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): August 7, 2012 (August 7, 2012)

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware

1-13105 (Commission File Number) **43-0921172** (I.R.S. Employer Identification No.)

(State or other jurisdiction of incorporation)

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))

o 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.

Beginning August 7, 2012, and at other times thereafter, members of the senior management team of Arch Coal, Inc. (the "<u>Company</u>"), will use the attached slides in various investor presentations. The slides from the presentation are attached as Exhibit 99.1 hereto and are hereby incorporated by reference.

The information contained in Item 7.01 and the exhibits attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "<u>Exchange Act</u>"), or otherwise subject to the liabilities of that section, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended (the "<u>Securities Act</u>") or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibits are attached hereto and filed herewith.

Exhibit

110.	Description		
99.1	Arch Coal, Inc. Investor Presentation Slides		

Description

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: August	Arch Coal, Inc.			
	By: /s/ Robert G. Jones Robert G. Jones Senior Vice President — Law, General Counsel and Secretary			
	2			
Exhibit Index				
Exhibit <u>No.</u> 99.1	Description Arch Coal, Inc. Investor Presentation Slides			
	3			



Powering the Working World.

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Arch Coal, Inc. Investor Presentation

August 2012

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.

ArchCoal

Powering the Working World.

Arch's leadership position in the U.S. coal industry will drive future value creation

1	Low-cost mine portfolio	 Large, low-cost producer in all major U.S. coal basins Leading and low-cost western thermal coal portfolio Strong, scalable Appalachian met/thermal coal platform
2	Growing met coal franchise	 Shifting focus in Appalachia to higher-margin met assets Upgrading met product slate with expansion projects Enhancing efficiencies at existing met mines
3	Expanding export platform	 Direct stakes in ports on East and West Coast Expanding throughput capacity in the Gulf Region Opened sales offices in Singapore and London
4	Low legacy liabilities	 Lowest legacy liabilities of major, diversified producers Nearly 75% of liabilities are reclamation obligations Substantial annual expense and cash flow savings
5	Major upside as markets recover	 High-quality, unused spare capacity in PRB Growing, higher-quality met coal production in Appalachia Undeveloped, low-cost reserves in Illinois

Arch is the most diversified U.S. coal producer, and the No. 2 reserve holder in the nation



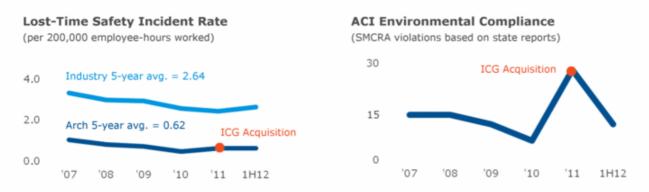
* Pro form a reserves at 12/31/11

ArchCoal

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Slide 4

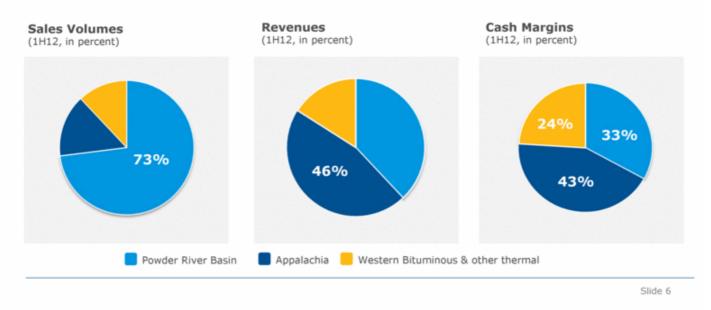
Arch leads the coal industry in safety and environmental compliance



- Arch's safety performance is four times better than the U.S. coal industry average
 - -Arch is deeply committed to further improving its industry-leading safety and environmental performances since integrating ICG into the fold

Arch has a balanced and diversified mine portfolio

While Arch's sales volumes are skewed toward low-cost Powder River Basin coal, the company's revenue stream is diversified between eastern (increasingly metallurgical) and western regions – and cash margins are very well balanced among all core operating regions.



Arch is holding the line on cost escalation despite running at lower volume levels

Powder River Basin Cost Guidance*



Appalachian Cost Guidance* (2012E, cash costs per ton)



- Controlling consumable costs (i.e. diesel, explosives)
- Reducing headcount, contractors and labor costs
- Decreasing parts & supplies expense as well as repair costs due to idled equipment
- Working with alliance and strategic suppliers
- Right-sizing operations
- Idling high-cost thermal capacity (Appalachia)

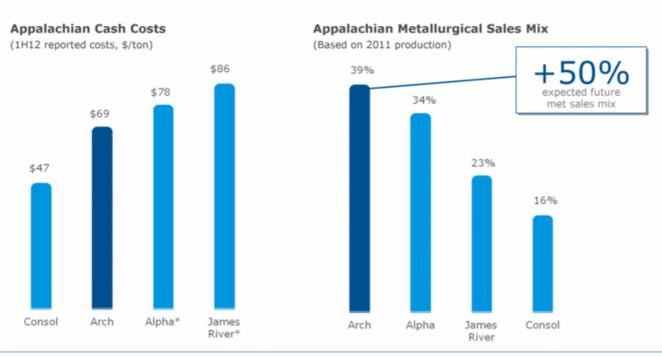
*As given on 7/27/12

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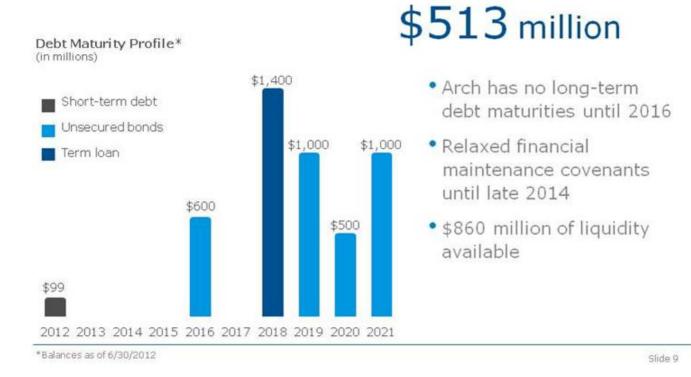
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Slide 7

Arch's Appalachian portfolio is low in cost — and is geared toward higher-margin met assets



Arch has increased its financial flexibility and enhanced its liquidity



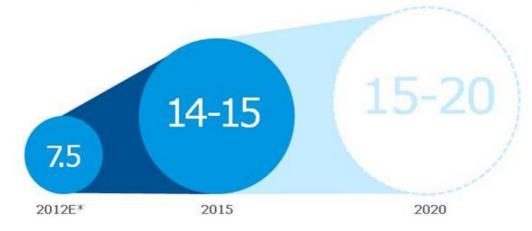
Cash on Hand*

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Arch's long-term growth plans are focused on higher-return organic expansions

- Leer metallurgical mine adds 3.5 million tons, starting in mid-2013
- 414 million tons of low-cost met reserves support incremental and greenfield expansion, should market conditions warrant



Arch's Leer mine represents an outstanding growth opportunity

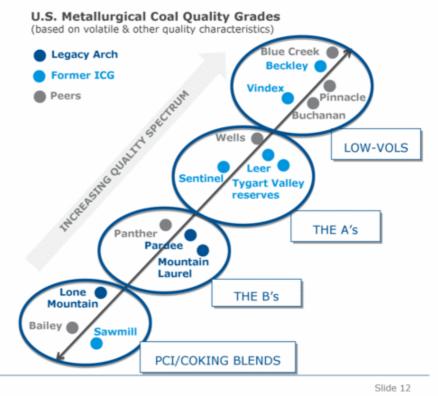
- One of the industry's most promising metallurgical projects
- Mine development is advancing
- Cash costs expected within Arch's current cost range with anticipated premium high-vol A pricing in domestic and global coal markets



Slide 11

Arch's metallurgical coal build-out will expand platform and upgrade overall product slate

- With the acquisition of ICG in 2011, Arch gained low-vol and high-vol A met assets, immediately upgrading its product slate
- With the build-out of Leer, Shelby Run and other reserves in Tygart Valley, Arch's met coal quality mix will increase further

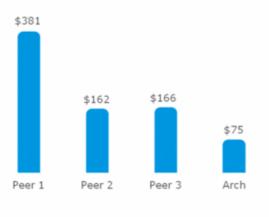


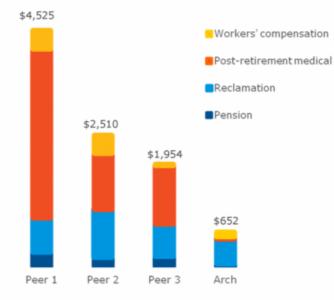
ArchCoal Powering the Working World. Arch's long-term goal is to play a larger role in the expanding seaborne coal trade 2 billion tons Seaborne coal trade Arch's export volumes ~30 1 million tons 2020 West Coast East Coast **Gulf Coast** River terminals MBT port in WA DTA port in VA 7+ in Illinois Agreement with Throughput million tons Agreement with Ridley in BC, options at 2011 Kinder Morgan other ports Canada in LA and TX Arch's capacity Pursuing additional Throughput throughput options could approach options at at ports along 10 million tons by 2015 other ports West Coast (plus midstreaming)

Arch maintains very low legacy liabilities versus major peers

Annual Expense of Legacy Liabilities

(12/31/11, in millions)





Legacy Liabilities of Largest U.S. Coal Companies

(12/31/11, in millions)

Sources: ACI, peer SEC filings

Slide 14



Metallurgical coal markets represent a compelling long-term opportunity

CURRENT GLOBAL MARKET

- Met markets are soft currently due to global macro uncertainty
- Global steel production declined month-over-month in June 2012
- Utilization rates at U.S. steel mills have fallen below 75%
- Seaborne coal markets were slightly oversupplied by roughly 25 million tonnes in 1H12

LONG-TERM GLOBAL MARKET

- World steel consumption is projected to increase +50% by 2020
- World population to top 8 billion by 2030 — with substantial growth in the middle class
- China and India are expected to import 1.5 billion tonnes by 2030
- Long-term met market strength driven by demand growth — and supply constraints

Sources: World Steel Association, Wood Mackenzie, ACI and other public sources

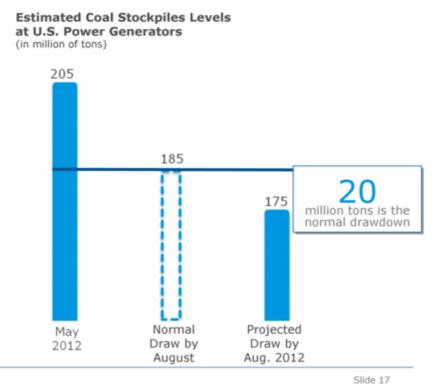
Slide 16

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U.S. thermal market has reached an inflection point — and coal stockpiles are beginning to liquidate

- Stockpiles peaked in May 2012, slightly above the record set in 2009
- Hot weather and higher natural gas prices are drawing down stocks meaningfully
- Domestic thermal market is trending toward better balance in the second half of the year

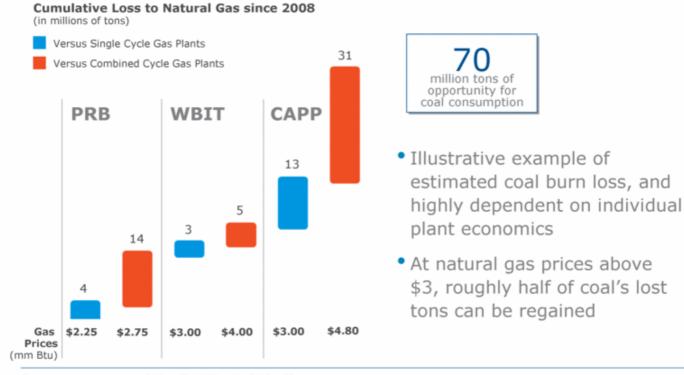


Sources: ACI and Energy Venture Analysis

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Incremental increases in natural gas prices should allow coal to move back into the money



Price assumptions per ton: PRB: \$15, WBIT: \$40, CAPP: \$75 Heat rate assumptions: single cycle gas: 11,000, combined cycle gas: 7,000, PRB coal plant: 10,000

The trend line in seaborne coal demand is clear ... with little reason to believe it will change soon

India net imports China net imports (in millions of tonnes) (in millions of tonnes) Thermal 147 Met 120 103 37 42 48 (83)(68)(46)(25) 0 (3)04 05 06 07 08 09 10 11 12E 03 03 04 05 06 07 08 09 10 11 12E Slide 19

Sources: ACI, McCloskey and India Coal Market Watch Data

ArchCoal

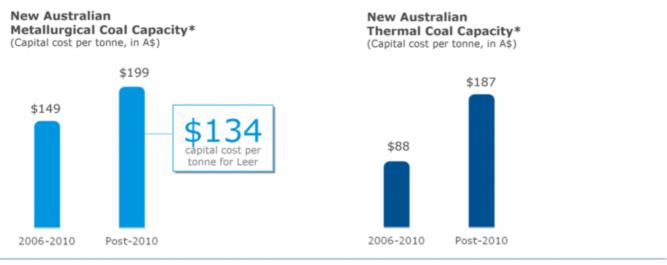
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Traditional supply sources are struggling to keep pace with demand, making U.S. coal increasingly competitive



U.S. coal should become increasingly competitive in world markets over time

As pressures mount in the fastest growing supply regions, U.S. coal should become even more competitive on the global stage. With Arch's exceptional reserve base, we expect far lower capital requirements for incremental met and thermal volumes.

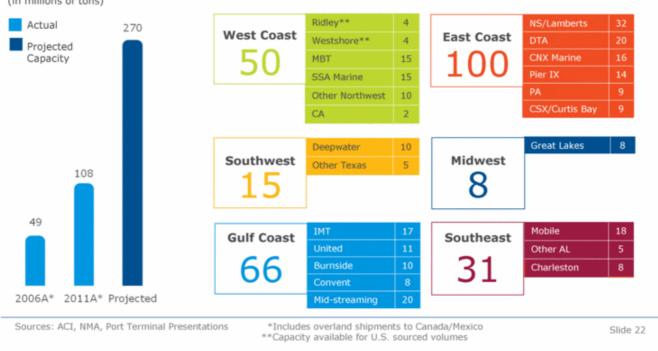


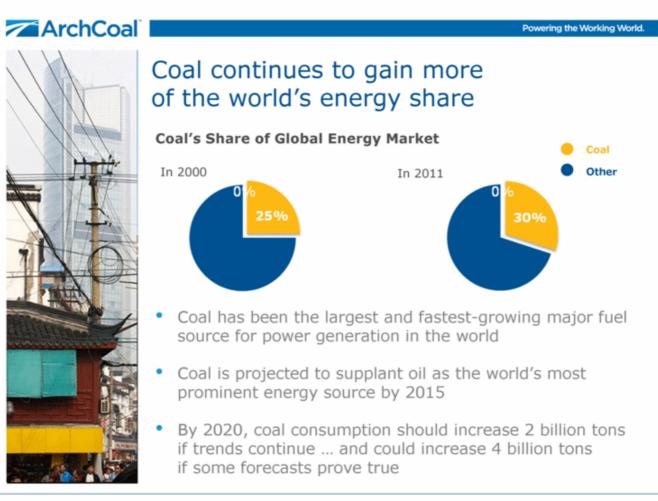
Sources: Wood Mackenzie, ACI *Projects that began construction prior to 2010 versus post-2010 (or expected post-2010) Slide 21



Planned U.S. port expansions will support a more than doubling of coal exports over the next five years or so

U.S. Exports (in millions of tons)







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August 2012

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