

**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): **April 26, 2012 (April 26, 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 April 26, 2012, Steven F. Leer, Chairman and Chief Executive Officer of Arch Coal, Inc. (the "Company"), and John W. Eaves, President and Chief Operating Officer of the Company, will deliver a presentation at the Company's 2012 annual stockholders' meeting. The slides from the presentation are attached as Exhibit 99.1 hereto and are hereby incorporated by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibits are attached hereto and filed herewith.

Exhibit No.	Description
99.1	Slides from the presentation at the 2012 annual stockholders' meeting.

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.

By: /s/ Robert G. Jones

Robert G. Jones

Senior Vice President — Law, General Counsel and Secretary

3

Exhibit Index

**Exhibit
No.**

Description

99.1 Slides from the presentation at the 2012 annual stockholders' meeting.

4



Powering the Working World.

Annual Shareholder Meeting

Steven F. Leer, Chairman and CEO

John W. Eaves, President and COO

St. Louis | April 26, 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.

This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA and Adjusted Earnings Per Share. 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.

Slide 2

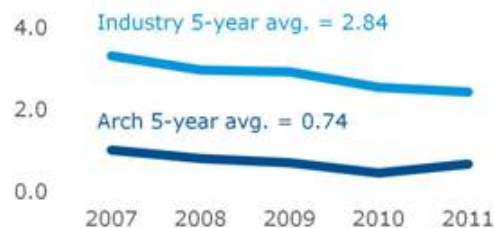
We achieved a record year in 2011 by living our values

- Peer-best safety rates for lost-time and total incidents
 - Ranked #1 in safety among large, diversified U.S. coal producers
 - 42 mines and facilities completed 2011 with a perfect safety record
 - Earned 25 national and state awards for safety excellence, including two of three national MSHA Sentinels of Safety awards
- Peer-best environmental compliance
 - Ranked #1 among peer group with 27 total SMCRA violations
 - 42% of our mines and facilities achieved zero SMCRA violations
- Record financial performance on several key metrics
 - ACI achieved record revenues
 - Generated record EBITDA

Slide 3

Arch leads the coal industry 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)



In 2011, four mining complexes and facilities achieved *A Perfect Zero* – 0 reportable injuries and 0 SMCRA environmental violations

Sources: ACI, MSHA, State environmental agencies

Arch achieves record revenues and EBITDA in 2011

- We achieved a new record for company revenue and EBITDA
- We maintained solid cost-control across our diverse operating platform
- We generated positive free cash flow

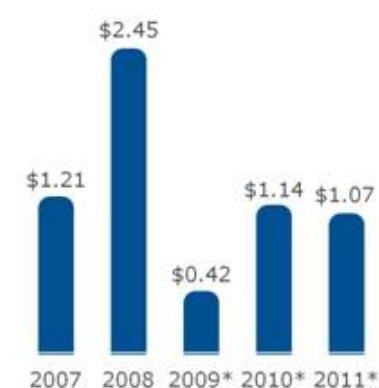
Revenues
(in billions)



EBITDA
(in millions)



Earnings Per Share
(per diluted share)



*EPS/Excluding acquisition charges and sales contract amortization

After a steady recovery following the global financial crisis, Arch stock has fallen hard in the face of unprecedented coal market weakness

ACI Share Price

(closing price at annual meeting date)



- Mild winter weather, unsustainably low natural gas prices and current economic conditions have eroded thermal coal use dramatically
- Generator stockpiles are likely to peak at around 210 mm tons at the end of May, an estimated 60 mm tons above target levels
- The slowdown in Asia has led to lower met coal demand and pricing as well

Coal's future remains bright

CURRENT U.S. MARKET

- Coal is facing its share of headwinds
- Coal's market share of U.S. electric generation dropped from 45% in 2010 to ~43% in 2011
- U.S. coal share could further erode vs. competing fuels – particularly natural gas – in 2012
- Coal stockpiles have moved into surplus due to abnormal winter weather
- Aggressive U.S. regulatory initiatives will accelerate coal plant retirements

LONG-TERM GLOBAL MARKET

- As the world develops, more people with more income means rising energy consumption
- Coal is expected to become the world's largest energy source as early as 2015
- World steel consumption is projected to increase +50% during this decade
- U.S. coal deposits are the world's largest, with 30% of proven global reserves
- Planned U.S. port expansions could support a doubling of coal exports by 2015 from the record level of 2011

Source: EIA, Arch estimates, other public sources

Slide 7



Powering the Working World.

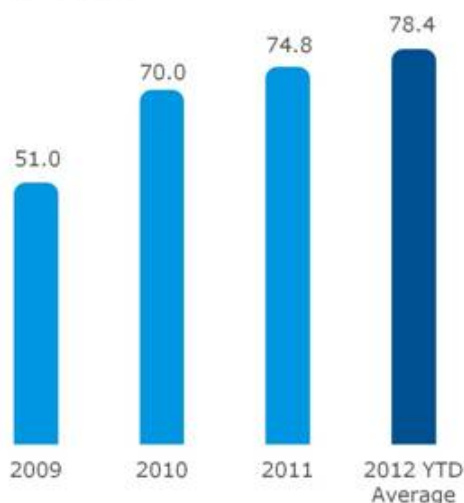
A close-up photograph of a coal miner wearing a black hard hat with a red headlamp. The miner's eyes are visible through the visor, looking directly at the camera. The background is blurred, showing industrial lights.

Short-Term Outlook for Coal Markets

After months of sluggishness, met coal markets may be poised for recovery

Steel Capacity Utilization in the United States

(in percent)



- U.S. steel capacity utilization has risen meaningfully since 2009
- We expect global steel production to increase more than 5% in 2012
- Chinese steel production year-to-date in 2012 is on par with 2011 ... and we expect levels to continue to increase as the year progresses

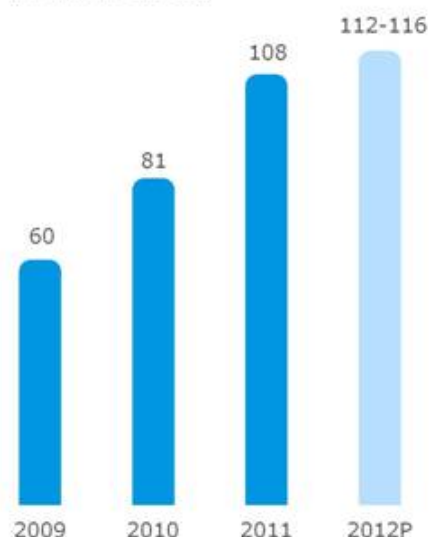
Sources: World Steel Association and ACI

Slide 9

U.S. exports appear to be on clear upward trend

U.S. Coal Exports

(in millions of tons)



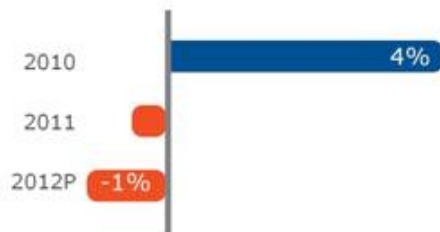
- We expect U.S. exports to continue to climb during next five years
- We project U.S. export growth of 5-15 million tons annually
- U.S. coal industry is transforming from swing supplier to strategic supplier status in the global marketplace

Slide 10

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

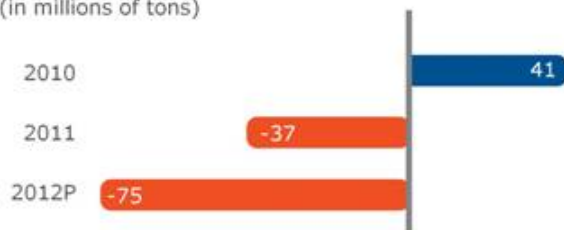
Change in U.S. Power Generation

(in percent)



Change in Domestic Coal Consumption

(in millions of tons)



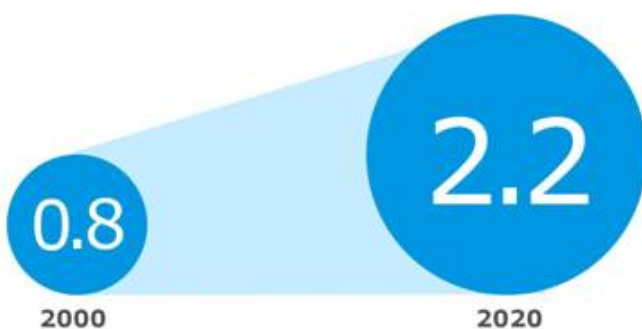
- A swift and deep correction may lead to a stronger and longer rebound
- Market is starting to correct:
 - Coal supply cuts likely greater than 50 million tons to date
 - U.S. economy is improving
 - Weather is likely to revert to mean
 - Natural gas displacement is nearing max
 - Drop in rig counts should reduce natural gas supply

Long-Term Energy Outlook



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

World Steel Production
(in billions of tons of crude steel)



Growth in world steel consumption is projected to increase more than 50 percent

Global Metallurgical Coal Use
(in billions of tons of coal)

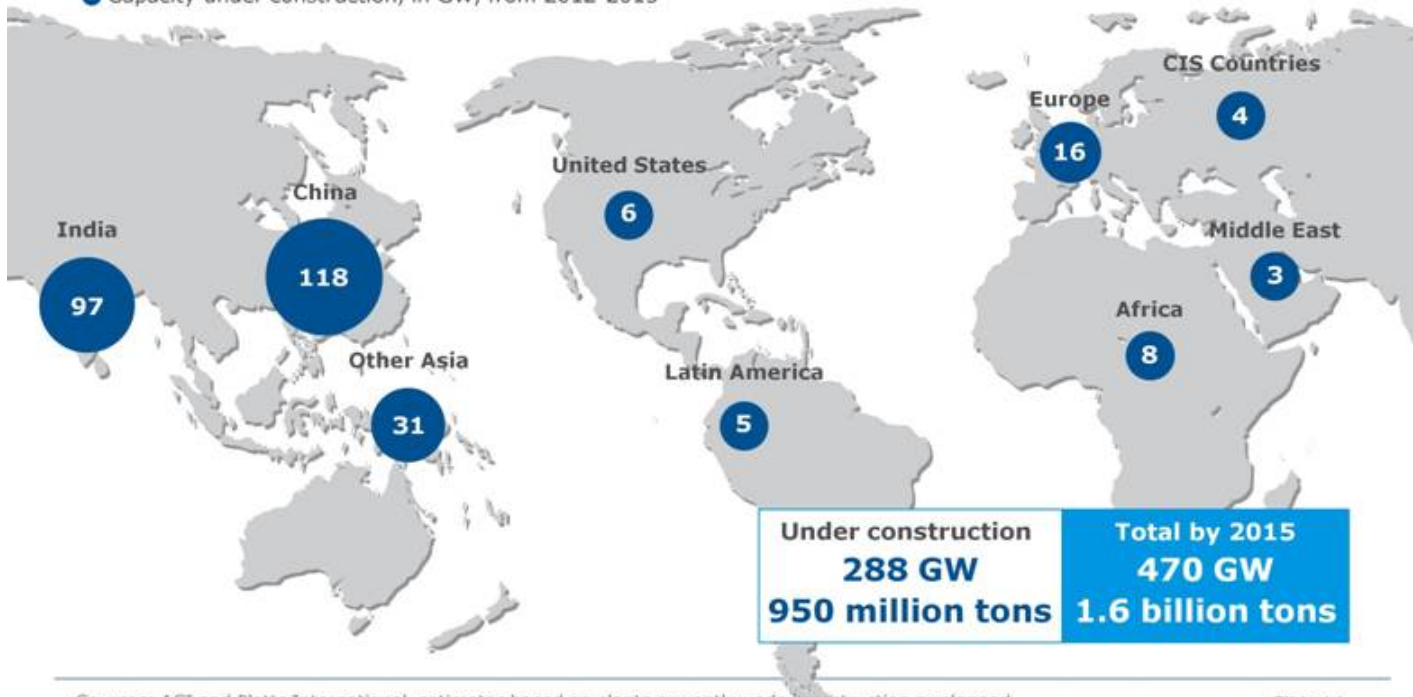


Demand for met coal is driven by increased utilization at existing steel plants together with a buildout of new steel capacity

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

New Coal-Fueled Generation Coming Online by 2015

● Capacity under construction, in GW, from 2012-2015



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

Slide 14

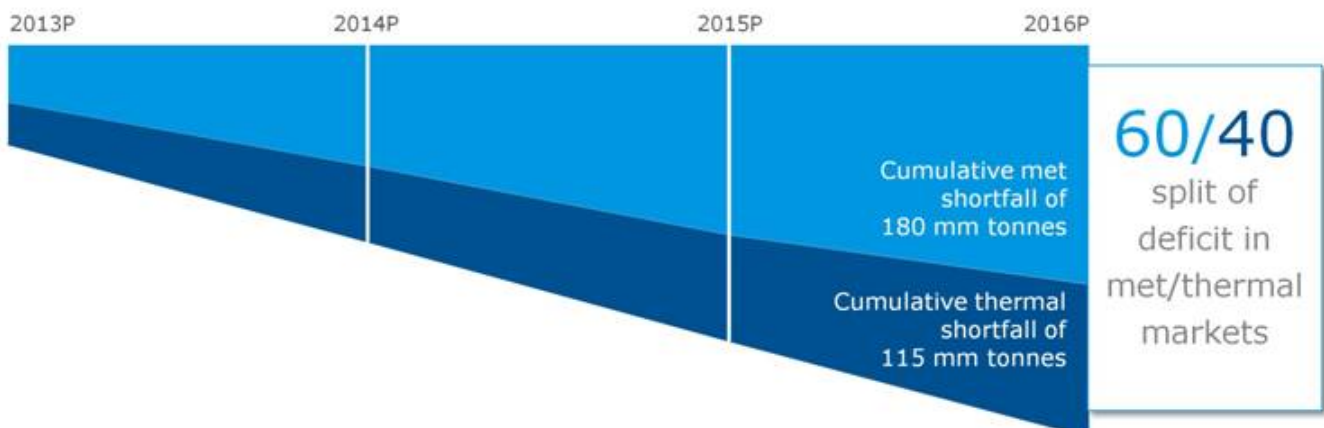
Growth in seaborne coal demand should outpace supply over the next four years

Cumulative deficit of nearly
300 Million
 short tons from 2013-2016

Projected Deficit in Seaborne Coal Supply Trade

(in millions of metric tonnes)

■ Metallurgical ■ Thermal



Slide 15

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

Supply Pressures



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



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 constrain export growth.



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.

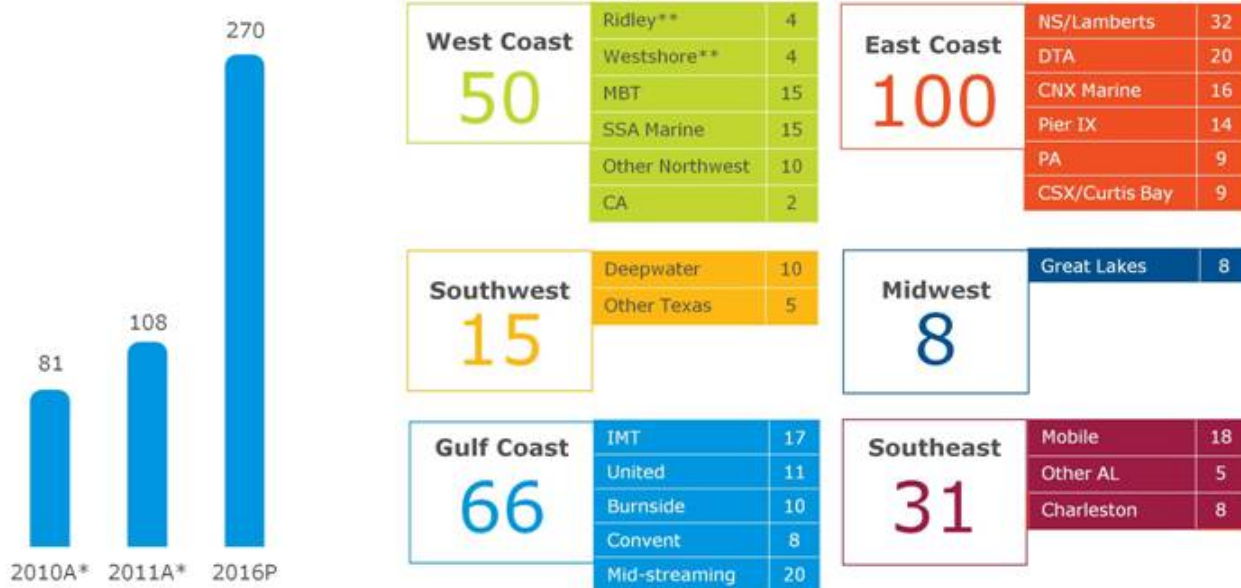


South Africa is increasingly mature, infrastructure needs are great.
Russia faces reserve depletion in West, infrastructure needs in East.
Mongolia & Mozambique have coal but no roads, rail, ports or miners.



Planned U.S. port expansions will support a more than doubling of coal exports by 2016

Projected Export Capacity (in millions of tons, by 2016P)



Sources: ACI, NMA, Port Terminal Presentations

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

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

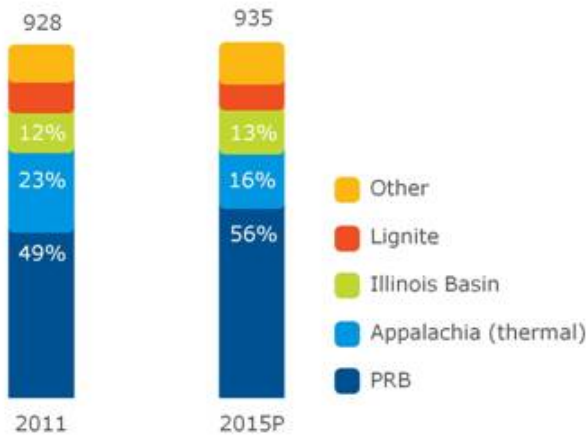
Asia-Pacific imports growing 45% in next five years



- ~10 million tons of coal moved off the West Coast into Asia in 2011, mostly via Canada
- We expect West Coast exports to grow significantly over the next five years with the planned buildout of port capacity
- Two major port projects – and several smaller ones – are in the permitting process

We expect coal to continue to play a dominant role in domestic power markets

U.S. Coal Consumption for Power Generation
(in millions of tons)

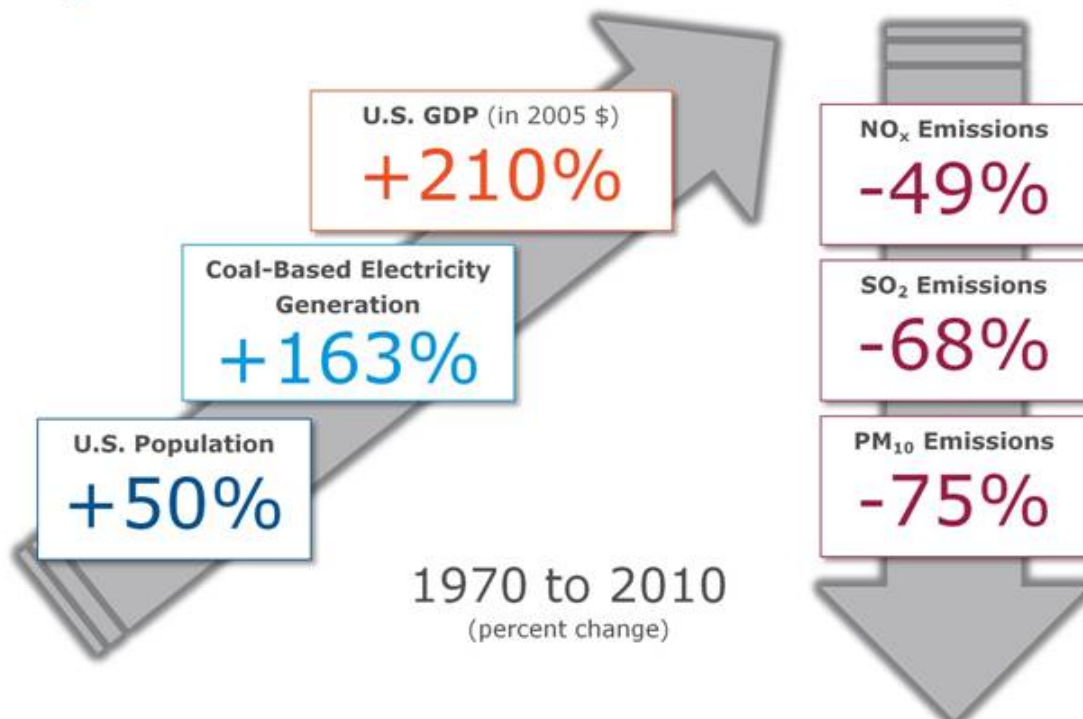


- We project flat coal use in U.S. power markets through 2015
- Other fuels (such as natural gas) may grow, but face limitations
- Some coal basins will see demand grow (PRB and ILB)
- Appalachia will increasingly serve the global metallurgical and export thermal market

Sources: Ventyx and ACI

Slide 19

Coal is increasingly clean ... and can address CO₂ concerns as well with time and funding



Sources: NMA, EPA, EIA

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

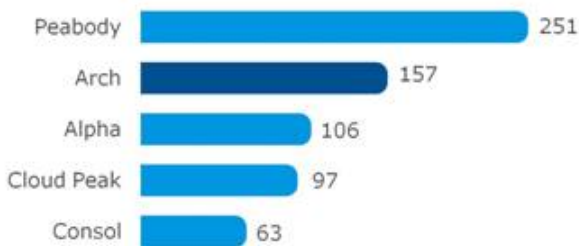
Slide 20

Arch is one of the top five largest coal producers in the world

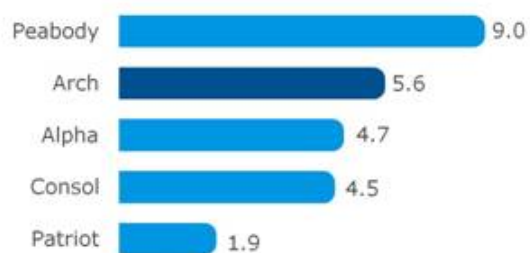
Global Coal Producers (2011, in millions of tons)



U.S. Coal Producers (2011, in millions of tons)



U.S. Reserve Holders (2011, in billions of tons)



Sources: ACI, Ventyx, Company filings, press articles

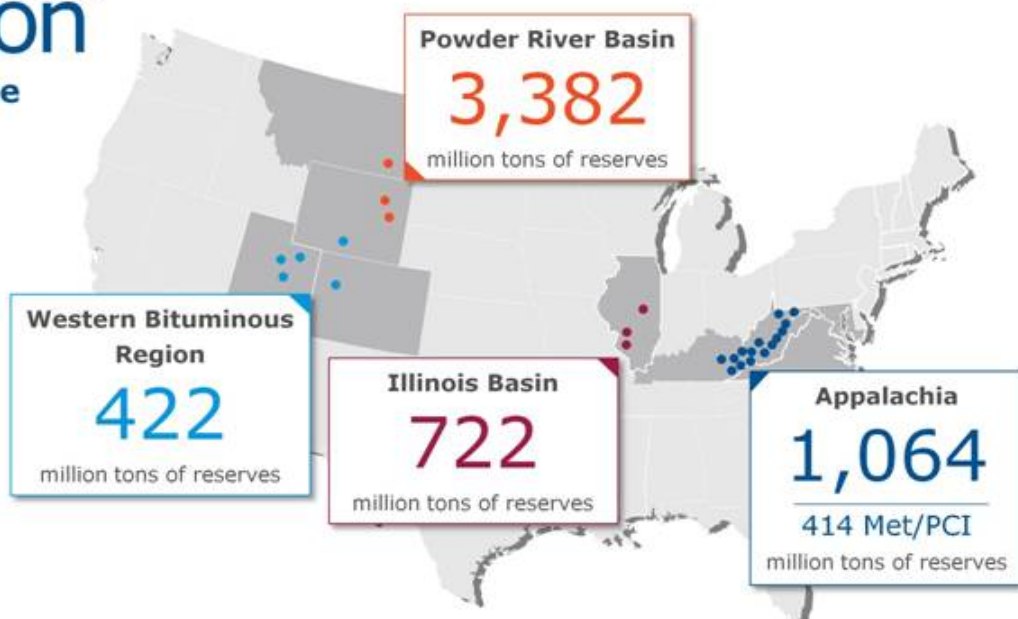
*Pro Forma

Slide 22

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

5.6 Billion*
Ton Reserve Base

Operations now extend to every major coal-supply basin



*Pro forma reserves at 12/31/11

Slide 23



In the near term, Arch is reducing production and capital spending, while expanding its met portfolio

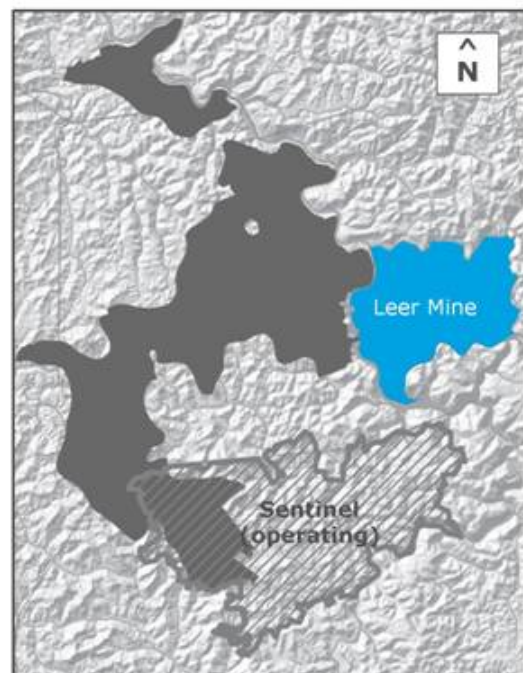
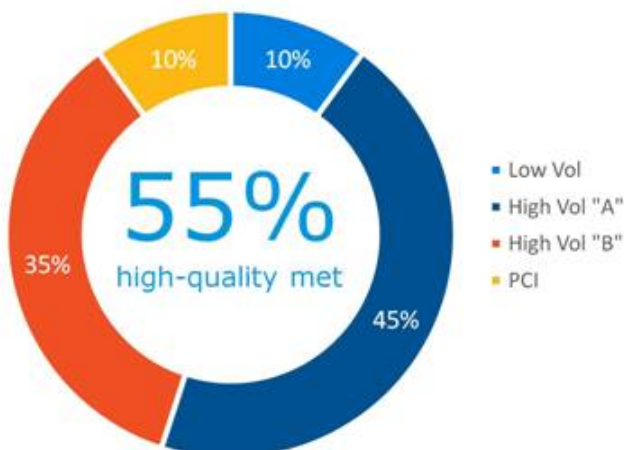
- Reduce production targets during weak market cycles to preserve the future value of reserve base
- Lower capital spending levels on thermal assets to match our current view of market demand
- Diligently manage controllable costs while maintaining flexibility to respond as market conditions evolve
- Highly committed in the near term – with opportunities to sell into seaborne markets and domestic markets given Arch’s cost structure

Slide 24

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

Arch’s organic metallurgical coal growth opportunities are compelling

Expected Future Metallurgical Quality



Slide 25

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

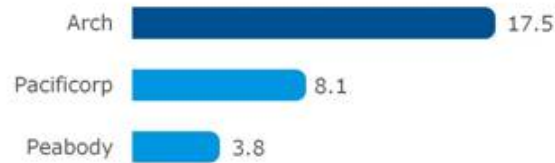


Arch has a leading, low-cost western thermal portfolio, with meaningful unused capacity

Southern Powder River Basin
(2011, in millions of tons)



Western Bituminous Region
(2011, in millions of tons)

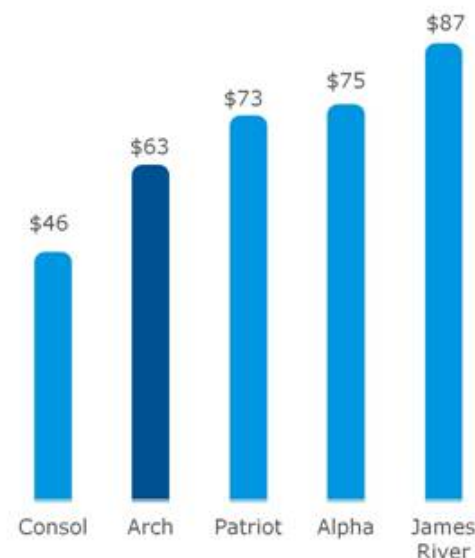


- Arch has a strong position in the PRB, the nation’s largest coal supply basin
 - 3.4 billion tons of high-Btu, low-sulfur coal reserves
 - Arch has roughly 50 million tons of unused PRB capacity still available
 - Expect PRB to expand domestically
 - Pursuing export growth off West Coast
- Arch is the leading producer in the Western Bituminous region
 - Supply to remain constrained in region
 - Targeting exports via Gulf/West Coast

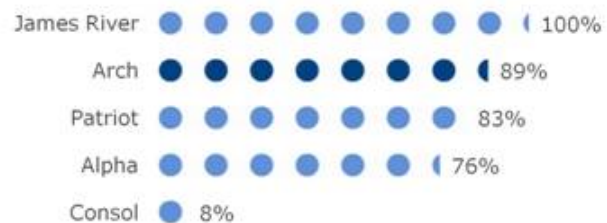
Sources: ACI, MSHA

Arch’s Appalachian operations are low-cost and geared toward met markets

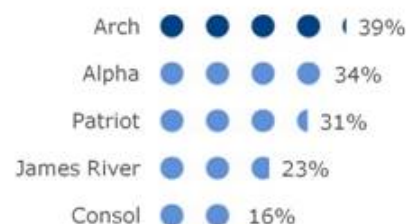
Appalachian Cash Costs
(2011 reported costs, \$/ton)



Central App Production as % of Appalachia*



Metallurgical Production as % of Appalachia*



Sources: ACI estimates, SEC filings

*Based on 2011 production

Arch has dedicated \$50+ million to date to advance U.S. clean coal technologies

- U.S. Department of Energy, National Carbon Capture Center
- Washington University, Consortium for Clean Coal Utilization
- University of Wyoming, School of Energy Resources
- DKRW, Mine-Mouth Coal-to-Liquids Facility
- ADA, Environmental Solutions
- Tenaska, Inc., Trailblazer Energy Center



Slide 29

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

- World-class global coal franchise
 - Top five global coal producer and marketer
 - One of the world's largest metallurgical coal suppliers
 - Disciplined financial management, capital allocation
- U.S. coal industry powerhouse
 - Most diversified U.S. coal producer
 - Represent 15 percent of U.S. coal supply
 - Second largest coal reserve holder in nation
 - Consistently first in safety and environmental performance among peer group



Slide 30

Reconciliation of Non-GAAP Measures

Adjusted EBITDA

- Adjusted EBITDA is defined as net income attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization and the amortization of acquired sales contracts. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results.
- Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded from 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 incur and service debt based on our ongoing operations. Furthermore, analogous measures are used by industry analysts to evaluate operating performance. In addition, acquisition and financing related expenses are excluded to make results more comparable between periods. 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 December 31,				
	(in millions, except per share data)				
	2007	2008	2009	2010	2011
Net income	\$ 175.9	\$ 355.2	\$ 42.2	\$ 159.4	\$ 142.8
Net income attributable to noncontrolling interest	(1.0)	(0.9)	-	(0.5)	(1.2)
Income tax expense (benefit)	(19.9)	41.8	(16.8)	17.7	(7.6)
Interest expense, net	72.3	64.3	98.3	140.1	226.9
Depreciation, depletion and amortization	243.7	293.5	301.6	365.1	466.6
Amortization of acquired sales contracts, net	(1.6)	(0.7)	19.6	35.6	(22.1)
Acquisition and transition costs	-	-	13.8	-	54.7
Acquisition related costs – inventory write up *	-	-	-	-	9.5
Bridge financing costs related to ICG	-	-	-	-	49.5
Net loss resulting from early retirement of debt	-	-	-	6.8	2.0
Other non-operating expense	2.3	-	-	-	-
Adjusted EBITDA	\$ 471.7	\$ 753.2	\$ 458.7	\$ 724.2	\$ 921.1

* Represents the pre-tax impact on cost of sales of inventory written up to fair value in the ICG acquisition.

Reconciliation of Non-GAAP Measures

Adjusted Net Income and Adjusted Diluted Earnings per Common Share

Adjusted net income and adjusted diluted earnings per common share are adjusted for the after-tax impact of acquisition and financing related costs and are not measures of financial performance in accordance with generally accepted accounting principles. We believe that adjusted net income and adjusted diluted earnings per common share better reflect the trend of our future results by excluding items relating to significant transactions. The adjustments made to arrive at these measures are significant in understanding and assessing our financial condition. Therefore, adjusted net income and adjusted diluted earnings per share should not be considered in isolation, nor as an alternative to net income or diluted earnings per common share under generally accepted accounting principles.

	Year Ended December 31,				
	(in millions, except per share data)				
	2007	2008	2009	2010	2011
Net income attributable to Arch Coal	\$ 174.9	\$ 354.3	\$ 42.2	\$ 158.9	\$ 141.7
Amortization of acquired sales contracts, net	-	-	19.6	35.6	(22.1)
Acquisition and transition costs	-	-	13.8	-	54.7
Acquisition related costs – inventory write up	-	-	-	-	9.5
Bridge financing costs related to ICG	-	-	-	-	49.5
Net loss resulting from early retirement of debt	-	-	-	6.8	2.0
Tax impact of adjustments	-	-	(12.2)	(15.5)	(30.1)
Adjusted net income attributable to Arch Coal	\$ 174.9	\$ 354.3	\$ 63.4	\$ 185.8	\$ 205.2
Diluted weighted average shares outstanding	144.0	144.4	151.3	163.2	190.9
Diluted earnings per common share	\$ 1.21	\$ 2.45	\$ 0.28	\$ 0.97	\$ 0.74
Amortization of acquired sales contracts, net	-	-	0.13	0.22	(0.12)
Acquisition and transition costs	-	-	0.09	-	0.29
Acquisition related costs – inventory write up	-	-	-	-	0.05
Bridge financing costs related to ICG	-	-	-	-	0.26
Net loss resulting from early retirement of debt	-	-	-	0.04	0.01
Tax impact of adjustments	-	-	(0.08)	(0.09)	(0.16)
Adjusted diluted earnings per common share	\$ 1.21	\$ 2.45	\$ 0.42	\$ 1.14	\$ 1.07