado Común del Sur (MERCOSUR) [Southern Common Market]; and Bolivia, Colombia, Ecuador, and Peru were members of the Andean Community, which was attempting to develop from a customs union into a common market. Venezuela's entry into MERCOSUR remained pending at yearend 2008. Canada and Mexico were part of the free trade area created by the North American Free Trade Agreement (NAFTA), together with the United States. Eighteen Caribbean Basin countries were members of the Petrocaribe energy cooperation arrangement, which allowed participating countries to purchase refined Venezuelan oil at a discount or to finance shipments of Venezuelan petroleum products at a low interest rate. Guatemala joined Petrocaribe in 2008.

Canada and a number of countries in Latin America were major producers and exporters of metallic and industrial minerals, mineral fuels, and related materials, mostly in crude form. With respect to 2008 mineral production, Bolivia was one of the top five producers of tin ore in the world. Brazil was one of the top five producers of bauxite, iron ore (Fe content), and tin ore. Canada was the leading producer of potash and uranium ore in the world, and one of the top five producers of aluminum, cobalt, gem-quality diamond, and ores of nickel, palladium, platinum, and zinc. Chile was the leading producer of copper ore in the world. Mexico was one of the top five producers of lead ore, and Peru was one of the top five producers of copper, gold, lead, tin, and zinc ore (Bray, 2010a, b; Carlin, 2010; Edelstein, 2010; George, 2010; Guberman, 2010; Jasinski, 2010; Jorgenson, 2010; Kuck, 2010; Loferski, 2010; Olson, 2010; Shedd, 2010; Tolcin, 2010; World Nuclear Association, 2010).

Colombia (13th) and Canada (15th) were among the top 15 coal producers in the world. Canada was one of the top five producers of natural gas, and Canada (6th), Mexico (7th), Venezuela (10th) and Brazil (15th) were among the top 15 crude oil producers in the world (BP p.l.c., 2009, p. 8, 24, 34).

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- Belize—Geology and Petroleum Department;
- Bolivia—Viceministerio de Minería y Metalurgia and Asociación Nacional de Mineros Medianos;
- Brazil—Departamento Nacional de Produção Mineral;
- Canada—Natural Resources Canada;
- Chile—Corporación Nacional del Cobre de Chile (CODELCO), Comisión Chilena de Cobre, and Servicio Nacional de Geología y Minería;
- Colombia—Unidad de Planeación Minero Energética and Instituto Colombiano de Geología y Minería;
- Costa Rica—Dirección de Geología y Minas;
- Dominican Republic—Dirección General de Minería;
- Ecuador—Ministerio de Energía y Minas and Dirección Nacional de Minería;
- Guatemala—Ministerio de Energía y Minas, Dirección General de Minería, and Departamento de Desarrollo Minero;
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- Peru—Ministerio de Energía y Minas; and
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General Economic Conditions

The global economic expansion of the past few years continued into 2008; however, by yearend 2008, a contraction of external demand and the tightening of available credit began to affect economic activity in the Latin America and Canada region. Export volumes of goods, including minerals and mineral products, fell sharply. The economic and financial

crisis, which resulted in a global recession, continued into 2009, although not all countries would be affected equally. Mineral importing countries, especially mineral-fuel importers in the Caribbean and Central America that had been adversely affected by the increased commodity prices, were expected to benefit from lower mineral commodity prices.

The boom in mineral commodity prices, which began in mid-2003 and escalated in 2005, finally peaked in mid-2008. During the boom, many of the mineral-exporting countries in the region had enjoyed additional economic benefits among which were low inflation, low interest rates, a low unemployment rate, and an increase in their export values and volumes. Revenues for already active mineral producers in the region increased exponentially during the commodity price boom, and many Governments were able to obtain corresponding increases in revenues from the mineral industries in their countries. By 2008, the production and export of mineral commodities, including mineral fuels, accounted for a notable percentage of the gross domestic products (GDPs) and export revenues in Canada and many countries in South America (International Monetary Fund, 2009, p. 13; United Nations, 2009, p. 10; United Nations Economic Commission for Latin America and the Caribbean and International Labor Organization, 2009, p. 5).

The United States was still the largest single (country) destination for the Latin America and Canada region's total exports, although the continuing growth in China's (and other emerging economies') demand for minerals was expected to draw an increased volume of goods from the region. For the period January to June 2009, the United States accounted for 37% of the total trade flow (exports and imports) from Latin America and the Caribbean. Intra-regional trade within Latin America and the Caribbean accounted for 19% of the region's total trade flow; trade with the European Union, 15%; and with China, 10%. The GDPs of mineral producing countries in Latin America and Canada were expected to be benefit from the revenue gained from the potential increase in exports of minerals and mineral products to China (United Nations Economic Commission for Latin America and the Caribbean, 2009b, p. 56).

By yearend, owing to the global economic and fiscal crisis, many mineral producers were affected by the lack of demand for their products. Capital-intensive mineral exploration, development, and processing-facility expansion projects were being affected by the lack of available funding.

Investment Data and Political Risk

According to the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) (2009a, p. 25-26), within Latin America and the Caribbean (excluding the financial centers of Bermuda, British Virgin Islands, Cayman Islands, and the U.S. Virgin Islands), foreign direct investment (FDI) was $128.3 billion in 2008, despite the international financial crisis. Brazil received $45.1 billion, which was about 35% of the FDI that flowed to Latin America and the Caribbean in 2008. About $22 billion was directed to Mexico, $16.8 billion to Chile, $10.6 billion to Colombia, and $8 billion to Argentina.

In 2008, FDI inflow to Mexico and the countries in the Caribbean Basin and Central America decreased by 5% with respect to that of 2007 to $38.4 billion. FDI received by South American countries in 2008 increased by 24% with respect to that of 2007 to about $89.9 billion. The disparity was attributed to the economic crisis in the United States, which resulted in a sharp decrease in the export of manufactured goods to the United States from Mexico and the countries in the Caribbean Basin and Central America. South American FDI was directed to the mineral commodity sector, especially the metals sector (the prices of metals did not decline significantly until the fourth quarter of 2008) (United Nations Economic Commission for Latin America and the Caribbean, 2009a, p. 25, 31).

Within the mineral industry of Latin America and the Caribbean, FDI in the solid mineral (mining) sector increased significantly more rapidly during the commodities price boom than did FDI in the hydrocarbon (natural gas and petroleum) sector. One cause of this disparity was the relatively higher presence of state-owned companies in the hydrocarbon sector. Investments were expected to decrease significantly in 2009 as companies scale back exploration and production activity in response to lower international mineral commodity demand and prices.

Total FDI in Canada was about $469 billion[1] in 2008, of which $71 billion was invested in hydrocarbon extraction and support, $28 billion in primary metal manufacturing, $23 billion in mining, and $22 billion in coal and petroleum processing. Total FDI inflow to Canada in 2008 was $40.2 billion. FDI in hydrocarbon production and support increased by $4.7 billion compared with that of 2007; mining increased by $3.2 billion; and coal and petroleum processing increased by $3 billion. In 2008, FDI in primary metal manufacturing decreased by $1.7 billion compared with that of 2007 (Foreign Affairs and International Trade Canada, 2009, p. 5, 68, 72).

Legislation

In Argentina, the law of minimum budgets for the protection of glaciers and the periglacial environment was vetoed in November. The proposed legislation would have restricted mining and oil drilling in a glaciated area between Argentina and Chile. In Colombia, the Ministry of Mines and Energy established at least three indigenous mining zones. In April, the Government of Ecuador issued a mandate that suspended metal-mine exploration and development activity in the country and revoked most mining concessions, claiming that they had been illegally granted without the consent of local communities. A new Ecuadorian mining law was passed in January 2009. Peru passed legislation that would change how mining royalties are distributed. Under the new legislation, royalties are assigned based on mineral production values. Venezuela announced a new policy to limit mining and mine development in its Imataca Forest Reserves, effectively stopping development of Las Cristinas and Las Brisas gold projects. Nationalization of the Venezuelan cement industry continued in 2008 (Ecclestone, 2008; Engineering and Mining Journal, 2008; Kosich, 2008b; Mineweb, 2008; Suggett, 2008).

[1]Where necessary, values have been converted from Canadian dollars (CAN$) to U.S. dollars (US$) at an average rate of CAN$1.077=US$1.00 for 2008 and CAN$1.074=US$1.00 for 2007.

Mineral exploration in Canada has been influenced by recent legislation directed at the mining industry. Approximately $93 million (to be disbursed during a 5-year period) was allocated for a Geo-mapping for Energy and Minerals program to provide the information necessary to guide investment decisions leading to the discovery and development of new resources, with emphasis on arctic areas in the Nunavut and the Northwest Territories. The New Brunswick Government approved up to $2.8 million during the course of 3 years to support mineral exploration at the Caribou mining camp. The Province of Saskatchewan approved a reintroduction of a 10% nonrefundable investment tax credit for mineral exploration following the eligibility rules of the Federal program (Canadian Mining Journal, 2008; CBC News, 2008; Geological Survey of Canada, 2010).

Across Canada, the debate on whether to permit uranium exploration and mining continued. British Columbia confirmed a ban on uranium exploration and mining in the Province. In the Province of Newfoundland and Labrador, a uranium mining ban was imposed on Inuit lands in Labrador by the Nunatsiavut Assembly. The Province of New Brunswick suspended all mining claims activity and imposed a ban on uranium exploration and mining within 300 meters of residential or institutional buildings and watershed areas designed for public water supply (Kosich, 2008a, c, d).

First Nation issues continue to affect mineral legislation in Canada. The Province of Ontario's Mining Act was under review for the purpose of updating regulations on how companies stake and explore their claims, and to establish consultation guidelines among Provincial governments, exploration companies, and First Nation authorities (Hill, 2008; Kirwin, 2008).

Exploration

On the basis of data compiled by the USGS, Latin American countries with the greatest exploration activity were, in descending order by number of sites for which data were compiled, Mexico, Peru, Chile, Brazil, and Argentina. According to the Metals Economics Group (MEG) (2008, p. 7-8), Latin America maintained its leading position as a destination for exploration capital (based on MEG estimates of proposed budget data) and Latin America's share of the world's mineral exploration budget increased slightly to about 25%. Brazil, Chile, Mexico, and Peru were ranked in MEG's top 10 country list for anticipated exploration spending in 2008. Gold attracted about 45% of total exploration activity; base metals, 36%; and silver, about 8% of the total. In 2008, investment in mineral exploration was used primarily to define newly discovered resources (56%), to conduct exploration at a producing site (22%), to conduct feasibility studies of promising discoveries (14%), and to explore further for resources adjacent to deposits under development (8%).

For many years, mineral exploration activity in Mexico has focused on gold and silver projects, which accounted for about 76% of the currently active exploration projects in Mexico. High base-metals prices in 2007 and the beginning of 2008 increased interest in base-metal deposits; polymetallic base-metal deposits accounted for an additional 23% of the active exploration projects. In recent years, precious metal exploration, principally by Canadian junior exploration companies, has been focused on the Sierra Madre mineral belt in central and western Mexico.

Chinese investment in Latin America increased in 2008 as Chinese companies secured interests in a number of large late-stage mineral projects. The 2008 results of the Fraser Institute's annual survey of exploration companies' assessment of the attractiveness of exploration in numerous countries, which is based on mineral occurrences and public policy factors, show a continued decline in the ranking of many Latin American countries, although Chile remains one of the top 10 destinations for investment according to the survey (McMahon and Cervantes, 2009).

Canada continued to be a focal point of global minerals exploration interest. The MEG (2008, p. 7) reported that $2.5 billion was budgeted for exploration spending in Canada in 2008, or about 19% of the estimated overall worldwide exploration budget. Statistics (as of February 2010) released by the Canadian Government's Natural Resources Canada (2009a-c) show that actual 2008 exploration expenditures (for projects through the feasibility study level) increased by 19% in terms of U.S. dollars [16% in terms of Canadian dollars (C$)] to about $3.1 billion from a total expenditure of $2.6 billion in 2007. Canadian Government statistics include expenditures for coal, industrial minerals, and uranium exploration, which are excluded from the MEG estimates. In 2008, precious metals (gold and silver) exploration expenditures accounted for $1.1 billion of the $2.5 billion exploration expenditure total; base metals accounted for about $782 million; diamond, $206 million; and uranium, $380 million. Junior exploration companies accounted for about 65% of total expenditures in 2008 compared with 61% in 2005, 65% in 2006, and 67% in 2007.

Based on data compiled by the USGS on the location of exploration activity in 2008, exploration for gold took place at approximately 32% of the Canadian exploration sites listed as active in 2008; copper, about 13%; uranium, 13%; lead and zinc, 10%; nickel, 9%; and diamond, 4%. Approximately 82% of all reported exploration sites were considered early-stage operations. Based on the number of sites in 2008 for which data were collected, Canadian gold exploration activity took place primarily in the Provinces of Ontario, Quebec, and British Columbia, respectively, and base metals exploration took place mainly in British Columbia, Ontario, Quebec, and Manitoba, respectively. Diamond exploration was focused in the Northwest Territories, Nunavut Territory, and the Province of Quebec and uranium exploration took place primarily in the Provinces of Saskatchewan, Quebec, Ontario, and Newfoundland and Labrador, respectively, based on the number of sites in 2008 for which data were collected.

Commodity Overview

This section summarizes the supply and demand trends and potential developments for the leading mineral commodities in Latin America and Canada. The region's share of world production of selected mineral commodities is listed by

commodity in table 4. Estimates for production of major mineral commodities for 2009 and beyond have been based upon supply-side assumptions, such as announced plans for increased production/new capacity construction, announced plans to reduce production and close production facilities either temporarily or permanently, and bankable feasibility studies. The outlook tables in this summary chapter show historic and projected production fluctuations and 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 current (2010) 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 production, exploration, and mine development; cost of capital projects; and timing of the start or closure of 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 and Bauxite and Alumina.—*Aluminum.*—Latin America accounted for 26% of the world's production of bauxite. Canada, which processed imported raw material, was the leading producer of aluminum in the region, accounting for about 8% of the world's production of primary aluminum metal. Latin America (mainly Brazil) accounted for 7% of the world's primary aluminum metal. Other aluminum producers in the region included Argentina, Mexico, and Venezuela. Regional aluminum production was expected to decrease in 2009. A rebound in aluminum output would depend upon the world's recovery from the economic crisis.

The apparent consumption of aluminum in Brazil and Mexico more than doubled between 2000 and 2008. During the same time period, the apparent consumption decreased by 62% in Canada. Notable consumers of aluminum included manufacturers of vehicles for the transportation industry, the food packaging industry, and the construction industry (table 23; Bray, 2010a).

In November 2008, Alcoa Inc. of the United States announced that it would partially or fully curtail production of aluminum metal at some of the company's smelters in response to decreases in global demand for aluminum. In Brazil, production of primary aluminum was expected to be lower than that of 2008 owing to a decrease in the production of primary aluminum by Alcoa Alumínio S.A.'s Poços de Caldas plant. In November, the Valesul Alumínio S.A. smelter in Brazil, which was owned by Companhia Vale do Rio Doce (Vale), began to reduce production; by December, it was operating at one-half of capacity. Valesul was not expected to resume operations at full capacity during the economic downturn (tables 4, 6; Alcoa Inc., 2008; Associação Brasileira do Alumínio, 2009a, b).

In Canada, Alcoa permanently closed one 53,000-metric-ton-per-year (t/yr)-capacity potline at the Baie Comeau smelter in November partially in response to the economic downturn, and Rio Tinto Alcan Inc. announced cutbacks in the production of alumina and primary aluminum at some locations, including the permanent closure of the Beauharnois aluminum smelter [which produced about 50,000 metric tons (t) of aluminum in 2008]. Rio Tinto Alcan also deferred the expansion of the Alma smelter and the modernization of the Kitimat smelter in 2008 (Rio Tinto plc, 2009, p. 71, 74; Alcoa Inc., 2010, p. 10).

Bauxite and Alumina.—Brazil was the leading producer of bauxite in the region and accounted for about 13% of the world's production. Other bauxite producers included Guyana, Jamaica, Suriname, and Venezuela. Production of bauxite in Latin America was expected to decrease in 2009 in response to the expected decrease in global demand for aluminum. In December, the West Indies Alumina Co. (WINDALCO) in Jamaica announced a 35% reduction in output (Jamaica Gleaner, 2008).

Copper.—*Ore.*—Production of copper ore in Latin America and Canada contributed more than 51% of the world output. Based on announced company plans, the region was expected to increase its copper ore production capacity by about 12% in 2015 compared with that of 2008 in response to continued growth in consumption of copper globally, especially in China and India (tables 4, 7).

The Escondida Mine in Chile was the leading single copper mine in the world, and Chile was the leading producer in the world, accounting for about 34% of global production of copper in 2008. In May, Corporación Nacional del Cobre de Chile started production from the 150,000-t/yr-capacity Gabriela Mistral (Gaby) Mine (Jordan, 2008).

In Brazil, copper ore production capacity was expected to increase significantly by 2015 compared with that of 2008 because Vale planned to complete the development of the company's Salobo copper project by 2012. Copper ore production capacity in Peru was expected to continue to increase gradually through 2015 mainly owing to expansions at the Cerro Verde, the Cuajone, and the Toquepala Mines (table 7).

Refined Copper.—In Latin America and Canada, refined copper production capacity was expected to increase by 2015 compared with that of 2008. Chile was the world's leading producer of primary refined copper in 2008. In 2009, total production of refined copper in Chile was expected to increase significantly compared with that of 2008 mostly owing to a full year's production of solvent extraction-electrowon (SX-EW) cathodes from the Gaby Mine and the continued rampup of production of SX-EW cathodes at the Spence Mine.

Between 2000 and 2008, the apparent consumption of copper increased in Brazil by 22% and in Peru by 33%. During the same time period, the apparent consumption of copper decreased in many countries, which included Argentina, Canada, Chile, Colombia, and Mexico (table 23).

In Peru, the Ilo copper smelter and refinery complex (operated by Southern Peru Copper Corp.) was the leading copper refinery in the country. An expansion of the Ilo copper refinery was expected to be completed sometime in 2012. SX-EW plants associated with copper mines accounted for more than 40%

of Peru's production of refined copper. Production of refined copper in Peru was expected to increase substantially by 2011 compared with that of 2008 mostly owing to capacity expansions at SX-EW plants.

In Brazil, after the restructuring of Paranapanema S.A. in August, plans were advanced for its subsidiary, Caraíba Metais S.A., to expand its production capacity to 277,000 t/yr by 2012. In December, Vale completed the construction of the 10,000-t/yr-capacity (of copper cathode) Usina Hidrometalúrgica de Carajás pilot plant at the Sossego Mine (Companhia Vale do Rio Doce, 2009, p. 42; Paranapanama S.A., 2010, section 6l).

Gold.—In 2008, Latin America and Canada accounted for about 27% of the world's production of gold. Peru and Canada were the first and second ranked producers, respectively, in the region and accounted for about 50% of the regional production (tables 4, 9).

A new mill began operating in 2008 at the Yanacocha Mine in Peru, which was owned by Newmont Mining Corp. of the United States and partners Cia. de Minas Buenaventura, S.A.A. of Peru and the International Finance Corp. Mine output was expected to increase substantially in the short term to feed the mill. Gold production from the mine was expected to increase by between 6 and 7 t/yr (Newmont Mining Corp., 2010a, p. 6; 2010b, p. 64).

In Canada, gold output decreased again in 2008. A number of polymetallic mines were placed on care-and-maintenance status owing to the international economic and financial crisis. Gold production was expected to increase by 2013 compared with that of 2008 as operations resume at suspended mines. Additional output was expected from the planned development of potential gold-producing properties, which included the Black Fox Mine of Apollo Gold Corp., the McGarry project of Armistice Resources Corp., San Gold Corp.'s Cartwright and Hinge zone deposits near the Rice Lake Mine, and the Timmins Mine of Lake Shore Gold Corp.

In 2009, Barrick Gold Corp. was expected to begin the construction of the Pascua-Lama project, which straddled the Argentinean-Chilean border (about 75% of the Pascua-Lama ore body was thought to be located in Chile). Barrick expected that the initial production of gold would take place in 2013, and that the production capacity would be ramped up to about 24 t/yr of gold and 1,000 t/yr of silver (Barrick Gold Corp., 2009, p. 8, 12).

Iron Ore and Iron and Steel.—*Iron Ore.*—In 2008, Latin America and Canada accounted for about 20% of the world's iron ore output in terms of gross weight. In terms of iron content, Brazil was the leading producer in the region and accounted for about 81% of the region's production of iron ore. Canada and Venezuela were ranked a distant second and third to Brazil, respectively, in the production of iron ore in the region. Production of iron ore in Latin America and Canada was expected to decrease in 2009 compared with that of 2008 mostly owing to an expected decrease in production by Vale in Brazil in response to the global economic crisis (tables 4, 10).

During 2010, Vale expected to expand the iron ore production capacity at the Carajas Mine in Brazil. In Canada, Consolidated Thompson Iron Mines Ltd.'s ongoing development of the company's Bloom Lake project was expected to start production by yearend 2009. The Bloom Lake project was expected to have a capacity to produce 7 million metric tons per year (Mt/yr) of iron ore concentrate. Also in Canada, iron ore production capacity could increase substantially by 2011 compared with that of 2008, with the resumption of an $800 million expansion program by Iron Ore Co. (IOC) of Canada, which would increase IOC's production capacity to 22.8 Mt/yr of iron ore concentrate from 17.5 Mt/yr in 2008. This expansion program was suspended in December 2008 (table 10; Dumont, 2009, p. 22.3; Consolidated Thompson Iron Mines Ltd., 2010).

Vale, Rio Tinto plc, and BHP Billiton Ltd., in order of the volume of iron ore shipped, accounted for much of the seaborne shipments of iron ore. About 57% of the shipments from Vale's Brazilian mines went to China; another 16% was shipped to other Asian counties, primarily Japan and the Republic of Korea. Rio Tinto shipped iron ore from mines in Brazil and Canada, which supplemented the company's shipments from Australia. BHP Billiton shipped iron ore from Brazilian operations, which supplemented the company's shipments from Australia (Sergeant, 2009).

Steel.—In 2008, Latin America and Canada accounted for more than 6% of the world's production of crude steel. The leading producers in the region were Brazil, Canada, and Mexico. Regional production of crude steel was expected to decrease in 2009 owing to decreases in capacity utilization. In response to an expected increase in global demand by 2010, production of crude steel in Latin America and Canada was expected to increase substantially by 2011, mostly owing to the resumption of expansion projects in Brazil and increased capacity utilization in the region (table 11).

Notable increases in the apparent consumption of finished steel for the period from 2000 to 2008 were calculated for Argentina, Brazil, Chile, and Colombia. Peru posted a more modest increase. In Canada, a decrease in apparent consumption of finished steel of 20% was noted for the same period (table 23).

Nickel.—Canada was by far the leading producer of nickel in the region and accounted for about 10% of the world mine output of nickel in 2008. The international economic crisis, which resulted in a significant decrease in the world nickel prices in late 2008 (and increasing inventories of nickel worldwide), was expected to result in a notable decrease in the production of nickel in the region in 2009. A production rebound in 2010 and beyond would be dependent upon market conditions, especially the recovery of the global steel sector (table 12).

In Brazil during 2008, Vale indefinitely postponed the 48,000-t/yr-capacity (nickel content of ferronickel) Niquel do Vermelho project, temporarily deferred the startup of the 58,000-t/yr-capacity (nickel content of ferronickel) Onca Puma project, and transferred the management of both projects to a subsidiary, Vale Inco Ltd. of Canada. In Canada, Crowflight Minerals Inc. completed construction of the Bucko Lake Mine in October. Commissioning of the mine and mill was expected to be completed in early 2009. Mining operations at the Lac des Iles, the Levack/McCreedy West, the Liberty, the Lockerby, the McWatters, and the Redstone nickel mines were closed or suspended in 2008, and the Copper Cliff South, the Craig, and

the Thayer-Lindsley nickel mines were expected to be closed in 2009 (Companhia Vale do Rio Doce, 2009, p. 35, 60, 82).

In Cuba, damage to nickel facilities caused by Hurricane Ike was expected to be repaired quickly. The Moa joint venture of General Nickel S.A. of Cuba and Sherritt International Corp. of Canada completed an initial 4,000-t/yr expansion of the Pedro Soto Alba Mine in Cuba, which increased the mine's capacity to about 37,000 t/yr of cobalt and nickel contained in mixed sulfides. The second phase of the capacity expansion program, which would result in an additional 9,000 t/yr of capacity, was postponed in late 2008 owing to economic conditions. In the Dominican Republic, Xstrata plc of Switzerland suspended operations at the 28,500-t/yr-capacity Falcondo nickel mine and ferronickel plant (Sherritt International Corp., 2009, p. 8-9; Xstrata plc, 2010, p. 81, 95).

Future facility expansions or new nickel mines included the 41,000-t/yr-capacity Barro Alto project in Brazil, which Anglo American plc of the United Kingdom planned to start up in 2011. In Canada, Vale Inco planned to complete an expansion at the company's Clarabelle mill and to complete development of the 8,200-t/yr-capacity (contained nickel) Totten Mine in 2011. Xstrata's 18,000-t/yr-capacity (contained nickel) Nickel Rim South Mine was expected to begin mining operations in 2009 (Anglo American plc, 2010, p. 19; Xstrata plc, 2010, p. 82).

Platinum-Group Metals.—Only two countries, Canada and Colombia, produced platinum-group metals (PGM) in the Latin America and Canada region in 2008. Canada produced 7% of the world's output of palladium and about 4% of the world's output of platinum. In the region, Canada accounted for 100% of the palladium output and much of the region's estimated output of platinum. Much of Canada's PGM ore production came from the underground Roby zone at the Lac des Iles Mine of North American Palladium Ltd., or was recovered as a coproduct of nickel ore mined by Vale Inco and Xstrata in the Sudbury district, as well as from nickel ore from Xstrata's Raglan Mine. The Podolsky Mine of FNX Mining Company Inc. started production in 2008. The copper-nickel mine also produced some PGM (tables 13, 14; Loferski, 2010).

A significant lack of demand for PGM, as expressed in the decline of the price of platinum metal that began in mid-2008, was attributed to the international economic crisis. According to Johnson Matthey Plc (2010), the average monthly price of platinum peaked in May at $2,060 per troy ounce, then declined to an average of $844 per troy ounce in November, before rebounding slightly in December. In response to the price decline, PGM production from the Lac des Iles Mine was temporarily (but indefinitely) suspended in late 2008. Coproduct PGM output from the Vale nickel mines was expected to be reduced in 2009 owing to the announced temporary suspensions of mining operations. Xstrata's output of coproduct PGM also was expected to be reduced as two nickel mines were scheduled to be closed in 2009.

The planned development of the underground Offset zone at the Lac des Iles Mine by 2012 was expected to more than compensate for the decrease of the mine's PGM production as the reserves at the Roby zone were depleted. Additional PGM was expected to be recovered from the output from Xstrata's Nickel Rim South Mine, which was scheduled to begin mining operations in 2009, and Vale Inco's Totten Mine.

Tin.—In 2008, Peru was the leading producer of tin of the countries in Latin America and Canada that produced tin and accounted for 16% of the world's production of tin ore; Bolivia produced about 7%, and Brazil, 5%. Minsur S.A., which was Peru's principal tin miner and refiner, was expected to decrease production in 2009 in response to the international economic recession. In late 2008, Serra da Madeira Participações Ltda., which was a subsidiary of Minsur, acquired the assets of Mineração Taboca S.A., which was the leading tin producer in Brazil (table 15).

Zinc.—*Ore.*—In 2008, Peru was the leading producer of zinc ore in the Latin America and Canada region, accounting for 14% of the world's output of zinc ore. Increased zinc ore production capacity in Peru (and the region) in the near term was expected to come mainly from an expansion of copper and zinc production capacity at the Antamina Mine in Peru by Cia. Minera Antamina S.A.; the rampup to full production of Xstrata's Perseverance Mine in Canada, which started commercial mining in July; and the development of the Wolverine zinc deposit in Canada by Yukon Zinc Corp. (tables 4, 17).

Votorantim Metais Zinco S.A. (a subsidiary of Votorantim Participações S.A. of Brazil) was the leading producer of zinc ore in Latin America. According to the Departamento Nacional de Produção Mineral (2009, p. 28), Brazil's production of zinc decreased in 2008 compared with that of 2007 at least partially owing to decreased production by Votorantim, which restrained production and program investments owing to decreases in zinc demand and prices. In September, Prometálica Mineração Ltda. closed the Monte Cristo zinc mine in Brazil because of decreased zinc prices and the lack of funding to continue operations. Prometálica subsequently filed a restructuring plan with the courts (Brazilian Resources, Inc., 2009, p. 3-4).

Refined.—Canada was the leading producer of refined zinc in the region, and Teck Cominco Ltd., which owned the Trail smelter and refinery complex, was the leading producer of refined zinc in Canada. In November 2008, Teck reduced production of refined zinc by about 5,000 metric tons per month at Trail in response to market conditions, and the cutback was expected to continue until mid-2009. Similar to steel consumption, about 70% of zinc use in Canada is by the automotive and construction sectors. Because the Government expected some recovery in those sectors by the end of 2010, production of zinc (both contained in concentrate and refined) in Canada was expected to increase substantially in 2011 compared with that of 2008 (table 18; Panagapko, 2009, p. 56.6, 56.11).

In Peru, Votorantim took advantage of the temporarily reduced demand for zinc to increase the production capacity at the Cajamarquilla zinc refinery. The capacity expansion to 320,000 t/yr from 160,000 t/yr was scheduled to be completed in 2009 (Votorantim Participações S.A., 2009, p. 42).

Industrial Minerals

Unlike the variability of apparent consumption of aluminum, copper, and steel, the apparent consumption of portland cement increased in Argentina, Brazil, Canada, Chile, Colombia, Mexico, and Peru between 2000 and 2008. Increases were noted

in Peru, 86%; Colombia, 70%; Argentina, 56%; Chile, 38%; Canada, 37%; Mexico, 33%; and Brazil, 16% (table 23).

Diamond.—Canada was by far the leading producer of diamond in the region; the world's third ranked diamond producer (by value) after Botswana and Russia; and the world's fifth ranked producer of natural diamond (by volume) after Russia, the Democratic Republic of Congo [Congo (Kinshasa)], Botswana, and Australia. Other regional producers included Brazil, Guyana, and Venezuela (table 19; Kimberley Process, 2009).

Canada's diamond production was recovered primarily from the Diavik Mine and the Ekati Mine. In 2008, De Beers Canada Inc. officially opened the 1.4-million-carat-per-year-capacity Snap Lake underground mine and the 730,000-carat-per-year-capacity Victor open pit mine. Tahera Diamond Corp.'s bankruptcy resulted in the closure of the 500,000-carat-per-year-capacity Jericho Mine (Perron, 2009, p. 17.1-17.3).

Lithium.—Lithium was recovered as lithium carbonate from subsurface brines and as lithium minerals from hard-rock ores. In 2008, production by Sociedad Chilena del Litio Ltda. and Sociedad Quimica y Minera de Chile S.A. (SQM) made Chile the leading producer of lithium carbonate. In Argentina, Minera del Altiplano S.A. produced lithium carbonate from brine. Cia. Brasileira de Lítio in Brazil and Tantalum Mining Corp. of Canada, Ltd. in Canada produced lithium minerals from ore. In 2008, the Latin America and Canada region accounted for about 58% of world production (excluding production from the United States) (table 20; Jaskula, 2010).

In 2008, energy shortages in Argentina again affected the delivery of natural gas to Chile, which adversely affected the generation of electricity and other industrial uses. Because of the lack of gas, SQM primarily used higher cost diesel and fuel oil to power its equipment in 2008. In October, SQM completed the expansion of its lithium carbonate capacity to 40,000 t/yr from 30,000 t/yr (Sociedad Quimica y Minera de Chile S.A., 2009, p. 3).

An anticipated increase in the production of rechargeable lithium-ion batteries for automobiles was expected to increase the demand for lithium significantly by 2015. In 2008, exploration for additional lithium deposits (both hard rock and lake brines) was underway in Argentina, Australia, Canada, and China. Exploration was expected to increase in the near term (Coons, 2008).

Mineral Fuels and Related Materials

Coal.—In the Latin America and Canada region, Colombia was the leading producer of coal followed closely by Canada. Production in the region was expected to increase substantially by 2011 compared with that of 2008. The majority of the increase was expected to come from Drummond Ltd.'s El Descanso Mine in Colombia, which was expected to produce more than 20 Mt/yr. The 6-Mt/yr-capacity Isla Riesco project, which is located in Region XII, Chile, was expected to begin production in 2012 (table 21; Drummond Ltd., 2009, p. 26; Diario Financiero, 2010).

Uranium.—Canada remained the leading producer of uranium in the world in 2008, despite the continued decline in Canadian uranium output. In the region, Brazil also produced uranium. The development of the Cigar Lake underground mine in Canada again was delayed by flooding in 2008, but construction was scheduled to be completed by 2013. The output from the Cigar Lake Mine was expected to increase Canada's uranium production significantly, and would more than offset the loss of production from the Rabbit Lake Mine, which was expected to close in 2015 (table 22; Cameco Corp., undated a, b).

The price of uranium had peaked in 2007, but there were a number of ongoing exploration projects in Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Guyana, Paraguay, Peru, and Venezuela. In Canada, the uranium rush was such that British Columbia banned uranium exploration and mining in the Province. In the Province of Newfoundland and Labrador, a ban was imposed on proposed uranium mining on Inuit lands in Labrador, and a ban also was imposed on uranium exploration and mining within 300 meters of residential or institutional buildings and watershed areas designed for public water supply in the Province of New Brunswick (Kosich, 2008a, c, d).

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TABLE 1
THE AMERICAS: AREA AND POPULATION IN 2008

Region and country	Area[1] (square kilometers)	Estimated population[2] (thousands)
North America:		
Canada	9,984,670	33,311
Mexico	1,964,375	106,350
United States[3]	9,826,675	304,060
Total	21,775,720	443,721
Central America and the Caribbean:		
Antigua and Barbuda	443	86
Aruba	193	105
Bahamas, The	13,940	335
Barbados	431	255
Belize	22,966	310
Bermuda	53	64
Costa Rica	51,100	4,527
Cuba	110,860	11,247
Dominica	754	73
Dominican Republic	48,730	9,838
El Salvador	21,040	6,134
Grenada	344	106
Guadeloupe	1,780	448
Guatemala	108,890	13,676
Haiti	27,750	9,780
Honduras	112,090	7,242
Jamaica	10,991	2,689
Martinique	1,100	402
Montserrat	102	5,100 [1]
Netherlands Antilles	960	194
Nicaragua	129,494	5,678
Panama	78,200	3,395
Saint Kitts and Nevis	261	49
Saint Lucia	616	170
Saint Vincent and the Grenadines	389	109
Trinidad and Tobago	5,128	1,338
Other[4]	17,154	4,187
Total	765,759	87,537
South America:		
Argentina	2,780,400	39,876
Bolivia	1,098,580	9,684
Brazil	8,514,875	191,972
Chile	756,950	16,758
Colombia	1,138,915	44,534
Ecuador	283,560	13,479
French Guiana	83,534	222
Guyana	214,970	763
Paraguay	406,750	6,227
Peru	1,285,215	28,837
Suriname	163,820	515
Uruguay	176,215	3,334
Venezuela	912,050	27,943
Total	17,815,834	384,144
Americas total	40,357,313	915,402
World total	148,940,000	6,692,030

[1]Source: U.S. Central Intelligence Agency, The World Factbook 2009.
[2]Source: The World Bank, 2008 World Development Indicators Database.
[3]Excludes Puerto Rico and U.S. Virgin Islands
[4]Includes Anguilla, British Virgin Islands, Cayman Islands, Puerto Rico, Turks and Caicos Islands, and U.S. Virgin Islands.

TABLE 2
THE AMERICAS: GROSS DOMESTIC PRODUCT[1, 2]

Region and country	Gross domestic product based on purchasing power parity: Gross value (million dollars)	Gross domestic product based on purchasing power parity: Per capita (dollars)	Real gross domestic product growth rate (percentage): 2006	2007	2008
North America:					
Canada	1,300,410	39,098	2.9	2.5	0.4
Mexico	1,550,540	14,120	5.1	3.3	1.3
United States	14,441,430	47,439.93	2.7	2.1	0.4
Total	17,292,380	XX	XX	XX	XX
Central America and the Caribbean:					
Antigua and Barbuda	1,627	19,340	12.4	6.9	2.8
Aruba	NA	NA	NA	NA	NA
Bahamas, The	9,383	27,735	4.3	0.7	-1.7
Barbados	5,231	18,977	3.2	3.4	0.2
Belize	2,548	7,954	4.7	1.2	3.8
Bermuda	NA	NA	NA	NA	NA
Costa Rica	48,663	10,735	8.8	7.8	2.6
Cuba	NA	NA	NA	NA	NA
Dominica	727	10,133	3.8	1.8	3.2
Dominican Republic	76,728	8,619	10.7	8.5	5.3
El Salvador	43,748	7,564	4.2	4.7	2.5
Grenada	1,181	11,464	-2.3	4.9	2.2
Guadeloupe	NA	NA	NA	NA	NA
Guatemala	67,117	4,907	5.4	6.3	4.0
Haiti	11,570	1,317	2.3	3.4	1.2
Honduras	32,779	4,275	6.7	6.3	4.0
Jamaica	24,199	8,967	2.7	1.5	-1.0
Martinique	NA	NA	NA	NA	NA
Montserrat	NA	NA	NA	NA	NA
Netherlands Antilles	NA	NA	NA	NA	NA
Nicaragua	16,709	2,698	3.9	3.2	3.2
Panama	38,667	11,362	8.5	11.5	9.2
Saint Kitts and Nevis	732	13,826	5.3	0.9	2.4
Saint Lucia	1,827	10,750	5.0	1.7	0.7
Saint Vincent and the Grenadines	1,087	10,163	7.6	7.0	0.9
Trinidad and Tobago	26,536	20,338	13.5	4.6	2.3
Other[3]	85,558	XX	XX	XX	XX
Total	496,617	XX	XX	XX	XX
South America:					
Argentina	572,668	14,408	8.5	8.7	6.8
Bolivia	43,570	4,345	4.8	4.6	6.1
Brazil	1,984,450	10,466	4.0	5.7	5.1
Chile	243,357	14,529	4.6	4.7	3.2
Colombia	397,249	8,229	6.9	7.5	2.5
Ecuador	108,389	7,786	3.9	2.5	6.5
French Guiana	NA	NA	NA	NA	NA
Guyana	3,082	4,029	5.1	5.4	3.0
Paraguay	29,451	4,786	4.3	6.8	5.8
Peru	246,283	8,594	7.7	8.9	9.8
Suriname	4,364	8,188	4.5	5.4	6.0
Uruguay	42,624	12,785	4.6	7.6	8.9
Venezuela	359,210	12,806	10.3	8.4	4.8
Total	4,034,697	XX	XX	XX	XX
Americas total	21,823,694	XX	XX	XX	XX
World total	69,489,850	XX	XX	XX	XX

NA Not available. XX Not applicable.

[1]Source: International Monetary Fund, World Economic Outlook Database, October 2009.

[2]Gross domestic product listed may differ from that reported in individual country chapters owing to differences in source or date of reporting.

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

TABLE 3

SELECTED SIGNIFICANT LATIN AMERICA AND CANADA EXPLORATION IN 2008[1]

Location	Type[2]	Site	Commodity	Company	Resource[3]	Exploration[4]
Argentina	E	Cerro Negro	Au, Ag	Andean Resources Ltd.	1.5 Moz Au, 17.3 Moz Ag	Extensive work program.
Do.	P	Cerro Vanguardia	Au, Ag	Anglogold Ashanti Ltd.	3.1 Moz Au, 55.9 Moz Ag	Extensive drilling.
Brazil	P	Corrego do Sitio	Au	do.	1.47 Moz Au	Do.
Do.	D	Lamego	Au	do.	Data not released	Do.
Canada	E	Afton	Cu, Au	Abacus Mining and Exploration Corp.	1.1 Mt Cu, 2.3 Moz Au	Extensive drilling.
Do.	E	Berg	Cu, Mo, Ag	Terrane Metals Corp.	1.1 Mt Cu, 136,000 t Mo, 25.4 Moz Ag	Do.
Do.	F	Bloom Lake	Iron ore	Consol. Thompson Iron Mines Ltd.	190 Mt Fe	Extensive work program.
Do.	E	Central Mineral Belt	U, V	Crosshair Exploration & Mining Corp.	3,400 t U_3O_8, 5,300 t V_2O_5	Do.
Do.	F	Detour Lake	Au	Detour Gold Corp.	10.8 Moz Au	Extensive drilling.
Do.	E	Eleonore	Au	Goldcorp Inc.	2.5 Moz Au	Extensive work program.
Do.	E	Foxtrot	Diamond	Stornoway Diamond Corp.	6.96 Mcarat diamond	Extensive drilling.
Do.	F	Gahcho Kue	Diamond	De Beers Canada Exploration Inc.	23.6 Mcarat diamond	Do.
Do.	F	Hidden Bay	U	Cameco Corp.	8,500 t U_3O_8	Do.
Do.	E	Joanna	Au	Aurizon Mines Ltd.	438,000 oz Au	Do.
Do.	E	Kerr-Sulphurets	Au, Cu	Seabridge Gold Inc.	19.7 Moz Au, 2.4 Mt Cu	Extensive work program.
Do.	E	Kwanika	Au, Cu	Serengeti Resources Inc.	Data not released	Do.
Do.	E	Lalor Lake	Zn, Cu, Au, Ag	HudBay Minerals Inc.	300,000 t Zn, 24,000 t Cu, 210,000 oz Au, 2.2 Moz Ag	Do.
Do.	E	Larder Lake	Au	Bear Lake Gold Ltd.	Data not released	Extensive drilling.
Do.	E	Magusi River	Cu, Zn, Au, Ag	Globex Mining Enterprises Inc.	27,600 t Cu, 43,100 t Zn, 49,800 oz Au, 1.8 Moz Ag	Do.
Do.	F	Malartic	Au	Osisko Mining Corp.	7.7 Moz Au	Extensive work program.
Do.	E	Matoush	U	Strateco Resources Inc.	1,700 t U_3O_8	Extensive drilling.
Do.	E	Meliadine West	Au	Comaplex Minerals Corp.	1.8 Moz Au	Do.
Do.	E	Midwest Northeast	U	Hathor Exploration Ltd.	Data not released	Do.
Do.	E	New Britannia	Au	Garson Gold Corp.	449,000 oz Au	Do.
Do.	E	Nunavik Nickel	Ni, Cu, Co, PGE, Au	Canadian Royalties Inc.	162,000 t Ni, 198,000 t Cu, 8,700 t Co, 1.5 Moz PGM, 84,000 oz Au	Extensive work program.
Do.	E	Rambler	Cu, Au, Ag, Zn	Rambler Metals and Mining plc.	184,000 t Cu, 97,500 oz Au, 688,000 oz Ag, 6,700 t Zn	Extensive drilling.
Do.	E	Roche Bay	Iron ore	Advanced Explorations Inc.	Data not released	Do.
Do.	E	Ruddock Creek	Zn, Pb	Selkirk Metals Corp.	Data not released	Do.
Do.	E	Sisson Brook	W, Mo	Geodex Minerals Ltd.	149,000 t WO_3, 49,000 t Mo	Do.
Do.	E	Young-Davidson	Au	Northgate Minerals Corp.	3.3 Moz Au	Do.
Chile	E	Apoquinda	Cu	Apoquindo Resources Inc.	200,000 t Cu	Do.
Do.	E	El Espino	Au, Cu	Explorator Resource Inc.	282,000 oz Au, 142,000 t Cu	Do.
Do.	P	Escondida	Cu	BHP Billiton Ltd.	34 Mt Cu	Do.
Do.	E	Pan de Azucar	Cu, Au, Ag, Mo	Centenario Copper Corp.	168,000 t Cu, 230,000 oz Au, 2.4 Moz Ag, 3,900 t Mo	Extensive work program.
Do.	E	Pelusa	Cu	do.	160,000 t Cu	Extensive drilling.
Do.	P	Zaldivar	Cu	Barrick Gold Corp.	3.1 Moz Au	Extensive work program.
Colombia	F	Angostura	Au, Ag	Greystar Resources Ltd.	11.6 Moz Au, 61.7 Moz Ag	Extensive drilling.
Do.	E	Gramalote	Au	B2Gold Corp.	2.4 Moz Au (inferred)	Do.
Mexico	E	Camino Rojo	Au, Ag, Zn, Pb	Canplats Resources Corp.	3.5 Moz Au, 60.7 Moz Ag, 600,000 t Zn, 310,000 t Pb	Do.
Do.	E	Juanicipio	Ag, Au, Pb, Zn	Mag Silver Corp.	237 Moz Ag, 480,000 oz Au, 169,000 t Pb, 288,000 t Zn (inferred)	Do.

See footnotes at end of table.

TABLE 3—Continued

SELECTED SIGNIFICANT LATIN AMERICA AND CANADA EXPLORATION IN 2008[1]

Location	Type[2]	Site	Commodity	Company	Resource[3]	Exploration[4]
Nicaragua	F	Orosi	Au	Central Sun Mining Corp.	709,000 oz Au	Extensive drilling.
Peru	E	La Granja	Cu, Zn	Rio Tinto plc	14.1 Mt Cu, 2.8 Mt Zn	Do.
Do.	P	Tintaya	Cu, Au, Mo, Ag	Xstrata plc	3.7 Mt Cu, 2 Moz Au, 26,300 t Mo, 31.4 Moz Ag	Do.

[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; PGE, platinum-group elements; U, uranium; V, vanadium; and Zn, zinc. Abbreviations used in this table for units of measurement are as follows: Mcarat, million carats; 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 2008 data reported from various sources; resource values reflect measured + indicated resources unless otherwise reported. Data not verified by the 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 MINERAL COMMODITIES IN 2008[1]

(Thousand metric tons unless otherwise specified)

	Metals									
	Aluminum		Copper, mine output,	Gold,	Iron and steel		Lead, mine output,	Nickel, mine output,	Silver, mine output,	Tin, mine output,
Country	Bauxite	Metal, primary	Cu content	Au content (kilograms)	Iron ore, gross weight	Steel, crude	Pb content	Ni content	Ag content (metric tons)	Sn content (metric tons)
Argentina	--	394	157	42,046	--	5,543	21	--	356	--
Bolivia	--	--	1	8,405	--	--	82	--	1,114	17,319
Brazil[p]	28,098	1,895	220	48,373	351,677	33,716	25	54	37	13,000
Chile	--	--	5,330	39,162	9,316	1,560 [e]	4	--	1,405	--
Colombia	--	--	2 [e]	13,411	475	1,125	--	64	9	--
Costa Rica	--	--	--	198	--	--	--	--	--	--
Cuba	--	--	--	--	--	274	--	67	--	--
Dominican Republic	NA	--	--	--	--	60 [e]	--	NA	--	--
Ecuador[e]	--	--	--	800	--	85	--	--	(2)	--
El Salvador	--	--	--	--	--	72 [e]	--	--	--	--
French Guiana	--	--	--	2,000 [e]	--	--	--	--	--	--
Guatemala[e]	--	--	--	7,500	30	250	(2)	--	100	--
Guyana	2,098	--	--	8,131	--	--	--	--	--	--
Honduras	--	--	(2) [e]	2,561	--	--	3	--	12	--
Jamaica	14,363	--	--	--	--	--	--	--	--	--
Mexico	--	--	269	50,817	11,688	17,230	141	--	3,236	NA
Nicaragua	--	--	--	3,400 [e]	--	--	--	--	3 [e]	--
Panama	--	--	--	--	--	--	--	--	--	--
Paraguay	--	--	--	--	--	130	--	--	--	--
Peru[p]	--	--	1,268	179,870	7,823	750 [e]	345	--	3,686	39,037
Suriname	5,230 [e]	--	--	10,300 [e]	--	--	--	--	--	--
Trinidad and Tobago	--	--	--	--	--	675 [e]	--	--	--	--
Uruguay	--	--	--	2,182	16	70	--	--	--	--
Venezuela[e]	5,500	610	--	10,100	23,000	5,000	--	20	--	--
Other[3]	--	--	--	5 [e]	--	--	--	--	--	--
Total	55,300	2,900	7,250	429,000	404,000	66,500	621	206	9,960	69,400
Share of world total	26%	7%	47%	22%	18%	5%	16%	8%	46%	27%
Canada[p]	--	3,120	607	95,044	31,273	15,130	79	260	728	--
Share of world total	--	8%	4%	5%	1%	1%	2%	10%	3%	--
United States	NA	2,660	1,310	233,000	53,600	91,900	410	--	1,260	--
Share of world total	NA	7%	8%	12%	2%	7%	10%	--	6%	--
Total Western Hemisphere	55,300	8,680	9,160	758,000	489,000	174,000	1,110	465	11,900	69,400
Share of world total	26%	22%	59%	38%	22%	13%	28%	18%	56%	27%
World total	213,000	39,600	15,500	1,970,000	2,210,000	1,330,000	3,980	2,540	21,500	256,000

See footnotes at end of table.

TABLE 4—Continued

LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2008[1]

(Thousand metric tons unless otherwise specified)

Country	Metals—Continued	Industrial minerals				Mineral fuels and related materials				
							Natural gas		Petroleum	
	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	30,349	9,703	1,257	--	1,681	208	44,100	--	229,723	140,900
Bolivia	383,618	1,985	5	--	45 [e]	--	14,895 [p]	4,800 [e]	14,233 [p]	11,000 [p]
Brazil[p]	173,933	46,500	1,923	2,242	7,020	6,732	18,941	4,904	876,000	725,620
Chile	40,519	4,622	774	7 [e]	6,431	534	1,828	3,500 [e]	966	82,573
Colombia	--	10,456	200	8 [e]	221	73,500	5,023	8,577	214,620	88,149
Costa Rica	--	2,500	--	--	NA	--	--	--	--	4,900 [e]
Cuba	--	1,707	--	--	157	--	1,161	--	19,366	10,112
Dominican Republic[e]	--	4,000	350	--	50	--	--	--	--	12,000
Ecuador	--	5,493	--	--	--	--	680	300 [e]	184,746	53,093
El Salvador[e]	--	1,300	6	--	30	--	--	--	--	6,200
French Guiana	--	62 [e]	--	--	--	--	--	--	--	--
Guatemala[e]	--	2,500	500	--	50	--	(2)	--	4,500	--
Guyana	--	--	--	--	--	--	--	--	--	--
Honduras[e]	7,700	1,800	6	--	40	--	--	--	--	--
Jamaica	--	725	238	--	19 [e]	--	--	--	--	299,000 [e]
Mexico	453,588	40,111	5,135	291	8,809	15,894	35,772	133,590	1,019,080	476,655
Nicaragua[e]	--	530	40	--	30	--	--	--	--	5,200
Panama[e]	--	1,050	--	--	18	--	--	--	--	--
Paraguay[e]	--	600	5	--	--	--	--	--	--	2,660
Peru[p]	1,602,597	6,862	495	17	1,276	136	1,750	12,236	28,027	63,201
Suriname	--	65 [e]	--	--	--	--	--	--	5,400 [e]	2,325
Trinidad and Tobago[e]	--	800	--	--	--	--	NA	12,500	45,000	55,000
Uruguay[e]	--	620	1,150	--	--	--	--	--	--	15,300
Venezuela[e]	--	11,000	7	115	350	7,457 [4]	28,500	78,500	920,000	434,000
Other[3]	--	1,040	--	--	1,773	--	12 [e]	--	365	169,800
Total	2,690,000	156,000	12,100	2,680	28,000	104,000	153,000	259,000	3,560,000	2,660,000
Share of world total	24%	6%	9%	5%	11%	2%	5%	10%	13%	9%
Canada[p]	678,177	13,672	5,740	210 [e]	14,386	67,749	157,949	172,200	1,004,000	745,000 [e]
Share of world total	6%	(2)	4%	(2)	6%	1%	5%	7%	4%	2%
United States	778,000	87,600	17,900	8,590	47,300	1,060,000	577,000	689,000	1,940,000	6,620,000
Share of world total	7%	3%	13%	17%	3%	16%	19%	28%	7%	22%
Total Western Hemisphere	4,150,000	257,000	35,700	11,500	89,700	1,240,000	888,000	1,120,000	6,500,000	10,000,000
Share of world total	37%	9%	25%	23%	36%	18%	30%	45%	23%	33%
World total	11,300,000	2,840,000	142,000	50,300	256,000	6,680,000	2,990,000	2,490,000	27,700,000	30,200,000

See footnotes at end of table.

TABLE 4—Continued

LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2008[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 June 21, 2010.

[2]Less than 1/2 unit.

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

[4]Reported figure.

TABLE 5

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED BAUXITE MINE PRODUCTION, 1995-2015[1]

(Thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Brazil	10,200	13,800	22,034	24,754	29,500	30,000	32,000
Dominican Republic	--	--	535	NA	--	--	--
Guyana	2,028	2,471	1,648	2,098	2,100	2,100	2,100
Jamaica	10,900	11,100	14,116	14,363	13,000	13,000	13,000
Suriname	3,530	3,610	4,757	5,230	5,250	5,300	5,500
Venezuela	5,020	4,360	5,900	5,500	5,500	5,500	5,500
Total	31,700	35,300	49,000	51,900	55,000	56,000	58,000

[e]Estimated. NA Not available. -- Negligible or no production.

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

TABLE 6

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PRIMARY AND SECONDARY ALUMINUM PRODUCTION, 1995-2015[1]

(Thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	196	278	270	393	400	400	400
Brazil	1,272 [2]	1,490	1,749	2,187	2,300	2,400	2,500
Canada	2,170	2,518 [2]	2 [2]	3,170	3,300 [2]	3,400 [2]	3,400 [2]
Mexico	139 [2]	348	574	600	600	700	700
Suriname	28	--	--	--	--	--	--
Venezuela	630	571	615	610	610	610	610
Total	4,400	5,200	6,200	7,000	7,200	7,500	7,600

[e]Estimated. -- Negligible or no production.

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

[2]Includes secondary aluminum production.

TABLE 7

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED COPPER MINE PRODUCTION, 1995-2015[1]

(Metal content in thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	--	145	187	157	175	200	300
Bolivia	1	1	1	1	1	1	1
Brazil	49	32	133	220	230	240	250
Canada	726	634	595	607	600	640	640
Chile	2,489	4,602	5,321	5,330	5,500	5,700	5,900
Colombia	11	10	9	5	6	7	7
Ecuador	--	--	--	--	--	6	6
Mexico	335	365	429	267	300	320	350
Peru	444	554	1,010	1,268	1,300	1,350	1,400
Total	4,100	6,300	7,700	7,900	8,100	8,500	8,900

[e]Estimated. -- Negligible or no production.

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

TABLE 8

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED REFINED COPPER PRODUCTION, 1995-2015[1]

(Thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina[2]	16	16	16	NA	--	--	--
Brazil	219	233	224	244	250	260	270
Canada	614	613	515	470	520	520	520
Chile[3]	1,490	2,668	2,824	3,060	3,200	3,400	3,400
Mexico	212	411	416	314	345	360	390
Peru[3]	444	452	512	464	500	550	600
Total	3,000	4,400	4,500	4,600	4,800	5,100	5,200

[e]Estimated. NA Not available. -- Negligible or no production.

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

[2]Secondary only.

[3]Primary only.

TABLE 9

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED GOLD MINE PRODUCTION, 1995-2015[1]

(Au content in kilograms)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	837	26,000	27,904	42,046	45,000	50,000	55,000
Belize	5	7	(2)	5	5	5	5
Bolivia	14,400	12,000	8,871	8,405	4,000	4,000	4,000
Brazil	63,300	50,400	38,293	54,000	55,000	55,500	60,000
Canada	152,000	156,200	120,541	95,044	98,000	105,000	100,000
Chile	44,585	54,100	40,447	39,162	40,000	45,000	55,000
Colombia	21,100	37,000	35,783	34,321	42,000	47,000	47,000
Costa Rica	400	50	424	198	300	500	500
Cuba	184	1,000	--	--	--	--	--
Dominican Republic	3,280	--	--	--	8,500	25,000	30,000
Ecuador	7,410	2,870	5,338	800	7,500	8,000	9,000
French Guiana	3,000	3,492	1,955	2,000	2,000	2,000	2,000
Guatemala	30	140	741	7,500	9,000	10,000	10,000
Guyana	9,005	13,510	8,325	8,131	8,150	8,200	8,300
Honduras	111	878	4,438	2,561	1,000	1,000	1,000
Mexico	20,300	26,400	30,356	51,000	60,000	65,000	65,000
Nicaragua	1,320	3,670	3,674	3,400	2,200	2,000	2,000
Panama	1,100	--	--	--	1,500	2,000	2,000
Peru	56,000	139,000	208,002	179,870	180,000	180,000	180,000
Suriname	300	300	10,619	10,300	10,500	11,000	11,500
Uruguay	900	2,180	3,151	2,182	2,200	2,250	2,300
Venezuela	7,260	7,330	10,480	10,100	10,500	11,000	12,000
Total	407,000	537,000	559,000	551,000	590,000	640,000	660,000

[e]Estimated. -- Negligible or no production.

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

[2]Less than 1/2 unit.

TABLE 10

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED IRON ORE PRODUCTION, 1995-2015[1]

(Fe content in thousand metric tons)

Country	Iron content	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	68%	--	--	--	--	300	500	500
Bolivia	65%	--	--	--	--	--	--	1,000
Brazil	66%	113,000	141,000	186,891	233,514	235,000	240,000	250,000
Canada[2]	64%	24,600	22,700	19,333	19,700	25,000	28,000	28,000
Chile	61%	5,200	5,400	4,707	5,670	6,000	6,000	6,000
Colombia	55%	300	363	325	261	300	300	300
Cuba	45%	9	9	9	--	--	--	--
Guatemala	65%	1	10	7	19	5	5	5
Mexico	60%	5,630	6,800	7,012	7,013	7,000	7,000	7,000
Peru	68%	3,950	2,810	4,565	5,244	5,300	5,300	5,400
Uruguay	50%	3	4	12	16	17	18	20
Venezuela	65%	12,600	11,100	13,000	15,200	15,500	16,000	16,500
Total	XX	165,000	190,000	236,000	287,000	290,000	300,000	320,000

[e]Estimated. XX Not applicable. -- Negligible or no production.

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

[2]Includes beneficiated and direct-shipping ore.

TABLE 11

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED CRUDE STEEL PRODUCTION, 1995-2015[1]

(Thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	3,620	4,470	5,386	5,543	5,700	5,700	5,700
Brazil	25,100	27,900	31,631	33,716	33,800	34,000	35,000
Canada	14,400	15,900	15,327	15,130	16,000	18,000	18,000
Chile	1,010	1,350	1,537	1,560	1,600	1,700	1,700
Colombia	792	660	842	1,125	1,300	1,300	1,300
Cuba	207	327	245	274	280	280	280
Dominican Republic	--	36	60	60	70	70	70
Ecuador	35	58	84	85	85	85	85
El Salvador	28	41	48	72	80	80	80
Guatemala	NA	166	207	250	250	300	300
Jamaica	25	--	--	--	--	--	--
Mexico	12,100	15,600	16,202	17,230	14,000	17,000	19,000
Paraguay	96	77	101	130	135	140	150
Peru	515 [2]	749	750	750	750	750	750
Trinidad and Tobago	738	753	711	675	700	700	700
Uruguay	40	38	64	68	70	71	72
Venezuela	3,630	3,840	4,907	5,000	5,000	5,000	5,000
Total	62,300	72,000	78,100	80,100	80,000	85,000	88,000

[e]Estimated. NA Not available. -- Negligible or no production.

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

[2]Ingots and castings.

TABLE 12

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED NICKEL MINE PRODUCTION, 1995-2015[1]

(Ni content in metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Brazil	29,100	45,300	74,198	54,060	54,500	55,000	56,500
Canada	182,000	191,000	199,932	259,588	180,000	280,000	280,000
Colombia	24,200	59,000	89,000	64,200	60,000	60,000	60,000
Cuba	41,000	68,100	73,753	67,265	87,000	90,000	96,000
Dominican Republic	46,500	39,900	53,124	20,000	10,000	20,000	30,000
Venezuela	--	2,540	20,000	20,000	20,000	20,000	20,000
Total	323,000	406,000	510,000	485,000	410,000	530,000	540,000

[e]Estimated. -- Negligible or no production.

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

TABLE 13

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PLATINUM MINE PRODUCTION, 1995-2015[1]

(Pt content in kilograms)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Canada	7,000	5,700	6,075	7,000	9,000	9,000	9,000
Colombia	973	339	1,082	1,370	1,200	1,200	1,200
Total	8,000	6,000	7,200	8,400	10,000	10,000	10,000

[e]Estimated.

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

TABLE 14

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PALLADIUM MINE PRODUCTION, 1995-2015

(Pd content in kilograms)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Canada	8,900	10,400	10,400	10,000	15,000	15,000	15,000

[e]Estimated; estimated data are rounded to no more than three significant digits.

TABLE 15

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED TIN MINE PRODUCTION, 1995-2015[1]

(Sn content in metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	1	4	1	1	1	1	1
Bolivia	14,733	12,293	18,640	17,319	19,500	20,000	25,000
Brazil	17,316	14,200	11,739	13,000	13,500	14,000	14,500
Peru	22,331	70,901	42,145	39,037	40,000	41,000	42,000
Total	54,400	97,400	72,500	69,400	73,000	75,000	81,500

[e]Estimated.

[1]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 TIN METAL PRODUCTION, 1995-2015[1]

(Metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	--	--	120	--	150	150	150
Brazil	17,039	14,023	9,236	10,558	11,000	11,500	12,000
Bolivia	17,664	9,353	13,841	12,666	15,000	18,000	20,000
Mexico	770	1,200	17	15	17	19	19
Peru	22,262	37,410	36,733	38,865	39,000	39,500	40,000
Total	57,700	62,000	59,800	62,100	65,000	69,000	72,000

[e]Estimated. -- Negligible or no production.

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

TABLE 17

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED ZINC MINE PRODUCTION, 1995-2015[1]

(Zn content in thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	32	35	30	30	30	30	30
Bolivia	146	149	160	384	400	390	380
Brazil	189	100	171	174	180	185	190
Canada	1,120	1,000	667	678	800	800	800
Chile	35	31	29	41	30	35	35
Colombia	--	40	--	--	--	--	--
Ecuador	(2)	(2)	--	--	--	--	--
Honduras	27	31	43	28	33	33	33
Mexico	364	393	456	454	455	455	455
Peru	692	910	1,202	1,603	1,650	1,700	1,750
Total	2,610	2,690	2,760	3,390	3,600	3,600	3,700

[e]Estimated. -- Negligible or no production.

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

[2]Less than 1/2 unit.

TABLE 18

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED ZINC METAL PRODUCTION, 1995-2015[1]

(Thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	36	39	40	43	40	40	40
Bolivia	--	--	--	--	--	--	30
Brazil	206	199	267	249	250	300	350
Canada[2]	720	780	724	764	850	850	850
Mexico[2]	223	235	327	305	320	350	350
Peru[2]	159	200	162	190	200	250	300
Total	1,300	1,500	1,500	1,600	1,700	1,800	1,900

[e]Estimated. -- Negligible or no production.

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

[2]Primary only.

TABLE 19

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED DIAMOND MINE PRODUCTION, 1995-2015[1]

(Thousand carats)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Brazil	1,280	1,600	208	182	185	190	195
Canada	--	2,530	12,314	14,803	9,000	10,000	10,000
Guyana	52	82	357	169	175	180	200
Venezuela	296	110	115	115	115	115	115
Total	1,600	4,300	13,000	15,300	9,500	10,500	10,500

[e]Estimated. -- Negligible or no production.

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

TABLE 20

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED LITHIUM PRODUCTION, 1995-2015[1]

(Li content in metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	15	25	2,800	1,200	2,000	6,000	8,000
Bolivia	--	--	--	--	--	--	5,600
Brazil	170	260	210	210	210	210	210
Canada	630	670	670	650	--	--	--
Chile	2,432	6,740	8,303	10,582	10,000	10,000	10,000
Total	3,200	7,700	12,000	12,600	12,000	16,000	24,000

[e]Estimated. -- Negligible or no production.

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

TABLE 21

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED SALABLE COAL PRODUCTION, 1995-2015[1]

(Thousand metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	305	246	320	208	300	300	300
Brazil	2,780	6,000	6,480	6,732	6,750	6,800	6,850
Canada[2]	75,000	69,200	67,555	67,749	75,000	75,000	75,000
Chile	1,490	509	732	534	700	1,000	1,500
Colombia	26,000	38,200	59,064	73,500	100,000	100,000	100,000
Mexico[2]	11,200	14,300	11,750	15,894	12,000	12,000	12,000
Peru[2]	80	27	22	136	140	145	150
Venezuela	4,260	7,910	7,195	7,457	7,500	7,550	7,600
Total	121,000	136,000	153,000	172,000	202,000	200,000	200,000

[e]Estimated.

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

[2]Run of mine.

TABLE 22

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED URANIUM PRODUCTION, 1995-2015[1]

(U_3O_8 content in metric tons)

Country	1995	2000	2005	2008	2011[e]	2013[e]	2015[e]
Argentina	68	--	--	--	--	--	--
Brazil[2]	--	20	129	130	130	130	130
Canada	12,400	12,600	14,854	10,261	10,000	12,000	17,000
Total	12,500	12,600	15,000	10,400	10,000	12,000	17,000

[e]Estimated. -- Negligible or no production.

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

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

TABLE 23

LATIN AMERICA AND CANADA: APPARENT CONSUMPTION FOR SELECTED COUNTRIES

(Thousand metric tons)

Commodity and country	2000	2008	Percent change
Aluminum, unwrought:			
Argentina	105	148	41%
Brazil	743	1,548	108%
Canada	948	357	-62%
Chile	15	16	10%
Colombia	32	43	34%
Mexico	375	998	166%
Peru	NA	-1	NA
Cement, portland, other than white:			
Argentina	6,221	9,688	56%
Brazil	39,710	46,121	16%
Canada	8,271	11,300	37%
Chile	3,469	4,800	38%
Colombia	5,469	9,310	70%
Mexico	29,400	38,965	33%
Peru	3,646	6,799	86%
Copper, refined:			
Argentina	49	14	-71%
Brazil	331	403	22%
Canada	2,272	199	-91%
Chile	84	56	-33%
Colombia	5	-8	-278%
Mexico	464	311	-33%
Peru	55	73	33%
Steel, finished and semifinished:			
Argentina	2,970	4,790	61%
Brazil	15,760	24,000	52%
Canada	17,800	14,279	-20%
Chile	1,465	2,572	76%
Colombia	1,695	2,937	73%
Mexico	14,143	16,268	15%
Peru	825	2,159	162%

NA Not available.

Sources: United Nations Commodity Trade Statistics Database; U.S. Geological Survey Minerals Yearbook 2008, Area reports—International—Latin America and Canada; World Steel Association, 2010, Steel Statistical Yearbook 2009, p. 95.