

# China Guangxi EMM Current Development & the Future



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GXDDM



# 1. Guangxi resources situation

## 1-1 Manganese ore

Guangxi is the richest manganese ore reserves province in China. The manganese ore holds the reserves 223 million tons, 38.5% of the total China manganese ore resources and the reserves occupy the first in China.

The manganese ore mainly distributes in 27 counties (cities), concentrates in three counties of Daxin, Tianden and Jingxi. Therefore it is called the manganese triangle in Guangxi. It holds the reserves 189 million tons, accounts for 84.7% of Guangxi total quantity.



Guangxi is the biggest manganese ore output province in China. The annual output amounts to above 1.5 million tons. Daxin county has the biggest reserves in the triangle. It has the reserves amounts to 141.6 million tons. Xialei mine has the large type manganese ore deposit with reserves 137 million tons, about 71.7% of the triangle or 61.43% of Guangxi, including  $MnCO_3$  ore 128 million tons.

Dameng company has 147 million tons manganese ore sources in Guangxi. The ore distributes 131 million tons in Daxin ( $MnCO_3$  121 million tons) and 16 million tons in Tianden (low phosphorus and low iron but high silicon manganese oxide ore). Tianden is one of the biggest manganese oxide ore deposits in China.



## 1-2 Electric power

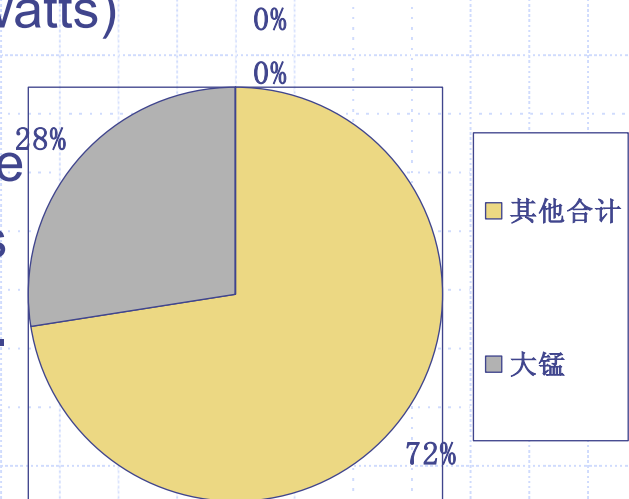
- Guangxi electric power resources are rich, the hydro-energy resources reserves amounts to 17.52 million kilowatts. Until the end of 2004 Guangxi's electricity capacity was 8.86 million kilowatts, including hydro electricity 5.69 million kilowatts and thermal power 3.17 million kilowatts. The power output was 33 billion kilowatt-hours in 2004, listed the second in China.
- Power projects in Guangxi have a great development and the construction at a high speed.
- Pingbai hydroelectric power station, Dongtang hydroelectric power station and Beihai thermoelectric power station went into running in 2004. The projects increased the electricity generation capacity 1.635 million kilowatts.
- The new investment will be rmb18.2 billion for power construction for 2.28 million kilowatts, about 1.155 million kilowatts will go into running in 2005.



### Power development tendency

- In 2005 the electricity generation capacity in Guangxi will be 11.105 million kilowatts (hydro power 6.525 million kilowatts and thermal power 4.58 million kilowatts)
- In 2007 the electricity generation capacity in Guangxi will be 14.004 million kilowatts (hydro power 7.648 million kilowatts and thermal power 6.356 million kilowatts)
- *Power supply by target plan*
- Guaranteed the importance enterprise produces using electricity, Dameng is
- one of the 27 importance enterprises.

崇左网用电指标分配情况





## 1-3 sulfuric acid

- Guangxi sulfuric acid annual output is 800,000 tons per year. Mainly producers locate in Hechi, Liuzhou. In addition, along with the increase demand of sulfuric acid, partial imported from Japan and Korea.
- Sulfuric acid price situation in Guangxi (in February, 2005)
  - Fangcheng port: rmb470/ton (tax excluded)
  - Qinzhou port: rmb470/ton (tax excluded)
  - Liuzhou: rmb480/ton (ex-factory, tax excluded)
  - Laibing: rmb480/ton (ex-factory price, tax excluded)
  - Jingxi: rmb490/ton (ex-factory price, tax excluded)
  - Yongning: rmb450/ton (ex-factory price, tax excluded)



## 1- 4 geography and transportation

- Guangxi has the unique geographical position with coast, rivers and roads. The convenient transportation plays the important channel in southwest of China for commodity import and export.
- The road transportation developed quickly with 77,066 kilometers, the highway over 1,000 kilometers.
- The railroad transportation network includes Hunan and Guizhou provinces, Zhiliu and Nankun branches with 3,090 kilometers. It goes nonstop to Qinzhou, Fangcheng and Beihai three big harbors. Luozhan railroad Guangxi section began to construct last year.
- The air transport network has formed by Guilin, Nanning and Beihai international airports as the central aerial. It is the "air bridge" to connect southwest of China to Southeast Asia and the world.



## 2. Guangxi EMM Industry

- Guangxi EMM industry started late. In 2001 Dameng completed the first EMM production line with 4,000tpa.
- In past years Guangxi EMM industry has had a great development progressively.
- In the end of 2003, Guangxi had 5 EMM enterprises with capacity 60,000tpa.
- In the end of 2004, Guangxi had 20 EMM enterprises with capacity 112,000tpa. The actual output was 33,000 tons.
- It estimates to the end of 2005 the capacity will be over 250,000tpa.
- 6 enterprises are in construction with capacity 86,000tpa.
- 4 enterprises will plan to construct with capacity 70,000tpa.
- Dameng as the biggest EMM producer in Guangxi with 40,000tpa capacity and actual output was 20,000 tons in 2004.



## Guangxi EMM Enterprise (until end of 2004)

	Name of Enterprise	Current Capa tpa	Opening Year	In Construction tpa	In Plan tpa
1	Dameng	30000	2001		30000
2	Xinfongxin Electrochemical Industry Co. Ltd	5000	2004		
3	Daxin Sanmenglong Mining Co., Ltd	5000	2004		
4	Daxin Jinrong Mn Industry Co., Ltd	5000	2004		
5	Daxin Baiteli Mn Industry Co., Ltd	5000	2004		
6	Daxin Zhenxin Mn Products Factory	3000	2004		
7	Tianden Kaifeng Mn Industry Co., Ltd	5000	2004	5000	5000
8	Tianden Qifeng Mn Industry Co., Ltd	5000	2004		
9	Tianden Dongping Mn Industry Co., Ltd	5000	2004		
10	Start Mn Material Co., Ltd (Jingxi)	10000	2004	6000	
11	Jingxi Xinyuan Mn Industry Co.	5000	2004		
12	Jingxi Daxinan Mn Industry Co., Ltd	5000	2004		
13	Jinxi Longgong Mn Industry Co	5000	2004		
14	Tianyang Guihang Mn Co.	10000	2004	10000	
15	Yizhou Xiangyi Mn Industry Co.,Ltd	5000	2004		
16	Yizhou Shengya EMM Factory	5000	2004		
17	Jincheng Jianghuaxin Mn Industry Co., Ltd	3000	2004		
18	Guiping Tianhongxin Mn Industry Co., Ltd			30000	30000
19	Xiangzhou Jixiang Mn Industry Co., Ltd			5000	5000
20	Huiyuan Mn Industry Co., Ltd			30000	
	<b>Total</b>	<b>116000</b>		<b>86000</b>	<b>70000</b>



### 3. Guangxi EMM industry development strategy

- *The manganese industry is the superiority industry in Guangxi*
- Advance manganese processing technological transformations, frame plan and policy to make manganese industry as a superiority industry in Guangxi.
- Strengthen with the domestic and the world enterprise's strategic cooperation, take the big enterprise as the main body in the group to develop manganese ore resources, advance the further manganese series processing projects.
- Attach importance to manganese industrial development.
- Chongzuo city took manganese industry as importance industry. They made the plan to support manganese industry. The manganese industry output value will over rmb10 billion, including 200,000tpa EMM.



- Reorganize standard to develop and optimize manganese ore resources.
- Protect resources, reasonable mining, raise the usage rate, enlarges mining legally surveillance and achieve the whole plan, unification mining, reasonably protect the mineral resource, prevent over consumption.
- Encourage manganese enterprise to use Vietnam, Australia and South Africa resources, use the advanced processing and match the local manganese ore reasonably with import ore to produce high value added new product.
- Strengthen the environmental protection investment, reduce discharges to achieve the standard, fulfills the social responsibility.



Guangxi Dameng Manganese Co., Ltd.

**THANKS!**