



**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

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**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934**

**Date of report (Date of earliest event reported): June 19, 2008 (June 19, 2008)**

**Arch Coal, Inc.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation)

1-13105  
(Commission File Number)

43-0921172  
(I.R.S. Employer Identification No.)

CityPlace One  
One CityPlace Drive, Suite 300  
St. Louis, Missouri 63141  
(Address, including zip code, of principal executive offices)

Registrant's telephone number, including area code: (314) 994-2700

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 7.01 Regulation FD Disclosure.**

On June 19, 2008, several senior executive officers of Arch Coal, Inc. (the “Company”) will be delivering presentations at the Company’s 2008 Analyst Day that will include written communications comprised of slides. The slides from the presentations are attached hereto as Exhibit 99.1 and are hereby incorporated by reference.

A copy of the slides will be available at <http://investor.archcoal.com/events.cfm> for 30 days.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

The following exhibits are attached hereto and furnished herewith.

Exhibit No.	Description
99.1	Slides from the presentations at the Arch Coal, Inc. 2008 Analyst Day.

**Signatures**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: June 19, 2008

Arch Coal, Inc.

By: /s/ Robert G. Jones  
Robert G. Jones  
Vice President-Law, General Counsel & Secretary

**Exhibit Index**

Exhibit No.	Description
99.1	Slides from the presentations at the Arch Coal, Inc. 2008 Analyst Day.



Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

Paul Lang  
Senior Vice President, Operations

Mountain Laurel Complex  
June 19, 2008

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## Forward-Looking Information

This presentation contains “forward-looking statements” – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” or “will.” Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties arise from changes in the demand for our coal by the domestic electric generation industry; from legislation and regulations relating to the Clean Air Act and other environmental initiatives; from operational, geological, permit, labor and weather-related factors; from fluctuations in the amount of cash we generate from operations; from future integration of acquired businesses; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. For a description of some of the risks and uncertainties that may affect our future results, you should see the risk factors described from time to time in the reports we file with the Securities and Exchange Commission.

This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation or as an alternative to net income from operations, cash flows from operations, earnings per fully-diluted share or other measures of profitability, liquidity or performance under generally accepted accounting principles. You should be aware that our presentation of these measures may not be comparable to similarly-titled measures used by other companies. A reconciliation of these financial measures to the most comparable measures presented in accordance with generally accepted accounting principles has been included at the end of this presentation.



## Arch is continuing to enhance our reputation as a responsible energy company



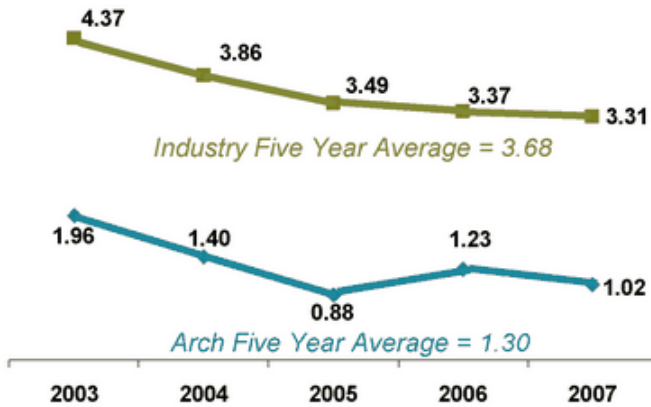
- Operating the world's **safest** coal mines
  - Awarded MSHA's Sentinels of Safety honor for operating the nation's safest underground coal mines in 2006 and 2007
  - Ranked first among coal industry peers for safety performance last year
- Acting as **responsible** citizens and good **environmental stewards**
  - Inaugural 2007 social responsibility report elevates awareness of Arch's environmental programs
  - Earned 3 National Good Neighbor Awards in 4 years
- Achieving superior **financial performance**
  - *Forbes* recognized Arch as one of the 100 most trustworthy U.S. companies of 2008
  - Expect 2008 to be a record earnings year for Arch



## Arch's safety performance is the best among the largest public coal companies

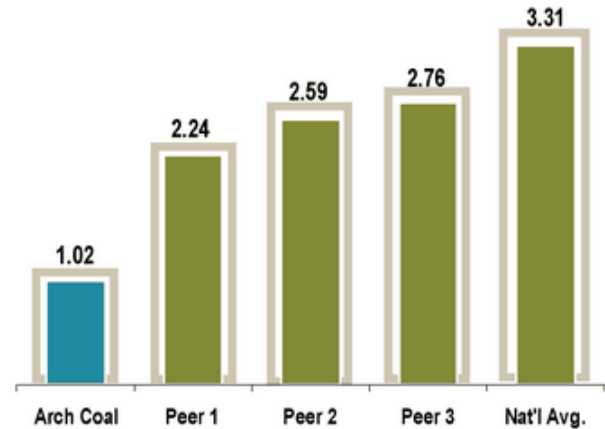
### Annual Lost-Time Safety Incident Rate

(per 200,000 employee-hours worked)



### Lost-Time Safety Incident Rate in 2007

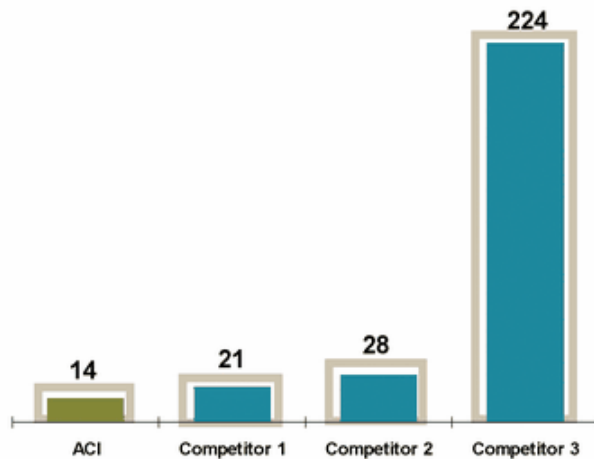
(per 200,000 employee-hours worked)



## Arch's 2007 environmental performance ranked first among our coal peers

### 2007 SMCRA Violations

(number of violations compared to key competitors)



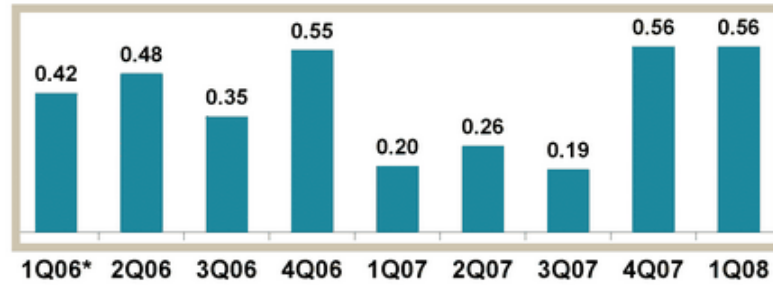
- Arch's 2007 environmental performance was the **best** in the company's 10-year history
- During the past decade, we've won more than **50 national and state awards** for environmental stewardship
- Arch's 2008 year-to-date violation rate is **zero**
- Our commitment to land reclamation demonstrates Arch's unique culture and dedication as a **responsible corporate citizen**



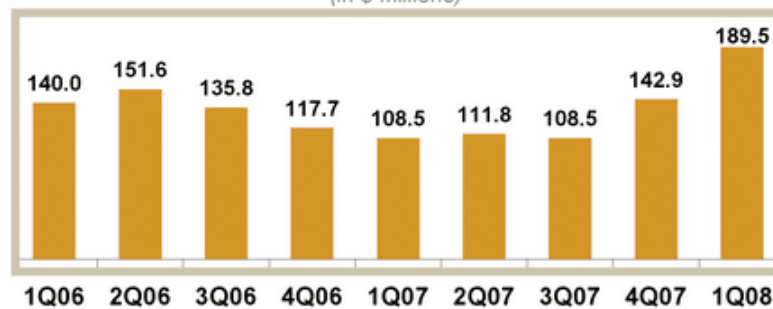
Arch Coal, Inc.

## Arch is building a solid earnings track record, anticipates record earnings in 2008

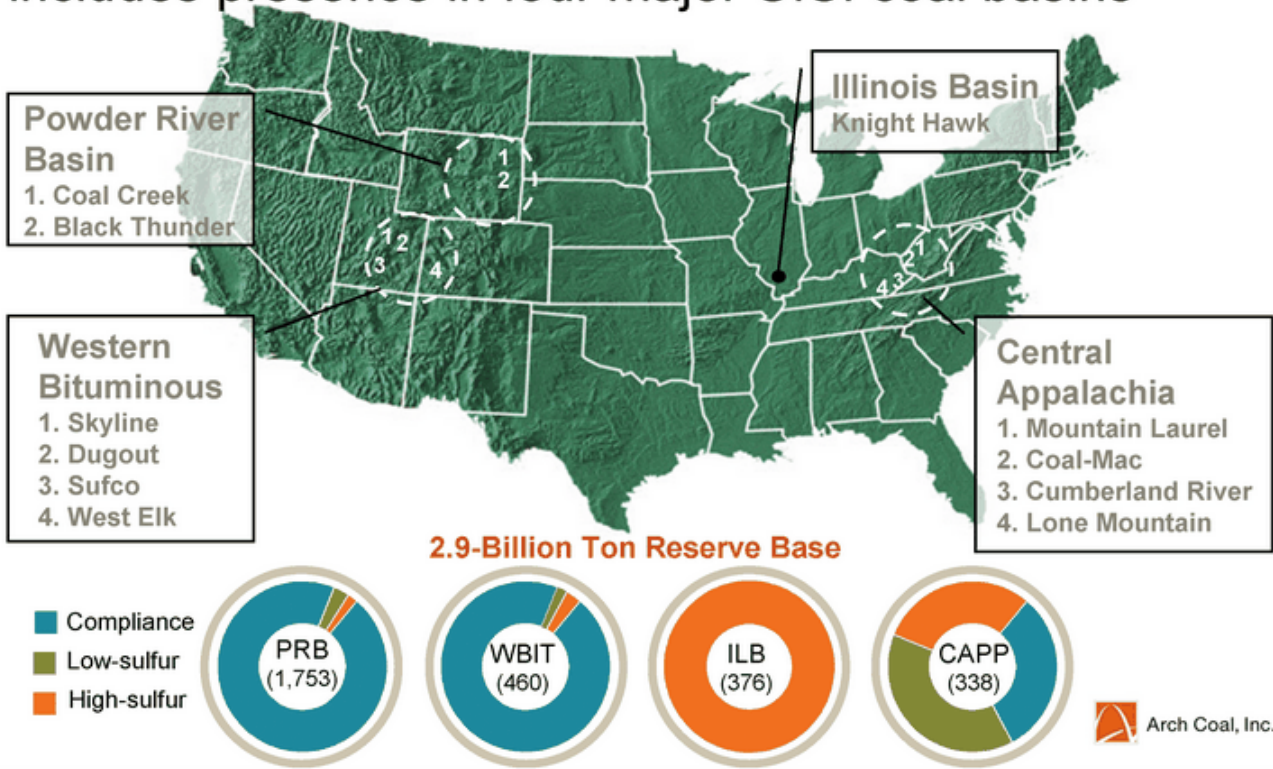
**Earnings Per Share**  
(fully diluted, in US dollars)



**EBITDA\*\***  
(in \$ millions)



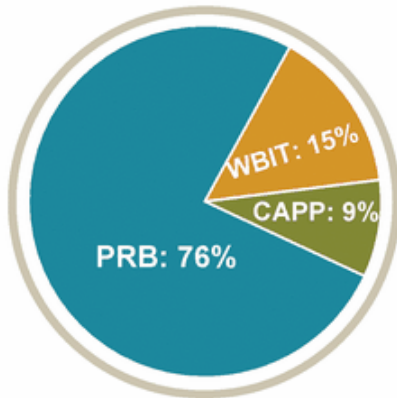
# Arch's national scope of operations and reserve base includes presence in four major U.S. coal basins



## Arch's mine portfolio underscores value of diversity

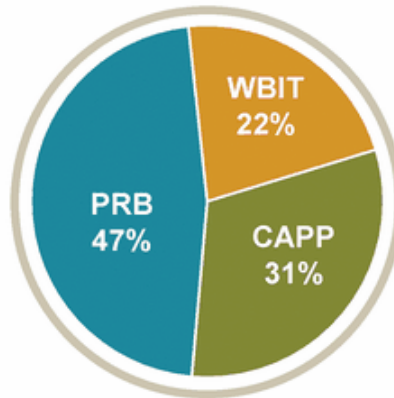
### 2007 ACI Coal Production

(percent of total tons by region)



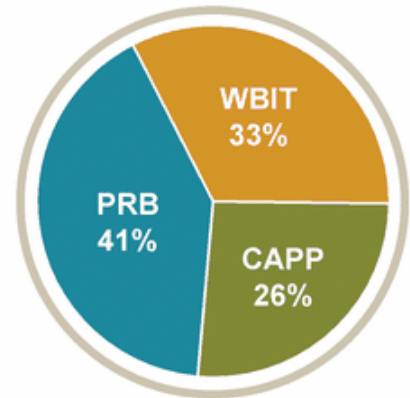
### 2007 ACI Revenue

(percent of total revenue by region)



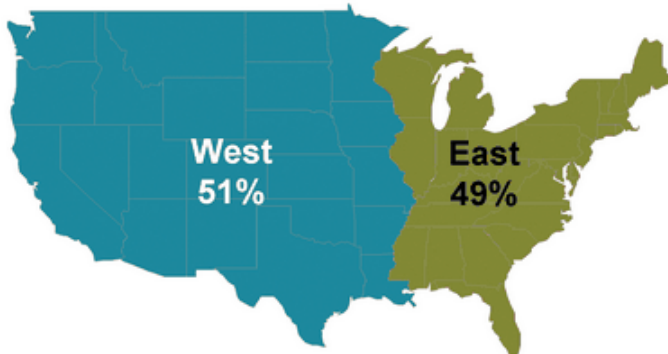
### 2007 ACI Income

(percent of segment income by region)

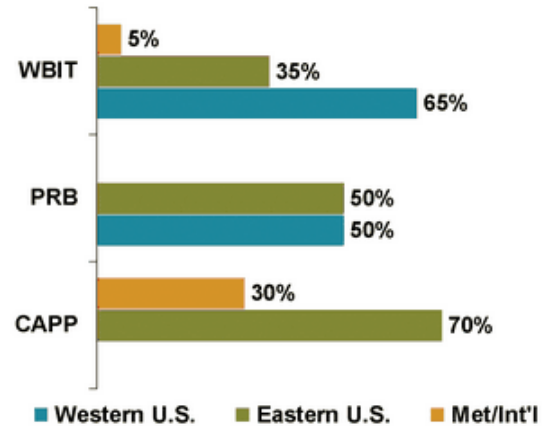


## Arch's national operations serve a diversified customer base

**2007 ACI Coal Sales**  
(percent of total sales volume)



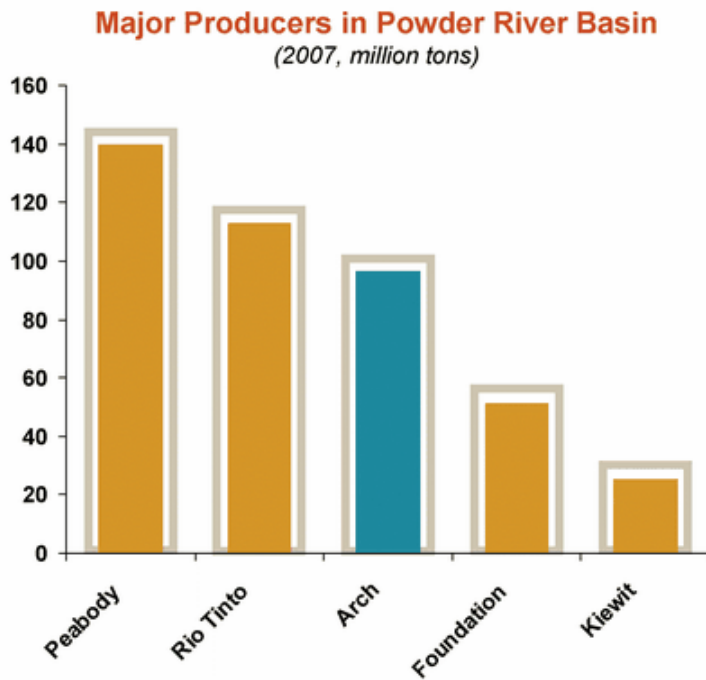
**ACI Customer Mix**  
(by key supply basin)



Arch's national network of mines services **148** coal-fueled power plants in **33** U.S. states and customers in more than a **dozen** countries worldwide



## The Powder River Basin is the largest coal supply region in the United States



- Total production in region of **480 million tons**
- Roughly **50%** of PRB coal moves east of Mississippi River today
- With global supply shortfalls, we believe PRB will penetrate further east and move to **export**





## Arch Coal is one of the top producers in the Powder River Basin

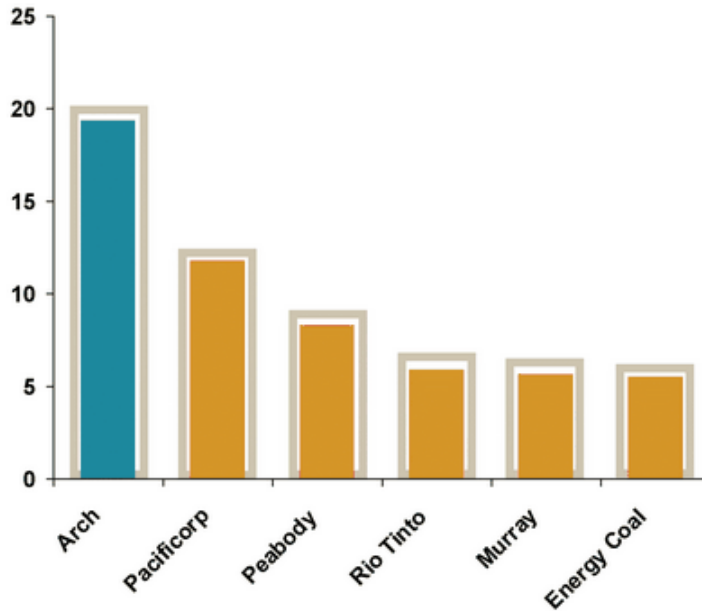


- **Black Thunder**
  - 5 draglines, 13 shovels
  - Sales\*: 86.2 million tons in 2007
  - Coal quality: 8800 Btu/lb, 0.50-0.75 lbs. SO<sub>2</sub>/mmBtu
  - 1,000+ employees
- **Coal Creek**
  - Dragline, shovel operation
  - Sales\*: 10.2 million tons in 2007
  - Coal quality: 8400 Btu/lb, 0.85 lbs. SO<sub>2</sub>/mmBtu
  - 130 employees



## Arch Coal is the leading coal producer in the Western Bituminous Region

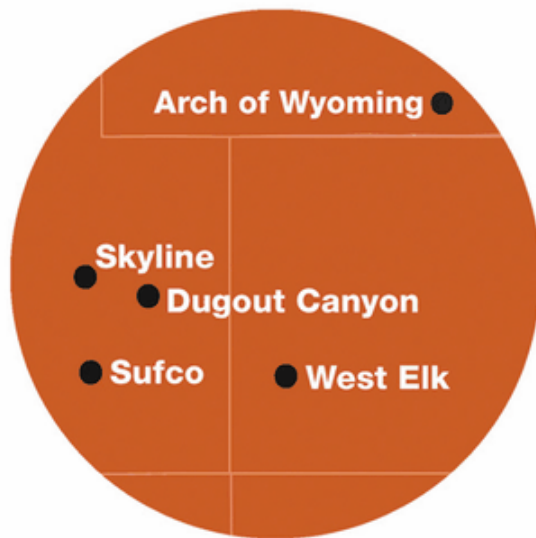
**Major Producers in Western Bituminous\* Region**  
(2007, in million tons)



- Total production in region of **77 million tons**
- Arch is the **largest producer** in the Western Bit region
- Western Bit coal is **expanding its reach** to Midwest and eastern power producers as well as overseas

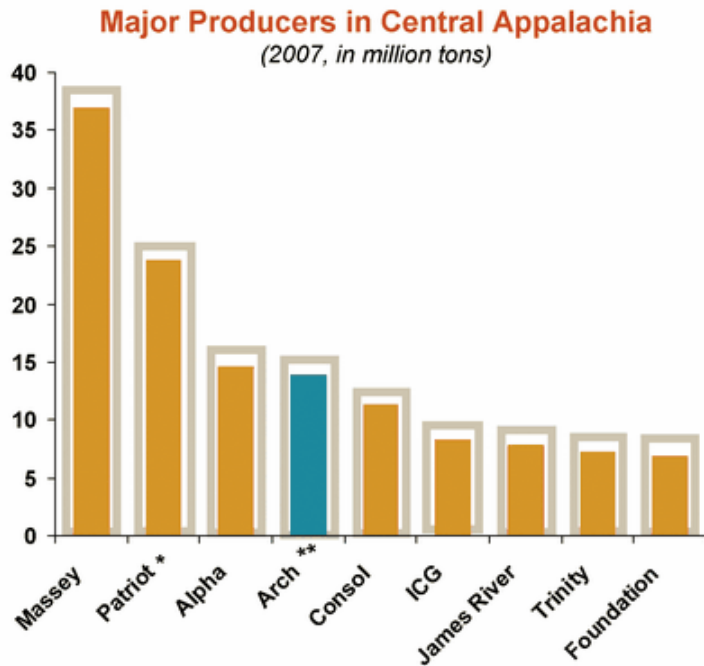


## Arch's Western Bituminous operations are some of the most productive longwall mines in the nation



- Four longwall operations with combined production of **19.3 million tons** in 2007 and workforce of 800
- **Low-sulfur** coal quality averages 11,700 Btu/lb, 0.80 lbs. SO<sub>2</sub>/mmBtu
- Limited **opportunity to expand** over time
- Arch of Wyoming / Carbon Basin reserves are site of future **coal-to-liquids** project with DKRW

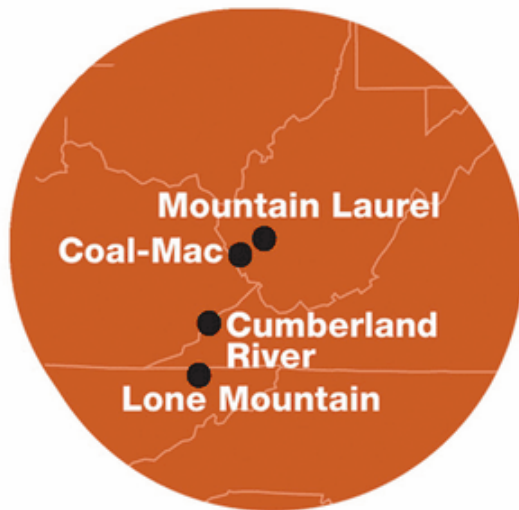
## Arch has maintained a meaningful position in Central Appalachia



- Total production in region of **226 million tons**
- Production in this region is fragmented
- Annual production in Central App. region has **declined** by more than 60 million tons since 1997



## Arch remains a key producer of metallurgical and steam coal in Central Appalachia

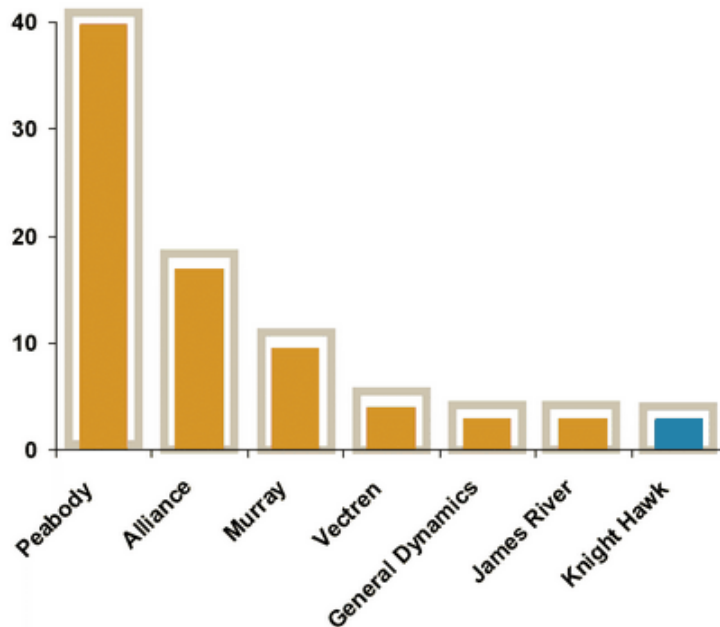


- Expect to produce **13-14 million** tons in 2008 through a combination of underground and surface operations
- Operations in West Virginia, Kentucky, and Virginia with **1,300+** direct employees
- **Opportunity to expand** production to 15 million tons in 2009 with brownfield or equipment investments
- Expect to sell roughly 4 million tons into **met markets** in 2008, and 5-6 million tons in 2009



## Arch is preparing for rebound in Illinois Basin demand

**Major Producers in Illinois Basin**  
(2007, million tons)



- Total production in region of **96 million tons**
- Arch owns a 33% equity interest in **Knight Hawk**
- As scrubbers come online, market **opportunities** will develop
- Region well positioned to export via **Gulf** of Mexico



## Arch has built an extensive and competitive reserve base in the Illinois Basin

- Acquired 157 million tons of reserves in southern Illinois for roughly \$39 million in October 2007
- Now control a nearly 300-million-ton continuous reserve block of **high-Btu, low-chlorine coal**
- Gives Arch the option to build a low-cost, mine-mouth facility for the domestic utility market or a CTL plant, depending on future market conditions
- Arch also owns an equity interest in Knight Hawk Holdings, a top 10 producer in Illinois



 Arch Coal, Inc.

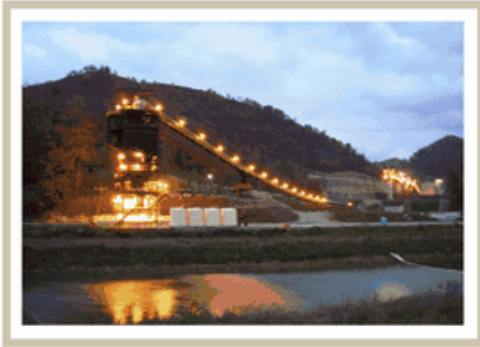
## We continue to seek new and innovative ways to manage our controllable costs at all of our mines

- **Increasing coordination** through centralized purchasing, operations, safety and environmental affairs
- Building a culture of continuous **process improvement** efforts to encourage innovative solutions and share best practices
  - Est. \$18 million cost-savings per year in 2007 and 2006
- **Predictive maintenance** reduces unplanned downtime and overtime, extends equipment life
  - Est. \$18 million cost-savings in 2007, \$11.5 million in 2006
- Focusing on cost control of **major consumables** such as diesel, electricity, explosives (natural gas) and tires (petroleum product)
  - Building alliances with major vendors; hedging; long-term supply arrangements





## Coal blending optimization allows Arch to better monetize every Btu



- **Blending optimization** models allocate mine production to sales contracts, thus maximizing margin
  - Models allow sales team to know real value in 100 Btu increments
- **Dynamic coal quality targets** provide monthly rolling quality averages for each customer so loading sources can adjust blends and provide optimum coal recovery
  - Additional space at DTA terminal allows for precision blending of **international** shipments to generate the greatest volume of our premium valued products
- Through coal blending optimization, Arch achieved an additional **\$10 million** in coal revenues in 2007



Arch Coal, Inc.

## Energy savings is a primary cost-control initiative

- Developing fuel and lubricant consumption goals for each mine
- Conducting energy analysis in Utah and Colorado
- Reviewing equipment usage, developing fuel economy and optimization plan
- Evaluating alternate technologies, such as electric conveyors



## We're focused on creating shareholder value as the energy industry expands



- **Recognized leadership** in mine safety and environmental stewardship promotes higher productivity and helps attract best-in-class workforce
- Rigorous **focus on cost control** and judicious capital spending helps expand margins
- Strong understanding of **world and domestic market trends** allows us to anticipate timing of future coal supply/demand
- **Financial flexibility** allows us to consider future investments for organic and strategic growth and capital enhancements
- A clear focus on **clean coal** in an evolving marketplace allows Arch to leverage our innovative expertise and expand market for coal



## EBITDA Reconciliation Chart

Included in the accompanying presentation, we have presented certain non-GAAP measures as defined by Regulation G. The following reconciles these items to net income as reported under GAAP.

**Arch Coal, Inc.**  
**Adjusted EBITDA**

	1Q 06	2Q 06	3Q 06	4Q 06	1Q 07	2Q 07	3Q 07	4Q 07	1Q 08
Net income	\$ 60,687	\$ 69,717	\$ 50,927	\$ 79,600	\$ 28,724	\$ 37,552	\$ 27,280	\$ 81,373	\$ 81,147
Income tax (benefit) expense	17,900	13,000	12,100	(35,350)	4,650	(2,400)	5,100	(27,200)	15,240
Interest expense, net	14,157	15,323	15,602	15,557	16,587	18,280	16,638	20,760	20,063
Depreciation, depletion and amortization	45,821	51,713	53,641	57,179	57,620	57,990	58,628	67,824	73,042
Expenses from early debt extinguishment and other non-operating	1,393	1,808	3,572	674	902	418	806	147	-
Adjusted EBITDA	\$ 139,958	\$ 151,561	\$ 135,842	\$ 117,660	\$ 108,483	\$ 111,840	\$ 108,452	\$ 142,904	\$ 189,492



Source: ACI



Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

John Drexler

Senior Vice President and Chief Financial Officer

Mountain Laurel Complex

June 19, 2008

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## Forward-Looking Information

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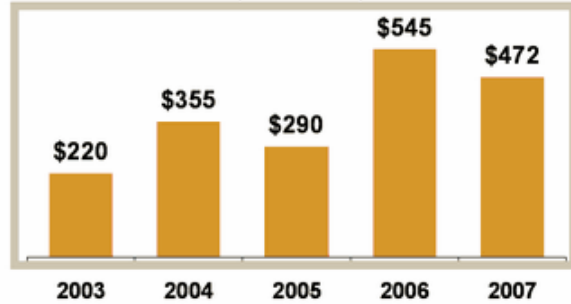
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# Arch's Financial Scorecard

**Earnings Per Share**  
(fully diluted)



**Adj. EBITDA\***  
(in \$ millions)



**Cash Flow from Operations**  
(in \$ millions)



**Capital Expenditures**  
(in \$ millions)



## Arch successfully anticipated past coal market trends; assembled strategic national and diverse asset base

- Strategically **expanded operational focus** on growth markets
  - Acquired assets and reserves opportunistically
- **Identified market trends** early and built a position in low-sulfur reserves
  - Low-sulfur coal continues to command a price premium in the market today
  - Expanded strategy to include low-chlorine reserves
- **Monetized non-core assets** at advantageous times
  - Portfolio approach to asset base
  - Redeployed capital from asset sales into more strategic investments
- Pursued key **organic growth** initiatives
  - Invested in projects that have provided a competitive advantage
- **Leveraged asset base** to participate in emerging trends/technologies
  - Focused on developing new markets for coal





## Overview of Arch's key past and present value-creating activities

- **Powder River Basin**

- Arco assets (1998)
- Thundercloud LBA (1998)
- North Rochelle (2004)
- Little Thunder LBA (2004)
- Coal Creek reopened (2006)

- **Central Appalachia**

- Contributed reserves to form NRP and monetized assets (2002-2004)
- Sold select operations (2005)
- Sold Mingo Logan Ben Creek (2007)
- Mountain Laurel longwall start-up (2007)

- **Western Bituminous Region**

- Arco assets (1998)
- Canyon Fuel interest (2004)
- Skyline reopened (2006)
- Carbon Basin CTL opportunity (2006)

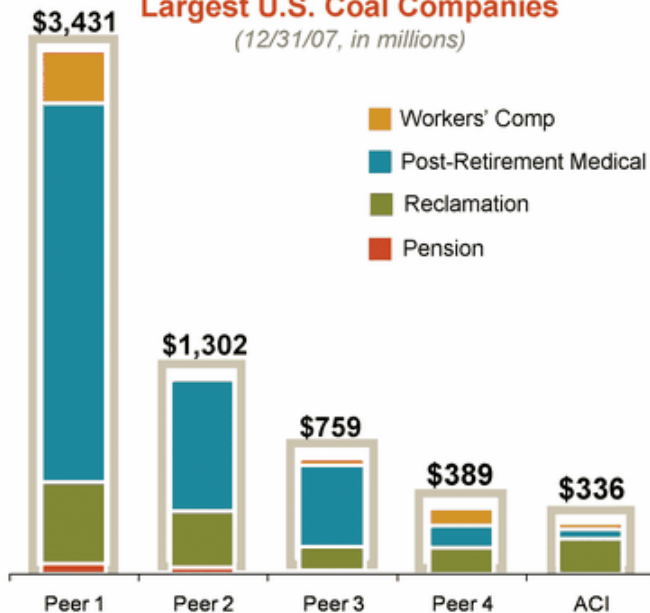
- **Illinois Basin**

- Acquired equity interest in Knight Hawk Holdings (2006)
- Acquired Denmark reserves (2007)



## Arch has significantly strengthened its financial position; maintains lowest legacy liabilities among peers

### Legacy Liabilities of Largest U.S. Coal Companies (12/31/07, in millions)

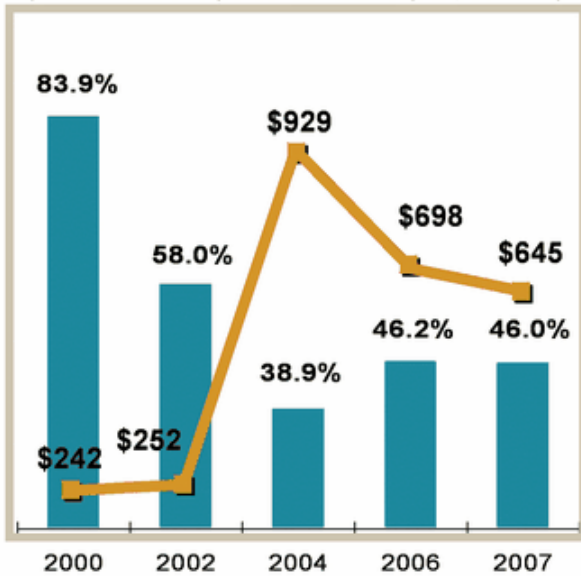


- Substantially **reduced legacy liability position** since 2005
  - More than one-half of Arch's remaining legacy liabilities represent ongoing reclamation expense
- Translates into significant **annual expense savings**
  - Arch estimates that annual costs required to service prior legacy liabilities were reduced by roughly \$65 million

# Arch has significantly improved its capital structure and liquidity position

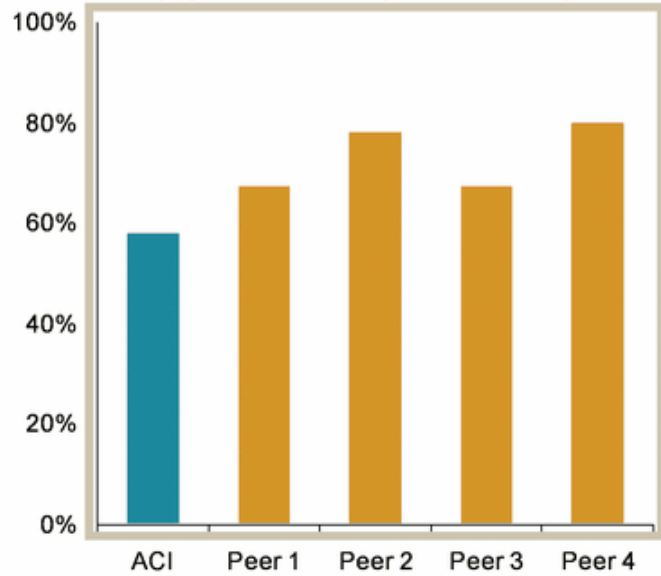
## Net Debt as Percentage of Capitalization and Available Liquidity

(in \$ millions and percent of total capital, at 12/31)



## Total Obligations\* as a Percentage of Capitalization

(in percent of total capital, at 12/31/07)



## Arch has access to multiple sources of low-cost financing

- **Revolving Credit Facility**
  - Restructured in 2006 to increase capacity to \$800 million
- **Asset Securitization**
  - Established in 2006 and expanded in 2008
  - Capacity of \$175 million
  - Rates are typically better than our Revolver borrowing rate
- **Commercial Paper Program**
  - Established in 2007 and expanded in 2008
  - Capacity of \$100 million
  - Rates are comparable to other highly rated CP programs
  - Rates are typically better than our Revolver borrowing rate

## Arch's adherence to a market-driven strategy laid the foundation for current success

- **Maintain strong balance sheet** to support leveraged sales position
  - Go prompt in weak market cycle to preserve future upside potential
  - Layering and patient sales approach as markets strengthen
  - Leveraged contracting strategies; use of trading to optimize asset base
- Re-align **production and capital spending levels** to match market
  - Match production targets to current market demand
  - Align capital spend with market expectations
  - Unhedged sales position reduces need for significant expansion capital
- Diligently **manage controllable costs** and preserve **flexibility**
  - Focus on cost control; increase operational flexibility
  - Offset cost pressures with productivity and process improvement initiatives

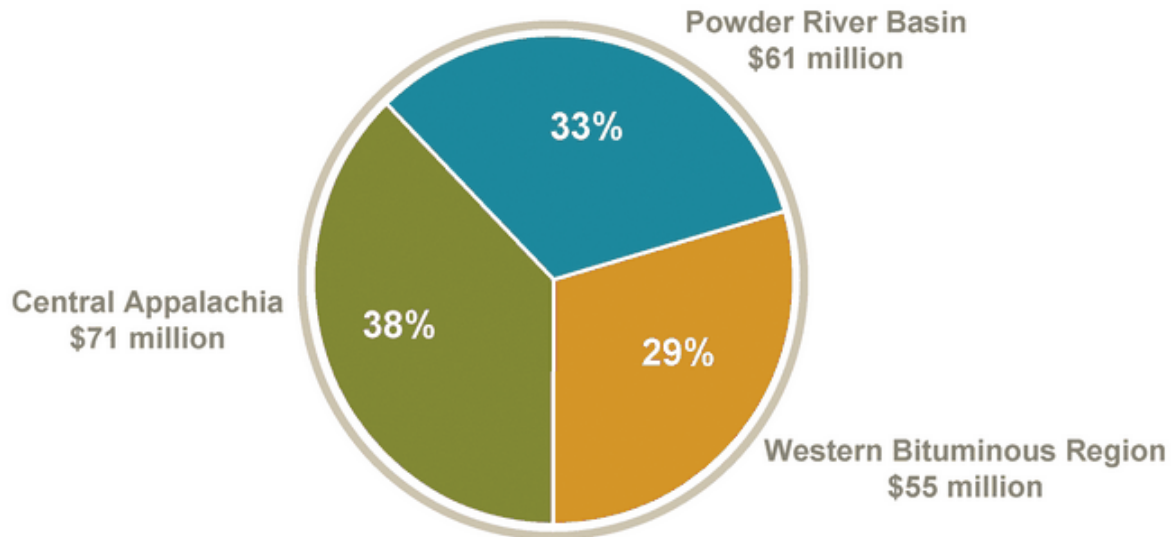
## Arch delivers strong first quarter 2008 results



- **Meaningful expansion** in revenues, earnings per share and adjusted EBITDA over prior-year period
  - Earnings per share increased 180%
  - Consolidated revenues increased 22%
  - EBITDA increased 75%

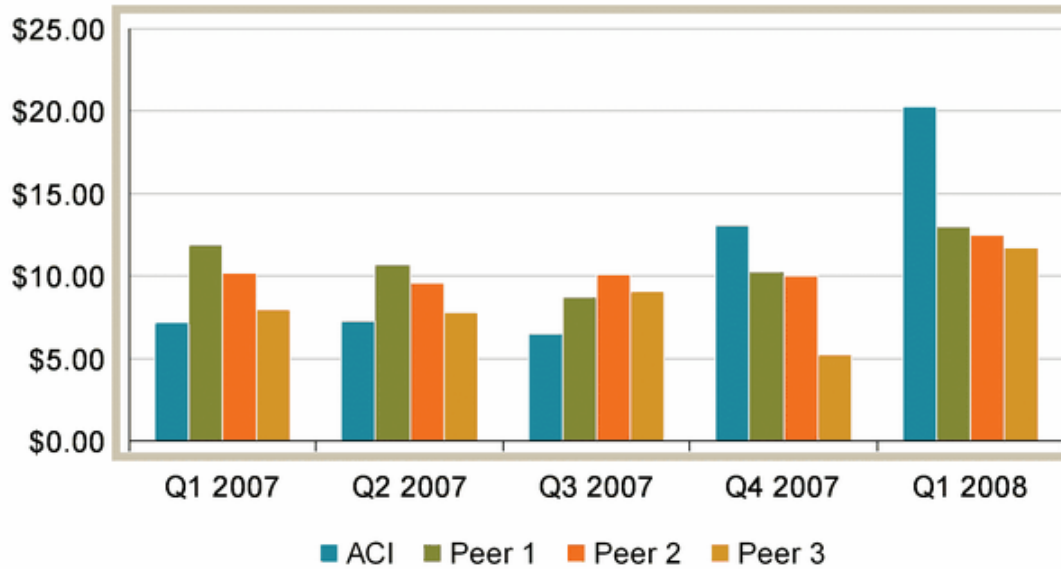
## Arch's first quarter 2008 financial performance highlights contribution from all operating regions

### 1Q08 Cash Contribution by Region



## Arch's cash margin in Central Appalachia has outperformed since the Mountain Laurel start-up

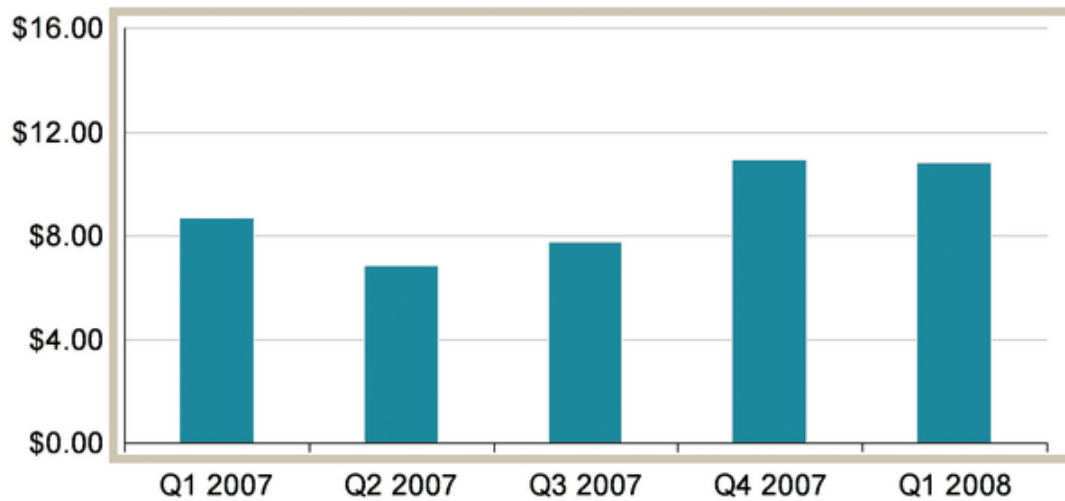
Reported Cash Margin per Ton





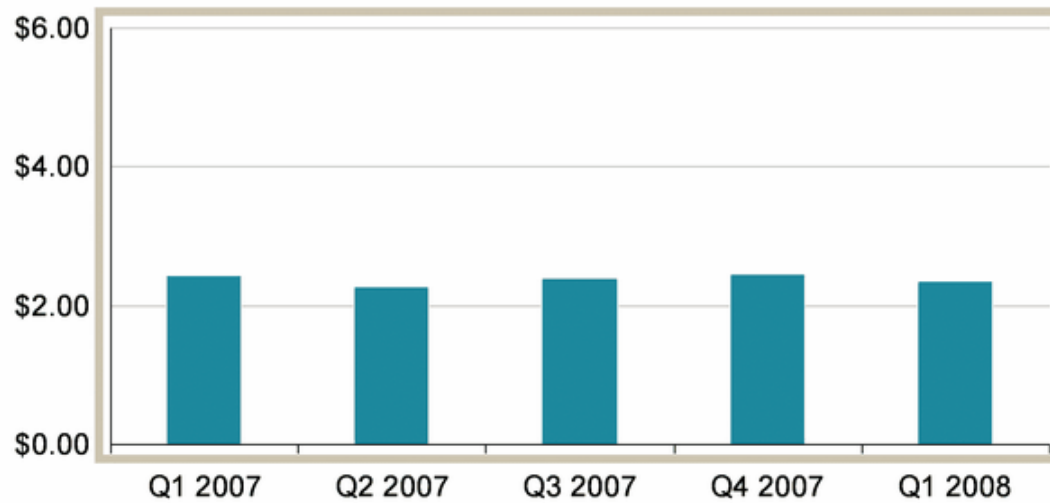
## Arch's cash margin in the Western Bituminous Region has been improving

Arch's Reported Cash Margin per Ton



## Arch's cash margin in the Powder River Basin has remained relatively constant

Arch's Reported Cash Margin per Ton

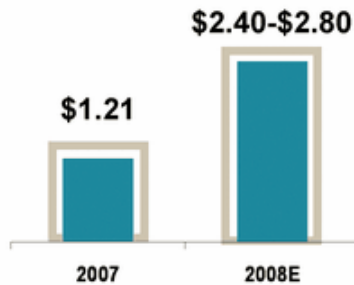


## Arch's strategic brokering and trading platform enhances value for shareholders

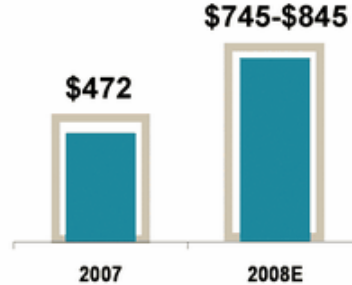
- Established in 2006 and expanded in 2007 and 2008
- Platform designed to enhance value through a variety of means
  - **Risk management**
  - **Asset optimization**
  - **Trading**
  - **Acquisition of market intelligence**
- Executed in a careful and deliberate fashion
  - Focused on managing and controlling risk

## Arch expects a record performance in 2008 and continued re-investment in core business

**Earnings Per Share**  
(as reported on April 21, 2008)



**EBITDA\* (\$ millions)**  
(as reported on April 21, 2008)



**Capital Spending\*\* (\$ millions)**  
(as reported on April 21, 2008)

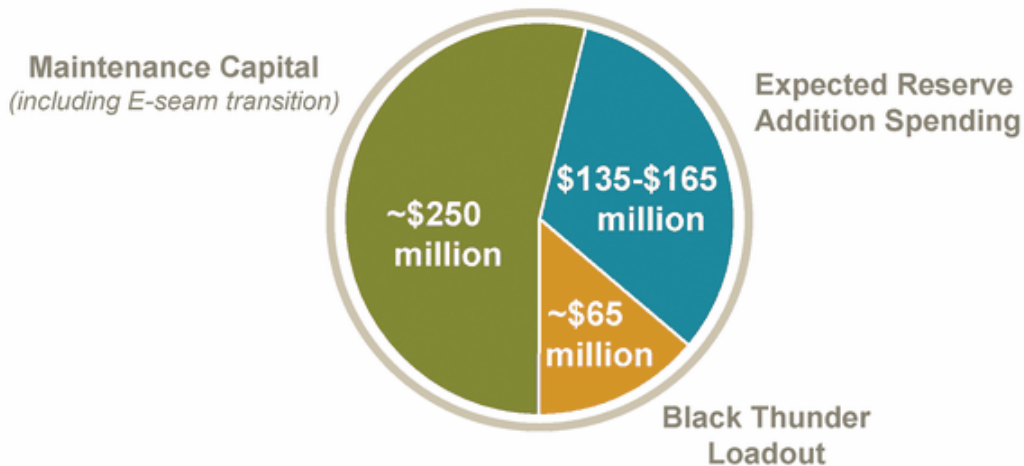


- Arch expects **significant expansion** in earnings per share and adjusted EBITDA
- Continue to execute a market-driven approach with leverage to the upside potential in coal markets
  - Low-level of capital spending



# Arch has the financial flexibility to support multiple growth, maintenance and improvement initiatives

## 2008 Capital Spending and Reserve Additions



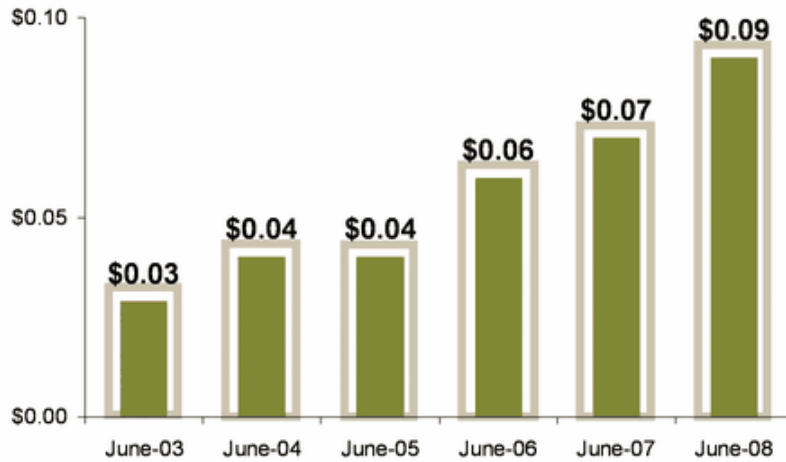
Capital spending guidance, excluding reserve additions, of \$310-\$340 million was given on April 21



## Arch has raised the dividend four times in the past five years

### ACI Quarterly Dividend

(common stock dividend on June payable date)



- Regular **increases** in quarterly dividend convey board's continued confidence in Arch's future earnings potential
- Beginning this quarter, shareholders will enjoy an increase of nearly **29%** or \$0.02 per share

## Arch is poised to generate – and rigorously prioritizes the use of – free cash flow



- Invest in **core businesses** to enhance profit growth and return on capital, evaluate opportunities to further upgrade/expand reserve base
- Maintain **strong balance sheet**
- Consider acquisitions, divestitures or other investments that **strategically fit** and create value
- Expand market for coal (and perception of coal's value) through **coal-conversion** technologies that provide significant upside



## Arch's value proposition is attractive

- Defined strategy to manage business successfully in all markets
- Asset base is one of the best in the business
- Significant exposure in Central Appalachia to robust met story
- Increasing opportunity to participate in global seaborne export market
- Largest producer in strong Western Bituminous region
- Largest exposure to emerging Powder River Basin story
- Experienced and talented management team
- Past record of delivering shareholder value
- CTL and CTG development should help valuation of Btus in the ground



## EBITDA Reconciliation Chart

Included in the accompanying presentation, we have presented certain non-GAAP measures as defined by Regulation G. The following reconciles these items to net income as reported under GAAP.

	Three Months Ended		Year Ended	Targeted Results	
	March 31		December 31,	Year Ended	
	2007	2008	2007	Low	High
				(Unaudited)	
<i>(in \$000s)</i>					
Net income	\$ 28,724	\$ 81,147	\$ 174,929	\$ 348,000	\$ 406,000
Income tax (benefit) expense	4,650	15,240	(19,850)	34,000	71,000
Interest expense, net	16,587	20,063	72,265	78,000	73,000
Depreciation, depletion and amortization	57,620	73,042	242,062	285,000	295,000
Non-operating expense	902	-	2,273	-	-
Adjusted EBITDA	\$ 108,483	\$ 189,492	\$ 471,679	\$ 745,000	\$ 845,000

	Twelve Months Ended			
	December 31			
	2003	2004	2005	2006
<i>(in \$000s)</i>				
Net income	\$ 16,686	\$ 113,706	\$ 38,123	\$ 260,931
Cumulative effect of accounting change	3,654	-	-	-
Income tax (benefit) expense	(23,210)	(130)	(34,650)	7,650
Interest expense, net	47,497	56,504	63,120	60,639
Depreciation, depletion and amortization - Arch Coal, Inc.	158,464	166,322	212,301	208,354
DD&A - Equity interest in Canyon Fuel Company, LLC	21,425	10,359	-	-
Expenses from early debt extinguishment and other non-operating	(4,256)	7,966	11,264	7,447
Adjusted EBITDA	\$ 220,260	\$ 354,727	\$ 290,158	\$ 545,021

Source: ACI



Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

John Drexler  
Senior Vice President and Chief Financial Officer

Mountain Laurel Complex  
June 19, 2008



Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

David Runyon  
General Manager – Mountain Laurel

Mountain Laurel Complex  
June 19, 2008

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## Mountain Laurel is a key addition to Arch's mine portfolio in Central Appalachia



- Invested roughly **\$400 million**
- Employ **350 personnel**
  - 150 personnel transferred from Mingo Logan Ben Creek operation
- **Mountaineer II** underground mine
  - 4 continuous miners, 1 longwall
  - High-quality, low-sulfur coal with flexibility to sell coal into met or steam markets
  - Steam coal quality: 12,500 Btu/lb, 1.4 lbs. SO<sub>2</sub>/mmBtu
  - Met coal quality: **“high-vol”** medium grade; customers impressed with consistency
- Served by **CSX railroad**



## Mountain Laurel Complex Project Goals

- Create a **world-class, safe** and **efficient** longwall operation
- Provide infrastructure to support the Mountaineer II underground mine, the Spruce surface mine and satellite operations
- Construct a **state-of-the-art preparation plant** to optimize coal blends for the property
- Build on the success of the Mingo Logan Ben Creek Complex



(September 2004)

 Arch Coal, Inc.



## Mountain Laurel Project Completion

- Began Alma Seam development in Sept. 2005
- **First train** loaded in July 2006
- **Longwall** startup on Oct. 1, 2007
  - Best start-up process in the history of the company
  - First longwall move completed in 6 days
- **Life** of mining complex ~ 20 years
  - 50 million tons of recoverable underground reserves from the Alma and Cedar Grove seams
  - 83 million tons of reserves for the entire complex



(May 2008)

 Arch Coal, Inc.



## We have great expectations for Mountain Laurel



- Longwall production began at precisely the **right time**
- One of the **lowest cost mines** east of the Mississippi
  - High-quality reserve base
  - Talented and experienced workforce





## Mountain Laurel is focused on achieving excellence in safety



- Operated 19 months without a lost-time injury
- Twenty-six months without a reportable injury at the Cardinal Preparation Plant
- **Distinguished Awards** won by the complex:
  - WV Office of Miners' Health, Safety & Training Mountaineer Guardian Award
    - Mountaineer II Mine in 2006
    - Cardinal Preparation Plant in 2007
  - Joseph A. Holmes Safety Association Award
    - Mountaineer II Mine in 2006
    - Cardinal Preparation Plant in 2007
  - Mine Safety & Health Administration's Pacesetter Award
    - Mountaineer II Mine in 2006 for best injury rate in District 4



## Our ultimate safety goal is “zero accidents”

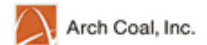
- Behavior Based Safety Program “S.L.O.P.E.”
  - **First U.S. underground mine to implement process**
  - Good fit for a new operation
- **Key program components**
  - Peer-to-peer observations
  - Employee ownership
  - Identifies safe and at-risk behaviors
  - Management and hourly work together to remove barriers
  - No name, no blame
  - Great communication tool



## Mountain Laurel is committed to responsible environmental stewardship



- We have excellent reclamation and drainage techniques designed to protect the environment and native wildlife
  - **Zero notice of violations** in 2007 and so far in 2008
- **Distinguished Awards** won by the complex:
  - WV Department of Environmental Protection Green Lands Award for 2006
  - Arch Coal President's Award for 2007
    - Award presented to company mine that best exemplifies Arch's commitment to environmental excellence and stewardship



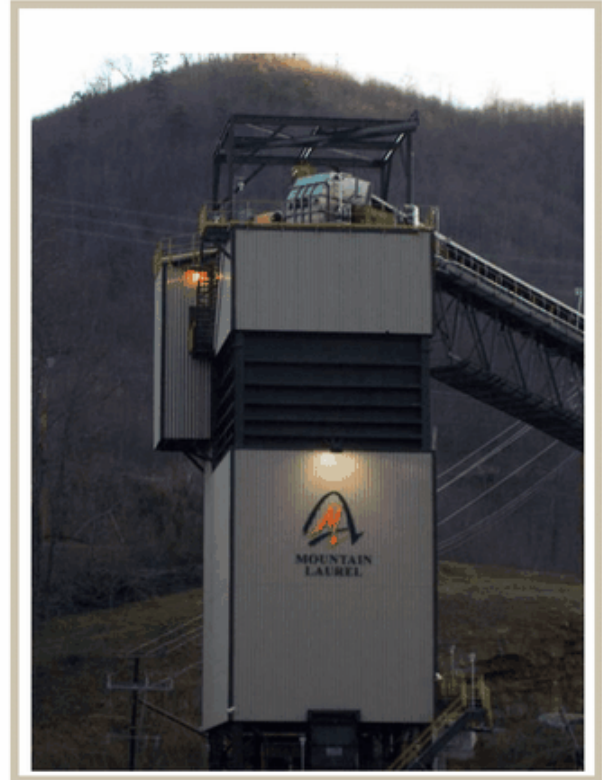
## Our stewardship and community service practices have been nationally recognized

- Received **National Good Neighbor Award** (Gold) from the U.S. Department of the Interior
  - Funded construction of a new section of highway, a railroad overpass and a bridge to provide residents with a safe connection to the existing highway
  - Community outreach program helped 90 homes gain public water access in surrounding towns
- Received the Excellence in the Advancement of Public Service or **Community Development Award** from the American Coal Council
  - Community Advisory Panel (CAP) meets regularly to work on common goals
  - Utilizes Arch Coal Foundation funding to award mini-grants to qualifying teachers in the area



## Rail loadout

- Newest technology available
- Loading rate of 5,000 tons per hour fed by a 72 inch conveyor
- Unit train loaded in less than four hours
- Three stage sampling system
- Full elemental coal analyzer for **blending purposes** (ash, moisture, Btu and sulfur)



## Clean coal storage

- Four 80-foot-high stacking tubes
- 120,000 ton live capacity
- Ability to store in excess of 300,000 tons



## Cardinal preparation plant

- Capacity 2100 T.P.H.
  - Three parallel modules
- Each module is designed for single unit operation
  - maximize simplicity
  - promote ease of operations
  - facilitate maintenance
- Plant circuitry
  - coarse – heavy media vessel
  - intermediate – heavy media cyclone
  - fine – compound spirals
  - ultrafine – deslime column flotation



# Additional mine infrastructure



(mine office and bathhouse)



(return shaft fan installation)

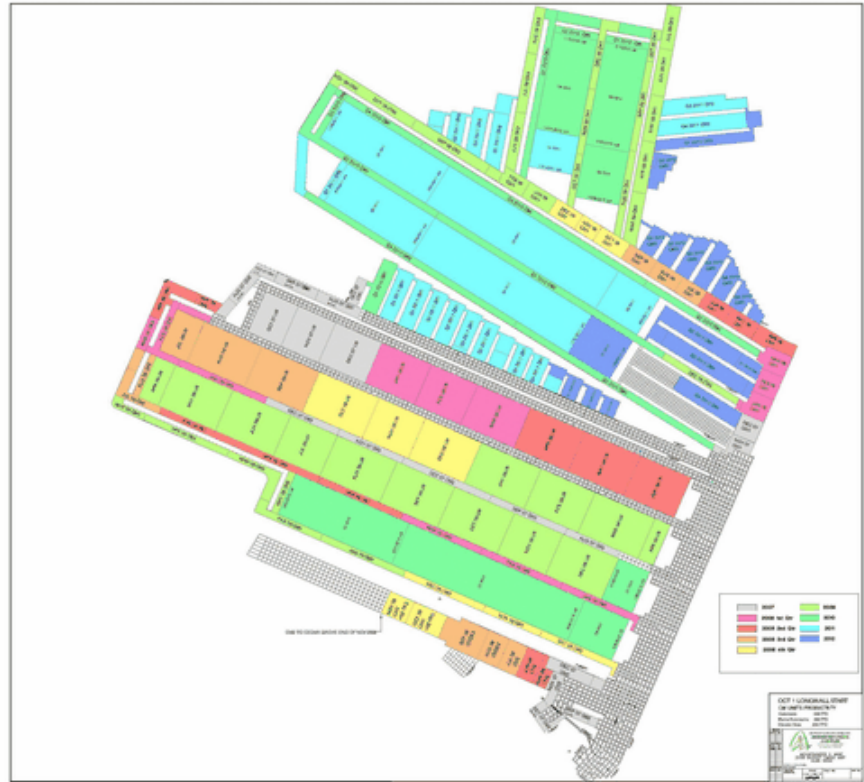


(in-take shaft with emergency escape hoist)



## Mine plan schematic

- 30-million-ton Alma seam
- 20-million-ton Cedar Grove seam
- More than 300 drill holes used in mine planning

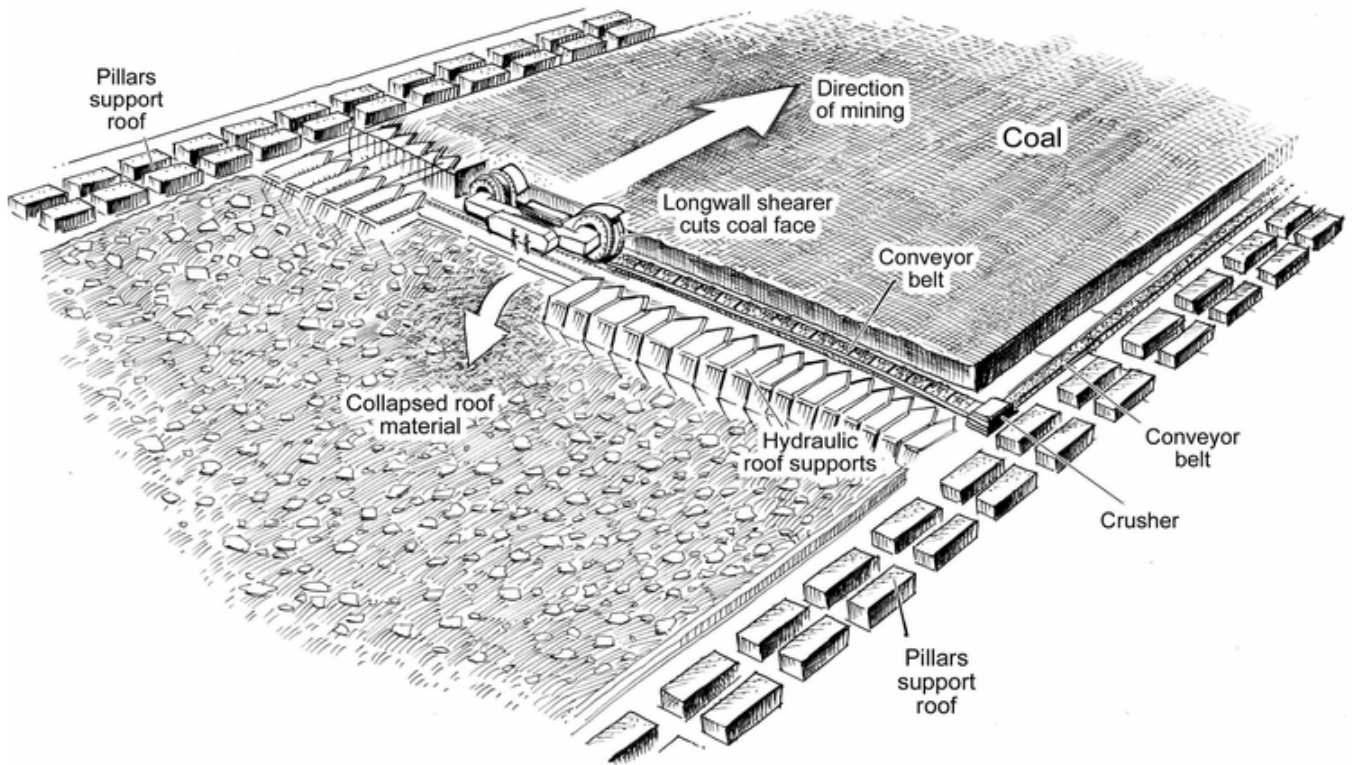


## Mining the seam

- Seven-foot-thick coal seam
- Only 52 systems operating in the United States



# Anatomy of a longwall operation



## Underground equipment

- Development Units
  - 14CM15/12CM12 Continuous Miners
  - Narco 10SC-32 Shuttle Cars
  - Stamler Feeder
  - Fletcher RR II Roof Bolter
  - Fairchild 35H Workhorse Scoops
  
- Longwall (Complete Joy System)
  - 1040 ton Shields
  - 4,000 tph Armored Face Conveyor
  - Joy 7LS2A shearer



(roof bolter)



(longwall face)



# Underground equipment



(longwall equipment on site)



(shearer at the longwall face)



(continuous miner)



(shuttle car)

## Future growth opportunities at Mountain Laurel are promising

- Plan to add a **fifth continuous miner unit** to increase production in met market boom
- Consider future development of **Spruce surface reserves** and **satellite mines**



(continuous miner)



(raw and clean coal storage)



## We're focused and ready to excel



- **Recognized leader** in mine safety, environmental stewardship and community outreach programs
- Three pillar focus translates into attracting a **best-in-class workforce**
- Longwall production began at precisely the **right time**
- Low-cost reserve base and a **focus on cost control** help expand margins
- **Future growth opportunities** include Spruce surface development





Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

David Runyon  
General Manager – Mountain Laurel

Mountain Laurel Complex  
June 19, 2008





Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

Peter Bethell, Ph.D.

Director of Coal Preparation – Arch Coal, Inc.

Mountain Laurel Complex

June 19, 2008

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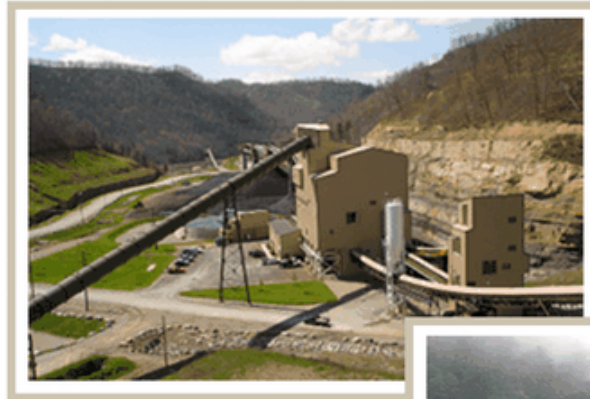
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## Forward-Looking Information

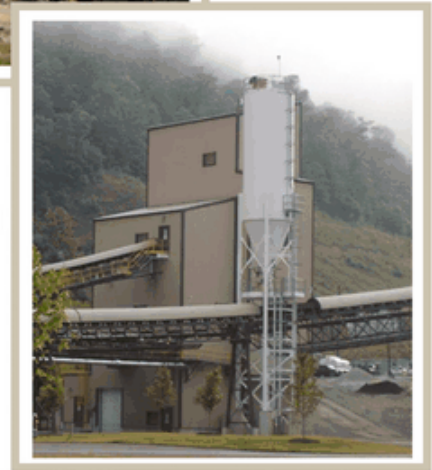
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## Cardinal preparation plant highlights

- We're achieving 98.5% organic efficiency
- Plant is running at 95% availability
- We're producing **high-quality met coal** with 5.0%-7.5% ash
  - Re-wash circuit produces a <5% ash premium product



(prep plant)



(metallurgical re-wash circuit)



## Raw coal handling statistics

- Mine slope belt: 5000 tph
- 4 stacking tubes: 80' high
- Stockpile capacity: 500,000 tons
- Reclaim capacity: 2500 tph
- Sizing to 6": MMD sizer

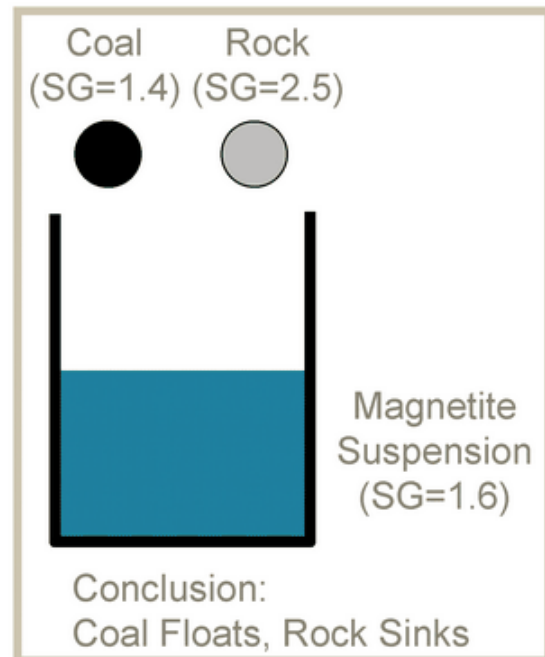
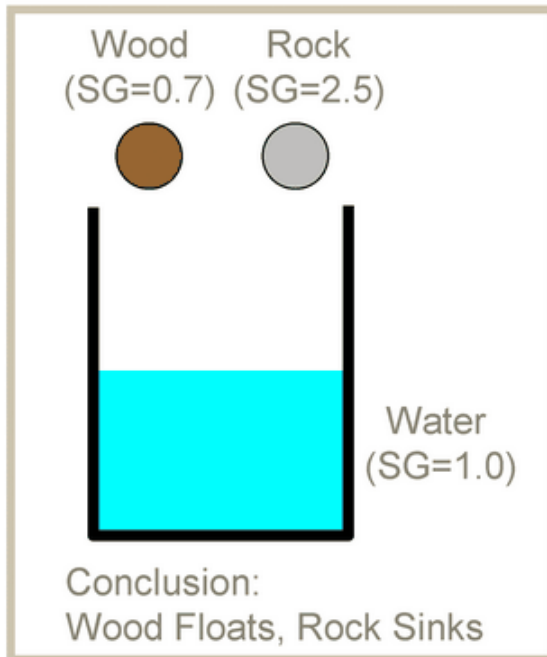


## Circuit Design Philosophy

1. Simplicity
2. Appoint new plant manager early
3. Single unit operation circuit design
4. Three 700 tph modules
5. Ability to run 1, 2 or 3 modules
6. Combined raw coal/de-slime double deck screen concept (10 millimeter and 1 millimeter separation), efficient and reduces footprint
7. Overhead crane – maximize maintenance access
8. Vessel circuit and D.M. cyclones
9. Compound spirals – low feed rate (2tph/start)
10. De-slime column flotation - eliminate high incremental moisture slimes
11. Screen bowl centrifuges – high capacity
12. Wear resistant materials
13. Engineered runs on all plant piping
14. Design for major swings in yield (30-70%) and sizing
15. Minimize refuse trucking
16. Pump slurry to impoundment
17. Added met re-wash plant to make low-ash product



## Coal Washability

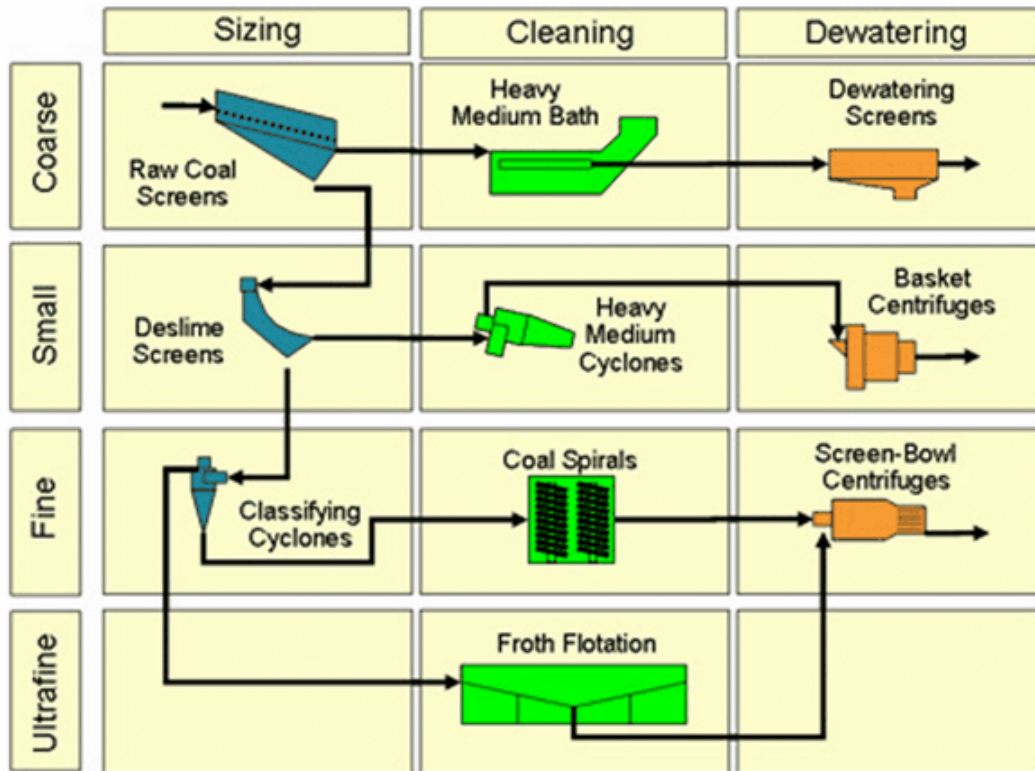


Coal is typically separated based on differences in density.



Arch Coal, Inc.

# Coal Cleaning

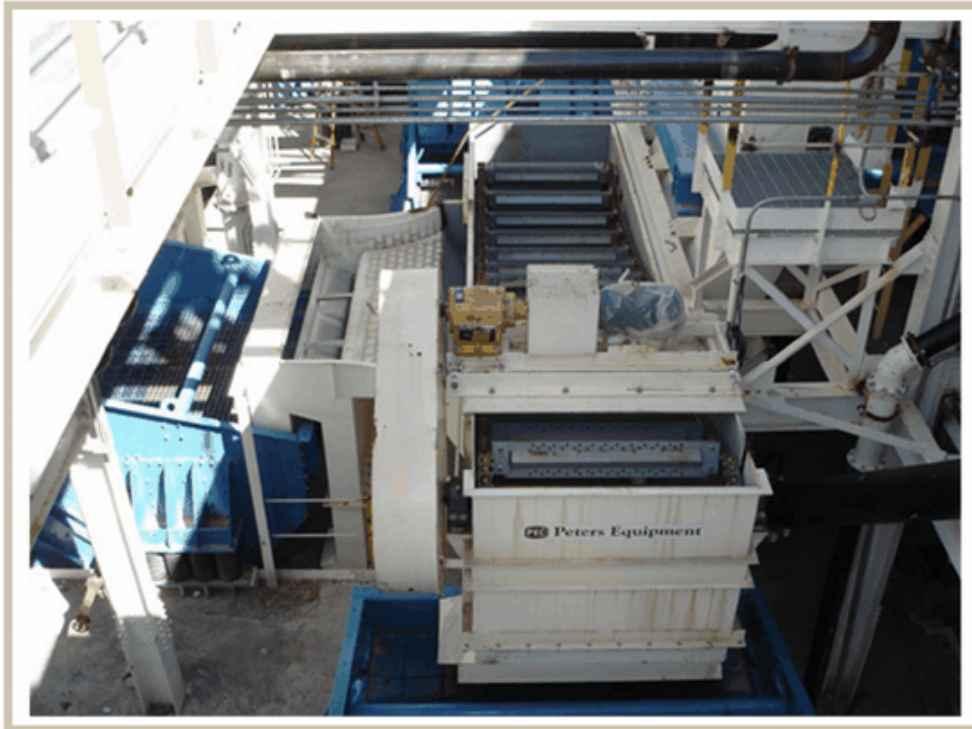


# Combined raw coal / de-slime screen





## Dense media vessel



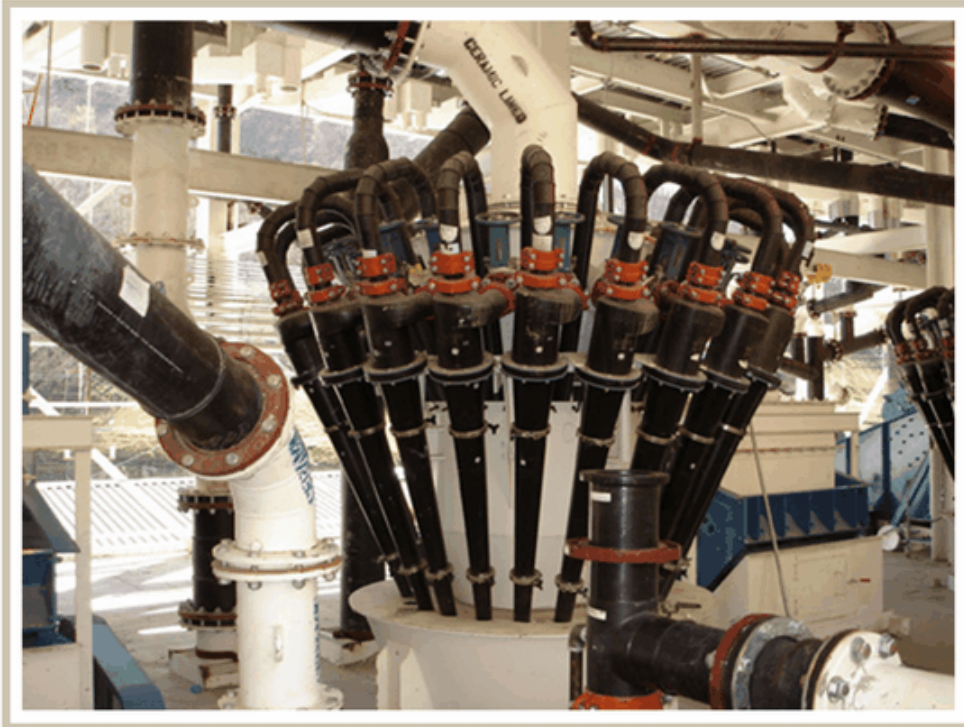
# Dense media cyclones



# Compound spirals



## De-slime cyclones



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## Column flotation cell assembled



## Column cell washwater tray



## Ludowici dryer



## Screen bowl centrifuge



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## Clean coal handling and storage

- 4 stacking tubes
- Storage capacity: > 180,000 tons
- Mass flow gates under piles
- Kanawha batch weight system
- Gammametrics CQM analyzer

(rail loadout)

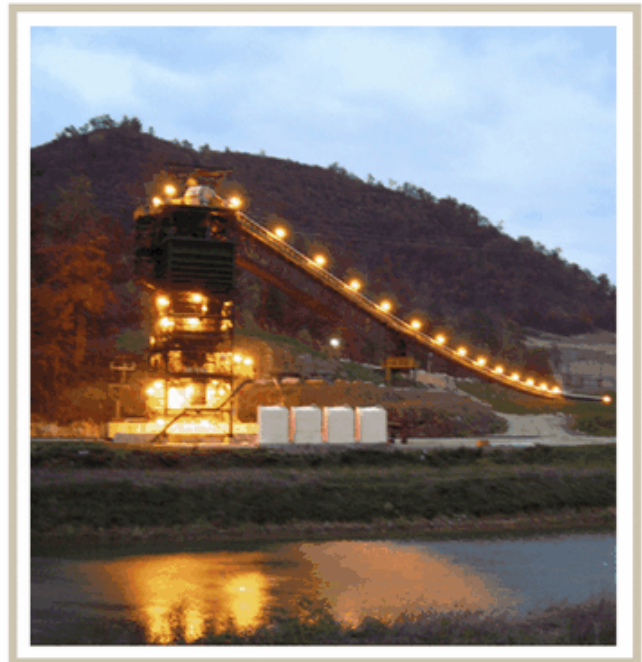


(clean coal storage)

- Loadout rate: 4500 tph

## We're optimizing our blends and yields in a continuous effort to deliver shareholder value

- Employ **state-of-the-art technology** to enhance material recovery at our preparation plants
- Evaluate and implement **best practices** from around the globe
- With minimal capital investment, we are efficiently cleaning our coal to **meet customer specifications** and to **increase our yields**
  - Ongoing initiatives are translating into 400,000 tons of additional coal material recovery annually





Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

John Eaves  
President and Chief Operating Officer

Mountain Laurel Complex  
June 19, 2008

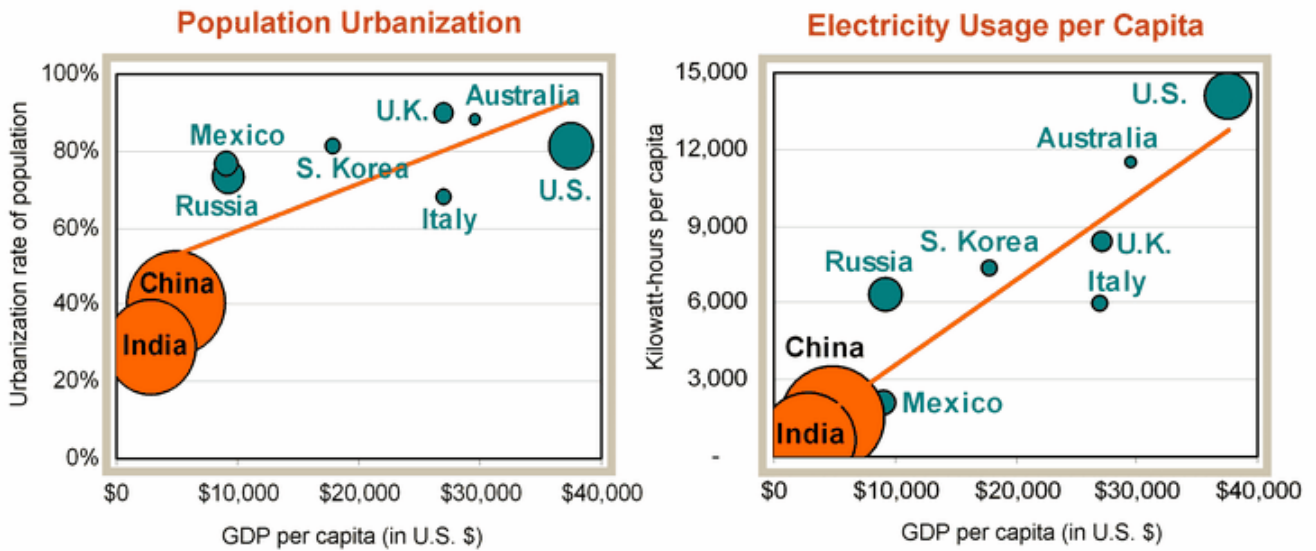
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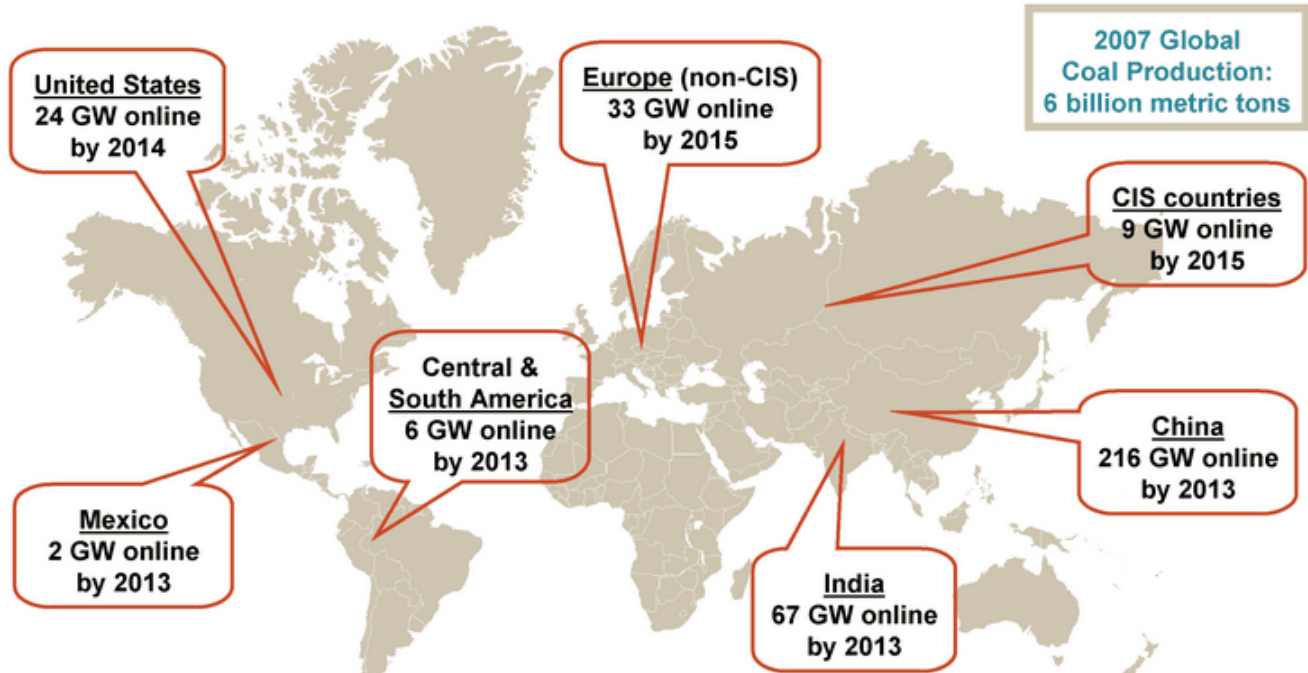
# Asia's industrial revolution is testing global energy supply infrastructure



Note: bubble size reflects size of population



## Around the globe, countries are embracing coal as a primary source for electricity

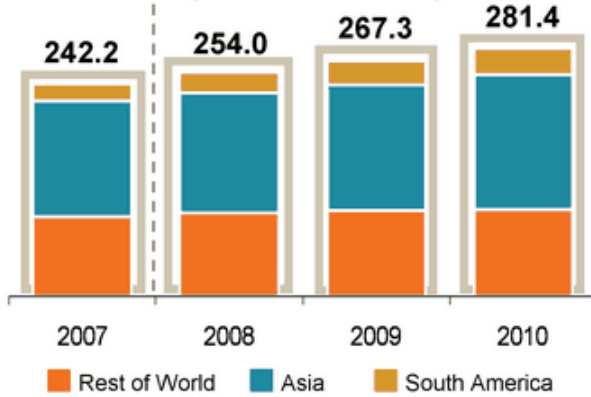


"The demand for coal will increase sharply as **coal-fired plant constructions** are being carried out at a break neck pace. By 2012, the world would need an estimated additional 1.1 billion short tons of new coal supply."

## Growing worldwide steel production and blast furnace capacity additions are stoking met coal demand

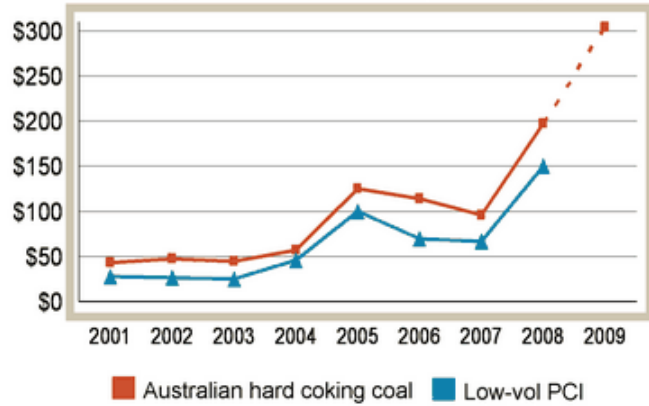
### Import Metallurgical Coal Demand

(in million metric tons)



### Benchmark Pricing for Met Coal

(\$/metric ton, FOB the port basis)



- Global import **met coal** demand will grow by at least 40 million tons over next 3 years
- Roughly 80 percent of the expected growth is being driven by increased consumption in **Asia** and **South America**
- **Met coal pricing** has risen sharply since 2003; expect continued market tightness
- With Mountain Laurel and increased met blending opportunities, Arch is **poised to capitalize** on strong met coal trends

## Supply constraints in traditional coal export nations are shifting global seaborne coal flows

### Key Trends in Asia-Pacific Coal Markets

- **Australia:** severe port and rail bottlenecks may mask underlying labor and mine challenges; expanded capacity still may undershoot growing Asian demand
- **Indonesia:** increasing domestic demand; export capacity dependent on congested river system
- **China:** substantial growth in domestic demand will push country to a net importer status of coal as early as 2008
- **Vietnam:** growing domestic demand expected to reduce export supply
- **India:** imported coal needs projected to rise meaningfully; will pull available supply from Atlantic Basin markets
- **Russia:** production challenges; growing domestic coal consumption; exports increasingly shifting to Asia-Pacific market
- **South Africa:** domestic power shortage; reserve degradation; exports increasingly shifting to Asia-Pacific market





## Asian demand pull is creating opportunities for the United States in seaborne coal export markets

### Key Trends in Atlantic Basin Coal Markets

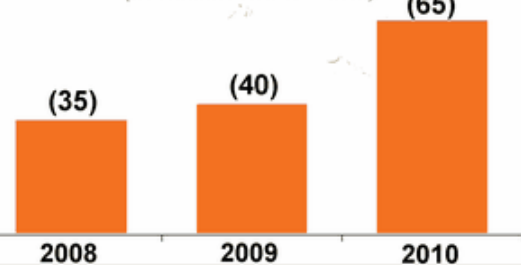


2007 seaborne total trade: 900 million metric tons

- **South America:** port infrastructure constraints; political instability; resource nationalism; growing regional coal burn
- **USA:** swing supplier to Atlantic basin market; available coal export capacity; imports into country declining
- **Europe:** coal production declining; growing coal burn in eastern Europe; traditional import supply avenues waning

### Est. Seaborne Coal Supply Deficit

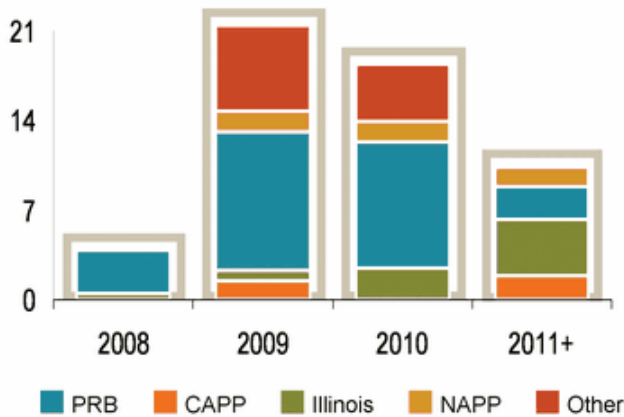
(in million metric tons)



## Largest coal plant build-out since 1980 will meaningfully expand coal demand

### Anticipated Supply Region for Coal Plants Under Construction

(in millions of tons)



- Build-out of 16 GW equates to **59 million tons** of new annual coal demand over next four years
- Arch's reserve base positioned to service two-thirds of these plants
- Roughly 8 GW – another **25 million tons** – in advanced permitting stages

## In the United States, Arch expects growth in coal demand to accelerate over the next three years

<i>(in million tons)</i>	2008	2009	2010
Growth at Existing Coal Plants	+11	+11	+11
New Coal Plant Demand <sup>1/</sup>	4	22	19
Increase in Gross Exports	21	10	10
Decline in Imports	6	1	-
<b>Incremental Demand Growth</b>	<b>+42</b>	<b>+44</b>	<b>+40</b>
<b>Cumulative</b>		<b>+86</b>	<b>+126</b>

<sup>1/</sup> Net of coal plant retirements.

- U.S. coal demand to grow by **more than 3%** annually through 2010
  - U.S. coal generation fleet has **increased average utilization** by 1 percent annually over the past 10 years
  - New **coal plant build-out** will expand coal consumption meaningfully
  - U.S. is expected to become a more **significant net exporter** given shortage of coal supply worldwide and available port capacity

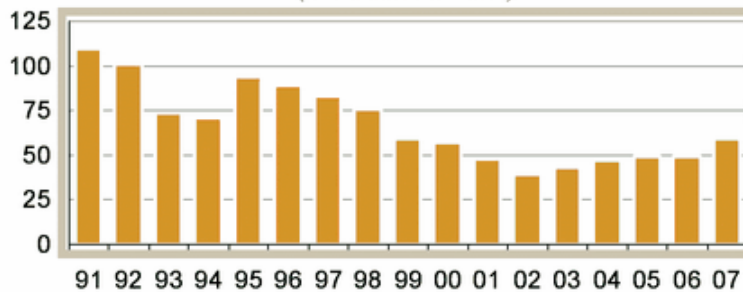


## United States has available port capacity to expand seaborne coal exports

- Available eastern export port capacity at Baltimore and Hampton Roads
- Existing port capacity at southern ports of Mobile, New Orleans, Charleston and Texas
- Limited port capacity on West Coast

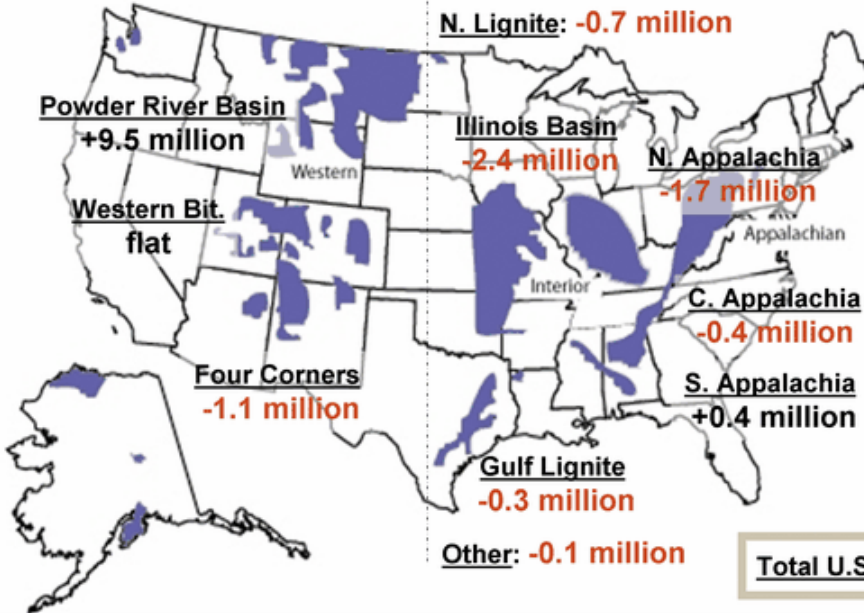


**Annual U.S. Export Throughput**  
(in millions of tons)



# U.S. coal supply growth is not keeping pace with projected U.S. coal demand so far in 2008

(Change in Output by Region vs. 1Q07)



## 1Q08 Estimated Production

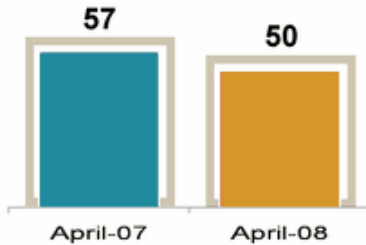
Producing Basin	Tons (in millions)
Power River Basin	123.6
Central Appalachia	58.3
Northern Appalachia	34.1
Illinois Basin	23.7
Western Bituminous	18.0
Gulf Lignite	11.2
Northern Lignite	7.1
Four Corners	6.7
Southern Appalachia	5.6
Other	0.9
<b>Total</b>	<b>289.2</b>



## While U.S. stockpiles appear adequate, generator comments would suggest otherwise

### Eastern Inventory Levels

(in days of burn)

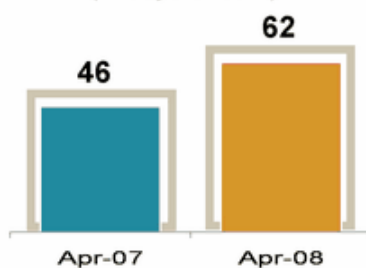


There is genuinely a **tightness** in the market driven by international fundamentals, global demands.  
- AEP (5/08)

We have blended in an increasing amount of Powder River Basin coal, and we – while rebalancing the portfolio – have remained within our dispatch price targets by **blending in cheaper coals**.  
- AEP (5/08)

### Western Inventory Levels

(in days of burn)

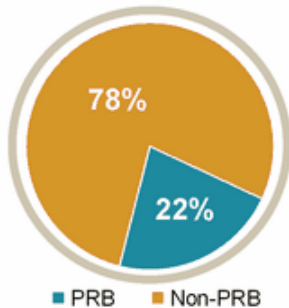


We did have the risk of **shortages** a year and a half ago ... our piles got pretty dramatically low ... **Coal conservation** in our instance affected our ability to sell some [power] into the wholesale market. With this, it showed that we need to have **more inventory** and we need to keep that stockpile. So, we certainly have **increased our [targets]** ...  
- Great Plains Energy (5/08)

## In past cycles, PRB coal has gained market share in border states just east of the Mississippi River

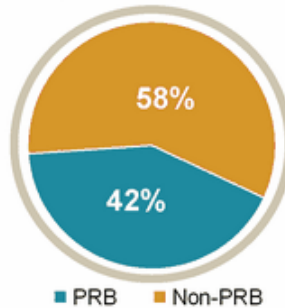
### Border States East of MS

Burn by Coal Type circa 1990



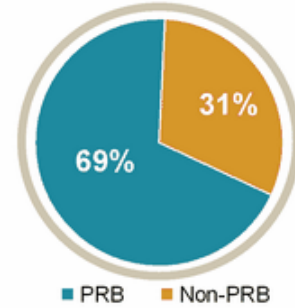
### Border States East of MS

Burn by Coal Type circa 1995



### Border States East of MS

Burn by Coal Type circa 2007

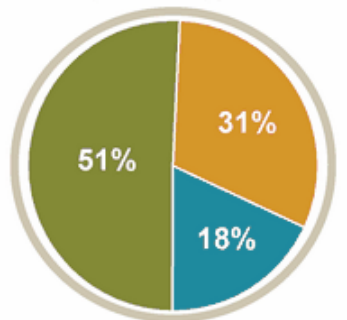


- **Eastern border state** power plants in Wisconsin, Illinois, Tennessee and Mississippi historically burned a small mix of PRB coal
- By 1995, power plants in these four states increased their mix of **PRB coal** from 22 percent to 42 percent in just five years
- Current 69 percent mix of PRB coal has been achieved with relatively **modest capital investment**

## We foresee increased PRB market expansion opportunities further east of the Mississippi River

### Non-Border States East of MS

*Burn by Coal Type circa 2007*



■ PRB  
■ PRB switching opportunity  
■ Non-PRB

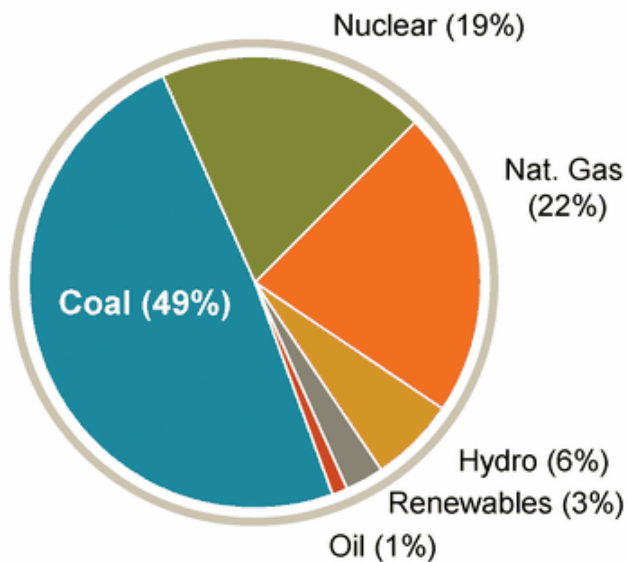


- Eastern power plants in non-border states are **generally comparable** in design to plants in the border states
- Consequently, these non-border state plants should be able to **increase their PRB coal use** significantly with minimal investment
- Based on historical switching in the border states and the lower heat content of PRB coal, the **theoretical PRB switching opportunity** in the East exceeds 300 million tons



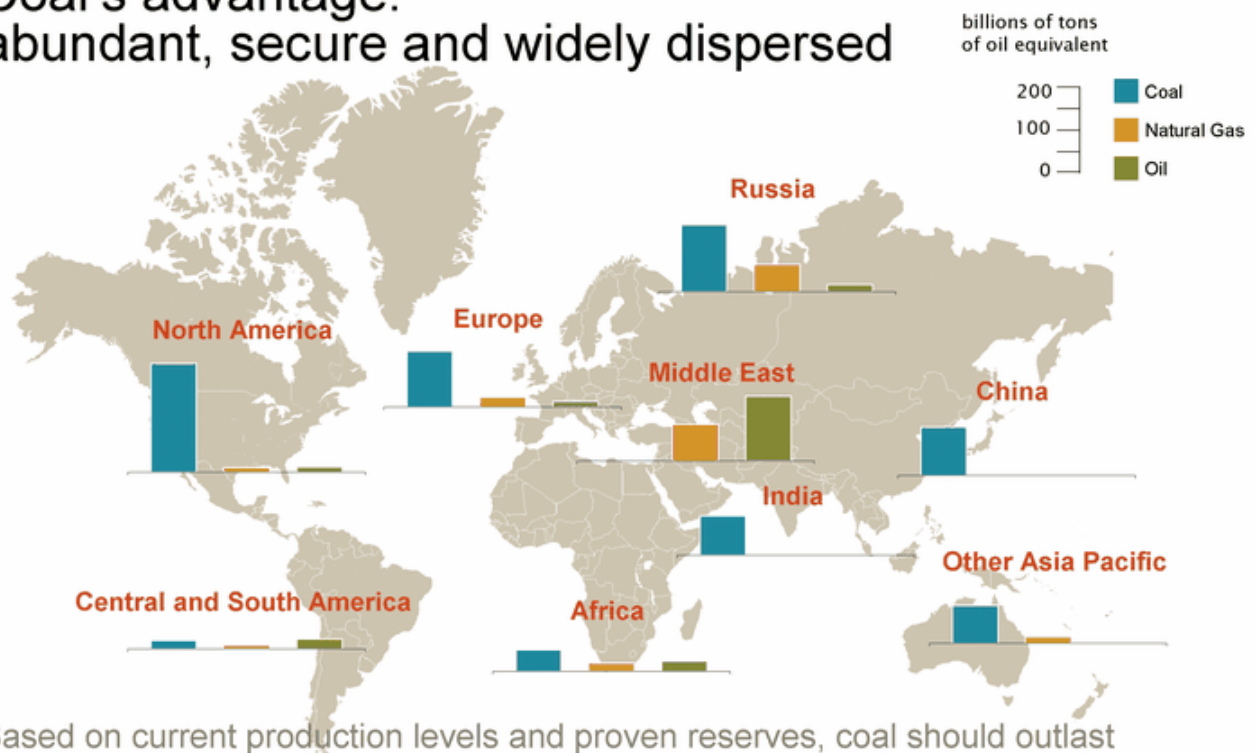
## Coal is the dominant fuel source for U.S. electric generation

### 2007 U.S. Electricity Generation by Fuel



- Significant growth in **natural gas** must be met by LNG imports
- Even with rapid expansion, **nuclear** will struggle to maintain its current share
- No new **hydro** facilities are planned or expected
- **Wind and solar** can and will grow but are not suited for baseload needs
- In reality, we need all fuels – along with conservation and efficiency – to satisfy America's growing energy requirements

## Coal's advantage: abundant, secure and widely dispersed

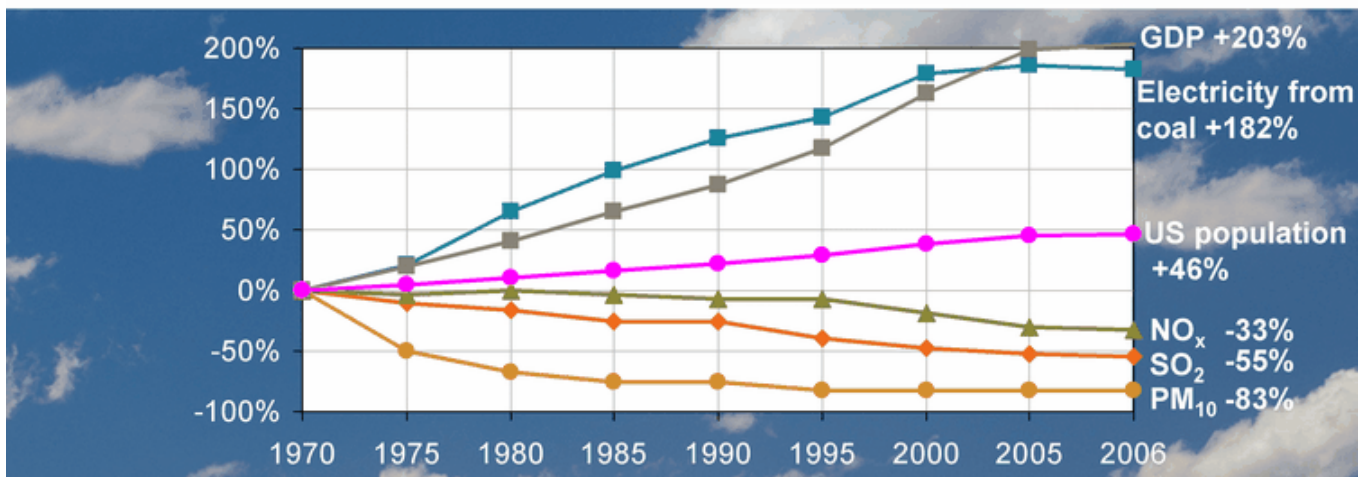


Based on current production levels and proven reserves, coal should outlast both gas supplies and oil reserves by **roughly 4 times**



Arch Coal, Inc.

## Since 1970, coal has been used in increasingly clean ways in the United States



- More **progress** is expected under existing regulations
- Higher efficiency rates and **carbon capture technologies** create opportunities for reducing carbon intensity as well



Arch Coal, Inc.

## There is support for coal's essential role in America's energy future



**"...we'll need to invest more in the clean technology that will allow us to burn more coal, our country's most abundant fossil fuel."**

Senator Barack Obama (D-IL)

**"We are sitting on the world's largest supply of energy in our coal reserves and that has to be one of the fundamental components of energy independence."**

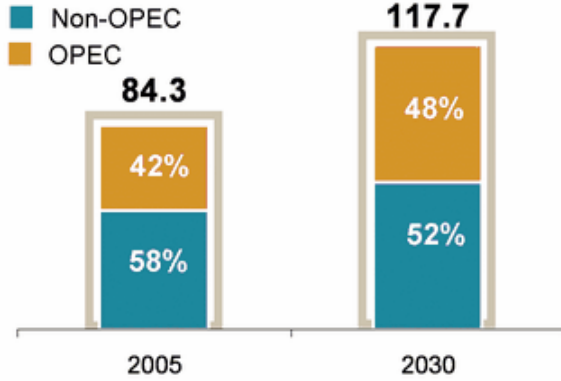
Senator John McCain (R-AZ)



# Coal-to-gas and coal-to-liquid technologies can help meet growing petroleum product demand

## Global Petroleum Liquids Production

(in million barrels per day, per EIA)



- World oil consumption needs are growing, and increasingly will be supplied by OPEC
- CTL can have a positive impact on the U.S. economy, security and environment

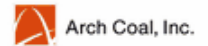
## Mine-Mouth CTL Plant



### Transportation Fuel      Chemical Feedstock



- Arch owns an equity interest in DKRW Advanced Fuels
- Proposed plant would capture CO<sub>2</sub> to enhance recovery in domestic oil fields



## Arch Coal is positioned for the future



- One of the **largest** coal producers in the U.S.
- Core business is **providing U.S. power generators** with cleaner-burning, low-sulfur coal for electric generation
  - Supplies roughly 12% of U.S. coal needs
  - Provides source fuel for roughly 6% of U.S. electricity
- Talented **workforce** operates large, modern mines
- Industry **leader** in mine safety, productivity and reclamation

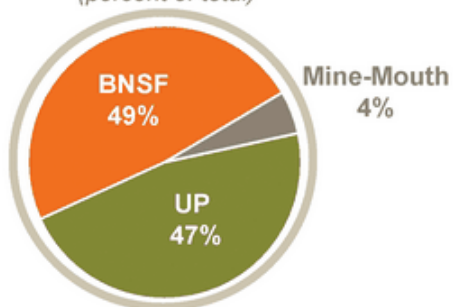


Our mine operations are equally distributed across all four major U.S. Class I railroads



### ACI Western Shipments

(percent of total)



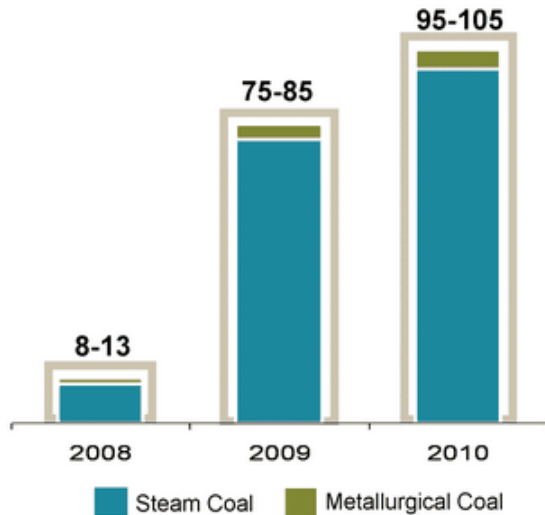
### ACI Eastern Shipments

(percent of total)

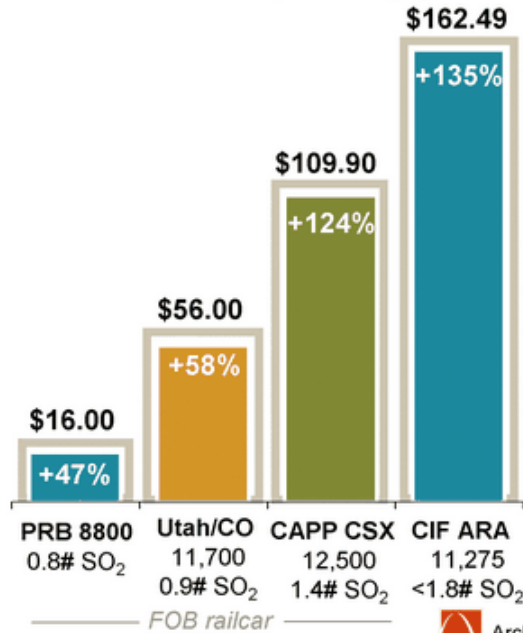


# Arch's selective approach to signing new contracts retains future upside potential

**Arch Unpriced Volume**  
(in millions of tons at 3/31/08)

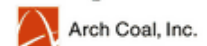


**Benchmark Steam Coal Index Prices**  
(\$/short ton for prompt year delivery as of 6/13/08;  
52-week % price change)



Coal Grade	SO <sub>2</sub> (#)
PRB 8800	0.8#
Utah/CO	0.9#
CAPP CSX	1.4#
CIF ARA	<1.8#

— FOB railcar —





## Our strategy on coal contracting continues to evolve

- Terms and conditions near bilateral
  - Embedded volume options all but gone
  - Seller's **sourcing flexibility** has become the norm
- Term agreements are making a comeback
  - Typically have "**market adjustment provisions**" (i.e. indexed to third party price plus an adder or cost recovery mechanisms)
- Arch open to creative approaches
  - Ensuring **all-in cost** plus risk adjusted returns
  - Guarantee price floors
- Many customers want **security of supply**
  - A large, physical and reputable coal producer can extract best value

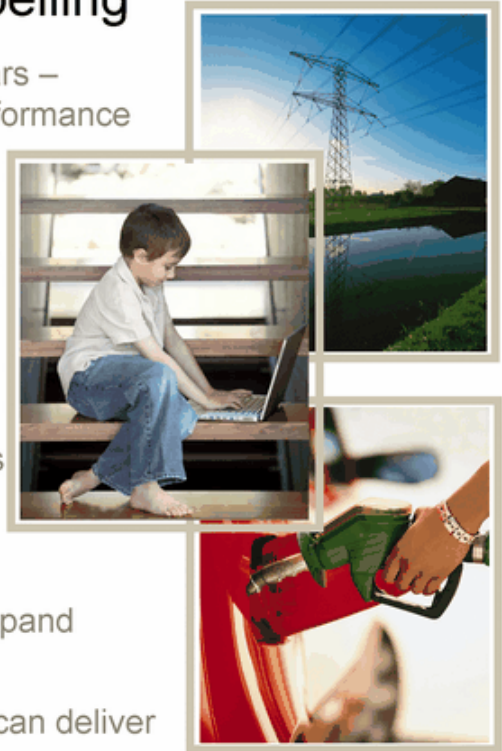
## Arch expanded seaborne terminal capacity, estimates company's met coal sales will double this year



1 – Steam sales  
2 – Met sales

## Arch's future growth story is compelling

- Expect **record year** in 2008 based on our three pillars – safety, environmental stewardship and financial performance
- Experienced **workforce** and **corporate culture** committed to operating the safest, most efficient and environmentally responsible mines in the nation
- Large-scale, diverse and **low-cost operations** that are flexible in response to market demand
- **Strategic reserve base** well-positioned to meet America's – and the world's – growing energy needs
- Strong **balance sheet** provides Arch with financial flexibility and strategic opportunities
- Focus on advancing **clean-coal technologies** to expand market for coal beyond electricity generation
- Building a truly **world-class energy company** that can deliver substantial shareholder value over the long-term



 Arch Coal, Inc.



Arch Coal, Inc.



## Arch Coal Analyst Mine Tour

John Eaves  
President and Chief Operating Officer

Mountain Laurel Complex  
June 19, 2008