



Cutting Subsidies and Closing Loopholes in the U.S. Department of the Interior's Coal Program

By Matt Lee-Ashley and Nidhi Thakar January 6, 2015

In 2002, the Powder River Basin, or PRB, in Wyoming and Montana surged past the Appalachian coalfields that stretch from Pennsylvania to Tennessee to become the nation's largest coal-producing region.¹ Today, the PRB occupies a 40 percent share of the U.S. coal market.² Although market forces, mechanization, and technological changes help explain some of the coal industry's decision to shift more production from privately owned lands in the East to federal lands in the American West, the U.S. Department of the Interior's, or DOI's, coal policies have played an equally important—though largely unnoticed—role in this transition.

Specifically, the DOI's Bureau of Land Management, or BLM, and Office of Natural Resources Revenue, or ONRR, use their royalty-collection authority to subsidize coal production on federal lands. Coal companies, in turn, have learned to maximize these subsidies by shielding themselves from royalty payments through increasingly complex financial and legal mechanisms. Reform is urgently needed to cut these subsidies and to close loopholes that disadvantage other coal producing regions and distort U.S. energy markets.

Subsidizing federal coal through royalty relief

The law governing royalty payments for coal produced on federally owned lands is straightforward. Under the Mineral Leasing Act of 1920 and its amendments, coal companies are required to pay a royalty of at least 12.5 percent of the value of surface-mined coal and 8 percent for coal from underground mines.³ The law authorizes the secretary of the interior to set the regulations by which the value of federal coal is determined for calculating a royalty.

In a competitive marketplace, a product's value on the market is the price that maximizes profit for the seller based on what a buyer is willing to pay.⁴ In the case of thermal coal—or coal that is burned to produce electricity—power plants and electric utilities are the buyers in the market. The market value of thermal coal, therefore, is the price that power plants are willing to pay for the product. In theory, royalties should be paid on this market price of coal.

In reality, however, the DOI has built a complex regulatory framework that provides agency officials the power to reduce the effective royalty rate that coal companies pay and thereby subsidizes coal production. The subsidies that DOI officials routinely provide coal companies come in three forms:

- 1. The assessment of royalties on the so-called “first arm’s-length sale” price of coal instead of the true market value.** Coal companies pay royalties on the price that they receive at the first sale to another entity. This transaction can be to an affiliated or nonaffiliated entity but must be valued as an arm’s-length transaction irrespective of the buyer’s relationship to the coal company.⁵ This sale often occurs near the point of production, meaning that taxpayers typically receive royalties on the mine-mouth price of coal instead of the true market price at which the coal is sold to a power plant or other end user, such as a broker who exports the coal. As a result, the federal government assesses royalties too early in the sale process and on prices that are not reflective of the true value of coal, which in turn results in lower royalty returns to taxpayers.
- 2. Royalty reductions for noneconomically viable coal production or financial hardship.** The BLM provides royalty reductions as low as 2 percent of the sale price if a mine becomes unprofitable due to unfavorable conditions—such as limited access to coal or a decrease in its quality—or if a mining company can show it is facing financial hardship.⁶
- 3. Subsidies for the costs of washing and transporting coal produced on federal land.** Under the current system, coal lessees can deduct transportation and washing costs, with no cap on deductions, from the total sale price upon which federal coal royalties are due.⁷ This translates into an allowance for the full cost of transporting federal coal from the mine mouth to a remote point of sale or to transport the coal to a distant wash plant.⁸ Unlike coal, transportation deductions for oil and gas are capped at 50 percent of the value of the resource.⁹

Captive transactions

The coal industry staunchly defends these subsidies and is lobbying the Obama administration to preserve them. In fact, the National Mining Association told the administration in November 2014 that the royalty-collection system is working and that the coal-valuation regulations that were last updated in 1989 are still relevant and effective.¹⁰ In their written presentation to the administration, the National Mining Association argues, “Changes to the existing regulations are not justified as there have been no significant market changes in the last 25 years and markets are even more transparent.”¹¹

A review of government data and the records of the largest coal companies operating in the PRB—such as Alpha Natural Resources, Ambre Energy, Arch Coal, Cloud Peak Energy, and Peabody Energy—reveals that, notwithstanding industry claims that the markets have remained stagnant, the coal market in the PRB has changed dramatically in the past decade alone. Of perhaps greatest note, the major coal companies operating in the PRB have built an extensive network of subsidiaries and affiliates through which they sell and distribute their coal, which appears to help maximize their subsidies.

A review of corporate documents from five of the biggest coal companies operating in the PRB, listed below, reveals hundreds of affiliates and subsidiaries of parent companies with names such as Excelven Pty Ltd., licensed in the British Virgin Islands, and Jacobs Ranch Holdings LLC, licensed in Delaware.¹²

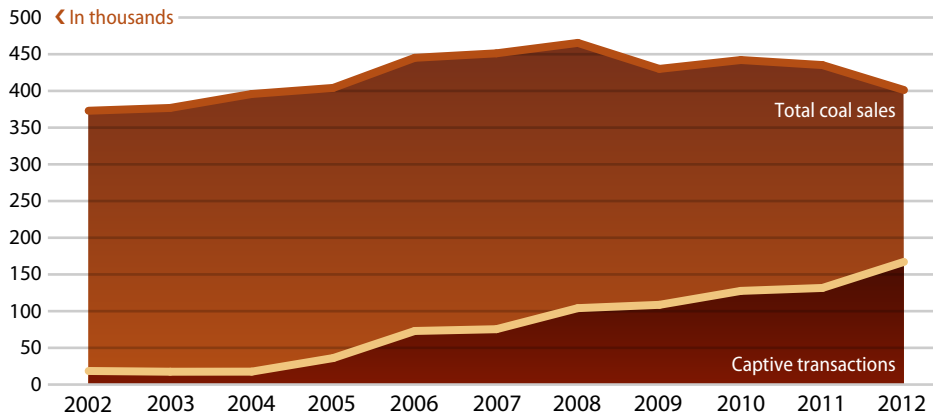
- Alpha Natural Resources, operator of the Belle Ayr and Eagle Butte mines in Wyoming, has built a network of 184 domestic and foreign subsidiaries.¹³
- Ambre Energy, which operates the Decker Mine in Montana that has produced more than 300 million tons of coal, has built a network of 26 domestic and foreign subsidiaries.¹⁴
- Arch Coal—which controls more than 3.3 billion tons of coal reserves in the PRB and operates the Black Thunder Mine, one of the globe’s largest coal mines and the first in the world to ship 1 billion tons of coal—has built a network of 83 domestic and foreign subsidiaries.¹⁵
- Cloud Peak Energy, which operates the Antelope, Spring Creek, and Cordero Rojo mines in the PRB that produced more than 86 million tons of coal in 2013 alone, has built a network of at least 31 domestic subsidiaries.¹⁶
- Peabody Energy—which operates the North Antelope Rochelle Mine in Wyoming, the largest coal mine in the United States—has built a network of 141 domestic subsidiaries and 101 foreign subsidiaries.¹⁷

A full list of the affiliates and subsidiaries of these companies is provided in the appendix.

Sales of PRB coal through this network have skyrocketed in the past decade. According to data from the U.S. Energy Information Administration, or EIA, 42 percent of all coal produced in Wyoming in 2012 was sold through a “captive transaction”—a sale between an affiliate and parent company—up from just 4 percent in 2004.¹⁸ This upward trend appears to have begun in 2004; captive transactions in Wyoming spiked 105 percent between 2004 and 2005 alone.¹⁹

FIGURE 1
Rise in captive transactions in Wyoming, 2002 to 2012

Sales of coal to affiliates and subsidiaries, thousands of short tons



Source: U.S. Energy Information Administration, Annual Coal Report (U.S. Department of Energy, 2004–2012), available at <http://www.eia.gov/coal/annual/>.

Evading royalties

A growing body of evidence suggests that the major coal companies use their elaborate network of subsidiaries and affiliates to maximize the subsidies that can be gained through existing federal royalty regulations. To keep the price of coal artificially low for royalty, tax, and other valuation purposes, companies are allegedly cloaking sales to their network of subsidiaries and affiliates as arm’s-length transactions when they are in fact captive, non-arm’s-length transactions.

For example, in *Western Minerals v. KCP*—which involved a contract dispute filed in the U.S. District Court of Montana in 2012—Western Minerals alleged that Ambre Energy engaged in “self-dealing transactions, by selling to itself coal from the Decker Coal Company through either Ambre Limited directly or an affiliated subsidiary and then reselling such coal at a higher price.”²⁰

Similarly, in *Cloud Peak Energy v. Montana Department of Revenue*—a Montana state court case regarding a tax dispute—the state of Montana alleged that Cloud Peak Energy intentionally undervalued federal coal sold to two affiliates between 2005 and 2007 to pay reduced taxes.²¹

Coal industry records suggest that masking sales to subsidiaries and affiliates as arm’s length to reduce federal royalty payments is a common practice. In a 2013 filing to the Securities and Exchange Commission, for example, Cloud Peak Energy says that the company’s finances would be adversely affected if there is a change to how the federal government assesses royalty payments on non-arm’s-length sales: “If the federal government were to materially alter the method for valuing royalty payments for our non-arm’s-length sales, our profitability and cash flows could be materially adversely affected.”²²

The arm's-length-transaction loophole is particularly lucrative for coal companies that are exporting PRB coal to foreign buyers.^{23*} A 2012 Reuters investigation estimated that the loophole allowed companies to pocket at least an additional \$40 million on coal exports from Wyoming and Montana alone in 2011.²⁴

The state of Wyoming—which, similar to other coal producing states, receives approximately 50 percent of the royalty revenue from coal production on federal lands within its boundaries—has formally asked the Obama administration to change current regulations to better prevent coal companies from using their networks of subsidiaries to dodge royalties.²⁵ “Non-arm’s-length transactions are highly susceptible to manipulation,” wrote Michael Geesey, director of the Wyoming Department of Audit, to ONRR in 2011.²⁶ According to Geesey, Wyoming’s chief auditor, ONRR should change current regulation to prevent coal company sales to “affiliates, partners, marketing agents, and trade and export associations” from qualifying as arm’s-length transactions.²⁷ Republican and Democratic members of Congress and independent reviewers have also called for reforms to close this loophole.²⁸

Overdue reforms and recommendations to eliminate subsidies and close loopholes

President Obama’s 2011 commitments under the Extractive Industries Transparency Initiative, or EITI—a global initiative to improve the transparency of natural resource governance, including revenues—highlight why the coal royalty system should be an important next chapter in the administration’s energy reform agenda.²⁹ The president has stated that the United States joined the EITI to ensure that “industries, governments and civil society, all work together for greater transparency so that taxpayers receive every dollar they’re due from the extraction of natural resources.”³⁰

Today, however, the DOI’s federal coal program can hardly be held up as a model of American leadership in transparency or efficiency. U.S. taxpayers and the states that share in these royalty collections are receiving far less than the 12.5 percent royalty rate that is required to be collected from surface-mined coal. Additionally, the United States’ biggest coal competitors in Pacific markets, such as Indonesia and Australia, do not allow many of the subsidies currently in place under the U.S. system. In Indonesia, for example, the royalty rate for exported coal is based on the true market value of the coal received at the export terminal, which is a price determined from the benchmark price or actual sales price, whichever is higher.³¹ Further, Indonesia does not allow transportation costs to be deducted from the price of coal upon which a royalty is levied.³² Likewise, states in Australia do not allow transportation deductions for domestic shipments of coal.³³

**Correction, February 9, 2015: This issue brief has been corrected to remove a reference to Peabody Energy’s revenues and royalty payments. Endnote 23 has also been updated.*

The DOI has acknowledged some of the deficiencies of the current royalty-collection system, recently issuing a proposed rule to remedy the arm's-length-transaction loophole.³⁴ While this proposed rule closes one regulatory gap by eliminating the arm's-length-transaction loophole, more significant reforms are needed to improve efficiency and transparency in the federal royalty-collection process.

The Obama administration should take a major step toward eliminating the DOI's subsidies for coal by modernizing existing regulations to apply the federal royalty on the commodity's true market price—which is at the final point of sale to an end user, such as a utility or power plant, for both domestic and export sales. This straightforward reform would alleviate burdensome royalty assessments for ONRR while also ensuring that taxpayers are receiving a royalty on the true market value of coal. Currently, the EIA provides publicly available information with the final sales price for federal coal,³⁵ ONRR auditors could use this information to calculate and verify royalty obligations, eliminating the need for complicated and time-consuming closed-door valuation estimates by federal regulators.

Making such a change would not come without opposition from coal companies, which have built a complex system of corporate entities to game the current system and short-change taxpayers. Nevertheless, the administration must enact reforms. Each month, U.S. taxpayers and state governments are missing out on tens of millions of dollars in revenue that would accrue if the DOI was enforcing the minimum 12.5 percent royalty rate that is required by statute rather than effectively lowering rates through subsidies and regulatory loopholes.

Taxpayers are not the only ones hurt by an outdated coal royalty system. Federal subsidies in the PRB unfairly disadvantage coal producers in Appalachia and other regions, contributing to job losses and economic dislocation in Appalachia. More broadly, the DOI's subsidies for coal distort U.S. energy markets, incentivize U.S. coal exports by subsidizing transportation costs, disadvantage cleaner sources of energy, and ultimately undercut the president's Climate Action Plan. The DOI should level the playing field between coal operators and ensure that taxpayers are receiving a fair return on their publicly owned resources by expanding its proposed rule to apply the federal royalty rate to the true market value of coal at its final point of sale.

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Appendix: Network of Powder River Basin coal companies

Alpha Natural Resources, Inc.: Subsidiaries

T. Massey Coal Company, Inc.	ANR Receivables Funding, LLC
Alex Energy, Inc.	Appalachia Coal Sales Company, Inc.
Alpha American Coal Company, LLC	Appalachia Holding Company
Alpha American Coal Holding, LLC	Aracoma Coal Company, Inc.
Alpha Appalachia Holdings, Inc.	Austin Rubber Company LLC
Alpha Appalachia Services, Inc.	Axiom Excavating and Grading Services, LLC
Alpha Australia, LLC	Bandmill Coal Corporation
Alpha Australia Services, LLC	Bandytown Coal Company
Alpha Coal India Private Limited	Barbara Holdings Inc.
Alpha Coal Resources Company, LLC	Barnabus Land Company
Alpha Coal Sales Co., LLC	Belfry Coal Corporation
Alpha Coal Sales International Limited	Ben Creek Coal Company
Alpha Coal West, Inc.	Big Bear Mining Company
Alpha European Sales, Inc.	Black Castle Mining Company, Inc.
Alpha Gas and Oil Company	Black Dog Coal, LLC
Alpha India, LLC	Black King Mine Development Co.
Alpha Land and Reserves, LLC	Black Mountain Cumberland Resources, Inc.
Alpha Midwest Holding Company	Black Mountain Resources LLC
Alpha Natural Resources, Inc.	Boone East Development Co.
Alpha Natural Resources, LLC	Brooks Run Mining Company, LLC
Alpha Natural Resources International, LLC	Brooks Run South Mining, LLC
Alpha Natural Resources Services, LLC	Buchanan Energy Company, LLC
Alpha Natural Resources Singapore Private Limited	Castle Gate Holding Company
Alpha PA Coal Terminal, LLC	Central Penn Energy Company, Inc.
Alpha Shipping and Chartering, LLC	Ceratech, Inc.
Alpha Sub One, LLC	Ceratech USA Holdings, LLC
Alpha Sub Two, LLC	Clear Fork Coal Company
Alpha Terminal Company, LLC	Coal Gas Recovery II, LLC
Alpha Wyoming Land Company, LLC	Coal Handling Solutions LLC
AMFIRE, LLC	Coral Energy Services, LLC
AMFIRE Holdings, LLC	Covington Handling LLC
AMFIRE Mining Company, LLC	Crystal Fuels Company
AMFIRE WV, L.P.	Cumberland Coal Resources, LP

Dehue Coal Company	Kingwood Mining Company, LLC
Delbarton Mining Company	Knox Creek Coal Corporation
Delta Mine Holding Company	Lauren Land Company
Dickenson-Russell Coal Company, LLC	Laxare, Inc.
Dickenson-Russell Land and Reserves, LLC	Litwar Processing Company, LLC
Dominion Terminal Associates	Logan County Mine Services, Inc.
DRIH Corporation	Long Fork Coal Company
Dry Systems Technologies, Inc.	Lynn Branch Coal Company, Inc.
Duchess Coal Company	Mahatamil Mining and Thermal Energy Limited
Eagle Energy, Inc.	Maple Meadow Mining Company
Elk Run Coal Company, Inc.	Marfork Coal Company, Inc.
Emerald Coal Resources, LP	Marshall Land LLC
Enterprise Mining Company, LLC	Martin County Coal Corporation
Esperanza Coal Co., LLC	Maxxim Rebuild Co., LLC
Excelven Pty Ltd.	Maxxim Shared Services, LLC
Foundation Mining, LLC	Maxxum Carbon Resources, LLC
Foundation PA Coal Company, LLC	Maysville Handling LLC
Foundation Royalty Company	McDowell-Wyoming Coal Company, LLC
Freeport Mining, LLC	Mill Branch Coal Corporation
Freeport Resources Company, LLC	Mountaineer Capital, LP
Green Source Holdings LLC	Neweagle Industries, Inc.
Goals Coal Company	New Ridge Mining Company
Gray Hawk Insurance Company	New River Energy Corporation
Green Valley Coal Company	Nicewonder Contracting, Inc.
Greyeagle Coal Company	North Fork Coal Corporation
Harlan Reclamation Services LLC	Omar Mining Company
Herndon Processing Company, LLC	Paramont Coal Company Virginia, LLC
Highland Mining Company	Paynter Branch Mining, Inc.
Hopkins Creek Coal Company	Peerless Eagle Coal Co.
Independence Coal Company, Inc.	Pennsylvania Land Holdings Company, LLC
Jacks Branch Coal Company	Pennsylvania Land Resources Holding Company, LLC
Jay Creek Holding, LLC	Pennsylvania Land Resources, LLC
Joboner Coal Company	Pennsylvania Services Corporation
Kanawha Energy Company	Performance Coal Company
Kepler Processing Company, LLC	Peter Cave Mining Company
Kingsport Handling LLC	Pigeon Creek Processing Corporation
Kingsport Services LLC	Pilgrim Mining Company, Inc.
Kingston Mining, Inc.	Pioneer Fuel Corporation

Plateau Mining Corporation	Solomons Mining Company
Power Mountain Coal Company	Spartan Mining Company
Premium Energy, LLC	Stirrat Coal Company
Rawl Sales & Processing Co.	Sycamore Fuels, Inc.
Republic Energy, Inc.	T. C. H. Coal Co.
Resource Development LLC	Tennessee Consolidated Coal Company
Resource Land Company LLC	Tennessee Energy Corp.
River Processing Corporation	Town Creek Coal Company
Riverside Energy Company, LLC	Trace Creek Coal Company
Riverton Coal Production Inc.	Tucson Limited Liability Company
Road Fork Development Company, Inc.	Twin Star Mining, Inc.
Robinson-Phillips Coal Company	Twisted Gun, LLC
Rockspring Development, Inc.	Vantage Mining Company
Rostraver Energy Company	Wabash Mine Holding Company
Rum Creek Coal Sales, Inc.	Warrick Holding Company
Russell Fork Coal Company	West Kentucky Energy Company
Scarlet Development Company	West Virginia Media Partners, LP
Shannon-Pocahontas Coal Corporation	White Buck Coal Company
Shannon-Pocahontas Mining Company	Williams Mountain Coal Company
Sidney Coal Company, Inc.	Wyomac Coal Company, Inc.
Simmons Fork Mining, Inc.	Wyoming Quality Healthcare Coalition, LLC

Source: Edgar Online, "Alpha Natural Resources, Inc. Form 10-K" (2014), available at <http://cleanenergyaction.org/wp-content/uploads/2014/06/Alpha-Natural-Resources-ANR-2013-10-K-Annual-Report.pdf>.

Ambre Energy Limited: Subsidiaries

Subsidiary	Country of incorporation	Ownership interest
Ambre Energy (Felton) Pty Ltd	Australia	100%
Ambre Energy Exploration Pty Ltd	Australia	100%
Ambre Fuels Limited (formerly Ambre CTL Limited)	Australia	100%
Ambre EOR Pty Ltd	Australia	100%
Ambre Pipelines Pty Ltd	Australia	100%
AE Minerals Pty Ltd	Australia	100%
AE Oil Shale, Inc.	United States	100%
Ambre Energy Partners, Inc.	United States	100%
Ambre Energy Technology, LLC	United States	100%
AE Alternative Fuels, LLC	United States	100%
AE Fuels North America, LLC	United States	100%
Ambre Energy North America, Inc.	United States	100%
AE Coal, LLC	United States	100%
AE Infrastructure, LLC	United States	100%
Millennium Bulk Terminals-Longview, LLC	United States	62%
AE Coal Marketing, LLC	United States	100%
Coyote Island Terminal, LLC	United States	100%
Gulf States Bulk Terminal, LLC	United States	100%
Barlow Point Land Company, LLC	United States	62%
Pacific Transloading, LLC	United States	100%
AE Wind River, LLC	United States	100%
Eldorado Coal, Inc.	United States	100%
KCP, Inc.	United States	100%
KCP Properties, Inc.	United States	100%
Big Horn Coal Company	United States	100%
Rosebud Coal Sales Company USA	United States	100%

Source: Ambre Energy, "Annual Report" (2012), available at http://www.ambreenergy.com/FileLibrary/ambre_energy_limited_annual_report_30_june_2012_lr.pdf.

Arch Coal, Inc.: Subsidiaries

Subsidiary	Country or state of incorporation	Ownership interest
Arch Coal Asia-Pacific PTE. LTD.	Singapore	100%
Arch of Australia PTY LTD	Australia	100%
Arch Coal Australia PTY LTD	Australia	100%
Arch Coal Australia Holdings PTY LTD	Australia	100%
Arch Coal Europe Limited	United Kingdom	100%
Arch Reclamation Services, Inc.	Delaware	100%
Arch Western Acquisition Corporation	Delaware	100%
Arch Western Acquisition, LLC	Delaware	100%
Arch Western Resources, LLC	Delaware	0.5%
Arch Western Resources, LLC	Delaware	99.5%
Arch of Wyoming, LLC	Delaware	100%
Arch Western Finance, LLC	Delaware	100%
Arch Western Bituminous Group, LLC	Delaware	100%
Mountain Coal Company, L.L.C.	Delaware	100%
Thunder Basin Coal Company, L.L.C.	Delaware	100%
Triton Coal Company, LLC	Delaware	100%
ACI Terminal, LLC	Delaware	100%
Ark Land Company	Delaware	100%
Western Energy Resources, Inc.	Delaware	100%
Ark Land KH, Inc.	Delaware	100%
Ark Land LT, Inc.	Delaware	100%
Ark Land WR, Inc.	Delaware	100%
Allegheny Land Company	Delaware	100%
Apogee Holdco, Inc.	Delaware	100%
Arch Coal Sales Company, Inc.	Delaware	100%
Arch Energy Resources, LLC	Delaware	100%
Arch Coal Terminal, Inc.	Delaware	100%
Arch Coal West, LLC	Delaware	100%
Arch Development, LLC	Delaware	100%
Arch Receivable Company, LLC	Delaware	100%
Ashland Terminal, Inc.	Delaware	100%
Catenary Coal Holdings, Inc.	Delaware	100%
Cumberland River Coal Company	Delaware	100%
Lone Mountain Processing, Inc.	Delaware	100%
Powell Mountain Energy, LLC	Delaware	100%
Catenary Holdco, Inc.	Delaware	100%
Coal-Mac, Inc.	Kentucky	100%

Subsidiary	Country or state of incorporation	Ownership interest
Energy Development Co.	Iowa	100%
Hobet Holdco, Inc.	Delaware	100%
International Coal Group, Inc.	Delaware	100%
ICG, LLC	Delaware	100%
ICG, Inc.	Delaware	100%
Arch Flint Ridge, LLC	Delaware	100%
ICG Beckley, LLC	Delaware	100%
ICG Natural Resources, LLC	Delaware	100%
ICG East Kentucky, LLC	Delaware	100%
ICG Illinois, LLC	Delaware	100%
ICG Knott County, LLC	Delaware	100%
ICG Tygart Valley, LLC	Delaware	100%
Shelby Run Mining Company, LLC	Delaware	100%
ICG Eastern, LLC	Delaware	100%
ICG Eastern Land, LLC	Delaware	100%
ICG Hazard, LLC	Delaware	100%
ICG Hazard Land, LLC	Delaware	100%
CoalQuest Development LLC	Delaware	100%
Hunter Ridge Holdings, Inc.	Delaware	100%
Hunter Ridge, Inc. (Delaware)	Delaware	100%
Hunter Ridge Coal Company	Delaware	100%
White Wolf Energy, Inc.	Virginia	100%
Bronco Mining Company, Inc.	West Virginia	100%
Juliana Mining Company, Inc.	West Virginia	100%
Hawthorne Coal Company, Inc.	West Virginia	100%
Marine Coal Sales Company	Delaware	100%
Upshur Property, Inc.	Delaware	100%
King Knob Coal Co., Inc.	West Virginia	100%
Vindex Energy Corporation	West Virginia	100%
Patriot Mining Company, Inc.	West Virginia	100%
Melrose Coal Company, Inc.	West Virginia	100%
Wolf Run Mining Company	West Virginia	100%
The Sycamore Group, LLC	West Virginia	50%**
Simba Group, Inc.	Delaware	
Jacobs Ranch Holdings I LLC	Delaware	
Jacobs Ranch Holdings II LLC	Delaware	
Jacobs Ranch Coal LLC	Delaware	
Mingo Logan Coal Company	Delaware	

Subsidiary	Country or state of incorporation	Ownership interest
Mountain Gem Land, Inc.	West Virginia	100%
Mountain Mining, Inc.	Delaware	100%
Mountaineer Land Company	Delaware	100%
Otter Creek Coal, LLC	Delaware	100%
P.C. Holding, Inc.	Delaware	100%
Prairie Holdings, Inc.	Delaware	100%
Prairie Coal Company, LLC	Delaware	100%
Saddleback Hills Coal Company	Delaware	100%

Source: Arch Coal, Inc., "Form 10-K" (2014), available at <http://cleanenergyaction.org/wp-content/uploads/2014/06/Arch-Coal-Inc-ACI-2013-10-K-Annual-Report.pdf>.

Note: The Sycamore Group is 50 percent owned by Wolf Run Mining Company and 50 percent owned by Emily Gibson Coal Co., Inc.

Cloud Peak Energy, Inc.: Subsidiaries

Domestic subsidiary	State of incorporation	Ownership interest
Antelope Coal LLC	Delaware	100%
Arrowhead I LLC	Delaware	100%
Arrowhead II LLC	Delaware	100%
Arrowhead III LLC	Delaware	100%
Big Metal Coal Co. LLC	Delaware	100%
Caballo Rojo Holdings LLC	Delaware	100%
Caballo Rojo LLC	Delaware	100%
Cloud Peak Energy Finance Corp.	Delaware	100%
Cloud Peak Energy Logistics LLC	Oregon	100%
Cloud Peak Energy Receivables LLC	Delaware	100%
Cloud Peak Energy Services Company	Delaware	100%
Cordero Mining Holdings LLC	Delaware	100%
Cordero Mining LLC	Delaware	100%
Cordero Oil and Gas LLC	Delaware	100%
Decker Coal Company	Unincorporated	50%
Kennecott Coal Sales LLC	Oregon	100%
Montana Royalty Company Ltd.	Unincorporated	50%
NERCO Coal Sales LLC	Tennessee	100%
NERCO Coal LLC	Delaware	100%
NERCO LLC	Delaware	100%
Prospect Land and Development LLC	Oregon	100%
Resource Development LLC	Washington state	100%
Sequatchie Valley Coal Corporation	Tennessee	100%
Spring Creek Coal LLC	Delaware	100%
The Interstate Ditch Company	Wyoming	59.68%
Venture Fuels Partnership	Colorado	50%
Western Minerals LLC	Oregon	100%
Wyoming Quality Healthcare Coalition, LLC	Delaware	33.30%
Youngs Creek Holdings I LLC	Delaware	100%
Youngs Creek Holdings II LLC	Delaware	100%
Youngs Creek Mining Company, LLC	Delaware	100%

Source: Morningstar Document Research, "Cloud Peak Energy, Inc., Form 10-K" (2014), available at <http://cleanenergyaction.org/wp-content/uploads/2014/06/Cloud-Peak-CLD-2013-10-K-Annual-Report.pdf>.

Peabody Energy Corp.: Subsidiaries

Foreign subsidiary	Country of incorporation
Bowen Basin Coal Joint Venture	Australia
Conexcel 1 Pty Ltd.	Australia
Coppabella and Moorvale Joint Venture	Australia
Excel Equities International Pty Ltd.	Australia
Helensburgh Coal Pty Ltd.	Australia
Metropolitan Collieries Pty Ltd.	Australia
Middlemount Coal Pty Ltd	Australia
Middlemount Mine Management Pty Ltd	Australia
Burton Coal Pty Ltd.	Australia
Capricorn Joint Venture	Australia
Millennium Coal Pty Ltd.	Australia
Monto Coal 2 Pty Ltd	Australia
Monto Coal Joint Venture	Australia
Moorvale West Joint Venture	Australia
North Goonyella Coal Mines Pty Ltd.	Australia
North Wambo Pty Ltd.	Australia
Olive Downs South Joint Venture	Australia
Peabody (Bowen) Pty Ltd.	Australia
Peabody (Burton Coal) Pty Ltd.	Australia
Peabody (Horse Creek) Pty Ltd.	Australia
Peabody (Kogan Creek) Pty Ltd.	Australia
Peabody (Wilkie Creek) Pty Ltd. South	Australia
Peabody Acquisition Co. No. 2 Pty Ltd.	Australia
Peabody Acquisition Co. No. 5 Pty Ltd	Australia
Peabody Australia Holdco Pty Ltd.	Australia
Peabody Australia Intermediate Pty Ltd	Australia
Peabody Australia Mining Pty Ltd.	Australia
Peabody BB Interests Pty Ltd	Australia
Peabody Bistrotel Pty Ltd	Australia
Peabody Budjero Holdings Pty Ltd	Australia
Peabody Budjero Pty Ltd	Australia
Peabody Capricorn Pty Ltd	Australia
Peabody Coalsales Australia Pty Ltd.	Australia
Peabody Coaltrade Australia Pty Ltd.	Australia
Peabody Coppabella Coal Pty Ltd	Australia
Peabody Custom Mining Ltd	Australia
Peabody Energy Australia Coal Pty Ltd.	Australia

Foreign subsidiary	Country of incorporation
Peabody Energy Australia PCI (C&M Equipment) Pty Ltd	Australia
Peabody Energy Australia PCI (C&M Management) Pty Ltd	Australia
Peabody Energy Australia PCI Berrigurra Pty Ltd	Australia
Peabody Energy Australia PCI Equipment Pty Ltd	Australia
Peabody Energy Australia PCI Exporation Pty Ltd	Australia
Peabody Energy Australia PCI Financing Pty Ltd	Australia
Peabody Energy Australia PCI Management Pty Ltd	Australia
Peabody Energy Australia PCI Mine Management Pty Ltd	Australia
Peabody Energy Australia PCI Pty Ltd	Australia
Peabody Energy Australia PCI Rush Pty Ltd	Australia
Peabody Energy Australia Pty Ltd	Australia
Peabody Energy Finance Pty Ltd.	Australia
Peabody MCC Holdco Pty Ltd.	Australia
Peabody Monto Coal Pty Ltd	Australia
Peabody Moorvale Pty Ltd.	Australia
Peabody Moorvale West Pty Ltd	Australia
Peabody Olive Downs Pty Ltd	Australia
Peabody Pastoral Holdings Pty Ltd.	Australia
Peabody Queensland Coke & Energy Pty Ltd	Australia
Peabody West Burton Pty Ltd	Australia
Peabody West Rolleston Pty Ltd	Australia
Peabody West Walker Pty Ltd	Australia
PEAMCoal Holdings Pty Ltd.	Australia
PEAMCoal Pty Ltd.	Australia
Ribfield Pty Ltd	Australia
Wambo Coal Pty Ltd.	Australia
Wambo Coal Terminal Pty Ltd.	Australia
Wambo Open Cut Pty Ltd.	Australia
West/North Burton Joint Venture	Australia
West Rolleston Joint Venture	Australia
West Walker Joint Venture	Australia
Wilpinjong Coal Pty Ltd.	Australia
Excelven Pty Ltd.	British Virgin Islands
Peabody Coal Venezuela Ltd.	Bermuda
Peabody Energy (Botswana) (Proprietary) Limited	Botswana
Peabody Investment & Development Business Services Beijing Co., Ltd.	China
Peabody Bear Run Mining, LLC	Delaware
Peabody Coaltrade GmbH	Germany

Foreign subsidiary	Country of incorporation
Peabody Energy (Gibraltar) Limited	Gibraltar
Peabody Holdings (Gibraltar) Limited	Gibraltar
Peabody International (Gibraltar) Limited	Gibraltar
Peabody Investments (Gibraltar) Limited	Gibraltar
Peabody MCC (Gibraltar) Limited	Gibraltar
Peabody Mining (Gibraltar) Limited	Gibraltar
Peabody Coaltrade India Private Ltd	India
PT Peabody Coaltrade Indonesia	Indonesia
PT Peabody Mining Services	Indonesia
Peabody Energy (Gibraltar) Limited and S.C.S.	Luxembourg
Peabody Gobi LLC	Mongolia
Peabody Mozambique, Limitada	Mozambique
BTU International BV	Netherlands
Peabody Acquisition Cooperative U.A.	Netherlands
Peabody AMBV2 B.V.	Netherlands
Peabody Holland BV	Netherlands
Peabody Netherlands Holding B.V.	Netherlands
9 East Shipping (Asia) Pte Ltd.	Singapore
Peabody Coaltrade Asia Private Ltd.	Singapore
Peabody Global Services Pte Ltd.	Singapore
9 East Shipping Limited	United Kingdom
Peabody Coaltrade International Limited	United Kingdom
Carbones Peabody de Venezuela S.A.	Venezuela
Complejo Siderurgico Del Lago, CA	Venezuela
Desarrollos Venshelf IV, CA	Venezuela
Transportes Coal Sea de Venezuela, CA	Venezuela

Domestic subsidiary: Peabody	State of incorporation
American Land Development, LLC	Delaware
American Land Holdings of Colorado, LLC	Delaware
American Land Holdings of Illinois, LLC	Delaware
American Land Holdings of Indiana, LLC	Delaware
American Land Holdings of Kentucky, LLC	Delaware
American Land Holdings of West Virginia, LLC	Delaware
Arid Operations, Inc.	Delaware
Big Sky Coal Company	Delaware
BTU Western Resources, Inc.	Delaware
Caballo Grande, LLC	Delaware
Caseyville Dock Company, LLC	Delaware
Central States Coal Reserves of Illinois, LLC	Delaware
Central States Coal Reserves of Indiana, LLC	Delaware
Coal Reserve Holding LLC No. 1	Delaware
Coalsales II, LLC	Delaware
Colorado Yampa Coal Company	Delaware
Conservancy Resources, LLC	Delaware
Cottonwood Land Company	Delaware
Cyprus Creek Land Company	Delaware
Cyprus Creek Land Resources LLC	Delaware
Dyson Creek Coal Company, LLC	Delaware
Dyson Creek Mining Company, LLC	Delaware
El Segundo Coal Company, LLC	Delaware
Elkland Holdings, LLC	Delaware
Gallo Finance Company	Delaware
Gold Fields Chile, LLC	Delaware
Gold Fields Mining, LLC	Delaware
Gold Fields Ortiz, LLC	Delaware
Hayden Gulch Terminal, LLC	Delaware
Highwall Mining Service Company	Delaware
Hillside Recreational Lands, LLC	Delaware
HMC Mining LLC	Delaware
Independence Material Handling, LLC	Delaware
James River Coal Terminal, LLC	Delaware
Juniper Coal Company	Delaware
Kayenta Mobile Home Park, Inc.	Delaware
Kentucky Syngas, LLC	Delaware
Lively Grove Energy Partners, LLC	Delaware

Domestic subsidiary: Peabody	State of incorporation
Lively Grove Energy, LLC	Delaware
Marigold Electricity, LLC	Delaware
Midwest Coal Acquisition Corp.	Delaware
Midwest Coal Reserves of Illinois, LLC	Delaware
Midwest Coal Reserves of Indiana, LLC	Delaware
Midwest Coal Reserves of Kentucky, LLC	Delaware
Moffat County Mining, LLC	Delaware
Mustang Clean Energy, LLC	Delaware
Mustang Energy Company, LLC	Delaware
New Mexico Coal Resources, LLC	Delaware
P&L Receivables Company LLC	Delaware
Pacific Export Resources, LLC	Delaware
Peabody America, Inc.	Delaware
Peabody Archveyor, LLC	Delaware
Peabody Arclar Mining, LLC	Delaware
Peabody Bear Run Services, LLC	Delaware
Peabody Bear Run Mining, LLC	Delaware
Peabody Caballo Mining, LLC	Delaware
Peabody Cardinal Gasification, LLC	Delaware
Peabody China, LLC	Delaware
Peabody Coalsales, LLC	Delaware
Peabody Coaltrade International (CTI), LLC	Delaware
Peabody Coaltrade, LLC	Delaware
Peabody Colorado Operations, LLC	Delaware
Peabody Colorado Services, LLC	Delaware
Peabody Coulterville Mining, LLC	Delaware
Peabody Development Company, LLC	Delaware
Peabody Electricity, LLC	Delaware
Peabody Employment Services, LLC	Delaware
Peabody Energy Generation Holding Company	Delaware
Peabody Energy Investments, Inc.	Delaware
Peabody Energy Solutions, Inc.	Delaware
Peabody Gateway North Mining, LLC	Delaware
Peabody Gateway Services, LLC	Delaware
Peabody Holding Company, LLC	Delaware
Peabody Illinois Services, LLC	Delaware
Peabody Indiana Services, LLC	Delaware
Peabody International Investments, Inc.	Delaware

Domestic subsidiary: Peabody	State of incorporation
Peabody International Services, Inc.	Delaware
Peabody Investments Corp.	Delaware
Peabody Magnolia Grove Holdings, LLC	Delaware
Peabody Midwest Management Services, LLC	Delaware
Peabody Midwest Operations, LLC	Delaware
Peabody Midwest Services, LLC	Delaware
Peabody Mongolia, LLC	Delaware
Peabody Natural Gas, LLC	Delaware
Peabody Natural Resources Company	Delaware
Peabody New Mexico Services, LLC	Delaware
Peabody Operations Holding, LLC	Delaware
Peabody Powder River Mining, LLC	Delaware
Peabody Powder River Operations, LLC	Delaware
Peabody Powder River Services, LLC	Delaware
Peabody PowerTree Investments LLC	Delaware
Peabody Recreational Lands LLC	Delaware
Peabody Rocky Mountain Management Services, LLC	Delaware
Peabody Rocky Mountain Services, LLC	Delaware
Peabody Sage Creek Mining, LLC	Delaware
Peabody School Creek Mining, LLC	Delaware
Peabody Services Holding, LLC	Delaware
Peabody Southwest, LLC	Delaware
Peabody Southwestern Coal Company	Delaware
Peabody Terminal Holding Company, Inc.	Delaware
Peabody Terminals, LLC	Delaware
Peabody Trout Creek Reservoir LLC	Delaware
Peabody Twentymile Mining, LLC	Delaware
Peabody Venezuela Coal Corporation	Delaware
Peabody Venture Fund, LLC	Delaware
Peabody Western Coal Company	Delaware
Peabody Wild Boar Mining, LLC	Delaware
Peabody Wild Boar Services, LLC	Delaware
Peabody Williams Fork Mining, LLC	Delaware
Peabody Wyoming Gas, LLC	Delaware
Peabody Wyoming Services, LLC	Delaware
Peabody-Waterside Development LLC	Delaware
PEC Equipment Company, LLC	Delaware
PG Investments Six LLC	Delaware

Domestic subsidiary: Peabody	State of incorporation
Point Pleasant Dock Company LLC	Delaware
Pond River Land Company	Delaware
Porcupine Production LLC	Delaware
Porcupine Transportation LLC	Delaware
Riverview Terminal Company	Delaware
Sage Creek Holdings, LLC	Delaware
School Creek Coal Resources, LLC	Delaware
Seneca Coal Company, LLC	Delaware
Shoshone Coal Corporation	Delaware
Star Lake Energy Company LLC	Delaware
Thoroughbred Generating Company LLC	Delaware
Thoroughbred Mining Company LLC	Delaware
Twentymile Coal LLC	Delaware
West Roundup Resources, LLC	Delaware
Big Ridge, Inc.	Illinois
Black Hills Mining Company, LLC	Illinois
Century Mineral Resources, Inc.	Illinois
Illinois Land Holdings, LLC	Illinois
Midco Supply and Equipment Corporation	Illinois
Falcon Coal Company, LLC	Indiana
Kentucky United Coal LLC	Indiana
Peabody Midwest Mining, LLC	Indiana
Sugar Camp Properties, LLC	Indiana
United Minerals Company LLC	Indiana
Newhall Funding Company (MBT)	Massachusetts
Sterling Centennial Missouri Insurance Corporation	Missouri
Sterling Centennial Insurance Corp.	Vermont

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