# UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

### 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): March 4, 2008 (March 4, 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:

- o 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))

### Item 7.01 Regulation FD Disclosure.

On March 4, 2008, Steven F. Leer, Chairman and Chief Executive Officer of Arch Coal, Inc., will deliver a presentation at the Raymond James 29th Annual Institutional Investors Conference that will include written communication comprised of slides. The slides from the presentation are attached hereto as Exhibit 99.1 and are hereby incorporated by reference.

A copy of the slides will be available at <a href="http://investor.archcoal.com/events.cfm">http://investor.archcoal.com/events.cfm</a> 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 presentation at the Raymond James 29th Annual Institutional Investors Conference.					
	1					

### 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: March 4, 2008 Arch Coal, Inc.

By: /s/ Robert G. Jones

Robert G. Jones

Vice President -- Law, General Counsel and Secretary

### **Exhibit Index**

Exhibit	
No.	Description

99.1 Slides from the presentation at the Raymond James 29th Annual Institutional Investors Conference.











# Raymond James 29<sup>th</sup> Annual Institutional Investors Conference

Steve Leer, Chairman and CEO Orlando, FL March 4, 2008

### 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.

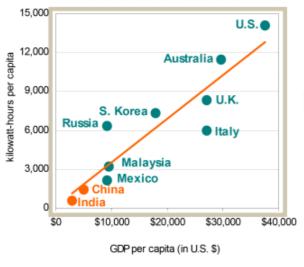
This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing 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.

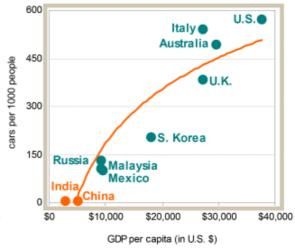


# Developing nations will increase energy use, putting pressure on global supply

### **Electricity Usage per Capita**

### Passenger Vehicles per 1,000 People







Source: United Nations' Human Development Report 2005, 2005 World Development Indicators (World Bank)

Source: Bank of America, BP Statistical Review and Blackwell Energy Research

# Where will the United States get its future power?

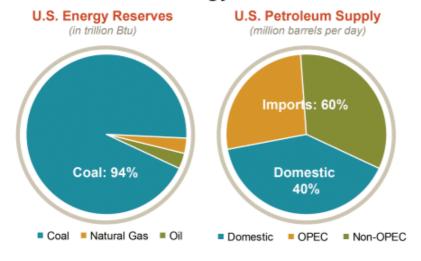
- U.S. dry natural gas production has remained essentially flat since 1997 despite an ever increasing number of rigs in production.
- Since 2000, nuclear utilization has been at or close to 90% and the fleet is aging. At least 40 new units are needed by 2030 just to maintain current U.S. share.
- Hydro power is concentrated in the Northwest. No net additions to capacity are anticipated.
- Renewable energy, including wind and solar, currently represents just 3% of electric generation. Even with rapid growth, source is likely to remain a niche player.





Source: EIA, ACI and Baker Hughes

### Coal is - and will remain - a vital part of America's energy future



(\$/million Btu at 2/29/08) 19x \$17.59 \$102 per bbl 10x \$9.37 \$0.95

Natural

Gas

PRB

8800

FOB rail

(Q2 2008)

**U.S. Fuel Prices** 

Arch Coal, Inc.

Crude

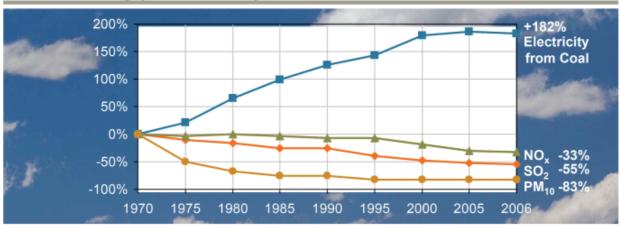
Oil

Wellhead (April 2008)

Source: EIA, Platts, Argus Coal Daily and NYMEX

LONG-TERM MACRO FUNDAMENTALS CLIMATE CONCERNS AND CLEAN-COAL TECHNOLOGIES CURRENT TRENDS ABOUT ARCH COAL

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



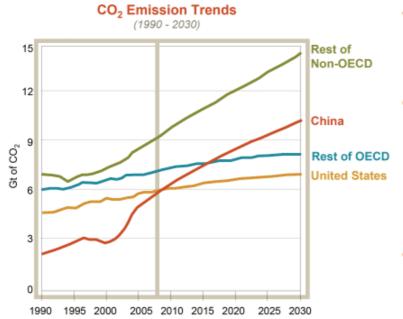
- · More progress is expected under existing regulations
- Higher efficiency rates and carbon capture technologies create opportunities for reducing carbon intensity as well



Source: NMA, EPA

NOx (Nitrogen Oxide), SO2 (Sulfur Dioxide), PM10 (Particulate Matter)

# Developed nations must adopt climate solutions and export them to developing nations



- China surpassed the U.S. in GHG emissions in 2007
- The growth rate of GHG emissions in developing nations is likely to significantly exceed that of developed nations
- We must invest in more clean coal technology R&D



Source: IEA World Energy Outlook 2006, Guardian

## Over the long term, clean-coal technologies can broaden market demand for coal



A plug-in hybrid is one entry for coal into the transportation market

 Likely to create significant off-peak demand for electricity



Coal can be converted into transportation fuel

 At current oil prices, coal-to-liquids facilities are economically feasible



Gasification can reduce emissions and transform coal into pipeline-quality natural gas

 IGCC and CCS should enable coal to prosper in a carbonconstrained world

Public policy initiatives aimed at domestic energy security are spurring **debate** on energy legislation and **incentives** for clean-coal technology development



# Explosive growth in international coal markets underscores the shortage of energy around the globe

### **Americas**

Americas expected to almost double net coal exports in 2008

 Driven by increase in exports from USA

Americas imports expected to decline slightly from 2007

 Driven by lower import levels into USA

### Europe/Africa

Europe/Africa should increase its net imports in 2008

- Significant export declines from South Africa
- Large switch from domestic to imported coal in Europe
- Coal production declines in Europe

### Asia/Pacific

Asia's net exports projected to decline significantly in 2008

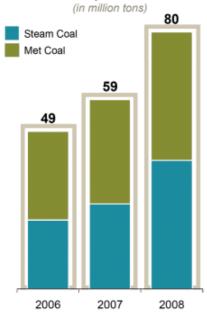
- Driven by strong economic growth in developing nations
- Severe supply constraints in traditional coal export nations

Global coal supply and demand flows suggest that the world is **short of coal** by 25 million to 35 million metric tons in 2008



## Robust international coal markets also are influencing domestic coal markets

### **U.S. Export Growth**



- In 2007, U.S. coal exports reached highest level since 2000
  - Higher coal consumption in Asia coupled with severe supply constraints in traditional export nations
  - Weak U.S. dollar
  - Growing global steel demand
- Arch expects U.S. coal imports to decline by 10 million tons in 2008
- Arch expects U.S. coal exports to increase meaningfully in 2008
  - U.S. coal increasingly valued for purposes of supply diversification



Source: ACI, NMA and MSHA Slide 11

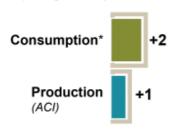
# Rebalancing trends in 2007 have set the stage for stronger U.S. coal markets in 2008

### U.S. Coal Industry Trends (2007, in million tons)



### U.S. Coal Industry Trends

(Through January 2008, in million tons)



#### In 2007

- Increased coal consumption, and reduced production levels, helped domestic coal markets to rebalance
- These trends reduced the build in generator stockpiles

### Year-to-date 2008:

- Electric generation flat on a tough comp; coal consumption likely up slightly
- U.S. coal production is basically flat
  - Higher PRB production, which is lower-Btu, offsets lower production in CAPP
- Arch estimates that generators had a 51 days supply at end of January



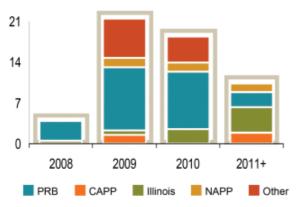
Source: ACI, NMA and MSHA

\* Coal consumption for electric generation

# 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 close to 16 GW translates into 54 million tons of new annual coal demand over next five years, with substantial increases in 2009 and 2010
- Arch's reserve base strategically positioned to service more than **two-thirds** of these new plants
- More than 9 GW, representing an additional incremental 33 million tons, is currently in advanced permitting stages



Source: Platts and ACI Slide 13

### 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

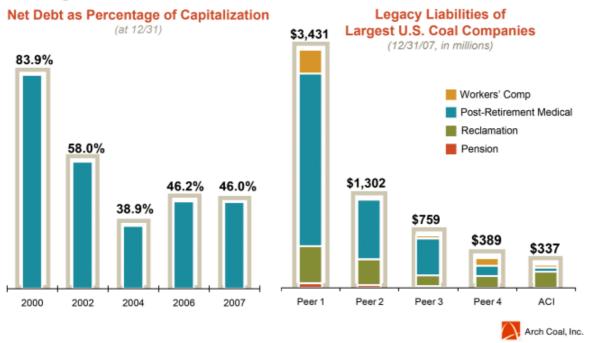


Source: ACI at 12/31/07 Slide 15

Arch Coal, Inc.

High-sulfur

# Arch has one of the industry's strongest and cleanest balance sheets



Source: SEC filings compiled by ACI

# Arch's future success hinges on three key pillars of performance



## 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
- 2007 was second-best year on record for total incident rate



# Acting as responsible citizens and good environmental stewards

- 2007 was best record for compliance in Arch history and best among peers
- Earned three National Good Neighbor Award in past four years
- U.S. Department of Interior Award in 2007 for best surface reclamation



## Achieving superior financial results

- 2007 was Arch's second-best financial performance on record
- Operated three of top eight most productive longwall mines last year
- Surface mines produced 170% more tons per employee shift than industry average in 2007



Source: ACI and Public Sources Slide 17

# Arch's mines are strategically positioned to capitalize on dynamic trends in coal markets

### Central Appalachia



- Timing of start-up of Mountain Laurel longwall in 2007 was advantageous
- Flexibility to sell 4 to 5 million tons into international and domestic metallurgical and PCI markets

### **Western Bituminous**



- Export growth and supply pressures in eastern U.S. will influence price
- Arch benefits as largest producer
- Have signed significant export business

#### **Powder River Basin**



- Supply constraints and sufficient PRB rail capacity should pull coal east
- Arch will benefit from rising domestic prices
- In discussions to export PRB coal

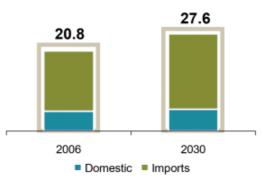
# Arch's growing international sales have supplied coal to customers on five continents



# Arch is advancing clean-coal technology development via a proposed coal-to-liquids plant in Wyoming

### **U.S. Refined Product Consumption**

(in million barrels per day, per EIA)



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

### Mine-Mouth CTL Plant



### Transportation Fuel







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



Source: EIA and ACI Slide 20

CURRENT TRENDS

ABOUT ARCH COAL

## Arch's market-driven strategy in 2007 laid the foundation for future success

Our strategy delivered Arch's **second-best year for earnings** despite a weak coal cycle in the first half of 2007

- Reduced production targets during the weak market cycle
  - Preserved the value of reserves for future periods
- Lowered capital spending
  - Matched spending with market demand and reduced production levels
- Focused on cost control
  - Reoriented mines to maintain production flexibility
- Remained patient in sales contracting
  - Layered in sales contracts as prices rebounded
- Maintained unpriced position for future periods

Arch Coal, Inc.

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



- 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



Source: ACI

\*EBITDA reconciliation is at end of presentation \*\* Excluding reserve additions

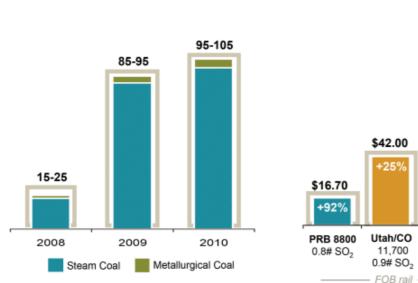
# Arch's selective approach to signing new contracts retains future upside potential

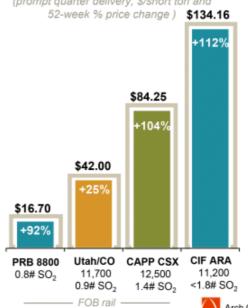
### **Arch Unpriced Volume**

(in millions of tons at 12/31/07)

### **Benchmark Coal Index Prices**

(prompt quarter delivery, \$/short ton and





Arch Coal, Inc.

Source: ACI, Argus Coal Daily 2/29/08

## Arch continuously evaluates all avenues for value creation

### **Organic Growth**

Invest in core businesses to enhance profit growth and return on capital, evaluate opportunities to further upgrade and expand reserve base

### Strategic Growth

Consider acquisitions or other investments that strategically fit and create value

### Shareholder Returns

### **Market Expansion**

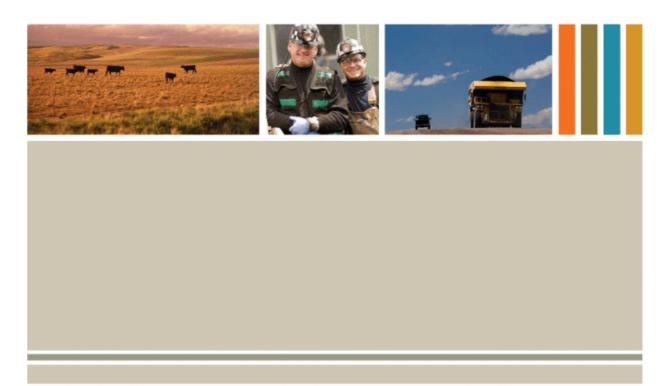
Consider investments to expand market for coal (and improve coal's value proposition) through Btu-conversion and other advanced coal technologies

### **Capital Structure Enhancement**

Maintain strong balance sheet, and consider other vehicles for value creation, such as share repurchases or dividend increases, when advantageous







### **EBITDA Reconciliation Chart**

#### Arch Coal, Inc. and Subsidiaries Reconciliation of Non-GAAP Measures (In thousands, except per share data)

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.

#### Adjusted EBITDA:

Adjusted EBITDA is defined as net income before the effect of net interest expense; income taxes; our depreciation, depletion and amortization; expenses resulting from early extinguishment of debt; and other non-operating expenses.

Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded to calculate Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation nor as an alternative to net income, income from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. We believe that Adjusted EBITDA presents a useful measure of our ability to service and incur debt based on ongoing operations. Furthermore, analogous measures are used by industry analysts to evaluate operating performance. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

	Year Ended		Year Ended December 31, 2008		
	12/31/07	_			
			Low	High	
	(Unaudited)		(Unaudited)		
Net income	\$ 174,929	s	290,000	\$ 362,000	
Income tax expense	(19,850)		25,000	58,000	
Interest expense, net	72,265		85,000	80,000	
Depreciation, depletion and amortization	242,062		280,000	290,000	
	2,273	_			
Adjusted EBITDA	\$ 471,679	s	680,000	\$ 790,000	



Targeted Results

Source: ACI