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): May 13, 2009 (May 13, 2009)

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)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o 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))

TABLE OF CONTENTS

Item 7.01 Regulation FD Disclosure
Item 9.01 Financial Statements and Exhibits
Signatures
Exhibit Index
EX-99.1

Table of Contents

Item 7.01 Regulation FD Disclosure.

On May 13, 2009, John Drexler, Senior Vice President and Chief Financial Officer of Arch Coal, Inc., will deliver a presentation at the Bank of America Merrill Lynch 2009 Global Metals & Mining 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 http://investor.archcoal.com/events.cfm for 30 days.

Item 9.01 Financial Statements and Exhibits.

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The following exhibit is attached hereto and furnished herewith.

Exhibit No.	Description
99.1	Slides from the Bank of America Merrill Lynch 2009 Global Metals & Mining Conference.
	1

Table of Contents

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: May 13, 2009 Arch Coal, Inc.

By: /s/ Robert G. Jones

Robert G. Jones

Senior Vice President—Law, General Counsel and

Secretary

2

Exhibit Index

Exhibit	
No.	Description

99.1 Slides from the Bank of America Merrill Lynch 2009 Global Metals & Mining Conference.











Bank of America Merrill Lynch 2009 Global Metals & Mining Conference

John Drexler, Senior Vice President and CFO Arch Coal, Inc.

Barcelona, Spain May 13, 2009

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 Coal is a leader in the U.S. coal industry





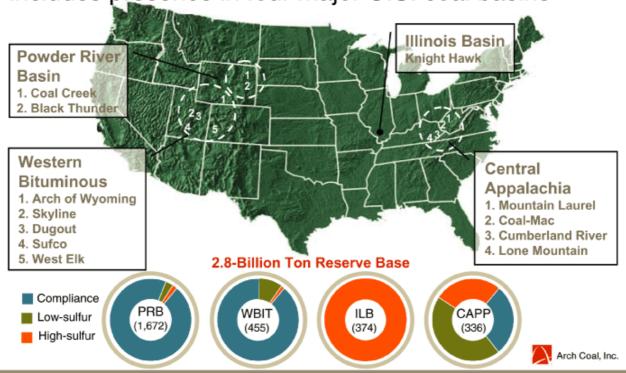


- One of the **largest** coal producers in the United States
- Supply roughly 12 percent of the U.S. coal supply
 - Provide cleaner-burning, low-sulfur coal to domestic power producers to fuel 6 percent of the nation's electricity
 - Ship coal to domestic and international steel manufacturers as well as international power producers
- Talented workforce operates large, modern and efficient mines
- Industry leader in mine safety and environmental commitment



Source: ACI Slide 3

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

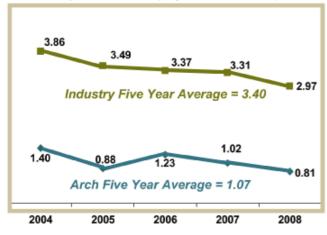


Source: ACI assigned reserves at 12/31/08

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

Lost-Time Safety Incident Rate

(per 200,000 employee-hours worked)



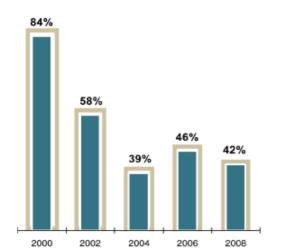
- Arch's safety record is the best in the U.S. coal industry
 - Awarded MSHA's Sentinels of Safety honor for operating the nation's safest underground coal mines in 2006 and 2007
- Arch's environmental performance ranks first among major coal industry peers
 - Earned 5 National Good
 Neighbor Awards since 2003

Sources: ACI, MSHA Slide 5

Arch has one of the strongest and cleanest balance sheets in the U.S. coal industry

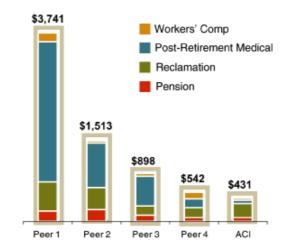
Net Debt as Percentage of Capitalization

(at 12/31)



Legacy Liabilities of Largest U.S. Coal Companies

(12/31/08, in millions)

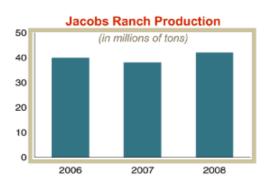


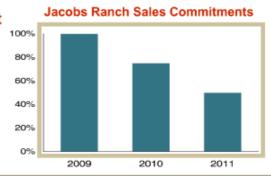


Source: ACI and SEC filings

Arch has recently announced plans to acquire the Jacobs Ranch mine in the Powder River Basin

- Purchase price of \$761 million
- 381 million tons of low-cost reserves (at 12/31/08) contiguous to Black Thunder
- Jacobs Ranch sold 42 million tons in 2008
 - Average quality over 8,800 Btu per pound
 - Sulfur-dioxide content < 1 lb per million Btu
- Purchase includes major mining equipment
- · Workforce of 600 at Jacobs Ranch
- Jacobs Ranch would have contributed incremental EBITDA* of \$145 million to \$165 million for Arch in 2009, assuming a closing date of Dec. 31, 2008



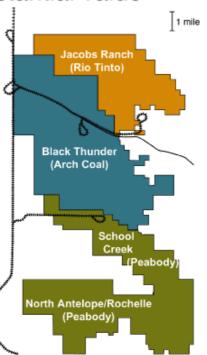


Source: ACI

*Reconciliation is at end of presentation

The integration of Jacobs Ranch into Arch's flagship Black Thunder mine will create substantial value

- · Jacobs Ranch offers compelling strategic rationale
 - Shares a 6-mile property line with Black Thunder
 - High-quality reserves with competitive mining costs
- Integration will create one of the world's largest and most efficient mining complexes
 - Optimization of combined equipment fleet
 - Increased utilization of expanded coal handling system and state-of-the-art rail loadout
 - Greater flexibility in product blending and quality control
 - Inventory management and purchasing efficiencies
 - Reduced net capital expenditures



Source: ACI Slide 8



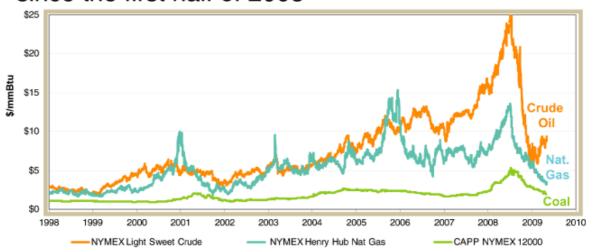




Current energy market challenges



Energy markets have weakened considerably since the first half of 2008



- During the first half of 2008, energy prices (oil, natural gas and coal) soared
 - U.S. exports surged in response to robust global demand
 - Strong steel demand lifted met coal market
- But, the global economic recession has led to a contraction in energy demand

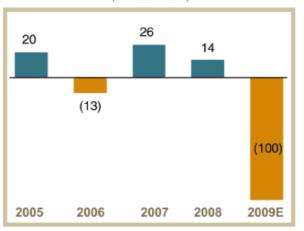
Source: ACI, NYMEX, Argus Coal Daily

Power generation and coal consumption are likely to be down in 2009, but so will supply

- We expect an unprecedented decline in coal consumption during 2009
 - Driven by weak U.S. power and industrial demand, potential fuel switching to natural gas, reduced need for coking coal domestically and lower coal exports
- Supply rationalization is also underway, and will help to rebalance markets
 - Announced domestic coal supply cuts exceed 50 million tons
 - Lack of access to capital is causing financial distress among smaller or leveraged companies
 - Expect production cuts to accelerate as the year progresses

Change in Consumption of U.S. Coal

(in million tons)





Source: EEI, EIA, MSHA and ACI

Arch is reducing volume and capital spending levels in a weak market cycle

RESPONSIBLE

- Reducing production and capital spending levels due to current weak market conditions
 - Preserve future value of reserve base
- Diligently managing our liquidity and balance sheet to ensure adequate cushion
- Remaining patient in sales contracting
 - Layer in sales as market rebounds
 - Use of trading to optimize asset base
- Focusing on long-term growth opportunities
 - Announced acquisition of Rio's Jacobs Ranch
 - Permitting new Lost Prairie reserves in Illinois





Source: EEI, EIA, MSHA and ACI



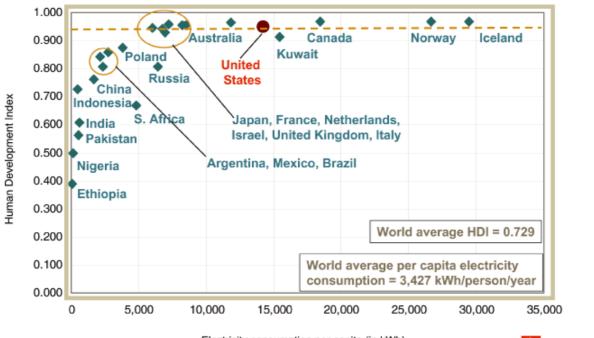




Long-term outlook for coal and energy markets



Prosperity is linked to electricity use



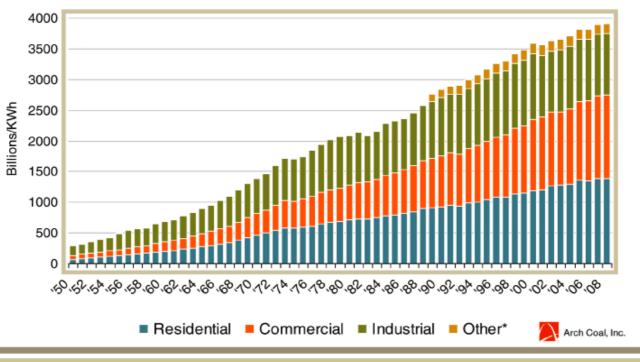
Electricity consumption per capita (in kWh)



Source: United Nations Human Development Report 2007/2008

PROGRESSIVE RESPONSIBLE VITAL GROWING

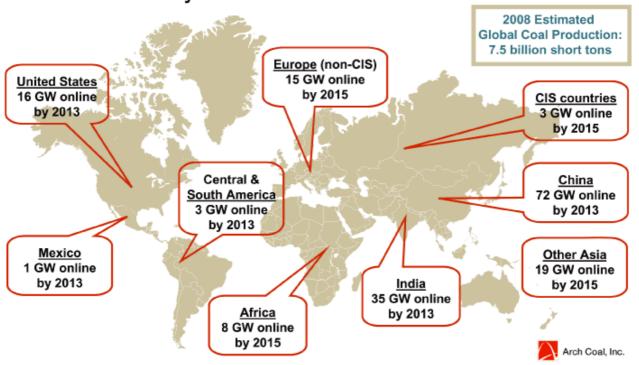
In the United States, electricity demand has steadily climbed since 1950



Source: EIA

*Includes power sold directly to transportation sector and self-generating power

Around the world, countries are building coal plants to fuel electricity needs



Source: ACI and Platts International, estimates based on plants currently under construction

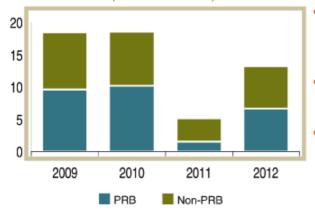
Slide 16

GROWING

Experiencing largest coal plant build-out since 1980 despite news coverage of cancellations

Anticipated Supply Region for Coal Plants Under Construction

(in millions of tons)

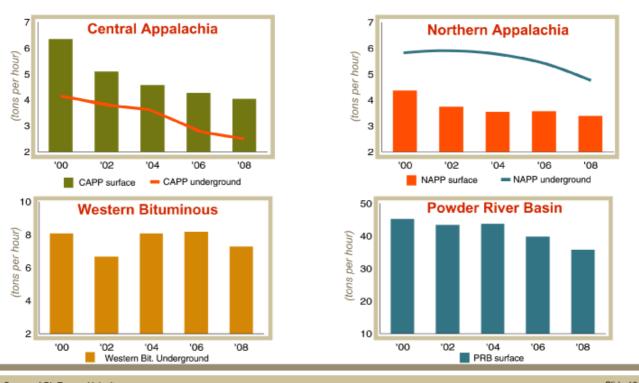


- Build-out of 16 GW equates to
 55 million tons of new coal demand annually over next four years
- Powder River Basin likely will service nearly half of these plants
 - At least 10 GW should be online by the end of 2010



Source: Platts, ACI and NextGen Energy Council

U.S. coal mining productivity has been on the decline since the start of this decade



Source: ACI, Energy Velocity Slide 18





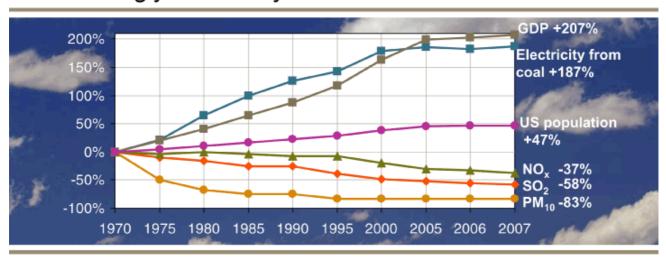


GROWING

Energy, the environment and clean coal technologies



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



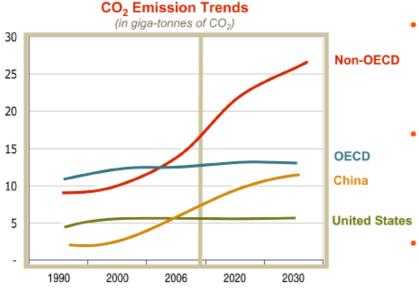
Higher efficiency rates and carbon capture technologies create opportunities for reducing carbon intensity as well



Source: NMA, EPA

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

The developed and developing world must work together to address the climate challenge



- Rapid increases in CO₂ emissions in emerging Asia further underscore the need for clean coal technologies
- China is now the largest emitter of CO₂ and the developing world has surpassed the OECD nations in total emissions
- Clearly, we will need global solutions to address the climate issue



Source: International Energy Outlook 2008

*OECD = Organization for Economic Cooperation and Development

PROGRESSIVE RESPONSIBLE VITAL GROWING

Leaders around the world increasingly recognize the importance of clean coal technologies



"The vast majority of new power stations in China and India will be coal-fired; not 'may be coal-fired'; will be. So developing carbon capture and storage technology is not optional, it is literally of the essence."

Tony Blair (June 2008)

"To the extent ... that we can sequester carbon, capture greenhouse gases before they're emitted into the atmosphere, that's going to be good for everybody. Because if we don't, then we're going to have a ceiling at some point in terms of our ability to expand our economies and maintain the standard of living ..."

U.S. President Obama (Feb. 2009)



Source: ACI, public sources Slide 22

PROGRESSIVE RESPONSIBLE VITAL







GROWING

The future of coal

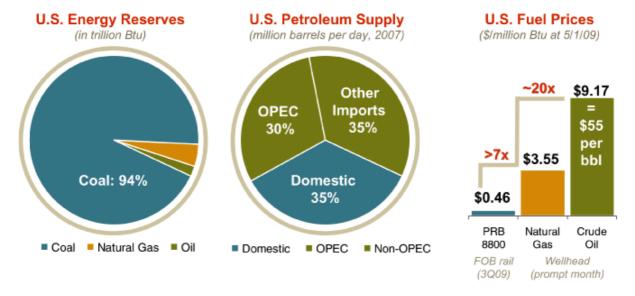




Based on current production levels and proven reserves, coal should outlast both gas supplies and oil reserves by **more than 3 times**Arch Coal, Inc.

Source: ACI, Bank of America, BP Statistical Review 2008 and Blackwell Energy Research

Coal is an affordable and secure energy choice for America





Source: EIA, BP Statistical Review of World Energy 2008, Argus Coal Daily and NYMEX

PROGRESSIVE

Clean coal technologies can create jobs, increase energy security and address climate concerns



Plug-in hybrids are perhaps the best and most realistic way to decarbonize the automotive fleet



Coal can be converted into transportation fuels, thus reducing our reliance on imported energy



Coal can be converted into synthetic natural gas for use in residential as well as a wide range of industrial applications

Coal conversion technologies can unlock coal's full potential



Source: ACI Slide 26

PROGRESSIVE

RESPONSIBLE

VITAL

Arch's future growth avenues are compelling long term

Strategic Growth

Consider acquisitions or other investments that strategically fit and create value

Organic Growth

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

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



Source: ACI Slide 27

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.

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.

Targeted Results

Reconciliation of pro forma Adjusted EBITDA to Income from operations for Jacobs Ranch for the 12 months ended December 31, 2009

Source: ACI