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Current Situation of China's Nonferrous Metals Industry and Development Trend

by

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- Characteristics of China's nonferrous metals Industry and the role in the global market;
- China's nonferrous metals output and consumption maintains fast growth;
- China's nonferrous metals foreign trade has increased rapidly and the trade deficit has enlarged;
- Supply shortage of raw materials being worsened; highly depending on imported raw materials; weak competitiveness of the domestic nonferrous metals enterprises;
- Production technology and equipments have reached the international advanced level;

1. Characteristics of China's nonferrous metals industry and the role in the global market :

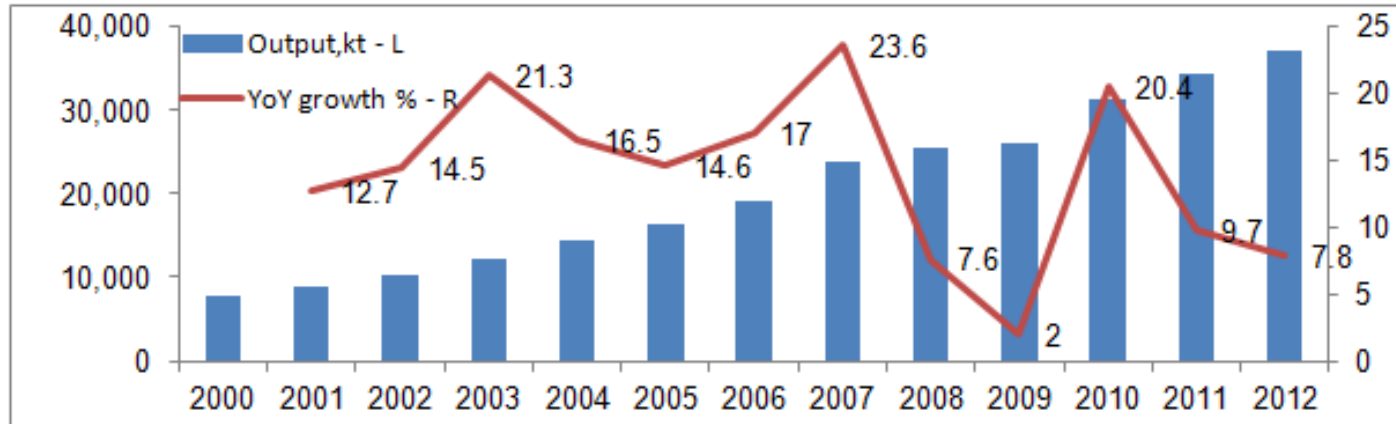
- ✓ China has been the world's biggest producer and consumer of nonferrous metals. Both the output and consumption account s for 40% of the global total. The change in China's nonferrous metals output and consumption has great impact on the global market.;
- ✓ China's nonferrous metals market has been in line with the international market for many years. Copper, aluminum, lead, zinc and other nonferrous metals have been the key trading products on the domestic metal exchange and the Shanghai Futures Exchange (SHFE) nonferrous metals futures prices have been closely following the LME prices.
- ✓ There is a high correlation between China's nonferrous metals consumption and the national economic development. The growth of China's nonferrous metals consumption has been faster than that of the GDP, indicating that China is still a developing country.
- ✓ The expansion in nonferrous metals smelting and refining capacity has been faster than the mining capacity, causing a continuous decrease in self-sufficiency of the raw materials and a continuous increase in import of the raw materials.
- ✓ The industrial distribution is being gradually shifted to littoral and west regions, from the old production bases that are close to the raw materials supply places.

2. The role of China's nonferrous metals industry in the world

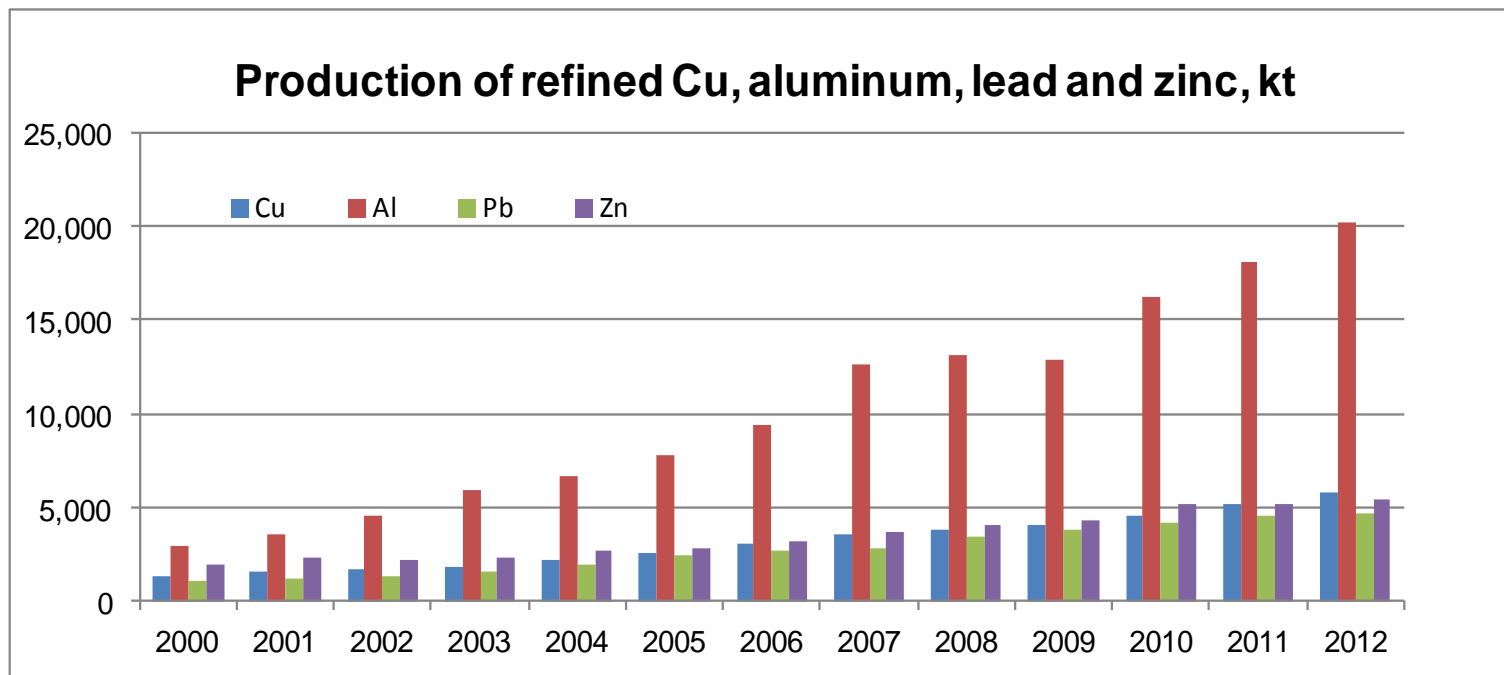
Unit: kt

Refined Metal	2012 The world	2012 China	Proportion %	China's ranking
Output: Cu	20,087	5,824	30.0	1
Al	48,040	22,300	46.4	1
Pb	10,631	4,660	43.8	1
Zn	12,461	4,630	37.0	1
Consumption: Cu	19,700	7,680	39.0	1
Al	47,550	21,850	46.0	1
Pb	10,435	4,510	43.2	1
Zn	12,503	5,400	43.2	1

3. China's nonferrous metals output maintains fast growth



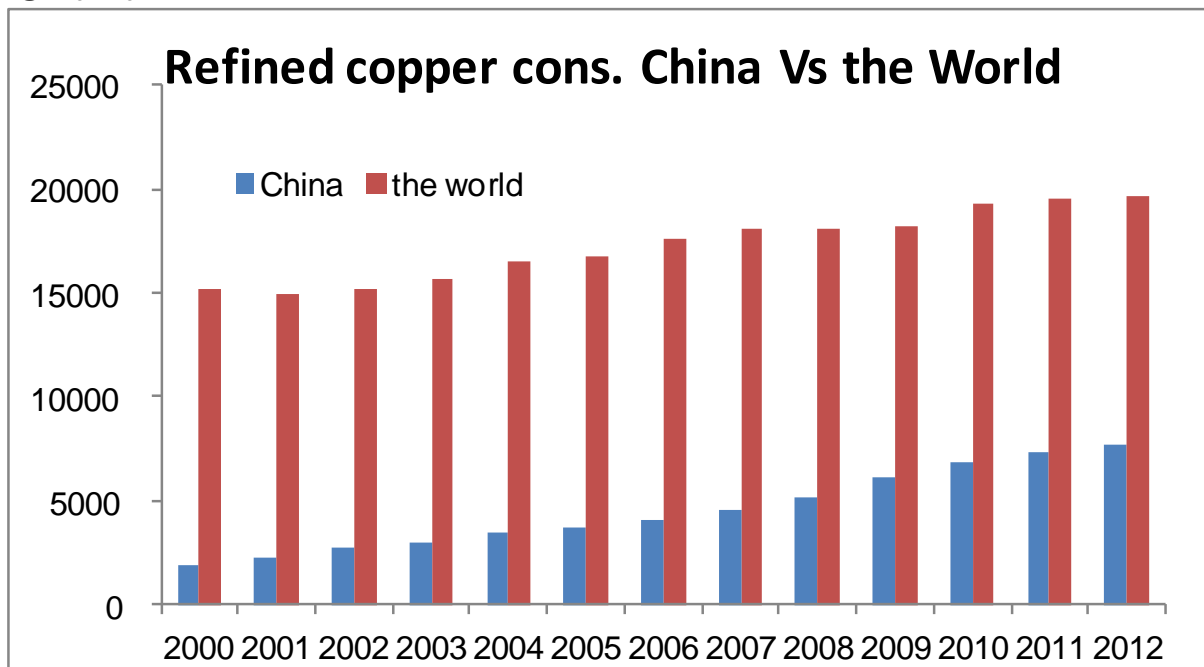
China's output of ten kinds of nonferrous metals grew at an average rate of 13.8% in 2000-2012. Of which, the average growth rate was 14.9% in 2000-2010. In 2002, China's output of nonferrous metals exceeded 10.00 Mt, ranking first in the world. At present, China's output of nonferrous metals represents 40% of the world's total.



China's output of refined copper, primary aluminum, refined lead and refined zinc respectively grew at an average rate of 12.8%, 17.3%, 12.8% and 18.8% in 2000-2012.

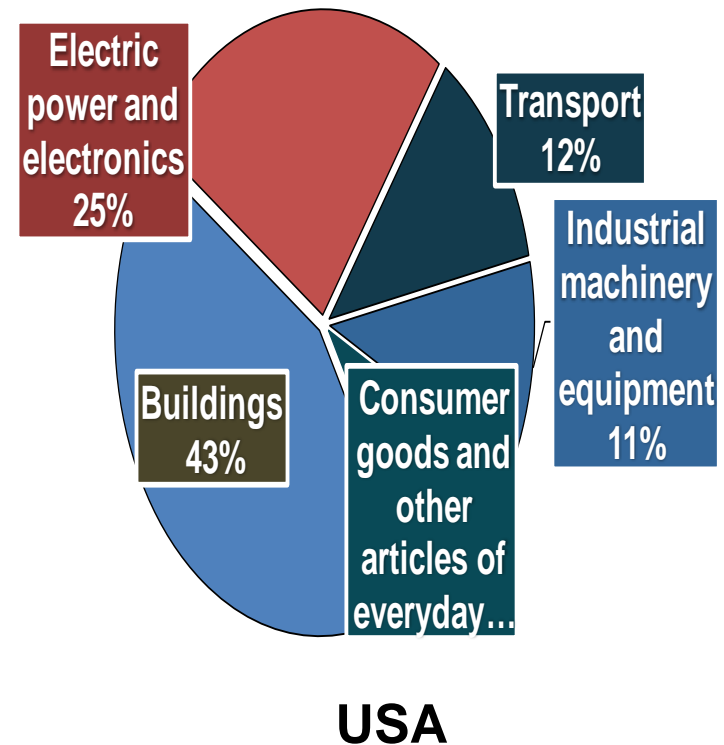
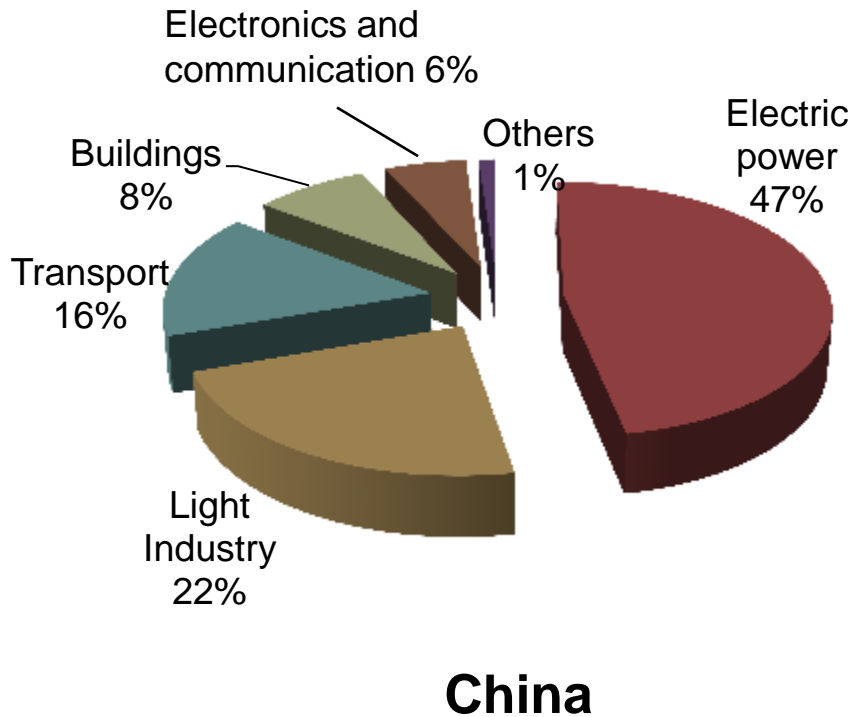
4. China's nonferrous metals consumption significantly faster than the world's average level

Unit: kt

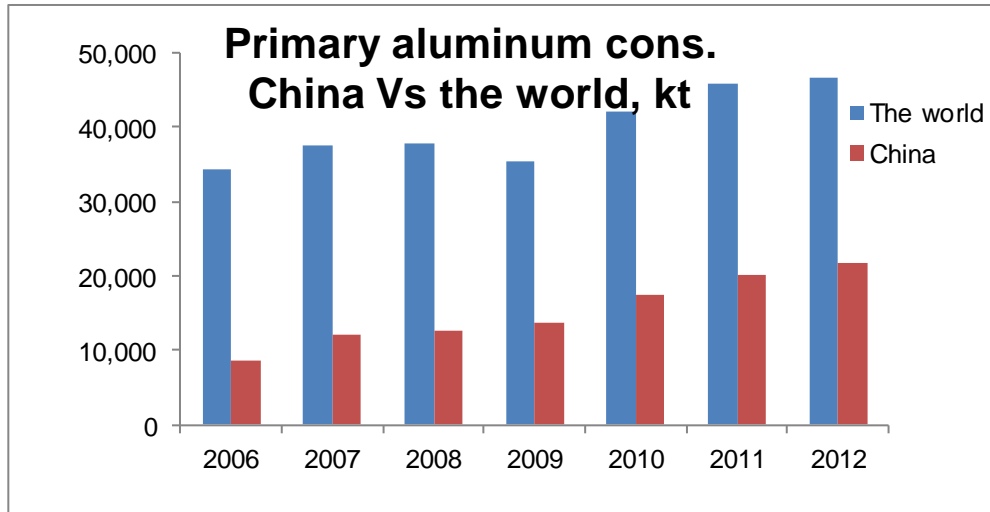


China's consumption of refined copper grew at an average rate of 12.5% in 2000-2012. Meanwhile, the average annual growth rate was 2.2% in the world.

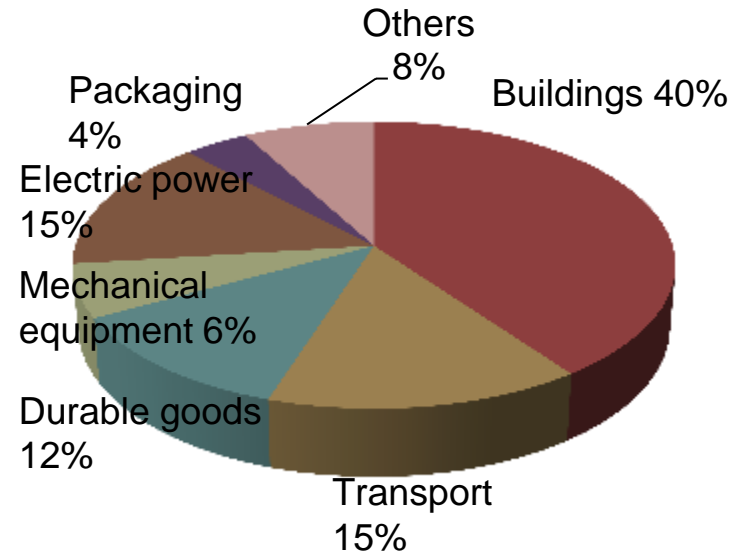
Comparison of refined copper consumption in China and USA



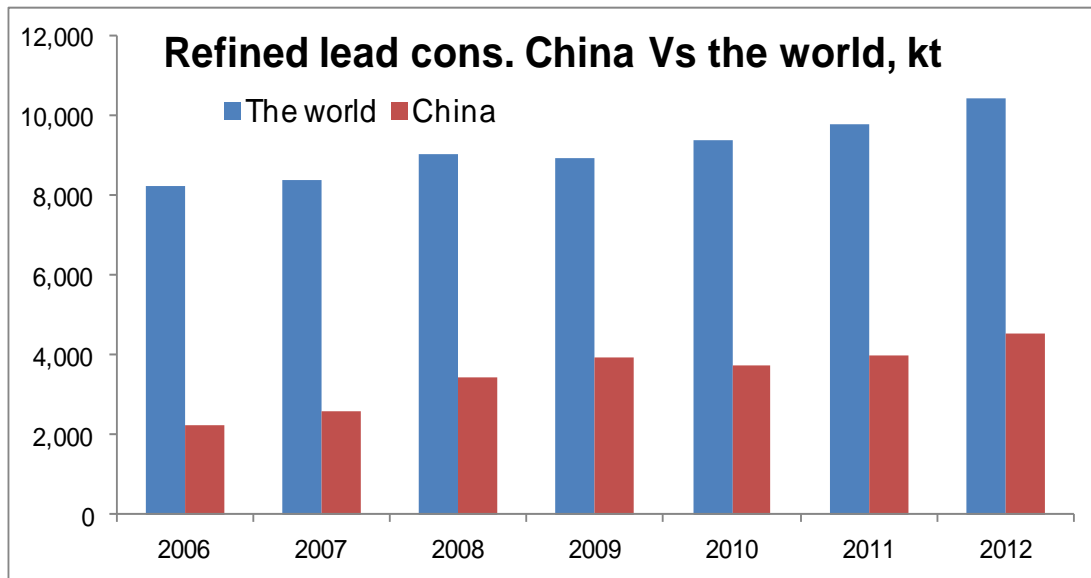
Current Situation Of China's Nonferrous Metals Industry



Primary aluminum consumption structure in China

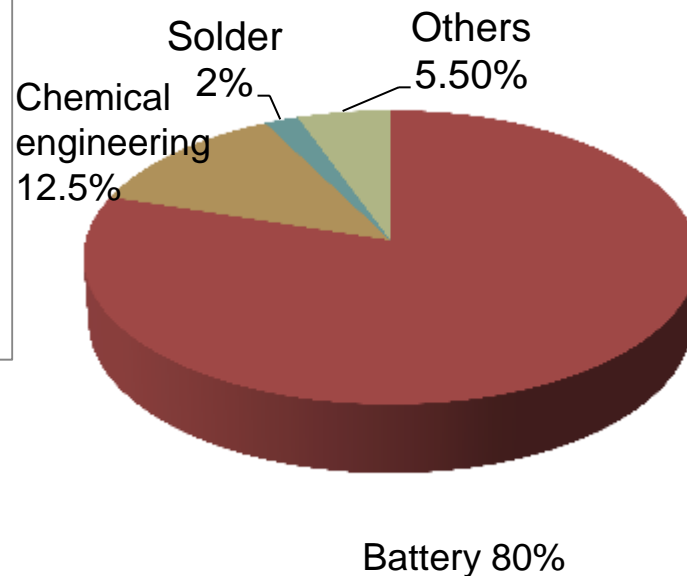


China's consumption of primary aluminum grew at an average rate of 16.7% in 2000-2012. Meanwhile, the average annual growth rate was 5.3% in the world.

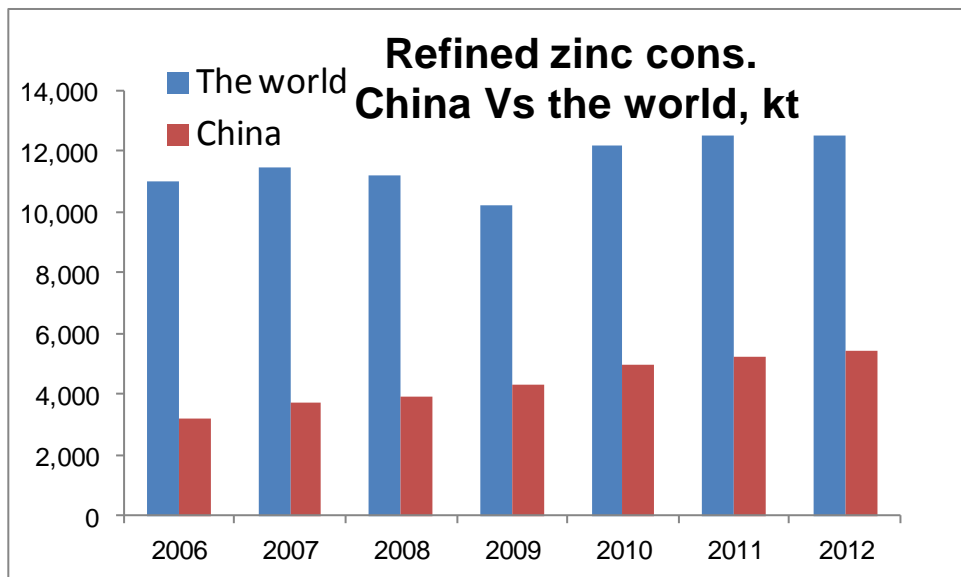


China's consumption of refined lead grew at an average rate of 12.6% in 2006-2012. Meanwhile, the average growth rate was 4.0% in the world.

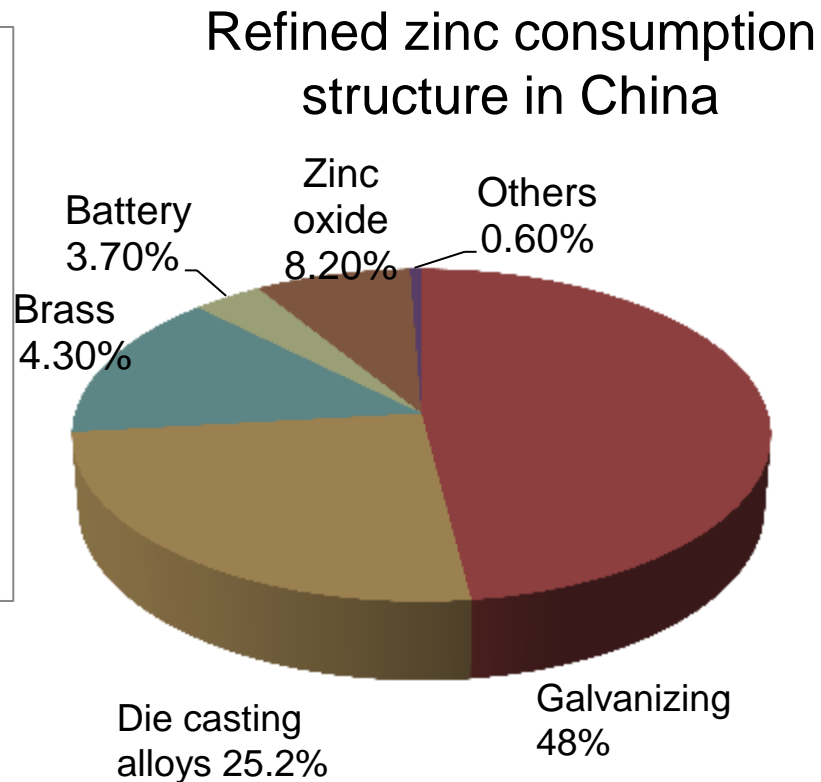
Refined lead consumption structure in China



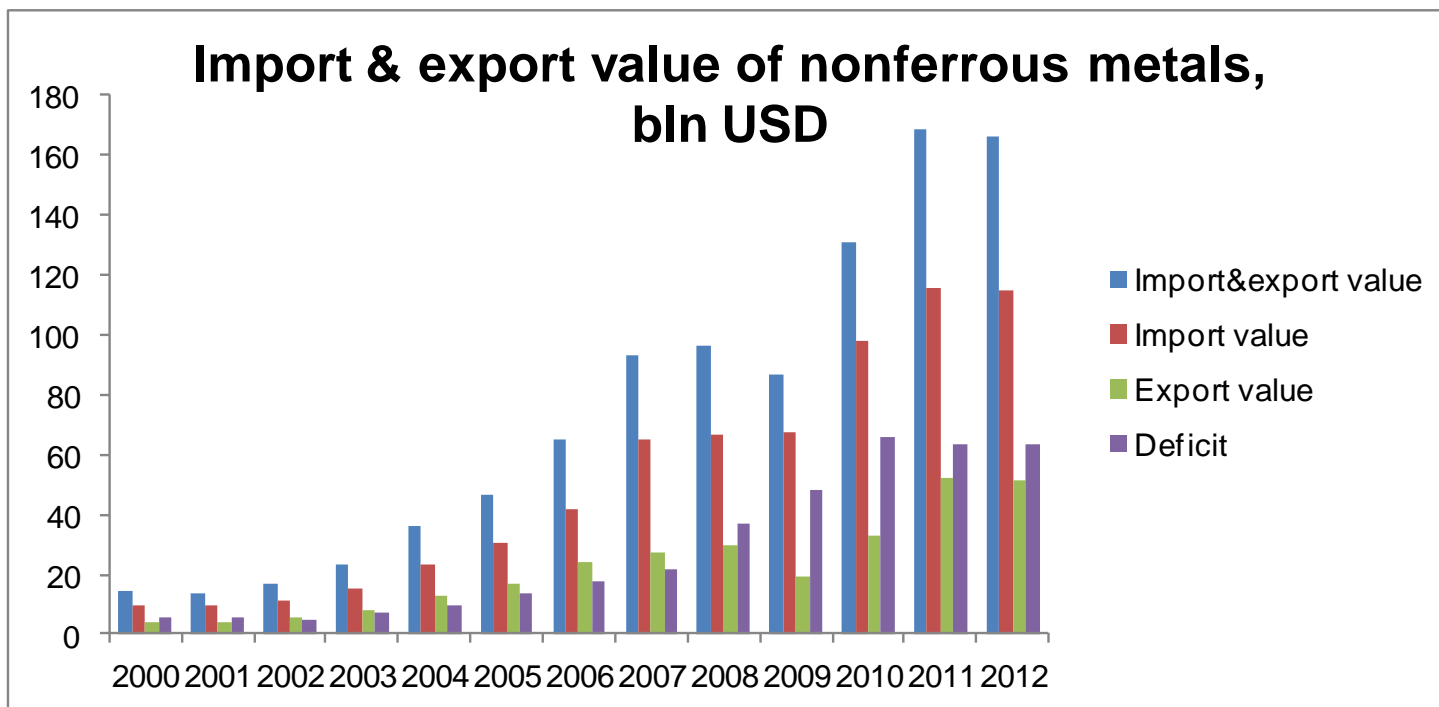
Current Situation of China's Nonferrous Metals Industry



China's consumption of refined zinc grew at an average rate of 9.3% in 2006-2012. Meanwhile, the average growth rate was 2.15% in the world.

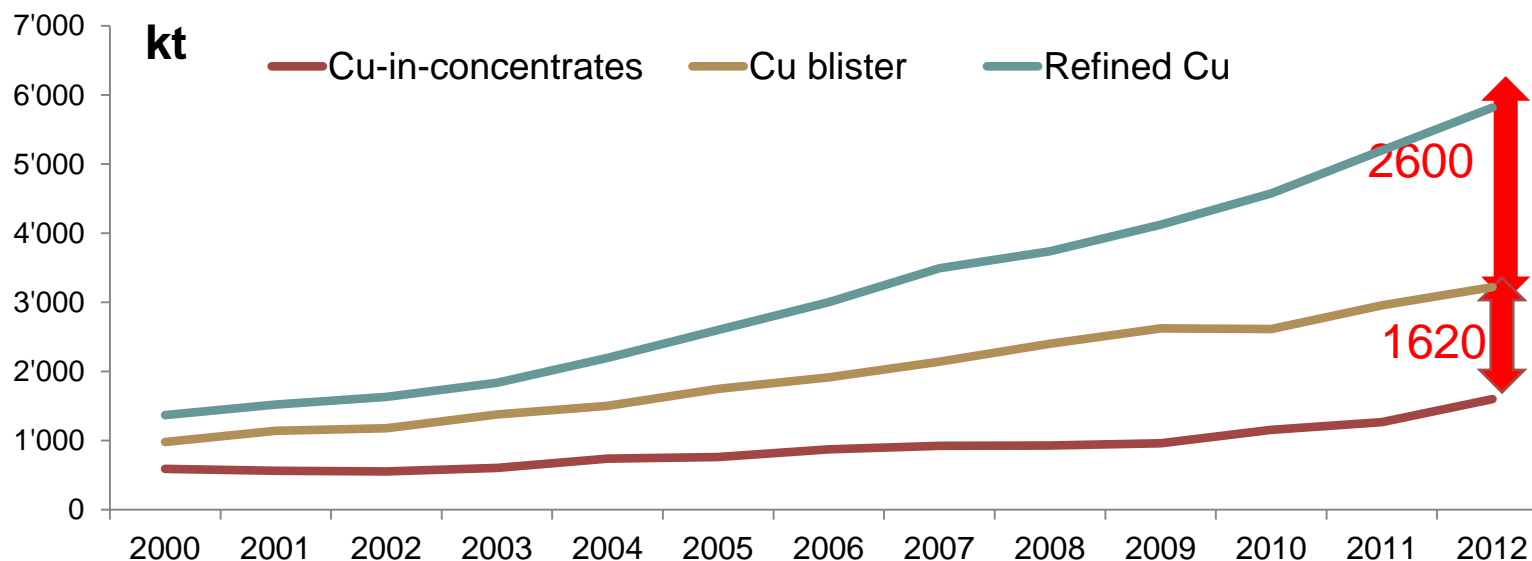


5. China's nonferrous metals foreign trade value has increased rapidly and the trade deficit has enlarged



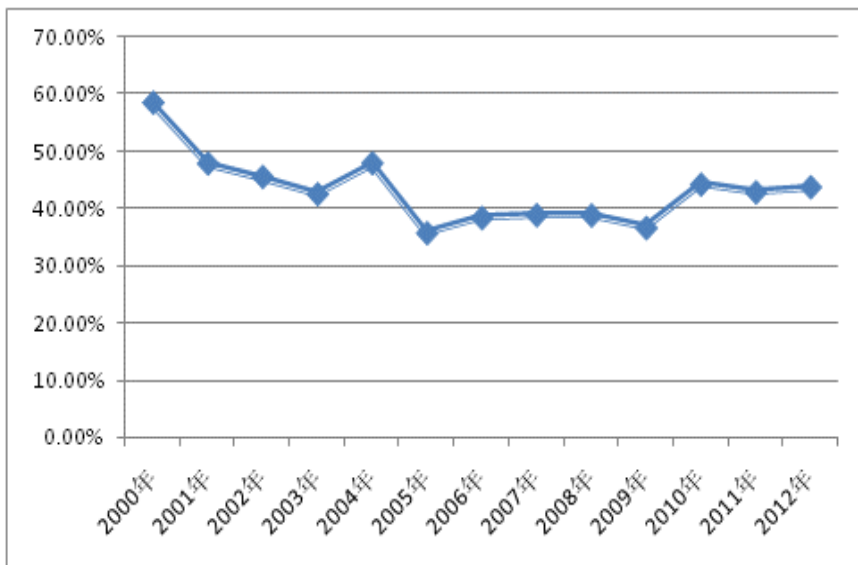
China's nonferrous metals foreign trade value grew at an average rate of 22.7% in 2000-2012. Of which, the growth of import value was 22.6%; export value, 23%. The foreign trade deficit enlarged to USD63.4 billion in 2012 from USD5.7 billion in 2000.

6. The copper smelting capacity expansion exceeds mining capacity

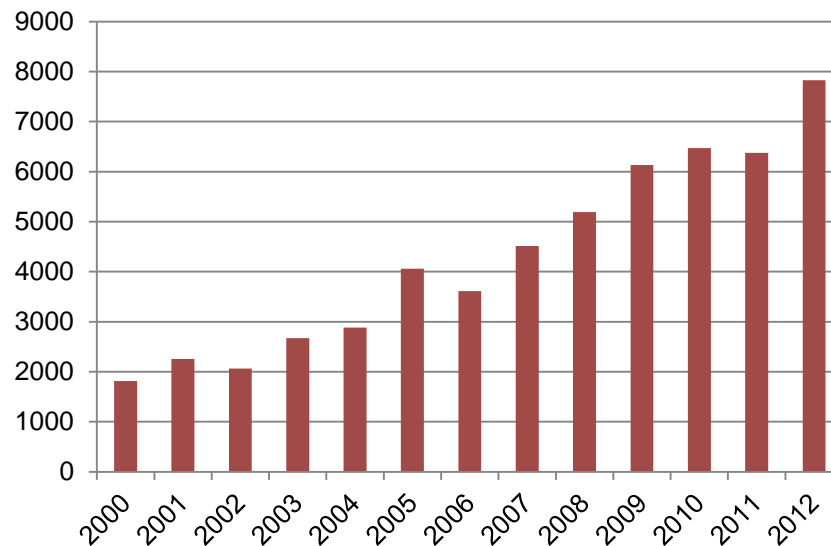


China's output of copper-in-concentrates, copper blister and copper cathode respectively grew at an average rate of 8.9%, 10.4% and 12.5% in 2000-2012. The gap between the copper blister output and copper-in-concentrates enlarged to 1.62 Mt in 2012 from 390 kt in 2000. The self-sufficiency of copper raw materials decreased to 43.8% in 2012 from 58.5% in 2000. China's copper industry is increasingly relying on imported raw materials.

Self-sufficiency rate of copper concentrates %



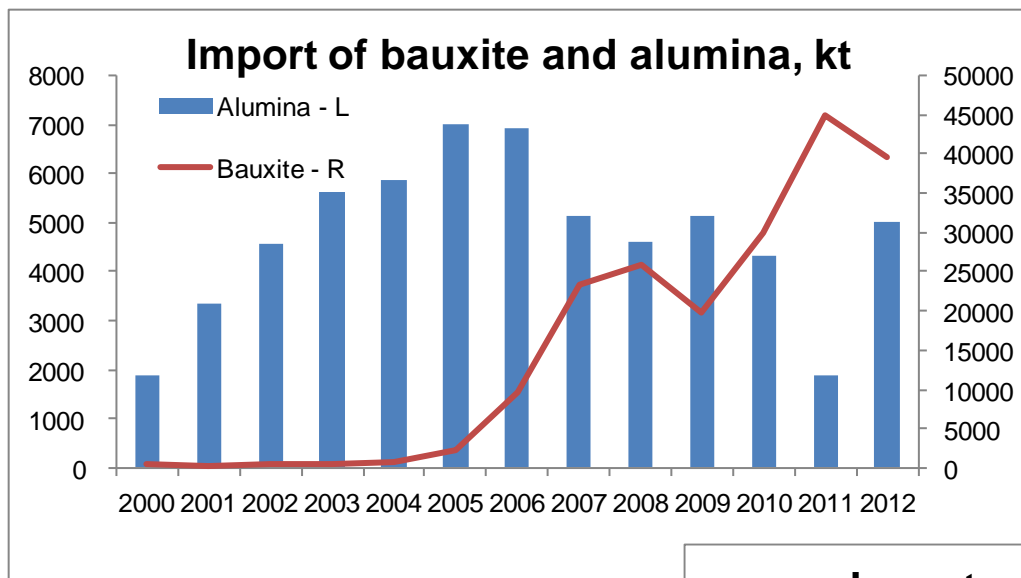
Imported copper concentrates
Unit: kt



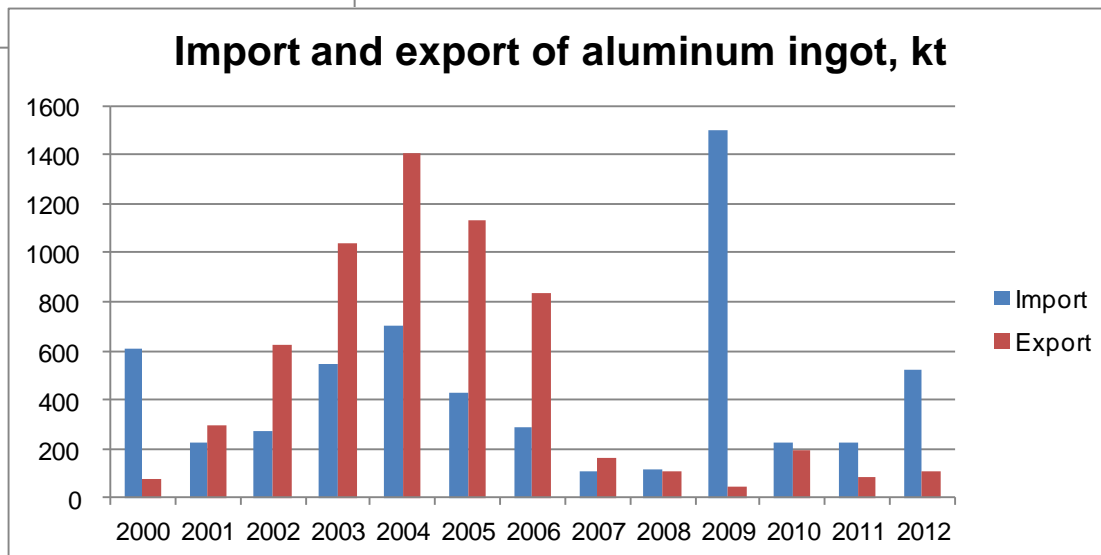
The proportion of home-made copper concentrates in the domestic copper smelting enterprises gradually decreased in 2000-2012, with the lowest level of 35.7% seen in 2005. And then, the proportion ranged in 38%-43% over the past few years. China's import of copper concentrates (physical weight) grew at an average rate of 12.9% in 2000-2012. The import approached to Mt in 2012, with copper metal contained exceeding 2.00 Mt.

Source: Antaiko

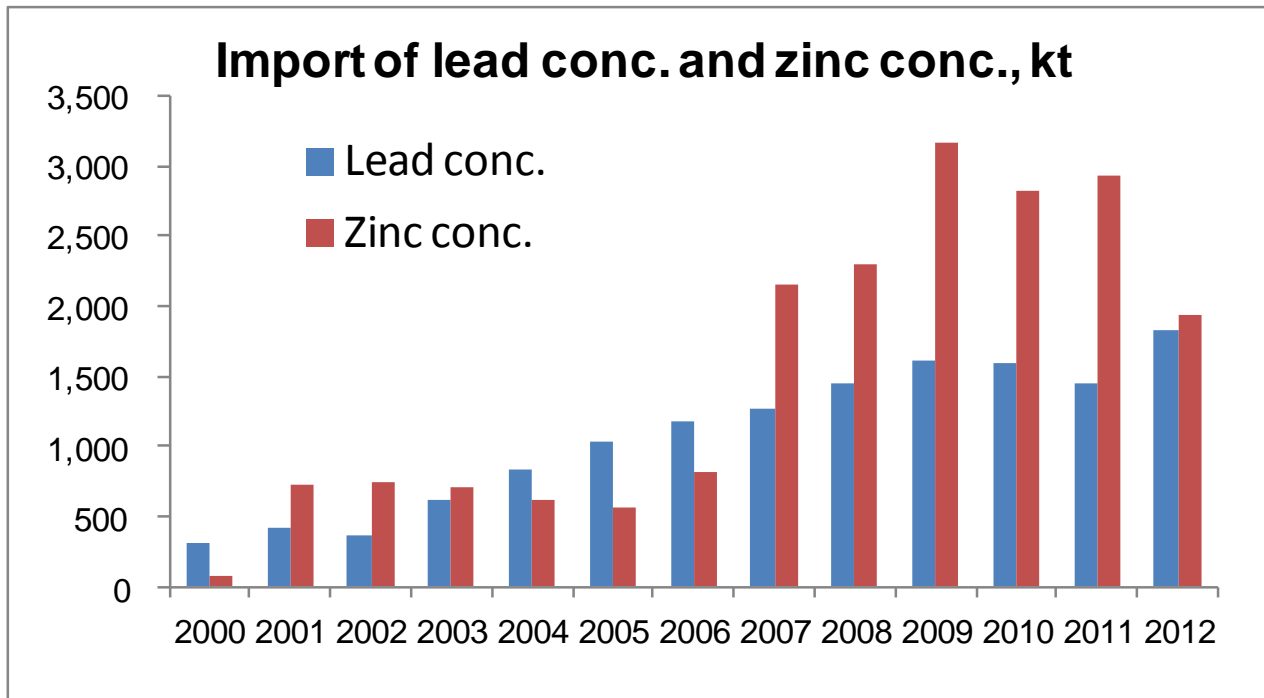
Current Situation of China's Nonferrous Metals Industry



China's import of aluminum raw materials is increasing. The decrease in the alumina import has been replaced by the increase in the bauxite import.

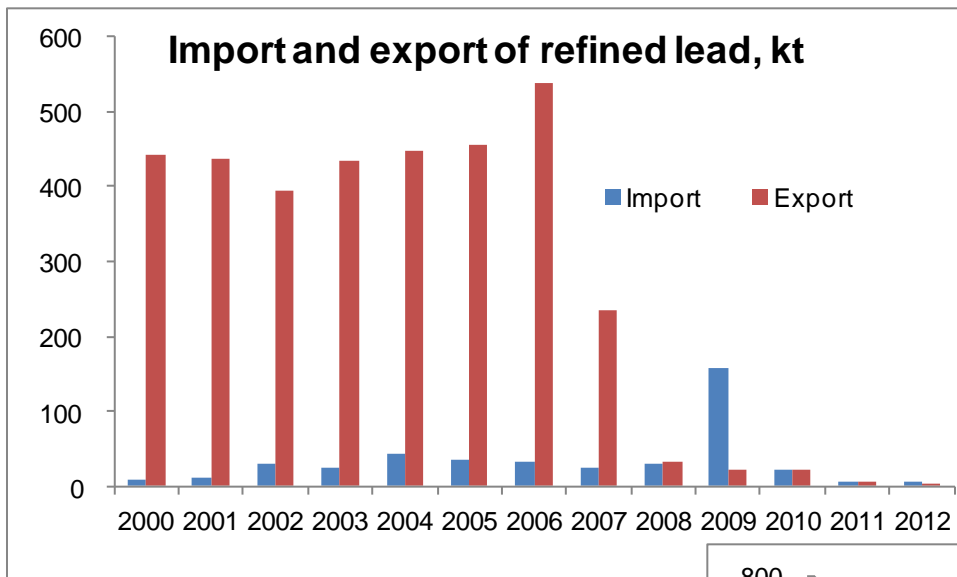


China's import of lead-zinc concentrates has increased year by year.



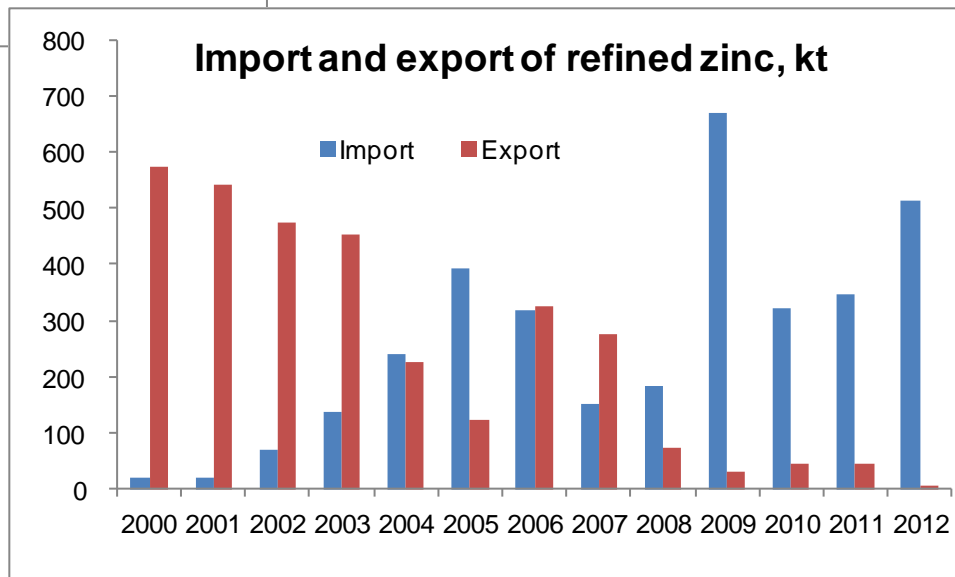
China's import of lead concentrates (physical weight) grew at an average rate of 15.9% in 2000-2012 and the zinc concentrates grew at 30.7%.

Current Situation of China's Nonferrous Metals Industry

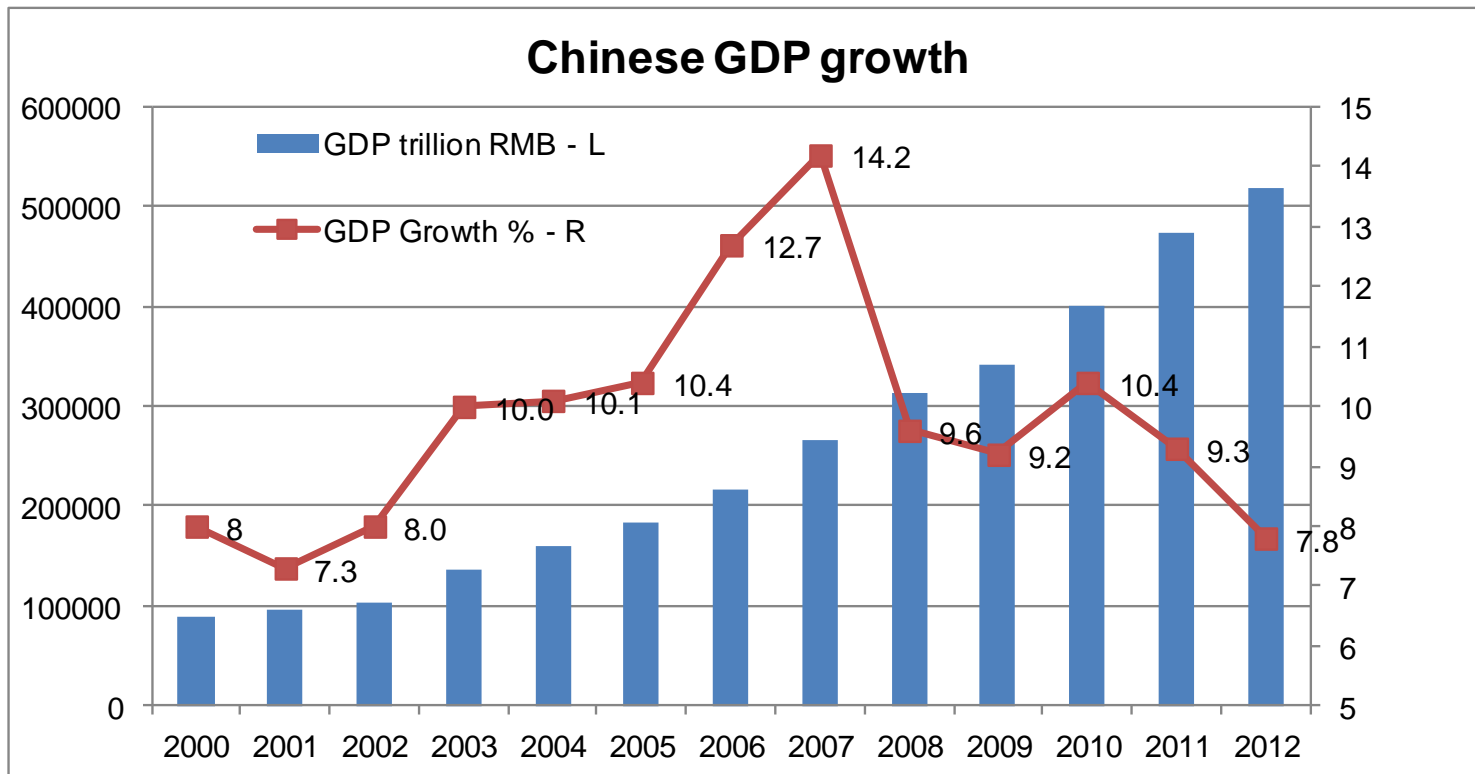


China exported large amount of refined lead in the past. But now the production mainly aims at meeting the domestic demand.

China was a big net exporter of refined zinc in the past but now turned to be a net importer.



7. There is a high correlation between China's nonferrous metals consumption and the national economic development.

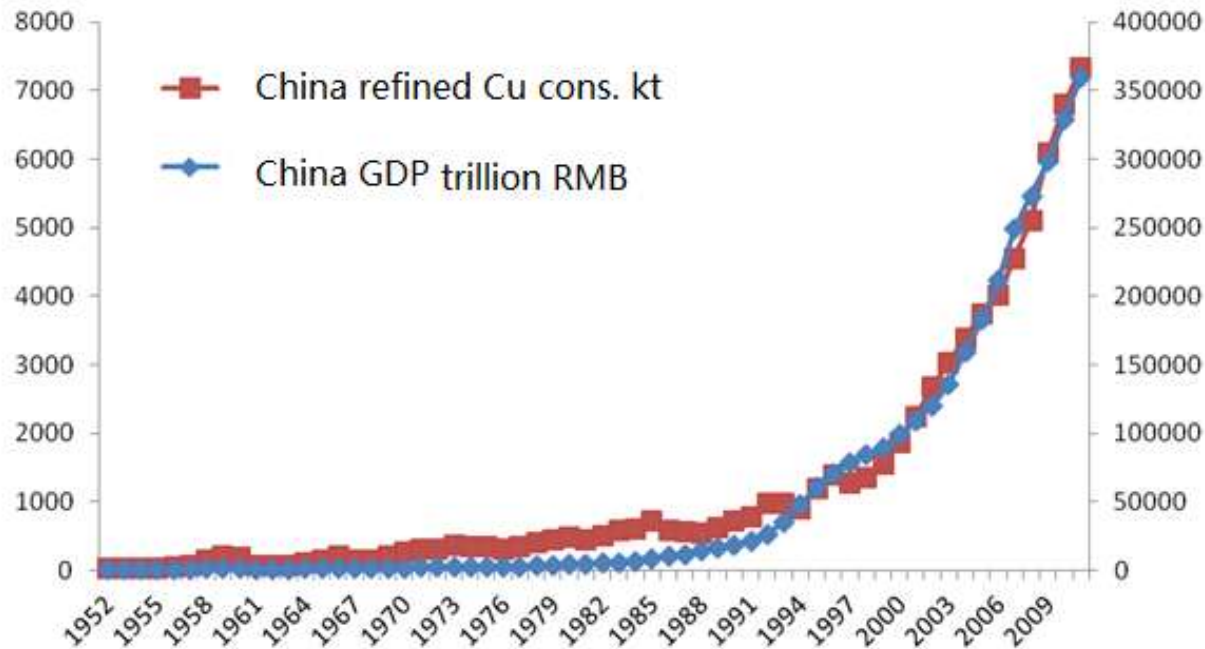


Current Situation of China's Nonferrous Metals Industry

The correlation between China's copper consumption and the GDP

$$Cu = 279.636987 + 0.01867327 \times GDP$$

There is a high correlation between China's copper consumption and the GDP. The simple correlation coefficient is 0.9938.



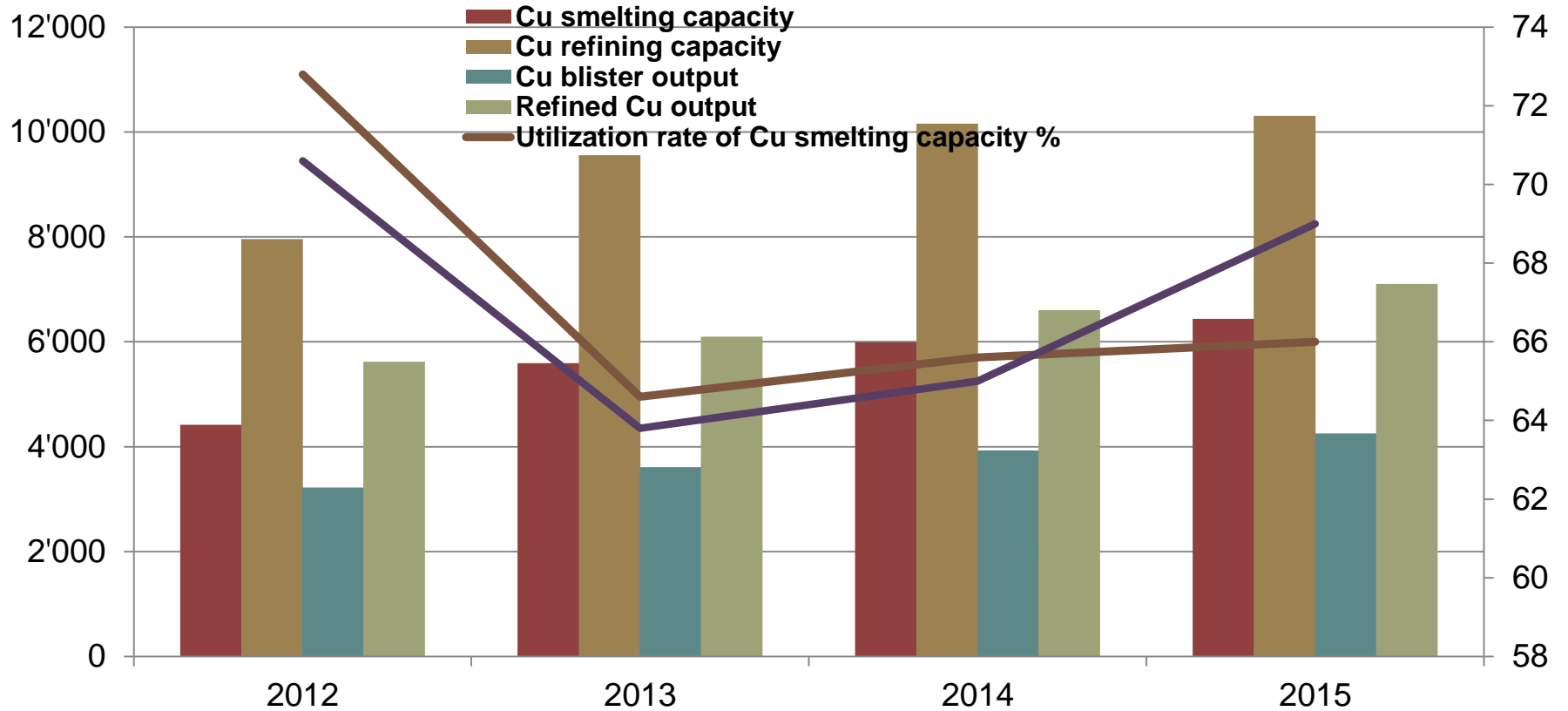
8. Production technology of China's nonferrous metals industry and facility reached the international advanced level

- Copper: China has adopted the international advanced copper smelting technology. By continued improvement, China has mastered the smelting technology with independent property right. China has become the showing stage for the global copper smelting technology and facility. All the domestic large-sized copper smelting enterprises have employed the advanced technology, accounting for over 90% of the total in China's copper industry.
- Aluminum: all the outdated Soderberg capacity have been eliminated. Most of the domestic aluminum smelters have adopted the high-ampere pre-baked aluminum reduction cells and the AC consumption has dropped to below 14,000kwh/tonne Al, reaching the international advanced level.
- Lead and zinc: the domestic lead and zinc enterprises have eliminated the backward sintering pots and adopted the advanced wet-method and pyrometallurgical process.

- There is room for the output and consumption to grow but the growth will largely slow down;
- Import of the raw materials will keep on rising. Meanwhile, the metal import will be stable and even decrease;
- The industrial structure and distribution will be more rational;
- More attentions will be paid to recycling of the secondary metal and the proportion of secondary metal output will increase;
- With more investments being put into environmental protection projects, the production cost of Chinese nonferrous metals enterprises will increase.

Development Trend of China's Nonferrous Metals Industry

Unit: kt



Source: Antaiko

Forecast on China's demand for nonferrous metals

Unit: kt

		2012	2015	2012-2015 Average annual growth %	2020	2012-2020 Average annual growth %
Refined Cu	China	7,860	9,220	5.4	11,150	4.4
	The world	19,700	21,550	3.0	24,040	2.5
Primary aluminum	China	21,850	29,000	9.9	33,570	5.5
	The world	47,550	56,760	6.0	61,150	3.2
Refined lead	China	4,510	5,350	5.8	5,600	2.72
	The world	10,435	10,910	4.55	11,400	1.11
Refined zinc	China	5,400	6,580	6.8	7,170	3.6
	The world	12,500	14,520	5.1	-	-

Source: Antaiko

No.	Events	Time	Location
1	China Nonferrous Metals Mining Forum	19-20 May	Beijing
2	International Magnesium Conference	19-22 May	Xi'an, Shaanxi
3	China International Aluminum Fabrication Forum	30 Jun. - 1 Jul.	Shanghai
4	China Metal Seminar Hong Kong	24 Jun.	Hong Kong
5	China International Silicon Conference	15-17 Sept.	Gansu
6	China International Silver Conference	Sept.	TBC
7	China Metal Seminar London	15-19 Oct.	London, UK
8	China International Copper Conference	29-31 Oct.	Beijing
9	China International Lead & Zinc Conference	5-7 Nov.	Beijing
10	China International Tungsten & Molybdenum Conference	11-12 Nov.	Nanchang, Jiangxi
11	China International Nickel & Cobalt Conference	12-14 Nov.	Chengdu, Sichuan
12	China Aluminum Forum	Nov.	TBC
13	China International Copper Fabrication Forum	20-21 Nov.	Shanghai

- To inquire about these events, please contact: Shiela Ju, Manager of International Department
Email: cmm@antaiko.com
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- Updates on the events can be found at www.antaiko.com

Thanks

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