

## Multi-Company

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# COAL: Missing the Window

## Downgrading on Stubborn Stockpiles, Hostile Politics

- Day of reckoning deferred** – After maintaining a positive view on Coal thus far into 2007, we are growing concerned that pro-Coal datapoints are failing to translate into utility stockpile drawdown as NatGas takes share. If stockpiles remain elevated into Autumn, the standoff with utilities may persist into 2008, at which point election politics are likely to turn bestial for Coal.
- Seeing few near-term catalysts** – 2Q earnings are likely to be grim, featuring Midwest weather impacts on rail shipments, diesel/steel input escalation, new legal/regulatory mandates, stalled spot pricing, and precious little in the way of new 2008 contracts. Exports and metallurgical Coal will be the bright spots.
- Coal equities have delivered** – Our Coal composite has returned 24% YTD/07. This is shy of the Nonferrous group at +60% and Steel at +48%, but above the long-suffering Golds which are down -4.5%. Yet, Coals are 10 -15% off their peak.
- Downgrading to Hold** – We are downgrading Peabody, Arch, and Foundation, while shaving estimates/targets. We have no Buys in Coal, and recommend switching into select Non-ferrous, Steel, and Gold names, or elsewhere in energy.
- Structural barriers remain** – Looking ahead, Coal needs consolidation in the East, and cuts in the PRB. Until then, miners will lack sufficient pricing power to expand margins, opposite more-consolidated rails and utilities. We expect anti-Coal politics to intensify, with Carbon constraints almost certain to pinch.
- Please see note** – For company commentary, comp sheets, and Coal datapoints.

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 John H Hill, CFA

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 Graham Wark

Ticker	Rating		Target Price		Current Year Estimates		Next Year Estimates	
	Old	New	Old	New	Old	New	Old	New
ACI	1H	2H	US\$46.00	US\$39.00	US\$1.49	US\$1.22	US\$3.00	US\$2.27
ANR	2S	2S	US\$18.00	US\$23.00	US\$0.66	US\$0.66	US\$1.39	US\$1.39
BTU	1H	2H	US\$56.00	US\$52.00	US\$2.36	US\$2.17	US\$3.49	US\$3.13
CNX	2H	2H	US\$50.00	US\$50.00	US\$2.56	US\$2.48	US\$2.93	US\$2.93
FCL	1H	2H	US\$48.00	US\$44.00	US\$1.75	US\$1.61	US\$3.35	US\$2.76
MEE	2S	2S	US\$30.00	US\$27.00	US\$1.61	US\$1.51	US\$1.68	US\$1.60

See Appendix A-1 for Analyst Certification and important disclosures.

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## Downgrading Coal

We are downgrading Coal stocks across the board. After maintaining a positive view on Coal thus far into 2007, we are growing more concerned that datapoints are failing to translate into utility stockpile drawdown as NatGas has taken further share in power generation. At the same time, prophesies of a new wave of Coal-fired generation have vaporized, while clean Coal technologies such as IGCC with carbon capture and Coal-to-Liquids remain a decade away, or more.

### **Stubbornly high stockpiles defer the "day of reckoning" into 2008**

Our sense is that Coal has missed a critical time window, which potentially throws any recovery out-of-phase, with implications that could last for a year or more. If stockpiles remain elevated into autumn, they are likely to remain so, thus perpetuating the contract/pricing standoff with the utilities into 2008 – at which point election politics are likely to turn progressively more bestial for Coal. Candidates are already stepping up to "ban Coal," while company productivity/margins are likely to be structurally impaired by new regulatory mandates applied to a group perceived as landscape-disfiguring global warming bad-guys. We expect Coal prices to rise, but for earnings to falter.

### **Dim 2Q earnings, flat pricing, and rising costs suggest few near-term catalysts**

We have been positive on Coal thus far into 2007, and had expected to make this downgrade call in Aug or Sept at "100 degrees in Manhattan." However, we are advancing the timetable due to likely grim 2Q/07 earnings, and push-out of Coal price recovery into 2008. Our Coal composite is up +24% YTD, and it is difficult to see where new catalysts will arise in the next 3 – 4 months.

### **The industry needs consolidation in the East, production cuts in the PRB**

Company margins and earnings are likely to remain under pressure from 1) Darwinist imperatives to cut production, particularly from the PRB; 2) Higher input costs, especially for diesel which is running above the \$65/bbl-equivalent planning basis for most companies; and 3) Regulatory mandates such as the Chambers Decision relative to valley fills, strict interpretation of permits as seen at Massey, and new provisions to the Miner Act. These factors are likely to continue to drive Coal prices higher over time, yet this is likely to be matched dollar-for-dollar by cost escalation, with margins remaining thin.

While Coal miners cannot "pay for carbon," it is naive to believe that CO<sub>2</sub> legislation will fail to pinch margins. We believe this necessary industry will be allowed to operate, but windfall margin expansion is unlikely, as fee will follow regulation will follow mandate. Looking further ahead, the US coal industry badly needs: 1) Consolidation in the East, and 2) Production cuts in the PRB to reverse the capital-destroying paradigm that has caused the miners to largely sit-out the four-year commodity Supercycle. The commodity remains abundant (lacking the scarcity of Nickel, Copper, or Moly) and the miners are fragmented, while the rails and utilities are more consolidated.

### **Downgrading Peabody, Arch, and Foundation to Hold**

As a result of these short- and medium-term factors, we are downgrading Peabody Energy, Arch Coal, and Foundation Coal to Hold. The principal change in the models is slowing down the rate of PRB appreciation, to \$11.50/ton (8800 Btu/lb) in 2008 and \$13/ton in 2009 (prev \$13/14). Operating costs were tweaked higher to reflect diesel and steel input escalation. We are maintaining Consol, Massey, and Alpha at Hold.

Coal equities are up +24% YTD/07, but are 10 – 15% off their peak as stockpiles and prices have stalled.

## Estimate and Ratings Changes

We are making a series of estimate and ratings changes tied to reduced pricing expectations and higher input costs heading into 2008. The most important of these is slowing the rate of PRB appreciation, to \$11.50/ton (8800 Btu/lb) in 2008 and \$13/ton in 2009 (prev \$13/14).

We expect Coal prices to rise, but for margins and earnings to falter.

Figure 1. Multiples Changes

Company	Target Multiples	
	EBITDA	OCF
<b>Peabody Energy</b>		
New	10.0x	12.0x
Previous	10.0x	12.0x
<b>Consol Energy</b>		
New	9.0x	11.0x
Previous	9.0x	11.0x
<b>Arch Coal</b>		
New	10.0x	11.0x
Previous	10.0x	11.0x
<b>Foundation Coal</b>		
New	6.5x	7.5x
Previous	6.5x	7.5x
<b>Massey Energy</b>		
New	6.0x	7.0x
Previous	6.5x	7.5x
<b>Alpha Natural Resources</b>		
New	6.0x	7.0x
Previous	5.0x	6.0x

Source: Citigroup Investment Research

Figure 2. Summary EPS, Target and Rating Changes

	2Q07E	3Q07E	4Q07E	2007E	2008E	2009E	Rating	Target
<b>Peabody Energy (BTU)</b>								
New EPS	0.45	0.56	0.83	2.17	3.13	4.00	Hold	52
Previous	0.48	0.56	0.98	2.36	3.49	4.43	Buy	56
Change	(0.04)	-	(0.15)	(0.19)	(0.36)	(0.43)		(4)
Percent Change	-7.7%	-0.7%	-15.0%	-8.0%	-10.3%	-9.7%		-7.1%
Consensus	\$0.47	\$0.59	\$1.07	\$2.47	\$3.48	\$4.13		\$60
<b>CONSO Energy (CNX)</b>								
New EPS	0.56	0.60	0.71	2.48	2.93	3.41	Hold	50
Previous	0.56	0.63	0.76	2.56	2.93	3.41	Hold	50
Change	-	(0.03)	(0.04)	(0.07)	-	-		-
Percent Change	0.0%	-4.9%	-5.8%	-2.9%	0.0%	0.0%		0.0%
Consensus	\$0.60	\$0.55	\$0.64	\$2.36	\$3.08	\$3.55		\$48
<b>Arch Coal Inc (ACI)</b>								
New EPS	0.22	0.32	0.48	1.22	2.27	3.22	Hold	39
Previous	0.26	0.43	0.59	1.49	3.00	4.01	Buy	46
Change	(0.04)	(0.11)	(0.12)	(0.27)	(0.73)	(0.79)		(7)
Percent Change	-15.5%	-26.3%	-19.7%	-18.2%	-24.3%	-19.7%		-15.2%
Consensus	\$0.27	\$0.45	\$0.62	\$1.54	\$2.86	\$3.77		\$43
<b>Foundation Coal (FCL)</b>								
New EPS	0.31	0.40	0.35	1.61	2.76	3.92	Hold	44
Previous	0.35	0.46	0.39	1.75	3.35	4.60	Buy	48
Change	(0.04)	(0.06)	(0.04)	(0.14)	(0.59)	(0.68)		(4)
Percent Change	-11.4%	-13.2%	-10.1%	-8.0%	-17.6%	-14.7%		-8.3%
Consensus	\$0.27	\$0.33	\$0.33	\$1.47	\$2.37	\$3.21		\$48
<b>Massey Energy (MEE)</b>								
New EPS	0.30	0.34	0.47	1.51	1.60	1.70	Hold	27
Previous	0.33	0.37	0.51	1.61	1.68	1.72	Hold	30
Change	(0.03)	(0.03)	(0.04)	(0.10)	(0.08)	(0.02)		(3)
Percent Change	-9.6%	-8.1%	-7.4%	-6.1%	-4.6%	-1.3%		-10.0%
Consensus	\$0.39	\$0.33	\$0.43	\$1.49	\$1.67	\$1.58		\$28
<b>Alpha Ntrl Resc (ANR)</b>								
New EPS	0.16	0.17	0.20	0.66	1.39	1.87	Hold	23
Previous	0.16	0.17	0.20	0.66	1.39	1.87	Hold	18
Change	-	-	-	-	-	-		5
Percent Change	-0.1%	0.9%	0.9%	0.4%	0.0%	-0.4%		27.8%
Consensus	\$0.17	\$0.20	\$0.23	\$0.75	\$1.32	\$1.72		\$22

- = No change

Note: Quarters may not sum to annual due to rounding, changes in share count, or convertible securities.

Source: Citigroup Investment Research

## Company Focus

Rating change   
Target price change   
Estimate change

<b>Hold/High Risk</b>	<b>2H</b>
<i>from Buy/High Risk</i>	
Price (17 Jul 07)	US\$46.83
Target price	US\$52.00
<i>from US\$56.00</i>	
Expected share price return	11.0%
Expected dividend yield	0.5%
<b>Expected total return</b>	<b>11.6%</b>
Market Cap	US\$12,409M

### Price Performance (RIC: BTU.N, BB: BTU US)



## Peabody Energy Corp (BTU)

Absent news, fully-valued. Downgrading to Hold

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2006A</b>	0.46A	0.44A	0.44A	0.56A	1.90A	2.23A
<b>2007E</b>	<b>0.33A</b>	<b>0.45E</b>	<b>0.56E</b>	<b>0.83E</b>	<b>2.17E</b>	<b>2.47E</b>
Previous	0.33A	0.48E	0.56E	0.98E	2.36E	na
<b>2008E</b>	<b>0.72E</b>	<b>0.78E</b>	<b>0.81E</b>	<b>0.82E</b>	<b>3.13E</b>	<b>3.48E</b>
Previous	0.81E	0.87E	0.90E	0.92E	3.49E	na
<b>2009E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>4.00E</b>	<b>4.13E</b>
Previous	na	na	na	na	4.43E	na

Source: Powered by dataCentral. FC Cons: First Call Consensus.

- **Cutting EPS and target:** We are shaving EPS estimates across the board, downgrading to 2H (Hold), and cutting the price target to \$52 per share.
- **Drivers:** These changes are due to scaled-back expectations for benchmark PRB prices, now \$11.50/ton (8800 Btu/lb) in 2008 and \$13/ton in 2009 (prev \$13/14). Unit costs are likely to feel the effects of higher diesel and steel inputs. Australian mines will feel the effects of stronger exchange rates. Making no changes to target multiples.

Peabody remains the key institutional-quality name in the group, and benefits from exposure to Asian growth markets. On the other hand, it commands a premium multiples to most of our M/Metals coverage and appears fairly valued. "Learning the lessons of Steel" and leading on PRB production cuts would provide a powerful catalyst for the entire sector.

### ■ Key themes to watch at the second quarter earnings call:

1. PRB volumes likely to run light — We expect PRB shipments to be light, due to wet, sloppy 2Q conditions at the mines and weather impacts on the mid-western rail network.
2. IRS ruling on Patriot Coal spinoff awaited — the company is awaiting an IRS ruling on the tax-free status of the Patriot Coal spinoff. Our sense is the company would rather sell C.App assets outright, but cannot find buyers. As tough as the C.Apps can be, there can be benefits from holding quality assets in a troubled basin.
3. Australian port congestion — Due to pervasive port congestion, Australian shipments are at risk. This may offset increased annual contract pricing on thermal effective from April 1<sup>st</sup>. Met coal shipments should not be as constrained. Margins are also exposed to the rising AUD and falling USD.

## Company Focus

Rating change   
Target price change   
Estimate change

<b>Hold/High Risk</b>	<b>2H</b>
Price (17 Jul 07)	US\$47.21
Target price	US\$50.00
Expected share price return	5.9%
Expected dividend yield	0.6%
<b>Expected total return</b>	<b>6.5%</b>
Market Cap	US\$8,597M

### Price Performance (RIC: CNX.N, BB: CNX US)



## CONSOL Energy Inc (CNX)

Relative advantage has stalled. Maintain Hold

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2006A</b>	0.59A	0.48A	0.27A	0.37A	1.71A	2.20A
<b>2007E</b>	<b>0.61A</b>	<b>0.56E</b>	<b>0.60E</b>	<b>0.71E</b>	<b>2.48E</b>	<b>2.37E</b>
Previous	0.61A	0.56E	0.63E	0.76E	2.56E	na
<b>2008E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>2.93E</b>	<b>3.07E</b>
Previous	na	na	na	na	2.93E	na
<b>2009E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>3.41E</b>	<b>3.52E</b>
Previous	na	na	na	na	3.41E	na

Source: Powered by dataCentral. FC Cons: First Call Consensus.

■ **Maintaining EPS and target:** We are only reducing 2007 estimates, while maintaining a \$50 per share target price and Hold rating.

■ **Drivers:** The slight EPS changes relate to energy/input cost escalation, and the impacts of the continuing Buchanan outage.

Consol has been among the strongest Coal stocks this year, and we have been too conservative on it. The company enjoyed a period of relative pricing advantage, as the NApps remained insulated from the carnage in the CApps and benefited from the incipient scrubber play. This may now be feeding into NApp thermal export opportunities.

### Key themes to watch at the quarter:

1. Pace of scrubber installs, and any indications that slowdowns will ultimately affect Coal volumes. This has previously been pegged at 70 GW by 2010 worth 170 mln tons/year of Coal.
2. Buchanan met coal restart timeline. Hopefully it can be remedied prior to the earnings report.
3. Competitive wins in the NApps, where weaker players are being pushed aside. Willingness to withhold 2 – 3 mln tons of unpriced CApp coal from the market at current prices.
4. Indications as to when the company will have the confidence to restart the Shoemaker, Fork, and Mill mines. CONSOL was the first among the major Coal companies to raise the issue of production cuts, and, commendably, the first to take action. It has been emphatic that it will not re-start until competitive pricing can be locked in.
5. Clarity on the operational and financial impact of the Amvest acquisition. Disposition towards Coal M&A, particularly outside its core geographies.

## Company Focus

Rating change   
Target price change   
Estimate change

<b>Hold/High Risk</b>	<b>2H</b>
<i>from Buy/High Risk</i>	
Price (17 Jul 07)	US\$34.59
Target price	US\$39.00
<i>from US\$46.00</i>	
Expected share price return	12.7%
Expected dividend yield	0.5%
<b>Expected total return</b>	<b>13.2%</b>
Market Cap	US\$4,933M

### Price Performance (RIC: ACI.N, BB: ACI US)



## Arch Coal Inc (ACI)

Leverage cuts both ways. Downgrading to Hold

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2006A</b>	0.42A	0.48A	0.35A	0.55A	1.80A	1.80A
<b>2007E</b>	<b>0.20A</b>	<b>0.22E</b>	<b>0.32E</b>	<b>0.48E</b>	<b>1.22E</b>	<b>1.54E</b>
Previous	0.20A	0.26E	0.43E	0.59E	1.49E	na
<b>2008E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>2.27E</b>	<b>2.86E</b>
Previous	na	na	na	na	3.00E	na
<b>2009E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>3.22E</b>	<b>3.77E</b>
Previous	na	na	na	na	4.01E	na

Source: Powered by dataCentral. FC Cons: First Call Consensus.

- **Lowering EPS and target:** We are shaving EPS estimates across the board, downgrading to 2H (Hold), and cutting the price target to \$39 per share.
- **Drivers:** These changes are due to scaled-back expectations for benchmark PRB prices, now \$11.50/ton (8800 Btu/lb) in 2008 and \$13/ton in 2009 (prev \$13/14). Unit costs are likely to feel the effects of energy/input escalation. This is particularly relevant to Arch, as it has the lowest percentage of its future coal production contracted/priced (90 / 52 / 25% over 2007-09). Making no changes to target multiples.

We believe Arch will be a leader when Coal prices convincingly turn higher, as its contract-light position will almost instantly shift from a liability to a strategic advantage.

### ■ Key themes to watch at the quarter:

1. PRB shipments are likely to run light, due to wet, sloppy 2Q conditions at the mines and weather impacts on the mid-western rail network.
2. Arch will have to guide for a significant 3Q improvement, or downgrade the 2007 financial guidance (EPS of \$1.25 - \$2.00 and EBITDA of \$530 - \$560 mln). The top of the range now appears out of reach.
3. The degree to which 1Q production metrics were impacted by three planned longwall moves and 12 days of downtime at the company's Black Thunder mine.
4. Look how much contract volume sign-ups rose from the mere 5 mln tons of 2008 volume inked during 1Q.
5. Any progress on theories of exporting PRB Coal to Asian Seaborne customers from Roberts Bank?

## Company Focus

Rating change   
Target price change   
Estimate change

<b>Hold/High Risk</b>	<b>2H</b>
<i>from Buy/High Risk</i>	
Price (17 Jul 07)	US\$38.86
Target price	US\$44.00
<i>from US\$48.00</i>	
Expected share price return	13.2%
Expected dividend yield	0.5%
<b>Expected total return</b>	<b>13.7%</b>
Market Cap	US\$1,757M

### Price Performance (RIC: FCL.N, BB: FCL US)



## Foundation Coal Holdings Inc (FCL)

A strong performer. Downgrading to Hold

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2006A</b>	0.67A	0.46A	0.16A	0.05A	1.36A	1.35A
<b>2007E</b>	<b>0.54A</b>	<b>0.31E</b>	<b>0.40E</b>	<b>0.35E</b>	<b>1.61E</b>	<b>1.47E</b>
Previous	0.54A	0.35E	0.46E	0.39E	1.75E	na
<b>2008E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>2.76E</b>	<b>2.37E</b>
Previous	na	na	na	na	3.35E	na
<b>2009E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>3.92E</b>	<b>3.21E</b>
Previous	na	na	na	na	4.60E	na

Source: Powered by dataCentral. FC Cons: First Call Consensus.

- **Lowering EPS and target:** We are shaving EPS estimates across the board, downgrading to 2H (Hold), and cutting the price target to \$44 per share.
  - **Drivers:** These changes are due to scaled-back expectations for benchmark PRB prices, now \$11.50/ton (8800 Btu/lb) in 2008 and \$13/ton in 2009 (prev \$13/14). Unit costs are likely to feel the effects of energy/input escalation. Making no change to target multiples.
- We continue to see Foundation as providing one of the best combinations of asset quality, execution, and M&A potential. Near term, however, the shares seem fairly valued.
- **Key themes to watch at the quarter:**
    1. PRB shipments are likely to run light, due to wet, sloppy 2Q conditions at the mines and weather impacts on the mid-western rail network.
    2. Clarification as to whether realized PRB prices are strong enough to validate ambitious 2Q estimates of ~\$14/ton (+69% from 2006) PRB from 2007-11. Pricing is clearly back-end loaded, and the algebra seemed scrambled. Pricing and prospects for lower-BTU PRB material, such as Eagle Butte.
    3. Update on projects that can take capacity from 72 mln tpy to 89 mln by 2015 (+24%). NApp: Foundation, Freeport, Sewickley worth 13 - 27 tpy. CApp: Harts Creek. PRB: 2 LBAs with EB West in 12/07. Gas modest but growing.
    4. Interest in consolidation opportunities in the CApps and Illinois Basin.

## Company Focus

Rating change   
Target price change   
Estimate change

<b>Hold/Speculative</b>	<b>2S</b>
Price (17 Jul 07)	US\$24.39
Target price	US\$27.00
	<i>from US\$30.00</i>
Expected share price return	10.7%
Expected dividend yield	0.7%
<b>Expected total return</b>	<b>11.4%</b>
Market Cap	US\$1,978M

### Price Performance (RIC: MEE.N, BB: MEE US)



## Massey Energy Co (MEE)

Tough headlines, and self-defeating takeover speculation

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2006A</b>	0.08A	0.04A	0.00A	0.10A	0.22A	0.31A
<b>2007E</b>	<b>0.40A</b>	<b>0.30E</b>	<b>0.34E</b>	<b>0.47E</b>	<b>1.51E</b>	<b>1.49E</b>
Previous	0.40A	0.33E	0.37E	0.51E	1.61E	na
<b>2008E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>1.60E</b>	<b>1.67E</b>
Previous	na	na	na	na	1.68E	na
<b>2009E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>1.70E</b>	<b>1.57E</b>
Previous	na	na	na	na	1.72E	na

Source: Powered by dataCentral. FC Cons: First Call Consensus.

- **Cutting EPS and target.** We are shaving EPS across the board for Massey, maintaining 2H (Hold) rating, and lowering target price to \$27 per share.
- **Drivers:** Massey likely had solid margins in 2Q, but renewed input cost escalation, failure to reach closure on "strategic alternatives," and new permitting and litigation issues cloud the outlook. Our reduced target is driven by lower estimates and lower multiples (EBITDA to 6.0x from 6.5x and OCF to 7.0x from 7.5x) to reflect these factors.

### Themes to watch at the quarter:

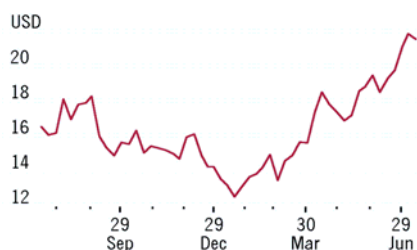
1. Guidance affirmation: previously was 40-42 mln tons of production in 2007, at average prices of \$51-52/ton, with costs of \$40 - 42.50/ton, and capex of \$220 mln. Met coal should be 20 - 25% of the total mix.
2. General outlook for C.App pricing into next year. Of particular interest will be domestic/export Met coal, given the rapid pace of global Steel production and the CONSOL outage.
3. Commentary on litigation, whereby Massey intends to appeal an unfavorable decision awarding Wheeling-Pittsburgh \$220 mln in damages.
4. Updates on other company litigation including federal criminal charges on the Aracoma fire, a shareholder lawsuit, and alleged violations of the Clean Water Act. Also look for commentary on the impact of restrictions on valley fills on mining plans and reserves.
5. Clarity on recently-blocked surface mining permits, and the implications for both company and regional production.
6. Signs of recovery in US metallurgical Coal markets tied to blast furnace restarts.

## Company Focus

Rating change   
Target price change   
Estimate change

<b>Hold/Speculative</b>	<b>2S</b>
Price (17 Jul 07)	US\$20.95
Target price	US\$23.00
	<i>from US\$18.00</i>
Expected share price return	9.8%
Expected dividend yield	0.0%
<b>Expected total return</b>	<b>9.8%</b>
Market Cap	US\$1,373M

### Price Performance (RIC: ANR.N, BB: ANR US)



## Alpha Natural Resources Inc (ANR)

Met beneficiary, but costs will pinch. Maintaining Hold

EPS	Q1	Q2	Q3	Q4	FY	FC Cons
<b>2006A</b>	0.43A	0.37A	0.28A	0.25A	1.33A	1.46A
<b>2007E</b>	<b>0.13A</b>	<b>0.16E</b>	<b>0.17E</b>	<b>0.20E</b>	<b>0.66E</b>	<b>0.75E</b>
Previous	0.13A	0.16E	0.17E	0.20E	0.66E	na
<b>2008E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>1.39E</b>	<b>1.32E</b>
Previous	na	na	na	na	1.39E	na
<b>2009E</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>1.87E</b>	<b>1.72E</b>
Previous	na	na	na	na	1.87E	na

Source: Powered by dataCentral. FC Cons: First Call Consensus.

- **Raising EPS and target.** We are maintaining EPS estimates on Alpha, maintaining 2S (Hold) rating, and raising the target price to \$23 per share
- **Drivers:** Alpha should benefit from stable operations and improvements in Met coal markets. We are raising target multiples from deep-discount levels (EBITDA to 6.0x from 6.5x and OCF to 7.0x from 7.5x), as the business hardens.
 

We expect Alpha to emerge among the winners from the Coal shakeout, but for now the shares appear fairly valued.
- **Key themes to watch at the quarter:**
  1. Productivity measures at underground Continuous Miner operations, particularly any signs of relief on labor availability/costs. Alpha tends to work thin seams of premium quality coal, with labor-intensive methods.
  2. Signs of recovery in domestic Met coal markets tied to blast furnace restarts, and CONSOL's mine outage.
  3. New export demand indirectly tied to Australian shipping bottlenecks and China's shift to net importer status.
  4. Clarity on non-coal businesses such as the freight terminal, equipment repair, highway construction, and underground limestone mining for utility FGD (flue gas desulphurization). There is nothing inherently wrong with these businesses, but Alpha's reticence to disclose revenues, costs, assets, and liabilities in these non-core areas is reflected in the company's low equity multiples.

## Global Coal Comps

Figure 3. Global Comps

Comparable Companies	Ticker	Analyst	Rating	Price 07/17/07	Market Cap (millions)	Dividend Yield	P/E Ratio			P/OCF			EV/EBITDA		
							2007E	2008E	2009E	2007E	2008E	2009E	2007E	2008E	2009E
<b>NORTH AMERICA METALS &amp; MINING</b>															
Arch Coal Inc	ACI	*	2H	34.59	4,933	0.5%	28.4x	15.2x	10.7x	11.4x	8.6x	6.9x	12.8x	8.9x	6.8x
Alpha Ntrl Resc	ANR	*	2S	20.95	1,373	0.0%	31.8x	15.1x	11.2x	6.4x	5.3x	4.8x	7.7x	5.7x	4.7x
Peabody Energy	BTU	*	2H	46.83	12,409	0.5%	21.6x	15.0x	11.7x	12.1x	9.7x	8.2x	13.7x	9.3x	7.2x
CONSOL Energy	CNX	*	2H	47.21	8,597	0.6%	19.0x	16.1x	13.8x	9.9x	8.7x	7.8x	13.6x	10.1x	8.8x
Foundation Coal	FCL	*	2H	38.86	1,757	0.5%	24.1x	14.1x	9.9x	6.8x	5.4x	4.5x	8.6x	6.7x	5.5x
Massey Energy	MEE	*	2S	24.39	1,978	0.7%	16.2x	15.3x	14.4x	5.4x	5.3x	5.1x	5.9x	5.6x	5.3x
<b>Median</b>						<b>0.5%</b>	<b>22.8x</b>	<b>15.1x</b>	<b>11.5x</b>	<b>8.4x</b>	<b>7.0x</b>	<b>6.0x</b>	<b>10.7x</b>	<b>7.8x</b>	<b>6.1x</b>
<b>Mean</b>						0.5%	23.5x	15.1x	12.0x	8.7x	7.2x	6.2x	10.4x	7.7x	6.4x
<b>COAL AND IRON ORE</b>															
China Coal	1898	Thomas P Wrigglesworth	1M	1.95	22,893	0.8%	32.0x	19.6x	16.7x	14.1x	8.9x	7.7x	18.0x	12.2x	10.1x
China Shenhua	1088	Thomas P Wrigglesworth	1M	4.07	73,665	1.4%	25.3x	23.4x	19.4x	9.4x	8.8x	7.4x	15.3x	14.1x	11.6x
Yanzhou Coal	1171	Thomas P Wrigglesworth	2M	1.78	9,817	1.6%	25.4x	15.9x	13.1x	18.0x	12.2x	10.5x	14.4x	10.3x	8.2x
Centennial Coal	CEY	Jonathan Battershill	3S	2.75	842	1.9%	32.0x	20.9x	10.5x	10.2x	6.0x	4.5x	9.8x	7.9x	6.3x
Macarthur Coal	MCC	Jonathan Battershill	3H	6.23	1,168	2.1%	22.3x	18.6x	10.1x	30.2x	13.9x	8.0x	16.0x	9.8x	4.9x
Gloucester Coal Ltd	GCL	Jonathan Battershill	3H	4.41	349	1.0%	22.0x	16.1x	7.8x	14.6x	12.1x	6.4x	11.7x	9.3x	4.5x
Resource Pacific	RSP	Jonathan Battershill	1H	1.70	393	0.0%	1929.8x	11.7x	6.4x	149.1x	5.7x	4.5x	74.8x	6.7x	3.7x
Bumi Resources	BUMI	David Fergusson	1L	0.28	5,363	0.8%	18.1x	14.8x	11.4x	11.2x	10.0x	8.1x	9.1x	7.7x	6.0x
TB Bukit Asam	PTBA	David Fergusson	1M	0.72	1,669	1.9%	23.6x	20.4x	23.1x	22.3x	19.7x	19.8x	16.1x	14.2x	15.6x
Utd Tractors	UNTR	David Fergusson	1L	0.98	2,806	1.7%	17.0x	15.0x	13.5x	10.8x	9.5x	8.3x	8.1x	7.3x	6.5x
<b>Median</b>						<b>1.5%</b>	<b>24.4x</b>	<b>17.4x</b>	<b>12.2x</b>	<b>14.3x</b>	<b>9.7x</b>	<b>7.9x</b>	<b>14.9x</b>	<b>9.5x</b>	<b>6.4x</b>
<b>Mean</b>						1.3%	214.7x	17.6x	13.2x	29.0x	10.7x	8.5x	19.4x	9.9x	7.7x

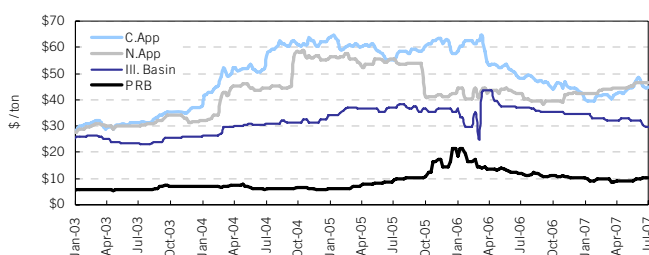
Source: EIA and Citi Investment Research

## Coal Commodity Perspectives

**Prices** – Spot prices have stalled following a muted early-year recovery. This follows a dismal period of higher year-on-year inventories, thin contracting, and intense political pressure. The PRB price has remained flat at \$9/ton in survey data and \$10 in OTC trade. C.App pricing has remained in the mid-\$40/ton range in the past two months on sustained production cuts from the region.

Natural gas prices are low at \$6.66/ MMBtu, and storage volumes high. Gas headlines are challenging for Coal, in terms of rapid storage injection, high onshore rig counts, and record LNG imports.

Figure 4. Coal Prices (\$/ton)



Region	Average Prices (Survey)				Current	'08 Fwd
	3Q/06	4Q/06	1Q/07	2Q/07		
Central Appalachia	48.52	45.42	40.22	43.66	<b>45.40</b>	<b>48.90</b>
Northern Appalachia	38.98	41.90	43.85	44.75	<b>45.25</b>	<b>46.40</b>
Illinois Basin	33.77	33.54	29.79	28.85	<b>31.50</b>	<b>31.50</b>
Powder River Basin	10.98	10.02	8.95	8.82	<b>9.15</b>	<b>9.95</b>
Natural Gas (H. Hub)	6.09	6.65	7.16	7.53	<b>6.15</b>	
Crude Oil (WTI)	73.93	58.68	56.31	64.64	<b>72.81</b>	

Source: Platts, Bloomberg and Citi Investment Research

**Outlook** – Coal is struggling to find catalysts, and the equities have pulled back after a strong anticipatory run. Background factors are mixed. Positives: powergen up +3% YTD, mines down -2.5%, hydroelectric down -12%, and strong pull from red-hot seaborne markets related to China’s swing to thermal net importer. There are clear signs of distress in the C.Apps, with 20 - 30 mln tons of mine supply threatened. PRB operators are clearly wrecking Coal markets for everyone, and need to cut production. Negatives: Mild weather and share gains from cheap/abundant natural gas have kept coal stockpiles high into June. In the midst of mild weather, gas has persistently taken market share, particularly from low hydro. All eyes remain on Coal stockpiles, which appear unlikely to revert below norm in absence of extreme weather events (heat-waves, hurricanes). An enhanced Miner Act and removal of Coal-to-Liquids from the Energy bill are disappointments. Looking further out to the Fall and 2008, we predict slower acceleration of coal prices amid a difficult regulatory environment that does not favor scenarios whereby coal producers can extract large financial returns for investors.

In general, Coal miners have minimal pricing power due to resource abundance and severe fragmentation versus heavily-consolidated rails and utilities. Our sense is that within three years the industry will be significantly consolidated, around the time that clean coal technologies begin to harden and national energy shortages materialize. This should open a new chapter for Coal.

Price Forecasts – CIR U.S. coal price forecasts are below:

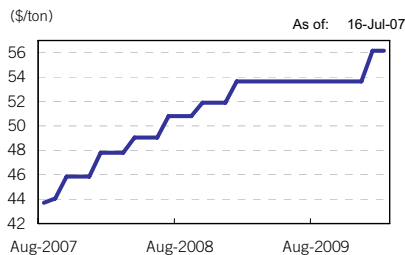
**Figure 5. U.S. Coal Price Forecasts:**

Region	Coal Price Forecasts - \$/ton						
	1Q/07	2Q/07	3Q/07	4Q/07	2007	2008	2009
Central Appalachia	\$40	\$48	\$50	\$50	\$47	\$52	\$55
Northern Appalachia	\$44	\$46	\$46	\$46	\$45	\$52	\$54
Illinois Basin	\$30	\$38	\$38	\$38	\$36	\$40	\$42
Powder River Basin	\$9	\$10	\$11	\$12	\$10	\$13	\$14
Met Coal	\$70	\$70	\$70	\$70	\$70	\$75	\$75

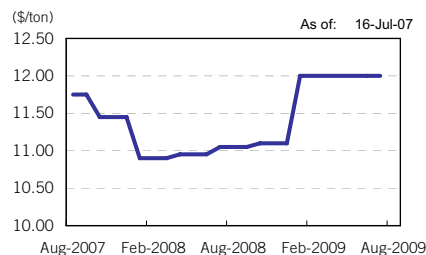
Source: Citi Investment Research

NYMEX Futures – NYMEX coal price futures are below:

**Figure 6. NYMEX C.App Coal Futures**



**Figure 7. NYMEX PRB Coal Swaps**



Source: NYMEX and Citi Investment Research

PRB swaps suggest 2008 pricing will soften, as opposed to typical contango conditions

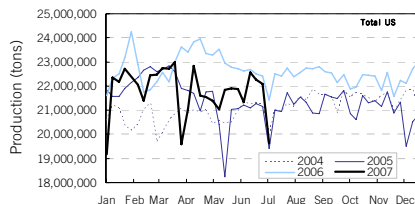
## Industry Datapoints

**US Coal Production:** EIA data through July 7th shows YTD production of 587 mln tons, a decline of -2.3% YTD. PRB production (WY) is down -1.7% YTD and Appalachian production is down -4.7% YTD.

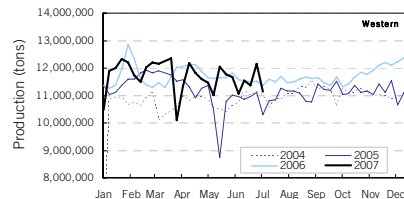
Coal production fell by 15% the last week of March on heavy snowfall in the PRB region and rail outages, but is now back to normal levels.

For 2006, Coal production was 1.161 bln tons, up +2.6% on 2005 levels. Western Coal had the largest production gains +5.9% YTD, with Interior Coal up +1.5% YTD and Appalachian Coal down -1.7% YTD.

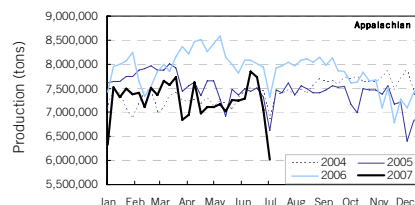
Figure 8. Total US Coal Production



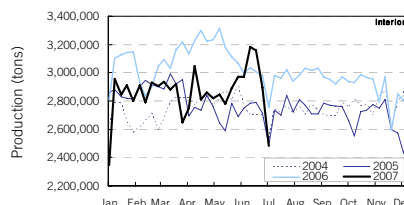
Western (~75% PRB) Production



Appalachian Production



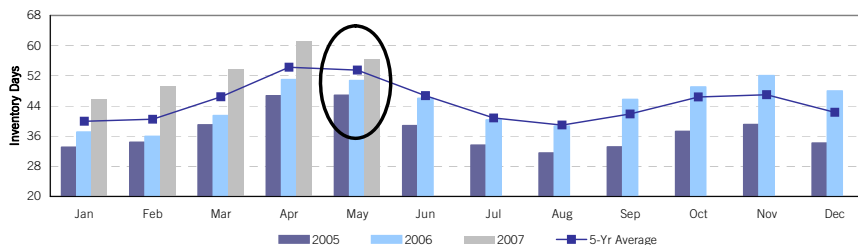
Interior Production



Source: EIA and Citi Investment Research

**Customer Inventories:** Utility stockpiles were slightly down in May to 150 mln tons, or 61 days of production. Inventories remain above the five year average for May (56 days). Recent reports suggest that stockpiles remain in the 145 – 150 mln ton range, well into July.

Figure 9. Utility Coal Inventories

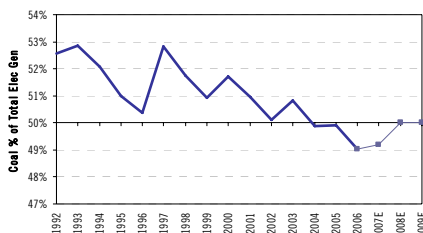


Coal Stockpiles (000 tons)		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005		97,772	98,292	105,458	116,088	119,916	115,772	105,556	99,051	97,956	101,110	106,481	101,237
2006		104,479	105,125	111,579	124,499	133,254	135,112	127,421	123,285	125,572	133,772	139,476	139,679
2007		136,350	133,325	142,515	150,308	150,000							
MoM		-2.4%	-2.2%	6.9%	5.5%	-0.2%							
YoY		30.5%	26.8%	27.7%	20.7%	12.6%							
5-yr Avg		117,024	114,965	121,244	130,542	134,603	133,508	124,441	118,855	118,043	122,895	126,111	122,173
MoM		-4.2%	-1.8%	5.5%	7.7%	3.1%	-0.8%	-6.8%	-4.5%	-0.7%	4.1%	2.6%	-3.1%

Source: EIA and Citi Investment Research

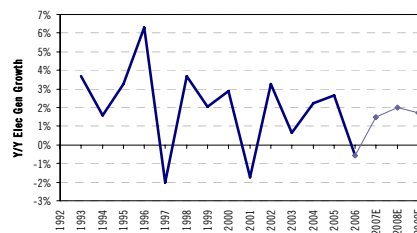
**Electricity Generation Trends:** Preliminary US electricity generation for the week ending June 9th was up +3.3% YTD, +0.6% YoY, and 2.5% WoW. Coal accounted for 49.6% of total electricity generation YTD, down from 50.4% at this time in 2006, but above the average for 2006 of 49.0%.

**Figure 10. Coal as a % of Total US Elec Gen**



Source: EIA and Citi Investment Research

**Figure 11. YoY Growth in US Electricity Generation**



Source: EIA and Citi Investment Research

**EIA Power Generation Data by Source:** EIA data through April shows electricity generation up +2.1% YoY, -5.5% MoM, +4.0% YTD. Nat Gas is up the most, taking share from coal, nuclear and hydro. Highlights:

- Net Coal-fired power generation in megawatt-hours was up +3.5% YoY and -8.5% MoM.
- Coal consumption for power generation in tons was up +3.9% YoY, -7.4% MoM, and +2.4% YTD.
- Natural Gas continues to be the winner, with net power generation in megawatt-hours up +9.3% YoY and +6.9% MoM. Gas consumption for power generation in mln cu ft was up +7.5% YoY and +7.3% MoM.
- Hydro was the loser, down a sharp -16.4% YoY, -1.7% MoM, and -12.1% YTD due to dry conditions in the northwest.
- Nuclear was up -0.5% YoY, -10.9% MoM, and +2.0% YTD.

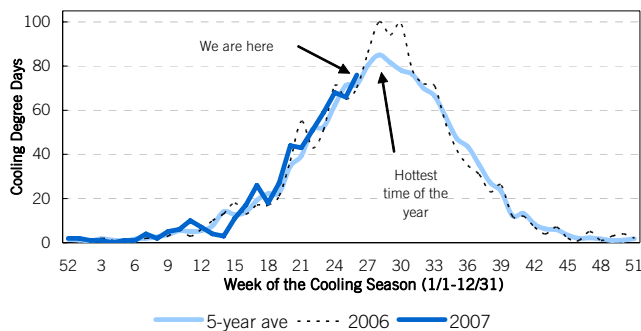
**Figure 12. US Electricity Generation by Power Source**

Mln KwH	Annual		Year-To-Date Generation by Source			
	2006	% Total	YTD '06	% Total	YTD '07	% Total
Coal	1,987	49.0%	629	50.4%	644	49.6%
Natural Gas	807	19.9%	198	15.9%	234	18.0%
Nuclear	787	19.4%	256	20.5%	261	20.1%
Hydroelectric	288	7.1%	106	8.5%	93	7.2%
Other	183	4.5%	59	4.7%	67	5.1%
<b>Total</b>	<b>4,053</b>		<b>1,248</b>		<b>1,298</b>	
<b>YoY</b>	<b>-0.6%</b>				<b>+4.0%</b>	

Source: EIA and Citi Investment Research

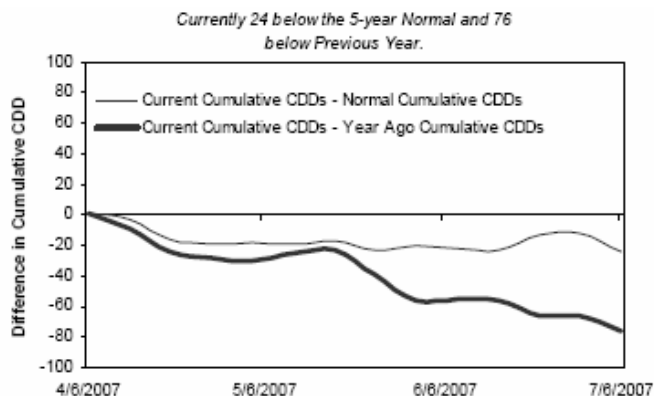
- **Heating/Cooling:** Weather in April, May and June as measured by CDDs was 9% warmer than the 50-year average, but weather to date since the beginning of April as measured by CDDs is 3% cooler than the 5-year average and 16% cooler than last year.

Figure 13. Cooling Degree Days (Weekly, Population Weighted)



Source: Bloomberg and Citigroup Investment Research

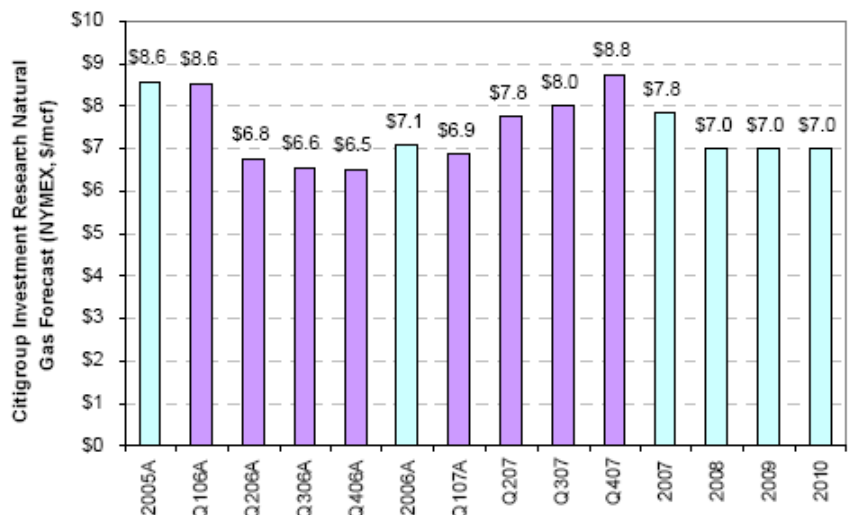
Figure 14. Seasons Cumulative Cooling Degree Days vs. prior periods



Source: NOAA and Citigroup Investment Research

**Natural gas:** Citi’s Exploration and Production analyst, Gil Yang, forecasts Henry Hub natural gas at \$7.80/MMBtu in 2007, \$7.00/MMBtu in 2008, \$7.00/MMBtu in 2009 and 2010. Current inventory is 2.3 Tcf which is 19% above the 5-year average. Gas production from higher rig count in the US is expected to more than offset lower Canadian drilling. Coupled with higher LNG imports, Citi thus forecasts higher injection will more than offset incremental demand from lower hydroelectric. This may result in record levels of gas at the end of the '07 injection season. For more see Friday Fuel for Thought (July 13th, *Gil Yang*).  
<https://www.citigroupgeo.com/pdf/SNA05907.pdf>

Figure 15. CIR Natural Gas Forecast (\$/MMBtu)



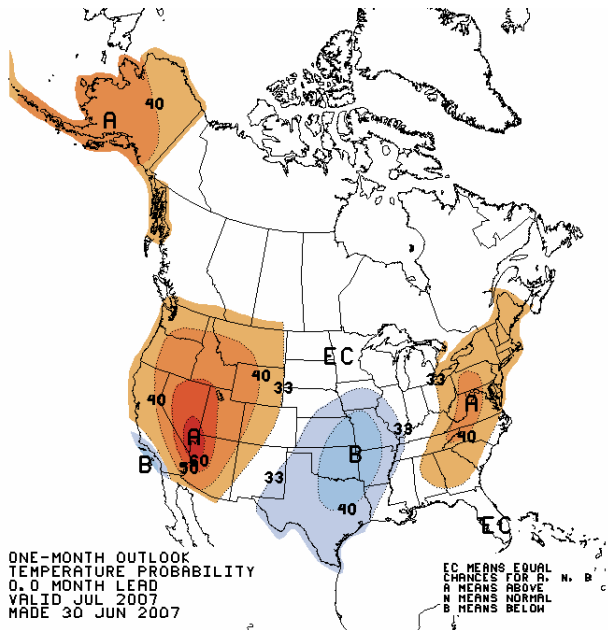
Source: Citi Investment Research

**Rail Traffic:** Coal shipments through twenty seven weeks of 2007 are 3,789,084 carloads, a 1.5% decrease on 2006. Winter storms impacted shipments in the PRB and Midwest. For 2006 rail shipments of Coal were up +5.6% on 2005 levels. This ran ahead of Coal usage rates, as seen in utility stockpiles. In many ways, everything that went wrong for Coal shippers in 2005 (ice/floods on the River system, followed by drought; 100+ miles of track rebuild in PRB; hurricanes) worked smoothly in 2006.

**Sulphur credits:** Sulphur credits declined substantially in 2006, and currently stand at \$550/ton after peaking at over \$1,300/ton in 4Q/05. Higher sulphur credits can be beneficial for companies producing lower-sulphur/compliance Coal via credit sharing arrangements in contracts. Higher sulphur credits can also reflect higher Coal burn rates relative to Natural Gas, or shortages of premium low-sulphur Coal. An uptick in Sulphur may provide an indicator of CApp shortages and more favorable contracting conditions.

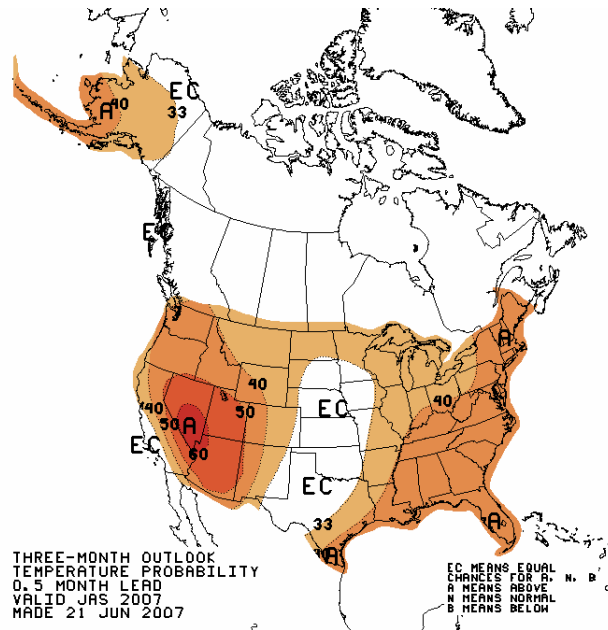
**Weather Forecast:** The National Weather Service Climate Prediction Center has a one-month forecast calling for above average temperatures across much of the East and the West Coast with below average temperatures in the South. This summer is forecast to be hot, with above average temperatures across much of the West and the East in Jul/Aug/Sep, with no areas of the country with below average temperatures. This is positive for coal which is used to power air conditioning.

Figure 16. One Month Temperature Outlook



Source: NOAA Climate Prediction Center

Figure 17. Three Month Temperature Outlook



Source: NOAA Climate Prediction Center

## International Coal Markets

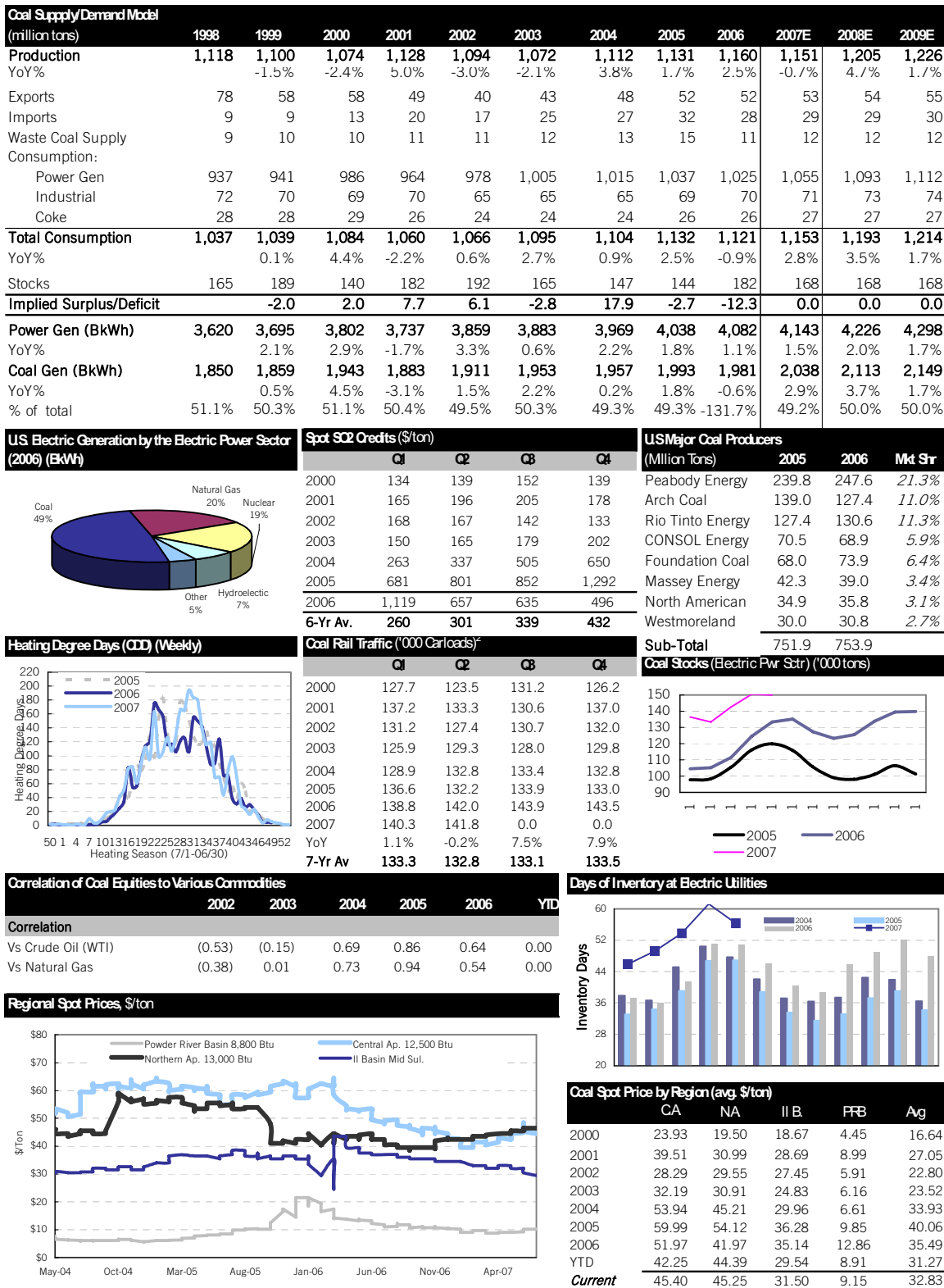
- Thermal Coal – China the driver.** China is rapidly becoming a net importer of thermal coal. In 2006, Chinese net exports were 40 mT (down from 70 mT in 2004). This is of course related to rapid powergen build-out, with added encouragement from recent deregulation of coal and electricity markets. Production is constrained by rising costs and environmental issues. China will abolish current 1% import duties on Jun-1, and there are proposals to impose a 10-15% export tax, while removing the 13% VAT tax rebate. China's shift to net importer status has had profound ripple effects in international/seaborne markets, with Australian port bottlenecks causing more S. African coal to be pulled to Asia, while Colombian coals are being diverted to Europe with added impetus from a weak US dollar. Port and rail bottlenecks in Australia and elsewhere seem set to become worse in the near term. In Europe, a further collapse in CO2 credits has restored competitive equilibrium between coal and gas, and should support coal demand at least until phase 2 of the EU ETS begins in 2008. Seaborne contract thermal Coal prices seem set to climb above \$60/Tonne.
- Metallurgical Coals – China the swing factor.** Despite global steel production running at a heady 9.8% pace, hard coking coal prices have been held in check due to (1) increased domestic production and imports from neighboring countries Mongolia, North Korea and Vietnam is displacing seaborne imports, and (2) substitution with lower quality semi- soft and PCI coals in the integrated steelmaking process. The substitution away from high-cost met coal has directly benefited mid-grade semi-soft and PCI and indirectly benefited thermal coal, distorting historical margins. The price outlook is for moderate improvement.

Figure 18. CIR International Coal Price Forecasts

Coal Price Forecasts		2004	2005	2006	1Q/07	2Q/07	3Q/07	4Q/07	2007	2008	2009	2010
<b>Asia</b>												
Hardcoking Coal - Contract	US\$/t	\$56	\$109	\$118	\$115	\$97	\$97	\$97	\$102	\$105	\$115	\$110
Semisoft Coal - Contract	US\$/t	\$40	\$63	\$61	\$58	\$65	\$65	\$65	\$63	\$68	\$70	\$70
Thermal Coal - Contract	US\$/t	\$38	\$50	\$53	\$53	\$56	\$56	\$56	\$55	\$61	\$63	\$63
Thermal Coal - Spot	US\$/t	\$53	\$48	\$49	\$52	\$55	\$56	\$56	\$55	\$61	\$63	\$63
<b>Europe</b>												
Hardcoking Coal - Contract	US\$/t	\$64	\$111	\$118	\$115	\$97	\$97	\$97	\$102	\$105	\$115	\$110
Semisoft Coal - Contract	US\$/t	\$42	\$65	\$63	\$60	\$67	\$67	\$67	\$65	\$71	\$72	\$72
Thermal Coal - Contract	US\$/t	\$41	\$45	\$50	\$51	\$51	\$56	\$56	\$53	\$61	\$63	\$63
Thermal Coal - Spot	US\$/t	\$54	\$45	\$50	\$51	\$51	\$56	\$56	\$53	\$61	\$63	\$63

Source: Citi Investment Research

Figure 19. Coal Data Page



Source: Platts, StockVal, Bloomberg, Company Reports, Energy Information Administration (EIA), and Citigroup Investment Research

## Peabody Energy Corp

### Company description

Peabody Energy is the world's largest coal company, with shipments of approximately 250 mln tons, representing 22% U.S. market share. This coal fuels 10% of U.S. power generation and 3% of global power generation. It has 8,300 employees and operates in 15 countries. Peabody operates 34 mining complexes in the U.S., Australia and Venezuela mining a mix of thermal and metallurgical coal. The company has approximately 10.0 billion tons of proven and probable coal reserves. Production is split between the Powder River Basin (59%), the Midwest (18%), the Southwest/Colorado (13%), Appalachia (6%) and Australia (4%).

Approximately 87% of sales are to U.S. electricity generators, 4% are to the U.S. industry and 9% are to overseas customers. Headquartered in St. Louis, MO, Peabody was first founded in 1883. During its long history, the company has merged and acquired many other companies, and has been acquired itself multiple times. Most recently Peabody was purchased in an LBO in 1998 and subsequently IPO-ed as Peabody Energy in 2001.

### Investment thesis

We rate Peabody Energy shares Hold / High Risk (2H). Peabody is a defining name in Coal, with a global footprint, diversified product mix, credible growth profile, tremendous underlying property value, and strong operating metrics. Yet, we see a neutral multi-year thesis for Peabody shares. In the shorter-term, we expect Coal markets to normalize between the bullish extremes of 2005, and the bearish misery of 2006. Power generation economics favor Coal, and particularly PRB, where Peabody is concentrated. Volume growth and better PRB pricing should drive earnings, eventually, but this appears fully reflected at current levels.

Uncertainty surrounds future externality costs, particularly carbon emissions, which may pressure Coal-fired generation growth. Longer term, Coal could benefit from technologies such as Integrated Gasification Combined Cycle (IGCC) with carbon capture, and Coal-to- Liquids (CTL). Peabody is a leader in Coal conversion (gasification, hydrogen, liquids), and clean power technology (IGCC, carbon capture). This is important for sustainability and stewardship issues, energy security, and the effort to enhance rather than surrender Coal value in a carbon-constrained future. Peabody is also targeting "Btu Convergence," or narrowing the gap between Coal and Oil valuations.

### Valuation

Our \$52 target price for Peabody Energy is based on 2008E operating Cash Flow, EBITDA, and DCF modeling with respective weightings of 40/40/20.

The cycle of EBITDA multiples for coal companies since 1997 is in the range of 5x to 18x with mid-cycle at 8x. We chose a conservative Coal group multiple of 7.0x for 2008E based on our view that this year will represent high, but not peak, levels of profitability. Peabody Energy has historically traded at a 20-30% valuation premium to the broader Coal sector. We believe this premium is justified by the company's size, asset quality, and operating track record. Applying a 30% premium to a 7.0x Coal group multiple, we arrive at a 10.0x multiple for Peabody. Applying this to our 2008E EBITDA, we arrive at a \$53 value.

The cycle of cash flow multiples for coal companies since 1997 is in the range of 3x to 18x with mid-cycle at 9x. Similar to the methodology described above for EBITDA, we first chose a Coal sector multiple - in this case 8.0x. Applying a 30% premium we arrive at an 12.0x multiple for Peabody. Applying this to our 2008 Operating Cash Flow estimate we arrive at a \$58 value.

Our detailed DCF modeling calculates a value of \$39 per share.

## **Risks**

We rate Peabody Energy High Risk based on the high degree of recent volatility in Coal stock prices driven by swings in coal prices and coal sector earnings.

Coal spot prices have been very volatile in recent years. Coal demand and prices are particularly sensitive to weather patterns which cannot be accurately predicted beyond the very short term. Also affecting coal prices is the cost of competing sources of power generation such as natural gas. The company also faces both upside and downside risk from fluctuations in Natural Gas prices which have also been recently volatile.

Peabody is subject to multiple federal, state and local laws regarding its environmental performance and impact. These regulations could require the company to undertake costly clean-up work or pay damages. Proposed federal "carbon taxes" may also negatively affect coal producers.

Rail transportation from the Powder River Basin region has suffered from bottlenecks in recent years which could constrain the company's ability to ship its product to end customers.

Peabody's debt to total capitalization stands at OVER 50% following the issuance of new debt to finance the Excel Coal acquisition. This debt is above average for the coal sector and the company is seeking to reduce this to 40%. Unfunded pension and OPEB liabilities of \$1.2 bln at end-2005 represent significant obligations.

If the negative impact on the company from any of these factors proves to be greater than we anticipate, it may prevent the stock from achieving our target price.

## **CONSOL Energy Inc**

### **Company description**

CONSOL Energy Inc. (CNX) is the fifth largest domestic coal producer at 67.3 million tons per year in 2006, and is the nation's largest underground miner. CONSOL accounts for 6% of total domestic production, for 14% of tons produced in the eastern U.S., and is the largest producer of high-BTU bituminous coal. Of production, 97% is from underground mines, chiefly by longwall methods. Roughly two-thirds of direct sales are to domestic electricity generators. The company controls coal reserves amounting to approximately 4.5 billion tons. It is also the 39th largest domestic natural gas producer, with pipeline-quality coalbed methane gas production of 56 billion gross cubic feet (Bcf) per year and growing.

### **Investment thesis**

We rate the shares of CONSOL Energy Inc. Hold/ High Risk (2H). The company benefits from large, strategically-located reserves and is should benefit from

rising prices as older contracts are renegotiated at higher rates. While the company has climbing coal volumes and growing natural gas production, our neutral view on the CONSOL is based on 1) continuing confrontation with geologic and operating challenges that have been a challenge over the past two years; and 2) concentration in soft eastern coal markets. Based on our valuation analysis, we find the shares fairly valued at current levels.

## **Valuation**

Our \$50 target price for CONSOL Energy is based on 2008E operating Cash Flow, EBITDA, and DCF modeling with respective weightings of 40/40/20.

The cycle of EBITDA multiples for coal companies since 1997 is in the range of 5x to 18x with mid-cycle at 8x. We chose a Coal group multiple of 8.0x for 2008E based on our view that this year will represent high, but not peak, levels of profitability. CONSOL Energy has historically traded at a 10-20% valuation premium to the broader Coal sector. We believe this premium is justified by the company's size, asset quality and natural gas business. Applying a 12% premium to a 8.0x Coal group multiple, we arrive at an 9.0x multiple for CONSOL. Applying this to our 2008 EBITDA estimate, we arrive at a \$51 value.

The cycle of cash flow multiples for coal companies since 1997 is in the range of 3x to 18x with mid-cycle at 9x. Similar to the methodology described above for EBITDA, we first chose a Coal sector multiple - in this case 9.0x. Applying a 20% premium we arrive at a 11.0x multiple for CONSOL. Applying this to our 2008 Operating Cash Flow estimate, we arrive at a \$52 value.

Our detailed DCF modeling calculates a value of \$44 per share.

## **Risks**

We rate CONSOL Energy High Risk based on the high degree of volatility in coal prices and commodity inputs, plus variable geological conditions.

Coal spot prices have been very volatile in recent years and represent both upside and downside risk. Coal demand and prices are particularly sensitive to weather patterns which cannot be accurately predicted beyond the very short term. CONSOL also faces both upside and downside risk from fluctuations in Natural Gas prices which have also been recently volatile.

CONSOL is principally an underground miner, which implies significant operating risk. Underground mines are more expensive to operate on a per-ton basis, and show high levels of fixed costs. Geological problems are common and the impact of mining-accidents can be very severe.

CONSOL is subject to multiple federal, state and local laws regarding its environmental performance and impact. These regulations could require the company to undertake costly clean-up work or pay damages.

Some form of federal "Carbon Tax" legislation is likely to be introduced in the near future. Coal contains more carbon than competing energy sources and demand for coal would likely be negatively impacted.

If the impact on the company from any of these factors proves to be greater/less than we anticipate, it may prevent the stock from achieving our target price or could cause our target price to be materially outperformed.

## Arch Coal Inc

### Company description

Arch Coal, Inc. is the second-largest coal producer in the United States based on total annual production of approximately 140 million tons and accounts for about 12% of total domestic production. The company mines, processes and markets compliance and low-sulfur coal in both the eastern and western regions of the United States. Arch Coal's main customers are domestic coal-fired electric generation facilities, with metallurgical coal production amounting to only 2 mln tpy. Arch controls approximately 3.1 billion tons of proven and probable coal reserves; 90% of which are low sulfur and 80% meet the Clean Air Act requirements. In the west, Arch operates two major surface mines in the Powder River Basin (PRB) of Wyoming, and four in Colorado/Utah. Arch has reduced its presence in the Central Appalachians, concentrating on five underground mining complexes in West Virginia and Virginia.

### Investment thesis

We rate Arch Coal, Inc. shares Hold / High Risk (2H). We view Arch as fully valued given the companies above average exposure to contract markets and our neutral outlook for vast gains in PRB pricing that appeared figured into forward consensus. In the shorter-term, we expect Coal markets to normalize between the bullish extremes of 2005, and the bearish misery of 2006. Uncertainty surrounds future externality costs, particularly carbon emissions, which may pressure Coal-fired generation growth.

Our neutral 12-month view on the Coal sector is predicated on slower acceleration of coal prices amid a difficult regulatory environment that does not favor scenarios where coal producers can extract large financial returns for investors. Longer term, Coal could benefit from technologies such as Integrated Gasification Combined Cycle (IGCC) with carbon capture, and Coal-to- Liquids (CTL).

### Valuation

Our \$39 target price for Arch Coal is based on 2008E operating Cash Flow, EBITDA, and DCF modeling with respective weightings of 40/40/20.

The cycle of EBITDA multiples for coal companies since 1997 is in the range of 5x to 18x with mid-cycle at 8x. We chose a Coal group multiple of 8.0x for 2008E based on our view that this year will represent high, but not peak, levels of profitability. Arch Coal has historically traded at a 10-20% valuation premium to the broader Coal sector. We believe this premium is justified by the company's size, asset quality, and operating track record. Applying a 10.0x multiple to our 2008 EBITDA estimate we arrive at a \$42 value.

The cycle of cash flow multiples for coal companies since 1997 is in the range of 3x to 18x with mid-cycle at 9x. Similar to the methodology described above for EBITDA, we first chose a Coal sector multiple - in this case 9.0x. Applying a 20% premium we arrive at a 11.0x multiple for Arch. Applying this our 2008 Operating Cash Flow estimate we arrive at a \$41 value.

Our detailed DCF modeling calculates a value of \$30 per share.

### Risks

We rate Arch Coal High Risk based on the high degree of recent volatility in Coal stock prices driven by swings in coal prices and coal sector earnings.

Coal spot prices have been very volatile in recent years. Coal demand and prices are particularly sensitive to weather patterns which cannot be accurately predicted beyond the very short term.

Coal is subject to competition from other energy sources, primarily oil, natural gas, nuclear, and hydroelectric power. Increases/decreases in availability and/or cost of these energy sources could negatively or positively impact demand for Coal.

Arch is subject to multiple federal, state and local laws regarding its environmental performance and impact. These regulations could require the company to undertake costly clean-up work or pay damages.

Some form of federal "Carbon Tax" legislation is likely to be introduced in the near future. Coal contains more carbon than competing energy sources and demand for coal would likely be negatively impacted.

Arch Coal's production is highly concentrated in the Power River Basin region. Rail transportation from this region has suffered from bottlenecks in recent years which could constrain the company's ability to ship its product to end customers.

If the negative impact on the company from any of these or other factors proves to be greater than we anticipate, it may prevent the stock from achieving our target price.

## **Foundation Coal Holdings Inc**

### **Company description**

Foundation Coal Holdings, Inc is the fourth largest coal producer in the U.S. based on total annual production of approximately 70 million tons, and accounts for about 6.0% of domestic production. It is among the few companies represented in the three major coal producing regions of the US (Powder River Basin, Northern Appalachians, Central Appalachians). Headquarters are located in Linthicum Heights, MD. Operations are spread over Pennsylvania, West Virginia, Illinois, and Wyoming. With 13 mines (nine underground, four surface), Foundation controls roughly 1.76 billion tons of proven and probable reserves for an implied life of 28 years. Thermal coal for power generation accounts for about 97% of the company's internally-produced coal sales, and 91% of revenue. Annual sales of high value metallurgical coal of 1.5 -1.7 million tons account for approximately 3% of volume and 9% of revenue.

### **Investment thesis**

We rate Foundation Coal Hold / High Risk (2H). Foundation appears well positioned in low sulfur compliance and super-compliance coal, which helps utilities control SO<sub>2</sub> air emissions. Yet, we see a neutral 12 month thesis for shares. In the shorter-term, we expect Coal markets to normalize between the bullish extremes of 2005, and the bearish misery of 2006. Uncertainty surrounds future externality costs, particularly carbon emissions, which may pressure Coal-fired generation growth.

Longer term, Coal could benefit from technologies such as Integrated Gasification Combined Cycle (IGCC) with carbon capture, and Coal-to- Liquids (CTL). Our neutral 12-month view on Foundation is predicated on slower acceleration of coal prices amid a difficult regulatory environment that does not

favor scenarios whereby coal producers can extract large financial returns for investors.

## **Valuation**

Our \$44 target price for Foundation Coal is based on 2008E operating Cash Flow, EBITDA, and DCF modeling with respective weightings of 40/40/20.

The cycle of EBITDA multiples for coal companies since 1997 is in the range of 5x to 18x with mid-cycle at 8x. For foundation we chose 10% discount to the broader Coal sector based on the company's small size. Applying this 6.5x multiple to our 2008 EBITDA estimate we arrive at a \$42 value.

The cycle of cash flow multiples for coal companies since 1997 is in the range of 3x to 18x with mid-cycle at 9x. Similar to the methodology described above for EBITDA, we first chose a 10% discount to mean level for a 7.5x multiple. Applying this to our 2008 Operating Cash Flow estimate we arrive at a \$50 value.

Our detailed DCF modeling calculates a value of \$36 per share.

## **Risks**

We rate Foundation Coal High Risk based on the high degree of recent volatility in Coal stock prices driven by swings in coal prices and coal sector earnings.

Coal spot prices have been very volatile in recent years. Coal demand and prices are particularly sensitive to weather patterns which cannot be accurately predicted beyond the very short term. Also affecting coal prices is the cost of competing sources of power generation such as natural gas. The company also faces both upside and downside risk from fluctuations in Natural Gas prices which have also been recently volatile.

Foundation is subject to multiple federal, state and local laws regarding its environmental performance and impact. These regulations could require the company to undertake costly clean-up work or pay damages. Proposed federal "carbon taxes" may also negatively affect coal producers.

Rail transportation from the Powder River Basin region has suffered from bottlenecks in recent years which could constrain the company's ability to ship its product to end customers.

Foundation's debt to total capitalization stands at more than 60% which is above average for the coal sector. The company plans to reduce this debt but this is dependent on adequate free cash flow.

If the impact on the company from any of these factors proves to be greater/less than we anticipate, it may prevent the stock from achieving our target price or could cause our target price to be materially outperformed.

## Massey Energy Co

### Company description

Massey Energy Company is the sixth-largest coal producer in the United States based on total annual production of about 42 million tons. Massey accounts for roughly 3.7% of total domestic production annually and was formed in late 2000, when the company completed a reverse spin-off, which divided it into two separate publicly traded corporations. Massey Energy processes and sells bituminous, low sulfur coal of steam and metallurgical grades through its 19 processing and shipping centers (resource groups) and is the largest producer of Central Appalachian coal. It operates 31 underground mines and 16 surface mines located throughout Central Appalachia and controls about 2.3 billion tons of proven and probable coal reserves.

### Investment thesis

We rate Massey Energy Co, Inc. shares Hold / Speculative (2S). Massey appears to have turned the corner on a series of ongoing operational problems. The company has the largest and highest quality reserve base in the Central Appalachian region. Massey benefits from considerable sales of high-priced Metallurgical coal both domestically and in export markets. Despite these positives, we are not convinced that the company can meaningfully grow EBITDA and EPS given modest forward contract pricing and ongoing cost pressures in underground mining. A legal ruling making mountaintop removal mining permits harder to get is a further constraint on growth. Our valuation work leads us to believe the company's shares are fairly valued at current levels.

### Valuation

Our \$27 target price for Massey Energy is based on 2008E operating Cash Flow, EBITDA, and DCF modeling with respective weightings of 40/40/20.

The cycle of EBITDA multiples for coal companies since 1997 is in the range of 5x to 18x with mid-cycle at 8x. We chose a Coal group multiple of 8.0x for 2008E based on our view that this year will represent high, but not peak, levels of profitability. Massey Energy has historically traded at a 10% valuation discount to the broader Coal sector. We believe a greater, 20% discount is justified by the potential for a history of poor operational and environmental performance to result in persistent litigation. Applying a 6.0x multiple to our 2008 EBITDA estimate we arrive at a \$25 value.

The cycle of cash flow multiples for coal companies since 1997 is in the range of 3x to 18x with mid-cycle at 9x. Similar to the methodology described above for EBITDA, we first chose a Coal sector multiple - in this case 9.0x. Applying a 20% discount we arrive at a 7.0x multiple for Massey. Applying this to our 2008 Operating Cash Flow estimate we arrive at a \$32 value.

Our detailed DCF modeling calculates a value of \$21 per share.

### Risks

We rate Massey Energy Speculative based on the high degree of recent volatility in Coal stock prices driven by swings in coal prices and coal sector earnings. We additionally note that the company is small in size and operates mostly underground mines where unforeseen accidents can have severe consequences.

Coal spot prices have been very volatile in recent years and represent both upside and downside risk. Coal demand and prices are particularly sensitive to overall economic growth and hard-to-predict weather patterns.

Massey has experienced severe productivity and cost pressures in recent quarters. It remains uncertain how quickly the company is able to permanently resolve these issues.

Massey is subject to multiple federal, state and local laws regarding its environmental performance and impact. Some form of federal "Carbon Tax" legislation is likely to be introduced in the near future. Coal contains more carbon than competing energy sources and demand for coal would likely be negatively impacted.

If the impact on the company from any of these factors proves to be greater/less than we anticipate, it could cause the shares to continue to outperform our target price or to fall below our target price.

## **Alpha Natural Resources Inc**

### **Company description**

Alpha Natural Resources primarily operates in Central Appalachia and is the third-largest coal producer in that region. Alpha is 13th-largest US coal producer, but ranks second in high value, high-margin metallurgical coal used in steel mills. It is the largest exporter of metallurgical coal. In 2005, the company produced 20.7 mt and coal sales totaled 26.8 mt. With 511.1 mt of proven and probable reserves, Alpha's operations have an overall life of 25 years. Roughly 89% of reserves are low sulfur, with 58% being below 1.0%. The company was formed through a series of acquisitions from 2002 through 2003 at a cost of almost \$300 m. The initial purchase of Pittston Coal occurred in December 2003, followed by Coastal Coal, the US assets of American Metals and Coal International (AMCI), and Mears Enterprises. Alpha is likely to continue its role as an industry consolidator, focusing on properties and assets that can be integrated into its system, rather than headline corporate transactions.

### **Investment thesis**

We rate Alpha Natural Resources Hold / Speculative (2S). Key positive elements of the investment thesis are: 1) Strong metallurgical coal exposure; 2) Solid financial profile in terms of liquidity and liabilities; 3) Coal blending and brokerage, which has enhanced margins; and 4) Likelihood that Alpha will continue to be a consolidator. Additional negative considerations include: 1) High cost structure due to predominantly thin-seam underground mining; 2) Fragmented production base with 69 mines serving 10 preparation plants in 5 states; and 3) Brief operating and trading history. Based on our valuation analysis, we find the shares fairly valued at current levels.

### **Valuation**

Our \$23 target price for Alpha Natural Resources shares is based on 2008E operating Cash Flow, EBITDA, and DCF modeling with respective weightings of 40/40/20.

The cycle of EBITDA multiples for coal companies since 1997 is in the range of 5x to 18x with mid-cycle at 8x. We chose a Coal group multiple of 8.0x for 2008E based on our view that next year represents mid-cycle, levels of

profitability. Alpha Natural has historically traded at a 10-30% valuation discount to the broader Coal sector. We believe this discount is justified by the company's small size and exposure to expensive Eastern underground mining. Applying a 20% discount for a 6.0x multiple on our 2008 EBITDA estimate yields \$22 value.

The cycle of cash flow multiples for coal companies since 1997 is in the range of 3x to 18x with mid-cycle at 9x. Similar to the methodology described above for EBITDA, we first chose a Coal sector multiple of 9.0x. Applying a 20% discount we arrive at a 7.0x multiple for ANR. Applying this our 2008 Operating Cash Flow estimate we arrive at a \$28 value.

Our detailed DCF modeling calculates a value of \$13 per share.

## **Risks**

We rate Alpha Natural 'Speculative Risk' based on the high degree of recent volatility in Coal stock prices driven by swings in coal prices and coal sector earnings. We additionally note that the company is small in size and operates mostly underground mines where unforeseen accidents can have severe consequences.

Coal spot prices have been very volatile in recent years and represent both upside and downside risk. Coal demand and prices are particularly sensitive to weather patterns which cannot be accurately predicted beyond the very short term.

ANR is principally an underground miner, which implies significant operating risk. Underground mines are more expensive to operate on a per-ton basis, and show high levels of fixed costs. Geological problems are common and the impact of mining-accidents can be very severe.

ANR is subject to multiple federal, state and local laws regarding its environmental performance and impact. These regulations could require the company to undertake costly clean-up work or pay damages.

Some form of federal "Carbon Tax" legislation is likely to be introduced in the near future. Coal contains more carbon than competing energy sources and demand for coal would likely be negatively impacted.

If the impact on the company from any of these factors proves to be greater/less than we anticipate, it may prevent the stock from achieving our target price or could cause our target price to be materially outperformed.

# Appendix A-1

## Analyst Certification

I, John H Hill, CFA, research analyst and the author of this report, hereby certify that all of the views expressed in this research report accurately reflect my personal views about any and all of the subject issuer(s) or securities. I also certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

## IMPORTANT DISCLOSURES

### Peabody Energy Corp (BTU)

#### Ratings and Target Price History - Fundamental Research

Analyst: John Hill, CFA (covered since January 12 2007)



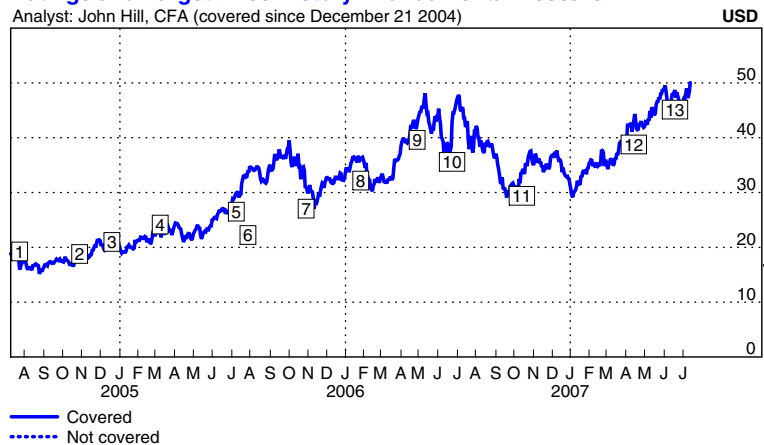
#	Date	Rating	Target Price	Closing Price
1:	11 Jan 07	1H	48.00	38.23
2:	13 Apr 07	1H	*56.00	46.18

\*Indicates change.

### CONSOL Energy Inc. (CNX)

#### Ratings and Target Price History - Fundamental Research

Analyst: John Hill, CFA (covered since December 21 2004)



#	Date	Rating	Target Price	Closing Price
1:	26 Jul 04	2H	*17.75	15.94
2:	28 Oct 04	2H	*19.75	17.49
3:	20 Dec 04	*1H	*24.50	20.18
4:	9 Mar 05	1H	*28.50	22.82
5:	10 Jul 05	1H	*35.50	29.93
6:	28 Jul 05	1H	*41.50	34.02
7:	28 Oct 05	1H	*38.00	31.05
8:	27 Jan 06	1H	*44.00	36.07
9:	28 Apr 06	1H	*51.00	42.58
10:	23 Jun 06	1H	51.00	42.81
11:	13 Oct 06	*2H	*34.00	33.49
12:	13 Apr 07	2H	*44.00	42.99
13:	19 Jun 07	2H	*50.00	48.68

\*Indicates change.

### Arch Coal, Inc. (ACI)

#### Ratings and Target Price History - Fundamental Research

Analyst: John Hill, CFA (covered since December 21 2004)

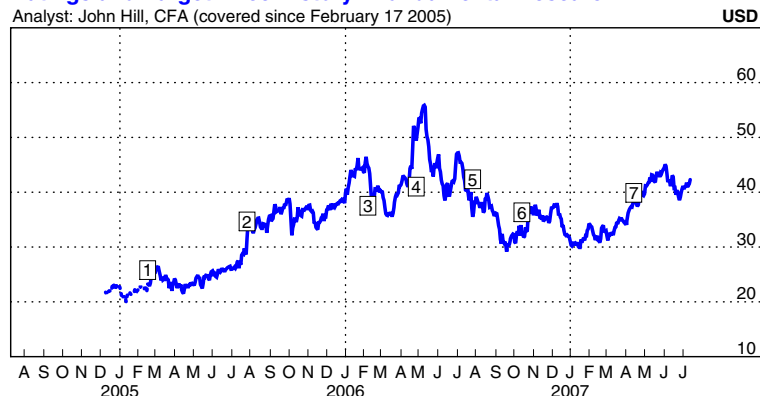


#	Date	Rating	Target Price	Closing Price
1:	15 Oct 04	2H	*18.75	16.85
2:	20 Dec 04	*1H	*21.50	16.95
3:	9 Mar 05	1H	*27.00	22.04
4:	24 Jun 05	1H	*32.50	27.29
5:	29 Nov 05	1H	*46.00	37.68
6:	23 Apr 06	1H	*57.00	49.47
7:	23 Jul 06	1H	57.00	33.41
8:	13 Oct 06	1H	*39.00	31.06
9:	23 Apr 07	1H	*46.00	36.75

\*Indicates change.

### Foundation Coal Holdings, Inc. (FCL) Ratings and Target Price History - Fundamental Research

Analyst: John Hill, CFA (covered since February 17 2005)



#	Date	Rating	Target Price	Closing Price
1:	16 Feb 05	2S	27.00	23.24
2:	27 Jul 05	*2H	*35.00	31.60
3:	8 Feb 06	*1H	*57.00	44.70
4:	27 Apr 06	1H	*64.00	49.41
5:	27 Jul 06	1H	*50.00	35.51
6:	13 Oct 06	1H	*43.00	32.05
7:	13 Apr 07	1H	*48.00	38.55

\*Indicates change.

— Covered  
- - - Not covered

### Massey Energy Company (MEE) Ratings and Target Price History - Fundamental Research

Analyst: John Hill, CFA (covered since December 21 2004)



#	Date	Rating	Target Price	Closing Price
1:	30 Jul 04	2H	*30.00	27.65
2:	27 Oct 04	2H	*29.00	28.17
3:	20 Dec 04	2H	*38.00	35.14
4:	9 Mar 05	*1H	*54.00	43.09
5:	29 Sep 05	*2H	54.00	52.53
6:	30 Oct 05	2H	*45.00	40.07
7:	28 Feb 06	2H	*44.00	37.20
8:	30 Jul 06	2H	*28.00	26.72
9:	13 Oct 06	*3S	*17.00	23.37
10:	30 Apr 07	*2S	*30.00	26.93

\*Indicates change.

— Covered  
- - - Not covered

### Alpha Natural Resources Inc (ANR) Ratings and Target Price History - Fundamental Research

Analyst: John Hill, CFA (covered since April 14 2005)



#	Date	Rating	Target Price	Closing Price
1:	13 Apr 05	2S	31.00	24.02
2:	4 Oct 05	2S	*34.00	29.00
3:	3 Nov 05	2S	*30.00	25.35
4:	1 Feb 06	2S	*27.00	22.85
5:	4 May 06	2S	*29.00	25.25
6:	1 Aug 06	2S	*21.00	17.05
7:	13 Oct 06	2S	*18.00	16.09
8:	15 Feb 07	2S	*17.00	14.16
9:	13 Apr 07	2S	*18.00	18.03

\*Indicates change.

— Covered  
- - - Not covered

Customers of the Firm in the United States can receive independent third-party research on the company or companies covered in this report, at no cost to them, where such research is available. Customers can access this independent research at <http://www.smithbarney.com> (for retail clients) or <http://www.citigroupgeo.com> (for institutional clients) or can call (866) 836-9542 to request a copy of this research.

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Arch Coal, Inc., Foundation Coal Holdings, Inc. and Yanzhou Coal Mining. This position reflects information available as of the prior business day.

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of China Coal Energy and Peabody Energy Corp.

## COAL: Missing the Window

18 July 2007

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Arch Coal, Inc., China Coal Energy, China Shenhua Energy, CONSOL Energy Inc., Foundation Coal Holdings, Inc., Massey Energy Company, Peabody Energy Corp, Tambang Batubara Bukit Asam and United Tractors.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from China Coal Energy, China Shenhua Energy and Resource Pacific Holdings Ltd.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Arch Coal, Inc., China Coal Energy, China Shenhua Energy, CONSOL Energy Inc., Foundation Coal Holdings, Inc., Massey Energy Company, Peabody Energy Corp, Tambang Batubara Bukit Asam and United Tractors in the past 12 months.

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<i>% of companies in each rating category that are investment banking clients</i>	40%	64%	73%
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