Chinese Scrap Usage

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By BGRIMM

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Contents

1. The 12th-five year plan for recycling industry

2. China’s scrap usage in 2012
The development & promotion plan for renewable nonferrous metal industry” - **Main objectives**

**Industrial scale and production**
- By 2015, secondary copper production should take about 40% of total refined copper production.

**Consolidation and re-structure**
- By 2015, large scale enterprises (capacity > 100 kt/a) should dominate the industry.
- The production of the top 10 secondary copper smelters should account for more than 50% of total secondary smelter production.
- The capacity concentration in major industrial zones should reach 80%.
The development & promotion plan for renewable nonferrous metal industry”- **Main objectives**

### Level of equipment & technology
- By 2015, overall technology and equipment level should improve greatly.
- Pre-treatment technology of mechanized dissembling should be generally adopted and the level of classification will be improved.
- New advanced secondary copper smelting furnaces should be developed in the direction of integration and matching.

### Energy saving, emission reduction and comprehensive recycling
- By 2015, the energy consumption of secondary copper smelting/refining (from scraps to refined copper cathode) should be lower than 290 kg standard coal /t.
- Copper recovery in the secondary copper smelting should be over 95%.
The development & promotion plan for renewable nonferrous metal industry”- **Main missions**

**To optimize industrial structure and enhance industrial consolidation**

- According to current distribution of the nonferrous metal recycling zones, to make overall planning on the basis of the existing enterprises and further optimize industrial structure of renewable nonferrous metals.
- Fully support Zhejiang, Guangdong, Shandong, Tianjin and Jiangxi etc. to develop copper recycling industry.

**To promote technical upgrading and realize industrial upgrade and transformation**

- To accelerate the R&D of key and new advanced technologies.
- Encourage enterprises to adopt advanced inspection technology and equipment. Enforce quality process control of nonferrous products.
The development & promotion plan for renewable nonferrous metal industry" - **Main missions**

**To fully support key projects**

- Supporting 6~8 new or expansion copper secondary smelting projects with each capacity of 200kt/a in Zhujiang delta, Yangtze River Delta, Surrounding Bohai Zone and Chengyu developing Zone;

- Supporting 10 copper secondary smelting upgrading or expansion projects with each capacity between 50~100kt/a in northern China, central China, Northeast and Yellow River Delta etc.
The development & promotion plan for renewable nonferrous metal industry” - **Main missions**

**To regulating the dissembling and trading of secondary materials**

- Fully utilizing the current recycling and collecting channels. Government will not encourage to set up new non-ferrous metal recycling industry zones.

- Supporting 5 industry zones with each dissembling capacity of 1 million t/a, 10 industry zones with each dissembling capacity of 500 kt/a, which owned advanced technology and management systems.

- Supporting 5 trading markets with each trading volume of 600kt/a and 10 markets with each trading volume of 400kt/a.

**Establish the admittance rule for non-ferrous metal recycling industry**

- Regulating the indicators for the production scale, technical equipment, comprehensive energy consumption, energy saving and environment protection and optimize the industry through controlling the total capacity strictly.

- Both the imported advanced technologies and domestic invented technologies will be encouraged, and the small blast furnace without off-gas collecting, <50t conventional fixed reverberatory will be rejected shortly.
Chinese scrap supply 2012

- Total scrap supply will increase by 3% in 2012

- Copper content of the imported scraps might be very flat
  - Scrap imports in the first 8 months increased by 3% YoY.
  - Unfavorable arbitrage to SHFE limited the buying interests of Chinese scrap merchants.
  - Some dissembling yards were shut down due to increased labor cost and the squeezed profit margins

- The domestic scrap supply might increase by 8% in 2012
  - Domestic scrap generation, has been restrained by the lackluster manufacture and construction sectors.
Scrap usage

- Direct usage by the fabricators
  - High quality, clean scraps
  - New scraps are normally directly used by the fabricators

- Indirect usage by the secondary smelters and refineries
  - Secondary smelters/refineries can treat the scraps with the Cu grade between 25~98%
  - Normally low Cu content, old scraps are for indirect usage
Chinese scrap usage in 2012

Copper and scrap price 2009~2012

Scrap availability and usage are all impacted by the volatilities of copper price
Chinese scrap usage in 2012

Scrap usage by the brass mills and wire rod mills remained downward trend

- Narrower scrap spreads reduced the buying interests of the fabricators.
- Foreign wire rod lines are replacing the Chinese up-casting lines, reducing the usage of scraps by wire rod mills.
- The contract terms of scraps on pricing are not so flexible as those of refined copper.
- The demand of brass mills products, especially low end products for general consumer goods, is softer than in previous years.
Chinese scrap usage in 2012

- More scraps for the secondary smelters/refineries in 2012

Table commissioned secondary smelting capacity in 2011

<table>
<thead>
<tr>
<th>No</th>
<th>Company</th>
<th>Location</th>
<th>Technology</th>
<th>Capacity kt/yr</th>
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<tr>
<td>1</td>
<td>Yunnan Copper Qingyuan</td>
<td>Qingyuan, Guangdong</td>
<td>NGL</td>
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<td>2</td>
<td>Jinchuan</td>
<td>Jiangchang</td>
<td>Titling</td>
<td>200</td>
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<tr>
<td>3</td>
<td>Guangxi Non-ferrous Metal Co</td>
<td>Wuzhou, Guangxi</td>
<td>Ausmelt &amp; NGL</td>
<td>300</td>
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<tr>
<td>4</td>
<td>Jinsheng</td>
<td>Shandong</td>
<td>NGL</td>
<td>100</td>
</tr>
</tbody>
</table>

More than 700kt/yr commissioned secondary smelting capacity ramp-up capacity in 2012
Chinese scrap usage in 2012

- Scrap usage by secondary smelters
  - Some secondary smelters, especially independent/private secondary smelters, cut their production in mid of this year
  - Production of some big SOE producers remained strong
  - The widened scrap spreads starting in September encouraged the secondary smelter production.
Chinese scrap usage in 2012

China’s scrap usage 2006~2012 Unit: kt

Scrap usage
- the secondary smelters
  - YoY %: +10%
  - proportion of total: 61.5%
- the fabricators
  - YoY %: -11%
  - proportion of total: 38.5%
Trend

- The scrap usage by the fabricators might increase modestly in the future.
- The scrap usage by the secondary smelter will keep increasing due to excessive capacity.
- Chinese domestic scrap generation will be the major source in the near future.
- Arbitrage should be one of the factors impacting scrap imports.
Thanks for your attention!

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