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Northwest Coal Exports

Some common questions about economics, health, and pollution.

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November 2012

"Coal is a dead man walkin'."

That's what Kevin Parker, the global head of asset management for Deutsche Bank, told the *Washington Post*. Regarding coal-fired power plants, he said, "Banks won't finance them. Insurance companies won't insure them. The EPA is coming after them. . . . And the economics to make [coal] clean don't work."[1]

Customer demand for coal has been declining precipitously in the United States, in part because of competition from cleaner energy sources. With dimming prospects in North America, coal companies are looking to Asian markets where demand appears to be increasing.[2] These companies hope to take large volumes of coal mined on public land in the Powder River Basin of Montana and Wyoming, carry it by rail to West Coast ports, and ship it to Asia, especially China, where it would be burned to generate electricity.[3]

Before coal companies can move significant quantities of coal to Asia they need new export terminals in the Northwest, yet the coal shipping plans have proven enormously controversial. This memo evaluates some of the principal concerns about new coal terminals and seeks to provide answers to frequently asked questions about coal exports in the region.

What is the status of coal exports in the Northwest?

Five coal export terminals are proposed in Oregon and Washington, and they have the potential to dramatically increase the amount of coal shipped to Asia.

- **Cherry Point, Washington.** SSA Marine is planning to build and operate the Gateway Pacific Terminal, a new shipping facility north of Bellingham that would be capable of handling 48 million tons of coal per year. Peabody Energy, the world's largest private sector coal company, has already agreed to supply 24 million tons of coal.[4]

- **Longview, Washington.** Millennium Bulk Terminals, a subsidiary of the Australian coal mining company Ambre Energy, purchased a port site on the Columbia River. Arch Coal, a major American coal mining company, has a 38 percent stake in the site. Ambre hopes to export 44 million tons of coal, with 25 million tons in the first phase.[5]
- **Port of St Helens, Oregon.** Kinder Morgan's Port Westward project would build and operate a coal export terminal near Clatskanie that will be capable of handling 30 million tons of coal per year, with 15 million tons in an initial phase of development.[6]
- **Port of Morrow, Oregon.** Ambre Energy is planning to construct a facility on the Columbia River in eastern Oregon that will transfer coal from rail to barges which will be towed downriver to the Port of St. Helens where the coal will be loaded onto ongoing vessels. The company says that the system will be capable of handling 8 million tons per year.[7]
- **Coos Bay, Oregon.** The Port of Coos Bay is considering a proposal known as "Project Mainstay" that officials say could export 6 to 10 million tons of coal per year.[8]

At full capacity these ports could ship 140 million tons of coal annually, more than the entire United States has ever exported in a single year.[9]

In recent years, British Columbia has exported more than 40 million tons of coal, most of which is high grade metallurgical coal mined in Canada, rather than the thermal coal from the Powder River Basin that is used to generate electricity. The biggest coal export facility is the Westshore Terminal at Roberts Bank, just north of the US border, which moved about 27 million metric tons of coal in 2011. Neptune Terminals in North Vancouver moved an additional 8 million metric tons, and Ridley Terminals in Prince Rupert exports roughly 11 million tons.[10]

Some capacity expansions are underway at each of British Columbia's coal ports, but the new export facilities would dramatically enlarge the Northwest's coal exports.

Does the US already export coal to Asia?

In recent years, the US has exported less than twenty million tons of coal to Asia, and just a fraction of that to China.[11] Even though the volume of Asia-bound coal has increased since 2009, the five facilities proposed for the Northwest states could easily multiply total American coal exports to China tenfold.

Coal mining companies want to tap new markets as domestic utilities shift away from coal. Coal power in the US is facing stiff economic competition from cleaner fuels, especially natural gas, and older plants can't meet modern pollution standards without expensive upgrades. In January 2011, Chevron announced it would sell its coal mines by the end of the year because staying in the industry was no longer a good business strategy, and Patriot Coal went into bankruptcy in July 2012.[12]

Over the last two years, utilities have announced plans to close dozens of outdated coal plants, including Oregon's only coal-fired electricity plant at Boardman and Washington's lone coal plant at Centralia. [13] In Montana, owners of the Corette Power Plant are opting to mothball the facility in 2015.[14]

At the same time that North American prospects are dimming, however, coal has been commanding

higher prices in Asia.[15] Coal mining companies are looking to overseas markets that lack strong pollution and health standards. Yet even exports to Asia may not save the industry.

Do coal export facilities make good neighbors?

One of the primary objections to coal export terminals is the spread of coal dust. Exporters store coal in large piles at terminals, and these piles can feed prolific quantities of dust to the wind, especially when terminal machinery are loading and unloading the fuel. As one study put it, "coal terminals by their nature are active sources of fugitive dust."[16] Unsurprisingly, coal dust problems plague several export facilities in North America.

In Seward, Alaska, for example, residents have sued the local terminal operators because coal dust blowing off the terminal's stockpiles regularly coats nearby fishing boats and neighborhoods with debris. The residents' suit states that the conveyor system used to load ships drops coal dust into Seward's scenic harbor, violating the Clean Water Act.[17] In 2010, the state of Alaska fined the railroad company that delivers coal to the terminal $220,000 for failing to adequately control dust.[18]

British Columbia's Westshore coal terminal, which ships about 21 million metric tons per year, sits on a peninsula jutting into the Strait of Georgia. Some residents of Point Roberts, a beachfront community three miles away, complain that coal dust blackens their homes, patio furniture, and boats moored in the local marina.[19] A comprehensive 2001 study of coal dust emissions in Canada found that the Westshore Terminal emits roughly 715 metric tons of coal dust a year. A separate study recently conducted by researchers at the University of British Columbia found that the concentrations of coal dust in the vicinity of the terminal had doubled during the period from 1977 to 1999.[20]

The Lamberts Point Coal Terminal in Norfolk, Virginia, which ships 28 million tons of coal annually, is legally permitted to release up to 50 tons of coal dust into the air each year. Black grit from the coal piles commonly coats cars, windowsills, and plants in neighboring communities. Neighbors worry that the dust is responsible for the vicinity's elevated asthma rates.[21]

In Newport News, Virginia; Charleston, South Carolina; and on the Mississippi River, coal dust routinely blankets neighborhoods and local waterways.[22] And coal dust is widespread near terminals in Australia, India, and South Africa.[23]

The scale of likely dust emissions at the export facilities planned for the Northwest is unclear. Project developers are promising to install mitigation devices that they say will control dust, yet it's highly unlikely that the coal dust can be contained entirely. Huge piles of coal will stand outdoors in wind and weather, and frequently be shoveled into new positions by giant bulldozers and other machinery.

Does rail transport release coal dust?

Coal dust escapes from the open-top rail cars used for transporting coal and can create safety and congestion problems for rail traffic. In 2005, for example, coal dust that had accumulated in ballast, the layer of crushed rock that supports rail tracks, caused derailments. Coal dust deposits sometimes even cause spontaneous fires.

The Burlington Northern Santa Fe Railway (BNSF) has studied the problem and found that as much as a ton of coal can escape from a single loaded coal car, while other reports show that as much as 3 percent of a coal car's load, which is typically 100 tons or more, can blow away in transit.[24] The US Department of Transportation classifies coal dust as a "pernicious ballast foulant" that can weaken and destabilize rail tracks.[25] It is not clear how much coal dust might escape in the Pacific Northwest, but one watchdog group has verified that coal and coal dust does escape from open rail cars traveling along Puget Sound coastlines.[26]

To reduce or prevent coal dust from escaping, shippers can fill cars less full or cover them with tarps or chemical sprays, but these measures run up the cost of moving coal, so coal shippers rarely employ them by choice.[27] A March 2011 ruling from the US Surface Transportation Board, which oversees railway operations, allowed BNSF to require coal shippers to control dust, but there is little reason to believe the controls will be effective.[28] In fact, shippers are already appealing the decision, blaming BNSF's operating procedures for the spread of coal dust and arguing that the railway's dust reduction goals are unrealistic and based on "junk science."[29]

Complicating matters for the Northwest, Powder River Basin (PRB) coal is notoriously difficult to handle. One technical analysis finds that, "PRB coal is extremely friable and will break down into smaller particles virtually independent of how the coal is transported or handled." According to the study's authors, "PRB represents the extremes of handling problems."[30]

The same analysis found that:

> Spontaneous combustion of coal is a well-known phenomenon, especially with PRB coal. This high-moisture, highly volatile sub-bituminous coal will not only smolder and catch fire while in storage piles at power plants and coal terminals, but has been known to be delivered to a power plant with the rail car or barge partially on fire…[31]

Outside of confined environments, Powder River Basin coal does not spontaneously explode or burst into full flame, but under the wrong conditions it can self-ignite and burn slowly even while it is riding the rails—a troubling proposition for railroad workers and communities along the tracks.

Is coal dust harmful?

Coal dust is more than a nuisance. It degrades water quality and may pose a danger to residents' health. Coal workers who are exposed to dust, for example, suffer elevated rates of bronchitis, emphysema, and black lung disease.[32] In Liverpool, England, researchers found that, even after correcting for economic and environmental factors at home, children exposed to coal dust from the nearby docks were more likely to miss school because of respiratory problems, including wheezing and coughing.[33]

In Norfolk, Virginia, home of the Lamberts Point Coal Terminal, soil samples contain up to 20 percent coal by weight at a site less than 1 kilometer from the docks, 3 percent coal at a site 5 kilometers away, and 1 percent coal as far as 12 kilometers away. High coal levels in soil along railroad tracks suggest that trains are another pathway for contamination. Researchers in Norfolk also found arsenic levels were five times higher than background soil concentrations nearby, and hypothesize that the coal export terminal is at least partially responsible for the difference because coal often contains arsenic.[34]

Do coal trains pose other risks?

The proposed coal exports would add a large number of trains to the Northwest's rail lines. All together coal exports could add 56 trains per day—and more than 20,000 each year. Coal trains tend to be long – sometimes more than a mile and a half in length – and are believed by many to be louder and produce more vibrations than other trains, owing to their weight.

A group of 160 doctors and other health professionals in Whatcom County, Washington, published a position statement documenting a number of health-related problems with coal exports. In addition to the risks of coal dust, the doctors raise concerns about the impacts of the trains themselves, which generate noise, create collision hazards, and delay emergency medical response by impeding rail crossings. Trains are also responsible for hazardous air pollution from diesel engines, a documented threat to health in Washington.[35]

The BNSF rail yards in Spokane—an important linkage point between the Powder River Basin and Washington's Pacific ports—would see increased rail traffic that is almost certain to increase harmful pollution there. A 2010 study by the Spokane Clean Air Agency identified lung cancer risks in Spokane that appear closely related to residents' proximity to the BNSF railyard, where diesel engines generate prodigious quantities of small particulate pollution, the most health-threatening major air pollutant in the Northwest. Researchers ruled out numerous alternative explanations and concluded that "the BNSF railyard appears to be the only other air pollution source in the vicinity of Hillyard that can account for its differential lung cancer risk."[36]

For many communities, coal trains are almost certain to worsen traffic congestion and impair truck freight. The sheer number of trains required by a full build-out of the coal terminals would dictate that even if trains traveled at 35 miles per hour they would obstruct at-grade crossings for 10 percent of every day. In urban locations, where train speeds are slower, the problem is likely to be even worse.[37] A series of traffic analyses conducted by Gibson Traffic Consultants found that coal train traffic will result in serious congestion and delay in many Northwest cities.[38] In Marysville, Washington, for example, a single coal train passing through would delay traffic on the city's central arterials by the equivalent of three to four continuous red light cycles and Gibson points to a potential "nightmare scenario" where all of the city's access points to Interstate 5 are obstructed simultaneously.[39]

Coal trains may also create congestion problems on the Northwest's railroads. Key areas of the region's railway system already operate beyond their capacity, resulting in congestion and delay for freight and passenger trains alike. Rail system experts working for the Western Organization of Resource Councils analyzed coal export plans and determined that local governments would be saddled with hundreds of millions of dollars in expenses to mitigate the rail expansions and operations envisioned by coal export proponents.[40]

The Portland, Oregon-Vancouver, Washington area is one of the most problematic locations in part because it will be affected by coal trains no matter whether coal is shipped to Bellingham, Longview, the Port of St. Helens, or Coos Bay. In fact, the authors of the most comprehensive analysis of Washington's freight rail system note that, "delay hours per train moving through the Portland/Vancouver area are greater than the delay hours for trains in the Chicago area, one of the nation's most congested rail hubs."[41]

Northwest Washington is another critical location because the rail mainline consists of just a single track and is already subject to frequent congestion. Coal trains serving the planned coal export facility at Cherry Point would more than double the existing rail traffic in that area—even before the region sees any other freight expansions, and before the region gets new passenger rail service. In fact, even if all existing freight and passenger trains were removed from the system—and only coal trains serving Cherry Point used the main railway—the coal shipments alone would exceed the capacity of the existing system. Not surprisingly, a study of rail capacity by the Cascadia Center concludes that the proposed terminal there "has the potential to create an operational bottleneck."[42]

Is Powder River Basin coal better for the environment than China's coal?

Powder River Basin coal is lower in ash and sulfur than some other kinds of coal, but it also produces less energy per pound than the coals that are more commonly burned in modern power plants.[43] To produce the same amount of energy from Powder River Basin coal requires mining, shipping, and burning about 50 percent more.[44] After accounting for those differences, coal from the Powder River Basin is somewhat cleaner than China's domestic sources of coal, but it is still coal—an extremely polluting form of energy.

Coal is a highly impure form of fuel, and burning it releases numerous hazardous substances, including radioactive materials such as uranium and thorium. In fact, the US Department of Energy's Oak Ridge National Laboratory has estimated that coal plants have released hundreds of thousands of tons of uranium, and that radiation from coal plants is a greater threat to Americans than radiation from nuclear plants.[45]

The true costs of coal are daunting. Researchers at the Harvard Medical School recently pegged the annual cost of coal—including harm to public health, mining damage, pollution, and subsidies—at $345 billion per year in the United States alone.[46] A 2010 report from the National Research Council finds that the non-climate damages from burning coal are 20 times higher than the damages from natural gas, the next dirtiest and costliest fossil fuel in use.[47] And a 2009 report from the National Academy of Sciences determined that US coal burning results in $60 billion per year in health costs alone.[48]

Coal is also a serious contributor to global climate change, and there is very little variation in the carbon intensity of coal types on an energy-adjusted basis because the amount of energy produced is simply a very close reflection of the carbon content of the coal. More importantly, coal comes with a much heavier carbon footprint than any other fuel on the planet. For example, the subbituminous coal characteristic of the Powder River Basin produces 32 percent more greenhouse gas emissions than diesel and 82 percent more than natural gas.[49]

Won't China just burn someone else's coal if we don't supply it?

US coal exports would not supplant the burning of dirtier Chinese coal. Instead, North American exports would add to the volume burned in Asia. In a recent white paper, resource economist Thomas Michael Power demonstrated this point:

> This result—that international competition to serve particular import markets will lower the prices that the importing countries have to pay—should not be startling. One of the major benefits of international trade is that it allows countries access to lower cost sources of supply.[50]

In other words, Washington coal exports will not simply displace other coal in the market. Instead, American coal exports will adhere to fundamental economic principles: an increase in supply will bring down market prices and thereby increase total consumption. The extent to which increasing supply will boost demand is debatable—just like the extent to which higher prices would dampen demand—but the direction of the change is clear.

In fact, some underlying dynamics may make US exports even more critical. As Power points out, lower prices may encourage China to build more coal-burning power plants than they otherwise would, an investment that would lock in elevated coal burning and pollution for decades to come.

Can Chinese coal burning harm the Northwest's environment?

Sulfur compounds, soot, and other byproducts of Asian coal combustion are detectable on mountaintops in the western United States.[51] Researchers have also linked ozone in the air above the United States to pollution from developing Asian countries that are burning fossil fuels.[52] Ozone can exacerbate asthma and heart disease. Mercury, a neurotoxin that is particularly dangerous for children, is especially likely to travel across the Pacific Ocean. An Oregon researcher estimates that as much as 18 percent of the mercury in Oregon's Willamette River comes from sources overseas, increasingly from China.[53] Another study found that human-created pollution from Asia contributed to 14 percent of the mercury dropped on Mount Bachelor in central Oregon.[54]

What's more, burning large amounts of coal accelerates global climate change. Burning 140 million tons of Powder River Basin coal releases roughly 250 million tons of heat-trapping carbon-dioxide into the atmosphere, roughly equivalent to the annual emissions from 57 million cars. A large coal-fired power plant like the one in Centralia, Washington (now scheduled to phase out coal-burning), emits about 10 million tons of carbon dioxide per year.[55] In fact, the carbon content of the coal proposed for export would vastly exceed the carbon from the dirty oil sands fuel planned for transport in the controversial Keystone XL pipeline.[56]

Would coal exports help the Northwest's economy?

Coal interests argue that new terminals will result in substantial new employment and tax revenue for the region, but in fact coal export terminals have been found to employ surprisingly few people relative to other uses of port space. Each of the coal export facilities planned for Washington would occupy hundreds of acres of waterfront land with storage for raw coal, possibly forestalling other,

more job-intensive uses for those lands. For example, at the Port of Tacoma, a marine construction company leasing just 3.5 acres of land and a new cold storage facility on 17 acres of land are each likely to generate 100 new jobs.[57] A Port of Seattle economic impact study found that shipping 1,000 metric tons of grain—a bulk commodity like coal—generates just 0.09 jobs, compared with 0.57 jobs for containerized cargo and 4.2 jobs for "break bulk" cargo, such as big machines or goods shipped on pallets, which requires more handling.[58] A study at the Port of Baltimore came to similar conclusions, finding that coal export supports just 0.11 jobs per 1,000 metric tons, as compared to 0.41 for other dry bulk commodities, 0.43 jobs for containerized cargo, and 1.71 jobs for autos.[59]

Recent redevelopments on port sites along the Lower Columbia River illustrate the weakness of coal exports as an economic strategy. The proposed coal export terminal at Longview would occupy 416 acres of heavy industrial waterfront property and produce 70 jobs—less than 0.2 jobs per acre. By contrast, in Troutdale, Oregon a recently cleaned-up port site attracted a FedEx Ground regional distribution center that employs over 750 people on 700 acres of heavy industrial property—supporting 1.1 jobs per acre.[60] In Vancouver, Washington another redeveloped port site with 218 acres of heavy industrial waterfront is expected to employ up to 1,000 people to accommodate a surge in wind turbines and other cargo—generating 3.4 jobs per acre.[61]

Coal export plans may actually jeopardize aspects of the Northwest's economy. High volumes of coal train traffic are likely to impair freight rail capacity for container cargo, grain, or other shipments. What's more, coal trains are virtually guaranteed to impede truck traffic in key manufacturing areas such as Seattle's industrial SoDo neighborhood, just as they will worsen traffic congestion and delay at street crossings in communities from eastern Montana to Pacific ports.[62] In fact, many residents worry that heavy coal train traffic may impair property values, a concern that is bolstered by a study in southern California that found a close correlation between increased freight rail shipments and reductions in property values near railway lines.[63]

Perhaps the most succinct analysis of the economic challenges comes from a former proponent of coal shipping, RailAmerica, a company that recently shelved plans to develop a coal export facility in Grays Harbor. After spending more than 18 months on a plan to ship coal abroad, the firm told a local newspaper that, "we believe that there are other uses and other opportunities for that terminal that are much more likely to generate jobs, economic development, tax revenues, (and provide a) general increase in business for the Port."[64]

Will Canada ship the coal if the US does not?

Although coal mined in the US accounts for only a small percentage of the total volume shipped through BC ports, US coal mining companies appear to have looked at reaching new Asian markets through BC ports.[65] In January 2011, for example, Arch Coal announced that it had reached an agreement with Ridley Terminals to export 2.5 million metric tons of coal annually from Prince Rupert. In June 2011, Cloud Peak Energy announced an agreement to export an unspecified volume of coal from the Westshore Terminals over a 10-year period,[66] and so far, it appears that Cloud Peak is moving approximately 4 million tons per year via Westshore.[67]

Yet big increases in shipments of American coal from British Columbia are highly unlikely. Canadian steelmaking coal is in high demand, and it brings significantly higher prices than the Powder River Basin coal. Moreover, to a large extent, BC's coal ports are structured to handle primarily Canadian coal and other exports. Finally, space is limited at BC terminals. Expansions planned for BC's coal terminals do not come close to providing enough capacity for the volumes of coal called for by the recent proposals in Washington. In fact, if all of the planned new capacity that is not already claimed by contract were filled by US coal (rather than by higher-value Canadian coal), and even if all three of BC's coal ports were able to operate year-round at full capacity—two highly unlikely scenarios—the terminals would have less than 13 million metric tons of extra capacity, a tiny fraction of the 140 million tons planned for Oregon and Washington.[68]

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. 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.

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. 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."[69]

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

Would Asian markets provide reliable demand for US coal?

As Asia's dominant coal consumers, China and India will determine the future of the Pacific thermal coal markets.[70] Indian and Chinese coal sectors are alike in at least two important respects. First, in both countries, growth in coal demand—particularly demand for thermal coal—will likely be dictated to a large extent by the country's demand for electricity. A rising demand for power would suggest increased coal use. Yet the electricity markets in both countries are subject to a range of policies that heavily distort normal market operations and make predictions fraught with uncertainty. Second, both countries have ample domestic supplies of coal, easily enough to supply their demand. But poor transportation infrastructure currently hinders greater use of domestic coal reserves. Clouding matters, government policies in both India and China currently suppress domestic coal production. At least one news account suggests that China is uninterested in large-scale coal imports from the United States with experts citing "high transportation costs, political red tape and environmental regulations" as major barriers.[71]

China is particularly relevant to Northwest coal export plans because it is responsible for half the world's coal consumption. In the past, economic growth and increased electricity consumption have gone hand-in-hand in China, and academic studies focused on China indicate that electricity supply leads economic growth.[72] For a growing China, then, an increase in electricity supply could point to an increase in demand for thermal coal as roughly 80 percent of the country's power is currently generated at coal-fired plants.[73] Yet the corollary is that stalled economic growth could mean a reduction in demand, and there is mounting recent evidence to suggest that China's demand for coal and electricity is declining. For example, news accounts show Chinese ports glutted with coal, prices falling, and coal buyers abrogating contracts with dozens of importers.[74] In fact, there is increasingly widespread agreement that China's economic boom is drawing to a close and that the country is poised for a slowdown, at minimum or even economic decline, heralding diminishing demand for imported thermal coal.[75]

Can the US compete with other exporting countries?

US coal interests will face stiff international competition in selling coal to Asian markets. Australia and Indonesia both enjoy abundant coal reserves, together accounting for over half of global coal exports. Several other nations, including Russia, South Africa, and Colombia, are already well established in the global coal trade, and may already be positioned to boost exports to Asia. In contrast, North America is a newcomer to Asia's thermal coal markets. With essentially no current coal export capacity on the Pacific coast, the US in recent years has mostly provided Asia with high-grade coal suitable for steelmaking, rather than the lower-grade coal used for electricity.[76]

Moreover, the United States is poorly positioned in geographic terms to supply a commodity like coal where the price is determined largely by the costs of transportation. Major coal-exporting nations like Australia, Indonesia, and Russia enjoy much greater proximity to key markets, and are therefore likely to enjoy lower costs. Even relatively small players in the global coal trade, such as Mongolia and Vietnam, already supply far more coal to China than the United States, largely owing to their advantageous geographic proximity to Chinese coal ports.[77] In fact, one Japanese coal-mining company aims to triple exports to China from Mongolia.[78]

What's the history of coal exports on the West Coast?

Two West Coast port cities have already gambled on coal-export facilities. Both lost. After investing millions of dollars in infrastructure and setting aside sizeable harbor acreage to coal export facilities, both Portland and Los Angeles watched their promised revenue from coal exports evaporate. The abandoned coal export facilities represented millions in stranded investments and clean-up expenses, not to mention years-long missed opportunities for more durable economic development choices.[79]

The early 1980s saw a rush of coal companies proposing export terminals in Washington and Oregon to satisfy a hungry Asian market. Longview, Kalama, Vancouver, and Astoria all entertained proposals, but the Port of Portland bought in.[80] The Port and investors spent $25 million building a coal export terminal, but two years later, the project imploded after Asian markets proved unstable and unreliable.[81] Analysts later determined that coal export failed because the Asian demand was based on promises rather than actual long-term contracts and international banks studying the issue found that the demand for coal had been "vastly overstated."[82]

After the Portland collapse, West Coast coal export plans went dormant until the early 1990s when the Port of Los Angeles forged ahead with a facility on the strength of promises by coal giant Peabody and other investors.[83] The plan was an enormously divisive project that alarmed neighbors and nearby workers who were concerned about coal dust and other impacts.[84]Their fears proved well-founded. The terminal experienced at least two fires after dangerous amounts of coal dust accumulated in the ship-loading machinery.[85]

The LAXT facility closed just six years after it opened, owing to unfavorable market conditions. When the facility shut down, the city of Los Angeles had to write off $19 million of capital investment, and forfeit $94 million in expected revenue.[86] Ultimately, the city was sued for improperly managing the site—and for failing to consider alternative uses of the site—and local authorities shelled out $28 million to settle the suit.[87]

About the Author

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This report benefited from valuable research contributions by Pam MacRae, John Kriese, Jennifer Langston, Clark Williams-Derry, and Brett VandenHeuvel. Layout and design by Nicole Bernard.

Sightline Institute is a not-for-profit research and communications 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.

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