Development review on 2007 and Prospect for 2008 on China Nonferrous Metals Industry

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I. Overview on 2007 China Nonferrous Metals Industry

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Overview on China Nonferrous Metals Industry

- 1. Output of Nonferrous Metals
- With the healthy development in national economy, output of major nonferrous metals products maintained rapid growth. On the year of 2007, according to annual bulletin of CNIA, ten kinds of commonly used nonferrous metals output set new highs, reached 23.70 Mton, increased 23.75%, the highest in the world for six consecutive years.

Overview on China Nonferrous Metals Industry

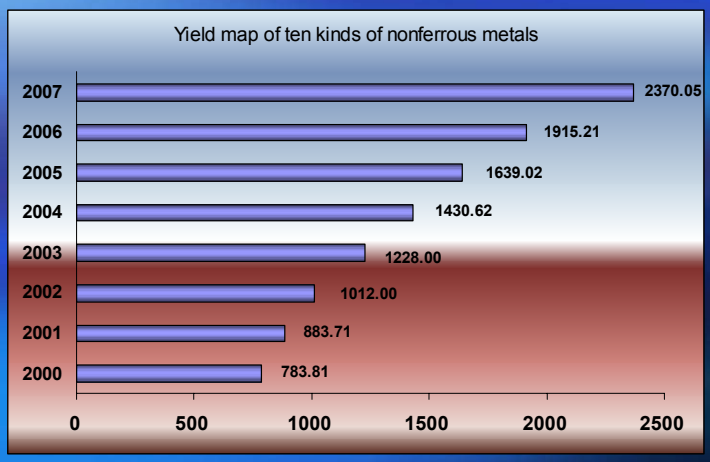
Ten kinds of commonly used nonferrous metals production

	2006	2007	up%
Output of ten kinds of nonferrous metals	1915.21	2370.05	23.75
copper	300.32	349.94	16.52
aluminum	935.84	1258.83	34.51
lead	271.49	278.83	2.70
zinc	316.27	374.26	18.34
nickel	10.19	11.57	13.54

Unit : 0,000t

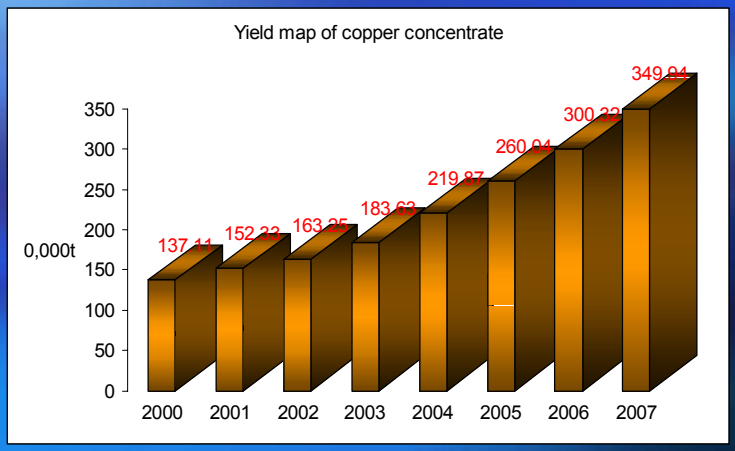
Overview on China Nonferrous Metals Industry

Growth of ten kinds of nonferrous metals since the year of 2000



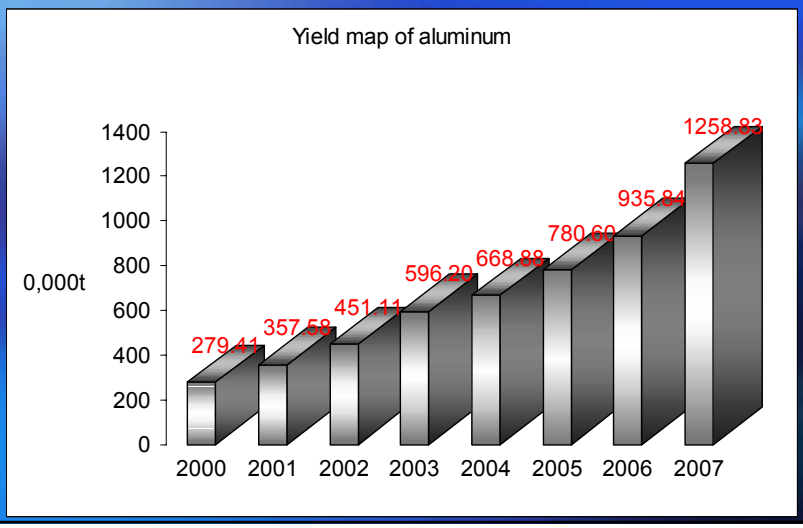
Overview on China Nonferrous Metals Industry

Growth of refined copper since 2000



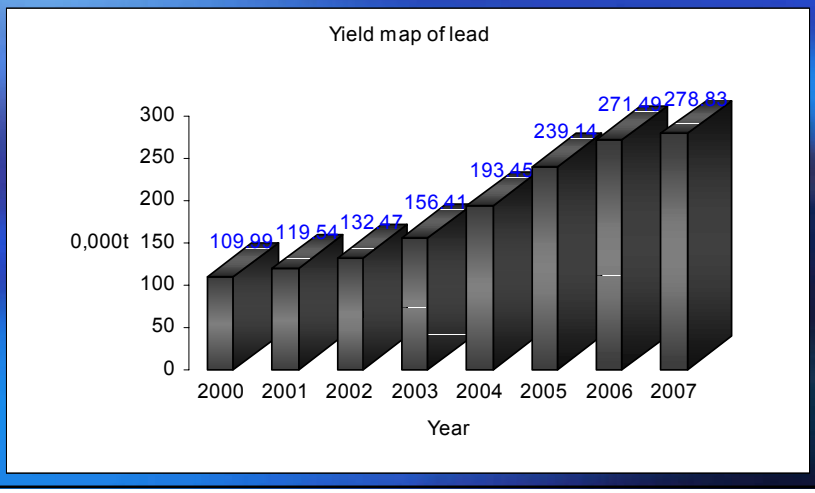
Overview on China Nonferrous Metals Industry

Growth of aluminum



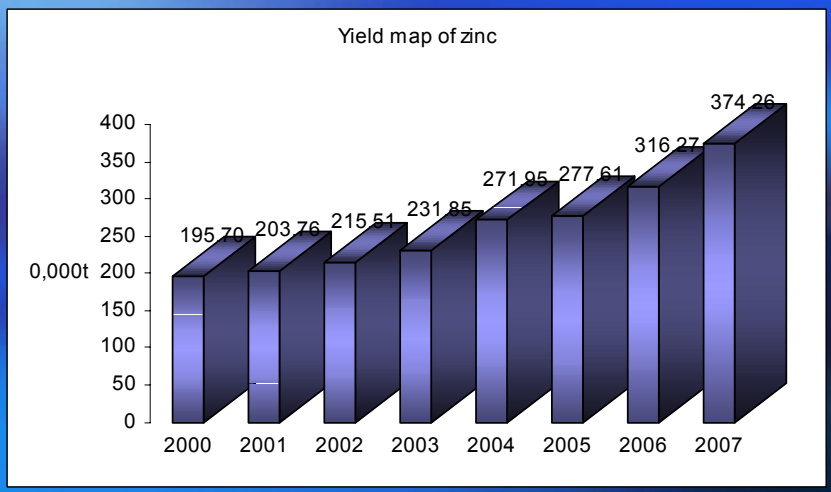
Overview on China Nonferrous Metals Industry

Growth of lead



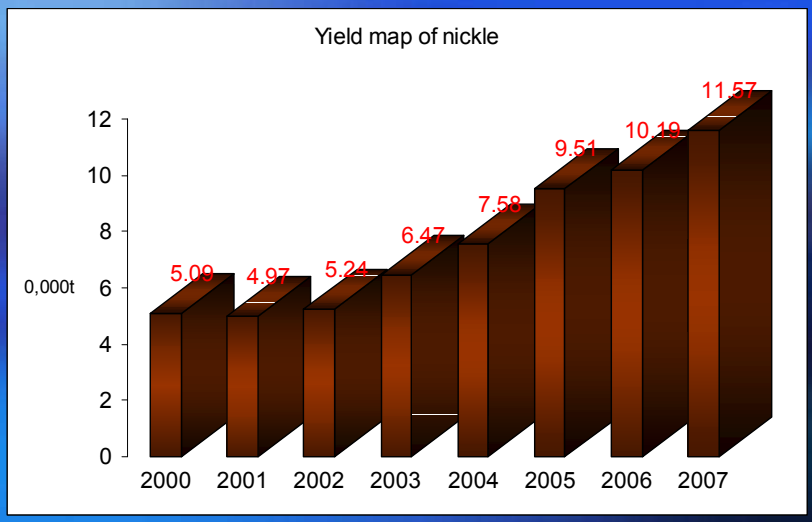
Overview on China Nonferrous Metals Industry

Growth of zinc



Overview on China Nonferrous Metals Industry

Growth of nickel



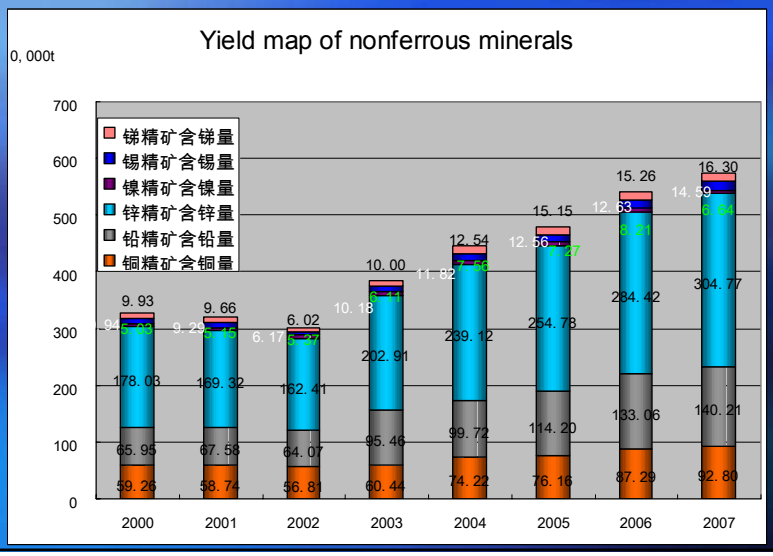
Overview on China Nonferrous Metals Industry

Six kinds of nonferrous metals in the year of 2007 (copper, nickel, lead, zinc, tin, stibium) output of ore concentrate (metallicity)

	2006	2007	up%
Copper concentrate	87.29	92.8	6.31
Nickel concentrate	8.21	6.64	-19.12
Lead concentrate	133.06	140.21	5.37
Zinc concentrate	284.42	304.77	7.15
Tin concentrate	12.63	14.59	15.52
Sum	540.87	575.31	6.37

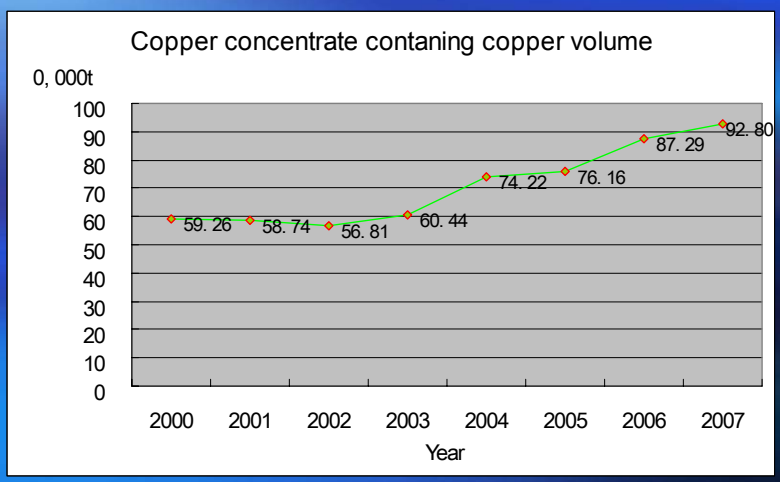
Overview on China Nonferrous Metals Industry

Growth of nonferrous minerals since 2000



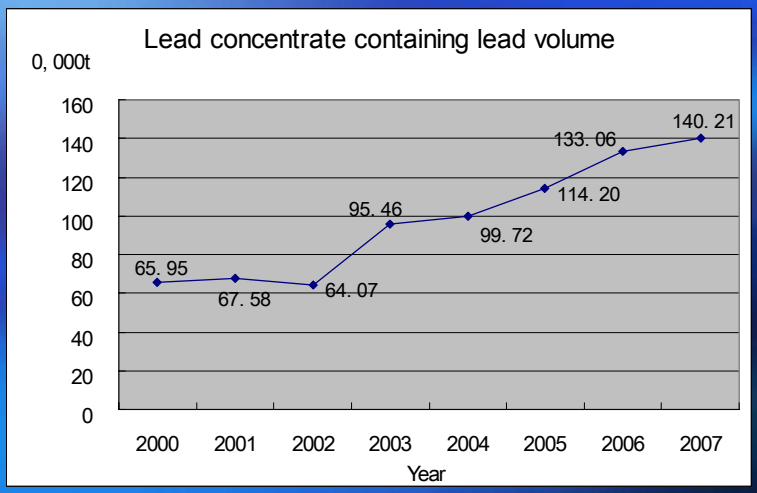
Overview on China Nonferrous Metals Industry

Output of copper concentrate since 2000 (metallicity)



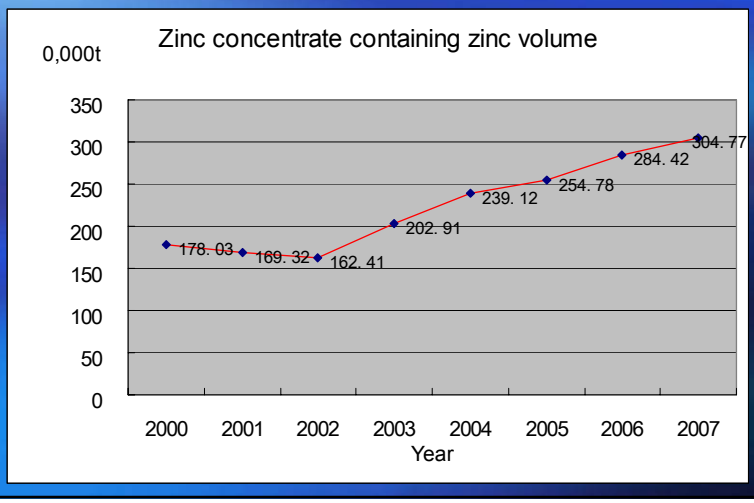
Overview on China Nonferrous Metals Industry

Output of lead concentrate since 2000 (metallicity)



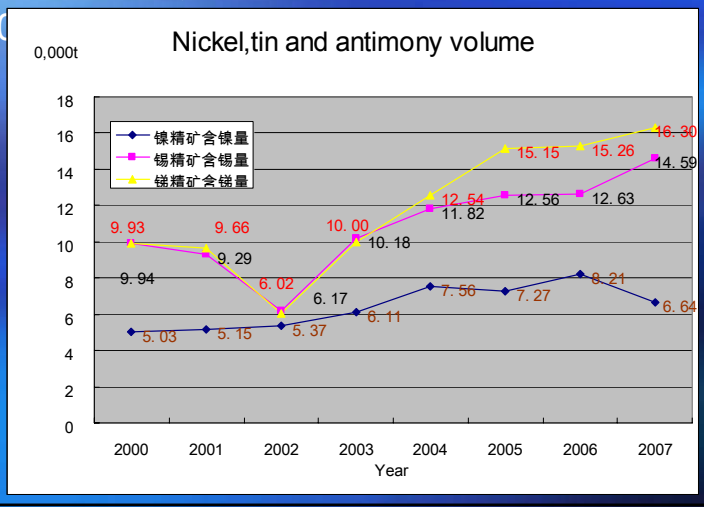
Overview on China Nonferrous Metals Industry

Output of zinc concentrate since 2000 (metallicity)



Overview on China Nonferrous Metals Industry

Output of nickel, tin and stibium concentrate since 200



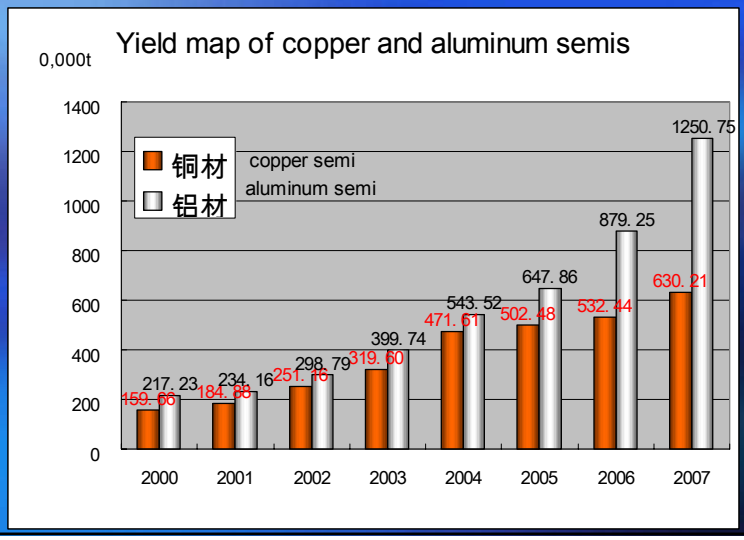
Overview on China Nonferrous Metals Industry

Nonferrous metals semi-conducts in 2007

Output of copper semi	6,30 Mton	up18.36%
Output of aluminum semi	12,5 Mton	up42.25%

Overview on China Nonferrous Metals Industry

Growth of copper and aluminum product since 2000



Reserves of main nonferrous metals

- 2. Reserves of main nonferrous metals

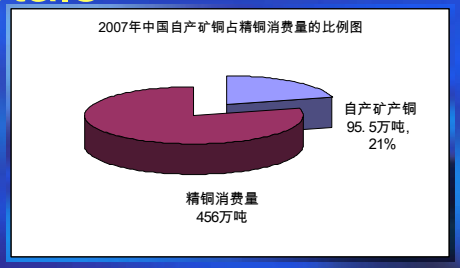
By the end of 2006, major nonferrous metals resources in China are below:

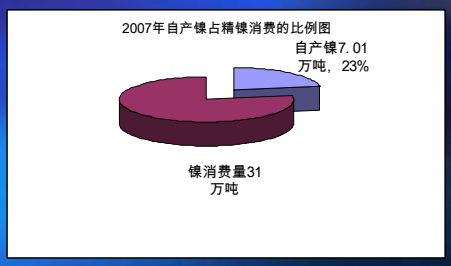
	Identified reserve	Basic reserve
copper	7048	3070
aluminum	27.76 (ore)	7.4166
lead	4141	135139
zinc	9710	4227.14
nickel	801.39	272.72
tin	476.92	153.53

Note：0,000t, therein, aluminum unit 100Mton

Reserves of main nonferrous metals

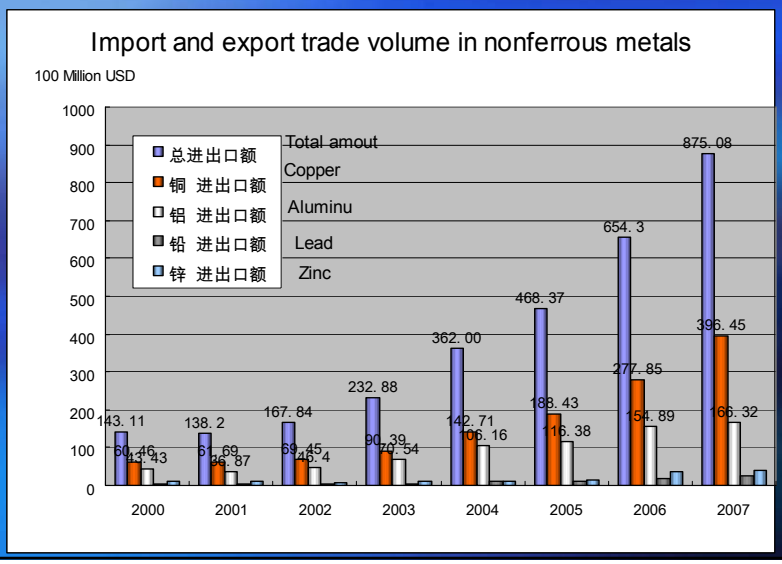
- Domestic supply is hard to meet fast growing supply as to limited nonferrous metals resources. Therefore, internal consumption is to be satisfied by different levels of importation, especially copper and nickel.





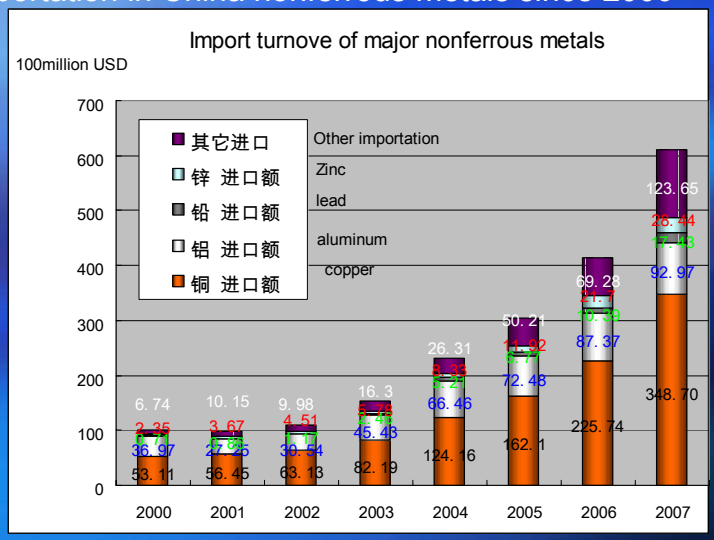
Overview on China Nonferrous Metals Industry

- Volume of trade since



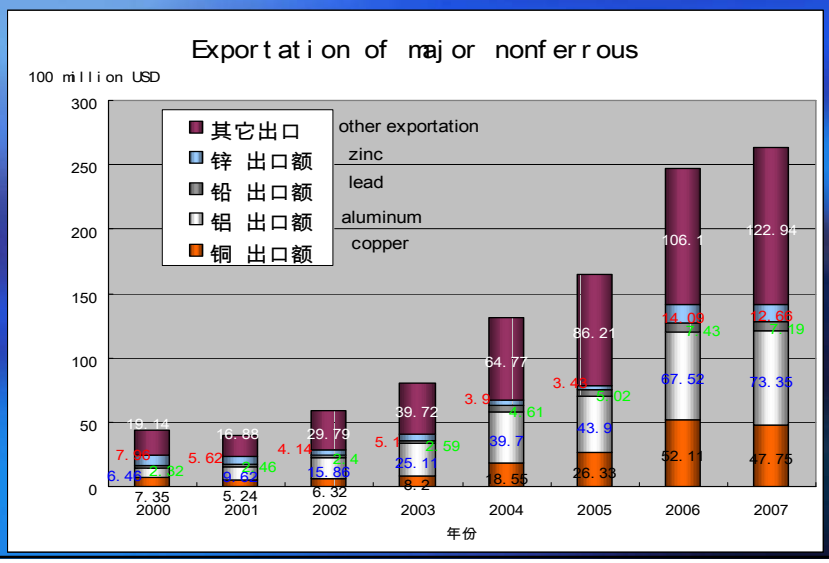
Overview on China Nonferrous Metals Industry

- Importation in China nonferrous metals since 2000



Overview on China Nonferrous Metals Industry

- Exportation of China nonferrous metals since 2000



Overview on China Nonferrous Metals Industry

- Foreign trade deficit of China's copper products since 2000

Overview on China Nonferrous Metals Industry

- 3. Investment projects on nonferrous metals industry
- The data showed that nonferrous mine and smelting projects are still popular investment in China's nonferrous metals.

Items	2007(RMB)	Up%
Total investment of new projects	1746.52	59.10%
New projects in mine	431.61	89.25%
New projects in smelting	839.41	72.98%
New projects in processing	475.5	23.67%

Overview on China Nonferrous Metals Industry

- In 2007, new projects in copper smelting are fewer than last year, but investment scale of new projects of lead, zinc and aluminum smelting are much more than before.

Investment	2007 (100 million RMB)	%
New projects in copper smelting	97.14	-12.27%
New projects in lead and zinc smelting	148.41	196.21%
New projects in aluminum smelting (including primary aluminum and alumina)	286.47	54.03%

Overview on China Nonferrous Metals Industry

- 4. Capacity of nonferrous metals
- Chinese government are focus on shutting down backward capacity facilities in nonferrous metals industry in recent years. All backward aluminum facilities were closed by the end of 2007, amount to 1 million tons; it achieved initial results in closing and eliminating backward copper, lead and zinc facilities. It is estimated that 300,000 tons of backward copper capacity will be closed and eliminated by the end of 2008. 。

Capacity of major nonferrous metals on 2007 are below

Copper	Blister	280
	Refined	448
Aluminum electrolysis		1401
Lead refining		342
Zinc refining		422

Note: unit(0,000t)

Overview on China Nonferrous Metals Industry

- 5. Main consumption sector

National economy maintained steady and rapid development, GDP growth reaches 10.4%. With the growth of national economy, all trades and professions need more and more nonferrous metals. Investment in power industry is still active, automobile production, air conditioning and refrigeration industry increase rapidly, other interrelated industries keep steady increase. At the same time, acceptance of high-priced nonferrous metals by enterprises make nonferrous consumption is growing fast again, particularly in aluminum, nickel, copper and magnesium, have a large increase in consumption.

Overview on China Nonferrous Metals Industry

- **Power industry**
- China's power capacity and power grid construction keep fast growth in 2007. Currently, domestic power construction maintained rapid development. In 2007 capital construction added 100 million KW power capacity, but lower 6.2% than last year. High-power stations were increased and power per unit was improved. Power grid construction accelerated obviously in 2007, particularly 500KV transmission lines, up by 14.21%; power transformation capacity is 1.144 billion KVA, up by 18.71% than last year.

Overview on China Nonferrous Metals Industry

- **Construction**

According to the National Statistical Office, China's investment in the fixed assets have increased to 10.987 trillion Yuan from 4.35 trillion Yuan, went up 26% during period of 2002—2006; gross product of construction have increased to 4.09 trillion Yuan from 1.85 trillion Yuan, 22% increase, added value, from 70.05 billion Yuan to 1.16 trillion Yuan, 13.6% increase. In 2004 to 2006, added value accounted for the proportion of GDP at 5%-7%, became an important force for rapid growth of national economy. Real estate developed rapidly in 2007, total amount of investment in real estate development is 2.52 trillion Yuan, increased 30%, growth rate, 7.4%, higher than other industries'; accounted for 21.5% in cities and towns investment, had a potential positive effect on nonferrous consumption. It is forecast that domestic real estate will be steady in the future and play a sustainable role in nonferrous consumption.

Overview on China Nonferrous Metals Industry

- **Home appliances**

Home appliance maintained increase due to domestic demand in 2007. According to the National Statistic Office, output value of Chinese household appliances is 605,33 billion Yuan, up by 26.05% than last year. Therein, output value in refrigeration appliances is 144.44 billion Yuan, up by 27.1%, accumulated value in air conditioning is 214.79 billion Yuan, up by 25.44% compared to the same period in last year.

Items	Capacity of 2007(0,000)	Growth rate%
refrigerator	4250	21.4
cooler	1000	17.6
Air conditioning	7500	7.7
Washing machine	3300	13.8
Microwave oven	6000	9.1
Water heater	1037	23.5

Overview on China Nonferrous Metals Industry

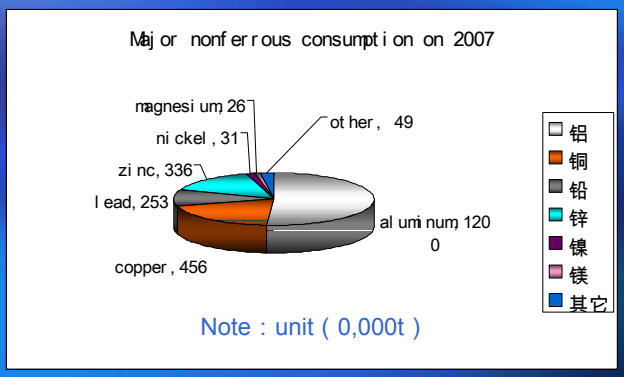
- **Automobile**

The amount of automobile production is 8,880,000, keep 20% growth rate. For the moment, China's automobile demand is growing throughout the world, higher than Japan, only to the US. In 2001, China accounted for global automotive consumption of 4.3%, leapt to 12% in 2007. During the "eleven-five" plan, China's auto production has remained around 10% growth rate, the market scale will be or close to 10,000,000. Development in China's auto industry and extensive use in automotive electronics will increase demand for nonferrous deep-processing.

Overview on China Nonferrous Metals Industry

Ten kinds of nonferrous consumption exceeded 23.50 million tons, therein, primary aluminum consumption reached 12 million tons, up by 38.4% compared to last year.

Major nonferrous consumption is below



Overview on China Nonferrous Metals Industry

6. Energy saving and emission reduction and secondary metals industry

The Chinese government has always attached importance to environmental protection and effective use of resources, and advocated actively for many years to develop recycling economy and build a resource-conserving society, regarded "Energy saving and emission reduction" as a key target in the future and supported the development of secondary metals industry.

Non-ferrous metals industry as a resource-based, energy-industry, China Nonferrous Metals Industry has been committed to building "a resource-conserving and environment-friendly" industry, and achieved substantive progress.

comprehensive energy consumption (kg standrad coal/t)	2006	2007
copper smelting	595	361
lead smelting	542	520
zinc smelting	1248	898

Overview on China Nonferrous Metals Industry

- With the increase of nonferrous consumption, recycling is an efficient solution to limited resources. China is emphasis on developing secondary metal industry. The average growth rate of total output of secondary metal reached 17% since 2002. The laws and regulations focus on developing the secondary metal industry healthy is to be set up and perfect continuously.

	2007	up%
secondary copper	200	19
secondary aluminum	275	17
secondary lead	45	15.4
secondary zinc	9.7	-11.8
Total	529.7	17

Unit: 0,000t

Overview on China Nonferrous Metals Industry

- 7. Metal Statistics
- Due to the numerous nonferrous manufacturer, irregular production scale and technical skills, statistics on nonferrous output is facing challenge. Non-ferrous metals industry as a whole, copper smelting is the highest concentration, total production of the former 10 enterprises amounted for nationwide refined copper at 79%, nickel refining is also highly concentrated, and the rest of low industrial concentration. In particular, lead and zinc smelting, aluminum smelting, and semi-conducts such as copper and aluminum, the number of these enterprises and the average small-scale, together with the backward technology, it is difficult to avoid duplication of statistics. CNIA is actively seeking a comprehensive analysis to the data of National Bureau of Statistics and CNIA together so that the statistic method is more scientific and the data is more accurate.

Overview on China Nonferrous Metals Industry

- 8. Related measures on China industrial policy
- In order to meet domestic demand and limit the types of resources, high-energy exports, in the past two years, China's foreign trade policy and industrial policy have a greater impact on the nonferrous development is that the Ministry of Finance, National Development and Reform Commission, Ministry of Commerce, the General Administration of Customs, State Administration of Taxation "on the part of the adjustment of commodity export tax rebate rate and the addition of the processing trade ban Catalog notice (taxation [2006] No. 139), and, most metal semi-conducts tax rebate rates of 13% to 5%, 8% or 11%, and some products were abolished. In addition, on Aug. 15, 2008, "the State Council Tariff Policy Commission of aluminum alloy on the adjustment of export tariffs on coal and coke," which since Aug. 20, that is, the same as the primary aluminum, general trade exports of aluminum alloy (Tax Identification Number: 76012000) start with the collection of provisional tariff at 15%.

Overview on China Nonferrous Metals Industry

- Industry policy encourages the recycling of non-ferrous metals, particularly copper, aluminum, lead and zinc, through a series of preferential policies and strict examination and approval, to encourage the establishment of China-renewable resources in the industrial park, currently more than 10 industrial parks are completed or under construction, which not only improved the recycling of scrap metal, industrial concentration and environmental protection, but also avoided redundant construction, and further standardize the market order.

- NDRC promulgated relevant market access conditions of copper, lead and zinc smelting industry and stricter investment projects approval in these sector, meanwhile, raw materials protection, own funds as well as environmental impact assessment is strictly and clearly defined.

Overview on China Nonferrous Metals Industry

- 9. Forms and trend of foreign direct investment in mining development
- China is no longer encourage foreign direct investment in China's nonferrous metals mining and development.

- The new "**Catalogue for the guidance of foreign investment industries** (Amendment 2007)" came into effect on December 1, 2007, according to the new "Catalogue", "low-grade, refractory gold mining , separating (limited to joint ventures, co-operation)", " copper, lead and zinc exploration, mining (limited to joint ventures, cooperation, in the western region to foreign-owned)" and "Bauxite exploration, mining (limited to joint ventures, cooperation, in the western region Can be wholly foreign-owned) " were delete, "exploration and mining in tungsten, tin, antimony, molybdenum, barite and fluorite (limited to joint ventures, co-operation)" was delete from limitative scope of the Guide Catalog for Foreign-Invested Industries, "exploration and mining of precious metals (gold, silver and platinum group)," was maintained. "Exploration and mining of tungsten, molybdenum, tin, antimony and fluorite " was added in prohibited Guide Catalog for Foreign-Invested Industries

Overview on China Nonferrous Metals Industry

- 10. Existing main problems

(1) Backward capacity are still existed ;

(2) Industrial concentration is on the low side ;

(3) Investment ;

(4) Environmental protection。

II. Development Prospect on 2008 China Nonferrous Metals Industry

- 1. Output prediction on 2008 nonferrous metals
- 2. Consumption prediction on 2008 nonferrous metals

Development Prospect for 2008 China Nonferrous Metals Industry

- 1. Output prediction on 2008 nonferrous metals

  In 2008, due to freezing rain, snow catastrophes and earthquake, parts of manufacturers production decreased, but recovered quickly, China's nonferrous industry presents healthy development, ten kinds of nonferrous output will go up stably. Affected by weak price, adjustment of industrial policy and global economic slowdown and other external factors, parts of benefit of metal enterprises declined, such as aluminum, nickel, lead and zinc.

output(0,000t)	2008	growth rate %
ten kinds of nonferrous	2600	10
copper	395	17
aluminum	1470	11.4

Development Prospect for 2008 China Nonferrous Metals Industry

- 2. Consumption prediction on 2008 nonferrous metals

  Chinese economy will maintain a rapid growth in the year of 2008, so does the nonferrous metals supply and demand. It is estimated by CNIA that ten kinds of major nonferrous metals consumption will exceed 26 Mton in China, among them, primary aluminum consumption will reach 14,04 Mton, up by 17% compare to the same period of last year.

consumption(0,000t)	2008
ten kinds of nonferrous metals	>2600
copper	497
aluminum	1404
lead	280
zinc	360
nickel	34
magnesium	28

THE END!

Thank You !