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The Mineral Industries of Latin America and Canada

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The countries and territories that are covered in this volume have a land area of 30.5 million square kilometers and a combined population of 652 million people, or about 9% of the world total in 2013 (table 1). (These figures do not include the population or land area of the United States, although those figures are included in the totals for the Americas in table 1.) Some countries of the Latin America and Canada region (LAC)[2] were major producers and exporters of metallic and industrial minerals, mineral fuels, and related materials. In terms of trends of the value of the mineral sector's contribution (including gas and oil) to real gross domestic product (GDP), that of the countries of the Caribbean decreased slightly in 2013, as it had each year since 2010, to 15% compared with 15.5% in 2012; that of Canada, which varied by 0.5% or less each year since 2008, increased to 7.2% of the total in 2013 or by 0.2% compared with that in 2012; that of Latin America, which varied by 0.2% or less each year since 2010, decreased to 5.9% in 2013; and the mineral sector's contribution to the real GDP of Latin America and the Caribbean, which varied by less than 0.1% (usually decreasing) each year since 2008, increased to 6% in 2013 (Comisión Económica para América Latina y el Caribe, 2015; Mining Association of Canada, 2014, p. 11).

The roles of many countries in Latin America and the Caribbean in the global mineral industry were as suppliers of metallic mineral ores and concentrates and of other minerals in crude form, and some countries were suppliers of refined mineral products. In 2013, Bolivia was among the top five producers of mined tin in the world. Brazil was the third-ranked producer of iron ore and one of the top five producers of mined bauxite and tin. Canada was the leading producer of mined potash; the third-ranked producer of mined bauxite and nickel; and one of the top five producers of gem-quality diamond, palladium, and platinum. Chile was the leading producer of mined copper and the second-ranked producer of refined copper in the world. Peru was one of the top five producers of mined copper, gold, lead, tin, and zinc in the world and was among the top five producers of tin metal. Mexico was among the top five producers of mined lead in the world (U.S. Geological Survey, 2015, p. 27, 49, 63, 67, 85, 91, 109, 121, 123, 169, 187).

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- Canada—Natural Resources Canada and the Mining Association of Canada;
- Chile—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;
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- Peru—Ministerio de Energía y Minas and Instituto Geológico Minero y Metalúrgico; and
- Trinidad and Tobago—Ministry of Energy and Energy Affairs.

General Economic Conditions

Some countries of the LAC continued to be affected by decreasing international prices for some mineral commodities in 2013, including aluminum, coal, copper, gold, nickel, petroleum, silver, and zinc. Fluctuating international petroleum prices in recent years had different effects on the economies of individual countries owing to the disparate nature of these economies in terms of the magnitude and the degree of structural integration into international markets. In 2013, the gross domestic product

[1]Deceased

[2]The countries and territories that are covered in this volume include Canada, and the countries of the Caribbean, Central America, and South America, but do not include the United States. Information is provided for subregions, including Canada, the Caribbean, Latin America, and Latin America and the Caribbean (combined). The Latin America subregion includes the countries of Central America and South America. Where data are provided for all the countries covered in the volume, the region is referred to as Latin America and Canada (LAC).

based on purchasing power parity (PPP GDP) of Canada was $1.5 trillion; that of Latin America and the Caribbean was about $9 trillion; and that of the LAC was $10.5 trillion, or about 9% of the world total. The real GDP rate of growth of Latin America was 2.9% in 2013, as was that of Latin America and the Caribbean combined; that of the Caribbean alone was 1.3%. From 1990 through the mid-2000s, despite varying overall historic trends in the year-on-year rate of growth of the GDP between the Caribbean and Latin America subregions (the Caribbean experienced greater overall long-term positive growth, whereas Latin America experienced fluctuating growth and contraction), the values for both subregions increased to their highest values in the mid-2000s (about 8% in 2006 for the Caribbean and 6% in 2004 for Latin America) owing in part to increased international mineral commodity prices. In 2009, however, the GDP rates of growth decreased to their lowest values (-1.2% for Latin America and –3.4% for the Caribbean) owing to the financial crisis in the United States and the global recession. Since 2010, a year when the economic growth of both subregions rebounded to some degree relative to 2009, the rate of growth of Latin America's real GDP decreased steadily to 2.9% in 2013 from 6.3% in 2010; that of the Caribbean, however, increased steadily to 1.3% in 2013 from 0.2% in 2010 (table 2; Comisión Económica pare América Latina y el Caribe, 2015).

In 2013, Paraguay had the region's leading rate of growth in terms of the PPP GDP, which increased to 13.6% compared with -1.2% in 2012, as the country's agricultural sector (the leading sector of the economy) rebounded from severe drought conditions. The mining sector in Paraguay, however, had not contributed more than 0.2% to the country's real GDP in any year since at least 1990. The rate of growth of the PPP GDP of Panama, which led the region in 2012, was the region's second ranked in 2013, having decreased to 8.4% from 10.8% in 2012 as the construction phase of the Panama Canal extension neared completion. The expansion project, which began in 2007, was expected to be completed in 2016. The mining sector in Panama, which accounted for 1.2% of the country's real GDP in 2013, accounted for 1% or less of the country's real GDP annually from 1990 until 2013. The sector's share of real GDP was expected to increase with the commencement of commercial production at First Quantum Minerals Ltd. of Canada's Cobre Panama copper mine in 2017 (table 2; Comisión Económica para América Latina y el Caribe, 2015).

The rate of growth of the PPP GDP of Bolivia was 6.8% in 2013 compared with 5.2% in 2012. The country's mining and mineral processing industries accounted for 14.3% of real GDP in 2013 and for at least 11.8% of real GDP every year since at least 1990. The rate of growth of the PPP GDP of Colombia was 4.7% in 2013 compared with 4.0% in 2012. The mining and mineral processing industries in Colombia accounted for 9.2% of real GDP in 2013, which was the same as in 2012, and ranged between 6.7% and 10.9% between 1990 and 2012. The rate of growth of the PPP GDP of Mexico decreased to 1.1% in 2013 from 4.0% in 2012 owing to decreased domestic and external demand. The mining and mineral processing industries' share of the annual real GDP in Mexico decreased steadily to 6.4% in 2013 from 10.3% in 1990. In 2013, the rate of growth of the PPP GDP of Peru was 5.8%, and its mining and mineral processing industries represented 11.2% of the country's real GDP. The rate of growth of the PPP GDP of Venezuela was 1.3% in 2013 compared with 5.6% in 2012, and the decrease was owing in part to decreased international prices for crude petroleum. The mining and mineral processing industries' share of real GDP (including gas and petroleum) in Venezuela remained among the region's highest (second after Trinidad and Tobago) at 24.8% in 2013; however, the sector's share in the GDP decreased steadily from 42.1% in 2003. The PPP GDP of the Dominican Republic was 4.6% in 2013, and the country's mining and mineral processing industries' share of real GDP more than doubled to 1.9% from 0.8% in 2012. Although the rate of growth of the PPP GDP of Trinidad and Tobago in 2013 was 1.6% compared with 1.2% in 2012, the country's mineral industries accounted for 39.1% of real GDP in 2013, and ranged from between 26.4% and 42.3% from 1990 to 2012. The economies of Brazil and Mexico combined accounted for 48% of the value of the LAC region's total PPP GDP in 2013 (table 2; Mining Association of Canada, 2014, p. 16; Comisión Económica para América Latina y el Caribe, 2015).

The rate of growth of the PPP GDP of Canada was 2.0% in 2013 compared with 1.7% in 2012 (table 2). Canada was one of the world's leading mineral producers, with mining operations in more than 100 countries of the world, and the mineral industry contributed greatly to Canada's economic strength. Canada's mining and mineral processing industries represented 7.2% of its real GDP in 2013 and accounted for between 6.9% and 7.2% of the nominal GDP from 2008 through 2012. Five of Canada's top 10 spots for international operations were in Latin American countries in 2013, and companies listed on the Toronto Stock Exchange and the Venture Exchange raised about $940 million[1] in equity capital for Latin American mining projects in 2013. The Canadian mineral industry employed more than 380,000 employees domestically in mineral extraction, smelting, fabrication, and manufacturing. In 2013, Canadian mining companies invested $533 million in research and development (R&D) and employed 4,700 people in R&D, which was greater than R&D employment in the pharmaceutical and forestry sectors, both of which receive extensive financial and policy support from the Government of Canada (table 2; Mining Association of Canada, 2014, p. 6–7, 73).

In 2013, the value of goods exported from Canada increased by 3.7% compared with that of 2012 to $481.5 billion, of which energy products accounted for 24.5% (a 6.8% increase compared with that of 2012), metal ores and nonmetallic minerals accounted for 3.8% (a 2.9% decrease compared with that of 2012), and metals and nonmetallic mineral products accounted for 11.2% (a slight increase compared with that of 2012). Approximately one-half of Canada's mineral and metal exports, by value, were received by the United States in 2013. The mineral sector of Canada occupied a significant and, in some cases, increasing share of export earnings for many nations of Latin America and the Caribbean. Several trade blocs promoted trade in the subregion including the Asociación Latinoamericana de Integración (ALADI), the Comunidad Andina (CAN), the

[1] Where necessary values have been converted from Canadian dollars (CAN) to U.S. dollars (US$) at an average exchange rate of CAN1.00=US$0.98 in 2013.

Mercoado Comun Centroamericano (MCCA), and the Mercado Comun del Sur (MERCOSUR) (Ministry of Foreign Affairs, Trade and Development, 2015).

Legislation

The President of Bolivia signed a new law in 2013, the Law of Mining Rights (Law 328), that increased the state's expropriation powers over the mining sector in order to regain control of mines deemed by the Government to be idle, inactive, or unproductive. Other instances whereby licenses would revert to the state include absence of registration, absence of an implementation plan, and a mining company's refusal to migrate contracts to modalities featured in an upcoming new mining law. The new legislation allows the Government to take over 70% of the current 2,454 mining licenses covering 1.5 million hectares held by private owners. The Vice Ministry of Regulation, Auditing, and Mining Policy was assigned the task of determining the status of a mining concession. Areas occupied by cooperatives or local groups would not be targeted for expropriation (Ernst & Young Global Ltd., 2013; Osler, Hoskin & Harcourt LLP, 2013; Mayer Brown LLP, 2014).

In June 2013, the Government of Brazil proposed a bill (The New Mining Code) to revise the country's Mining Code of 1967. Provisions of the bill would increase state authority and revenue. The President of Brazil sought to fast track the legislation through the National Congress, but controversy emerged among the Government, private industry, labor unions, and the general public. Numerous amendments were made to the bill by a special commission of the National Congress, but the bill had not been passed into law by yearend 2013. Provisions of the new code would dissolve the Departamento Nacional de Política Minerária (the National Department of Mining Policy) (DNPM) and would create a regulatory agency called the Agencia Nacional de Mineracao [the National Mining Agency] (ANM), which would regulate and supervise the mining sector as well as create a Conselho Nacional de Políticas de Mineração (National Council of Mining Policies) (Ernst & Young Global Ltd., 2013; Osler, Hoskin & Harcourt LLP, 2013; Mayer Brown LLP, 2014).

A main point of contention in the new mining bill was its challenge to the first-come-first-served policy that exists for granting mining rights. The Government of Brazil proposed to replace this method with a public bidding process that would be organized by the ANM. The Government claimed that the first-come-first-served policy resulted in decreased exploration of potential mining areas by mining companies because the mining rights could be held by companies that had neither the intention nor the means to develop the concession. Some among the private mining sector claimed that the bidding process would decrease mining exploration activities because the bidding process would rely on the state's initiatives. Amendments to the bill presented by the special commission restricted the bidding process to the mining titles that the Government already held for sites where there were proven, commercially viable mineral deposits and required mining companies to comply with the minimum levels of activity. Negotiations were ongoing among the Government, the National Congress, and the mining companies at yearend (Osler, Hoskin & Harcourt LLP, 2013; Mayer Brown LLP, 2014).

Another regulatory change initially proposed by the Government was the unification of exploration licenses and exploitation licenses into one mining license. The unified mining license would delimit an exploration phase during which mining companies would have to comply with minimum exploration obligations to be established in a concession contract and would have a maximum term of 40 years that would be renewable indefinitely in 20-year increments as long as the requirements of the concession contract had been upheld. The amended bill also proposed a fixed maximum term of 6 years for the exploration license and a maximum 30-year term for a production license that could be renewed indefinitely in 15-year increments, provided the contract terms had been upheld) (Osler, Hoskin & Harcourt LLP, 2013; Mayer Brown LLP, 2014).

The Government's proposed new mining code would require that royalties from mineral exploitation be levied on gross revenue rather than on net revenue of mineral sales and would allow for the value of other taxes levied on the commercialization of mineral production to be deducted from the amount of royalties owed. A fixed range of royalties (a royalty band system) was proposed; the maximum royalty rate proposed was 4% for iron ore (as opposed to 3% previously), and other royalties would be fixed by decree. The National Congress' special committee eliminated the band system and proposed that royalty rates be established by the National Congress within the Mining Code (Osler, Hoskin & Harcourt LLP, 2013; Mayer Brown LLP, 2014).

On October 30, 2013, the National Assembly of the Canadian Province of Quebec blocked a bill titled Mining Act (Bill 43), which proposed replacing the existing Quebec Mining Act that was enacted in 1987. On December 5, a bill titled An Act to Amend the Mining Act (Bill 70) was passed with some requirements of Bill 43 having been withdrawn. Proposed changes to the Mining Act included, but were not limited to, such requirements for mining companies as a project feasibility study and a scoping and market study to accompany an application for a mining lease; the proven ability to cover 100% of the estimated cost of mine-site rehabilitation and restoration; a 3-year limit to begin rehabilitation and restoration work after operations cease, unless an extension is granted by the Minister of Natural Resources; completion of an environmental impact assessment for metal or asbestos ore processing projects where the processing capacity is 2,000 metric tons per day or greater; and the power of municipalities to declare any area as incompatible with mining in their land-use development plans and the inability of Ministers to request changes to those plans (Davies, Ward, Phillips & Vineberg LLP, 2013; Osler, Hoskin & Harcourt LLP, 2013).

Ecuador's legislature passed a new mining law in 2013 that determined a system for mining royalties based on the size of the project. Small-scale mines would pay 3% of sales in royalties, medium-scale projects would pay 4%, and large-scale projects would pay 5%. A mine included in the newly created medium-scale category would pay the Government 50.1% of its net profits from mining. Kinross Gold Corp. announced plans to discontinue development of the Fruta del Norte gold-silver deposit after it failed to reach an agreement with the Government on key economic and legal terms (Keen, 2013).

In 2013, the Government of Guatemala announced that it would introduce a bill calling for a 2-year mining moratorium on new mining licenses. It was unclear whether the bill was introduced or approved, but reports indicated that, if approved, the measure might lead to the reform of current mining legislation, including increased royalty rates, increased community engagement, and increased state participation in the sector when the moratorium ended (Ernst & Young Global Ltd., 2013).

In 2013, the Government of Mexico passed a broad-based tax reform bill into law that became effective on January 1, 2014, and had implications for mining companies operating in Mexico. The tax reform package required a mining royalty, an additional mining duty, or an extraordinary mining duty to be levied on owners of mining concessions. A mining royalty of 7.5% would apply to net profits, which was determined similarly to general taxable income. Interest income, annual inflation adjustments, and quantities of cash greater than $46,000 (received as loans, future capital increase contributions, or capital increases), however, would not be considered as income, and tax deductions were not available for interest income accrued in the tax year, for investments in fixed assets, or for the annual inflation adjustment (with exceptions). Mining concessionaires that failed to carry out exploration and exploitation activities for 2 continuous years within the first 11 years of holding a concession title would pay an additional charge equal to 50% of the maximum mining fee allowed under the Federal Government Fees Law, which in 2013 was $10 per hectare; after the 12th year, the additional mining fee would increase to 100% of the maximum mining fee per hectare. Owners of mining concessions would be required to pay an additional 0.5% tax on gross income derived from the sale of gold, silver, and platinum (Deloitte Global Services Ltd., 2013; Ernst & Young Global Ltd., 2013).

The Chamber of Deputies of Uruguay passed a mining law in 2013 to regulate large-scale mining projects after approval in the Senate, and Federal Government approval of the law was pending at yearend. The law would affect projects with a surface area greater than 400 hectares or with an investment of more than $100 million. The law would require companies with large-scale mining projects to pay an annual fee (unspecified), a 25% corporate income tax, and an additional profit tax linked to international mineral prices, which would range from 0% to 38%. The law would also require mining firms to have a mine-closure plan that included the creation of tourist spaces or reservoirs (Ernst & Young Global Ltd., 2013).

Exploration

Mineral exploration activity in Latin America and the Caribbean decreased in 2013 compared with that of 2012 in terms of the number of exploration sites. Although the exploration budget for Latin America and the Caribbean decreased by 26% to $3.8 billion from $5.2 billion in 2012, Latin America and the Caribbean continued to be the leading region in the world for exploration activity based on budget data. Approximately 56% of the deposits actively explored in 2013 in Latin America and the Caribbean contained gold or silver and 29% contained base metals or some combination of precious and base metals. Exploration activity in 2013 was primarily used to further define early-stage discoveries (65%), conduct exploration at a producing site (20%), conduct prefeasibility and feasibility studies of economically promising prospects (8%), and further explore for resources at deposits under development (7%). Major companies accounted for about 60% of Latin America's exploration budget; junior companies, about 26%; intermediate companies, about 11%; and other types of companies, 3%. Approximately 35% of Latin America's exploration budget was targeted for activity near an existing mine site, 34% was for late-stage and feasibility activity, and 31% was for grassroots or early-stage activity (table 3; Wilburn and Stanley, 2014, p. 32).

Globally, Canada has been either the leading or the second-ranked destination for mineral exploration since the mid-1980s. In 2013, exploration for precious metals (gold and silver) accounted for $1.15 billion; base metals, $430 million; uranium, $175 million; iron ore, $115 million; and diamond, $82 million of the country's $2.4 billion exploration total. Company exploration spending for 2013, as reported by the Canadian Government as of March 2014, was greatest in Ontario (26% of the total exploration and deposit appraisal expenditures for Canada), British Columbia (22%), Quebec (14%), Nunavut Territory (12%), Saskatchewan (9.1%), and Newfoundland and Labrador (4.5%). The only Canadian Province with an increase in exploration activity in 2013 compared with the level in 2012, based on reported expenditures, was New Brunswick (which had a modest 1.4% increase, primarily as a result of increased exploration for gold and other metals). All other Canadian Provinces and Territories showed a decrease in exploration expenditures of at least 15% in 2013 compared with those of 2012. Senior exploration companies accounted for about 59% of total exploration expenditures in 2013, which was a 52% increase compared with their expenditures in 2012. In terms of mineral commodities sought countrywide, precious metals received the largest exploration expenditure (48%), followed by base metals (18%), uranium (7%), iron ore (5%), and diamond (3%) in 2013. Other mineral commodities made up the remaining 19%. Canadian Provinces or Territories with the greatest amount of exploration activity were, in descending order by number of sites in 2013 as compiled by the USGS, Quebec, Ontario, British Columbia, Saskatchewan, Newfoundland and Labrador, New Brunswick, Manitoba, Yukon Territory, Northwest Territories, and Nunavut Territory. Based on the site data, 60% of the exploration sites were targeted precious metals; 15%, base metals; 6%, iron ore; 6%, uranium; 4%, graphite; 3%, rare-earth elements; and 2% (each), diamond, lithium, and potash in 2013. Approximately 82% of all reported exploration sites were considered early-stage sites (Mining Association of Canada, 2014, p. 36; Wilburn and Stanley, 2014, p. 35–36).

Consultation with First Nations was considered a significant issue by the Canadian Government, nongovernment organizations, and the mineral industry. As many as 600 mineral resource projects are under consideration for development during the next 10 years in Canada, and many of them are located within 100 kilometers of aboriginal communities. Each Province has established, or is in the process of establishing, procedures for consulting and negotiating with First Nations groups, but differences in these procedures has led to confusion and project

development delays. The issue of unsettled land claims is considered the single most important barrier to mining investment in British Columbia based on information collected by the Fraser Institute (Wilburn and Stanley, 2014, p. 36).

Investment and Spending Data

Net foreign direct investment (FDI) in Latin America and the Caribbean was $188.1 billion in 2013, which was a 6% increase compared with that of 2012. FDI in Latin America and the Caribbean as a percent of GDP had increased rapidly since 2009. Reinvested earnings accounted for a large share of the FDI in the past few years, but in 2013, capital contributions accounted for 42% of total FDI in the region; reinvested earnings, 38%; and intercompany loans, 20%. In 2013, Brazil was the leading recipient of FDI in the region, followed by Mexico and Chile. Inward FDI in Brazil was $64.1 billion, or 2% less than in 2012 (Brazil did not include reinvested earnings in its FDI figures); that of Mexico was $38.3 billion, which was more than twice the amount received in 2012; and that of Chile was $20.3 billion or 2% less than in 2012. Other countries in the region that had high percentage increases in FDI compared with that of 2012 included Suriname (86%), Panama (61%), and Bolivia (35%). Inward FDI for Central America increased by 21%, whereas that of the Caribbean region decreased by 31%. The United States was the leading investor in Latin America and the Caribbean, accounting for 30% of inflows to Central America and 32% of inflows to Mexico. Europe was the leading investor in Mexico, Brazil, and Colombia, accounting for 54%, 46%, and 30% of FDI inflows, respectively. In the Latin America and Caribbean region, natural resources received 26% of total FDI, but there were wide variations among individual countries. FDI in natural resources in the Latin America and the Caribbean region was dominated by the hydrocarbon and mining industries in 2013, and FDI in mining has increased since the mid-1990s, notably in Brazil, Chile, Colombia, the Dominican Republic, Mexico, and Peru (Economic Commission for Latin America and the Caribbean, 2014, p. 9–10).

In Argentina, restrictions on access to foreign currency, which were introduced in 2011 to prevent capital flight, led to an increase in reinvested earnings. In 2013, reinvested earnings accounted for 77% of total FDI inflows, although the value of those earnings reportedly decreased by 14% compared with that of 2012. Mergers and acquisitions included the sale of Compania General de Combustibles to a private investor for $200 million. In early 2014, the Government of Argentina reached an agreement with Repsol S.A. of Spain to pay $5 billion in compensation for the 2012 nationalization of its 51% share in the Argentinian energy company Yacimientos Petrolíferos Fiscales (Economic Commission for Latin America and the Caribbean, 2014, p. 35–36).

In Brazil in 2013, the value of FDI directed towards natural resources, which increased to $10.9 billion, or by more than 50% compared with that of 2012, was driven by expansions in the petroleum industry. A consortium led by Royal Dutch Shell plc, Total S.A. of France, and China National Petroleum Corp. of China won a bid to develop the Libra Deepwater oilfield in partnership with Petróleo Brasileiro S.A. with a signing payment of $7 billion and future investments of $200 billion expected during the next 35 years. The mineral industry received $3.3 billion in total FDI in 2013 (Economic Commission for Latin America and the Caribbean, 2014, p. 35).

In Bolivia, net FDI increased by 35% to about $2 billion, most of which was directed to hydrocarbon exploration and processing. Petroleo Brasileiro S.A. of Brazil (the primary venture partner of Bolivia's state-owned oil and gas company Yacimientos Petrolíferos Fiscales Bolivianos) won a bid for hydrocarbon resource development that was estimated to require an investment of more than $800 million in 2013. Repsol S.A. of Spain invested $373 million in 2013 to expand its natural gas processing plant, and the Samsung Corp. of the Republic of Korea committed $843 million for a petrochemical complex in Bolivia (Economic Commission for Latin America and the Caribbean, 2014, p. 35).

FDI by sector was not available for Chile, but the mineral industry accounted for the largest share of inflows in recent years. The Chilean Copper Commission (COCHILCO) forecasted that more than $112 billion in mining FDI would be received by 2021, of which Canada would account for 27%, and Japan, 10%. Pan Pacific Copper Corp. of Japan's Caserones Mine commenced production in 2013 after an investment of $4.2 billion. Kombinat Górniczo-Hutniczy Miedzi Polish Copper of Poland and Sumitomo Metal Mining of Japan were developing the Sierra Gorda Mine in Sierra that was expected to require about $3.9 billion worth of investment (Economic Commission for Latin America and the Caribbean, 2014, p. 35).

The extractive industries of Colombia received 47% of total inward FDI in 2013, or about $8 billion, including $5 billion directed to the hydrocarbon sector and $3 billion to the mining sector. FDI in Guatemala increased to $1.3 billion in 2013, or by 5% compared with that of 2012. FDI in natural resources in Guatemala accounted for $488 million in 2013, of which $467 million was investment made by the Solway Group of Cypress in the Fenix nickel project. In Mexico, FDI in natural resources accounted for 8% of total inflows, almost all of which was directed to gold mining activities. In Nicaragua, B2Gold Corp. of Canada announced an investment of $289 million for expansion of the La Libertad Mine. In 2013, the Government of Suriname approved Newmont Mining Corp. of Canada's development of the Merian gold mine, which was expected to result in investments of between $800 million and $1 billion. Under the terms of the agreement, a 6% royalty, payable in gold, was granted to the Government of Suriname. Also, Apache Corp. of the United States announced a $230 million investment in Suriname's gas and oil exploration block, Block 53. In Peru, FDI inflows decreased by 17% to $10.1 billion, which was the second greatest amount of FDI received by the country. Official data were not available on FDI by sector, but record FDI inflows to Peru in recent years were driven by large quantities of reinvested earnings from mining companies. In Guyana, Gold Fields Ltd. of Canada announced a $249 million investment in the Aurora gold mine (Economic Commission for Latin America and the Caribbean, 2014, p. 26–27, 35, 37, 39, 40, 43, 46).

In 2013, outward FDI from Latin America and the Caribbean region decreased by 30% compared with that of 2012 to $32.6 billion, which was one of the lowest values since

about 2003. The decrease was owing in large part to decreased outflows from Chile and Mexico, and to negative net outflows, or disinvestment in Brazil in 2011, 2012, and 2013. Colombia, however, accounted for $7.7 billion of outward FDI from the region, 19.9% of which was invested in hydrocarbon industries and exploitation of mines and quarries (Economic Commission for Latin America and the Caribbean, 2014, p. 10).

FDI inflows to Canada increased by 9.5% in 2013 to $686.3 billion. The United States was the leading source of FDI to Canada, accounting for about 51% of the total. FDI in Canada's mineral extraction industries, including natural gas and crude petroleum, was about $130 billion. FDI in metal mining in Canada was about $66 billion. Domestic capital spending in the Canadian mineral industry (which included spending on new mine construction, capacity increases, processing and technology improvements, upgrades or expansion of smelters and refineries, mill improvements, energy reconfigurations, and environmental work) decreased by 23% in 2013 compared with that of 2012 to about $19 billion, but this did not include spending on exploration or repairs. About 90% of capital spending in the mineral industry was accounted for by extraction, smelting, and refining. About two-thirds of capital spending in the extraction segment was for construction expenses and the other one-third was for machinery and equipment. For smelting and refining activities, about one-fifth of spending was accounted for by construction, and the rest was accounted for by spending on machinery and equipment. In Canada in 2013, the total for capital spending on extraction, refining and smelting (about $19 billion), plus reported exploration spending of about $2 billion, plus spending on repairs (which falls under the spending category of equipment and machinery) of about $4 billion was $25 billion. Also, in 2013, domestic capital investment in Canada's oil sands increased by about 20% compared with that of 2012 to $34 billion, which was higher than investment prior to the global recession of 2009. Total domestic investment in 2013 in both hard-rock-mineral mining and oil-sand mining in Canada was about $58.6 billion, including repair expenditures in 2013 (Mining Association of Canada, 2014, p. 37–38; Statistics Canada, 2015).

Net outward FDI (stock) from Canada to the world increased by 8% compared with that of 2012 to $784 billion, of which mining investment accounted for 9%; oil and gas extraction, 6%; and support activities for mining and oil and gas extraction 4%. In terms of net value, the United States was the leading destination for Canada's FDI, as it had been each year since at least 2010, receiving $357.1 billion in 2013, of which 5% was accounted for by oil and gas extraction, 4% by support activities for mining and oil and gas extraction; and 1% by mining activities. Net FDI from Canada to the Latin America and the Caribbean region increased by 9% to about $205 billion in 2013, which was the maximum value of Canada's FDI by region. Of that amount, mining accounted for 22%; oil and gas extraction, 5%; and support activities for both segments, 4% (Ministry of Foreign Affairs, Trade and Development, 2015).

Commodity Overview

This section summarizes the supply and demand trends and potential mineral industry developments for the leading mineral commodities in the LAC. The region's share of world production of selected mineral commodities is listed by commodity in table 4. In tables 5 through 20, estimates for production of major mineral commodities for 2015 and beyond have been based upon supply-side assumptions, such as announced plans for increased production or 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 historic data are estimated or reported and revisions are not identified. Data on individual countries are labeled to indicate estimates and revisions. Forward-looking information, which includes estimates of future production, exploration and mine development, cost of capital projects, and timing of the start 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 take place.

Metals

Bauxite and Alumina and Aluminum.—Brazil and Canada continued to be the leading primary-aluminum-producing countries in the LAC in 2013, and production from the two countries accounted for 88% of the total for the region. Canada accounted for 6% of the world's total primary aluminum production, and the combined total production from Brazil and Canada accounted for 9% of world production (table 4). In Canada, Rio Tinto Alcan Inc. shut down the Shawinigan smelter, which was located in Quebec, and had an annual production capacity of 100,000 metric tons per year (t/yr). The facility used the Söderberg technology, which is a relatively outdated technology that does not comply with current environmental regulations in Quebec. The 72-year-old smelter was closed 1 year earlier than planned owing to weak metal prices (Canadian Press, The, 2013). Also, Alcoa Inc. closed two potlines at its Baie-Comeau facility in Quebec, which accounted for a combined annual production capacity of 105,000 t/yr, owing to increasing prices for power in the Province as well as outdated technology (Thomson Reuters, 2014).

Expanded or newly created production capacity in Canada was expected to compensate for losses owing to closures. Production was expected to increase slightly in the near term if demand from the automotive and aerospace sectors remained high. Low metal prices and high power prices were also the cause of production decreases and capacity losses in Brazil where temporary shutdowns of facilities accounted for a 9% decrease in production for the year. Votorantim Metals Ltda.'s Rodon alumina project was expected to begin construction in 2014 on a 3-million-metric-ton-per-year (Mt/yr) alumina refinery in the State of Para. Commercial operation was scheduled to commence in 2017 (tables 4–6; Alumina Rondon, 2013).

Copper.—Chile and Peru continued to be the leading copper-producing nations in the LAC, and production from the two countries accounted for 83% of the total for the region. Chile was the world's leading copper-producing nation, accounting for 32% of global copper content of mine output in 2013, and the combined production from Chile and Peru accounted for 39% of the world total. Mined copper output in Chile increased by 6% in 2013 compared with that of 2012 to 5.9 Mt. The value of exported copper and copper products from Chile decreased by 0.4% to $36.6 billion, whereas the tonnage increased by 6.8% to 5.8 Mt. Mine production in Chile may necessarily increase in the near term to compensate for the downward trend of international copper prices, which decreased steadily by about 30% since 2011, and lower copper grades at mines in the country. Other important factors affecting future copper production in Chile included the risk of oversupply if external demand were to decrease and uncertainty as to whether the decreasing cost of energy would contribute to sustained or increased production levels at Chilean copper mines (tables 4, 8; Comision Chilena del Cobre, 2015).

In Peru, copper production increased by 6% in 2013 compared with that of 2012 despite a 6% decrease in production at the Cerro Verde Mine, which was one of the country's largest mines, as expansion work took place to increase annual copper production capacity by about 300,000 t/yr by 2016 (FreeportMcMoRan Copper & Gold Inc., 2014, p. 15). The volume of copper exported from Peru remained nearly constant in 2013 compared with that of 2012, decreasing by 0.3% to 1.4 Mt, whereas the value of exported copper decreased by 9%. The quantity of exported copper was expected to remain constant in 2014, whereas the value derived from exports was expected to decrease. Production in the near term is likely to increase, not only owing to the potential for continued low international copper prices but also owing to scheduled expansions and new capacity at several mines in the country (tables 4, 8; Minesterio de Energia y Minas, 2015, p. 8).

Gold.—By order of quantity produced, Peru, Canada, Mexico, and Brazil were the leading producers of mined gold in the LAC in 2013. The combined total of mined gold from these countries accounted for 64% of the total for the region and 17% of the world total. Preliminary data for mined gold in these countries indicated that production increased by between 15% and 20% in Brazil, Canada, and Mexico compared with that of 2012. In Peru, preliminary data indicate that production decreased by between 3% and 6% in 2013, and the volume of mined gold decreased by 30% since 2006 (Minesterio de Energia y Minas, 2015, p. 4).

Peru's total production decreased primarily because of a 24% decrease in production at theYanacocha Mine as a result of lower grade ore delivered to leach pads as well a decreased rate of recovery at the mill (Newmont Mining Corp., 2014, p. 74). The downward trend in Peru's gold production was expected to continue at least until 2017 as aging mines continued to process lower grade ores and as the Government attempted to limit informal mining (Taj and Cespedes, 2014). Some small mines were expected to come on line in 2018 or later that would contribute to a rebound in production. Peru's gold exports decreased by 2% in 2013 compared with those of 2012 to 184 t, and the value of exported gold decreased by 14%. The value of gold exports from Peru decreased each year since 2011 for a cumulative decrease in value of 37% between 2011 and yearend 2013 (Minesterio de Energia y Minas, 2015, p. 8). The value of Peru's gold production, therefore, was expected to decrease until new mine production commenced (tables 4, 10).

By value of mineral production, gold was Canada's third-ranked mineral product after potash and coal in 2013. The value of mined gold in 2013 was $5.9 billion, and the value of gold exports, which was the leading mineral export by value, was $17.7 billion (Mining Association of Canada, 2014, p. 28). The gold metal contained in proven and probable minable ore in operating mines and deposits committed to production in 2011 (the most recent year for which data were available) was 2,044 t, which was an increase of 39% compared with that of 2010 and a 123% increase cumulatively since 2009 (Mining Association of Canada, 2014, p. 28). Preliminary data indicated that the quantity of gold produced in 2013 increased by 20% compared with that of 2012 and the increase was attributed in large part to the startup of the Detour Lake Mine, which produced about 7 t of gold during 11 months of production (Detour Gold Corp., 2015, p. 5).

Feasibility studies had been completed or construction had started on numerous gold mine projects in Canada by early 2014. Total mineral exploration and deposit appraisal expenditures in Canada, however, decreased by 40% in 2013 compared with those of 2012 and by 45% cumulatively from 2011 to yearend 2013 as the price of gold decreased by 17% between 2011 and 2013. Production was expected to continue to increase moderately in the near term in Canada as it had each year since 2009 (tables 4, 10; Mining Association of Canada, 2014, p. 28, 39).

Iron Ore.—Iron ore production in the LAC decreased by 9% in 2013. Brazil was the region's main iron-ore-producing country, accounting for 79% of the total in 2013, the same percentage as in 2012; the regional decrease was primarily owing to a 5% decrease in Brazil's output to 246 Mt (table 11). Iron ore production in Brazil was conducted primarily in the States of Mina Gerais (52%) and Para (32%). Brazil's iron ore exports totaled 295.5 Mt in 2013 compared with 296.1 Mt in 2012, accounting for 88.9% of the country's mineral sector exports, 13% of the country's total exports, and about 25% of the global market share of trade in iron ore (Gilroy, 2015). The country's iron ore exports generated revenues of $32.5 billion, which was an increase of 4% compared with revenues in 2012 (Barbosa, 2014). Vale S.A. accounted for 77% of the country's production of iron ore in 2013. Shipments were expected to remain high in the near term despite Vale's plan to eliminate about 30 million metric tons of high-cost capacity from its Brazilian operations as the company was ramping up its S11D project in Para, which was expected to add nearly 100 Mt/yr of ore by 2018 (tables 4, 11; Sindicato Nacional da Indústria da Extraçao de Ferro e Metals Básicos, 2015, p. 4).

Platinum-Group Metals.—Canada and Colombia continued to be the only countries to produce palladium and (or) platinum in the LAC in 2013. Canada produced about 16,000 kilograms (kg) of palladium, of which 4,200 kg came from the Lac des Isles Mine (a decrease of 21% compared with the amount in 2012). The mine, which was also the country's

leading platinum-producing mine, produced about 300 kg of platinum (a decrease of 9% compared with the output in 2012). Palladium and platinum produced in Canada came from primary production and as a byproduct of production at base-metal operations. Canada's production of platinum-group metals increased modestly to 24,636 kg in 2013 from 22,337 kg in 2011. The average price of palladium in 2013 was higher than in 2012 as supply was constrained owing in part to labor strikes in South Africa. Platinum and palladium production in Canada was expected to increase only slightly in the near term (tables 14 and 15; North American Palladium Ltd., 2014, p. 6).

Colombia produced about 1,836 kg of platinum primarily from small-scale operations in Choco Department. Reported production of platinum from Colombia followed trends of international prices for precious metals. Platinum production in Colombia was not expected to increase in 2014 (table 1).

Tin.—Brazil, Bolivia, and Peru were the only tin-producing countries in the LAC in 2013. Peru was the leading mined-tin-producing country in the LAC, followed by Bolivia and Brazil. The combined total production from these three countries accounted for 21% of the world total. Peru's production of mined tin accounted for 40% of the regional total in 2013; Bolivia, 32%; and Brazil, 28% (tables 4, 16).

Canada was not a tin-producing country, but tin exploration projects were underway in the Provinces of New Brunswick, and Nova Scotia, and in the Northwest Territories, including the East Kemptville project (wholly owned by BHP Billiton Ltd.), the Mount Pleasant project (wholly owned by Adex Mining Inc. of Canada), and the Wrigley project (majority owned by Glencore Plc of Switzerland). Although both the East Kemptville and the Mount Pleasant projects achieved limited production in the 1980s, they were also in the early stage of reserves development in 2013 for the potential production of multiple commodities, including indium, molybdenum, tungsten, and zinc.

Minsur S.A. of Peru was reported to be the world's third-ranked tin producer. The company announced that it planned to invest as much as $2 billion in deposits in Brazil and Peru. In 2013, Minsur produced about 11% of the world's tin output from the San Rafael Mine in Peru, and the remainder came from the Mineração Taboca Pitinga Mine in Brazil. Minsure announced plans to process tailings at San Rafael to add as much as 7,000 t/yr of tin to its production total. The volume of production from tin mining in the region was not expected to increase in the near term as the depletion of reserves at San Rafael was likely to result in lower tin content of mine production starting in 2017. As of mid-2013, expansion projects in Bolivia were behind schedule (ITRI Ltd., 2013a, b).

Industrial Minerals

Diamond.—Canada continued to be the leading diamond producer in the LAC in 2013 (table 18). Minor producers in the region included Brazil, Guyana, and Venezuela. Canada produced about 10.7 million carats of diamond in 2013, which was an increase of just 0.3% compared with that of 2012. The value of diamond production in the country and decreased significantly in recent years to about $2.0 billion in 2013 compared with about $2.4 billion in 2010, but the commodity continued to be one of Canada's top mineral products by value of production. The decreased value of diamond production was attributable to decreased demand as well as a potential excess global supply. The Northwest Territories was the country's dominant source of diamond, followed by Ontario and Nunavut. Despite declining exploration spending in Canada's diamond sector, several development projects were under way, including the Stornoway Diamond Corp.'s Renard Diamond project, which was on track to become the first diamond mine in Quebec when construction commenced in July 2014. As of February 2013, the Renard deposit had estimated proven and probable reserves of 17.9 million carats (Stornoway Diamond Corp., 2013, p. 7; Mining Association of Canada, 2015, p. 12, 22).

Lithium.—Chile continued to be the leading lithium-producing country of the LAC in 2013, accounting for 77% of the region's estimated production and 40% of global production in 2012. Bolivia, Chile, and Argentina were the top ranked countries in the world in terms of estimated shares of lithium resources, accounting for 24%, 22%, and 19%, respectively, of the world total. About 60 identified salt flats are located in northern of Chile, the most important of which also contain potassium and boron. About 70% of lithium occurrences in Chile are associated with brines of the salt flats in the northwestern part of the country, and the remainder are associated with pegmatite structures, which are more common sources of such lithium-containing minerals as lepidolite and spodumene that are found in other regions of the world. By 2020, total projected production capacity in terms of lithium carbonate equivalent was expected to increase nearly twofold compared with global capacity in 2013. Argentina was expected to surpass Chile in terms of installed capacity by 2017 as Argentina's installed lithium-carbonate equivalent capacity was projected to increase until at least 2020, whereas that of Chile was expected to level out in 2016 and remain constant until at least 2020 (Comision Chilena del Cobre, 2013; p. 27; Cubillos, 2014, p. 2, 14).

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TABLE 1
THE AMERICAS: AREA AND POPULATION IN 2013

Region and country	Area[1] (square kilometers)	Estimated population[2] (thousands)
North America:		
Canada	9,984,670	35,158
Mexico	1,964,375	122,332
United States[3]	9,826,675	316,129
Total	21,775,720	473,619
Central America and the Caribbean:		
Antigua and Barbuda	443	90
Aruba	180	103
Bahamas, The	13,880	377
Barbados	430	285
Belize	22,966	332
Bermuda	54	65
Costa Rica	51,100	4,872
Cuba	110,860	11,266
Curacao[4]	444	154
Dominica	751	72
Dominican Republic	48,670	10,404
El Salvador	21,041	6,340
Grenada	344	106
Guadeloupe[5]	1,704	453
Guatemala	108,889	15,468
Haiti	27,750	10,317
Honduras	112,090	8,098
Jamaica	10,991	2,715
Martinique[5]	1,100	401
Montserrat	102	5 [6]
Nicaragua	130,370	6,080
Panama	75,420	3,864
Saint Kitts and Nevis	261	54
Saint Lucia	616	182
Saint Vincent and the Grenadines	389	109
Sint Maarten[4]	34	40
Trinidad and Tobago	5,128	1,341
Other[7, 8]	17,476	3,882
Total	763,483	87,475
South America:		
Argentina	2,780,400	41,446
Bolivia	1,098,581	10,671
Brazil	8,514,877	200,362
Chile	756,102	17,620
Colombia	1,138,910	48,321
Ecuador	283,561	15,738
French Guiana[5]	90,000	202
Guyana	214,969	800
Paraguay	406,752	6,802
Peru	1,285,216	30,376
Suriname	163,820	539
Uruguay	176,215	3,407
Venezuela	912,050	30,405
Total	17,821,453	406,689
Americas total	40,360,656	967,783
World total	510,072,000	7,125,000

[1]Source: U.S. Central Intelligence Agency, The World Factbook.

[2]Source: The World Bank, 2014 World Development Indicators Database.

[3]Excludes Puerto Rico and U.S. Virgin Islands.

[4]Netherlands Antilles was dissolved in October 2010. Curacao and Sint Maarten became autonomous territories of the Kingdom of the Netherlands.

TABLE 1—Continued
THE AMERICAS: AREA AND POPULATION IN 2013

[5]Source: Embassy of France, Washington, D.C.
[6]Source: U.S. Census Bureau
[7]Includes Anguilla, Bonaire, British Virgin Islands, Cayman Islands, Puerto Rico, Saba, Sint Eustatius, Turks and Caicos Islands, and U.S. Virgin Islands.
[8]Source: Statistics Netherlands—The Caribbean, Netherlands in Figures 2012; U.S. Central Intelligence Agency, The World Factbook 2014; and U.S. Census Bureau.

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

Region and country	Gross domestic product in 2013 based on purchasing power parity: Gross value (million dollars)	Gross domestic product in 2013 based on purchasing power parity: Per capita (dollars)	Real gross domestic product growth rate (percentage): 2011	2012	2013
North America:					
Canada	1,518,410	43,253	2.5	1.7	2.0
Mexico	2,058,900	17,390	4.0	4.0	1.1
United States	16,768,050	53,001	1.6	2.3	2.2
Total	20,345,360	42,957 [3]	2.3 [4]	2.7 [4]	1.9 [4]
Central America and the Caribbean:					
Antigua and Barbuda	1,920	21,967	-1.9	3.6	1.8
Bahamas, The	8,780	24,648	1.1	1.0	0.7
Barbados	4,463	16,015	0.8	0.0	-0.3
Belize	2,803	8,014	2.1	4.0	0.7
Costa Rica	67,604	14,344	4.5	5.1	3.5
Cuba	71,017	6,301	2.8	3.0	2.7
Dominica	734	10,372	0.2	-1.1	0.8
Dominican Republic	126,782	12,173	2.9	2.7	4.6
El Salvador	49,227	7,783	2.2	1.9	1.7
Grenada	1,214	11,481	0.8	-1.8	1.5
Guatemala	112,863	7,290	4.2	3.0	3.7
Haiti	17,571	1,703	5.5	2.9	4.3
Honduras	37,189	4,592	3.8	3.9	2.6
Jamaica	23,627	8,487	1.4	-0.5	0.2
Nicaragua	28,229	4,593	5.7	5.0	4.6
Panama	70,994	19,080	10.9	10.8	8.4
Saint Kitts and Nevis	1,159	19,823	-1.9	-0.9	3.8
Saint Lucia	1,882	11,150	1.3	-1.3	-2.3
Saint Vincent and the Grenadines	1,159	10,560	0.3	1.5	2.3
Trinidad and Tobago	40,588	30,197	-2.6	1.2	1.6
Other[5]	NA	NA	NA	NA	NA
Total	669,805	7,657 [3]	3.8 [4]	3.1 [4]	3.4 [4]
South America:					
Argentina	927,875	22,363	8.6	0.9	2.9
Bolivia	65,424	5,928	5.2	5.2	6.8
Brazil	3,012,880	14,987	2.7	1.0	2.5
Chile	395,617	22,534	5.8	5.5	4.2
Colombia	601,997	12,776	6.6	4.0	4.7
Ecuador	172,071	10,908	7.8	5.1	4.5
French Guiana	NA	NA	NA	NA	NA
Guyana	5,234	6,573	5.4	4.8	5.2
Paraguay	54,723	8,064	4.3	-1.2	13.6
Peru	357,642	11,557	6.5	6.0	5.8
Suriname	8,801	16,080	5.3	4.8	4.1
Uruguay	66,758	19,679	7.3	3.7	4.4
Venezuela	553,311	18,453	4.2	5.6	1.3
Total	6,222,333	15,300 [3]	4.6 [4]	2.5 [4]	3.4 [4]
Americas total	27,237,498	28,144 [3]	3.4 [4]	3.4 [4]	2.9 [4]
World total	101,933,870	14,307 [3]	4.1	3.4	3.3

NA Not available.

[1]Source: International Monetary Fund, World Economic Outlook Database, October 2014.

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

[3]Gross domestic product/population.

[4]Weighted average.

[5]Includes Anguilla, Aruba, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Curacao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Saba, Sint Eustatius, Sint Maarten, Turks and Caicos Islands, and U.S. Virgin Islands. Netherlands Antilles was dissolved in October 2010. Curacao and Sint Maarten became autonomous territories of the Netherlands.

TABLE 3

SELECTED SIGNIFICANT LATIN AMERICA AND CANADA EXPLORATION IN 2013[1]

Location	Type[2]	Site	Commodity	Company	Resource[3]
Argentina	E	Altar	Cu, Au, Ag	Stillwater Mining Co.	6.8 Mt Cu, 4.8 Moz Au, 61 Moz Ag (D).
Do.	E	Cerro Moro	Au, Ag	Yamana Gold Inc.	715,000 oz Au, 41 Moz Ag (R).
Brazil	E	Volta Grande	Au	Belo Sun Mining Corp.	2.8 Moz Au (R).
Canada	E	144	Au	Lake Shore Gold Corp.	Data not released.
Do.	E	Albany	Graphite	Zenyatta Ventures Ltd.	977,000 t graphite (ID).
Do.	E	Back River	Au	Sabina Gold & Silver Corp.	2.7 Moz Au (R).
Do.	F	Blackwater-Davidson	Au, Ag	New Gold Inc.	8.2 Moz Au, 61 Moz Ag (R).
Do.	E	Borden Lake	Au	Probe Mines Ltd.	3.7 Moz Au (D).
Do.	F	Brucejack	Au, Ag	Pretium Resources Inc.	7.3 Moz Au, 35 Moz Ag (R).
Do.	E	Coffee	Au	Kaminak Gold Corp.	719,000 oz Au (ID).
Do.	D	Gahcho Kue	Diamond	DeBeers SA	48 Mcarat diamond (R).
Do.	F	Kerr-Sulphurets-Mitchell (KSM)	Au, Cu, Ag, Mo	Seabridge Gold Inc.	38 Moz Au, 4.5 Mt Cu, 191 Moz Ag, 108,000 t Mo (R).
Do.	E	Mann Lake	U_3O_8	Cameco Corp.	Data not released.
Do.	F	Meliadine	Au	Agnico-Eagle Mines Ltd.	2.8 Moz Au (R).
Do.	P	New Afton	Au, Cu, Ag	New Gold Inc.	879,000 oz Au, 410,000 t Cu, 3.5 Moz Ag (R).
Do.	E	Patterson Lake South	U_3O_8	Fission Uranium Corp.	Data not released.
Do.	E	Premier	Au, Ag	Ascot Resources Ltd.	2.2 Moz Au, 15 moz Ag (ID).
Do.	P	Rice Lake	Au	San Gold Corp.	251,000 oz Au (R).
Chile	E	Maricunga	Au	Atacama Pacific Gold Corp.	3.5 Moz Au (D).
Do.	E	Productora	Cu, Au, Mo	Hot Chili Ltd.	420,000 t Cu, 226,000 oz Au, 10,000 t Mo (D).
Do.	E	Los Helados	Cu, Au, Ag	NGEx Resources Inc.	6.9 Mt Cu, 8.9 Moz Au, 80 Moz Ag (ID).
Colombia	E	Santa Rosa	Au	Red Eagle Mining Corp.	446,000 oz Au (D).
Do.	P	Segovia	Au	Gran Colombia Gold Corp.	460,000 oz Au (D).
Do.	E	Vetas	Au, Ag	Galway Gold Inc.	225,000 oz Au, 317,000 oz Ag (D).
French Guiana	E	Paul Isnard (Montagne d'Or)	Au	Columbus Gold Corp.	5.4 Moz Au (IF).
Mexico	P	Bolanitos	Ag, Au	Endeavor Silver Corp.	2.3 Moz Ag, 37,000 oz Au (R).
Do.	P	El Chanate	Au	AuRico Gold Inc.	1 Moz Au (R).
Do.	P	El Cubo	Ag, Au	Endeavor Silver Corp.	5.9 Moz Ag, 96,000 oz Au (R).
Do.	D	Morelos (Media Luna)	Au, Ag	Torex Gold Resources Inc.	4.1 Moz Au, 6.8 Moz Ag (R).
Do.	P	Mulatos	Au	Alamos Gold Inc.	2 Moz Au (R).
Do.	E	Promontorio	Ag, Au, Zn, Pb	Kootenay Silver Inc.	40 Moz Ag, 508,000 oz Au, 210,000 t Zn, 179,000 t Pb (D).
Do.	P	San Dimas	Au, Ag	Primero Mining Corp.	870,000 oz Au, 49 Moz Ag (R).
Do.	P	San Francisco	Au	Timmins Gold Corp.	1.6 Moz Au (R).
Do.	P	Santa Elena	Au, Ag	SilverCrest Mines Inc.	327,000 oz Au, 20 Moz Ag (R).
Nicaragua	E	La India	Au, Ag	Condor Gold Corp.	1.1 Moz Au, 1.8 Moz Ag (D).

[1]Abbreviations used in this table for commodities are as follows: Ag, silver; Au, gold; Cu, copper; Fe, iron ore; Mo, molybdenum; Pb, lead; U_3O_8, uranium oxide; 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]Quantity expressed as contained metal or element in ore based on 2013 data reported from various sources; D, measured + indicated; ID, indicated; IF, inferred, R, proven + probable. Data not verified by U.S. Geological Survey.

TABLE 4

LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2013[1]

(Thousand metric tons unless otherwise specified)

Country	Metals									
	Aluminum		Copper, mine output, Cu content	Gold, Au content (kilograms)	Iron and steel		Lead, mine output, Pb content	Nickel, mine output, Ni content	Silver, mine output, Ag content (metric tons)	Tin, mine output, Sn content (metric tons)
	Bauxite	Metal, primary			Iron ore, gross weight	Steel, crude				
Argentina	--	440	110	50,650	NA	5,188	26 e	--	844	--
Bolivia	--	--	8	6,751	--	--	82	--	1,287	19,287
Brazil	32,867	1,304	271	79,573	386,270	34,163	19	105	--	16,830
Chile	--	--	5,851	51,309	17,000 e	1,200 e	1	--	1,174	--
Colombia	--	--	1	55,745	710	1,297	--	70 e	14	--
Costa Rica	--	--	--	300	--	--	--	--	--	--
Cuba	--	--	--	--	--	280 e	--	66 e	--	--
Dominican Republic	--	--	10	26,083	--	--	--	1,100 e	78	--
Ecuador[e]	--	--	--	2,800	--	562	--	--	1	--
El Salvador	--	--	--	--	--	100 e	--	--	--	--
French Guiana	--	--	--	1,600 e	--	--	--	--	--	--
Guatemala	--	--	--	6,384	950 e	320	2 e	--	283	--
Guyana	1,649	--	--	14,692	--	--	--	--	--	--
Honduras	--	--	--	1,985	--	--	12	--	51	--
Jamaica	9,510	--	--	--	--	--	--	--	--	--
Mexico	--	--	409	117,848	18,840	18,028	253	--	5,821	--
Nicaragua	--	--	--	8,610	--	--	--	--	14	--
Panama	--	--	--	2,099	--	--	--	--	--	--
Paraguay	--	--	--	--	--	45	--	--	--	--
Peru	--	--	1,286	151,486	10,126	1,069	266	--	3,407	23,688
Suriname	2,706	--	--	34,213 p	--	--	--	--	--	--
Trinidad and Tobago	--	--	--	--	--	616	--	--	--	--
Uruguay	--	--	--	2,022	--	90	--	--	--	--
Venezuela	2,160	152 e	--	1,691	10,583 3	2,250 3	--	6 e	--	--
Other[2]	--	--	--	--	--	--	--	--	--	--
Total	48,900	1,900	7,950	616,000	444,000	65,200	662	1,350	13,000	59,800
Share of world total	17.3%	4.0%	43.8%	21.5%	13.9%	4.1%	12.2%	35.3%	27.1%	20.9%
Canada[p]	--	2,969	632	125,853	41,841	12,415	20	223	646	--
Share of world total	--	6.24%	3.49%	4.40%	1.30%	0.77%	(4)	5.86%	1.35%	--
United States	NA	1,950	1,250	230,000	53,000	86,900	340	--	1,040	--
Share of world total	NA	4.09%	6.89%	8.03%	1.65%	5.40%	6.27%	--	2.17%	--
Total Western Hemisphere	48,900	6,810	9,830	971,000	539,000	164,000	1,020	1,570	14,700	59,800
Share of world total	17.3%	14.3%	54.2%	34.0%	16.8%	10.2%	18.8%	41.2%	30.7%	20.9%
World total	283,000	47,600	18,100	2,860,000	3,210,000	1,610,000	5,420	3,810	47,800	287,000

See footnotes at end of table.

TABLE 4—Continued

LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2013[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	40,000 [e]	11,892	1,400 [e]	--	1,500 [e]	250	41,708	10,000 [e]	203,639	283,650
Bolivia	407,331	2,500 [e]	1 [e]	--	2 [e]	--	17,810	4,000	15,177	13,889
Brazil[p]	152,147	69,975	3,333	2,504	7,275	7,407	28,174	32,938	738,715	471,636
Chile	29,759	4,800 [e]	1,015	4 [e]	6,577	2,902	893	--	2,525	67,500
Colombia	--	11,252	NA	NA	432	103,885	12,600	--	365,800	81,800 [e]
Costa Rica	--	1,500 [e]	--	--	--	--	--	--	--	19,016
Cuba	--	1,659	87	--	222	--	1,066	--	19,300 [e]	88,600 [e]
Dominican Republic	--	4,250 [e]	65	--	--	--	--	--	--	NA
Ecuador[e]	--	6,600	--	--	--	--	515	300	192,000	69,678 [5]
El Salvador	--	1,400 [e]	--	--	--	--	--	--	--	--
French Guiana	--	92 [e]	--	--	--	--	--	--	--	--
Guatemala	1,221	3,000 [e]	118	--	60 [e]	(3)	(3)	--	3,645	223
Guyana	--	--	--	--	--	--	--	--	--	--
Honduras	25,000	1,700 [e]	--	--	--	--	--	--	--	--
Jamaica	--	825	48	--	--	--	--	--	--	8,000
Mexico	642,542	34,612	5,091	665	9,461	28,783	47,600 [e]	148,100	935,079	438,900
Nicaragua	--	700 [e]	37	--	--	--	--	--	--	--
Panama	--	2,000 [e]	--	--	15 [e]	--	--	--	--	--
Paraguay[e]	--	650	5	--	--	--	--	--	--	--
Peru	1,350,874	10,527	298	774	1,205	189	3,800 [e, 6]	38,187 [7]	22,956 [7]	55,898 [5]
Suriname	--	65 [e]	--	--	--	--	--	--	5,980	2,780
Trinidad and Tobago	--	802	--	--	--	--	42,244	12,573	29,617	48,177
Uruguay	--	900 [e]	--	--	--	--	--	--	--	15,731
Venezuela	--	7,800	--	NA	NA	1,083	21,820 [8]	42,300 [e]	1,058,100 [9, 10]	449,300 [9, 11, 12]
Other[2]	--	--	--	--	--	--	--	--	800 [e]	--
Total	2,650,000	180,000	11,500	3,950	26,800	145,000	218,000	288,000	3,590,000	2,110,000
Share of world total	19.68%	4.39%	4.51%	5.60%	9.92%	1.80%	6.44%	9.76%	12.59%	7.79%
Canada[p]	426,089	11,612	1,820	200 [e]	12,210	68,908	141,396	220,000 [e]	1,260,000 [e]	681,000 [e]
Share of world total	3.16%	(4)	0.71%	(4)	4.53%	0.86%	4.17%	7.45%	4.41%	2.51%
United States	784,000	77,400	15,500	8,930	40,300	1,090,000	688,000	951,000	2,720,000	4,430,000
Share of world total	5.8%	1.9%	NA	12.7%	6.0%	13.5%	20.3%	32.2%	9.5%	16.3%
Total Western Hemisphere	3,860,000	269,000	28,800	13,100	79,300	1,300,000	1,050,000	1,460,000	7,570,000	7,230,000
Share of world total	28.7%	6.6%	11.3%	18.5%	38.0%	16.2%	30.9%	49.4%	26.5%	26.6%
World total	13,500,000	4,090,000	255,000	70,500	270,000	8,030,000	3,390,000	2,950,000	28,600,000	27,100,000

See footnotes at end of table.

TABLE 4—Continued

LATIN AMERICA AND CANADA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2013[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 October 16, 2015.

[2]Includes Aruba, Barbados, Belize, Curacao, Guadeloupe, Haiti, Martinique, Saba, Saint Eustatius, and Sint Maarten.

[3]World Steel Association, crude steel production, 2009–13 and iron production, 2009–13.

[4]Less than ½ unit or less than ½ percent.

[5]Reported figure.

[6]Source: Ministerio de Energía y Minas del Perú, Anuario Estadistico de Hidrocarburos, 2013.

[7]Source: Banco Central de Reserva del Perú, Memoria, 2013.

[8]Source: Organization of the Petroleum Exporting Countries, Annual Statistical Bulletin 2014.

[9]Excludes production under contract with the Government.

[10]Source: Petróleos de Venezuela S.A., Informe de Gestion Annual 2013.

[11]Includes asphalt, distillates, gasoline, jet fuel, kerosene, naphtha, parrafins, petroleum coke, and residuals.

[12]Excludes byproduct sulfur.

TABLE 5

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED BAUXITE MINE PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Brazil	22,034	29,000	33,260	32,867	33,000	35,000	36,000
Dominican Republic	535	9	--	--	--	--	--
Guyana	1,694	1,083	2,210	1,649	2,200	2,300	2,400
Jamaica	14,116	8,540	9,290	9,510	10,000	10,000	10,000
Suriname	4,757	3,104	3,400	2706	3,400	3,500	3,500
Venezuela	5,900	3,126	2,286	2,160	2,200	2,200	2,200
Total	49,000	44,900	50,400	48,900	50,800	53,000	54,100

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

[1]Estimated data and totals are their 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 METAL PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	270	413	413	440	440	440	440
Brazil	1,749	1,788	1,666	1,512	1,600	1,600	1,600
Canada	3,070 [2]	3,000	2,820	3,010	3,700	3,700	3700
Venezuela	615	335	203	152	300	300	300
Total	5,700	5,540	5,100	3,600	6,000	6,000	6,000

[e]Estimated.
[1]Estimated data and their totals are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes secondry aluminum production.

TABLE 7
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED COBALT MINE PRODUCTION, 2005–2020[1]

(Metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Brazil	1,500	3,139	2,900	3,500	3,500	3,500	3,500
Canada	5,767	4,568	6,625	6,916	7,100	7,200	7200
Cuba	5,277	4,800	4,900	4,200	4,200	4,400	4,400
Total	12,500	12,500	14,400	14,600	14,800	15,100	15,100

[e]Estimated.
[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 COPPER MINE PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	187	140	136	110	100	200	200
Bolivia	(2)	2	9	8	10	10	10
Brazil	133	214	223	271	300	300	300
Canada	595	522	579	632	700	700	700
Chile	5,321	5,419	5,434	5,851	6,000	6,500	6,000
Colombia	2	4	1	1	2	4	4
Dominican Republic	--	10	12	10	10	12	12
Ecuador	--	--	--	--	--	30	60
Mexico	429	238	440	409	500	500	500
Peru	1,010	1,094	1,198	1,286	1,500	1,600	1,700
Total	7,680	7,640	8,030	8,600	9,100	9,900	9,500

[e]Estimated. -- Negligible or no production.
[1]Estimated data and their totals are rounded to no more than three significant digits; may not add to totals shown.
[2]Less than 1/2 unit.

TABLE 9

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED REFINED COPPER METAL PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina[2]	16	16	15	14	14	14	14
Bolivia	--	1	2	1	2	2	2
Brazil	224	253	215	266	270	270	270
Canada	515	320	276	322	300	300	300
Chile[3]	2,824	3,244	2,902	2,755	2,700	2,600	2,500
Mexico	416	278	370	409	400	400	400
Peru[3]	512	394	311	361	360	400	400
Total	4,510	4,510	4,090	4,100	4,000	4,000	3,900

[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]Secondary production only.

[3]Primary production only.

TABLE 10

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED GOLD MINE PRODUCTION, 2005–2020[1]

(Metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	27,904	63,138	59,700	50,650	58,000	58,000	58,000
Belize	(2)	--	--	--	--	--	--
Bolivia	8,801	6,394	6,973	6,751	40,000	40,000	40,000
Brazil	38,293	62,047	66,773	79,573	80,000	80,000	80,000
Canada	120,541	102,693	105,270	125,853	150,000	160,000	175,000
Chile	40,447	39,494	49,936	51,309	60,000	70,000	80,000
Colombia	35,783	53,600	66,178	55,745	39,000	40,000	40,000
Costa Rica	424	--	400	300	--	--	--
Cuba	--	--	--	--	--	--	--
Dominican Republic	--	500	4,106	26,083	34,000	34,000	34,000
Ecuador	5,338	4,600	4,000	2,800	5,000	7,000	8,000
French Guiana	1,955	1,140	1,300	1,600	1,400	1,500	1,600
Guatemala	741	9,213	6,473	6,384	7,000	7,000	7,000
Guyana	8,325	9,594	13,643	14,964	14,000	14,000	14,000
Honduras	4,438	2,197	1,858	1,985	2,000	2,000	2,000
Mexico	30,356	72,600	102,802	117,848	119,000	125,000	125,000
Nicaragua	3,674	4,900	6,981	8,610	5,000	5,000	5,000
Panama	--	870	2,115	2,099	2,000	5,000	8,000
Peru	208,002	164,084	161,544	151,486	150,000	160,000	170,000
Suriname	10,619	31,084	33,474	34,213	35,000	35,000	35,000
Uruguay	3,151	1,740	1,725	2,022	2,000	2,000	2,000
Venezuela	10,480	6,991	1,981	1,691	1,700	1,700	1,700
Total	559,000	637,000	697,000	742,000	800,000	800,000	900,000

[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 11

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED BENEFICIATED IRON ORE PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	Iron content	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	68%	--	--	--	--	--	--	--
Bolivia	65%	--	(2)	(2)	--	10	10	10
Brazil	64%	186,891	247,772	258,129	245,668	246,000	290,000	290,000
Canada[3]	64%	19,333	23,300	25,000	26,000	38,000	48,000	57,000
Chile	61%	4,707	5,852	9,429	9,000	13,000	16,000	18,000
Colombia	60%	325	77	173	200	200	200	200
Cuba	45%	9	--	--	--	--	--	--
Guatemala	65%	7	(2)	1	1	1	1	1
Mexico	60%	7,012	7,931	8,047	8,094	8,500	9,000	9,200
Peru	68%	4,565	6,140	6,792	6,788	7,000	7,000	7,000
Uruguay	50%	12	16	16	16	16	16	16
Venezuela	62%	13,000	8,700	9,400	6,600	12,000	12,000	12,000
Total	XX	236,000	300,000	317,000	302,000	300,000	300,000	400,000

[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]Less than 1/2 unit.

[3]Includes beneficiated and direct-shipped ore.

TABLE 12

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED CRUDE STEEL PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	5,386	5,138	4,996	5,188	5,000	5,000	5000
Brazil	31,631	32,928	34,524 [r]	34,163	34,200	35,000	35,000
Canada	15,327	13,003	13,507	12,415	16,000	16,000	16,000
Chile	1,537	1,011	1,683	1,200	1,650	1,650	1,650
Colombia	1,007	1,213	1,324	1,297	1,300	1,400	1,400
Cuba	245	278	277	280	300	300	300
Dominican Republic	242	193	300	--	NA	NA	NA
Ecuador	389	372	536	562	500	500	500
El Salvador	48	64	102	100	120	120	120
Guatemala	207	274	334	320	350	370	400
Jamaica	--	--	--	--	--	--	--
Mexico	16,202	16,710	18,095	18,028	18,500	19,000	19,500
Paraguay	101	59	44	45	50	60	70
Peru	750	880	981	1,069	1,100	1,100	1,100
Trinidad and Tobago	711	572	624	616	620	650	650
Uruguay	64	65	78	90	100	100	100
Venezuela	4,907	2,207	2,359	2,250	2,300	2,300	2,300
Total	78,800	75,000	79,800	77,900	80,000	80,000	80,000

[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 13

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED NICKEL MINE PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Brazil	74	109	139	105	100	100	100
Canada	200	160	211	223	225	225	225
Colombia	90	70	50	70	50	50	50
Cuba	74	69	68	66	66	70	75
Dominican Republic	53	--	1,143	1,100	--	--	--
Venezuela	20	11	10	6	6	6	6
Total	5,280,000	11,400,000	15,100,000	1,570	400	500	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 14

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PALLADIUM MINE PRODUCTION, 2005–2020

(Kilograms)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Canada	10,400	6,200	13,100	16,000	19,000	19,000	19,000

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

TABLE 15

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED PLATINUM MINE PRODUCTION, 2005–2020[1]

(Kilograms)

Country	2005	2,010	2012	2013	2016[e]	2018[e]	2020[e]
Canada	6,075	3,500	7,500	6,800	10,000	10,000	10,000
Colombia	1,082	997	1,460	1,836	1,600	1,600	1,600
Total	7,160	4,500	8,960	8,600	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 16

LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED TIN MINE PRODUCTION, 2005–2020[1]

(Sn content in metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	1	--	--	--	--	--	--
Bolivia	18,433	20,190	19,702	19,287	19,000	22,000	22,000
Brazil	11,739	10,400	13,667	16,830	17,600	18,000	18,000
Peru	42,145	33,848	26,105	23,688	23,000	23,000	23,000
Total	72,300	64,400	59,500	59,805	59,600	63,000	63,000

[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 TIN METAL PRODUCTION, 2005–2020[1]

(Metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Bolivia	13,941	15,003	14,517	14,862	15,000	22,000	22,000
Brazil	9,236	9,098	11,955	14,721	15,400	15,700	15,700
Mexico	17	--	--	--	--	--	--
Peru	36,733	36,451	24,811	24,181	24,000	24,000	24,000
Total	59,900	60,600	51,300	53,800	50,000	60,000	60,000

[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 18
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED DIAMOND PRODUCTION, 2005–2020[1]

(Thousand carats)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Brazil	208	25	49	49	50	160	220
Canada	12,314	11,773	10,451	10,560	11,000	10,000	10,000
Guyana	357	50	41	56	50	50	55
Venezuela	115	15	15	15	15	15	15
Total	13,000	11,900	10,600	10,700	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 19
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED LITHIUM PRODUCTION, 2005–2020[1]

(Li content in metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	2,800	3,213	2,529	3,000	5,000	7,000	12,000
Bolivia	--	--	--	--	--	5	8
Brazil	210	489	390	416	425	450	475
Canada	670	--	--	--	3,800	3,800	3,800
Chile	8,290	9,722	13,226	11,500	12,500	13,000	13,000
Total	12,000	13,400	16,100	14,900	20,000	20,000	30,000

[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 20
LATIN AMERICA AND CANADA: HISTORIC AND PROJECTED SALABLE COAL PRODUCTION, 2005–2020[1]

(Thousand metric tons)

Country	2005	2010	2012	2013	2016[e]	2018[e]	2020[e]
Argentina	320	140	160	250	140	120	100
Brazil	6,480	5,743	6,635	7,407	7,500	7,600	7,700
Canada[2]	67,555	67,876	66,563	68,908	70,000	80,000	90,000
Chile	732	619	712	2,902	700	700	700
Colombia	59,064	74,350	89,024	103,885	99,700	108,000	130,000
Mexico[2]	11,750	27,565	29,932	28,783	29,000	29,000	29,000
Peru[2]	22	121	226	189	250	275	300
Venezuela	7,195	2,630	1,911	1,083	1,100	1,200	1,200
Total	153,000	179,000	195,000	213,000	200,000	200,000	300,000

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