CNMC Mining in Africa: Opportunities and Challenges

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A Booming Copper Market In China

Refined Copper Consumption By Region (kt)

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>China</th>
<th>Other than China</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>13020.6</td>
<td>1269.7</td>
<td>11750.9</td>
</tr>
<tr>
<td>2001</td>
<td>13400.6</td>
<td>1397.4</td>
<td>12003.2</td>
</tr>
<tr>
<td>2002</td>
<td>14023.5</td>
<td>1484.2</td>
<td>12539.3</td>
</tr>
<tr>
<td>2003</td>
<td>15103.9</td>
<td>1928.1</td>
<td>13175.8</td>
</tr>
<tr>
<td>2004</td>
<td>14561.5</td>
<td>2210.5</td>
<td>12351.0</td>
</tr>
</tbody>
</table>

Growth rate (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>China</th>
<th>Other than China</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2.92</td>
<td>10.06</td>
<td>2.15</td>
</tr>
<tr>
<td>2001</td>
<td>4.65</td>
<td>6.21</td>
<td>4.47</td>
</tr>
<tr>
<td>2002</td>
<td>7.70</td>
<td>29.91</td>
<td>5.08</td>
</tr>
<tr>
<td>2003</td>
<td>-3.59</td>
<td>14.65</td>
<td>-6.26</td>
</tr>
<tr>
<td>2004</td>
<td>3.37</td>
<td>23.81</td>
<td>-0.29</td>
</tr>
</tbody>
</table>

In each year, China’s growth rate was significantly higher than that of the world and other parts of the world. Yearly increment of copper consumption was dominated by China. The rate of China's increment in copper consumption is about 11.78% to 100%.

The gap between Curves of refined copper and copper concentrate grows quickly. It means more copper raw material is demanded to imported to supply copper refinery, such as copper concentrate and copper scrap.
China is not a short-term copper demand market. The consumption for raw copper products such as refined, anode, scrap, and copper concentrate will continuously growing:

- Manufacturing Giant in current world
- Economical growth has accelerated urbanization in China

The strong copper price pushed by the strong demand of copper drives more and more international mining company to expand their business activity into China, and more and more Chinese company to search copper supply abroad.

Introduction to CNMC

CNMC is abbreviation of China Nonferrous Metal Mining (Group) Co., LTD, which is a wholly state-owned company Group. Its core business covers nonferrous mining & metallurgy, Engineering projects contracting, and nonferrous mining products trading.
History
• Established in 1983, named as China Nonferrous Metal Industry’s Foreign Engineering and Construction Co.
• Frontier Company to go abroad, supported by exploration, engineering, mining, metal urging enterprises and CNMC;
• Put part of its assets to establish China Nonferrous Metal Industry’s Foreign Engineering and Construction Co., Ltd (NFC), which was listed on the Shenzhen Stock Exchange of China in April, 1997. NFC got into the list of the world’s 225 largest international contractors by the US-based Engineering News Records in 1997;
• Traditionally a Projects contractor in Nonferrous Metal Industry;
• Expanded its activity to mining, winning the bid of Chambishi copper project, 1998;
• Renamed as China nonferrous metal mining (Group) CO.LTD in 2004

Mining and metallurgy sector
Projects in Operation
• Chambishi Copper Mine project, Zambia,
• Chambish SX/EW plant
• Tumurtin-Ovoo Zinc Mine, Mongolia
• Hongtoushan copper mine, china
• Guangdong Pearl River Rare earth Smelting plant
• Thai-China lead- Antimony Alloy Plant

CNMC Mining in Copperbelt, Zambia

Operations in Zambia
Chambishi Copper Mine, Zambia,
• Construction beginning in 2000;
• Commercial production beginning in 2003;
• US$150 million Capital
• Employment: about 2000 local employees;
• Underground mining;
• Designed mining and milling capacity: 6500tpd
• Annual production: 20,000 ton copper in concentrate (2005)
• 2005 year end ore reserve: 27 Mt at Cu 2.48% 
• 2005 year end ore resource: 30 Mt at Cu 2.27%; Chambishi west 102 Mt at Cu 2.2%, Co 0.11%; Chambishi Southeast

CNMC’s Strategy in Zambia
• Focused on copper/cobalt mineralization in Zambia
• Further exploration of already-found mineral occurrences with application of modern evaluation techniques
• JV with local company
• Develop and grow with local community and local people
• Engaged Chinese experienced companies to invest jointly into Zambia mining sector
Operations in Zambia

Chambishi SX/EW plant
- Construction beginning in November 2004;
- Commercial production beginning in September 2005;
- US$25 million Capital
- Employment: about 300 local employees;
- Designed annual production rate: 8000 ton cathode copper

Chambishi copper smelter
Under feasibility

Opportunities and Challenges

Opportunities
- Rich copper resources potential
- Modern Mines Act
- Stable Government
- Strong mining practice and Skilled local manpower
- Abundant database of exploration and geological data
- Low hydro-power costs

Challenges
- Language and Culture
- Transportation:
- Health: such as AIDS/HIV, malaria
- Supply

Thank you!