Coal: Entering the Early Stages of a Long-Term Supercycle

Coal: The World’s Fastest Growing Fuel for the Past Decade

Growth in Major Energy Forms (1999–2009)

- Coal +46%
- Natural Gas +27%
- Oil +10%
- Hydro +25%
- Nuclear +7%


Coal is the Affordable, Stable Fuel

Natural Gas 50% More and Oil Three Times the Cost of Coal in 2010

International Fuel Prices
Good Energy Access is a Human Right and Rapidly Rising Need

3.6 Billion People Have No or Only Partial Access to Electricity


Global Coal Use and Economic Growth: Near Perfect Correlation

Coal-Fueled Electricity in 2030: Equal To Current Power in the Western Hemisphere, The EU and Five Times Japan

Coal Grows to Largest Primary Energy Source by 2020

Global Primary Energy Use

- Total Global Primary Energy
  - Total energy growth 2.8% (historical 10 year CAGR 2.4%)%
  - Coal is the dominant share of primary energy at 33% by 2020
  - Coal is the fastest growing at 4.1% due to total electricity growth of 3.8%

Coal by Sector

- Fastest growing primary energy source at 4.1%
- ~65% of coal use related to electricity
- ~15% of coal use for making steel: growing at 4.8%
- ~10% of coal use for making cement; growing at 6.2%

Total Global Primary Energy

- Other Renewables
- Hydro
- Nuclear
- Coal
- Natural Gas

Electricity Demand Increases ~50% by 2020 Fueled by Coal

Developing World Electricity Growth Will Drive Higher Coal Demand; ~40% of Electricity Mix in 2020

- Electricity Demand Increases ~50% by 2020
- Fueled by Coal

Global Electricity Consumption

- Fuel (% Elec. Mix in 2020)
  - Oil (3%)
  - Renewables (8%)
  - Nuclear (11%)
  - Hydro (15%)
  - Natural gas (22%)
  - Coal (41%)

Asia Represents 90% of 3.5 Billion Tonnes Long-Term Global Demand Growth

China and India Lead Long-Term Coal Demand Growth

Growth 2008 - 2020 (Tonnes in Millions)


Asia-Pacific Dominates Supply Growth

Most Growth from Existing Supply Regions

Growth 2008 - 2020 (Tonnes in Millions)

Outlook for Coal Markets & Industry

*International Energy Agency*

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