



# Opportunities for U.S. Companies in Mining Sector of India With Special Reference to Coal Mining

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## BACKGROUND

- **Endowed with significant mineral resources**
  - **Global Rank- 1<sup>st</sup>. in mica, 2<sup>nd</sup>. In barytes, 3<sup>rd</sup> in coal & lignite, 4<sup>th</sup> in iron ore, 4<sup>th</sup>. In chromite, 6<sup>th</sup> in bauxite and manganese ore, 10 in aluminum and 11<sup>th</sup> in crude steel**
  - **Deposits- iron ore 25.2 billion tons (13% of global), coal 257.4 billion tons (10% of global), bauxite 3.3 billion tons (7.5% of global resources)**
  - **73% of mining is in coal**
- **Mining sector employs 1.1 million people!**

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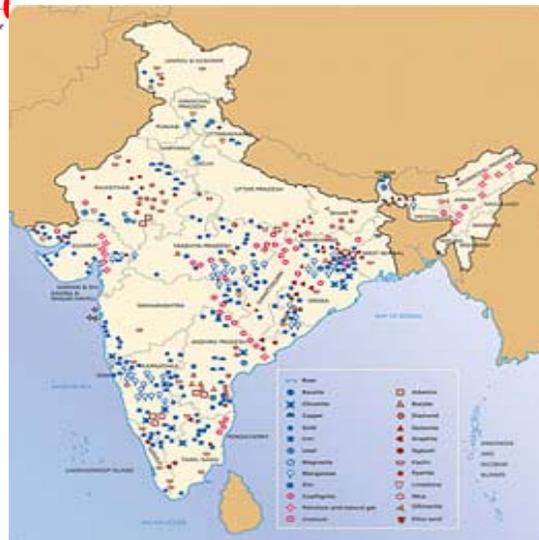
## MARKET SIZE

- **90 minerals from 3100 mines**
- **11 states account for 90% of operational mines**
- **Value of mineral production in 2008- \$20 billion**
- **Industry turnover projection: \$30 billion by 2012 (2.5% of GDP)**
- **Industry growth rate in 2008: 9%**
- **Estimated market for mining and mineral processing equipment: \$3 billion. Global market: around \$20 billion**

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## MINING MAP OF INDIA



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## MARKET DRIVERS

- **Growth in energy demand => growth in coal-based thermal power generation**
- **Growth in infrastructure sector => tremendous growth in demand for steel**
- **Government relaxing controls and inviting private participation in mining**
- **Backward integration of manufacturing companies in to mining for security of supply**
- **Easy options running out; technology and productivity becoming more important**

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## MARKET OPENING UP

- **Foreign and private investment allowed in most sub-sectors**
- **Number of manufacturers in the organized sector, both public and private, for underground and surface mining equipment**
- **Most of the international equipment and mining companies doing business / taking interest in the India market**
- **Nearly 200 coal blocks have been allotted to end-user companies**
- **Government-owned companies responsive up to issues raised by foreign companies**
- **New Mineral Policy announced**
- **Opportunity Areas:**

**EXPORT, INVESTMENT, TECHNOLOGY COLLABORATION**

**Investment of \$21 billion in opencast mining and \$5 billion in underground mining required to meet India's coal production target for 2025**

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## ROLE OF GOVERNMENT

### **Mining a predominantly government undertaking till 90s**

- **The public sector contributes over 85 percent of the total value of mineral production.**
- **Ministry of Mines- survey and exploration of all minerals (other than natural gas, petroleum, and atomic minerals); for mining and metallurgy of non-ferrous metals like aluminum, copper, zinc, lead, gold, nickel; administration of Mines Act 1957 in respect of all mines and minerals except coal, lignite, petroleum and natural gas**
- **Ministry of Coal- governs coal mining**

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## KEY ORGANIZATIONS

**Coal- Coal India Limited (with its 8 subsidiaries) + captive mine lease owners (recently granted)**

**Copper- Hindustan Copper (Sterlite / Hindalco has only smelting and refining operations in India)**

**Aluminum-NALCO/Hindalco/Vedanta (BALCO/MALCO)**

**Iron Ore- NMDC, SAIL, Orissa Mining Corporation**

**Zinc- Hindustan Zinc Limited**

**Uranium- Uranium Corporation of India Limited**

**Survey/Exploration- Geological Survey of India; Mineral Exploration Corporation of India Limited**

**Regulation/Conservation- Indian Bureau of Mines**

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## INDIA- COAL

- **Proven geological reserve: 103 Billion T**
- **Coal output FY08: 456 Million T**
- **Projected Demand 2012: 731 Million T**
- **Demand 2032: 1600-2600 Million T**
- **CAGR required till 2032: 6%**
- **Predominantly open cast mining; renewed emphasis on underground mining**

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## INDIA- COAL

- **Contributes 55% of energy need (global average 27%)**
- **High ash content**
- **Major investment required to meet 2025 target**
- **Coal India produces 85% of India's coal and offers coal at much lower price than international markets**
- **India imported 20 Million tons of coking coal in 2008; projected import in 2012: 50 million tons**
- **Serious capacity addition needed in coal preparation infrastructure**

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## BEST PROSPECTS

- **Long wall loaders and draglines**
- **Excavators, shovels and coal/rock cutters**
- **Feeder crushers and special stage loaders**
- **Continuous mining technology**
- **Jumbo drills and long wall machinery**
- **Hydraulic/friction props and chocks**
- **Screening, washing, crushing and grinding equipment**
- **Underground communication and safety systems**
- **Coal beneficiation, washeries and gasification plants**
- **Coal Bed Methane**
- **Underground coal gasification**
- **Mine safety equipment**
- **Recovery of coal from abandoned underground mines**

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## KEY SUPPLIERS

- **Over 100 manufacturers in the organized sector, both public and private, for underground and surface mining equipment. 71 % of the sector is comprised of PSUs while the remaining 29% comprises of private limited, JVs and closely held private limited companies.**
- **Most of the international suppliers and technology leaders like Case, Caterpillar, Hitachi, Ingersoll-Rand, JCB, John Deere, Joy Mining Machinery, Komatsu, Liebherr, Poclain, Terex, Bucyrus and Volvo are present in India as joint venture companies, or have set up their own manufacturing facilities, or marketing companies**

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## NOT AN EASY MARKET

- **Cannot breeze in to the market and start selling overnight (ranked 122 in IFC's (ease of) Doing Business 2009 report- out of 181 countries. Singapore Ranks 1)**
- **Business environment not similar to what you are familiar with (Tax Payments: 60 payments, involving 271 hours / year. In U.S., 10 payments involving 187 hours)**
- **Disputes relating to Contracts, Intellectual Property Rights not unknown (Enforcing Contract: 1420 days / 46 procedures / cost of claim 39.6%. In U.S. it is 300 days / 32 procedures / cost of claim 9.4%)**

**FOR MOST COMPANIES HOWEVER,  
PROSPECTS OUTWEIGH PROBLEMS**

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## MARKET ENTRY

- **Relationships and personal meetings- V. Imp!**
- **Due diligence recommended**
- **Evaluate market entry options**
- **What about after-sales service?**
- **Understanding Indian business law**
- **Need for local expertise**
- **Selling to Government- 3Ps!**
- **Define exit plan and procedure**
- **Stay engaged**

**READ MORE: [www.BuyUSA.gov/en/ccg.html](http://www.BuyUSA.gov/en/ccg.html)**

- **CS India support available!**

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## U.S. COMMERCIAL SERVICE CAN HELP

- **7 offices, 50+ staff**
- **Matchmaking in regional markets**
- **Advocacy**
- **Due Diligence services**
- **Briefing: on-site/ webinars/ videoconference**
- **Contact us:**  
[www.buyusa.gov/india](http://www.buyusa.gov/india)



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## CS INDIA INITIATIVES ON MINING- 2008

- **U.S. Pavilion in IME Show, Jan 17-20, 2008; Kolkata**
- **Delegation to Coal Prep 2008, Kentucky, April 2008**
- **Gold Key and other services for new-to-market companies**
- **Webinar on India Market Opportunities; July 2008**
- **Market Research reports on Coal Beneficiation, Mine Safety Equipment, Specialty Chemicals for Mining**
- **Publicizing upcoming mining projects to U.S. companies**
- **Large delegation to MINExpo 2008**
- **U.S. Pavilion in partnership with Mining Media at IMME Show; Nov 5-8, 2008; Kolkata**
- **Webinar on India Market Opportunities; Jan 2009**

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## UPCOMING EVENTS

- **IME 2010- January 2010; Kolkata**
- **IMME 2010- November 2010; Kolkata**
- **Possible delegation to Coal Prep 2009; April 2009; Kentucky**

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## LEARN MORE

- **Ministry of Mines:** [www.mines.nic.in](http://www.mines.nic.in)
- **Ministry of Coal:** [www.coal.nic.in](http://www.coal.nic.in)
- **Coal India Limited:** [www.coalindia.nic.in](http://www.coalindia.nic.in)
- **Power Sector:** <http://powermin.nic.in>
- **Asia Pacific Partnership:** [www.asiapacificpartnership.org](http://www.asiapacificpartnership.org)
- **Customs Duty:** <http://www.cbec.gov.in/>
- **India Mining:** [www.infomine.com/countries/india.asp](http://www.infomine.com/countries/india.asp)
- **Indian Bureau of Mines:** [www.ibm.nic.in](http://www.ibm.nic.in)
- **IFC Doing Business Report:** [www.doingbusiness.org](http://www.doingbusiness.org)
- **USCS Market Research Reports:** [www.export.gov/mrktresearch](http://www.export.gov/mrktresearch)

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[www.buyusa.gov/india](http://www.buyusa.gov/india)

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