General Overview of Chinese Copper Market: Supply and Demand

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Overview

- Entering the 21st century, China’s copper industry has made impressive progress, both refined copper output and consumption witnessed rapid growth. From 2006 to 2010, the output of refined copper rose to 4.573 mlint from 3.003 mlint, with an annual growth rate of 11.1%; refined copper consumption reached 6.80 mlint from 4.01 mlint, saw an annual growth rate of 14.1%. The annual growth rate, both are over 10%.

- While the refined copper production and consumption increased rapidly, the copper-in-concentrate output saw a lower growth rate, with annual average growth rate of 7.3%. The supply shortage of copper raw materials continued to widen, copper raw materials is increasingly dependence on imports, currently, China is the largest copper importer in the world.

- The “bottleneck of copper resource”, to some extent, has restricted the development of China copper industry, and China paid a big fortune for it. To solve the copper supply, on the one hand, to make efforts to develop domestic copper resource, on the other hand, to encourage Chinese enterprises to “go Abroad” for copper resource exploration, to ease domestic shortage of copper resource.
Copper Concentrates and Refined Copper Production

Source: CNIA

Major Copper Concentrates production Provinces in 2010

Source: CNIA
Major Refined Copper Production Provinces in 2010

Source: CNIA

Copper Raw Materials Imports in 2006 - 2010

Source: China Customs
Quantity of Copper Raw Materials Imports

During 2006-2010, China’s raw materials imports continued to increase, but the structure of copper raw materials imports changed.

<table>
<thead>
<tr>
<th></th>
<th>kt</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrates</td>
<td></td>
<td>3611.9</td>
<td>4516.2</td>
<td>5192.1</td>
<td>6130.9</td>
<td>6468.1</td>
<td>15.7%</td>
</tr>
<tr>
<td>Scrap</td>
<td></td>
<td>4942.9</td>
<td>5584.7</td>
<td>5576.9</td>
<td>3998.1</td>
<td>4364.3</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Blister</td>
<td></td>
<td>88.4</td>
<td>172.8</td>
<td>197.6</td>
<td>228.1</td>
<td>399.0</td>
<td>45.8%</td>
</tr>
<tr>
<td>Refined Copper (net import)</td>
<td></td>
<td>584.0</td>
<td>1367.8</td>
<td>1360.3</td>
<td>3112.3</td>
<td>2883.4</td>
<td>49.1%</td>
</tr>
</tbody>
</table>

Source: China Customs
Copper Scrap Imported by Country/Region in 2010

Source: China Customs

Copper Blister Imported by Country/Region in 2010

Source: China Customs
Refined Copper Imported by Country/Region in 2010

Source: China Customs

China’s Refined Copper Consumption in 2006-2010

Source: Antaike
China’s Refined Copper Consumption in 2006-2010

- From 2006 to 2010, China’s refined copper consumption increased with an annual growth rate of 14.1%, witnessed a faster growth;

- In 2010, China’s actual refined copper consumption accounted for 37.6% of the world total, while the proportion of apparent consumption is even higher;

- Started in 2009, impacted by Chinese government “Economic Stimulus Plan”, to further promote refined copper consumption;

- In 2009 and 2010, copper scrap import declined significantly, which lead to increase refined copper consumption.

Main Refined Copper Consumption Sectors in 2010

Source: Antaike
### The Difference of Apparent & Actual Consumption

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined copper output</td>
<td>3003.2</td>
<td>3499.4</td>
<td>3794.6</td>
<td>4051.3</td>
<td>4573.5</td>
</tr>
<tr>
<td>Refined copper import</td>
<td>827.0</td>
<td>1493.7</td>
<td>1456.4</td>
<td>3185.2</td>
<td>2922.1</td>
</tr>
<tr>
<td>Refined copper export</td>
<td>243.0</td>
<td>125.9</td>
<td>96.1</td>
<td>72.9</td>
<td>38.7</td>
</tr>
<tr>
<td>Net import</td>
<td>584.0</td>
<td>1367.8</td>
<td>1360.3</td>
<td>3112.3</td>
<td>2883.4</td>
</tr>
<tr>
<td>Apparent refined copper consumption</td>
<td>3587.2</td>
<td>4867.2</td>
<td>5154.8</td>
<td>7163.6</td>
<td>7456.9</td>
</tr>
<tr>
<td>Actual refined copper consumption</td>
<td>4010</td>
<td>4560</td>
<td>5100</td>
<td>6100</td>
<td>6800</td>
</tr>
<tr>
<td>Balance</td>
<td>-422.8</td>
<td>307.2</td>
<td>249.8</td>
<td>1063.6</td>
<td>656.9</td>
</tr>
</tbody>
</table>

Source: CNIA, China Customs, Antaike

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- In 2006, as the rapidly rising of copper price, China’s refined copper import fell sharply, while the refined copper export increased, China’s copper destocked significantly;
- From 2007 to 2010, because of domestic copper fabricating capacity expansion, SRB restocked, certain amount of refined copper stockpiled in domestic market;
- In 2009 and 2010, imported refined copper for financing, or to the bonded warehouse, stockpiled in traders, not entered end-users;
- China’s refined copper consumption increased, also related with copper scrap supply. Copper scrap, either to refined copper production-indirect use, or to copper semis production-direct use, and it will directly affect the quantity of refined copper consumption.
Review of China’s Copper Market in Jan.-Jul. 2011

- Characteristics of China’s copper market in first 7 months of 2011:
  - Copper production increased steadily: the first 7 months of 2011, copper concentrates output reached 669 kt, with an increase of 12.3% y-o-y; refined copper output was 2.972 mlnt, with an increase of 12.6% y-o-y.
  - Apparent refined copper consumption fell 6.8% y-o-y, mainly due to decrease of refined copper import, while the export of refined copper increased.
  - In the first 7 months, actual refined copper consumption was still increasing, but the growth rate slowed down compared to the same period in 2010.
  - In the first half year of 2011, the inventory of refined copper in bonded warehouse fell significantly.

Refined Copper Production in Jan.-Jul. 2011

Source: CNIA
Refined Copper Imported in Jan.-Jul. 2011

Source: China Customs

Refined Copper Exported in Jan.-Jul. 2011

Source: China Customs
### Copper Supply/Demand In Jan.- Jul. 2011

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>3960</td>
<td>11.7%</td>
<td>4245</td>
<td>7.2%</td>
</tr>
<tr>
<td>Supply</td>
<td>4400.8</td>
<td>1.6%</td>
<td>4099.8</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Of which: Output</td>
<td>2639.6</td>
<td>16.3%</td>
<td>2972.4</td>
<td>12.6%</td>
</tr>
<tr>
<td>Net import</td>
<td>1761.2</td>
<td>-14.6%</td>
<td>1127.4</td>
<td>-36.0%</td>
</tr>
<tr>
<td>Balance</td>
<td>440.8</td>
<td>-</td>
<td>-145.2</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: CNIA, China Customs, Antaike

### China’s Copper supply/Demand in 2011

<table>
<thead>
<tr>
<th>Refined copper</th>
<th>2010</th>
<th>y-o-y</th>
<th>2011</th>
<th>y-o-y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>4573.5</td>
<td>12.9%</td>
<td>5100</td>
<td>11.5%</td>
</tr>
<tr>
<td>Import</td>
<td>2922.1</td>
<td>-8.3%</td>
<td>2430</td>
<td>-16.8%</td>
</tr>
<tr>
<td>Export</td>
<td>38.7</td>
<td>-46.9%</td>
<td>230</td>
<td>494.3%</td>
</tr>
<tr>
<td>Supply</td>
<td>7456.9</td>
<td>4.1%</td>
<td>7300.0</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Consumption</td>
<td>6800.0</td>
<td>11.5%</td>
<td>7380</td>
<td>8.5%</td>
</tr>
<tr>
<td>Balance</td>
<td>656.9</td>
<td>-</td>
<td>-80</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: CNIA, China Customs, Antaike
Conclusion

- In 2011, China's refined copper imports will decline, although the domestic refined copper production maintains stable growth, the total supply of refined copper will decrease compared to 2010.

- China's refined copper consumption remains stable growth, in 2011, China's refined copper consumption will increase 8.5% y-o-y.

- Refined copper destocked in 2011, if taking into account the export and supply/demand of refined copper, the inventory of refined copper will fell around 250kt in 2011.

- During "twelfth five-year plan" period, China will continue to intensify investment in copper resource exploration, and copper reserve will increase, hence, output of copper concentrate will go up, but copper raw materials imports will continue to increase.

Thank you for your attention!
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The Leading Information Provider and Consultancy for the Global Metals and Mining Industry

Since being established in 1992, Antaike has built a reputation for its authoritative, strategic, and in-depth analysis of the Chinese metals industries and markets. It also provides news, trade and production data, prices and forecast.

Working under China Nonferrous Metals Industry Association (CNIA) and directly overseen by the Information Center of China National Nonferrous Metals Industry, Antaike has become a key center for information collection and delivery within the country and across the world.

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Antaike’s motto is to supply the best services to our clients and to use our information to create business value.

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