

160612 Eric Strid comments on the MBTL DEIS

S.3 Applicant's Project Objectives

The Project Objectives are to:

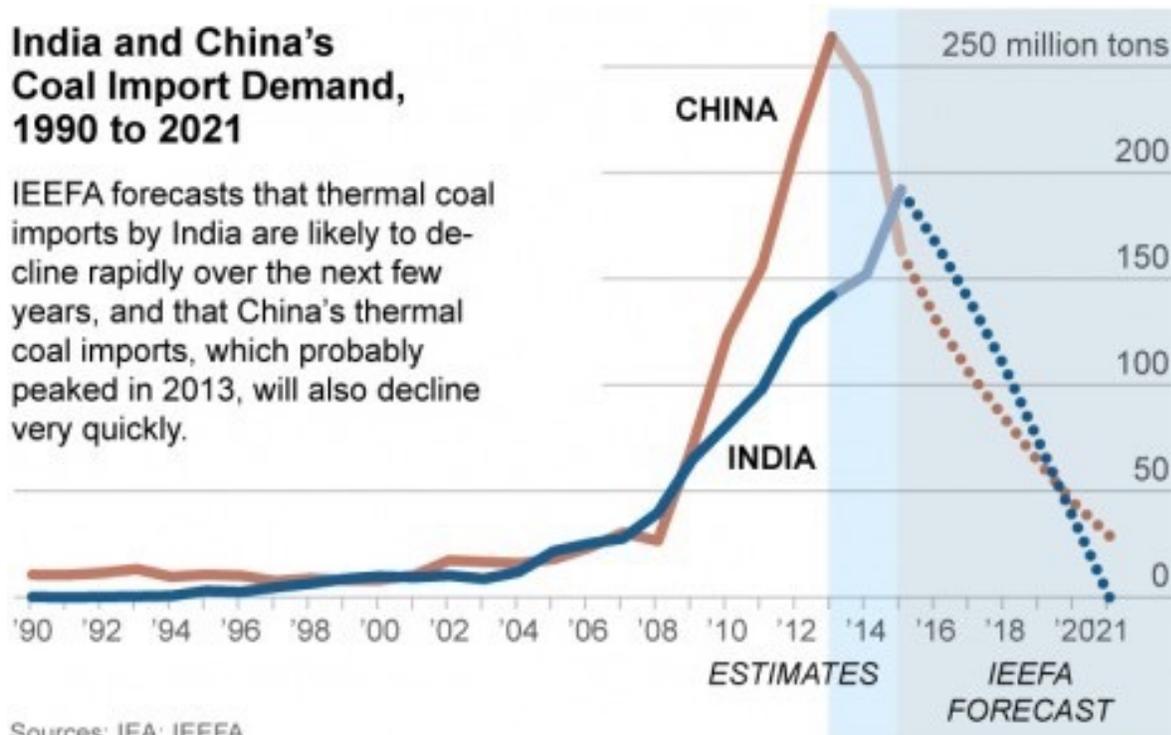
- Enable western U.S. coal to compete in the Pacific international coal supply market,
- Diversify Washington State's trade-based economy, and
- Reduce local unemployment.

Given that the global demand and price for coal continue to decline while clean-energy alternatives continue to improve, none of these objectives are likely to be achieved. *This project is already a stranded asset, even before the EIS is done.*

The DEIS is deficient in its use of outdated market data in the SEPA Coal Market Assessment Technical Report. For example, Figure 12 shows China coal imports rapidly rising through 2012, while in fact those imports peaked in 2013 and have declined since then. India was supposed to ramp up its coal imports, but the latest forecasts (and news reports) show both China and India coal exports dropping dramatically¹:

India and China's Coal Import Demand, 1990 to 2021

IEEFA forecasts that thermal coal imports by India are likely to decline rapidly over the next few years, and that China's thermal coal imports, which probably peaked in 2013, will also decline very quickly.



[1] <http://ieefa.org/indias-new-emissions-target-adds-momentum-to-global-energy-transition/> (Oct. 2015)

In both countries popular sentiment against coal emissions and continuously falling prices of wind and solar power have turned around further expansion of coal power plants.

In 3.1.3.2 it is noted that, “Delivered prices to Japan in the range of \$3.0/MMBtu suggest that Powder River Basin coal would have a difficult time being cost-competitive, if shipped through the Pacific Northwest to Japan or other Pacific Basin countries, until international coal prices increase.” So the financial viability of this project hinges on whether international coal prices will significantly increase, but there is no stated rationale for such an increase. Table 12 forecasts coal prices doubling through 2040. Table 13 predicts 2016 natural gas prices more than twice as high as actuals, and not related to recent trends. Table 14 predicts China demand increasing at 1.67% CAGR, and India at 2.24% CAGR, through 2038. For all the detail and complexity of this IPM model, it wasn’t anywhere close to predicting the massive US coal bankruptcies of the past year.

Due to wrong data inputs, most of sections 4, 5, 6, and 7 in the SEPA Coal Market Assessment Technical Report are grossly in error. The entire report must be redone for the EIS, using updated actual demand and prices, and more realistic assumptions about future demand, especially in light of continued low natural gas prices worldwide and continuously decreasing costs of wind and solar electricity.

The DEIS is deficient in not analyzing how such a terminal could possibly be part of a profitable coal export business model by 2024, or ever. The EIS must include potential environmental impacts of a poor or marginal business model, such as:

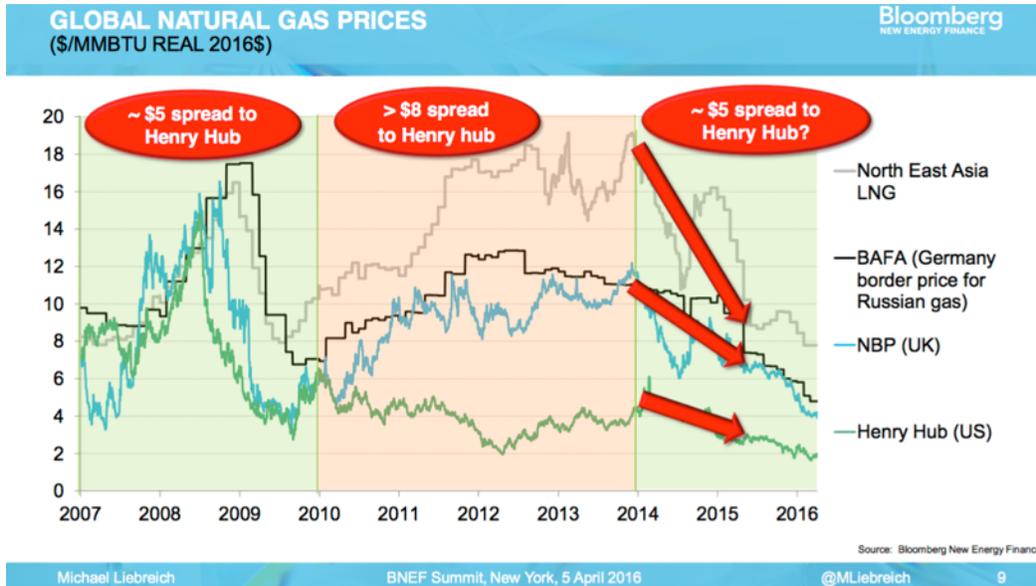
- 1) Inability of the terminal owners to afford the insurance, internal inspections, safeguards, personnel training, or updated equipment necessary to ensure proper operation for minimal environmental effects.
- 2) Insufficient financial reserves to pay for spill remediation, plant or equipment upgrades, or site cleanup when the terminal closes.

This project has already proven to be uneconomic. It’s a zombie, perpetuated by a bottom-feeding financial entity that simply hopes to sell it to the next bigger fool. All the coal companies that might use this terminal have gone bankrupt, and none of them are willing to sign up for it.

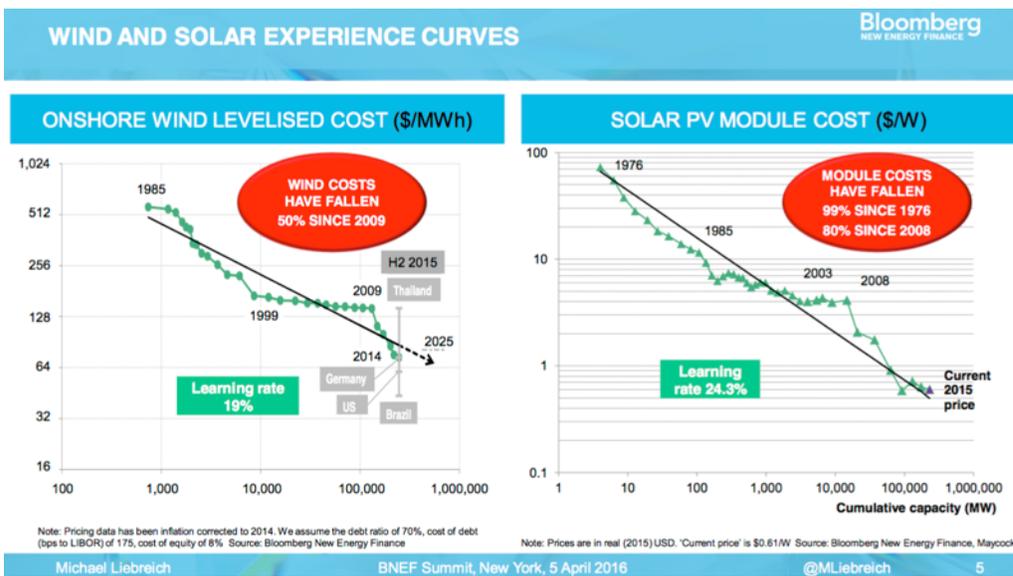
Worldwide coal demand is shrinking, particularly with China shuttering coal plants now and installing solar and wind power. Thermal coal prices continue to slide since their peak in 2011:



Four years ago Deutsche Bank presciently noted that “Coal is a dead man walking.” At that time the business model was deteriorating, nobody would insure a coal project, and carbon capture and sequestration was clearly destined to be a loser because the economics don’t work, even if the hardware might. The coal death spiral has continued, until now all the largest US coal companies are bankrupt and there is a \$2.7B coal cleanup bill² that taxpayers may end up paying. In March the US used 33% less coal than last year³. Natural gas prices have caused many of the coal plant closures:



And the impressive cost trajectories of wind and solar power further guarantee coal’s obsolescence⁴

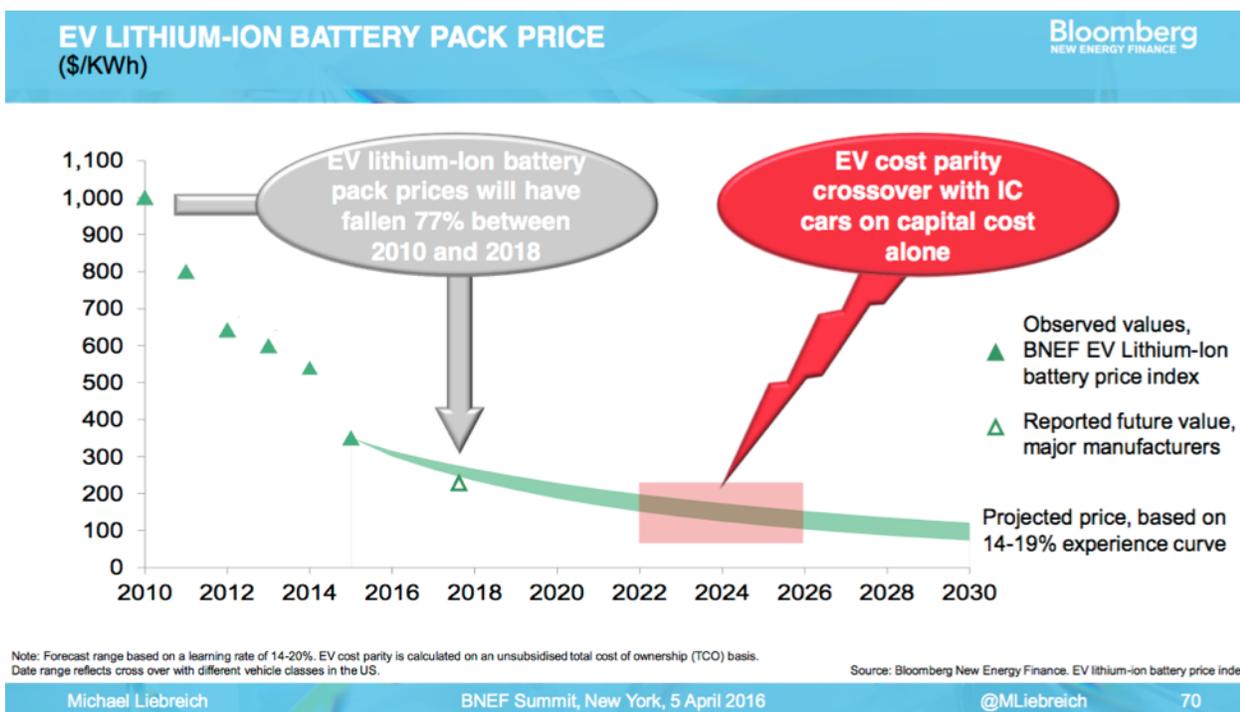


- [2] cleanup costs <http://thinkprogress.org/climate/2015/06/08/3667061/coal-cleanup-insurance/>
 [3] 33% less <http://www.utilitydive.com/news/eia-coal-generation-drops-222-in-march/420107/>
 [4] Global coal markets <http://about.bnef.com/video/liebreich-state-industry-keynote-bnef-global-summit-2016/>

BNEF notes that the combined effect of more affordable wind, solar, and natural gas energy, plus nascent storage technologies, is that we are awash in power generation, although still short of enough storage options. In this mix coal is the least desirable, due to its high emissions of greenhouse gases (GHGs) and toxics, high water usage, and the superior startup/shutdown ability of gas peaker plants.

This project is expected to be operational in 2024. By that time the International Technology Roadmap for Photovoltaics (ITRPV) conservatively estimates that PV modules will cost half what they did in 2013.⁵ Wind power continues to get cheaper and more consistent as hub heights increase⁶. And lithium-ion batteries will be about half their current cost by 2024 as electric vehicles ramp up⁴.

- [5] <http://www.itrpv.net/Reports/Downloads/>
 [6] <http://energy.gov/eere/wind/wind-vision>

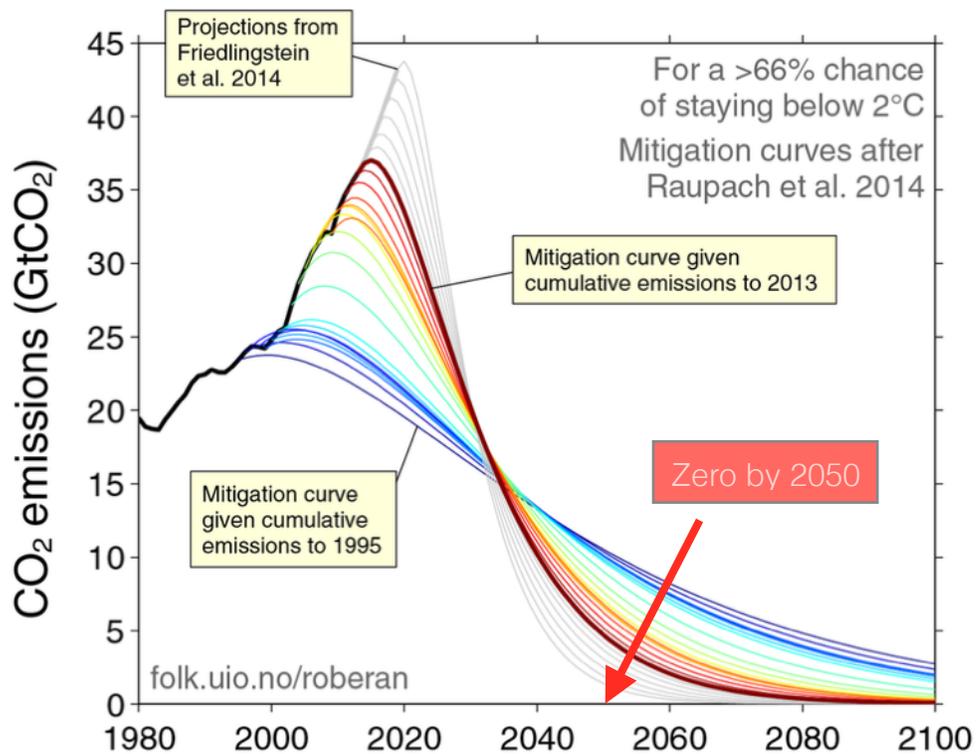


The EIS must justify why Longview should dedicate prime industrial real estate to such a clear loser project.

GHG Emissions (SEPA Coal Market Assessment Technical Report)

Due to the gross inaccuracies of the modeling in this report, the GHG emissions are also unusable and must be redone.

The global requirement to rapidly cut GHG emissions will render coal increasingly unsuitable and more expensive in the coming years. This chart from the IPCC illustrates the urgency with which emissions must be cut to achieve a 66% chance of holding global warming to 2°C:



At what point will the EIS become obsolete because the business or environmental landscape has changed so much that the EIS findings are no longer accurate? For example, fees on greenhouse gas (GHG) emissions are increasing and being applied in more countries, particularly China.

S.7.1 Social and Community Resources

A. Solar resource

The DEIS is deficient in not addressing the loss of solar resource as a significant community resource. The DEIS should note that the large area used by the project (190 acres) could be utilized for solar power generation as a dedicated solar farm or with solar arrays atop large warehouses or other buildings.

A comparable utility-scale solar generation facility is the Baldock Rest Area on 7 acres on I-5 near Wilsonville, which generates 1.75 MW of power.

<http://www.solarworld-usa.com/newsroom/news-releases/news/2012/advanced-transportation-energy-systems>

190 acres in Longview is enough space for a 47 MW ground-mount solar installation. 47 MW could entirely power about 3100 homes plus two electric vehicles per home (15 kW per home). That's roughly 20% of the homes in Longview/Kelso. Such facilities are very financially efficient and will be increasingly attractive as solar technologies get cheaper.

Instead of offering a best case of 135 jobs, 10,000 residents would be better off with free energy to entirely and cleanly power their houses and cars. At 8.3 cents/kWh and gasoline at \$2.50 per gallon, the average Longview household (assume two electric cars) would save about \$900 for electricity and \$2500 in gasoline annually; and 3100 households would save over \$10 million a year, which is 50% more than the average income of 135 Americans.

Rail tracks, a huge pile of coal, and coal dust everywhere don't allow space for solar energy collection. (Roof space would not be as space-efficient as a ground-mounted array, so perhaps half of the 47 MW would be available if panels are mounted on warehouses.)

B. Land resource

For the third Project Objective, the DEIS is deficient in not pointing out the extremely poor use of the land area for creating jobs. The project would generate less than one job per acre of land used. Any small-business park creates at least 30 jobs per acre, including parking.

Volume III.c

2.3 Reduce Local Unemployment

I'm a retired high-tech CEO. I cofounded, and for decades led, an Oregon company (Cascade Microtech, Inc.) which now employs over 500 people and is still growing, so I feel qualified to opine on creating jobs. I didn't need pollution subsidies or environmental waivers to create jobs — what I needed was talented people, and talented people don't want to be anywhere near coal chutes or coal piles. A huge pile of coal is one of the least attractive features a town can have.

Instead of creating a Superfund site, Longview would enable more jobs by adopting policies that attract more people to live in Longview. People now seek clean, walkable neighborhoods with recreation options close by. Like a pedestrian/bicycle path on the waterfront, next to a solar farm. Portland would love to get back the waterfront on the east side of the Willamette, but now moving everything is prohibitively expensive.

The DEIS is deficient in not estimating the loss of jobs and property values along a coal chute through the Columbia Gorge National Scenic Area. How many talented people would decide that they'd rather live somewhere with clean waterfronts, far from coal trains? How much would property values decline as a result of noise, coal dust, waiting for 16 more trains every day at at-grade crossings, etc.? What would be the environmental and cultural impacts of a coal train derailing and dumping coal into the Columbia?

The DEIS is deficient in not analyzing how many people MBTL expects to hire from the existing Longview workforce. The current progress of artificial intelligence and robotics will obviate jobs like vehicle drivers and any job that is repetitive or dangerous. So is the estimate of 135 operating employees realistic? BNSF runs a train with two people, and coal plants unload coal cars with one person per shift. The only jobs not automated at the terminal would be for managers and automation experts—how many of those currently live in Longview? How many jobs would actually be created?

This is not a complete review.

This compendium is only comments from briefly browsing portions of the DEIS. The inaccuracies and incompleteness are frankly disappointing and shocking. How is a reader supposed to trust this data through 2038 when it is grossly in error for 2016? The revisions necessary are so extensive that it warrants a further DEIS cycle of reviews. And this EIS is a waste of everyone's time unless there are funding entities signed up to build the project, instead of running away from it.

Thank you for this opportunity to voice my inputs.
Eric Strid