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Overview of Exploration in Asia—the rising importance of China

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Asia spans across 51 countries and covers 33% of the earth's surface (excluding Antarctica). For ease of analysis the study consolidated the 51 countries into six regions – Middle East (17), Central Asia (9), Indian Sub-Continent (7), Southeast Asia (11), East Asia (5) and Northeast Asia (2 countries, including the Asian-part of Russia,).

In terms of (non-bulk) mineral deposits, Asia accounts for 25% of all known significant deposits in the World – including 28% of the global resources (by mass) for nickel and zinc/lead as well as 23% for gold and uranium and 19% for copper.

Based on available reported data, over the last decade (2007-2016) 165 significant mineral deposits (or 25% of the global total of 662 deposits) were found in Asia. This included three Tier-1 deposits (out of a total of 12 discovered in the World) over that time. All three of Asia's Tier-1 deposits were found in China. These were Haiyu (Au), Huoshaoyun (ZnPbAg) and Xiling (Au).

Compared to the previous decade (1997-2006) Asia's share of global exploration expenditures rose from 20% to 27%, with the biggest factor being China (up from 3% to 16% of global spend). In terms of domestic expenditures China is now the largest explorer in the World; ahead of Canada and Australia. Much of this is driven by strategic considerations to meet future growth in domestic demand associated with rising prosperity within China.

The presentation provides detailed information on the location, number, size, contained metal and economic value of these mineral discoveries over the last decade for gold, base metals, uranium and other minerals. It also shows data on total exploration expenditures, unit discovery costs ($/oz and $/lb) and the economic efficiency (i.e. "Bang-per-Buck") value by commodity for Asia versus the Rest of the World.

Over the last decade, Asia performed well in gold exploration (with a unit discovery cost of $47 per ounce-equivalent versus the $74/oz-eq (in constant 2016 US Dollars) for the Rest of the World. Asia also performed well in lead/zinc exploration (1.4 versus 4.2 c/lb Zn-eq for the ROW) and was on-par for copper (3.6 versus 3.8 c/lb Cu-eq) but higher for nickel (20 versus 14 c/lb Ni-eq) and uranium ($9.08 versus $2.77/lb U3O8 for the ROW).

However, it should be noted that the relative performance for each of these metrics varies widely between the six regions within Asia. Even so, China performed well across many of the key categories.