# The Future of the Chinese Steel Industry

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# The Future of the Chinese Steel Industry

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***Deputy General Manager, WISCO***

- Senior engineer with extensive experience in fisheries, water conservancy, hydropower engineering
- Member of Standing Committee of CPC, WISCO
- Director of Migrant Relocation & Planning, Three Gorges Office of State Council (2006)
- Director of Institute of Hydroecology, Chinese Academy of Sciences and Ministry of Water Resources

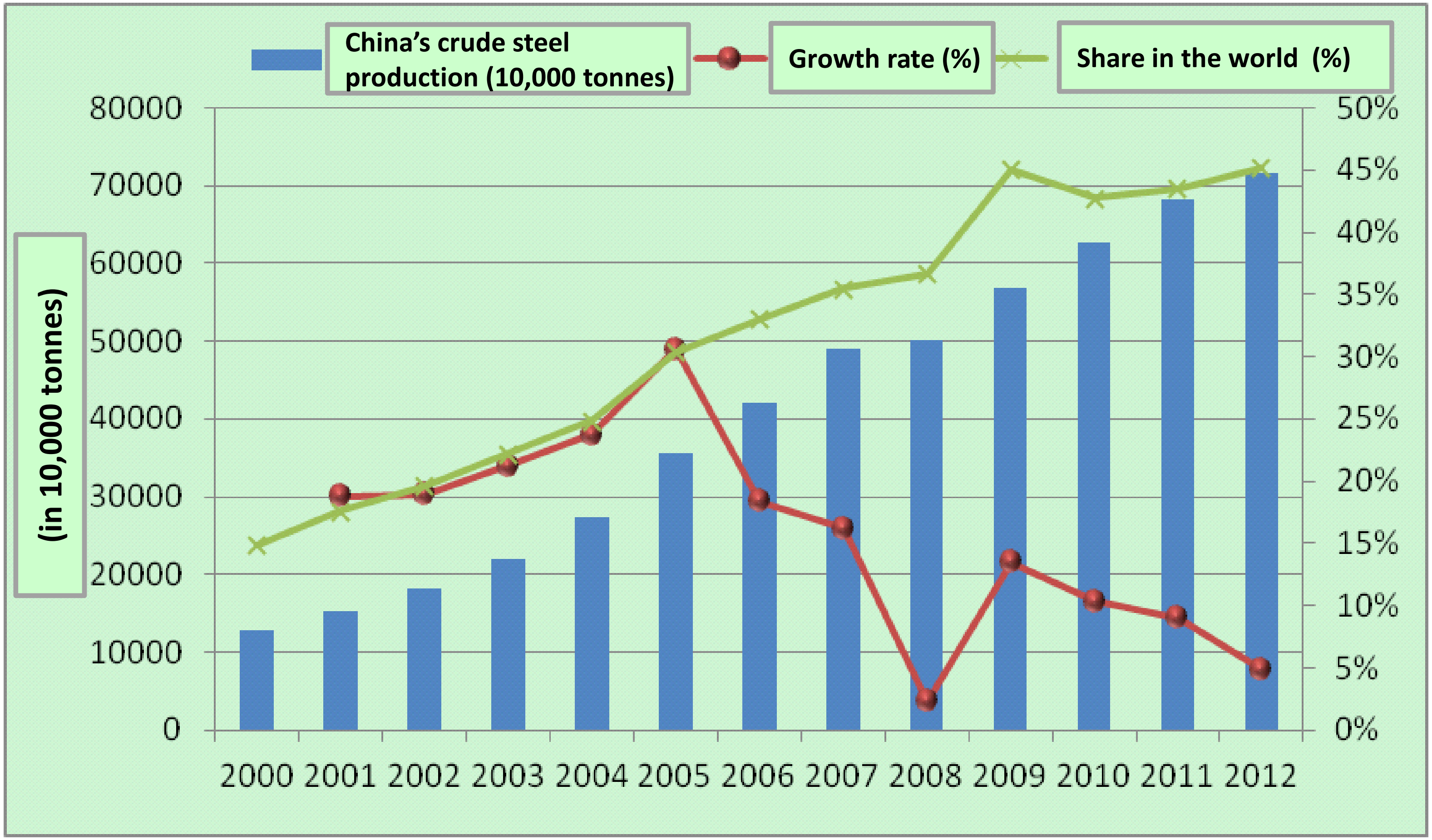
**Represented today by Daniel Zhu**

## Daniel Zhu PhD
***President & CEO, WISCO Canada***

- Director, Executive Vice President of Bloom Lake General Partner Limited
- Director of Wugang Australia Resources Investment Co. Ltd
- Standing Director of China Engineering Blasting Association
- President of Institute of Lithomechanics & Engineering of WISCO
- Professor of Wuhan University of Science and Technology.
- Managed more than 150 projects (Mines, Pellet Plants, etc.)

# Current Status of the Chinese Steel Industry and Its Prospect

1. Development history of the Chinese steel industry



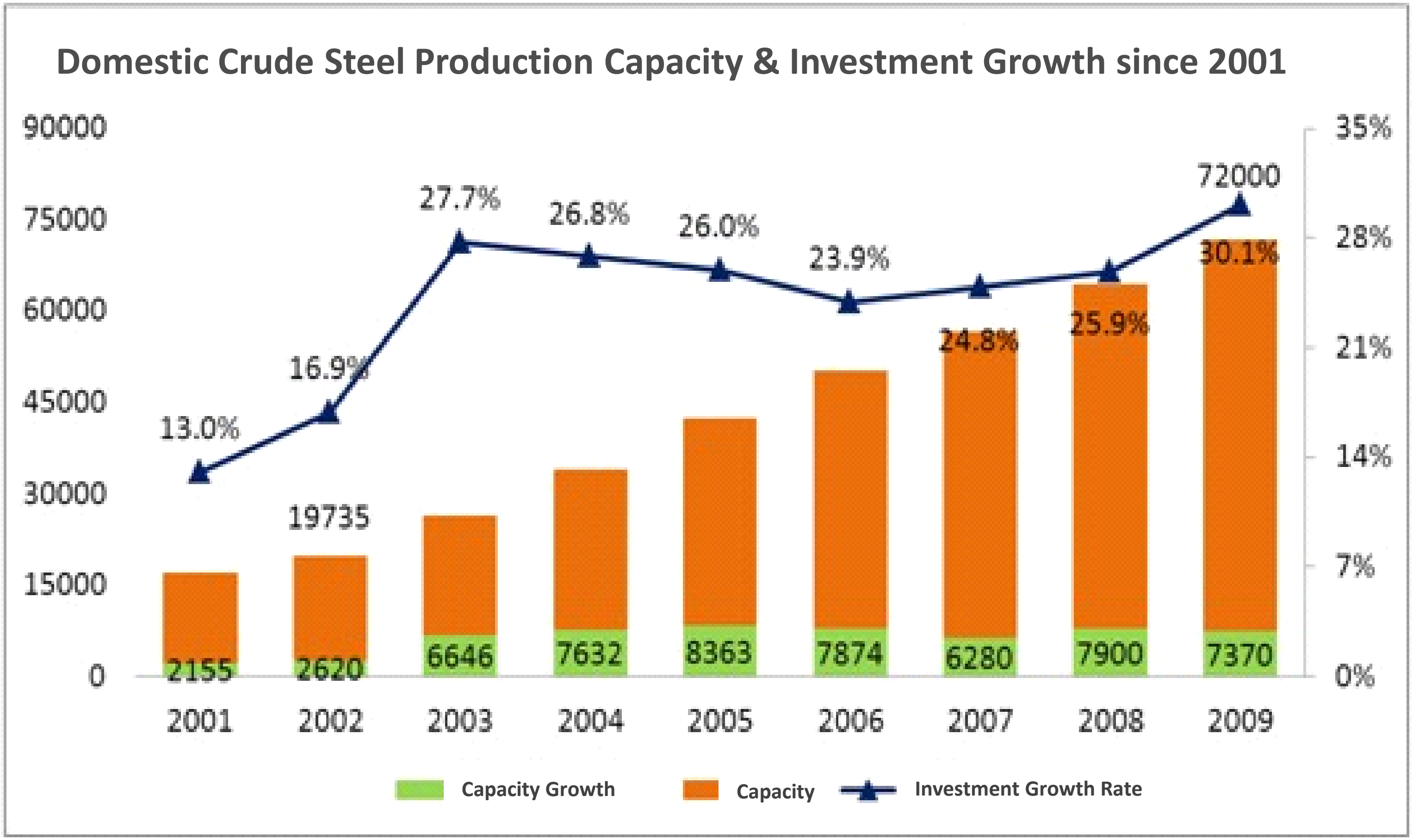
# Current Status of the Chinese Steel Industry and Its Prospect

2. Market distribution of major steel companies in China

# Current Status of the Chinese Steel Industry and Its Prospect

3. Development trend of the Chinese steel industry

- Domestic steel demand



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3. Development trend of the Chinese steel industry

- Domestic steel demand

**Industry Chain Model of the Steel Industry**

| Upstream ore and waste collection industries | Steel making and processing industries | Downstream steel using industries |
|---|---|---|
| Over 50% of iron ore is imported; mainly seaborne trading; became involved in pricing negotiations; waste collection to make up for raw materials | Continuously growing steel production volume; accelerating elimination of backward production capacity; technological upgrading of steel products; diversified products from large companies | Increasing steel demand from construction industry; rapidly developing shipbuilding industry; Growing steel consumption from automobile industry; demand for special steel increases |

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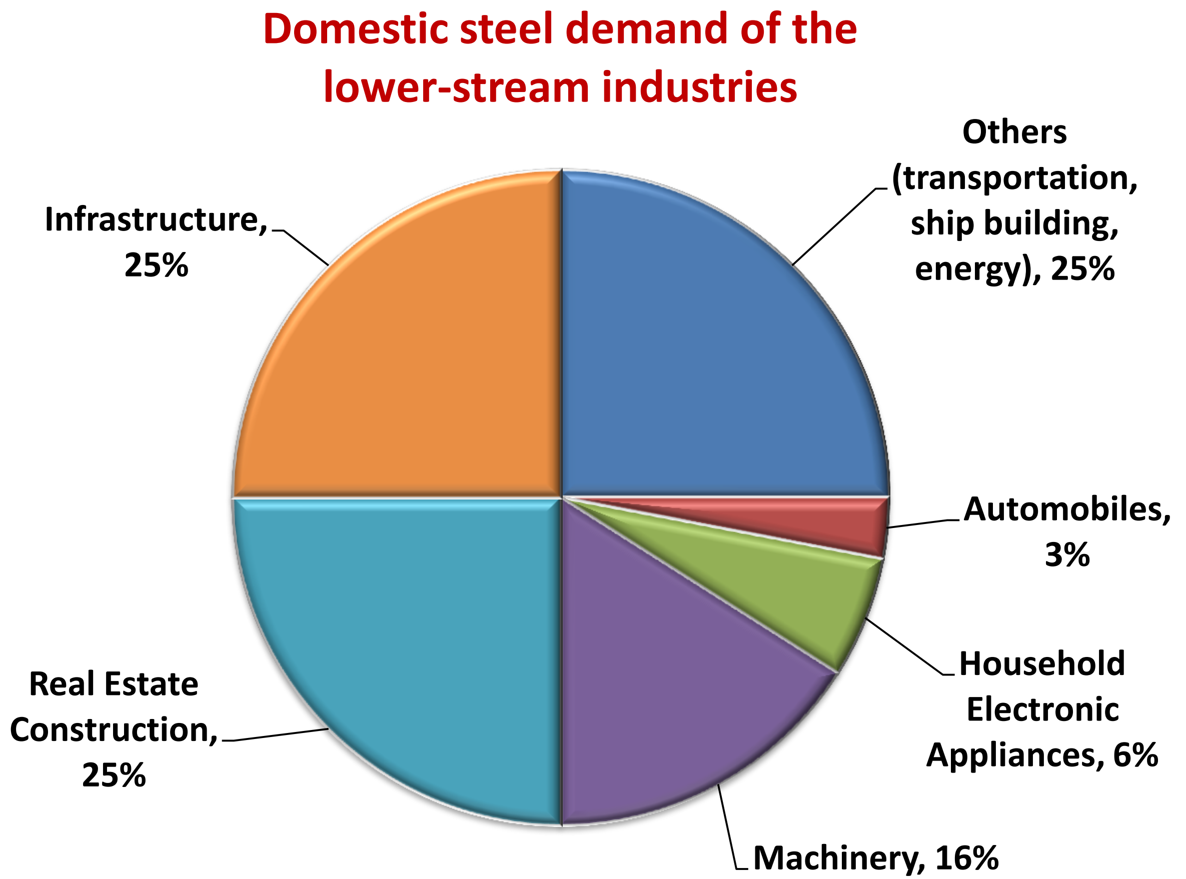

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**A forecast of the domestic industrialization and urbanization**

| | 2007 | 2010 | 2018 | 2025 |
|---|---|---|---|---|
| GDP per-capita (USD in 2005) | 4780 | 6021 | 10058 | 14423 |
| Industry Structure (First/Second/ Third) | 11.3/48.6/40.1 | 10.1/49.2/40.7 | 8.0/47.6/44.4 | 6.6/46.2/47.2 |
| Urbanization Rate (%) | 44.9 | 49.4 | 58.4 | 64.4 |

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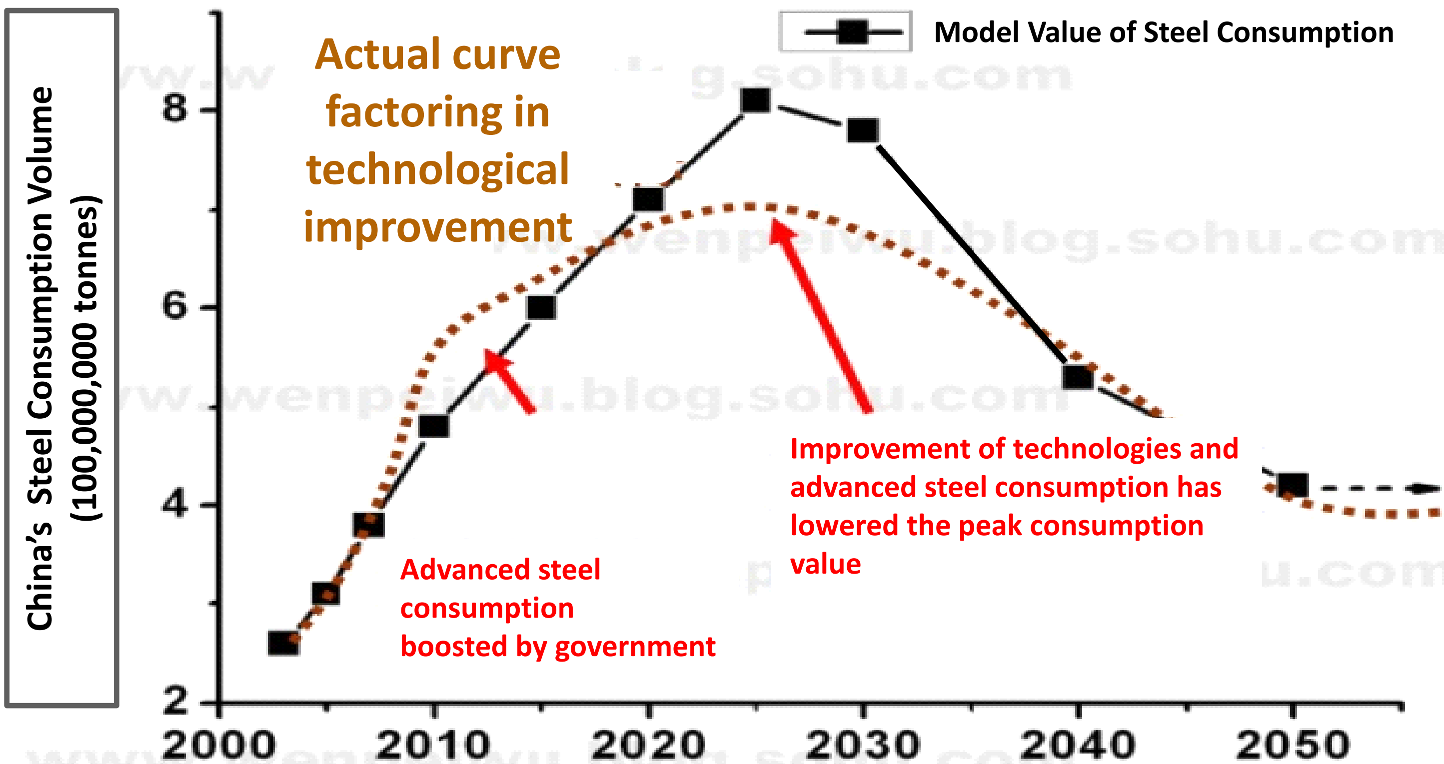


**Model Value of China's Steel Consumption during 2003 - 2050**

# Current Status of the Chinese Steel Industry and Its Prospect

3. Development trend of the Chinese steel industry

- Steel production and development of steel companies

**Crude Steel Production Forecast (in million tonnes)**

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | % in the World | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 2010 | 2015 |
| China | 356 | 423 | 490 | 500 | 574 | 627 | 652 | 678 | 718 | 747 | 785 | 44% | 46% |
| India | 35 | 38 | 41 | 44 | 48 | 52 | 63 | 74 | 86 | 97 | 108 | 4% | 6% |
| Other Asian Countries | 207 | 216 | 231 | 227 | 167 | 203 | 204 | 206 | 210 | 215 | 222 | 14% | 13% |
| Europe | 212 | 227 | 240 | 230 | 168 | 206 | 207 | 208 | 209 | 210 | 211 | 15% | 12% |
| CIS | 122 | 128 | 124 | 114 | 97 | 127 | 130 | 133 | 136 | 140 | 143 | 9% | 8% |
| North America | 128 | 132 | 133 | 124 | 83 | 112 | 113 | 114 | 115 | 116 | 118 | 8% | 7% |
| South America | 45 | 45 | 48 | 47 | 38 | 44 | 45 | 46 | 46 | 47 | 48 | 3% | 3% |
| Africa | 18 | 19 | 19 | 17 | 15 | 17 | 18 | 19 | 19 | 20 | 21 | 1% | 1% |
| Middle East | 15 | 15 | 16 | 17 | 17 | 19 | 24 | 24 | 25 | 26 | 26 | 1% | 2% |
| Oceania | 9 | 9 | 9 | 8 | 6 | 8 | 9 | 9 | 9 | 10 | 10 | 1% | 1% |
| World | 1,147 | 1,251 | 1,351 | 1,329 | 1,211 | 1,414 | 1,463 | 1,511 | 1,575 | 1,629 | 1,692 | 100% | 100% |

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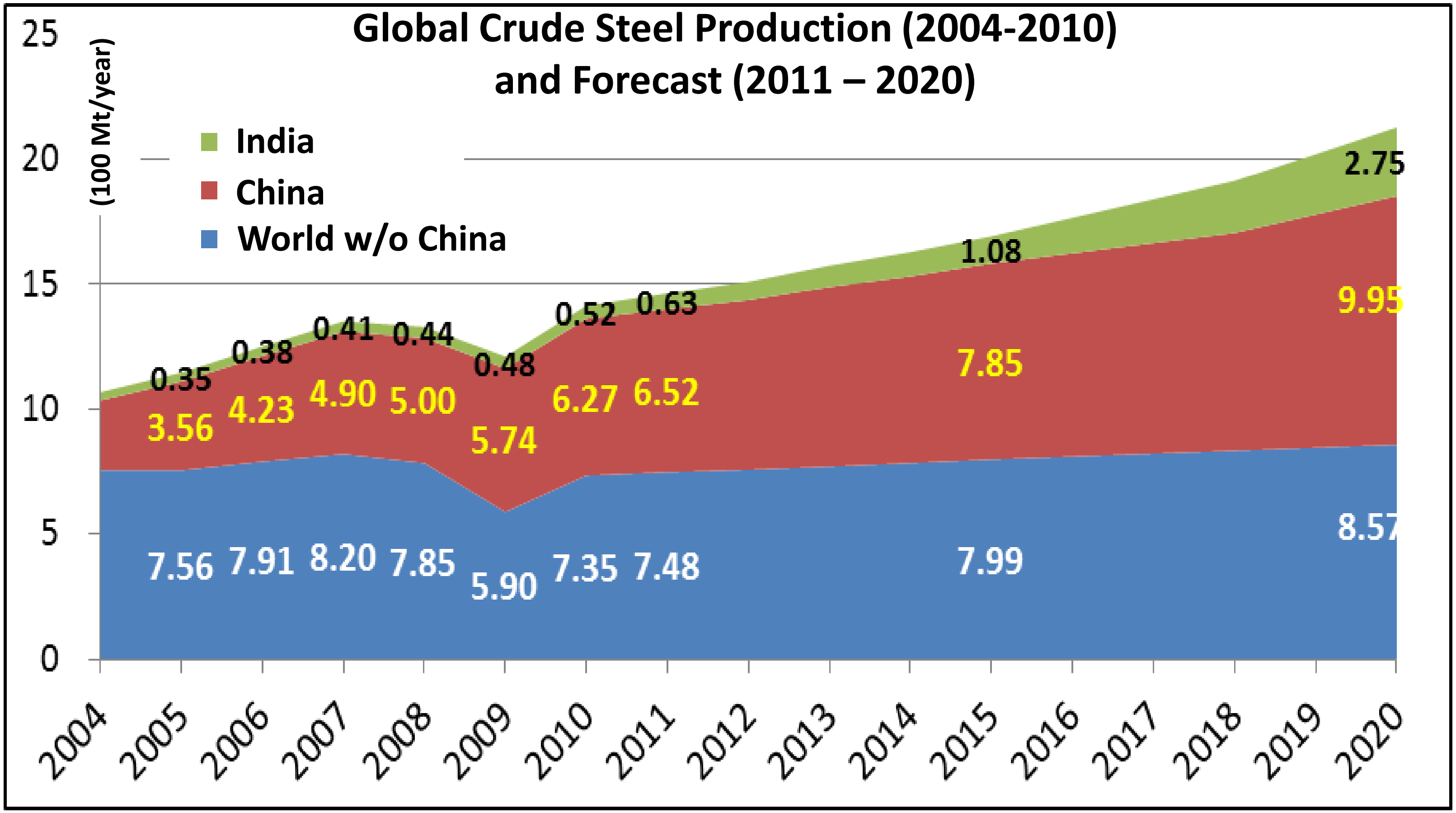

# Current Status of the Chinese Steel Industry and Its Prospect

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- Steel production and development of steel companies

**Forecast of China's Crude Steel Production Volume & Concentration**

| Crude Steel Production Volume | 2009 | 2015（E） | 2020（E ） |
|---|---|---|---|
| China 's domestic total | 5.68 | 6.8 | 7.1-7.6 |
| Top-10 steel companies | 2.47(43.5% ) | 4.08(60%) | 4.97-5.32(70%) |
| Bottom 6 of the top-10 companies | 1.08 (Averagely 18 Mt) | 1.5 (Averagely 25 Mt) | 1.8 (Averagely 30 Mt) |
| Top 4 of the top-10 companies | 1.39 (Averagely 34.75 Mt) | 2.58 (Averagely 64.50 Mt) | 3.17-3.52 (Averagely 79.25-88Mt) |

# Current Status of the Chinese Steel Industry and Its Prospect

## 4. Iron ore demand analysis

- Demand for iron ore - Global and China

**China's Production Volumes of Crude Steel, Pig Iron V.S. Imorted Iron Ore (2000 – 2012) (in 10,000 tonnes)**

| Year | Crude Steel Production | Pig Iron Production | Imported Iron Ore |
|---|---|---|---|
| 2000 | 12850 | 13101 | 7129.46 |
| 2001 | 15266 | 15510 | 9156.61 |
| 2002 | 18155 | 17079 | 11149.6 |
| 2003 | 22012 | 21373 | 14812.9 |
| 2004 | 27246 | 25184 | 20808.9 |
| 2005 | 35579 | 34473 | 27526.1 |
| 2006 | 42102 | 41363 | 32630.3 |
| 2007 | 48924 | 46945 | 38306.3 |
| 2008 | 50049 | 46468 | 44409.8 |
| 2009 | 56784 | 54375 | 62789 |
| 2010 | 62665 | 59021.8 | 61877 |
| 2011 | 68327 | 62969.3 | 68647 |
| 2012 | 71654 | 65791 | 74402.3 |

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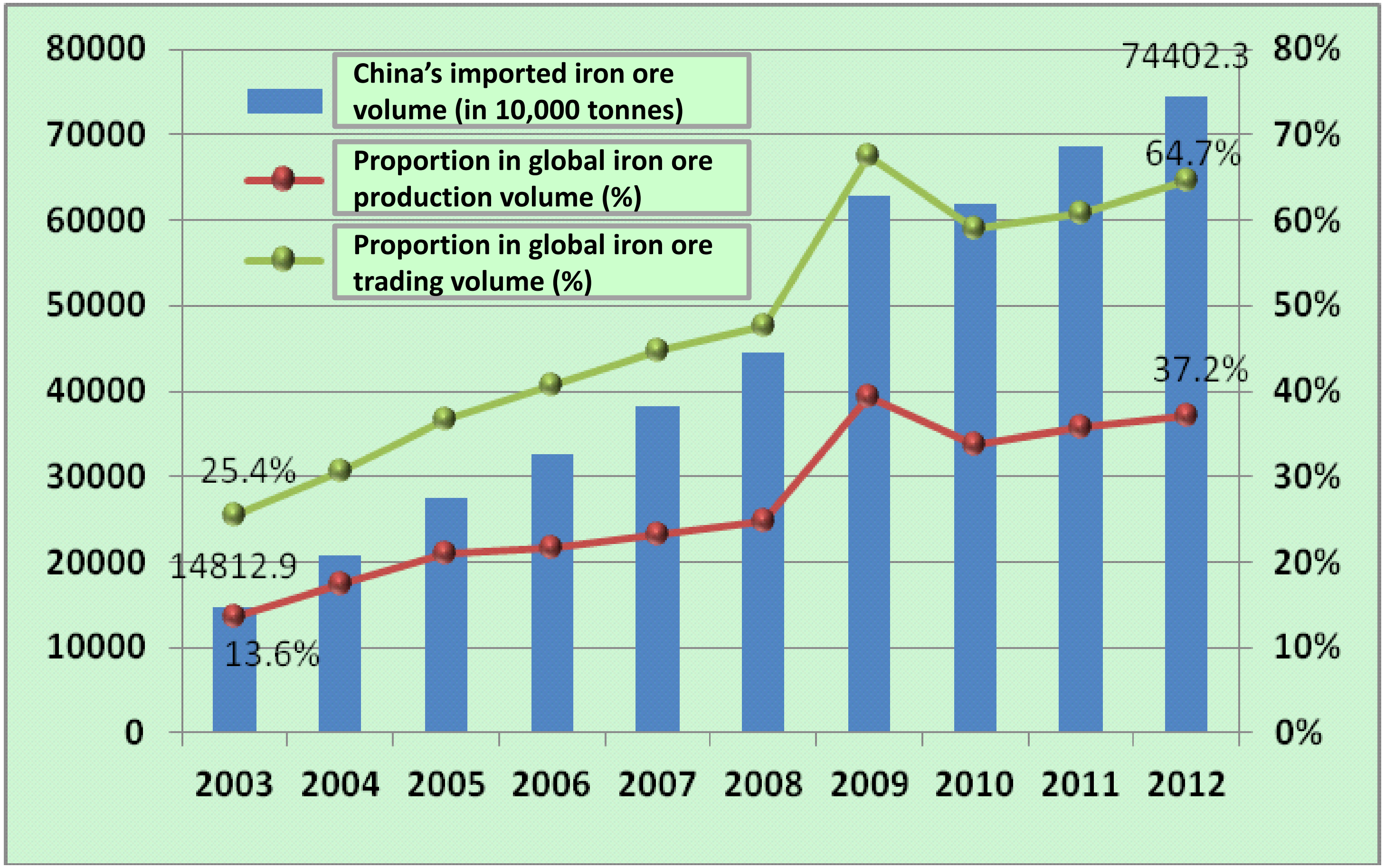

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4. Iron ore demand analysis

- Iron ore market prices

**Average Price of Iron Ore Imported to China (USD/tonne)**