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): February 2, 2012 (February 2, 2012)

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))

Item 7.01 Regulation FD Disclosure.

On February 2, 2012, John W. Eaves, President and Chief Operating Officer of Arch Coal, Inc. (the "Company"), will deliver a presentation at the Coaltrans USA 2012 Conference. 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.

Description

99.1 Slides from the Coaltrans USA 2012 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: February 2, 2012 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 Coaltrans USA 2012 Conference.	
	3	
	3	





Forward-Looking Information

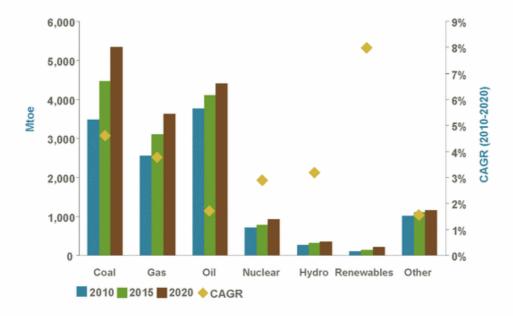
This presentation contains "forward-looking statements" – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates," "intends," "plans," "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 (including the ICG business); 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.







Wood Mackenzie projects that coal will supplant oil as the world's leading fuel source by 2015



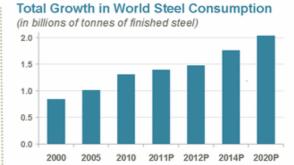


Source: Wood Mackenzie Energy Markets Service



We expect continued strength in met coal markets – based on projected growth in steel consumption globally

- Growth in world steel consumption is projected to increase nearly 60 percent during the next decade
- Met coal demand growth will come from increased utilization at existing steel plants along with a build out of new steel capacity
 - Asia-Pacific market is leading the steel capacity build out
 - Robust growth is also projected in Atlantic Basin market (Brazil, Eastern Europe)



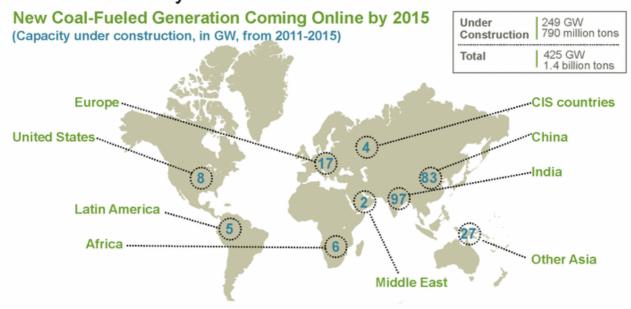
Iron & Steel Capacity Build Out* Through 2015 (in millions of tonnes of raw steel, blast & basic oxygen furnaces)







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



425 GW of total coal-fueled capacity is planned to be online by 2015 ... and will be fueled by 1.4 billion tons of coal

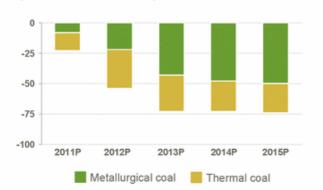
Slide 6

Sources: ACI and Platts International, estimates based on plants currently under construction or planned



Growth in seaborne coal demand should outpace growth in seaborne coal supply over the next five years

Projected Deficit in Seaborne Coal Supply Trade (in millions of metric tonnes)



- We project growing coal consumption worldwide – and ongoing production and transportation constraints in traditional coal export nations
- Internal forecasts suggest that global seaborne coal markets will be under-supplied through at least 2015
 - Cumulative deficit of ~300 million metric tonnes through 2015
 - Roughly 60 percent of projected deficit is in met coal markets; 40 percent relates to thermal coal





Two large developing nations are driving much of the change in global coal supply flow patterns



- By 2015, China and India could increase their coal imports nearly twofold – to support their rapidly developing economies
- This increase will require a further **shifting** of traditional global coal supply patterns
- The U.S. can become a more strategic supplier in seaborne coal markets
 - Major supplier in the Atlantic Basin as South African and Colombian tons migrate to Asia
 - Emerging supplier in the Pacific Rim with the expansion of West Coast infrastructure



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

******** Australia

- New reserve areas have higher costs and greater infrastructure needs
- Demand continuously runs ahead of investment
- Government, regulatory and community impediments are on rise

Indonesia

- Coal quality is declining and infrastructure is a huge challenge
- Capital required to open new reserve areas is substantial
- Growing domestic demand could ultimately constrain export growth

Supply

pressures

Other Supply Regions

- India faces quality, land use, environmental and infrastructure challenges
- South Africa is increasingly mature and infrastructure needs are great
- Russia faces reserve depletion in West and infrastructure needs in East
- Mongolia and Mozambique have coal but no roads, rail, ports or miners

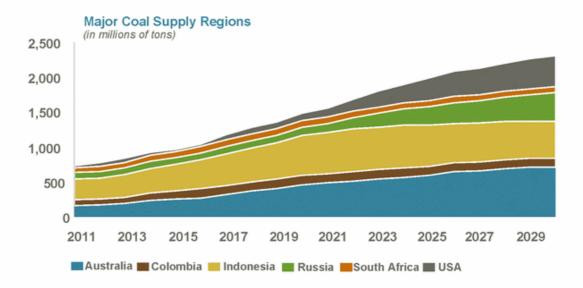
China

- Depleting own reserves at unprecedented (and accelerating) rate
- Production is migrating further from population centers
- Imported coal often offers significant quality and environmental advantages





We expect exports from nearly every major supply region to grow significantly over the next two decades

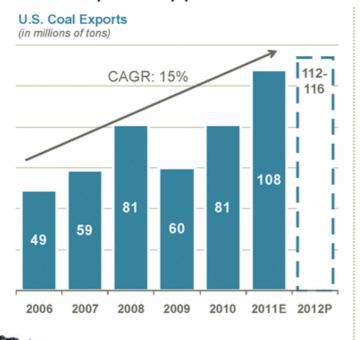




Source: Wood Mackenzie Energy Markets Service



Despite briefly retracing during global financial crisis, U.S. exports appear to be on clear upward trend

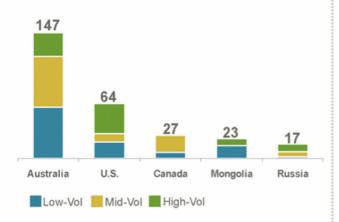


- We expect U.S. exports to continue to climb during next five years
- We project U.S. export growth of 10-15 mm tons annually



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

2011 Metallurgical Export Coal Supply (in millions of tonnes)



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



Sources: Wood-Mac and ACI



Planned U.S. port expansions could support a more than doubling of coal exports by 2015

Midwest Capacity

Port	2015P
Great Lakes	10

West Coast Capacity

Port	2015P
Ridley**	5
Westshore**	5
MBT	15
SSA Marine	15
CA/Other	5
West Coast	45

^{**} Capacity available for U.S. sourced volumes

Projected Export Capacity

2010A	61 million tons
2011E*	108 million tons
2015P	245 million tons

^{*} Includes overland shipments to Canada/Mexico

East Coast Capacity

Port.	2015P	
Lamberts	32	
DTA	22	
Pier IX	14	
CNX Marine	16	
Chesap. Bay	6	
Other East	8	
East Coast	98	

Gulf Capacity

Port	2015P	Port	2015P
IMT	14	United Bulk	10
Burnside	10	IC Marine	8
Gulf			42
Mid-streaming			

Southern Capacity

Port	2015P	
Mobile	18	
Charleston	9	
Texas	5	
Southern	32	

Slide 13

Sources: ACI, Goldman Sachs Research, NMA, Port Terminal Presentations



We expect U.S. coal to play an increasingly important role in the Pacific Basin in the coming decade

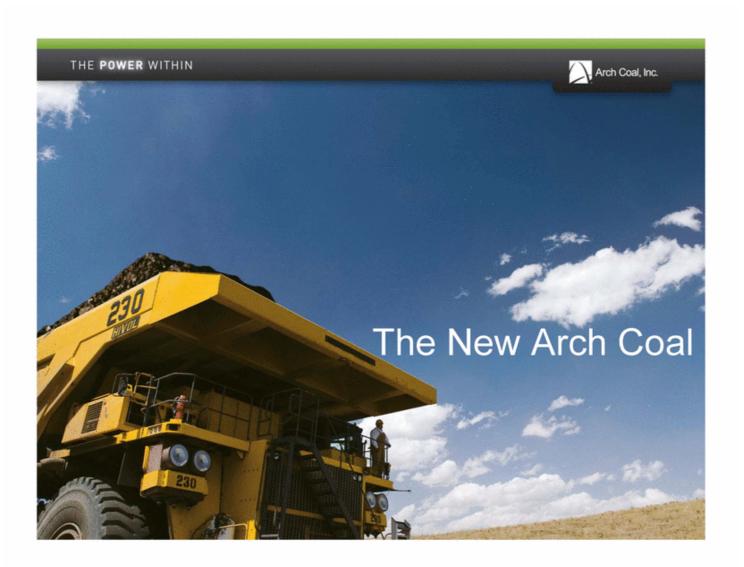
U.S West Coast Port Potential



- Approximately 10 million tons of coal moved off the West Coast into Asia in 2011
- Most of that tonnage moved through Canada, but plans are underway to add U.S. throughput capacity
- We expect West Coast exports to grow significantly over the next five years
- Two major port projects and several smaller ones – are in the permitting process
- We believe the appetite for U.S. coal in Asia is immense



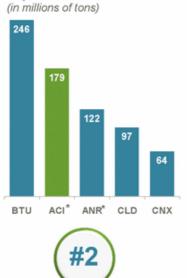
Source: Wood Mackenzie Energy Market Service



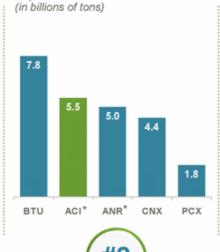


Arch is one of the largest coal producers in the U.S. and the world

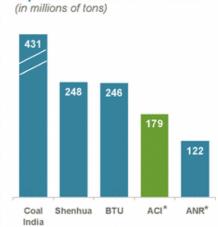
Top Five U.S. Coal Producers



Top Five U.S. Reserve Holders



Top Five Global Coal Producers







Sources: ACI, Ventyx, Company filings * Pro forma 2010



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



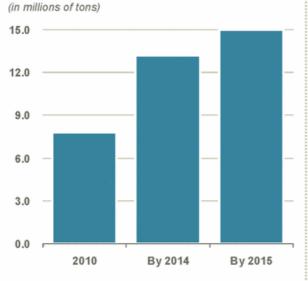
- · Operations now extend to every major coal-supply basin
- · Control a robust U.S. product slate, with representation in all major segments





Our "15 by '15" plan – to grow met volumes to at least 15 million tons by 2015 – is well underway

ACI Expected Metallurgical Coal Volumes



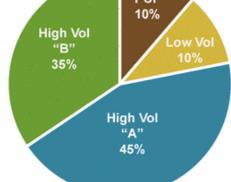
- Accelerated development of Tygart Valley (longwall production now expected in mid-2013) will add 3.5 million tons to our met production profile
- Upgrades to Beckley and Sentinel preparation plants will increase efficiencies and yield of higherquality met coal
- Increased PCI sales from the expanded Lone Mountain complex





Arch is building a world-class, high-vol "A" mining complex on former ICG reserves





19 MT

Slide 19

Total met output should reach 19 million tons by 2017 – with over 50% of that total higher-quality coals





Arch will play a growing role in the global seaborne met and thermal coal trade

East Coast



- Own 22% interest in DTA in Newport News, VA which has throughput capacity of ~20 million tpy
- In final discussions with Kinder Morgan for port space at KMP-owned facilities on East Coast

Gulf Coast (New Orleans)



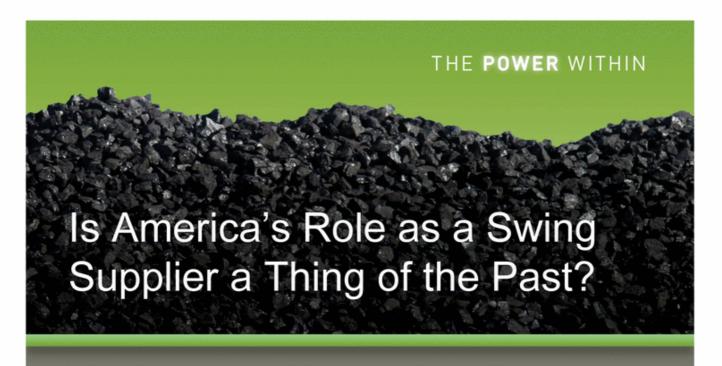
- Ownership and throughput rights at river facilities in Kentucky and Illinois
- Long-term throughput agreement with Kinder Morgan that supports expansion of Gulf Coast export facilities

West Coast



- Own 38% interest in Millennium Bulk Terminals in Washington state
- Agreement with Ridley Terminals in Canada
- Commitments to move Western Bituminous coals through ports in California





JOHN EAVES

President & COO Arch Coal, Inc.

Miami I 2.2.2012

