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 8, 2013 (May 8, 2013)

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))
- 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 in May, 2013, and at other times thereafter, members of the senior management team of Arch Coal, Inc. (the "Company"), 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 "Exchange Act"), 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 "Securities Act") 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 No.	Description	
99.1	Arch Coal, Inc. Investor Presentation Slides	

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 8, 2013

Arch Coal, Inc.

By: /s/ Robert G. Jones
Robert G. Jones
Senior Vice President — Law, General Counsel and Secretary

3

Exhibit Index

Exhibit
No.

99.1 Arch Coal, Inc. Investor Presentation Slides

4







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.

Slide 2

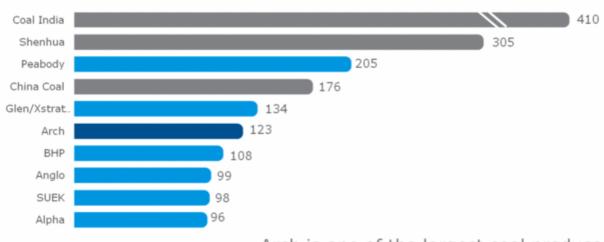


Powering the Working World.

Arch is among the top coal producers and marketers in the world

Top 10 Global Coal Producers

(2012, in millions of metric tonnes)



Government affiliated

Arch is one of the largest coal producers globally, and is the third largest privatesector producer based on volume.



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



Slide 4

ArchCoal

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Arch maintains an industry-leading position in safety and environmental compliance

Lost-Time Safety Incident Rate

(per 200,000 employee-hours worked)



ACI Environmental Compliance

(SMCRA violations based on state reports)

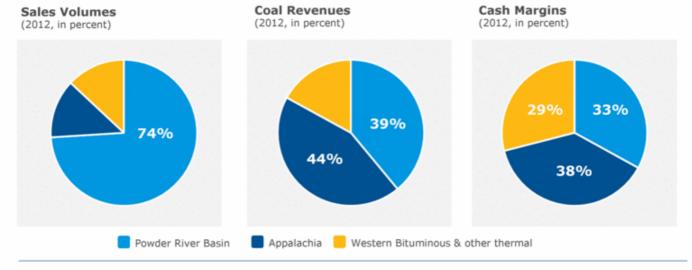


- Arch's average safety performance is four times better than the U.S. coal industry average
 - Deep commitment to a behavior-based process drives continuous improvements in workplace safety and environmental care across all sites



Arch has a balanced and diversified mine portfolio

While Arch's sales volumes are weighted 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 well balanced among all core operating regions.



Slide 6



Arch has a leading, low-cost western thermal portfolio with meaningful available capacity

Southern Powder River Basin

(2012 production, in millions of tons)



Western Bituminous Region

(2012 production, in millions of tons)



- Arch has a strong position in the PRB, the nation's largest coal supply basin
 - High-Btu, low-sulfur product
 - Available, excess capacity to bring back as demand returns
 - Expect PRB to expand domestically
 - Pursuing export growth off West Coast
- Arch is the leading producer in the Western Bituminous Region
 - Supply to remain constrained in region
 - Targeting exports via Gulf/West Coast

Sources: ACI, MSHA Slide 7

ArchCoal

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Slide 8

Arch's thermal platform in the Illinois Basin provides future opportunities

725 Million

tons of reserves

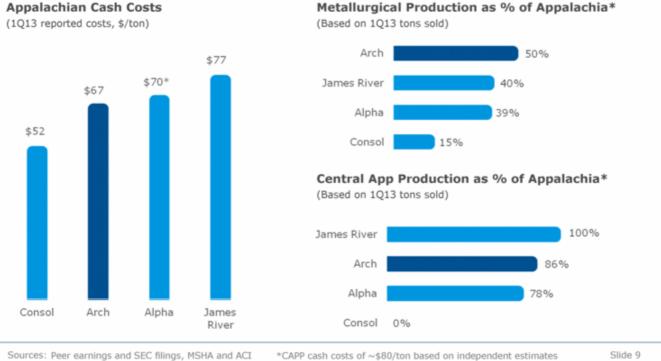


- Viper Mine is low-cost and highly competitive
- Arch owns a 49% equity stake in Knight Hawk, which sold over 4 million tons in 2012
- Arch has built a large portfolio of low-chlorine assets in the basin
- All required permits received for the Lost Prairie Reserves, setting the stage for potential development in the future

Sources: ACI, Ventyx *49% equity interest



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



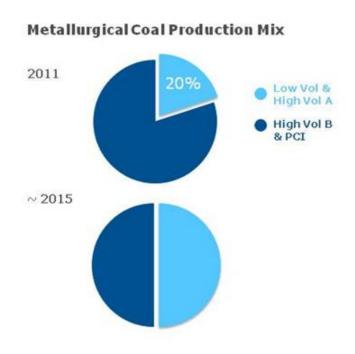
*CAPP cash costs of ~\$80/ton based on independent estimates

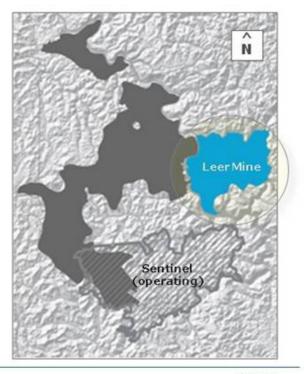
Slide 9



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Arch's metallurgical coal platform is expanding and shifting towards higher-quality coking coals







Arch continues to advance development of the Leer mine to build out its metallurgical coal franchise

- Preparation plant is online
- Continuous miners are in operation
- First train loaded in fall of 2012
- Longwall expected to start-up by October 2013
- Cash costs expected within Arch's current cost range or lower
- High-vol A Leer mine should improve company margins









Sources: Wood Mackenzie, ACI

Slide 12

ArchCoal

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Arch is containing costs even while running at reduced volume levels

Powder River Basin Cost Per ton (cash costs per ton)



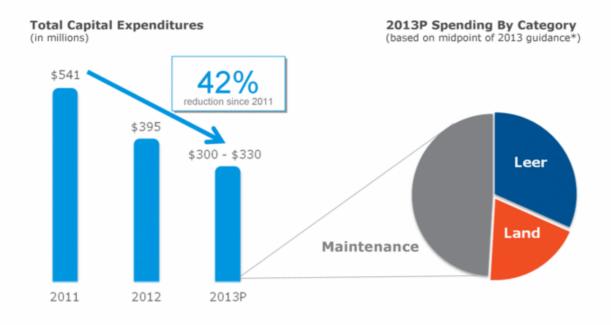
Appalachian Cost Per Ton (cash costs per ton)



- Controlling consumable costs (i.e. diesel, explosives)
- Reducing contractor and overtime labor costs
- Decreasing parts & supplies expense as well as carrying costs of inventory
- Working with alliance and strategic suppliers
- Right-sizing operations



Arch is reducing its capital allocation budget in line with evolving coal market conditions



*As given on 4/23/13 Slide 14



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Arch has a strong liquidity position, primarily in cash, to weather current market downturn



- Arch's current strategy favors holding cash versus historically maintaining higher borrowing capacity
- Relaxed financial maintenance covenants until late 2015
 - Only a minimum liquidity and senior secured leverage ratio, net of cash, remain in interim
- No debt maturities until 2016





Arch is well-positioned to benefit as coal markets improve

Arch's diversified operations, competitive cost structure and enhanced liquidity position will allow it to emerge as an even stronger player as the market returns to a more balanced state

Flexible Capital Structure

Current Focus

- Manage capital
- · Control costs
- Rationalize supply
- Continue met development
- Maximize value of asset base

As Cycle Turns

- Reduce leverage
- Invest in the business via organic and strategic growth
- Return capital to stakeholders
- Maximize value of asset base







Powering the Working World.

We are seeing improving trends in 2013, leading to a further correction in U.S. coal stockpiles

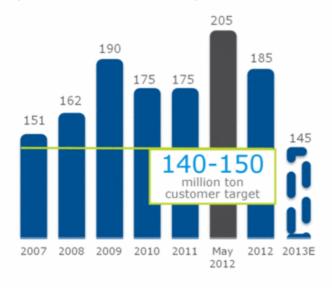
	2011	2012	2013P
(in millions of tons)		change	change
Power generation use	928	(103)	1
U.S. coal exports	106	+19	•
Industrial use	50	(5)	
Domestic metallurgical	21	(1)	
			_
U.S. demand	1,105	~(90)	
U.S. demand Domestic supply*	1,105 1,107	~(90) (77)	1
			1
Domestic supply*	1,107	(77)	† +

- In 2012, U.S. coal demand declined 90 million tons.
 Supply fell 80 million tons, leading to a build in U.S. generator coal stockpiles.
- Trends are reversing in 2013 (through March):
 - Power demand up 3%
 - U.S. coal consumption up 10%
 - U.S. coal production down 10%



U.S. coal stockpiles should further liquidate in 2013; could end the year at targeted levels

Estimated Coal Stockpile Levels at U.S. Power Generators (in millions of tons, at December 31)



- After a record build in May 2012, coal stockpiles at U.S. generators declined to 185 million tons by December. Despite the positive trend, stockpiles remained well above targeted levels.
- With higher natural gas prices, normalized weather, elevated exports and lower supply anticipated in 2013, we expect coal stockpiles to liquidate further and approach targeted levels by year end.

Sources: EIA, EVA and ACI Slide 19

ArchCoal

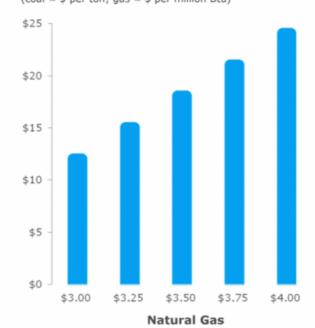
Powering the Working World.

The economics of coal — particularly in the PRB — are compelling in today's gas market

PRB 8800

- Powder River Basin coal remains the most cost competitive fossil fuel source in the U.S.
- The PRB demand outlook is improving due to higher natural gas prices and normalized weather







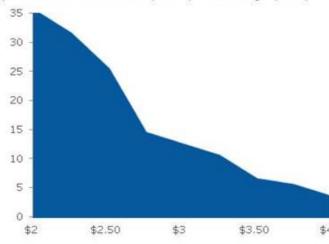
As natural gas prices rise, Powder River Basin coal is moving back into the money

25+ Million Tons

should be recaptured by the PRB in 2013

Powder River Basin vs. Natural Gas

(in millions of tons of coal displaced per mm Btu gas prices)

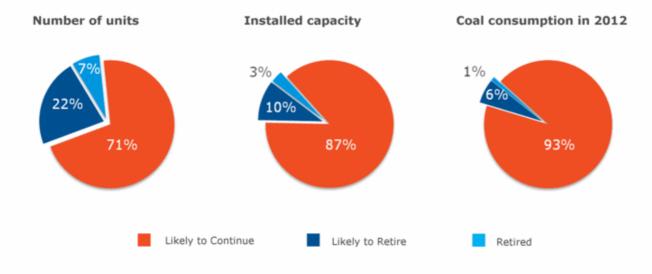


- We estimate that ~30 million tons of PRB coal consumption was displaced by natural gas in 2012
- We expect domestic consumption of Western Bituminous coal to increase by 8 million tons due to higher natural gas prices
- Central Appalachia will start to become competitive if and when gas prices move above \$4.50

Price assumptions per ton: PRB: \$11. Transportation costs per ton: \$20-\$25. Heat rate assumptions: single cycle gas: 11,000, combined cycle gas: 7,000, PRB coal plant: 10,000.



Arch expects 30% of U.S. coal-fueled units to retire by 2018, but the impact on consumption won't be as great



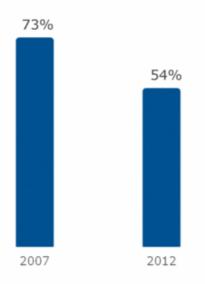
Source: Ventyx, ACI Slide 22



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Coal units are operating at low capacity factors, which could provide offset to the impact of plant retirements

Average Capacity Factor of U.S. Coal Fleet

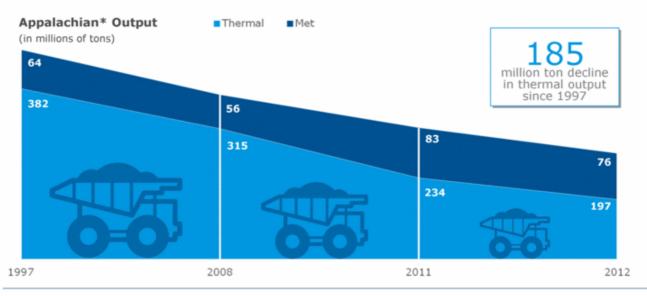


- The coal fleet has run at much higher utilization rates in past
- Large plants retrofitted with modern control technologies should be able to operate at capacity factors well above the 2007 fleet average
- The units that we anticipate surviving the current shakeout operated at approximately 60% utilization in 2012, according to our estimates



Supply constraints will bring balance to coal markets

Appalachian thermal coal is in long-term secular decline. Arch expects thermal output in the region to fall further in 2013.



Sources: EIA and ACI

*Includes Northern and Central Appalachia

Slide 24



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The coal market is global and diverse — with the U.S. continuing to expand its role



Sources: IEA, IHS CERA and ACI

* Includes brown coal (<4,200 kcal)

Slide 26



The fall-off in global metallurgical coal prices is spurring a significant supply rationalization

Benchmark Hard Coking Coal Price (in US \$ per metric tonne)



- Supply cuts of up to 35 million tons annualized have been announced as benchmark prices fell
 - At the 2Q13 benchmark of \$172/tonne, public announcements of mine idlings and workforce reductions continue
- Earnings announcements suggest that leading global metallurgical producers are suffering operating losses at current prices
- Market observers project one-third of global metallurgical supply could be uneconomic at current prices

Sources: AME, CRV, and ACI Slide 27

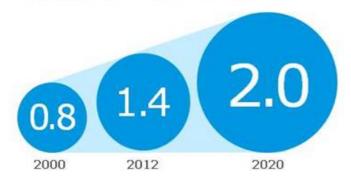


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Projected growth in global steel consumption will drive metallurgical coal demand through 2020

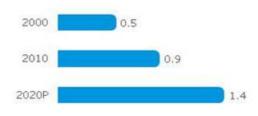
World Steel Production

(in billions of metric tonnes of crude steel)



(in billions of metric tonnes of coal)

Global Metallurgical Coal Use



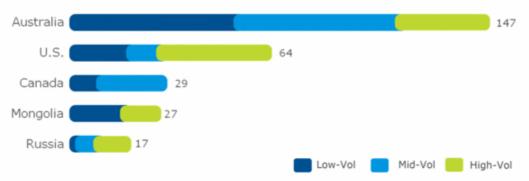
World steel consumption is projected to increase more than 35 percent from 2012 level of 1.4 billion tonnes Demand for met coal will be driven by increased utilization at existing steel plants and the projected build-out of new steel capacity



The U.S. already plays a sizable and increasingly essential role in global metallurgical markets

2012 Metallurgical Export Coal Supply

(in millions of metric tonnes)



- The U.S. is already an essential source of seaborne metallurgical coal — second only to Australia
- U.S. output of low-vol and mid-vol coals is comparable to Canada

Sources: Wood Mackenzie, T. Parker Host and ACI

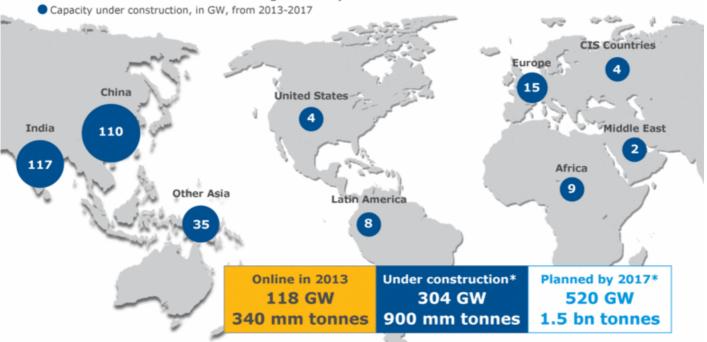
Slide 29

ArchCoal

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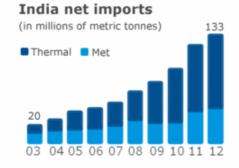
Nations around the world are building coal power plants to fuel electricity needs

New Coal-Fueled Generation Coming Online by 2017

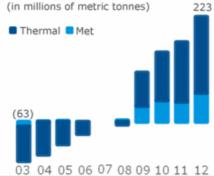




The trend of increased coal imports is unmistakable – and the growth is not confined to India and China







- Since 2007, South Korean imports have risen 45% to 141 million tonnes
- Vietnam plans to add more than 30 GWs of coal-based capacity this decade – and Taiwan, Indonesia, Malaysia and the Philippines are following a similar path
- Thailand's energy agency expects power demand to double by 2030, and views coal as a lower cost and more secure option than LNG

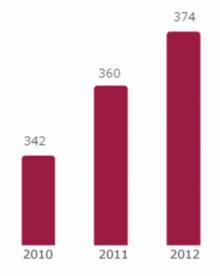
Sources: ACI, McCloskey, India Coal Market Watch Data, Bloomberg, JP Morgan / Bangkok Post



European coal consumption has risen measurably

Coal Burn in the European Union

(in millions of tonnes of coal equivalent)*



- With natural gas prices at nearly three times the level prevailing in the U.S., Europe is consuming more coal
- Expiring natural gas contracts as well as an acrimonious history of natural gas purchases from Russia provide further incentives
- Declining indigenous production in Europe should translate into increased coal imports
- 6 GW of new coal-fueled capacity coming online on the continent in 2013

Sources: IEA, IHS CERA, McCloskey and ACI

*Excludes consumption of brown coal

Slide 32



Powering the Working World.

Traditional supply sources are faced with rising costs, depleting resources and growing domestic demand, making U.S. coal increasingly competitive

China is depleting reserves at an unprecedented (and accelerating) rate and production is migrating further from population centers. Imported coal often offers significant quality and environmental advantages.

Australia will experience higher costs in new reserve areas. Government, regulatory and community impediments are on the rise.

> India faces quality, land use, environmental and infrastructure challenges.

Supply Pressures

Indonesia coal quality is declining and infrastructure is a huge challenge. Substantial capital is required to open new reserve areas, and growing domestic demand could ultimately constrain export growth.

Other Supply Regions

South Africa is increasingly mature and infrastructure needs are great. Russia faces reserve depletion in the West and infrastructure needs in the East. Mongolia and Mozambique have coal but no roads, rail, ports or miners.

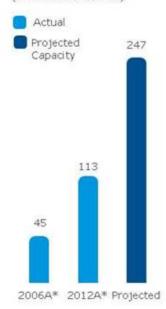
Source: Public sources





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 tonnes)



	4	Taken the larger of the first	NS/Lamberts	29
Westshore**	4	East Coast	DTA	18
MBT	14	27	CNX Marine	14
SSA Marine	14	07	Pier IX	13
Other Northwest	9		PΑ	1
CA	2		CSX/Curtis Bay	12
Deepwater	10		Great Lakes	6
Other Texas	6	6		
IMT	15	Southeast	Mobile	16
LINE CONTROL OF THE PARTY OF TH	-	20	Watermandelites	5
Burnside	9	/ 74	Charleston	17
	MBT SSA Marine Other Northwest CA Deepwater Other Texas IMT United	MBT 14 SSA Marine 14 Other Northwest 9 CA 2 Deepwater 10 Other Texas 6	MBT 14 SSA Marine 14 Other Northwest 9 CA 2 Deepwater 10 Other Texas 6 Midwest 6	MBT 14 87 CNX Marine SSA Marine 14 Pier IX Cther Northwest 9 PA CA 2 CSX/Curtis Bay Deepwater 10 Midwest Other Texas 6 Great Lakes Mobile Other AL

Sources: ACI, NMA, Port Terminal Presentations

- *Includes overland shipments to Canada/Mexico **Capacity available for U.S. sourced volumes

Slide 34



Powering the Working World.

While current market conditions are challenging, long-term prospects for coal demand are bright

CURRENT MARKET

LONG-TERM

- Global macro uncertainty is impacting both thermal and met demand
- Emerging markets have slowed in the face of economic weakness in the developed world
- Utilization rates at global steel mills stand at 79 percent off peak levels
- Thermal and met coal prices have slid to unsustainably low levels

- World steel consumption is projected to climb +40% by 2020
- World population could top 8 billion by 2030 - with substantial urbanization and growth in middle class of emerging world
- The rapid build-out of the world's coal-based power plant fleet shows no signs of abating
- Growing supply constraints should further support market conditions



