China's Mining Sector
Overview of the Chinese Mining industry

- China is the world's leading producer of coal, gold, and most rare earth minerals. However, the country has limited resources for certain commodities, such as high-quality metallurgical coal and nickel.

- The world's leading consumer of most mining products, particularly for commodities like thermal coal, approximately 49% of global total, and iron ore, approximately 58% of global total.

- Historically, the industry has been fragmented, with many companies operating in the same mining area.

- Consolidation has been encouraged in an effort to increase efficiency and to improve safety and environmental performance.
Summary of Chinese Mining Production

*mine output measured in metric

<table>
<thead>
<tr>
<th>Material</th>
<th>Output (metric)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>1.16 million</td>
</tr>
<tr>
<td>Gold</td>
<td>345</td>
</tr>
<tr>
<td>Iron &amp; Steel</td>
<td>1 million</td>
</tr>
<tr>
<td>Lead</td>
<td>1,850</td>
</tr>
<tr>
<td>Nickel</td>
<td>81,000</td>
</tr>
<tr>
<td>Silver</td>
<td>3,500</td>
</tr>
<tr>
<td>Zinc</td>
<td>3,700</td>
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</tbody>
</table>

*2010 mine output

PwC Asia School of Mines 2012
PwC

November 2012
Slide 3
Key Commodity Trends

• **Nickel** — China has limited nickel resources. Nickel resources have been discovered in Xinjiang, Gansu, Hubei, Jilin, Sichuan, and Yunnan. China uses nearly 50% of the world’s nickel and supplies approximately 5% of the world’s supply. Growth in nickel consumption has slowed down.

• **Copper** — Owing to domestic smelter and refinery expansions, China’s copper output increased sharply during the past several years, despite the constrained supply of copper concentrates on the world market.
  
  o Domestic copper mines supplied about 30% of the country’s requirements for copper concentrates.
  
  o 2012 witnessed a strong stock building activity by Chinese companies as copper imports were used to obtain credit.

• **Iron and Steel** — China accounted for about 57% of the world’s pig iron production and 45% of the world’s crude steel production. Domestic iron ore production cannot meet domestic demand; thus, China depends on iron ore imports to fill the gap. Growth in steel making is slowing in China.
Key Commodity Trends

- **Coal** — Coal consumption had increased to meet the high demand for industrial production and power generation. Coal is the primary source of energy – two thirds of the country’s electricity was produced by coal-fired plants.
  - Despite China’s coal production increases, due to an increase in demand, China has become a net coal importing country.
  - Chinese thermal coal imports have continued to surge, reaching 9.65Mt in May as utilities turn to cheaper offshore supplies.
  - High costs and increased focus on environment and safety continue to exert pressure on the domestic coal costs, which has resulted in making imported coal more competitive

- **Gold** — Chinese gold companies are actively looking at assets overseas, and while other sub-sectors may slow down, we may even see an increase in gold related deals by Chinese companies in the near term.
  - In China, demand fell 8% to 176.8t in Q3 2012
Mining will be impacted by China’s 12th Five-Year Plan

- The government continues to consolidate coal mining companies: about 11,000 coal enterprises will be reduced to 4,000, with 8 to 10 coal companies expected to account for nearly two-thirds of all coal production by 2015.

- Important goals of the plan include developing western regions, protecting the environment, and improving energy efficiency.

- The reduction of energy dependence on fossil fuels could be a key challenge for the mining sector. China may push the use of non-fossil fuels to 15% of the country’s total energy use by 2020. The 2015 target for non-fossil fuel is 11.4%.

- Key areas of funding will include government investments in IT, environmental protection, and scientific research.
Foreign investment in China’s mining industry varies by subsector with only certain areas being encouraged (1/2)

Sectors in which foreign investment is **encouraged:**

- Prospecting, exploitation and utilization of coal-bed gas
- Prospecting, exploitation, and beneficiation of iron ores and manganese ores
- Development and application of new technologies for improving the utilization of tailings and the comprehensive utilization of recovery technology of the mine ecology
- Prospecting and exploitation of unconventional natural gas resources such as shale gas and submarine natural gas hydrate

Sectors in which foreign investment is **restricted:**

- Exploring and mining of special and scarce coals exploration
- Exploring and mining of barite
- Exploring and mining of precious metals (gold, silver, platinum families) and precious non-metals such as diamond
- Exploring and cradling of phosphorite
- Inorganic salts production with high resource consumption and serious environmental pollution using outdated technologies
Foreign investment in China’s mining industry varies by subsector with only certain areas being encouraged (2/2)

Sectors in which foreign investment is prohibited:

- Exploring and mining of tungsten, molybdenum, tin, antimony, fluorite

- Exploring, mining and dressing of radioactive mineral products

- Exploring, mining and dressing of rare earth metal
China’s mining M&A landscape

**Inbound**

- Minimal with few western companies investing directly in Chinese mines

**Domestic**

- Mostly consists of major state-owned enterprises restructuring and consolidating.
- For example, there are plans to continue consolidating the coal sector, reducing about 11,000 coal enterprises to 4,000, with eight to 10 coal companies expected to account for nearly two-thirds of all Chinese coal production by 2015.

**Outbound**

- The most significant and notable mining deals involving China have been outbound.
- Multi-sector Chinese mining companies are likely to emerge over the next few years, with major state-owned companies investing in different commodities.
China M&A mining outbound overview

- The number of China-led mining merger and acquisition deals nearly doubled in the first half of 2012.

- While Chinese companies could potentially slow down their rate of doing deals in the near term, China-based companies are continuing to evaluate opportunities and will still seek to take advantage of global conditions to secure overseas resource assets at attractive valuations - areas of particular focus include North America, South America and Africa.

- Outbound deals in the resources and energy sectors continued to dominate, representing 44% of the number of outbound transactions in the first half of 2012 on a combined basis compared to 36% in the same period of 2011.
Chinese overseas equity acquisitions in the global mining sector

Year-to-date 2012

- China has been involved in 189 deals
- Total value of USD75 billion
- Average disclosed deal size was USD136 million
- Average premium 31%
Geography of Chinese acquisitions in the mining sector in the first half of 2012

With approximately 69% of 1H2012 deals by value Chinese outbound deals have largely focused on deals on Asia Pacific Emerging markets.

Source: S&P Capital IQ, PwC Analysis
Thank you