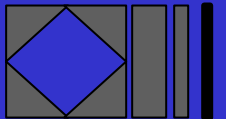


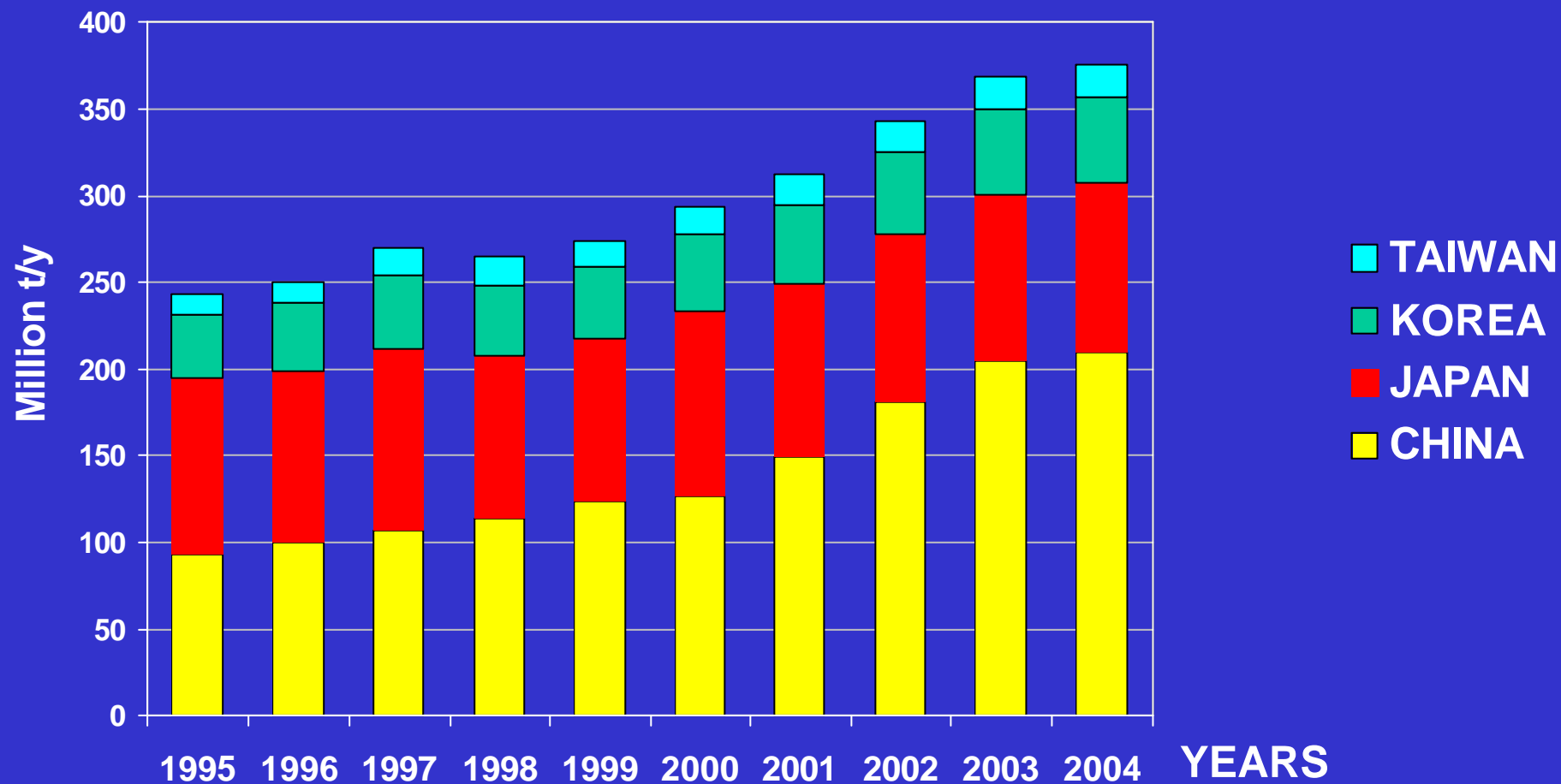
The Current situation and outlook for structural adjustment in China and overview of balance between local demand and supply for manganese ferroalloys in China

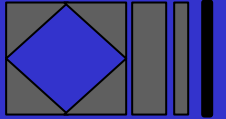
IMnI Annual Conference 2003
04 – 06 June , Rio de Janeiro, Brazil

Presented by
Christian Ching, Asia Manager of Sales and Marketing
Manganese / Ferro-Alloy Division - CVRD



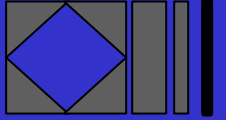
CRUDE STEEL PRODUCTION IN CHINA / JAPAN / KOREA / TAIWAN 1995 - 2002 AND FORECAST 2003 - 2004





•Fact and expectation - 2003:

- The crude steel output in the 1 Quarter was 48.3 million tons, 18.12% more than 2002;
- The expectation of crude steel output in 2003 shall be more than 200 million tons;
- The demand of ferroalloy in the domestic market will increased following the steel industry;
- The demand of imported Mn ore will increase due to substitution of local Mn ore, expectation 2,2 million tons.



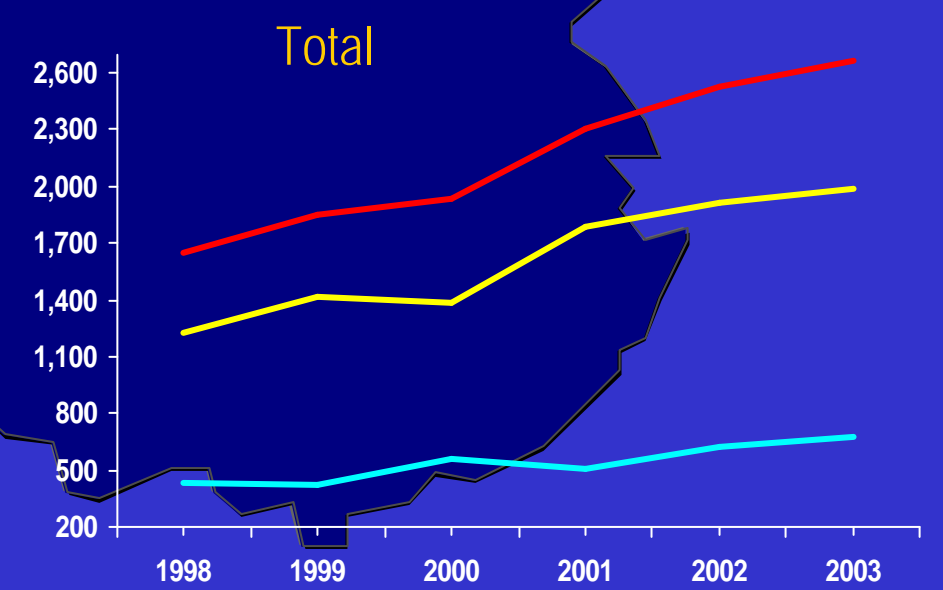
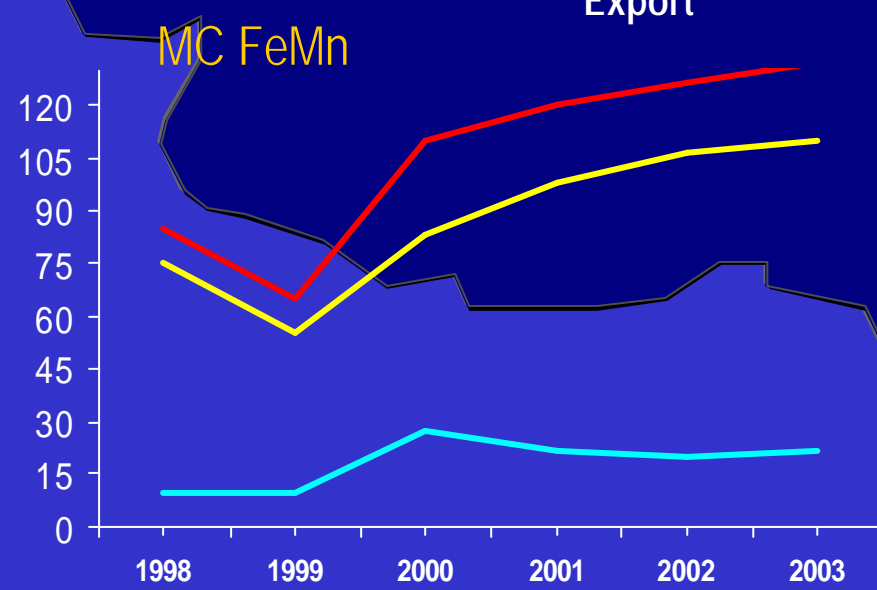
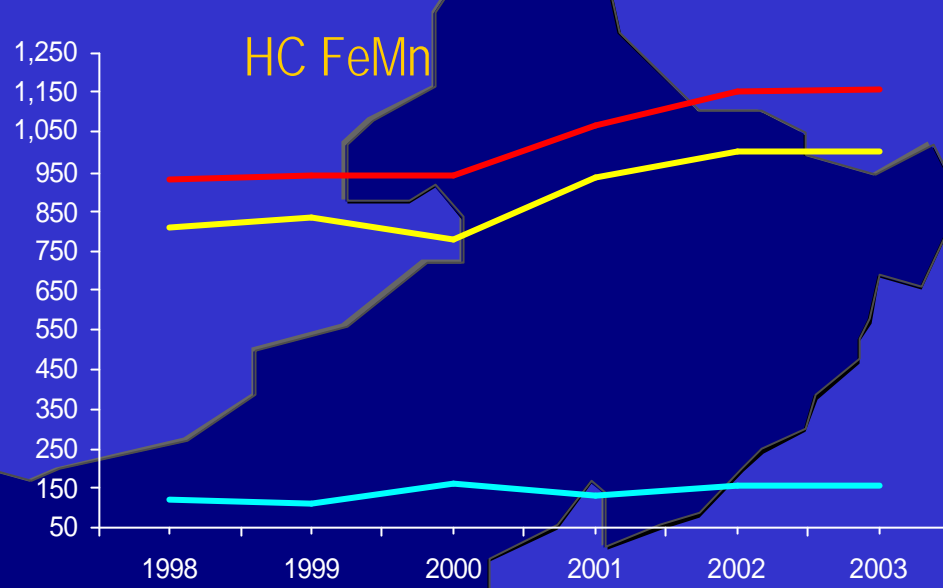
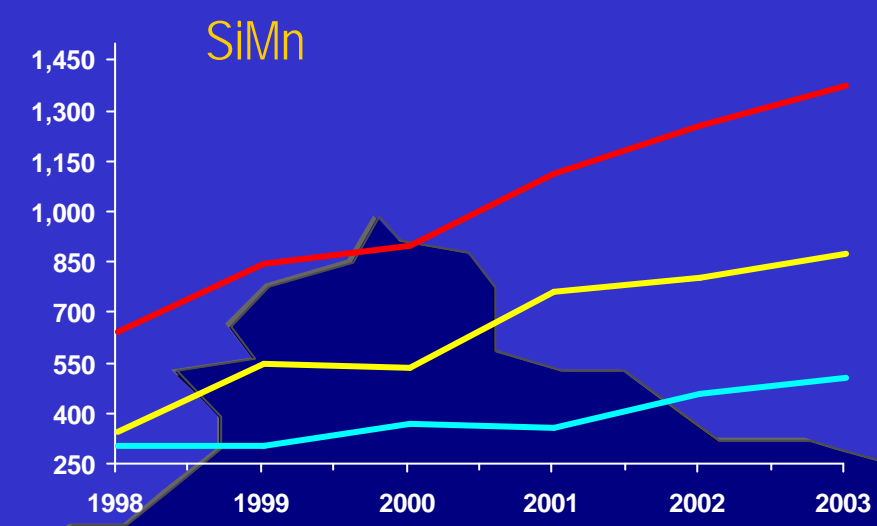
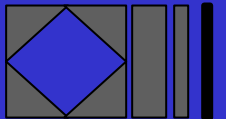
• Fact and expectation - 2003: (Continue)

• SiMn production will increase due to the high demand in the domestic market and the attractiveness of international market price;

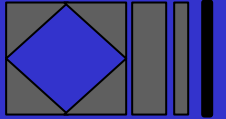
• HC FeMn will increase following the domestic steel industry;

• MC+LC FeMn also increase following the domestic steel industry ;

Chinese Production, Consumption and Exports of Mn Ferro-Alloys and forecast 2003



Production — (red line)
 Consumption — (yellow line)
 Export — (cyan line)



- Conclusion:
- This year 2003, the Chinese ferroalloy sector faces three forces :
- Growing market demand of steel industry;
- The restraint of electricity in the first quarter, the restraint of coke and domestic transportation;
- The total manganese Ferroalloy production is expected to reach more than 2.4 million tons this year;