



# Coal Exports From Canada

## Why coal planned for ports in Oregon and Washington cannot divert to British Columbia

July 2012

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Coal companies and other proponents of increased West Coast coal exports argue that resistance to new terminals is futile. They say that if Oregon and Washington ports decline to expand their coal shipping capacity, US companies will simply export their products from existing port facilities in British Columbia. But that raises an important question: how much US coal could Canada's Pacific ports actually handle?

In this paper, Sightline analyzes current and projected export capacity at each coal port in British Columbia, concluding that there is very little potential for US coal shipments out of Canada. If the Northwest states do not build coal export terminals, it is extremely unlikely that US coal companies could divert significant quantities of coal to Canadian ports.

### FINDINGS

Canada is a major player in the global coal trade, ranking among the world's top 10 exporters.<sup>1</sup> Because the vast majority of Canada's exports are bound for Asia, virtually all the coal exported by Canada leaves from British Columbia.<sup>2</sup> Coal export terminals in the province already operate near their full capacity.

In recent years, less than 5 million tons of US coal has been exported through BC ports annually.<sup>3</sup> In 2010 and 2011, US-originated coal shipments increased dramatically from previous years, but there is no reason to believe that significant quantities of American coal will ever be shipped out of BC because:

1. Canadian coal is in high demand and it achieves significantly higher prices than the Powder River Basin coal that would be shipped from the US.<sup>4</sup>
2. BC's coal ports are to a large extent structured to handle primarily Canadian coal and other exports.<sup>5</sup>
3. BC coal ports simply do not have sufficient space to add large quantities of US coal shipments.

An examination of each of BC's three major coal terminals reveals that they cannot provide significant capacity to US coal exports.

## ANALYSIS

British Columbia exports coal from three locations that are theoretically available for US coal shipments: Ridley Terminals at Prince Rupert, and the Neptune and Westshore Terminals in the Vancouver area.<sup>6</sup> Together, these ports have roughly 50 million tons of coal export capacity in their current configuration.<sup>7</sup> Planned upgrades will increase that figure to around 75 million tons.

Yet even the expanded capacity planned for BC's coal ports could not handle more than a tiny fraction of the volumes of coal called for by the recent proposals in Washington and Oregon, which could amount to as much as 145 million tons each year.<sup>8</sup> In fact, the proposed Gateway Pacific Project at Cherry Point, Washington is roughly the same size as the entire coal exporting capacity currently available in all of British Columbia.<sup>9</sup>

British Columbia coal exports (million metric tons)				
	Estimated throughput	Current capacity	Expanded capacity	Expected capacity for US coal
Ridley (Prince Rupert)	11	12	24	0 – 2.5
Neptune (North Vancouver)	8	8	18	0
Westshore (Roberts Bank)	27	29	33	6 - 10
<b>Total</b>	<b>46</b>	<b>49</b>	<b>75</b>	<b>6 – 12.5</b>

### Ridley Terminals, Inc. (Prince Rupert)

The port at Prince Rupert, located roughly one hundred miles south of Ketchikan, Alaska, is remote from population centers and from the Powder River Basin. But it is 450 nautical miles closer to Shanghai than Vancouver and nearly 1,200 nautical miles closer than Los Angeles. The Prince Rupert coal export facility is operated by Ridley Terminals, Inc., a Federal Crown Corporation, which means that it is owned by the government of Canada. In fact, the facility was built specifically to export metallurgical and thermal coal from the northeastern part of the province, although it currently receives very small amounts of coal from the US.<sup>10</sup>

The Ridley facility can process 12 million metric tons of bulk commodities annually, and it can store one-tenth of that amount on-site.<sup>11</sup> The terminal appears to be operating at close to full capacity, though it is expanding. By the end of 2014, the company expects to double its annual capacity, to 24 million tons.<sup>12</sup>

In January 2011, Arch Coal, an American coal company that is a major player in Powder River Basin mining, announced that it had reached an agreement to export 2.5 million tons of coal annually from Prince Rupert.<sup>13</sup> To date, however, official figures suggest that Arch Coal is not actually shipping any meaningful quantity of coal from Ridley, probably because the cost of the longer rail haulage is too expensive.<sup>14</sup> In fact, Cloud Peak Energy, a Powder River Basin coal mining company that ships coal from BC's Westshore terminal, and has shipped small amounts from Ridley, but has also stated publicly that the long rail haulage to Prince Rupert tends to be too expensive.<sup>15</sup>

Faced with a choice of paying to move the coal to Prince Rupert or not shipping coal to Asia, it appears that US coal interests are choosing not to ship. And even if it were economically feasible to route US coal through Ridley, it is not at all clear that a terminal that is chartered specifically to export Canadian coal would make capacity available for American competitors.

Although the prospect of US coal exports appeared to play a role in the planned expansion of the terminal, recent evidence brought to light by Communitywise Bellingham makes clear that Canadian coal interests are actively hostile to US coal moving out of the port.<sup>16</sup> In fact, Ridley's port management and policies shifted decisively to favor Canadian interests since the announcement of the Arch contract.<sup>17</sup> After 2015, all of Ridley's coal capacity is allocated to Canadian coal interests.

### **Neptune Terminals, Port Metro Vancouver (North Vancouver)**

The three Neptune Terminals, including the single terminal used for coal, are located within the city of North Vancouver, on the north shore of Vancouver's Inner Harbor. Neptune's coal is predominately high-grade steelmaking coal produced in northwest Alberta and southeast BC.<sup>18</sup> Neptune is owned by three Canadian bulk shippers, including Teck, a Canadian coal mining giant.<sup>19</sup>

Current investments in new equipment will increase coal handling capacity at Neptune from 8 million to 18 million tons per year.<sup>20</sup> None of Neptune's coal capacity is available to US coal interests, because Teck maintains exclusive rights to ship coal through the port.<sup>21</sup>

### **Westshore Terminal, Port Metro Vancouver (Roberts Bank)**

Located at Roberts Bank just north of the US border, Westshore is the largest coal export facility on the West Coast of North America and it ships more coal than the other Canadian terminals combined.<sup>22</sup> With a stated capacity of 29 million tons, the terminal is operating at close to full capacity, moving nearly 25 million tons in 2010 and more than 27 million tons in 2011.<sup>23</sup>

Because of its peculiar location—an exposed peninsula jutting into the Strait of Georgia—it is unlikely that Westshore could expand its physical footprint. However, technological improvements have increased capacity in the past, as happened in 2008 when equipment upgrades increased the terminal's throughput capacity from 24 to 29 million tons.<sup>24</sup> An expansion planned for 2012 is projected to bring the terminal's capacity up to 33 million tons per year.<sup>25</sup>

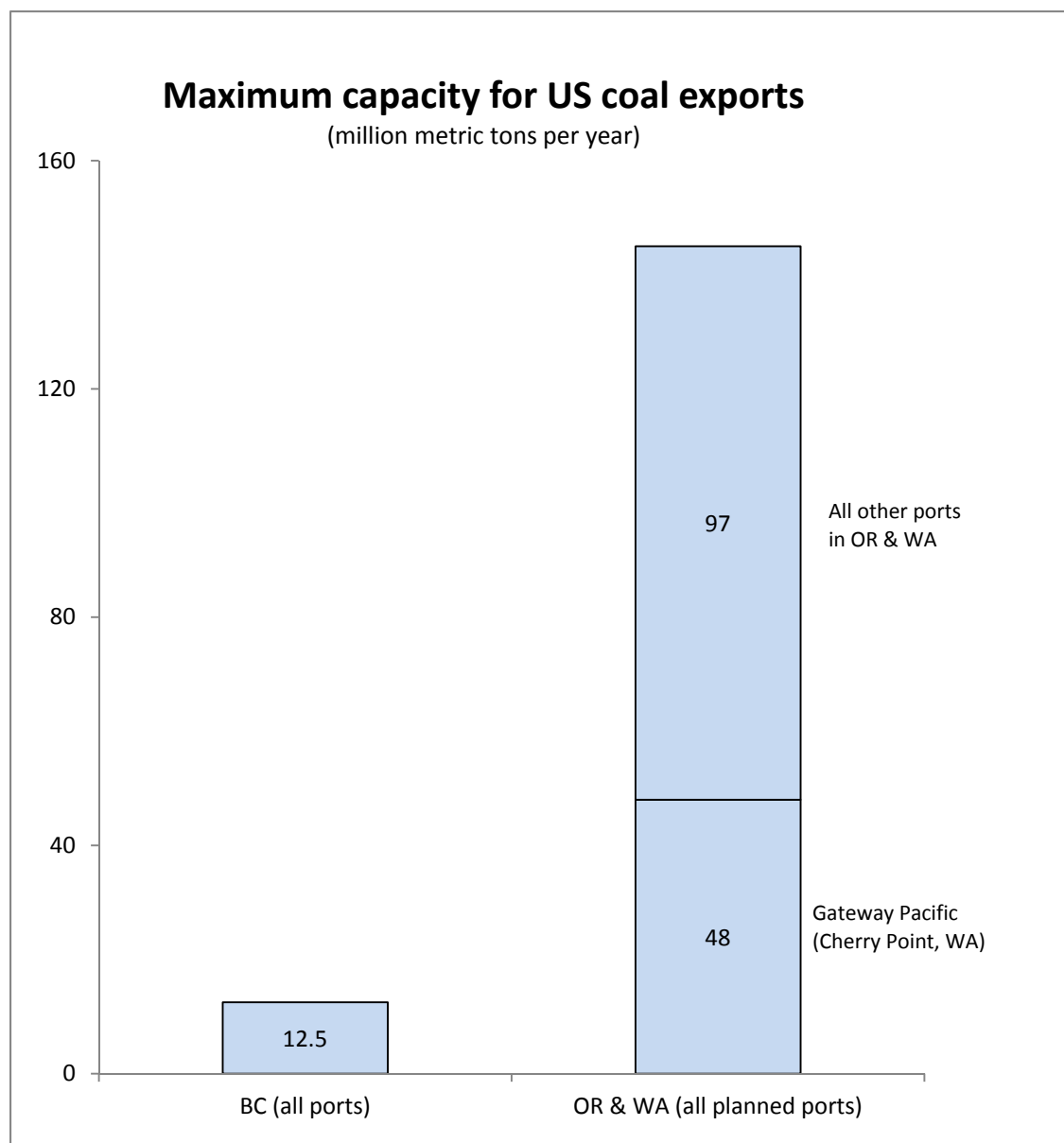
In 2009, the terminal shipped 1.9 million tons of US coal, mainly from the Powder River Basin and Utah, apparently the first time that meaningful quantities of American coal were shipped from Westshore.<sup>26</sup> In 2010 and 2011, it has handled less than 5 million tons of US coal.<sup>27</sup>

Available evidence indicates that very little of Westshore's capacity could be used for US coal exports. Research from Communitywise Bellingham indicates that agreements between the terminal and Teck account for as much as 19 million tons per year through 2016. Contracts with other Canadian coal mining companies, Grande Cache Coal and Sherritt International, will consume an additional 7 to 8 million tons per year.<sup>28</sup>

The remaining capacity at Westshore—perhaps 6 to 10 million tons per year—might be available to US coal companies, probably Cloud Peak Energy and Signal Peak Energy. There is no guarantee, however, that US coal shipments would take precedence over higher-value Canadian coal.

## DISCUSSION

If BC were ever to handle significant quantities of US coal, the province would need to displace Canadian coal shipments with US coal, add new export capacity, or repurpose a large number of existing bulk commodity facilities.<sup>29</sup> Barring these arrangements, very little US coal from the Powder River can be exported via Canadian ports, particularly in comparison to the volumes planned for export from Oregon and Washington.<sup>30</sup>



The clearest evidence that West Coast coal exports are constrained by port capacity comes from the coal industry itself. Major coal firms have clearly and repeatedly indicated to their investors that they need new export facilities in Oregon and Washington if they are ever to export large quantities of Powder River Basin coal.<sup>31</sup> For example, as Cloud Peak stated in a 2012 investor report, “While demand from our Asian customers remains strong, this year’s exports will again be limited by available terminal capacity out of the Pacific Northwest.”

In other words, if Canadian ports actually did have available capacity for American coal, US coal interests would already be using it. But terminal space is tightly limited. So now US coal companies are betting on big new export terminals in the Northwest—projects that are expensive, time-consuming, and highly uncertain.

**Note:** *All weight figures in this research memo are in metric tons. A metric ton weighs about 10 percent more than a US “short” ton.*

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**Sightline Institute** is a not-for-profit research and communication center—a think tank—based in Seattle. Sightline’s mission is to make the Northwest a global model of sustainability—strong communities, a green economy, and a healthy environment.

Sightline thanks Communitywise Bellingham for the report *Coal Train Traffic to Canada and Gateway Pacific Terminal* and Salish Law PLLC for *Fact Check: Will the Coal Trains Come Anyway, Without the Proposed Gateway Pacific Terminal?*

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- <sup>4</sup> Kevin Stone, “Canadian Minerals Yearbook: 2009,” Natural Resources Canada, <http://www.nrcan.gc.ca/mms-smm/business/cmy-amc/2009revu/coa-cha-eng.htm>; and US Energy Information Administration, “Quarterly Coal Report: October-December 2011,” April 2012, <http://www.eia.gov/coal/production/quarterly/pdf/0121114q.pdf>.
- <sup>5</sup> Although the planned expansion at Ridley Terminals seems to be driven in part by the possibility of US coal shipment, it is owned by the government of Canada and was built to export high-grade steelmaking coal from BC. Neptune Terminals is owned by three Canadian bulk commodity shippers, including Teck, a Canadian coal company giant with no direct mining interest in the Powder River Basin. (See Teck, “Our Coal Business,” <http://www.teck.com/Generic.aspx?PAGE=Teck+Site%2fDiversified+Mining+Pages%2fCoal&portalName=tc>; and Neptune Terminals, “Neptune Bulk Terminals,” <http://www.neptuneterminals.com/about/>.)
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