

Hon. Mary Polak
Minister of Environment
PO Box 9047 Stn Prov Govt
Victoria, BC V8W 9E2

Hon. Rich Coleman
Minister of Natural Gas Development and Housing, and Deputy Premier
PO Box 9047 Stn Prov Govt
Victoria, BC V8W 9E2

Hon. Bill Bennett
Minister of Energy and Mines, and Responsible for Core Review
PO Box 9047 Stn Prov Govt
Victoria, BC V8W 9E2

April 16, 2015

Dear Ministers Polak, Coleman and Bennett,

We write to you as members of the Energy Forum, a collaboration of British Columbian power producers, industry associations and non-government organizations that are working together to address the challenges and opportunities presented by the nexus of energy, climate and ecosystems. Our organizations collectively support British Columbia taking the actions necessary to meet its climate change commitments in the short, medium and long-term as laid out in the *Greenhouse Gas Reduction Targets Act*.

We are encouraged by the language in this year's Speech from the Throne that indicated B.C. "will continue to provide a positive example to the world that there is no need to choose between economic growth and fighting climate change." We support this commitment and it aligns well with the government's intention to move ahead with a second phase of its Climate Action Plan.

In that context, one of our areas of work is liquefied natural gas (LNG) and upstream natural gas development in the province. We are working to advance changes in provincial policy that will lead to reduced greenhouse gas (GHG) emissions from the production, processing, transportation and liquefaction of natural gas in B.C. We believe these objectives align with your government's and we would like to work collaboratively with you to achieve them.

Opportunities to reduce GHG emissions from upstream gas development

In 2012, B.C. produced 41 billion m³ of raw natural gas.¹ The production, processing and transportation of that natural gas resulted in 10.2 million tonnes of GHG emissions — 17 per cent of B.C.'s total.² Assuming 25 per cent of raw natural gas is used or lost from

¹ B.C. Government (2014), *Production and Distribution of Natural Gas in B.C.* Accessed on March 2, 2015 from: <http://www2.gov.bc.ca/gov/DownloadAsset?assetId=9AB708CD43A94A47A799DA166D449872&filename=gasnew.xls>

² The 10.2 million tonnes are from B.C.'s facility level GHG inventory. Accessed on March 2, 2015 at <http://www2.gov.bc.ca/gov/topic.page?id=FBB18F75B34F4B47BBBDECE8D784B0CF&title=GHG%20Facility%20Inventory>

wellhead to the conversion to LNG,³ that 41 billion m³ of raw natural gas would be enough to produce 23 million tonnes of LNG for export. If the province's target of almost four times that amount (82 million tonnes of LNG) is realized, the upstream natural gas development could be responsible for 36.8 million tonnes of GHG emissions. This would increase B.C.'s emissions by more than 50 per cent.

Fortunately, the emissions from upstream natural gas production are not fixed. The actual emissions will depend on the level of LNG development that proceeds, the source of the gas and the technologies and practices used to extract, process and transport it.

Of particular interest to our work are the technologies and practices used to develop natural gas in B.C. Opportunities to reduce GHG emissions include electrifying natural gas processes via B.C.'s world-class renewable energy resources, improving compressor efficiency, reducing leaked and vented methane and capturing and storing vented carbon dioxide.

We appreciate that you are interested in taking advantage of these opportunities. Through the public release of the *Greenhouse Gas Industrial Reporting and Control Act*, Minister Polak stated that the government "is committed to working with industry to reduce emissions in the upstream."⁴ And during legislative debate, the Minister stated: "We know the real challenge is with emissions that are coming from the upstream when you get off the footprint of the facilities. Huge challenges, but also huge opportunities."⁵

Taking advantage of those opportunities will require stronger policies. Those could take the form of collaboration with producers and clean energy developers to improve access to the grid, technology requirements or performance benchmarks for specific segments of the natural gas supply chain, and an increased and broadened carbon tax.

Opportunities to reduce GHG emissions from LNG terminals

Through the *Industrial Reporting and Control Act*, the province has already taken initial steps to limit emissions from LNG terminals. We are supportive of the approach of having industry-specific GHG-targets that augment the province's carbon tax. We also see important opportunities to strengthen that framework over time, so that LNG terminals (along with the rest of the economy) have an increasing incentive to invest in clean energy and reduce emissions.

As with efforts to address upstream GHG emissions, the government has a range of policy options at its disposal to require ongoing performance improvements. This could include increasing the carbon tax, lowering the emissions intensity target and increasing the technology fund price over time.

These types of changes would encourage proponents to look at a full range of design options, including those that exceed the current target of 0.16 tonnes of GHG emissions per

[20Reports%20-%20Questions%20%26%20Answers](#). The 17 per cent is calculated using the 60.1 million tonnes reported in Environment Canada's National Inventory Report.

³ The Ministry of Natural Gas Development and the Oil and Gas Commission also use the 25 per cent assumption in their LNG forecast (<http://www.bcogc.ca/node/11277/download>).

⁴ B.C. Government new release (2014). Accessed March 26, 2015 from:

http://www2.news.gov.bc.ca/news_releases_2013-2017/2014ENV0092-001579.htm

⁵ Hansard of the B.C. Legislature (2014). Accessed March 26, 2015 from:

<http://www.leg.bc.ca/hansard/40th3rd/20141029pm-Hansard-v16n8.htm>

tonne of LNG produced. Even if onsite improvements were not made, strengthened policy would increase the amount invested in offsets, the amount money allocated to the technology fund or that received in carbon tax revenues.

To summarize, we are supportive of provincial policies that will lead to GHG emissions abatement in LNG and upstream natural gas development. Furthermore, we are keen to provide our ideas and expertise in support of these outcomes. We will be expanding our work in these areas through 2015 and hope that they can become useful contributions to the second phase of B.C.'s Climate Action Plan.

Thank you for taking the time to consider our perspectives on efforts to increase clean energy and reduce emissions from LNG and natural gas development in the province. We would like to meet with you to discuss these opportunities in more detail, including how we can work together to achieve them.

On behalf of,

Alterra Power Corp.
Boralex
Canadian Wind Energy Association
Chinook Power Corp.
Clean Energy B.C.
Clean Energy Canada
David Suzuki Foundation
Ecofish Research Ltd.
Finavera Wind Energy
Innergex
MK Ince and Associates
Pembina Institute
Sea Breeze Power Corp.
Watershed Watch Salmon Society
West Coast Environmental Law Association

cc:
Deputy Minister Wes Shoemaker
Deputy Minister Steve Carr
Deputy Minister Dave Nikolejsin