

LNG in B.C.: Fracking our future



The B.C. government is touting liquefied natural gas (LNG) exports as an economic panacea. But B.C.'s fracking plans are a tremendous risk for little reward.

Fracking is a process where water, sand and toxic chemicals are blasted into shale or coal beds under high pressure, creating cracks in the rock that allow gas to flow up the well. Then, via a network of pipelines, the fracked gas would be transported to LNG terminals along the coast of B.C., to be transformed into LNG by super-cooling it in huge refrigeration plants. It would then be loaded onto mega-tankers – over 300 metres in length, the size of three football fields – for export to Asia.

B.C.-wide, over 14 LNG projects are planned, although industry experts are expecting only three or four of them to be approved. LNG projects are proposed for Prince Rupert, Kitimat, Squamish, Delta, Campbell River, and the west coast of Vancouver Island.

LNG and fracking lead to climate chaos

By 2020, the carbon pollution from LNG development could equal three-quarters of the amount produced by the tar sands, which would more than double B.C.'s current levels of greenhouse gas emissions.¹ A study by Cornell University found that, compared to coal, the footprint of shale gas is at least 20 per cent bigger because of methane emissions from fracking, which are at least 30 per cent greater than conventional gas.² LNG terminals will also seriously impact air quality and create acid rain.

B.C.'s LNG export industry is an economic risk

The process of cooling and liquefying gas in order to load it onto supertankers is extremely expensive. LNG is currently 2.5 times more expensive to produce than typical gas. Yet LNG requires relatively few workers,

meaning fewer jobs and less local economic development. More jobs would be created by investing in transit, energy efficiency and renewable energy.³

LNG profit projections assume a high price in Asia, but that is unlikely to be sustained, with Bloomberg predicting a 60 per cent price drop.⁴ Competition is fierce from countries like Qatar, the world's largest exporter of LNG, and Australia.⁵

Geoscientist David Hughes warns that LNG exports on the scale that B.C. Premier Christy Clark envisions would require ramping up B.C.'s gas production to roughly 50 per cent more than what is produced in all of Canada, impacting our water, climate and public health.⁶

LNG contaminates water

Assuming that nine of ten proposed wells were fracked, about 582 billion litres of water would be contaminated. More than 600 chemicals are used in fracking, and many have been linked to cancer, mutations, and impacts to the nervous, immune, and cardiovascular systems. The Fort Nelson First Nation has stated that fracking on their territories represents "the largest and most destructive industrial force that our waters have ever known." The boom in proposed LNG developments could result in a 600 per cent increase in fracking on their already heavily impacted territory.

Pacific Northwest LNG and Prince Rupert LNG are located in the most sensitive spot for millions of Skeena salmon. Lelu Island and Ridley Island near Prince Rupert are both being considered as locations for LNG terminals. The construction and operation of LNG terminals could be the tipping point for Skeena salmon, the second largest wild salmon run in Canada – one they may never recover from.



- 1 www.pembina.org/op-ed/2515
- 2 www.eeb.cornell.edu/howarth/Howarth%20et%20al%20%202011.pdf
- 3 bluegreencanada.ca/more-bang-for-our-buck
- 4 commonsensecanadian.ca/bc-lng-economics-dont-add-new-report/
- 5 www.theglobeandmail.com/report-on-business/international-business/the-lng-race-the-lessons-canada-can-learn-from-australia/article17946509/
- 6 www.watershedsentinel.ca/content/david-hughes-bc-lng-reality-check

LNG plants also impact the marine environment. These plants will be cooled by sea water and will discharge massive amounts of water back into the surrounding marine environment at higher temperatures. In the case of the Woodfibre LNG project proposed for Howe Sound, the discharged water will also contain the chemical hypochlorite – what effects this will have on marine life remains unknown.

LNG tanker safety and risk

There is much uncertainty as to the safety of LNG tankers and what would happen in an accident. However, in the unlikely event of a serious LNG tanker accident, the consequences could be severe to nearby populations. Spilled LNG could form a low, combustible fog. Worst case scenario? If ignited by a passing boat or a cigarette, the fog would burn at 538°C and could cause fatalities within 1.6 kilometres and third-degree burns for up to 3.5 kilometres.⁷ With some LNG projects and tanker routes proposed near major population centres, the stakes are high. As a result of these safety concerns, the municipalities of West Vancouver and Lions Bay have urged bans on LNG tankers in Howe Sound.

Resistance to fracking and LNG is building

Seventy per cent of people in B.C. support a moratorium on fracking.⁸ Fracking moratoriums have been achieved in Quebec, Nova Scotia, and the Whitehorse Trough in the Yukon. A moratorium has been promised by the recently elected New Brunswick government.

In the path of fracked gas pipelines, the Unist'ot'en clan of the Wet'suwet'en First Nation have built a cabin, a traditional pithouse, permaculture gardens and a bunkhouse for blockaders. Luutkudziiwus, Xsim Wits'iin, Noola and Gitxsan hereditary chiefs declared their territory permanently closed to all natural gas pipeline development, and began construction of a long-term base camp. A significant proportion of the Kispiox Valley's local population signed onto the Kispiox Declaration against the LNG projects proposed in the community. Concerned residents in Squamish have been organizing and educating their community on the risks of the Woodfibre LNG project. Several nearby councils, like Gibsons, West Vancouver, Lions Bay and the Sunshine Coast Regional District, recently passed resolutions or wrote letters against either the Woodfibre LNG or LNG tankers in Howe Sound.

7 commonsensecanadian.ca/VIDEO-detail/lng-tankers-pose-safety-risk-howe-sound-chemistry-phd/
8 www.canadians.org/media/results-ekos-research-poll-october-2014

Take action!

1. Visit www.canadians.org/fracking and sign the “Ban Fracking Now” petition.
2. Write to Premier Christy Clark to demand a moratorium on fracking and LNG in B.C.
3. Ask your municipal council to pass a resolution or bylaw banning fracking and LNG in your community, and LNG tankers off the coast.

For more information, please visit our website at www.canadians.org/fracking, or call 1-800-387-7177.