



Indian Steel Industry: Present Scenario & Future Outlook

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3rd Largest Producer of Steel Globally



On track to become 2nd largest Producer after China



Largest Producer of DRI Globally



Steel industry contributes over 2% to India's GDP



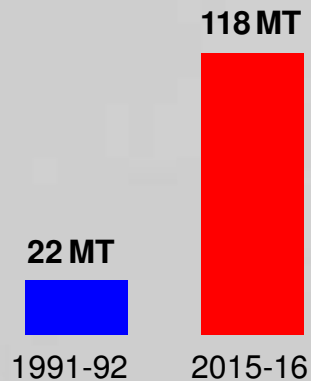
~10 Million employed in Steel/Allied sectors



>50% capacity in secondary sector with more than 2000 units

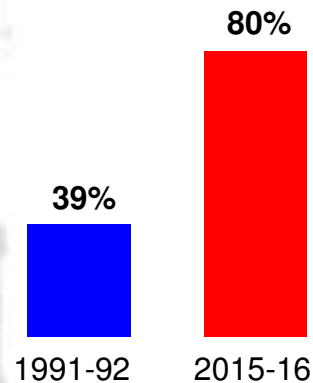
Witnessed Rapid Structural Changes post 1991-92

Steel Capacity



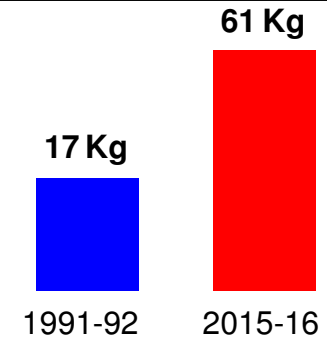
Steel capacity grew from 22 MT in 1991-92 to 118 MT in 2015-16

Contribution of Private Sector in Steel Capacity



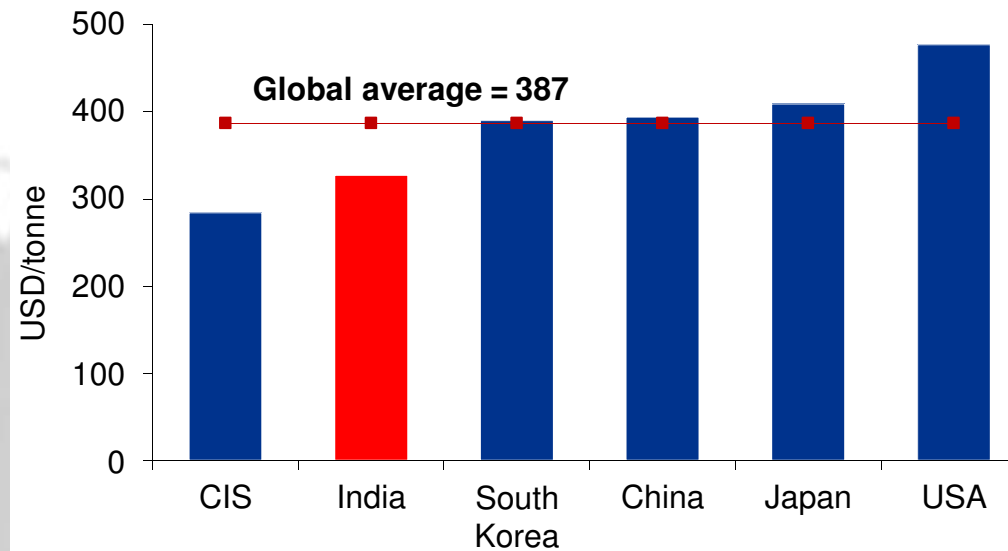
80% capacity in private sector in 2015-16; grown from 39% in 1991-92

Per Capita Consumption



Per capita consumption increased from 17 Kg in 1991-92 to 61 Kg in 2014-15

Most Competitive Globally; 2nd only to CIS



Source: World Steel Dynamics

Inherent Advantage due to



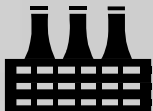
5th largest resources of iron ore globally



Large resources of thermal coal

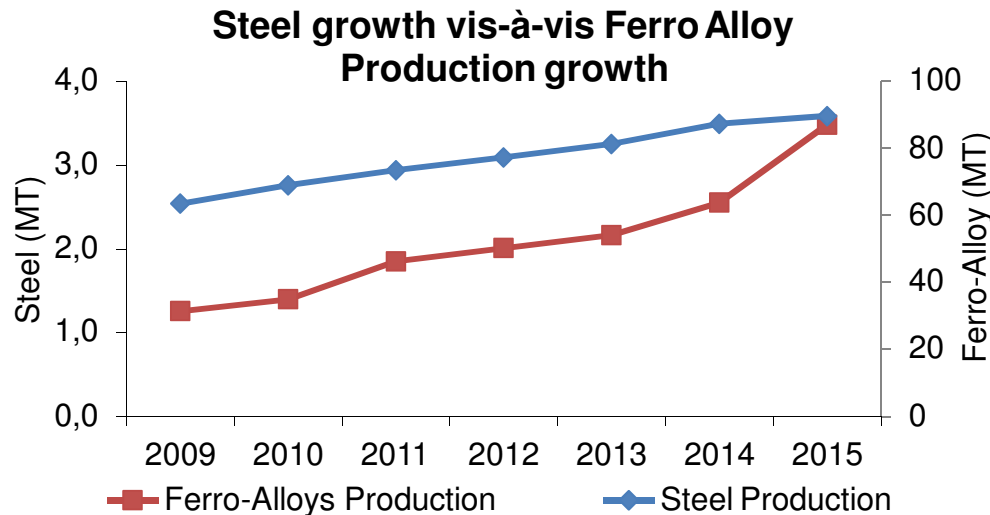


Young workforce, low labor cost



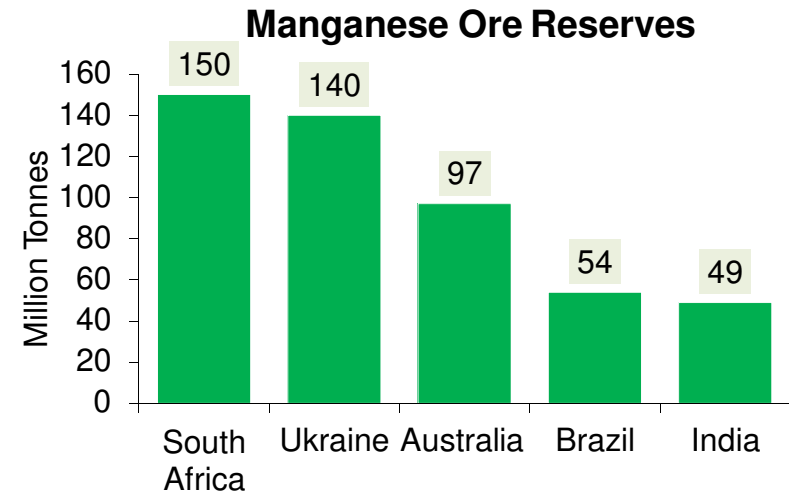
Large domestic market; Not dependent on exports

Key driver for allied industries such as Ferro-Alloys



Source: Industrial & Association Sources

- Growth in steel sector has led to growth in Ferro-Alloys sector
- Indian ferro-alloys industry accounts ~ 10% of the world's production
- Production capacity increased from 4 MT in 2009-10 to 5.15 MT in 2015-16

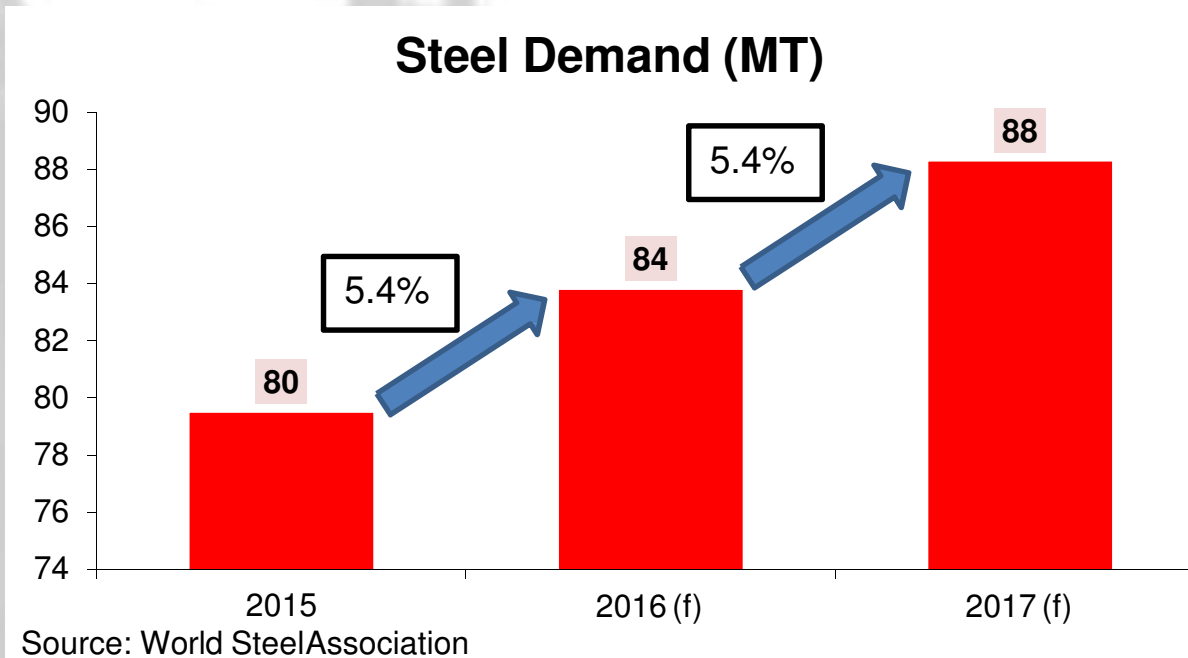


Source: IMYB 2013, Mineral Commodity Summaries, 2014

- Manganese Alloys account ~ 60% of the overall capacity
- Driven by availability of large reserves of manganese ore

Growth in steel demand will lead to growth in Ferro-Alloy consumption

Demand for steel expected to grow further



DRIVERS

Per capita steel low as compared to global average = Immense opportunity for growth

GDP expected to grow five fold by 2032

Low steel penetration in rural areas; expected to increase in future

Manufacturing sector to grow from 17% to 25% by 2025 in contribution towards GDP

Taking proactive steps to address issues in steel sector

Overcapacity

Demand Generation

Affordable Raw Material

New Steel Products

Sustainable Development

Overcapacity

Global Scenario

- Global overcapacity >600 MT
- Global production declined by ~3% in 2015
- Capacity shutdowns, job cuts and property sale offs in various countries

India

- National Steel Policy in place to guide rational capacity addition
- Long term vision developed for growth of the steel industry
- Developing a self-sustained domestic market for steel

Demand Generation

Global Scenario

- Demand in major steel consuming countries slowed down
- Developing countries- major consumers of steel, not growing at the rates observed in past decade
- Major steelmaking countries witnessed negative growth
- Steel facing substitution by other materials in various applications

India

- **Make in India** - to drive manufacturing growth
- **Power for All** - to drive electricity sector growth
- **Smart cities** - to drive urbanization
- **Planned investment of USD 34 Bn in infrastructure**- to drive growth of infrastructure sector

Affordable Raw Material

Global Scenario

- Volatility in market; fluctuations in iron ore and coal prices- increases hedging cost
- Regulatory challenges in mine acquisitions

India

- Enacted **MMDR Amendment Act, 2015** for increased availability of iron ore and manganese ore in the country
- Enacted **Coal Mines (Special Provisions) Act, 2015** for increased availability of coal
- Increased emphasis on beneficiation and agglomeration of iron ore

New Steel Products

Global Scenario

- Need for light weight, high strength steel; driven by-
 - Stringent environment norms
 - New generation of transport
 - Construction in earthquake prone zones
 - Advances in defence, space and other strategic sectors
 - Changing requirements in aviation and renewable energy
 - Changing Safety norms for automobiles

India

- Steel Research & Technology Mission of India (SRTMI) established
- Collaborations with foreign players
- Pursuing development of-
 - CRGO Steel sheets
 - High grade steels for automobiles
 - High strength low alloy structural grade steels
 - High strength micro-alloyed grade steels

Sustainable Development

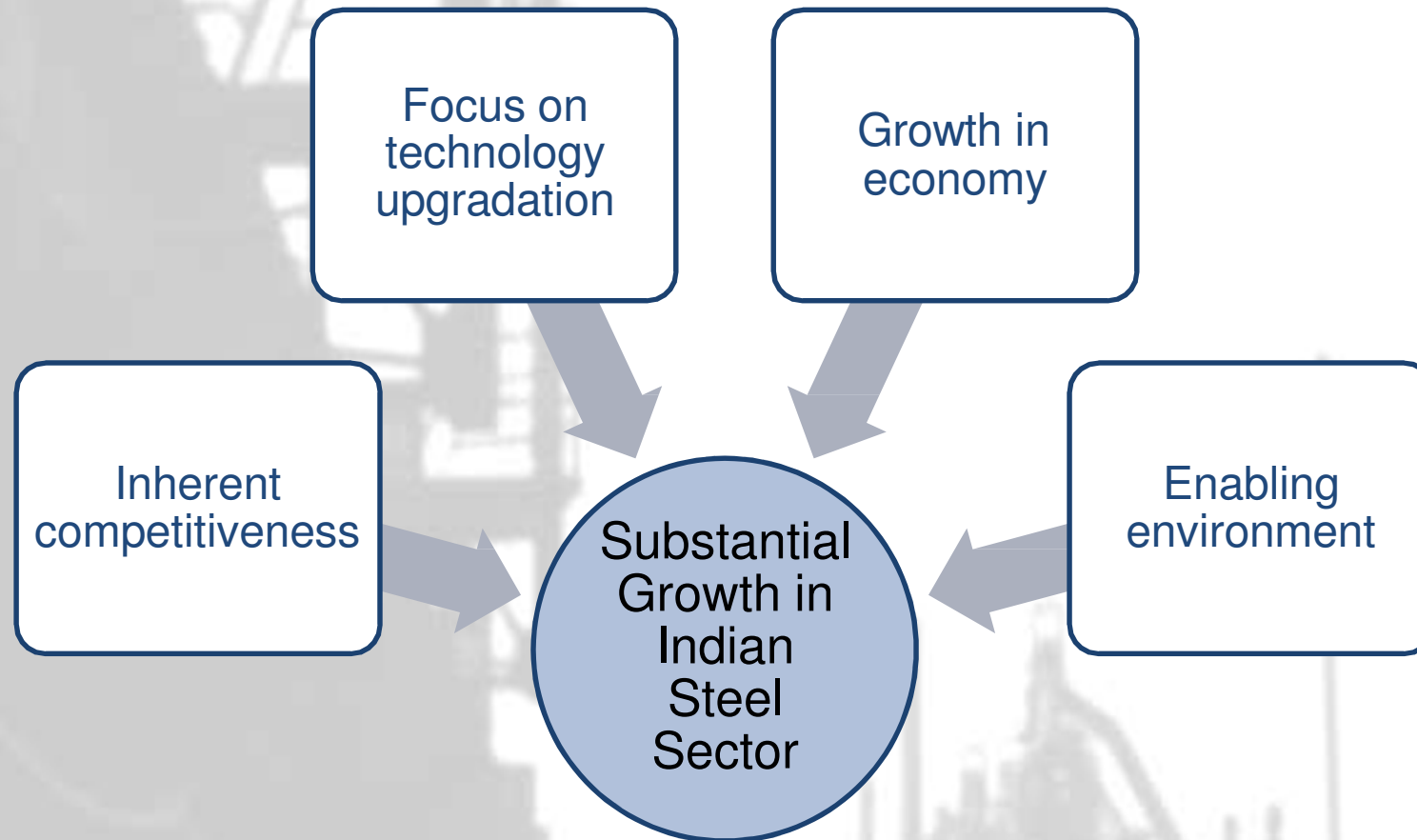
Global Scenario

- Controlled GHG emissions
- Stringent regulations on Air Pollution and Effluent Discharge
- Reducing energy intensity in steelmaking
- Reducing use of fossil fuels for meeting energy requirements

India

- Stringent efficiency parameters specified
- Global Superior Energy Performance Partnership (GSEP)
- NEDO Model Projects
- UNDP-AUSAID-MOS Steel Project
- National Action Plan on Climate Change
- Committed to reducing GHG emissions

Future of Indian steel industry



The background of the slide is a blurred industrial scene, likely a refinery or chemical plant, with various structures, pipes, and towers. A solid dark blue horizontal bar is positioned across the middle of the image, containing the text "Thank You" in white.

Thank You