STEELMAKING RAW MATERIALS: SUPPLY STILL STRUGGLING TO MEET DEMAND

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Presentation by Mr. Anthony de Carvalho, OECD. Steel Committee meeting, Istanbul, Turkey.

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Price of Iron Ore: Historical Perspective
(U.S. cents/dmtu)
Share of World Iron Ore Imports in 2006

Source: CRU Analysis

Monthly Delivered Prices of Iron Ore to China

Source: CRU Analysis
Iron Ore Supply

- **Australia:**
  - BHP investing USD 5 billion in the Pilbara region to raise capacity by 152 MT/year over next 5 years
  - Rio Tinto investing heavily to bring total capacity to 220 MT/year
  - New smaller entrants in market
- **Brazil:**
  - CVRD has completed projects in northern range of Carajás mineral province boost capacity to 100 MT/year and a doubling of capacity at Brucutu mine
  - In 2007, capacity to rise in Fazendao and Fabrica mines
  - More CVRD investment in Carajás to boost capacity to 130 MT/year by 2009
  - CSN and MBR also raising capacities

Market Balance To Remain Tight

- **India:** exports of iron ore to China and other markets will slow as domestic steel capacity and production increase sharply
- **Brazil:** steel sector expansion to limit growth in iron ore exports?
- **Shortages of miners’ production inputs may delay completion of the expansion projects?**
- **Rollover in iron ore price in 2008?**
U.S. and European Scrap Prices

- United States
  - No. 1 heavy melt, weekly average of Chicago, Philadelphia and Pittsburgh, gross tonne

- European
  - Rotterdam, No. 1 heavy melt, f.o.b. Rotterdam, metric tonne

Japanese Scrap Prices

- H2 delivered price, average of Kanto, Chubu and Kansai regions

Source: Japan Ferrous Raw Materials Association
Scrap Demand to Remain Strong

- Russia: electric arc furnace steelmaking to replace the outdated open hearth process
- Turkey: scrap-intensive EAF accounts for 75% of steel output, production to increase by 13% over next years
- Vietnam: imports to rise from 0.8 MT to 2 MT in 2008?
- Iran facing scrap shortage
- Prices to remain above USD 200 even in 2008?

Coking Coal and Coke Markets Have Tightened

- Resurgent steel market
  - Blast furnace output up by 10-11 percent year to date
- Restocking of coking coal in some economies
  - Indian imports of coking coal very strong as coke plants are being restarted
  - Japanese and European imports up significantly
- Limited export supply of coke
Price of Chinese Coke Exports 1/

Barriers Impeding Raw Material Supplies

- Export restrictions
- Regulatory burdens
- Transportation bottlenecks
- Lack of scrap collection
Summary

• Further tightening in raw material markets seen recently.
• Demand for raw materials expected to stay strong.
• The supply of raw materials will struggle to cope.
• Market distortions, investment barriers, and infrastructure problems in some raw material markets will continue to hamper supply.