



No Need for New U.S. Coal Ports: Data Shows Oversupply in Capacity

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The supply of coal-port capacity for shipping coal mined in the United States exceeds the demand for it. During the most robust year for coal exports on record, 2012, no U.S. port exceeded 70 percent of capacity. While U.S. ports today have the capacity to ship 234 million tons per year (mtpa)¹, export levels this year might not exceed 80 million tons, which would be only 34 percent of port capacity.

That means that plans for new coal port capacity are ill-conceived, including the very large proposals being considered in the Pacific Northwest and in Gulf Coast states. Coal and shipping interests have proposed six new export terminals in the Northwest alone in recent years. Developers cancelled projects at three sites, however, and a fourth has had a crucial state permit denied, where the federal government has suspended permit processing pending state appeals. In Gulf Coast states, plans for at least four new coal export terminals have been abandoned owing to opposition and market volatility. However, permits are still being sought for the RAM Terminals coal-export facility outside New Orleans, which would have the capacity to ship 8 million tons of coal per year, and in Houston, where two terminals are expanding or have expanded already, and a third may be built. Meanwhile, the global price for thermal coal has sunk to five-year lows, and most major coal-consuming nations are rethinking their energy strategies. Most major banks² and analysts³ have backed away from previous projections of new investments in coal mining and exports.

Any serious consideration of coal markets should suggest to public officials that the coal industry is a poor investment partner now and for the foreseeable future.

¹ This paper relies heavily on Finn Host, *How much coal can the U.S. Export and How Much Will it Export*, T. Parker Host, undated. <http://www.thecoalinstitute.org/ckfinder/userfiles/files/Finn%20Host.pdf>. T. Parker Host is a large, venerable company providing shipping and cargo services through 75 ports in the United States. The company is involved with grain, metals and minerals shipments though most of its business comes from the coal industry. The data in this company presentation treats in a consistent methodological manner information and data that, drawn from other sources would suffer from varying accounting and statistical treatments. The data offered by T. Parker Host has been cross checked to the degree possible using Energy Information Administration (Quarterly and Annual Coal Reports), SNL Coal export import database and other coal industry sources to test for reliability.

² <http://www.theaustralian.com.au/business/mining-energy/us-banks-baulk-at-abbot-point-coal-port-expansion/story-e6frg9df-1227104282562?nk=0b5c12e521089e1d1250d43c325d371e>

³ Angela Kean, *India's Adani faces obstacles in securing funding for Queensland coal port expansion*, SNL, October 29, 2014.

Current Coal Ports are Under-utilized

Table 1 shows the total capacity of those U.S. ports that currently ship coal from the United States to countries throughout the world. Capacity is compared with the total of U.S. tons shipped from the ports in 2012, a peak export year. The percentage identifies port capacity utilized for U.S. coal during 2012.

- East Coast ports shipped 68 million tons of coal and had the capacity to ship 105 million tons of coal. The East Coast terminals used 64.8 percent of capacity to ship coal.
- Gulf ports shipped 50 million tons of coal and had the capacity to ship 75.5 million tons of coal. The terminals in the Gulf used 66.5 percent of capacity to ship coal.
- The Northwest ports⁴ shipped 7.4 million tons of U.S. coal and had the capacity to ship 54 million tons of coal. The terminals in the Northwest used 13.7 percent of total capacity to ship coal.

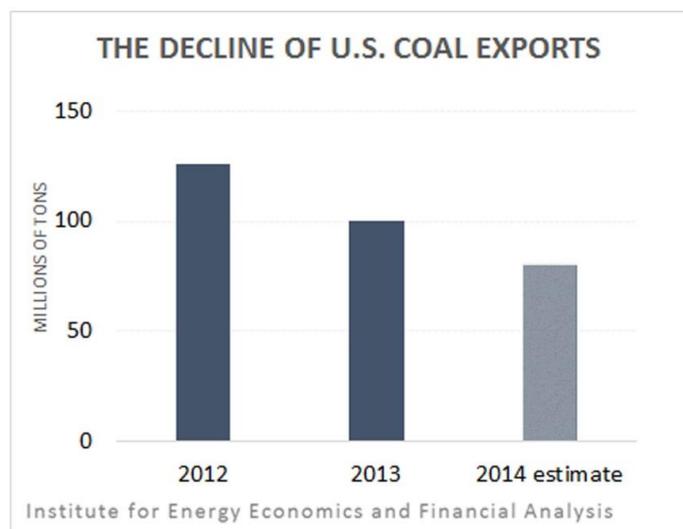
The average size port on the East Coast has a capacity of 20 mtpa. In Gulf states, the average size of a port is 5.2 mtpa.

Table 1: Coal Exports by Port Location, Capacity and 2012 Tonnage and Percent Utilization

Terminals	Capacity (in tons)	2012 U.S. Tonnage	Utilization
East Coast (Hampton/Baltimore)	105	68	64.8%
Gulf (States: LA, TX, AL, MS)	75.5	50.2	66.5%
Northwest (Ridley, Westshore, Neptune)	54	7.4	13.7%
TOTAL	234.5	125.6	48.3%*

*average utilization between three terminals

Coal exports from the United States have declined since the peak year of 2012. In 2013, producers exported 100 million tons, down from 125.6 million tons in 2012. According to coal-export reports through August 2014, the amount of coal shipped in 2014 could be as low as 80 million tons, a 36 percent decline from the 2012 peak.



⁴ Northwest ports ship more than just U.S. coal. The ports serve coal production from Canada. In 2012 these ports shipped 42 million tons of commodities including coal.

Prospects for Future U.S. Coal Exports Are Shaky

Various expansion and new port proposals could lift capacity to 443 million tons, an increase of 190 million tons per year. The largest of these proposals are in Washington State – the Gateway Pacific Terminal in Bellingham, (45 mtpa) and the Millennium Bulk Terminal in Longview (40 mtpa).

Much of the planning and financial commitments for port expansion, particularly in the Pacific Northwest, have been predicated on: 1) global benchmark coal prices in the \$80- to \$90-per-ton range or higher;⁵ 2) continued robust expansion of demand from China, India and other Asian countries, and 3) secured, long-term agreements reflecting the market view that U.S. coal producers could successfully compete over the long run with producers in Australia, Indonesia, and South Africa.

In the present market, and for the foreseeable future, coal exports from the Powder River Basin (PRB) are likely to remain unprofitable making substantial growth improbable and causing a reconsideration of Asian exports as a viable strategy.

The current market price for Newcastle coal, an important benchmark for the price of global thermal coal, is hovering in the \$60-per-ton range (down from a peak of \$132 per ton⁶ in mid-2011). The global market, in short, is in a state of oversupply.⁷

This broader backdrop creates severe headwinds for the coal port proposals in Washington State. In 2012, the peak year for U.S. coal exports, ports in British Columbia handled coal primarily from Canadian mines in addition to some from U.S. exporters. Since then, British Columbian ports have pressed forward with ambitious port-expansion plans—including a doubling of the capacity of the Ridley and Neptune terminals, significant capacity expansions at the Westshore terminal, and a proposed development of a new eight-million-metric-ton coal export facility at Fraser Surrey Docks in metropolitan Vancouver.

Yet even in the face of these expansion plans, demand for British Columbian coal-port capacity has declined. The Ridley terminal has seen a 37 percent year-over-year decrease in throughput through September 2014, with losses accelerating over the past several months, as some of the port's chief customers have shuttered their mines due to collapsing international coal prices.⁸ Moreover, new coal mine development projects in Western Canada are on hold indefinitely, making Ridley's 13 million ton-per-year

⁵ Peter Gartrell and John Miller, *Peabody Projections show lucrative Chinese market for PRB coal*, Platts Coal Trader, December 6, 2010. See also: <http://seekingalpha.com/article/2175763-cloud-peak-energy-ceo-discusses-q1-2014-results-earnings-call-transcript?part=single>

⁶ <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,content-MDK:21574907~menuPK:7859231~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

⁷ <http://www.mining.com/web/coal-exporters-not-backing-down-despite-glut-could-china-enter-the-market-too/> For a detailed discussion of global coal trends see the joint Carbon Tracker Institute/IEEFA treatment of coal markets in <http://www.carbontracker.org/report/carbon-supply-cost-curves-evaluating-financial-risk-to-coal-capital-expenditures/>

⁸ For a detailed discussions of current trends and analysis on Ridley Terminal see: <http://daily.sightline.org/2014/07/09/bad-news-for-ridley-terminal/>

expansion superfluous for the foreseeable future.⁹ In light of Ridley's slackening throughput, at least one Canadian coal company has shifted its exports from Westshore to Ridley, which has opened up additional capacity at the Westshore terminal.

The expansion plans for the Fraser Surrey terminal have moved forward but they too are challenged by the same risks faced at the other Canadian ports and U.S. new projects. The Fraser Surrey project would add capacity for 4 million tons of coal shipped from Wyoming and Montana.¹⁰ In addition to market uncertainty about the ability of U.S. coal producers to supply throughput the plant has encountered opposition from environmental groups.¹¹

Port capacity in British Columbia will likely remain available to U.S. coal companies,¹² but that capacity and the planned expansions are unlikely to benefit U.S. coal shippers as there is little market for their product either now or for the foreseeable future. The global coal glut has given low-cost exporters in Australia, Indonesia and South Africa a significant advantage over PRB coal producers, which suffer from comparatively low-quality coal and high shipping costs. At today's prices, PRB coal producers will lose money selling into oversupplied Asian coal markets.¹³

Even if the global markets loosen modestly, PRB producers will remain minor players. This factor, plus the severe financial constraints of U.S. coal producers caused in part by diminished profitability of their domestic operations, leaves little liquidity to navigate the turbulent volatility of a global market. Increased concerns in the United States regarding hidden subsidies on coal exports add another risk dimension to U.S. coal producer plans for significant increases in global sales.¹⁴

Australian coal producers are also severely challenged with low global prices and changing policy priorities of importer nations. Australian ports reflect these market weaknesses and are currently underutilized.¹⁵ In addition the two largest proposed greenfield mining projects in Australia are faced with a constellation of risks that make them unlikely to move forward despite substantial developer outlays and government support.¹⁶ Recently JP Morgan, Citigroup and Goldman Sachs followed Deutsche Bank in declaring their unwillingness to finance these projects.¹⁷

⁹ For an overview of current trends in Canadian mining industry see: <http://online.wsj.com/articles/sale-price-for-canada-coal-mine-2-1412200984>

¹⁰ <http://www.cbc.ca/news/canada/british-columbia/coal-terminal-expansion-vital-argues-fraser-surrey-docks-1.1378877>

¹¹ <http://www.surreyleader.com/news/272183911.html>

¹² Despite the current slowdown in global sales Cloud Peak has recently increased its throughput at Canadian terminals.

<http://seekingalpha.com/article/2614865-cloud-peaks-cld-ceo-colin-marshall-q3-2014-results-earnings-call-transcript>

¹³ The case of Arch Coal is informative. In 2011 the company projected export levels at 245 million tons per year by 2015. The company also discussed its plans to retool the company toward this large export market. See: Dan Lowrey, *Arch: U.S. coal export capacity could swell to 245 million tons by 2015*, SNL, November 10, 2011. During the company's third quarter 2014 earnings call CEO John Eaves said the company was backing away 'quite a bit' from this strategy. While not abandoning Asian export those plans were of a long term nature because of weak global pricing. Jeffery McDonald, *Arch expects rail service to improve in Q4 and into 2015*, Platts, October 28, 2014.

¹⁴ <http://www.trust.org/item/20141023045950-k4wfm>

¹⁵ http://cpd.org.au/wp-content/uploads/2013/11/CPD_OP32_Too_Many_Ports-2013.pdf

¹⁶ <http://www.ieefa.org/category/australias-galilee-basin/>

¹⁷ <http://www.theguardian.com/environment/2014/oct/28/us-banks-vow-not-to-fund-great-barrier-reef-coal-port-say-activists>

For at least five years, China's coal imports have driven global production and prices. In the short term, China's 2014 imports are down 6 percent year-on-year. In the medium term, China's total demand for coal may rise, but its imports are likely to be curtailed. China recently placed a tariff on coal imports, though it exempted Indonesia and Vietnam from the tariff. U.S. producers cannot compete without robust import demand from China and supportive policies. Many U.S. coal producers are now turning their attention to Korea, Taiwan, Japan, and India.

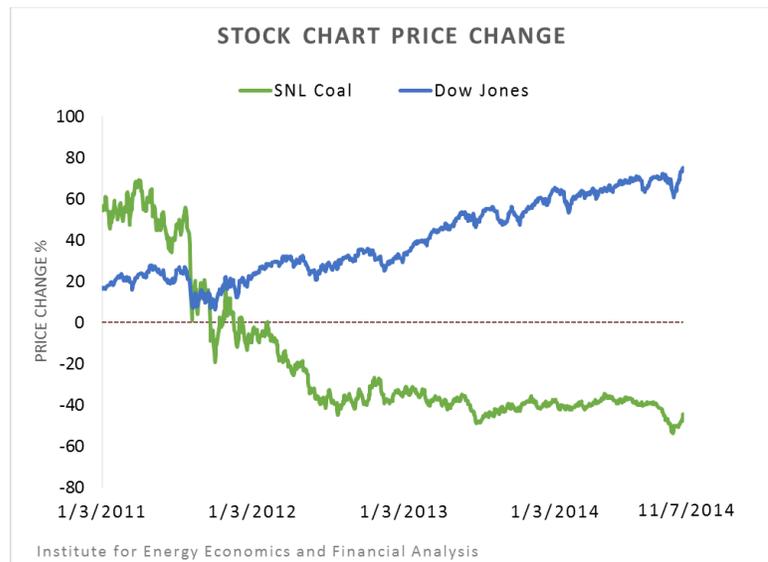
India is the second largest importer of coal in the world. In 2012, 9.5 million tons, or approximately 7.5 percent of U.S. coal exports went to India.

India's energy plans project an increase in coal imports. However, the country's fiscal, economic and political situation show that imports place upward pressure on the price of electricity.¹⁸ The country must also improve the efficiency of its domestic coal mine industry if it wishes to keep electricity prices stable. Rising electricity prices will have a political impact, but they will also send a market signal to developers of renewable energy.

Long term, viable coal agreements are increasingly rare on the global market. Existing take-or-pay agreements with ports and rail companies have actually become liabilities for many coal producers. They pledge to push coal through ports under guaranteed agreements but they have a shrinking and unprofitable market for the coal. Most major investment houses have already identified long-term problematic scenarios for coal producers in the global thermal trade.

U.S. Coal Producer Financial Capacity to Participate in Global Coal Trade Is Shrinking

The larger issue for U.S. coal producers' role in the global thermal coal trade relates to a more fundamental issue. Most large coal producers in the United States are in serious financial trouble.¹⁹ Every major U.S. exporter of coal has reported a souring of the global market. Two companies with significant reserves in the PRB, Arch Coal and Alpha Natural Resources, face severe financial problems that have required them to sure up



¹⁸ <http://www.ieefa.org/press-release-the-beginning-of-the-end-of-imported-coal-in-india-report-exposes-economic-flaws/>

¹⁹ Darren Epps, *Broken, moribund, abused: Somber earnings season expected by coal sector*, SNL, October 17, 2014.

investor confidence.²⁰ Arch Coal is particularly relevant as the 38 percent owner of the Millennium Terminal in Longview, Washington. Arch currently has a market capitalization of less than \$500 million and \$5.1 billion in long-term debt. This debt is trading at significant discounts to par value, raising investor concerns about bankruptcy risk.²¹ Arch's co-owner of the Millennium Terminal, Ambre Energy, is an Australian private-equity backed startup with negative cash flow and well-documented financial questions.²² Peabody Energy, which also has a major stake in the PRB and has purchased half of the planned capacity of the proposed Gateway Pacific Terminal, is also overleveraged and in a poor cash position to take on further risk. In the face of lower revenues and shrinking margins, Peabody is cutting costs and capital expenditures. All three companies are facing year-end losses.

The two companies with active export transactions out of the PRB — Cloud Peak and the FirstEnergy/Gunvor venture that owns the Bull Mountain mine in Montana — are both struggling and account for only 16 million tons²³ in a good year. Cloud Peak, which also has purchased capacity at both the Millennium and Gateway Pacific Terminals, is facing losses on its exports for the first time in its history, and has stayed profitable through hedging. Cloud Peak has told investors that it needs a significant increase in global coal prices in order for to gain profits on coal exports, even through existing terminals. FirstEnergy Gunvor's exports are also down from 2013 levels.²⁴ .

Conclusion

The two remaining major Northwest planned port expansions – Gateway Pacific Terminal and Millennium Terminal – are facing severe financial headwinds. Global coal prices are extremely weak, markets are oversupplied. Major consumers of coal globally are rethinking their strategies and U.S. coal producers are in a state of financial disarray. Coal will continue as a major source of power generation needs around the world. U.S. coal producers, however, have not demonstrated an ability to compete when markets were more robust. They will surely falter in a prolonged down market. Most equities analysts have pointed to a long-term oversupply of coal in the global markets.

²⁰ Darren Epps, *Analyst says Alpha's liquidity ensures company will be around for a while*, SNL, October 8, 2014.

²¹ Jacob Barker, *Investors Flee Arch Coal Debt, Driving Down Its Bond Prices*, St. Louis Post – Dispatch, October 31, 2014.

²² Clark Williams-Derry, *Ambre Energy, Caveat Investor*, The Sightline Institute, February 13, 2014.

²³ Signal Peak mine exports some of its coal through the Great Lakes. See: Darren Epps, *Signal Peak mine in Montana sets all time quantity production record*, SNL, July 8, 2014 and Darren Epps, *Western coal shipments to Europe boost tonnage through Great Lakes*, SNL, November 14, 2013.

²⁴ Coal and Energy Report, *Market Commentary*, October 29, 2014 from chart prepared by Hanou Energy Consulting.