



2014 Minerals Yearbook

ASIA AND THE PACIFIC



Base modified from ESRI ArcGIS online world countries (generalized) map data, 2017
 Mercator Auxiliary Sphere projection
 World Geodetic System 1984 datum

Figure 1. Map of the Asia and the Pacific region. The countries covered in this report are labeled on the map; bordering countries are shown in gray and not labeled.

THE MINERAL INDUSTRIES OF ASIA AND THE PACIFIC

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The Asia and the Pacific region as defined in this publication includes 30 countries and territories (fig. 1, facing page) and was the most populous region in the world in 2014. The land area of the Asia and the Pacific region accounts for about 20% of the world's total land mass, and the region's total population accounted for about 55% of the world total in 2014. The region's total gross domestic product (GDP) based on purchasing power parity was \$42.6 trillion and accounted for about 39% of the world total. The region was relatively undeveloped, with an average GDP per capita that was about 29% lower than the world average. The economy of this region, however, had been growing at a pace that was twice the world's average during the past few years (tables 1, 2; Asian Development Bank, 2016, p. xxi).

The economic growth in the Asia and the Pacific region had been a major component of global minerals demand during the past 15 years. For example, China, which was the second largest economy in the world and one of the fastest growing economies in the region, imported 55 million metric tons (Mt) of iron ore in 1999, and this amount increased to 932 Mt in 2014. The region was not only the leading consumer of minerals in the global market, but also the leading producer of a variety of minerals. Production of some mineral commodities in the region, such as alumina, bauxite, cement, iron ore, refined copper, and steel, accounted for more than 50% of world production in 2014 (table 4; China Steel Yearbook Editorial Board, 2015, p. 256).

Acknowledgments

The U.S. Geological Survey (USGS) acknowledges and thanks the following foreign Government agencies, international institutions, and private research organizations for providing mineral production statistics, basic economic data, and exploration and mineral-related information:

For mineral production statistics—

- Australia—Australian Department of Industry and Science and Western Australia Department of Minerals and Petroleum Resources;
- Bhutan—Ministry of Trade and Industry, Department of Geology and Mines;
- Brunei—Prime Minister's Department, Petroleum Unit;
- Cambodia—Ministry of Industry, Mines and Energy, Department of Mineral Resources Development;
- India—Indian Bureau of Mines;
- Japan—Ministry of Economy, Trade and Industry, Research and Statistics Department;
- Laos—Ministry of Industry and Handicraft, Department of Geology and Mines;
- Malaysia—Ministry of Natural Resources and Environment, Minerals and Geoscience Department;

- Mongolia—Mineral Resources and Petroleum Authority;
- Nepal—Ministry of Industry, Commerce and Supplies, Department of Mines and Geology;
- Republic of Korea—Korea Institute of Geoscience and Mineral Resources;
- Sri Lanka—Geological Survey and Mines Bureau;
- Thailand—Ministry of Industry, Department of Primary Industries and Mines; and
- Vietnam—Vietnam Institute of Geosciences and Mineral Resources.

For key economic data—

- Asian Development Bank in Manila, Philippines;
- International Monetary Fund in Washington, DC; and
- The World Bank in Washington, DC.

For exploration and other mineral-related information—

- Australian Bureau of Statistics in Canberra, Australia; and
- SNL Metals and Mining (formerly SNL Metals Economics Group) in Charlottesville, Virginia.

General Economic Conditions

The real GDP rate of growth for the Asia and the Pacific region was 6.3% in 2014 compared with 6.8% in 2013. The GDP rate of growth for the world was 3.4% in 2014 compared with 3.3% in 2013. The economies of the region that recorded rates of growth higher than 7% in 2014 were Burma (8.7%), Papua New Guinea (8.5%), Mongolia (7.9%), Laos (7.4%), China (7.3%), India (7.2%), and Cambodia (7.1%) (table 2).

Economic growth in China since the late 20th century was the source of much of the unprecedented levels of demand for minerals and metals. Beginning in 2012, however, China's economic growth slowed from double-digit growth to about 7% to 8%, which was described as the "new normal" economic situation. The country's development was in transition from being investment-driven (infrastructure development associated with urbanization) and export-driven (export-oriented manufacturing) to consumer-driven (sustainable growth driven by domestic consumption). As a result, in recent years, the mining and mineral-processing industries in China experienced challenges, such as excess capacity and weak growth in demand owing to the slowdown that led to sustained oversupply and weak commodity prices on the regional and global markets (International Council on Mining and Metals, 2012, p. 3; PricewaterhouseCoopers LLP, 2015, p. 3, 9).

The economic slowdown in China had affected other economies in the region, including the member countries of the Association of Southeast Asian Nations (ASEAN) (whose leading trade partner was China) and Australia and Mongolia (whose leading mineral commodity export partner was China). India's economy, which benefited from low energy prices on the global market and increasing domestic demand, remained

strong in 2014. The country was undergoing a series of reforms in such areas as the regulation of labor law and land acquisition to remove barriers to economic development. One of India's development strategies, the "Make in India" program, which sought to boost investment in manufacturing in India, could lead to significant increases in mineral production and consumption in the future.

Legislation

In 2014, the Asia and the Pacific region experienced two legislative events that had far-reaching economic effects on global mineral production and supply. One was the implementation of a new mining law in Indonesia that prohibited exports of unprocessed ores; the other was a ruling by the World Trade Organization (WTO) that declared that the rare-earth export quotas introduced by the Chinese Government in 2011 were in violation of WTO rules and commitments. These events are examples of nationalist resource policies that were adopted by the Governments of some countries in the region to increase revenue from downstream and higher value-added products, improve sustainable exploitation of strategic minerals, and attain or retain competitiveness in relevant economic sectors. Supply disruption of some mineral commodities as a result of implementation of these policies was observed in 2014.

Indonesia was a major producer and exporter of several mineral commodities in 2014, including bauxite, copper concentrate, and nickel ore. In 2013, Indonesia accounted for 22% of the world's nickel in ore (contained nickel) production and 20% of bauxite production; in 2014, following the export ban, Indonesia accounted for 3% of the world's nickel in ore (contained nickel) production and 1% of bauxite production. In response to the inaccessibility to mineral supplies from Indonesia in 2014, alternative sources of bauxite were developed in Malaysia, and nickel ore production increased dramatically in the Philippines in response to demand from China. In 2014, the region produced about 67% (171 Mt) of the world's total production of bauxite. Of this regional amount, Australia accounted for 46% (79 Mt); China, 38% (65 Mt); India, 12% (21 Mt); and Malaysia, 2% (3 Mt). Australia accounted for 31% of world bauxite production; China, 25%; and India, 8% (table 4; fig. 2, which follows the tables at the end of this chapter; Jensen and Burton, 2014; Sambijantoro, 2014; Winzenried and Adhitya, 2014; Rusmana, 2015; Bray, 2016; Kuck, 2016a, b).

China was the world's leading rare-earths producer, consumer, and exporter. In 2011, the Government imposed an export quota on rare earths, which caused significant supply disruption and price volatility on the world market. The export quotas were subsequently challenged by China's export partners (the European Union, Japan, and the United States) at the WTO. On March 26, 2014, a WTO panel issued a ruling saying that the rare-earth export quotas applied by China's Government were in violation of WTO rules and commitments. On April 17, China's Ministry of Commerce submitted a formal appeal to the WTO, and on August 7, the WTO made its final ruling that rejected China's claim. In compliance with the verdict, on December 31, China's Ministry of Commerce and General Administration of Customs announced the removal of the rare-earth export quotas,

effective on January 1, 2015 (Chen, 2015; Chinese Society of Rare Earths, The, 2015).

In 2014, legislative actions continued in China to address the country's overcapacity of production, which had resulted in significant regional and global effects in recent years. In 2011, the Government issued the Notice on the Assessment and Implementation of the Program Aimed at Eliminating Outdated Production Capacity. According to the Ministry of Industry and Information Technology, in 2014 the program achieved its target and eliminated some annual capacities, including 230 million metric tons per year (Mt/yr) of coal, 28.23 Mt/yr of pig iron, 31.13 Mt/yr of steel, 18.53 Mt/yr of coke, 2.62 Mt/yr of ferroalloys, 1.94 Mt/yr of calcium carbide, 510,000 metric tons per year (t/yr) of electrolytic aluminum, 760,000 t/yr of smelted copper, 360,000 t/yr of smelted lead, 87.73 Mt/yr of cement, and 114,000 t/yr of rare-earth separation. The program, which was expected to continue in the near term, has had far-reaching effects on the regional and global raw materials industry (Ministry of Industry and Information Technology, 2011, 2014a, 2015).

In June, the ministers responsible for mining from the Asia-Pacific Economic Cooperation (APEC) member countries held a meeting in Beijing. APEC has 21 member countries, including Australia, China, Indonesia, Japan, Mexico, and the United States. A joint statement issued after the meeting identified the group's goal as sustainable development in the mining sector through closer cooperation within the Asia and the Pacific region, innovation-driven growth, social responsibility, and collaborative development. The Mining Task Force, which derives its mandate from priorities set by APEC leaders and ministers, was instructed to formulate and implement an action plan for the proposals agreed upon by the member countries. According to APEC, the member countries accounted for 75% of the world's mining trade and investment and about 70% of the world's mineral output and consumption, including most of the world's bauxite, copper, iron, nickel, silver, tin, and zinc (Asia-Pacific Economic Cooperation, 2016).

In October, representatives from 22 Asian countries signed a memorandum of understanding to establish the Asian Infrastructure Investment Bank (AIIB), which is a multilateral development bank headquartered in Beijing. The bank was to focus on the development of infrastructure in Asia and was expected to become a cooperation platform that could benefit China's raw material industry by providing accessibility to overseas markets for its overcapacity (Asian Infrastructure Investment Bank, 2016).

Exploration

The 2014 exploration budget for the Pacific region and Southeast Asia (excluding Australia) was about \$600 million, which was down by 38% from the 2013 level of \$960 million. Indonesia, Papua New Guinea, and the Philippines together accounted for about 82% of the total mineral exploration budget for the region. Much of the sustained interest in this region can be attributed to the continued interest by Chinese and South Korean companies to expand supply sources of gold, base metals, and rare-earth elements and by Japanese companies to develop regional copper and nickel deposits to supply Japan's smelting industry. Based on the data of active

exploration sites compiled by the USGS, the three countries included in this region with the largest number of exploration sites were Indonesia, the Philippines, and Papua New Guinea, which together accounted for 67% of the active exploration sites in the region in 2014. Base and precious metals accounted for about 90% of all exploration activity in the Pacific region, with minor exploration activity for iron ore and other minerals (minor metals not classified as base or precious metals, and selected industrial minerals) in 2014. About 47% of the sites in this region were conducting early-stage exploration, 23% were exploring for minerals adjacent to producing mines, 20% were undergoing feasibility studies, and 10% were in development. Although nickel and bauxite exports from Indonesia had been curtailed, interest in exploration for nickel and bauxite increased in 2014 from countries in the region. Some selected exploration sites are listed in table 3 (Kean, 2014; SNL Metals & Mining, 2014).

In 2014, China's investment in mineral exploration was \$18.6 billion, which represents a year-on-year decrease of 5.4%. The Australian Bureau of Statistics reported that Australia's mineral exploration expenditures (including coal and excluding petroleum) for fiscal year 2014 (from July 1, 2013, through June 30, 2014) were about \$2.2 billion, which was a decrease of about 21% from the expenditures for fiscal year 2013 of \$2.6 billion (SNL Metals & Mining, 2014; Australian Bureau of Statistics, 2015; Ministry of Land and Resources, 2015, p. 3–5).

Based on the number of exploration sites compiled by the USGS, exploration activity in Asia in 2014 was focused primarily on base metals (50% of all sites), precious metals (38%), iron ore (9%), and other minerals (3%). Selected exploration sites are listed in table 3 (SNL Metals & Mining, 2014).

Commodity Overview

The estimates for the production of major mineral commodities for 2016 and beyond have been based upon supply-side assumptions, such as announced plans for increased production, new capacity construction, and bankable feasibility studies. The outlook tables (tables 5 through 20) in this summary chapter show historic and projected production trends; therefore, no indication is made about whether the data are estimated or reported, and revisions are not identified. Data on individual mineral commodities in tables in the individual country chapters are labeled to indicate estimates and revisions. The outlook segments of the mineral commodity tables are based on projected trends that could affect current producing facilities and on planned new facilities that operating companies, consortia, or Governments have projected to come online within the indicated timeframes.

Forward-looking information, which includes estimates of future production, exploration and mine development, the cost of capital projects, and timing of the start of operations, is 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 sections are presented as an indication of industry plans and are not a USGS prediction of what will take place.

Metals

The Asia and the Pacific region was a significant producer of metal ore and metals; the production of some major metal commodities accounted for more than one-half of the world's total. Specifically, the leading commodities produced in the region in 2014 were—in order of the region's share of the world's total—mercury, which accounted for 97% of the world's total; tin (metal, primary), 89%; tungsten (W content of mine output), 89%; lead (refined, primary), 78%; pig iron, 75%; tin (Sn content of mine output), 73%; alumina, 69%; iron ore (gross weight), 69%; bauxite, 67%; steel (crude), 65%; zinc (metal), 64%; lead (Pb content of mine output), 63%; nickel (Ni content of mine output), 58%; aluminum (metal), 56%; copper (refined, primary), 53%; zinc (Zn content of mine output), 52%; nickel (metal, refined), 45%; manganese (Mn content of mine output), 41%; gold (Au content of mine output), 29%; and copper (Cu content of mine output), 18% (table 4).

The output of most commodities increased in 2014 compared with that of 2013. A noticeable increase was reported for iron ore production in Australia—to 746 Mt in 2014 from 609 Mt in 2013; the increase was a result of significant investment in capacity expansion in recent years. The output of mercury in China, which was the sole mercury-producing country in the region, increased to 2,200 metric tons (t) in 2014 from 1,600 t in 2013. The region's output of nickel (Ni content of mine output) decreased to 1.1 Mt in 2014 owing mainly to the decrease (to 55,284 t in 2014 from 225,000 t in 2013) in mine output in Indonesia after the implementation of the export ban on unprocessed minerals. The region's output of nickel metal (refined), however, increased to 575,000 t in 2014 owing mainly to the production increase in China (to 350,000 t in 2014). The region produced about 73% (190,000 t) of the world's total production of tin in 2014. Of the regional total, China accounted for 52%; Indonesia, 20%, and Burma, 18%. China accounted for 38% of world tin production; Indonesia, 15%, and Burma, 13%. The output of tin in Burma increased to 35,000 t in 2014 from 9,000 t in 2013; the increase was a result of increased demand from the Chinese electronics industry after Indonesia implemented a ban on tin exports in July 2013 (tables 4, 13, 16; fig. 2; Scrap Register, 2014).

Industrial Minerals

The region produced 3.17 billion metric tons of cement in 2014, which accounted for 74% of the world's total. Of this regional amount, China accounted for 79%, and India, 9%. China accounted for 58% of world cement production, and India, 7%. The region's percentage of world cement production compared with its share of the world's total GDP (39%) is a reflection of the large-scale infrastructure development taking place in the region. In 2014, the region produced 934,000 t of graphite, which accounted for 87% of the world total. Of this regional amount, China accounted for 80%, and India, 18%. China accounted for 70% of world graphite production, and India, 16%. In China, crystalline graphite was used in steel metallurgy and refractory materials; however, in recent years, the graphite had been deemed a strategic resource for

aerospace, electronics, military, and nuclear power applications. The Government of China had issued a series of policies that identified graphene as one of the strategic materials. Other major industrial mineral commodities produced in the region in 2014 included, in order of the region's share of the world total, fluor spar (which accounted for 70% of the world total), magnesite (69%), and salt (35%). The changes in production tonnages for these industrial minerals were less than 7% in 2014 compared with those of 2013 (table 4; fig. 2; Ministry of Industry and Information Technology, 2014b; Liu, 2015).

Mineral Fuels

The Asia and the Pacific region's production of anthracite coal and bituminous coal accounted for about 82% and 69%, respectively, of the world's total in 2014. The region's shares of natural gas and crude petroleum production, however, were relatively low, accounting for 10% and 12%, respectively, of world production. The output of anthracite coal decreased by 21% in 2014 from that of 2013; the output of bituminous coal increased by 10%, followed by natural gas (5.5%), and crude petroleum (1.3%) (table 4).

Outlook

The production of most mineral commodities in the Asia and the Pacific region is projected to increase during the next few years owing largely to significant investments in capacity expansions in the region in response to the growth in demand from China. Lithium production is expected to increase by 71% by 2020 owing to several anticipated capacity additions in China to meet growth in demand from the battery industry. Nickel mine output is expected to increase as Indonesia recovers from the effects of the export ban on raw minerals. Iron ore production is expected to increase at a moderate rate because the production increases in Australia and India are expected to offset the anticipated decrease in China. Production of coal may decrease slightly as the output from such countries as Australia, India, and Indonesia would be insufficient to make up for the decrease in China, which was the leading coal producer in the region. The production of such other mineral commodities as bauxite, cobalt, copper, and rare-earth elements is expected to increase at modest rates or to remain at current levels (tables 5–20).

Global GDP growth, as projected by the International Monetary Fund (IMF), was expected to remain modest in 2016 (3.2%) and 2017 (3.5%), and to increase by less than 4% by the end of 2021. The average rate of growth for developing countries in the Asia and the Pacific region was projected to be 5.7% for both 2016 and 2017, which was lower than the 6.4% and 6.3% rates of growth in 2014 and 2013, respectively. These projections reflect anticipated economic challenges, such as weakness in the economies of oil-exporting countries, a moderate slowdown and a shift from manufacturing and investment to consumption in China, and a weak outlook for exporters of commodities other than oil. As a result, less-competitive, high-cost producers may be forced out of business and new capacity production may be postponed or canceled in response to challenging market conditions (tables 5–20;

Asian Development Bank, 2016, p. xxi; International Monetary Fund, 2016, p. 17–18).

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TABLE I
ASIA AND THE PACIFIC: AREA AND POPULATION IN 2014

Country	Area ¹ (square kilometers)	Estimated population ² (thousands)
Afghanistan	652,230	31,628
Australia	7,741,220	23,470
Bangladesh	148,460	159,078
Bhutan	38,394	765
Brunei	5,765	417
Burma	676,578	53,437
Cambodia	181,035	15,328
China	9,596,960	1,364,270
Fiji	18,274	886
India	3,287,263	1,295,292
Indonesia	1,904,569	254,455
Japan	377,915	127,132
Korea, North	120,538	25,027
Korea, Republic of	99,720	50,424
Laos	236,800	6,689
Malaysia	329,847	29,902
Mongolia	1,564,116	2,910
Nepal	147,181	28,175
New Caledonia	18,575	266
New Zealand	267,710	4,510
Pakistan	796,095	185,044
Papua New Guinea	462,840	7,464
Philippines	300,000	99,139
Singapore	697	5,470
Solomon Islands	28,896	572
Sri Lanka	65,610	20,771
Taiwan	35,980	23,434 ³
Thailand	513,120	67,726
Timor-Leste	14,874	1,212
Vietnam	331,210	90,729
Total	29,962,472	3,975,622
World total	148,940,000	7,259,692

¹Source: U.S. Central Intelligence Agency, The World Factbook, 2016.

²Source: The World Bank, 2016 World Development Indicators Database.

³Source: Statistical Bureau of the Republic of China (Taiwan).

TABLE 2
ASIA AND THE PACIFIC: GROSS DOMESTIC PRODUCT IN 2014^{1,2}

Country	Gross domestic product based on purchasing power parity		Real gross domestic product growth rate (percent)		
	Gross value (million dollars)	Per capita (dollars)			
			2012	2013	2014
Afghanistan	60,808	1,944	14.0%	3.9%	1.3%
Australia	1,099,538	46,562	3.5%	2.0%	2.6%
Bangladesh	536,482	3,391	6.3%	6.0%	6.3%
Bhutan	5,871	7,663	6.4%	4.9%	6.4%
Brunei	32,958	80,015	0.9%	-2.1%	-2.3%
Burma	262,278	5,101	7.3%	8.4%	8.7%
Cambodia	50,193	3,278	7.3%	7.4%	7.1%
China	17,960,665	13,131	7.7%	7.7%	7.3%
Fiji	7,640	8,628	1.4%	4.7%	5.3%
India	7,347,154	5,758	5.6%	6.6%	7.2%
Indonesia	2,685,315	10,649	6.0%	5.6%	5.0%
Japan	4,759,639	37,442	1.7%	1.4%	0.0%
Korea, North ³	15,454	622	1.3%	0.8%	1.0%
Korea, Republic of	1,783,950	35,379	2.3%	2.9%	3.3%
Laos	34,531	5,006	7.9%	8.0%	7.4%
Malaysia	769,448	25,147	5.5%	4.7%	6.0%
Mongolia	34,909	11,933	12.3%	11.6%	7.9%
Nepal	67,137	2,388	4.8%	4.1%	5.4%
New Caledonia	9,712 ³	37,862 ³	2.9% ⁴	2.2% ⁴	2.8% ⁴
New Zealand	161,047	35,359	2.8%	1.7%	3.0%
Pakistan	884,231	4,817	3.8%	3.7%	4.0%
Papua New Guinea	18,595	2,470	8.1%	5.5%	8.5%
Philippines	693,420	6,924	6.7%	7.1%	6.1%
Singapore	457,997	83,733	3.7%	4.7%	3.3%
Solomon Islands	1,099	1,911	4.7%	3.0%	2.0%
Sri Lanka	209,932	10,014	9.1%	3.4%	4.5%
Taiwan	1,080,074	46,091	2.1%	2.2%	3.9%
Thailand	1,067,029	15,542	7.2%	2.7%	0.8%
Timor-Leste	6,541	5,711	6.4%	2.8%	5.5%
Vietnam	512,582	5,650	5.2%	5.4%	6.0%
Regional total	42,616,229	XX	XX	XX	XX
Regional average	XX	10,719 ⁵	6.6% ⁶	6.8% ⁶	6.3% ⁶
World total	109,142,513	15,034 ⁵	3.5%	3.3%	3.4%

XX Not applicable.

¹Source: International Monetary Fund, World Economic Outlook Database, April 2016.

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

³Source: United Nations Data 2013 and U.S. Central Intelligence Agency, The World Factbook, 2016.

⁴Source: U.S. Central Intelligence Agency, The World Factbook.

⁵Gross domestic product/population. Calculated using country data reported by the International Monetary Fund and the World Bank.

⁶Annual change in regional gross domestic product.

TABLE 3
ASIA AND THE PACIFIC: SELECTED SIGNIFICANT EXPLORATION SITES IN 2014¹

Country	Type ²	Site	Commodity	Company	Resources ³
Australia	F	Castle Hill (Kumanalling)	Au	Phoenix Gold Ltd.	709,000 oz Au (R).
Do.	P	DeGrussa	Cu, Au	Sandfire Resources NL	376,000 t Cu, 456,000 oz Au (R).
Do.	P	Duketon area	Au	Regis Resources Ltd.	2.5 Moz Au (R).
Do.	P	Jundee	Au	Northern Star Resources Ltd.	415,000 oz Au (R).
Do.	P	Paulsens	Au	do.	124,000 oz Au (R).
Do.	P	Peak	Au, Ag, Cu	New Gold Inc.	412,000 oz Au, 820,000 oz Ag, 44,000 t Cu (R).
Do.	E	Pilbara iron ore	Iron ore	Flinders Mines Ltd.	500 Mt of iron ore (D).
Do.	P	Tropicana	Au	Anglogold Ashanti Ltd.	3.6 Moz Au (R).
Do.	E	West Musgrave	Ni, Cu, Co	Cassini Resources Ltd.	218,000 t Ni, 187,000 t Cu, 7,300 t Co (IF).
Do.	F	Wiluna	U	Toro Energy Ltd.	24,900 t U ₃ O ₈ (D).
Do.	F	Yamana belt	Au	Gold Road Resources Ltd.	2.5 Moz Au (D).
Cambodia	E	Kou Sa	Cu	Geopacific Resources Ltd.	Data not released.
Do.	E	Okvau	Au	Renaissance Minerals Ltd.	794,000 oz Au (ID).
China	P	White Mountain	Au	Eldorado Gold Corp.	571,000 oz Au (R).
Do.	P	Ying	Ag, Pb, Zn, Au	Silvercorp Metals Inc.	83 Moz Ag, 380,000 t Pb, 127,000 t Zn, 29,000 oz Au (R).
Indonesia	P	Martabe	Au, Ag	G-Resources Group Ltd.	2.7 Moz Au, 27 Moz Ag (R).
Mongolia	E	Kharmagtai	Cu, Au	Xanadu Mines Ltd.	245,000 t Cu, 939,000 oz Au (D).
Papua New Guinea	F	Wafi-Golpu	Au, Ag, Cu	Harmony Gold Mining Co. Ltd.	5.4 Mt Cu, 12.4 Moz Au, 19.8 Moz Ag (R).
Do.	E	Misima	Au, Ag	WCB Resources Ltd.	1.6 Moz Au, 8.6 Moz Ag (IF).
Philippines	P	Co-O	Au	Medusa Mining Ltd.	450,000 oz Au (R).
Do.	E	Masbate	Au	B2Gold Corp.	3 Moz Au (R).

Do. do. Ditto.

¹Abbreviations used for commodities in this table include the following: Ag, silver; Au, gold; Co, cobalt; Cu, copper; Pb, lead; Ni, nickel; U₃O₈, uranium oxide; Zn, zinc.

Abbreviations used for units of measure include the following: Moz, million troy ounces; Mt, million metric tons; oz, troy ounces; t, metric tons.

²E, active exploration; F, feasibility work ongoing/completed; P, exploration associated with producing site.

³Expressed as contained metal or element in ore based on 2014 data reported from various sources; D, demonstrated (measured + indicated); ID, indicated; IF, inferred; R, proven + probable. Resource data have not been verified by the U.S. Geological Survey. In cases where resource data have not been released, the site was considered noteworthy based on the level of exploration activity or regional significance.

TABLE 4
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2014¹

(Thousand metric tons unless otherwise specified)

Country	Metals													
	Copper				Iron and steel				Lead					
	Alumina	Aluminum Bauxite	Metal ²	Mine output, Cu content	Refined, primary	Gold, mine output, Au content (kilograms)	Iron ore, gross weight	Pig iron and direct-reduced iron	Steel, crude	Mine output, Pb content (metric tons)	Refined, primary (metric tons)	Steel, crude	Mine output, Pb content (metric tons)	Refined, primary (metric tons)
Afghanistan	--	--	--	--	--	50	--	--	9	--	--	--	--	--
Australia	20,475	78,633	1,704	969	507	274,000	746,000 ^e	3,300 ^e	4,412	728,000	4,412	728,000	176,000	
Bangladesh	--	--	--	--	--	--	--	--	--	--	--	--	--	
Bhutan	--	--	--	--	--	--	19	--	--	--	--	--	--	
Brunei	--	--	--	--	--	--	--	--	--	--	--	--	--	
Burma	--	--	--	33	33	900 ^e	--	--	--	18,000	--	18,000	200	
Cambodia	--	--	--	--	--	--	NA	--	--	--	--	--	--	
China ^e	47,800	65,000	28,100	1,620	4,820	486,000	1,510,000	713,740 ³	822,300 ³	2,800,000	822,300 ³	2,800,000	3,140,000	
Fiji ^e	--	640	--	--	--	1,160	--	--	--	--	--	--	--	
India	3,800	21,000	2,100	36 ^e	653	--	129,800	55,166	87,292	106,000	87,292	106,000	129,000	
Indonesia	--	2,555	211	406	175 ^e	69,100	--	--	3,000	--	3,000	--	--	
Japan	--	--	189	--	1,109	7,115	--	83,872	110,666	--	110,666	--	97,303	
Korea, North ^e	--	--	--	14	12	2,000	6,000	250	1,200	53,100	1,200	53,100	3,000	
Korea, Republic of	--	--	--	--	620	284	693	46,909	71,036	280,000	71,036	2,764	280,000	
Laos	--	--	--	71	89	5,265	1,149	--	--	--	--	--	--	
Malaysia	--	3,258	--	--	--	4,038	9,615	--	4,316	--	4,316	--	--	
Mongolia	--	--	--	249	2	11,504	6,389	--	64	--	--	--	--	
Nepal	--	--	--	--	--	--	--	--	--	--	--	--	--	
New Caledonia	--	--	--	--	--	--	--	--	--	--	--	--	--	
New Zealand	--	--	328	--	--	11,989	--	670 ^e	900 ^e	--	900 ^e	--	--	
Pakistan	--	31	--	13	--	--	255	142	900 ^e	--	900 ^e	--	--	
Papua New Guinea	--	--	--	76	--	52,858	--	--	--	--	--	--	--	
Philippines	--	--	--	92	130	18,423	827	--	1,196	--	1,196	--	--	
Singapore	--	--	--	--	--	--	--	--	--	--	--	--	--	
Solomon Islands	--	--	--	--	--	1,403	--	--	--	--	--	--	--	
Sri Lanka	--	--	--	--	--	--	--	--	--	--	--	--	--	
Taiwan	--	--	--	--	--	--	--	14,400 ^e	22,511	--	22,511	--	--	
Thailand	--	--	--	--	--	4,576	348	--	3,500 ^e	--	3,500 ^e	--	--	
Vietnam ^e	(4)	150	--	16	--	NA	4,355 ³	650 ³	2,900	6,000	2,900	6,000	--	
Total	72,000	171,000	32,600	3,600	8,150	951,000	2,420,000	919,000	1,140,000	3,710,000	1,140,000	3,710,000	3,830,000	
Share of world total	69.2%	66.0%	56.2%	18.0%	54.3%	29.1%	69.3%	74.7%	65.1%	62.6%	65.1%	62.6%	78.0%	
United States	4,390	NA	1,710	1,360	1,050	210,000	56,700	29,400	88,200	379,000	88,200	379,000	--	
Share of world total	4.2%	NA	2.9%	6.8%	7.0%	6.4%	1.6%	2.4%	5.0%	6.4%	5.0%	6.4%	--	
World total	104,000	259,000	58,000	20,000	15,000	3,270,000	3,490,000	1,230,000	1,750,000	5,930,000	1,750,000	5,930,000	4,910,000	

See footnotes at end of table.

TABLE 4—Continued
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2014¹

(Thousand metric tons unless otherwise specified)

Country	Metals									
	Manganese mine output, Mn content	Mercury, mine output, Hg content (metric tons)	Nickel, Ni content		Tin		Tungsten, mine output, W content (metric tons)		Zinc	
			Mine output (metric tons)	Refined metal	Mine output, Sn content (metric tons)	Metal, primary (metric tons)	Mine output, W content (metric tons)	Mine output, Zn content (metric tons)	Metal ² (metric tons)	
Afghanisitan	--	--	--	--	--	--	--	--	--	--
Australia	3,000 ^e	--	244	114	7,207	--	477	1,560,000	482,000	--
Bangladesh	--	--	--	--	--	--	--	--	--	--
Bhutan	--	--	--	--	--	--	--	--	--	--
Brunei	--	--	--	--	--	--	--	--	--	--
Burma ^e	97 ³	--	21 ^{p.3}	--	35,000	30	143 ³	6,100	--	--
Cambodia	--	--	--	--	--	--	--	--	--	--
China ^e	3,200	2,200	98	350	99,000	187,000	71,000	4,930,000	5,780,000	--
Fiji	--	--	--	--	--	--	--	--	--	--
India	945	--	--	--	--	--	--	706,000	723,000	--
Indonesia	38 ^e	--	55	--	38,545	58,233	--	--	--	--
Japan	--	--	--	56	--	1,746	--	--	583,021	--
Korea, North ^e	--	--	--	--	--	--	70	36,000	32,000	--
Korea, Republic of	--	--	--	NA	--	--	--	1,919	900,943	--
Laos	--	--	--	--	866	--	--	--	--	--
Malaysia	NA	--	--	--	3,777	35,018	--	46,600	--	--
Mongolia	--	--	--	--	--	--	--	--	--	--
Nepal	--	--	--	--	--	--	--	--	--	--
New Caledonia	--	--	178	55	--	--	--	--	--	--
New Zealand	--	--	--	--	--	--	--	--	--	--
Pakistan	--	--	--	--	--	--	--	--	--	--
Papua New Guinea	--	--	21	--	--	--	--	--	--	--
Philippines	3	--	523	--	--	--	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	--
Solomon Islands	--	--	--	--	--	--	--	--	--	--
Sri Lanka	--	--	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	--	--
Thailand	7	--	--	--	156	16,929	100	39,140	65,694	--
Vietnam ^e	(4)	--	--	--	5,400	4,000	--	20,000	18,000	--
Total	7,290	2,200	1,410	575	190,000	303,000	71,800	7,350,000	8,580,000	--
Share of world total	41.0%	96.5%	71.3%	45.3%	72.7%	88.6%	89.0%	51.8%	63.6%	--
United States	--	--	--	--	--	--	NA	832,000	180,000	--
Share of world total	--	--	--	--	--	--	NA	5.9%	1.3%	--
World total	17,800	2,280	1,980	1,270	260,000	342,000	80,700	14,200,000	13,500,000	--

See footnotes at end of table.

TABLE 4—Continued
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2014¹

(Thousand metric tons unless otherwise specified)

Country	Mineral fuels and related materials										Petroleum, crude (thousand 42-gallon barrels)	
	Industrial minerals					Coal						Natural gas, dry (million cubic meters)
	Cement, hydraulic	Fluorspar (metric tons)	Graphite (metric tons)	Magnesite	Salt	Anthracite	Bituminous	Bituminous	Bituminous			
Afghanistan	102	20,000	--	--	35	--	233	140 ^e	67			
Australia	9,000 ^e	--	--	450 ^e	13,000	--	442,000	64,897	128,960			
Bangladesh	3,570	--	--	--	1,461	--	943	23,232	2,528			
Bhutan	600 ^e	--	--	--	--	--	122	--	--			
Brunei	NA	--	--	--	--	--	--	NA	NA			
Burma	1,317	--	--	--	188	--	--	18,503	5,851			
Cambodia	1,000 ^e	--	--	--	NA	--	--	--	--			
China ^e	2,492,000 ³	3,900,000	750,000	16,000	70,497 ³	530,000	3,000,000	115,000	1,530,000			
Fiji	190 ^e	--	--	--	--	--	--	--	--			
India ^e	280,000	5,000	170,000 ³	195 ³	17,000	--	540,000	33,000	322,000			
Indonesia	65,000 ^e	--	--	--	NA	NA	435,000 ⁴	75,000	289,100			
Japan	53,847	--	--	--	1,000 ^e	--	1,200 ^e	2,882	4,051			
Korea, North ^e	6,600	--	10,000	--	NA	41,000	--	--	--			
Korea, Republic of	63,247	--	--	--	304	NA	--	--	--			
Laos ^e	1,500	--	--	--	9	110	--	--	--			
Malaysia	21,700	--	--	--	--	--	2,688	62,000	210,000			
Mongolia	411	375,000	--	--	2	--	24,415	--	7,405			
Nepal	3,000 ^e	--	--	--	--	--	1	--	--			
New Caledonia	106	--	--	--	--	--	--	--	--			
New Zealand	1,200 ^e	--	--	--	100 ^e	--	3,992	5,440	13,804			
Pakistan	31,960	8,938	--	4	2,541	--	3,085	40,000 ^e	34,232			
Papua New Guinea	--	--	--	--	--	--	--	160 ^e	11,000			
Philippines ^e	22,000	--	--	--	1,016 ³	--	NA	4,000	2,500			
Singapore	--	--	--	--	--	--	--	--	--			
Solomon Islands	--	--	--	--	--	--	--	--	--			
Sri Lanka	1,885	--	4,000 ^e	--	102	--	--	--	--			
Taiwan	14,592	--	--	--	--	--	--	387	57			
Thailand	34,980	NA	--	--	1,381	--	--	42,118	50,647			
Vietnam	60,507	--	NA	--	766	41,697	--	10,210 ⁵	123,000 ^e			
Total	3,170,000	4,310,000	934,000	16,600	109,000	613,000	4,450,000	497,000	2,740,000			
Share of world total	74.2%	69.5%	87.3%	68.6%	34.5%	81.7%	69.0%	10.4%	8.4%			
United States	77,400	--	--	W	45,300	2,400	1,010,000	888,000	3,160,000			
Share of world total	1.8%	--	--	W	14.3%	0.3%	15.7%	18.6%	9.7%			
World total	4,270,000	6,200,000	1,070,000	24,200	316,000	750,000	6,450,000	4,770,000	32,600,000			

See footnotes at end of table.

TABLE 4—Continued
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2014¹

⁰Estimated; estimated data, U.S. data, and world totals are rounded to no more than three significant digits. NA Not available. ¹Preliminary. W Withheld to avoid disclosing company proprietary data; not included in "World total." -- Zero or zero percent.

¹Totals may not add due to independent rounding. Percentages are calculated on unrounded data. Table includes data available as of September 22, 2016.

²Primary and secondary production.

³Reported figure.

⁴Contains small amounts of anthracite.

⁵Natural gas, gross production.

TABLE 5
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED BAUXITE MINE PRODUCTION, 2005–2020¹

(Thousand metric tons, gross weight)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	59,960	68,414	81,119	78,633	80,000	82,000	104,000
China	22,000	44,000	50,400	65,000	65,000	67,500	70,000
India	12,385	14,124	20,420	21,000	24,000	28,000	31,000
Indonesia	1,442	27,410	57,024	2,555	5,000	15,000	25,000
Malaysia	5	124	209	3,258	3,000	10,000	10,000
Other	33	90	270	671	450	500	500
Total	95,800	154,000	209,000	171,000	177,000	203,000	240,000

^cEstimated.

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

TABLE 6
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED PRIMARY AND SECONDARY ALUMINUM METAL PRODUCTION, 2005–2020¹

(Thousand metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	2,030	2,060	1,778	1,704	1,700	1,700	1,700
China	9,740	20,200	25,100	28,100	33,000	35,500	38,500
India	942	1,607	1,700	2,100	2,600	3,000	3,500
Indonesia	252	253	255	211	200	250	270
Japan	240	180	172	189	190	200	200
New Zealand	373	343	325	328	330	330	330
Other	--	--	290	--	--	--	--
Total	13,600	24,600	29,600	32,600	38,000	41,000	44,500

^cEstimated. -- Negligible or no production.

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

TABLE 7
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED COBALT MINE PRODUCTION, 2005–2020¹

(Co content in metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	5,600	3,850	6,400	5,978	6,000	6,000	6,000
China	2,100	6,380	7,200	7,700	8,500	9,000	9,500
Indonesia	1,600	1,600	4,700	329	500	1,000	1,500
New Caledonia	--	2,850	3,190	4,400	5,000	5,500	6,000
Papua New Guinea	--	--	1,013	2,134	2,500	2,800	3,000
Philippines	300	2,100	2,126	4,094	5,000	5,000	5,000
Total	9,600	16,800	24,600	24,600	27,500	29,300	31,000

^cEstimated. -- Negligible or no production.

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

TABLE 8
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED COPPER MINE PRODUCTION, 2005–2020¹

(Cu content in thousand metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	930	870	1,001	969	1,000	1,000	900
China	762	1,160	1,540	1,620	1,620	1,720	1,820
Indonesia	1,064	878	504	406	600	700	800
Mongolia	127	125	187	249	260	270	280
Papua New Guinea	193	160	106	76	110	120	130
Philippines	16	58	91	92	93	95	95
Other	73	50	60	184	200	200	200
Total	3,170	3,300	3,490	3,600	3,880	4,110	4,200

^cEstimated.

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

TABLE 9
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED REFINED COPPER METAL PRODUCTION, 2005–2020¹

(Thousand metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	461	417	480	507	480	480	480
China	2,600	4,650	6,180	6,820	7,950	8,500	8,500
India	497	654	680	653	700	800	900
Indonesia	263	279	214	175	300	350	400
Japan	1,395	1,549	1,468	1,554	1,500	1,500	1,500
Korea, Republic of	519	565	586	620	600	600	600
Other	270	266	280	171	300	300	300
Total	6,010	8,380	9,890	10,500	11,800	12,500	12,700

^cEstimated.

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

TABLE 10
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED GOLD MINE PRODUCTION, 2005–2020¹

(Au content in kilograms)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	263,000	261,000	268,000	274,000	290,000	300,000	280,000
China	225,000	345,000	428,000	486,000	530,000	570,000	600,000
Indonesia	130,620	119,726	59,804	69,100	80,000	90,000	100,000
Japan	8,318	8,544	7,411	7,115	7,000	6,500	6,000
Laos	6,232	5,061	6,838	5,265	6,000	6,000	6,000
Mongolia	24,120	6,000	8,904	11,504	125,000	130,000	130,000
New Zealand	10,583	13,494	12,468	11,989	12,000	12,000	12,000
Papua New Guinea	68,483	58,983	56,035	52,858	53,000	55,000	58,000
Philippines	37,490	40,847	17,248	18,423	20,000	22,000	22,000
Other	19,000	19,800	23,000	14,411	15,000	17,500	20,000
Total	793,000	878,000	888,000	951,000	1,140,000	1,210,000	1,200,000

^cEstimated.

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

TABLE 11
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED BENEFICIATED IRON ORE PRODUCTION, 2005–2020¹

(Fe content in thousand metric tons)

Country	Average iron content	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	62%	163,000	271,000	367,000	448,000	490,000	550,000	590,000
China ^c	30%	134,000	350,000	435,000	453,000	402,000	378,000	355,000
India	64%	97,500	131,677	84,382	80,476	85,000	90,000	100,000
Other	64%	3,000	5,000	11,000	19,000	15,000	15,000	15,000
Total	XX	398,000	760,000	897,000	1,000,000	992,000	1,030,000	1,060,000

^cEstimated. XX Not applicable.

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

TABLE 12
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED CRUDE STEEL PRODUCTION, 2005–2020¹

(Thousand metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	7,790	7,408	4,646	4,412	4,900	4,600	4,300
China	353,240	637,230	779,040	822,300	783,000	750,000	730,000
India	45,800	68,976	81,299	87,292	93,000	100,000	200,000
Japan	112,470	109,599	110,595	110,666	110,000	112,000	120,000
Korea, Republic of	47,820	58,914	66,061	71,036	70,000	70,000	70,000
Malaysia	5,296	5,693	4,693	4,316	4,300	4,300	4,300
Taiwan	18,567	18,975	21,466	22,511	23,000	23,000	23,000
Other	13,000	15,000	15,000	8,793	10,000	10,000	10,000
Total	604,000	922,000	1,080,000	1,130,000	1,100,000	1,070,000	1,160,000

^cEstimated.

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

TABLE 13
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED NICKEL MINE PRODUCTION, 2005–2020¹

(Ni content in metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	189,000	170,000	234,000	244,000	230,000	250,000	270,000
Burma	10	--	9,000	21,000	22,000	24,000	25,000
China	72,700	80,000	93,300	98,400	105,000	110,000	115,000
Indonesia	135,000	235,800	225,000	55,284	150,000	200,000	300,000
New Caledonia	111,939	129,800	163,866	178,000	200,000	220,000	250,000
Papua New Guinea	--	--	11,369	21,000	25,000	28,000	30,000
Philippines	26,636	150,000	464,000	523,000	550,000	550,000	550,000
Total	535,000	76,600	1,201,000	1,140,000	1,280,000	1,380,000	1,540,000

^cEstimated. -- Negligible or no production.

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

TABLE 14
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED PALLADIUM MINE PRODUCTION, 2005–2020¹

(Pd content in kilograms)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	550	650	610	600	600	600	600
China	450	850	900	900	1,100	1,500	1,700
Total	1,000	1,500	1,510	1,500	1,700	2,100	2,300

^cEstimated.

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

TABLE 15
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED PLATINUM MINE PRODUCTION, 2005–2020¹

(Pt content in kilograms)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	111	130	176	180	150	150	150
China	700	1,500	1,600	1,600	1,900	2,700	3,000
Total	811	1,630	1,780	1,780	2,050	2,850	3,200

^cEstimated.

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

TABLE 16
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED TIN MINE PRODUCTION, 2005–2020¹

(Sn content in metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
Australia	2,819	18,263	6,472	7,207	7,000	7,000	7,000
Burma	708	800	9,000	35,000	35,000	35,000	35,000
China	126,000	93,200	97,000	99,000	110,000	110,000	100,000
Indonesia	78,404	97,796	45,800	38,545	40,000	42,000	40,000
Malaysia	2,857	2,668	3,697	3,777	3,800	3,800	3,800
Vietnam	5,400	5,400	5,400	5,400	5,400	5,400	5,400
Other	1,000	1,200	1,000	1,000	1,000	1,000	1,000
Total	217,000	219,000	168,000	190,000	202,000	204,000	190,000

^cEstimated.

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

TABLE 17
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED TIN METAL PRODUCTION, 2005–2020¹

(Metric tons)

Country	2005	2010	2013	2014	2016 ^c	2018 ^c	2020 ^c
China	122,000	149,000	159,000	187,000	170,000	175,000	185,000
Indonesia	65,300	40,000	60,000	58,233	60,000	60,000	60,000
Japan	950	1,300	1,200	1,746	1,200	1,300	1,200
Malaysia	36,924	38,771	32,633	35,018	35,000	35,000	35,000
Thailand	31,600	20,000	19,088	16,929	17,000	17,000	17,000
Other	2,800	3,500	4,400	4,030	4,200	4,500	4,500
Total	260,000	253,000	276,000	303,000	287,000	293,000	303,000

^cEstimated.

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

TABLE 18
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED DIAMOND PRODUCTION, 2005–2020¹

(Thousand carats)

Country	2005	2010	2013	2014	2016 ^e	2018 ^e	2020 ^e
Australia	34,307	10,000	11,482	9,288	16,000	18,000	20,000
China	100	150	200	200	200	200	200
India	58	50	73	75	50	50	50
Indonesia	30	37	37	37	35	35	35
Total	34,500	10,200	11,800	9,600	16,300	18,300	20,000

^eEstimated.

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

TABLE 19
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED LITHIUM PRODUCTION, 2005–2020¹

(Li content in metric tons)

Country	2005	2010	2013	2014	2016 ^e	2018 ^e	2020 ^e
Australia	4,800	8,200	12,400	13,300	13,700	19,300	22,500
China	3,600	6,000	10,500	11,000	13,000	16,000	19,000
Total	8,400	14,200	22,900	24,300	26,700	35,300	41,500

^eEstimated.

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

TABLE 20
ASIA AND THE PACIFIC: HISTORIC AND PROJECTED SALABLE COAL PRODUCTION, 2005–2020¹

(Thousand metric tons)

Country	2005	2010	2013	2014	2016 ^e	2018 ^e	2020 ^e
Australia	370,000	427,000	478,000	503,000	530,000	540,000	560,000
China	2,260,000	3,240,000	3,970,000	3,880,000	3,650,000	3,500,000	3,350,000
India	360,000	507,000	590,000	567,000	598,000	780,000	925,000
Indonesia	192,920	224,677	377,847	435,000	400,000	500,000	500,000
Korea, North	23,500	41,000	42,000	41,000	40,000	40,000	40,000
Mongolia	8,256	25,246	29,164	24,415	22,000	21,000	20,500
New Zealand	5,267	5,330	4,625	3,992	4,000	4,000	4,000
Pakistan	3,367	3,429	2,985	3,085	3,200	7,000	7,300
Philippines	3,165	6,650	10,732	12,406	13,000	13,000	13,000
Thailand	21,429	18,399	18,111	17,991	18,000	18,000	18,000
Vietnam	34,093	44,835	41,064	41,697	42,000	42,000	42,000
Other	5,390	7,000	8,200	8,000	7,800	8,000	8,000
Total	3,290,000	4,600,000	5,600,000	5,540,000	5,330,000	5,470,000	5,490,000

^eEstimated.

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

Asia and the Pacific region

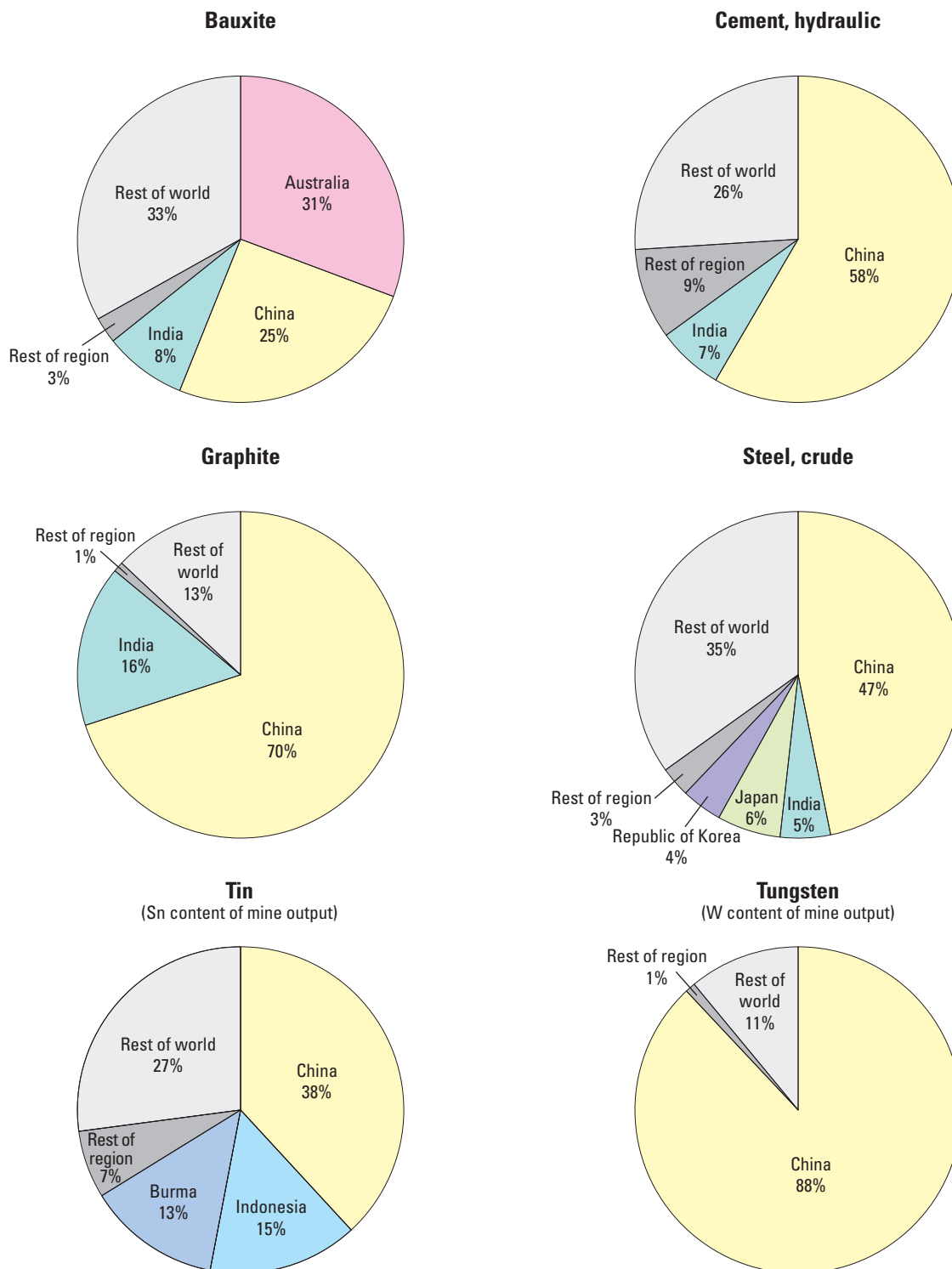


Figure 2. Pie charts showing percentage of world production of selected mineral commodities by countries of the Asia and the Pacific region in 2014. Individual countries of the region are labeled if they accounted for at least 3% of world production. Data are from table 4. Percentages may differ from those reported in individual country chapters owing to differences in source or date of reporting.