Coking Coal Market
Striving to meet demand

Platts 34th Annual Coal Marketing Days
September 19, 2011
Pittsburgh, Pennsylvania

We Manage the Process
From the Ground Up
Topics for Discussion

» Demand for Met Coal – Strong Growth
  • Economic Recovery
  • Significant Themes / Events

» U.S. Met Coal Participation – Strong Growth
  • Increased production of U.S. met coal
  • Supply chain challenges

» U.S. Exports to Asia – Sustainable
  • Structural shift in seaborne met trade
  • Wider acceptance / Customer diversification strategy
  • Creative supply chain improvements
Company Profile - Xcoal

Privately held company specializing in the export of U.S. origin hard coking, PCI, and anthracite coals to integrated steel mills throughout the world

FY 2011 Forecast:

» Revenues in excess of $3.0 billion

» Exports of 13-15 million tons of U.S. origin coking coal and anthracite

» Contracts for 15-17 million tons of rail and throughput capacity to ensure reliable and timely deliveries

» Supplier of low, mid, and high volatile coking coals

» Approximately 75% of sales to customers in the Asia Pacific region

» Long-term contracts of 3-5 year duration with major integrated steel mills in Asia
Economic Recovery – Two Speeds

» Emerging Economies:
  • Rapid and steady economic growth
  • 6%-9% Annual GDP growth
  • Moderate and manageable debt levels
  • Inflation concerns
  • Overheating risk

» Advanced Economies:
  • Slow to moderate economic growth
  • 1.0%-2.0% Annual GDP growth
  • High debt levels and credit risk
  • Low to moderate inflation
  • Stagnation risk
Significant Themes / Events

» 2011 looking like 2010 – around the same time last year, a global economic slowdown present
  • Far too early to draw any negative conclusions

» We believe that the global economies will not experience a double dip recession
  • The global economic expansion appears strong enough to withstand the major known uncertainties

» Signs of Recovery
  • Global met coal trade
  • Steel & iron production

» Rains in Queensland had a significant international impact
  • Highlighted exposure to Australian supply (Japan, India, etc.)

» Higher levels of U.S. seaborne met tonnage needed to balance the market
  • US export levels returned to levels not achieved since the 1990’s
Significant Themes / Events (cont.)

» Long term structural weakness in the $USD should help drive exports and drive U.S. recovery & global rebalancing
  • Since 2008:
    › AUD appreciated 50% against $USD
    › CAD appreciated 25% against $USD

» Consolidation in coking coal space continues – met reserves still affordable
  • Alpha / Massey (USA)
  • Arch / ICG (USA)
  • James River / L&K (USA)
  • Jim Walters / Western Coal (USA & Canada)
  • Peabody & ArcelorMittal / Macarthur Coal (Australia)

» In this environment, commodity prices will trend higher – however with potential continued volatility
World Steel Production
World Iron Production – Top 40 Countries
(January 2010 through June 2011)

Source: IISI
Pig Iron Production - Asia
January thru July 2011 (thousands of tonnes)

China: +9.4%
India: -2.3%
Japan: -1.0%
South Korea: +22.4%
Taiwan, ...: +49.4%
Asia: +8.7%
Pig Iron Production-Regional Producers
January thru July 2011 (thousands of tonnes)

- European Union (27): +1.3%
- C.I.S.: +2.6%
- North America: +5.9%
- South America: +12.0%
China

- Combination of interest rate hikes and reserve ratio adjustments seem to have controlled inflation while creating an environment for a “soft landing” of the Chinese economy
  - Inflation (annualized basis) decreased to 6.2% in August

- GDP growth forecast to be 9.3% in 2011

- Foreign Direct Investment has increased 17.7% year-on-year (thru August)

- Fixed Asset Investment has increased 25% year-on-year (thru August)

- China M2 Money Supply increased 13.5% year-on-year (August)
China Statistics

Growth in Trade Indicators

New Lending & M2 Money Supply

Asia - Demand

» Korea – integrated steel mills operating at full capacity
  • Recent fire at Gwangyang not expected to disrupt deliveries

» Japan – despite the economic consequences of the earthquake and tsunami, the Japanese steel industry is forecasted to produce 105-110 million tons of steel in 2011

» Chinese Steel Production
  • 2010 - 627 million tons
  • 2011 - +711 million tons based on current daily operating rates of ~2.0 million tons/day
  • As a comparison, the U.S. production:
    › Approximately 88.5 million tons of steel in 2010
    › Producing at an annualized rate of 93 million tons in 2011
Seaborne Coking Coal Update

» Australia
  • BMA labor strike action affecting production
  • Some surface mines still holding excess water in pits
  • Carbon Tax to apply to coal production
  • Mineral Resource Rent Tax (MRRT)
  • Labor Shortage
  • Rail and port capacity limits expansion opportunities

» Canada
  • Rail and port capacity limits expansion opportunities

» Mozambique / Mongolia / Russia (Elga)
  • Several years before meaningful quantities enter the market
U.S. Coking Coal Update

» Production issues at home
  • JWR production not meeting expectations
  • Cliffs Natural Resources
    › Hurricane impact
    › CO issues at Pinnacle mine

» Infrastructure tested
  • Met coal is no longer the only player in town
    › Steam exports YTD represents 35% seaborne exports
  • Port demand stretching capacity limits
  • Additional railway capacity requires innovative operating practices and close cooperation among participants in the supply chain

» Creative supply chain improvements necessary to ensure stable supply
Northern Appalachia contribution is expanding. During 2011, NAPP is expected to produce 20 million MT of which 16 million metric tons exported

U.S. Coking Coal Mine Capacity Levels
(2007 through 2011)

- Includes “crossover” tons
- Definition of coking coal has changed
- NAPP now a major contributor
North American coke makers need an additional 0.5 – 1.0 million tons of coking coal (Xcoal estimate)
U.S. Coking Coal Exports
(2008 through 2011)

50% increase in coking coal exports from the U.S. in CY2010 and another ~15% in CY2011 (Xcoal estimate)
U.S. Coking Coal – Export vs. Domestic
(1973 through 2011)
U.S. East Coast – Coking Coal Exports
(January 2009 through July 2011)
U.S. East Coast – Coking Coal Exports

(Asia Focus)
All segments of the supply chain, i.e. mines, railways, barge lines, and terminals, are responding to the significant increase in demand.
Top 10 U.S. Exporters – YTD July 2011
(East Coast Exports)

MT (000)

Xcoal 7,776
Alpha
Integrity
Consol
Massey
Arch
Peabody
Patriot
L&K
Mechel

% of Total Exports

Xcoal, 28%
Alpha, 23%
Integrity, 11%
Consol, 10%
Massey, 6%
Peabody, 4%
Arch, 6%
Patriot, 4%
L&K, 4%
Patriot, 4%
## U.S. Origin Coking Coal to Customers in Asia

*(FY 2011 / 2012 Forecast)*

<table>
<thead>
<tr>
<th>Destination</th>
<th>Metric Tons (rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>7,800,000</td>
</tr>
<tr>
<td>China</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Korea</td>
<td>3,500,000</td>
</tr>
<tr>
<td>India</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Taiwan</td>
<td>300,000</td>
</tr>
<tr>
<td><strong>Total Demand</strong></td>
<td><strong>19,100,000</strong></td>
</tr>
</tbody>
</table>

The total demand represents an increase of approximately 70% from CY2010 levels.
## U.S. East Coast - Coal Export Tonnage

(YTD July 2011 metric tonnes)

<table>
<thead>
<tr>
<th>Rank 2011</th>
<th>Country</th>
<th>2011 - YTD July</th>
<th>2010 - YTD July</th>
<th>% Change - YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NETHERLANDS</td>
<td>4,194,684</td>
<td>2,904,361</td>
<td>44%</td>
</tr>
<tr>
<td>2</td>
<td>BRAZIL</td>
<td>3,761,356</td>
<td>3,114,227</td>
<td>21%</td>
</tr>
<tr>
<td>3</td>
<td>JAPAN</td>
<td>3,233,046</td>
<td>1,629,000</td>
<td>98%</td>
</tr>
<tr>
<td>4</td>
<td>KOREA</td>
<td>3,040,738</td>
<td>1,595,687</td>
<td>91%</td>
</tr>
<tr>
<td>5</td>
<td>CHINA</td>
<td>2,724,697</td>
<td>1,789,575</td>
<td>52%</td>
</tr>
<tr>
<td>6</td>
<td>ITALY</td>
<td>2,666,216</td>
<td>1,301,256</td>
<td>105%</td>
</tr>
<tr>
<td>7</td>
<td>INDIA</td>
<td>1,878,204</td>
<td>1,539,056</td>
<td>22%</td>
</tr>
<tr>
<td>8</td>
<td>FRANCE</td>
<td>1,845,352</td>
<td>2,284,991</td>
<td>-19%</td>
</tr>
<tr>
<td>9</td>
<td>UKRAINE</td>
<td>1,506,619</td>
<td>1,329,266</td>
<td>13%</td>
</tr>
<tr>
<td>10</td>
<td>UNITED KINGDOM</td>
<td>1,194,620</td>
<td>1,769,858</td>
<td>-33%</td>
</tr>
</tbody>
</table>
### U.S. East Coast - Coal Export Tonnage

(YTD July 2010 vs. YTD July 2011)

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<tr>
<th>2010 Rank</th>
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<td>1</td>
<td>BRAZIL</td>
</tr>
<tr>
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<table>
<thead>
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<th>2011 Rank</th>
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U.S. Terminal Expansions & Improvements

» Existing Terminal Improvements
  • 3-6 month time horizon
  • Track reconfigurations
  • Operational efficiencies
  • Ground storage manipulation

» New Terminal & Rail Projects
  • “If you build it, will they come?”
    › Fairless Hills, PA
    › Charleston, SC
    › Tampa, FL
    › Others…
  • 3-5 year time horizon
  • Capital intensive
The challenge for U.S. origin coal is to ensure a sustainable, efficient, and competitive supply chain to customers in Asia.

In response to that challenge, Xcoal implemented the following “top-off” procedure:

- Load 180K – 200K DWT capesize vessel to ~125K
- Load 55K – 75K DWT belted self-unloading vessel
- The two vessels “meet” at a protected anchorage where the belted self-unloader transfers its cargo to the capesize vessel

The customers realize the benefit of lower cost ocean freight which reduces the delivered cost of the coal.

The loading terminal realizes the efficiency improvements and increased capacity resulting from the use of larger vessels.
Supply Chain Improvements (cont.)
Creative Logistic Solutions

Xcoal’s “top off” operation was recently recognized by World Coal magazine in its Annual Review of major coal projects.
Market Volatility

» 2010 – move to quarterly pricing from annual pricing
  • Australian HCC prices range from US$225-$200/MT FOB T

» Q4 2010 through Q1 2011 – flooding affects Australian coking coal production for the second consecutive year

» 2011 – shift to spot pricing from quarterly pricing
  • Australian HCC prices range from US$330-$315/MT FOB T

» 2011 – effort to introduce price index for coking coal

To ensure security of supply and diversification, steel mills in Japan and Korea sign long term contracts for U.S. origin coal

» July-September HCC price settled at US$285/MT FOB T but…
  • Many Australian mines continue to produce below capacity
  • Potential supply disruption due to the rainy season in Australia
  • Increased purchases from China and India after a quiet 1H then…
  • Why would the HCC price for January-March 2012 quarter fall?
Summary (1)

» Return of U.S. origin coking coal as a long term, sustainable supply source for the international market
  • U.S. companies with potential to increase coking coal production have responded

» Fundamentally, the global coking coal market appears tight

» Higher levels of U.S. seaborne met tonnage needed to balance the market

» Disruption in coal supply from Australia in late 2010 early 2011 highlight how exposed the met market is to Australian supply

» Expect met coal exports from the U.S. will remain strong over the year but see potential for some moderation as Australian supply recovers
Summary (2)

» Met coal consumers worldwide implementing diversification strategy

» Renewed merger activity and investments at home and abroad

» Although met coal demand expected to grow in ROW, majority of growth expected to come from India & China

» China’s and India’s move to significant importers “structurally” changes the seaborne coking coal market
Credits

» American Iron & Steel Institute
» CRU Analysis
» International Iron and Steel Institute
» John T. Boyd Company
» Macquarie Research
» McCloskey Group
» T. Parker Host
» World Steel Association
» World Steel Dynamics
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