The Copper Scrap Market in China: Recent Data and Trends

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Outline

- **Description of the Copper Scrap Project**
  - Objectives
  - Methodology
- **Copper Scrap Market In China**
  - Refined Copper Production
  - Copper Semis Production
  - Copper Scrap Import & Export
  - Domestic Copper Scrap Supply
  - China’s Refining Copper Production Capacity
  - The Influence of Industry and Foreign Trade policy
- **Conclusion**
Description of the Copper Scrap Project

Objectives

- To improve the coverage and accuracy of China copper scrap statistics
- To improve current knowledge of demand and supply of copper scrap in China
- To analyze and forecast Chinese copper scrap supply and demand in the future
Description of the Copper Scrap Project (cont’d)

- Based on the agreement between ICSG and Antaike, Antaike collected and summarized the historic data, for example, the output of refined copper, the quantities of copper scrap import and export and output of copper semis, to make analysis and estimation of Chinese copper scrap demand and supply, and have the statistic data of copper become more accurate.

- According to the projection on change of production capacity and output of copper blister and refined copper and supply of copper scraps in China in the future, to analyze and forecast for Chinese copper scrap supply-demand balance in the future.
Description of the Copper Scrap Project (cont’d)

Methodology

- Survey-Sample Survey
  - Visiting
  - Phone consulting
- Inviting external experts and consultants
- Data collecting and analyzing
Copper Production in China (2000-2007)

- Starting from 2000 to 2007, during the 7 years, Chinese refined copper consumption increased to 4.56 mln tonnes from 1.8 mln tonnes, with an average annual growth rate of 14.2%. In the same period, Chinese refined copper production, driven by refined copper consumption, has taken a rapid growth, from 1.37 mln tonnes in 2000 to 3.5 mln tonnes, with an average annual growth rate of 14.3%.

- Meanwhile, with regard to the output of refined copper, the average annual growth rate of the primary and the secondary reached 12.6% and 18.4% respectively.

- The output of copper semis increased rapidly too, from 1.597 mln tonnes in 2000, to 6.302 mln tonnes in 2007, with an average annual growth rate of 21.7%.
Refined Copper Production (2000-2007)

Source: CNIA Antaike
Copper Semis Production (2000-2007)

Source: CNIA, Antaike
China’s Copper Scrap Import & Export

- In 2000-2001, China imported 2.501 mln and 3.335 mln tonnes copper scraps respectively. But impacted by copper prices, the decreased to 3.08 mln tonnes in 2002 and 3.16 mln tonnes in 2003. In 2004-2005, the growth rate recovered again, up to 25.2% and 21.8 respectively. In 2007, China imported 5.58 mln tonnes copper scrap, increasing by 13.0% y-o-y.

- Regarding the copper content in copper scraps, Antaike adjusted the copper content in imported copper scraps after visit and survey the importers, copper scrap end-users and recycling recourses processing parks.

- China’s export of copper scrap is very small and could be ignored. The export was 4,972 tonnes in 2007, down from the highest of 10,153 tonnes in 2000.
Copper Scrap Import (2000-2007)

Source: China Customs, Antaike
Main Origin for import of Copper Scraps into China

In 2007, copper scraps are mainly imported from Japan (2071 thousand tonnes), USA (694 thousand tonnes), Spain (596 thousand tonnes), the Netherlands (325 thousand tonnes), Australia (320 thousand tonnes) and Hong kong (314 thousand tonnes). The quantity of the above six suppliers was 4320 thousand tonnes, accounting for 77.35% of total imported copper scraps into China.

The difference between China official imports of copper scrap and official exports from Japan, US.
China’s Copper Scrap Import & Export

Main Origin of Copper Scraps Imported into China in 2007

Source: China Customs
Domestic Copper Scrap recycling

Unit: Thousand Tonnes

Source: CNIA, NBS, Antaike
Domestic Copper recycling (cont’d)

- Main areas for treatment of domestic copper Scrap
  - Baoding, Hebei Province
  - Linyi, Shandong Province
  - Changge, Henan Province
  - Miluo, Hunan Province
Major dismantling and recycling areas in China

The main production bases of copper semis are Jiangsu, Zhejiang and Guangdong. These three provinces are the regions with most vigorous development in local economies in China. In 2007, copper semis output in Jiangsu reached 1.436 mln tonnes in 2007, accounting for 22.5% of national total; copper semis output in Zhejiang was 1.385 tonnes, accounting for 22.0% of national total; copper semis output in Guangdong amounted to 957 thousand tonnes, accounting for 15.2% of national total. The output of copper semis for the above three provinces was 3.778 mln tonnes, accounting for 60.1% of the national total.

China’s imported copper scrap mainly flows into in Zhejiang, Guangdong and Tianjin. In 2007, 5.585 mln tonnes copper scrap was imported into China. Of which, Zhejiang imported 2.932 mln tonnes, accounting for 52.5% of national total; Guangdong imported 1.625 mln tonnes, accounting for 29.1% of the national total; Tianjing imported 625 thousand tonnes, accounting for 11.2% of the national total. The imported quantity of the above three provinces reached 5.18 mln tonnes, accounting for 92.8% of the national total.
China’s Main Copper Semis Production Provinces and Copper Scrap Resources Recycling Park

- Ningbo, Zhejiang Province
- Taizhou, Zhejiang Province
- Yongkang, Zhejiang Province
- Qingyuan, Guangdong Province
- Nahai, Guangdong Province
- Ziya, Tianjin City
Copper Scrap Usage in Refineries and Semis Fabricators In 2000-2007

Source: Antaike
From 2000 to 2007, copper smelting capacity increased to 2.80 mln tonnes from 1.05 mln tonnes in China, with an average annual growth rate of 15.0%.

From 2000 to 2007, the refining capacity increased to 4.482 mln tonnes from 1.694 mln tonnes, with an average annual growth rate of 14.9%.

The difference between refining and smelting capacity, in 2000, was 644 thousand tonnes, and in 2007, increased to 1.683 mln tonnes, with an average annual growth rate of 14.7%. 
Copper Production Capacity in China (2000-2007)

Source: CNIA, Antaike
Industry and Foreign Trade Policy

- **Industrial policy**
  Currently, Chinese government restricts investment in copper smelting projects, but encourages recycling and reusing of metal scraps to develop recycling economy. Hence, the refining capacity will continue to increase in the next several years.
  In July, 2007, Chinese government adjusted tax policy for social-welfare enterprise. To some extent, the adjustment will affect some metal recycling and secondary metal producing enterprise.

- **Foreign trade policy**
  China lacks copper resources, Chinese government therefore encourages import of copper raw materials. It removed interim import tariff for copper scraps, 1.5% previously, since January 1, 2006, but without change in the 17% VAT, and in the meanwhile, it imposed 15% high tariff on export of copper scraps.
Industry and Foreign Trade Policy (Cont’d)

- **Taxation Policy and Environmental laws and regulations**

The Ministry of Finance and State Administration of Taxation on April 29, 2001 jointly issued a circular. According to which, waste material recycling and trading companies will be free from VAT. The policy took effective on May 1, 2001.

The waste materials refer to all kinds of wastes and scraps that was generated through social production and consumption, and was selected, sorted out, or simply treated. But enterprises taking wastes as materials will not enjoy such a preferential policy.

VAT: when a general value-added tax payers buys wastes from waste good recycling and trading companies, it will, according to the volume noted in the ordinary invoice that is supervised and manufactured by the taxation departments and issued by the seller, pay input tax with a deduct of 10% of the volume.
Outlook for Copper Scrap Demand and Supply

- In the next few years, because of the limited domestic copper raw material supplies, including both copper concentrates and copper scraps, China will still rely on import materials. Of course, it is one choice to import refined copper or copper semis.

- In recent years, Chinese smelting and refining capacity increased very quickly, especially the refining capacity. China will continue to import blister and copper scraps. At present, the copper concentrate market is still tight and TC/RC quite low, the situation will remain unchanged in the next 2-3 years. Reviewing the historic Customs data, it is unlikely to import large quantity of blister to China. Therefore, import of copper scrap is the priority for most Chinese copper enterprises. In summary, in a quite long time in the future, import of copper scraps will continue to expand to China.
### Outlook for Copper Scrap Demand and Supply (2008-2012)

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<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tr>
<td>Scraps Used in Cathode Production</td>
<td>1320</td>
<td>1444</td>
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<td>Direct Use Of Copper Scraps</td>
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<td>1225</td>
<td>1266</td>
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<td>Total Use for Copper Scraps</td>
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<td>2669</td>
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<td>Domestic Supply for Copper Scraps</td>
<td>367</td>
<td>371</td>
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<td>432</td>
<td>466</td>
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<td>Balance</td>
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<td>-2298</td>
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</table>

Source: Antaike
Conclusion

- Rapid growth both in production and consumption of copper will drive the utilization of copper scraps in China in the future.

- Before 2000, China's refined copper consumption was relatively low, so the quantity of domestic copper scraps available for recycling is rather limited by 2020.

- In the next five years, the import of copper scraps will keep increasing, but the growth rate is going to slow down.
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Thank You!