



A critical look at BC's new tax breaks and subsidies for LNG

Introduction

ON MARCH 25, 2019 THE BC GOVERNMENT publicly released details of its fiscal framework for LNG development.¹ A package of tax breaks and subsidies to be provided to the LNG Canada consortium is described in an official document, the *Operating Performance Payments Agreement* between the Province of BC and LNG Canada.² The measures therein also serve as a framework for other LNG producers, including the smaller Woodfibre LNG plant planned for Squamish, the FortisBC Tilbury LNG facility in Delta and any other LNG projects that go ahead.

¹ Government of British Columbia, "Legislation introduced to complete fiscal framework for LNG investment, jobs and benefits," March 25, 2019, <https://news.gov.bc.ca/releases/2019FIN0035-000478>

² *Operating Performance Payments Agreement* between the Province of BC and LNG Canada, https://news.gov.bc.ca/assets/releases/2019fin0035-000478/lng_agreement.pdf

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The centrepiece of the LNG Canada Agreement is a “Joint Economic Model” that specifies tax breaks and subsidies effective for up to 20 years after production commences (likely in 2025). Most of the attention is on LNG Canada’s proposed terminal to liquefy gas for export, but the Shell-led consortium has formed an integrated operation from wellhead to final consumption as it includes major Asian buyers of BC gas and their Canadian subsidiaries who hold the upstream rights for gas development. The fiscal framework adds on to other generous policies made by the previous government that favour gas producers.

There are four major measures or concessions made by the BC government in the LNG Canada Agreement:

The new BC government has offered a much sweeter deal to the LNG industry than what the previous government was willing to extend.

1. *Discounted electricity prices:* Through BC Hydro, LNG Canada’s facility will pay the much lower industrial rate for electricity used in production. The value of this subsidy is between \$32 million and \$59 million per year.
2. *Exemptions from increases in the BC carbon tax:* Any BC carbon tax above \$30 per tonne of CO₂ will be rebated for approved facilities that meet a greenhouse gas intensity benchmark. As the tax will be \$50 per tonne by the time the facility opens, this tax break is worth \$62 million per year.
3. *A corporate income tax break:* A natural gas credit against corporate income tax has been created with the intent of lowering tax from the regular rate of 12 per cent to 9 per cent. Prevailing LNG prices suggest that very little income tax is likely to be declared in BC so it is difficult to estimate the value of this tax break.
4. *Deferral of provincial sales tax on construction:* This measure is essentially an interest-free loan that does not have to be repaid for more than two decades. On an annual basis, this break is worth \$17–21 million.

Overall, the new BC government has offered a much sweeter deal to the LNG industry than what the previous government was willing to extend. Not covered here, but also important, are tax breaks provided by the federal government to exempt imported modules for the LNG plant from steel tariffs (estimated at \$1 billion in forgone revenue).³

In this paper, I look at each of the four measures in turn and put some numbers to their cost. I also consider the context of BC’s already-generous royalty regime. Some of these measures have been in play since October 2018 when LNG Canada announced its Final Investment Decision. We are only just learning the details now, although the gist of the policy was announced in July 2018.⁴ I also comment on the relationship between this Agreement and the new CleanBC climate plan introduced in December 2018. As I have reported previously, the CleanBC plan falls well short of meeting the province’s 2030 legislated greenhouse gas (GHG) emissions target, in large part due to LNG Canada’s liquefaction terminal in Kitimat and incremental upstream gas development in BC’s Northeast.

3 S McCarthy, B Jang, J Hunter, “Ottawa clears way for proposed LNG terminal on B.C. coast with tariff exemption” in *The Globe and Mail*, Sept 26, 2018, <https://www.theglobeandmail.com/canada/british-columbia/article-ottawa-clears-way-for-proposed-lng-terminal-on-bc-coast/>

4 M Lee, “Tax breaks and subsidies for BC LNG” in *Policy Note*, July 5, 2018, <http://www.policynote.ca/tax-breaks-and-subsidies-for-bc-lng/>

Electricity subsidies through BC Hydro

DISCOUNTED RATES ON ELECTRICITY FROM BC HYDRO represent a major subsidy to LNG Canada. The previous BC Liberal government in 2014 had established a higher LNG rate to ensure that LNG customers covered “the full cost of new energy required to serve their power needs.”⁵ It also completed a power agreement where “LNG Canada will fund the cost of new infrastructure to be built by BC Hydro.”⁶ Both of these provisions have been eliminated in the new LNG fiscal framework.

Powering fracking and LNG will be the primary purpose of the 5,100 GWh per year Site C dam.⁷ BC Hydro is investing an estimated \$10.7 billion for the Site C dam plus \$600 million for two transmission lines to provide electricity to upstream gas fracking and processing in the Northeast. An \$82-million upgrade is also in the works to deliver electricity to the LNG Canada liquefaction terminal in Kitimat⁸ (of which \$58 million will be paid by BC Hydro), and an as-yet-undetermined amount of funds will be spent to “refurbish” transmission lines between Terrace and Kitimat. The public costs of new generation and transmission infrastructure being built specifically for the gas industry will be spread across all ratepayers (including residential and commercial customers).

In terms of rates, Schedule C of the LNG Canada Agreement provides for LNG facilities to access BC Hydro’s industrial rate of \$47.71 per megawatt-hour (MWh).⁹ This is a substantial saving (\$33.68 per MWh) from the \$81.39 per MWh energy charge for LNG that the previous Liberal government had regulated in 2014. The industrial rate is predicated on BC’s legacy hydropower dams, not on the much higher cost of power from independent power producers (\$91 to 95/MWh cost of supply¹⁰) nor from the Site C dam (\$88–110/MWh cost¹¹). Thus, LNG Canada will only be paying about half the true cost of the electricity it consumes.

The previous Liberal government’s preoccupation with “clean LNG” led to a special “e-drive rate” (equivalent to the standard industrial rate) in 2016 as an incentive for LNG proponents to power the energy-intensive liquefaction process with grid electricity rather than burning gas.¹²

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5 Government of British Columbia, “Terms finalized for LNG customers using BC Hydro system,” news release, Nov 4, 2014, https://archive.news.gov.bc.ca/releases/news_releases_2013-2017/2014MEM0028-001668.htm

6 Ibid.

7 Electricity terminology and measurement can be challenging for many people to follow. For households, the basic unit on BC Hydro bills is the kilowatt-hour (kWh), which is the amount of energy it takes to light a 100-watt bulb for ten hours. One MWh is equal to 1,000 kWh and is approximately the energy requirement of one BC home for one month. Larger loads are generally specified in gigawatt-hours (GWh), where 1 GWh is equal to 1,000 megawatt-hours (MWh). kWh, MWh and GWh are measurements of the amount of energy we use, like the amount of gasoline in a car’s gas tank. Dropping the number of hours, we get capacity. A megawatt (MW) is a measure of the instantaneous ability of the electricity system to generate this energy, like the size of a car’s engine. Both these measures are important in understanding our electricity system works.

8 Email communication from BC Hydro to CCPA researcher, Ben Parfitt, March 25, 2019.

9 These numbers may be somewhat lower than seen elsewhere, as they are just the energy charge per MWh. There is also a demand charge in kilovolt-amperes (kVA), a measure of capacity. Some citations of the industrial or “heritage” rate *add the energy and demand charges together* for past usage to determine an average industrial rate (typically stated at around \$53-54 per MWh). The text of the regulation cited in Schedule C is at <https://www.canlii.org/en/bc/laws/regu/bc-reg-197-2018/latest/bc-reg-197-2018.html>

10 See page 17 of BC Utilities Commission, *British Columbia Hydro and Power Authority, F2017 to F2019 Revenue Requirements Application: Decision and Order G-47-18*, March 1, 2018, https://www.bcuc.com/Documents/Proceedings/2018/DOC_50971_03-01-2018_BCH_F17-19_RRA_Decision_WEB.pdf

11 BC Hydro, *Submission to the British Columbia Utilities Commission Inquiry into the Site C Clean Energy Project*, August 30, 2017, https://www.bcuc.com/Documents/wp-content/09/DOC_90101_F1-1-BCH_submission_SiteC_Public.pdf

12 S McCarthy, B Jang, J Hunter, “Ottawa clears way for proposed LNG terminal on B.C. coast with tariff exemption” in *The Globe and Mail*, Sept 26, 2018, <https://www.theglobeandmail.com/canada/british-columbia/article-ottawa-clears-way-for-proposed-lng-terminal-on-bc-coast/>

Only Woodfibre LNG near Squamish (a much smaller facility than LNG Canada's) would have qualified for this perk, yet LNG Canada now will get the same rate, thus making the incentive of an e-drive rate irrelevant for LNG projects going forward.

Even though it will use gas to power the liquefaction process, LNG Canada will still need lots of BC Hydro electricity for other parts of its operations. BC Hydro's estimate of incremental demand from LNG Canada is 946 gigawatt-hours (GWh) per year.¹³ Connecting this amount to the reduction in electricity rates above yields approximately \$32 million in annual savings relative to the previous \$81.39/MWh LNG rate and as much as \$59 million per year relative to the top end of costs (\$110/MWh) for new Site C power.¹⁴

The amount of subsidy gets worse if we consider the combined electrical load of LNG Canada and two anticipated projects, Woodfibre LNG and Fortis' Tilbury LNG expansion. The three projects would have a combined incremental demand of 2,662 GWh per year according to BC Hydro. This translates into a gain for the LNG sector ranging from \$90 million (relative to the previous LNG rate) to \$166 million per year (relative to Site C power).

The LNG Canada Agreement does not get into this, but electrification of upstream gas extraction and processing—a key plank in the CleanBC plan—will also be subsidized by ratepayers through BC Hydro. There are a range of estimates as to what this would mean, depending on how much production increases and how much upstream activity actually gets electrified. BC Hydro has estimated a range of 2,700 to 4,000 GWh per year of incremental demand. Given the \$88–110/MWh cost range for the Site C dam, this will be a subsidy to upstream fracking operations of between \$108 million and \$249 million per year.

It's hard to determine what portion of this specifically benefits the upstream operations that will feed the LNG Canada export terminal. Modelling for the BC government's CleanBC plan estimates that 60 per cent of LNG production will be incremental supply and 40 per cent diversion of current production levels. If we take those numbers at face value, LNG Canada's 14 million tonnes of LNG exports per year, plus additional gas used to power operations, would equal about one-third of BC's current marketable gas production. For LNG Canada, one-third of the subsidy for upstream electrification translates into \$35–83 million per year although there may be no actual cost savings for the consortium relative to using gas to power extraction and processing. However, any gas saved through electrification would be available for export.

We all will soon face higher electricity prices associated with building Site C and new transmission lines for the benefit of the gas industry, and by subsidizing their operations through rates that are much lower than the cost of new supply. While rates will likely go up for all customer classes as BC Hydro needs to pay for new infrastructure, LNG Canada is largely insulated from its own impacts on the grid (facility and upstream) by paying the lower industrial rate. At \$47.71 per MWh this compares to residential rates of \$88.40 per MWh in the first tier and \$132.60 per MWh for consumption above roughly 650 kWh per month.

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13 BC Hydro, Submission to the British Columbia Utilities Commission Inquiry into the Site C Clean Energy Project, August 30, 2017, https://www.bcuc.com/Documents/wp-content/09/DOC_90101_F1-1-BCH_submission_SiteC_Public.pdf

14 Some would argue that likely cost over-runs for Site C will increase the ultimate cost per MWh beyond that top end.

Rebates on BC carbon tax

THIS MEASURE IS INTENDED TO REBATE INCREMENTAL carbon taxes above \$30 per tonne and is linked to a CleanBC initiative aimed at reducing industrial emissions. BC's carbon tax will go up to \$50 per tonne by the time the LNG Canada facility opens (the tax will reach that level in April 2021). But LNG Canada will be rebated \$20 of the \$50 carbon tax (i.e., it will only have to pay \$30 per tonne) if it builds a facility that meets a world-leading carbon-intensity benchmark (GHG emissions per tonne of LNG produced).

This measure is loaded with irony: LNG Canada will be burning a lot of gas to power its liquefaction facility, making it the province's largest point-source emitter the day it opens for business. Incremental upstream gas production to feed the LNG plant will also lead to higher overall emissions in BC. No matter how clean BC's gas production is, the bulk of emissions from LNG Canada will actually occur in the importing country where the gas is burned.¹⁵

While the details of the CleanBC incentive program are still being worked out, the threshold for qualifying for the carbon tax rebate will almost certainly be favourable to LNG Canada. The LNG Canada Agreement's Schedule C has some discussion of this and posits a benchmark of 0.22 tonnes of CO₂ per tonne of LNG produced, below which new BC carbon taxes would be rebated. Facilities between 0.22 and 0.28 tonnes of CO₂ per tonne of LNG would get a partial rebate of the new carbon taxes on a sliding scale.

For Phase 1 production of 14 million tonnes of LNG per year, LNG Canada would have annual emissions of 3.1 million tonnes of CO₂ if it met the above benchmark of 0.22. At \$50 per tonne, LNG Canada would pay \$154 million per year in carbon tax, but only \$92.4 million at \$30 per tonne, for a savings of \$61.6 million per year due to the rebate.

Again, from an environmental and taxpayer standpoint, the previous government's policies look favourable in comparison. In 2014, the BC government established a much lower carbon benchmark of 0.16 tonnes of CO₂ per tonne of LNG. Above that amount, LNG proponents would have had to buy carbon offsets or pay into a technology fund for emissions. The new policy and higher bar for emissions intensity appear to be a cave-in relative to the more ambitious policy of the previous government.

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Deferred PST on construction

THIS TAX BREAK IS ESSENTIALLY AN INTEREST-FREE loan with incredibly generous terms. LNG Canada would normally have to pay provincial sales tax (PST), estimated at almost \$600 million, during construction of its new facility in Kitimat. This measure defers that upfront cost in favour of a payment schedule over 20 years. The Agreement's Schedule D requires a first payment the fiscal year after the facility opens and every year thereafter for the next 19 years. The sweetheart part of this deal is that in years 1–18 the payment is a modest half a million dollars per year or \$9 million total. Only in years 19 and 20 do payments jump to \$208 million and \$379 million respectively.

¹⁵ See M Lee, *Extracted Carbon: Re-examining Canada's Contribution to Climate Change through Fossil Fuel Exports*, CCPA, January 2017, <https://www.policyalternatives.ca/publications/reports/extracted-carbon>

To see why this is a benefit consider how much you would need to save today in order to pay \$379 million some 26 years from now and \$208 million 25 years from now (assuming the facility opens in 2025, the first payment will be in 2026). The answer depends on the rate of return of your investment and the rest is the magic of compound interest.

For example, at a 5 per cent return per year LNG Canada would only need to set aside \$61 million today to pay \$208 million in 2044 and \$107 million today to pay \$379 million in 2045. These savings work out to \$419 million, or almost \$17 million per year. Other LNG discussions posit a hurdle rate of return of 10 per cent per year¹⁶ for the consortium. At that rate of interest, today LNG Canada would only need to set aside \$19 million and \$32 million for its required payouts in 2044 and 2045 respectively (\$536 million in total savings, or \$21 million per year). Similar calculations can be made for the \$500,000 annual payments in years 1–18, but those amounts are already ridiculously small.

Suffice it to say that this is an extremely generous measure to LNG Canada exempting them from a large proportion of the PST they would have to pay. If only ordinary people could get mortgages or loans with such generous repayment terms.

Reduced corporate income tax

It's hard to say how much this corporate income tax break is actually worth because today's gas prices in Asia don't justify the cost of getting a load of BC LNG to Asian shores.

THE AGREEMENT ALLOWS LNG CANADA to claim a credit for the cost of gas against corporate income taxes (CITs) payable. The maximum credit would lower the CIT rate from 12 per cent to 9 per cent. The previous government included a similar measure when it caved in to industry on its proposed LNG income tax, but while the LNG income tax has been scrapped the credit has been maintained.

Notably, the LNG income tax was aimed at securing a greater portion of the economic rent (or windfall profits above the cost of production) from development of the public gas resource and selling it to Asia. The big difference between the current CIT credit and the 2015 LNG income tax framework (then aimed at Petronas for its proposed Pacific Northwest LNG facility) is that the latter was developed at a time when gas prices were extremely and temporarily high in Asia. Politicians back then saw LNG as a cash cow, leading to, among other outrageous claims, a “debt-free BC” wrap on then-Premier Christy Clark’s election tour bus.

It's hard to say how much this corporate income tax break is actually worth because today's gas prices in Asia don't justify the cost of getting a load of BC LNG to Asian shores. Many analysts see an Asian price of US\$9–10 per million BTU (mmbTU) as necessary for BC LNG to break even due to the costs of liquefaction and transportation.¹⁷ By comparison, gas prices in the US have ranged from US\$2–4 per mmbTU over the last year and US\$7–8 per mmbTU in Japan. Meanwhile, spot prices for LNG in Singapore in March 2019 were just over US\$4 per million BTU.

BC's subsidy and tax concessions will help lower costs somewhat, but not by much. The Agreement's Joint Economic Model estimates the sum of all four measures will lower costs for LNG Canada by a mere 12.9 cents (USD) per mmbTU. Thus, the impact is fairly modest for LNG Canada in spite of serious consequences for BC.

¹⁶ Calculations of costs generally include a provision for a “normal rate of return” or otherwise the company would not necessarily go ahead with the investment in favour of something else.

¹⁷ I review these sources in M Lee, *Path to Prosperity? A Closer Look at British Columbia's Natural Gas Royalties and Proposed LNG Income Tax*, April 2014, CCPA, <https://www.policyalternatives.ca/publications/reports/path-prosperity>

That does not mean production won't go ahead. Prices in Asia could well return to above \$10 per mmbTU. For importing countries this investment is a means of locking down gas supply for 40 years, so even if prices fail to rise substantially in the future it may well be worth it for them to proceed. What it does mean is there may not be very much income to tax. This is doubly true since the Asian buyers for BC's gas (South Korea's KoGas, Japan's Mitsubishi, Malaysia's Petronas and PetroChina) are already part of the LNG Canada consortium and any profits from the venture could easily be declared outside of BC (known as "transfer pricing").

Missing piece: BC's royalties giveaway

THE AGREEMENT IS QUIET ON THE ROYALTIES to be paid on gas production. It's worth noting that BC's royalty regime is also extremely generous to the gas industry with a range of credits for fracking activities that dramatically reduce actual royalties paid. For example, the energy minister revealed in the Legislature that, as of November 2017, there were some \$3.2 billion in outstanding deep well royalty credits, which will diminish future royalty payments to the BC treasury.¹⁸

A retired civil servant with expertise in the gas sector wrote a scathing letter about BC's overly generous regime, estimating that \$6 billion in royalties had been forgone over the past decade due to the deep well credit alone, and that currently "the Crown is giving out \$2 in available rebates for every \$1 in royalty/tax payable."¹⁹ The CCPA's Ben Parfitt has uncovered "a vast suite of subsidies that enabled natural gas companies to reduce their royalty payments by \$447 million last year, with the most generous subsidies offsetting the costs of drilling deep and horizontal gas wells, and building roads and pipelines."²⁰

As a result, net royalty revenues in the BC budget have been in the range of \$140 to 160 million for the past four years due to more generous credits (subsidies to the gas industry). A decade ago, BC received annual royalty revenues in excess of \$1 billion per year from its growing natural gas sector even though total BC gas production increased by more than 60 per cent from 2007 to 2017.

In addition, as part of the previous government's LNG agreement with Petronas, legislation was brought forward in 2015 that allows the minister (then of Natural Gas and Development) to enter into long-term royalty agreements (LTRA) with LNG proponents. These agreements provide greater certainty to both sides in terms of what rate LNG producers will pay and what volumes will be produced.²¹

While Petronas did not move ahead with its own Final Investment Decision in 2018, the corporation has joined the LNG Canada consortium. Through its Progress Energy subsidiary, Petronas

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18 Figure reported by Minister Michelle Mungall in an exchange with Andrew Weaver in the BC Legislature. Text reproduced by A Weaver, "The ongoing subsidy of natural gas extraction in BC", Nov 20, 2017, <http://www.andrewweavermla.ca/2017/11/20/ongoing-subsidy-natural-gas-extraction-vbc/>

19 L Leyne, "Ex-bureaucrat's swan song raps gas royalties" in *The Times Colonist*, March 28, 2019, https://www.timescolonist.com/opinion/columnists/les-leyne-ex-bureaucrat-s-swan-song-raps-gas-royalties-1.23772739?fbclid=IwAR0UfIIO485LbGP3JbILXmEzswgEXea8tUs9vMhUNB1x_YUj6B_N467o6uw

20 B Parfitt, "How clean is a BC that subsidizes accelerated fossil fuel extraction?" in *Policy Note*, Feb 25, 2019, <https://www.policynote.ca/how-clean-is-a-bc-that-subsidizes-accelerated-fossil-fuel-extraction/>

21 C Gunton, *Evaluating British Columbia's Economic Policies for Liquefied Natural Gas Development*, Project submitted in partial fulfillment of the requirements for the Degree of Master of Resource Management, 2018, http://rem-main.rem.sfu.ca/theses/GuntonCameron_2018_MRM708.pdf

owns upstream gas development rights subject to an LTRA at much lower rates: whereas the gross royalty on gas ranges from 9 per cent to 27 per cent of market value depending on conditions, the LTRA starts rates at 6.06 per cent then rises steadily over 22 years to 13.36 per cent.²² There are also some provisions to adjust the royalty based on market price.

This LTRA compounds BC's revenue challenges from the treatment of royalties—which are supposed to represent the public's financial share from the development of the public gas resource—and minimal CIT revenues arising from low gas prices in Asia.

The BC government claims LNG Canada will end up contributing \$22 billion in public revenues over a 40-year lifespan. This is likely a maximum amount if everything goes according to the BC government's plans. Even at face value, the revenue contribution is about half a billion dollars per year, equivalent to about 1 per cent of BC's 2019 Budget, so the claims that LNG will be funding new schools and hospitals are grossly exaggerated.

Locking in supply, emissions and concessions

BC's new climate plan, CleanBC, does not provide a pathway for meeting BC's legislated 2030 emissions target in large part because of LNG Canada.

THE LNG CANADA AGREEMENT SPANS 20 YEARS from the date the facility opens. Section 4.3 locks in the tax and subsidy provisions against future changes by governments that might be concerned about, say, climate change. A decade from now, amid growing climate chaos, a newly elected BC premier will have their hands tied by having to pay financial compensation for any changes to the four measures that affect LNG Canada's bottom line. Only after 20 years (i.e., in 2045) could the measures be revisited for the remaining two decades of the project's anticipated 40-year life.

In any event, it will be hard to know what is really going on because of extensive confidentiality provisions in Section 6 of the Agreement, preventing disclosure (including through Freedom of Information requests or FOIs) of any financial, economic, scientific, planning and sales data that is not public. In other words, any information shared with the BC government is protected; the public only gets to know what LNG Canada wants to tell us.

For all the talk of LNG displacing coal in China and thereby helping to reduce global GHGs there is not a mention at all of such ambitions in the LNG Canada Agreement, much less of adhering to the Paris Agreement on climate change. This is happening even as the City of Vancouver declared a climate emergency, students are striking around the world due to the lack of action on the part of governments, and forest fires have dominated the BC landscape for the past two summers.

BC's new climate plan, CleanBC, does not provide a pathway for meeting BC's legislated 2030 emissions target in large part because of LNG Canada.²³ More measures are promised over the next two years, but the government is also seeking more LNG investment via its fiscal framework. Even if LNG Canada can be made to fit within BC's 2030 target by all other sectors slashing their emissions more rapidly, the facility's emissions are inconsistent with the province's 2040 and 2050 targets (not considered in CleanBC). Feeding that LNG Canada facility will require a major increase in fracking, about which a scientific panel recently raised alarms on environmental and

²² Government of British Columbia, *Long Term Royalty Agreement* with Progress Energy et al, June 26, 2015, https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-gas-oil/uploads/long_term_royalty_agreement.pdf

²³ My analysis of the plan is M Lee, "BC's shiny new climate plan: A look under the hood" in *Policy Note*, Dec 17, 2018, <https://www.policynote.ca/clean-bc/>. BC Government's CleanBC plan at: https://cleanbc.gov.bc.ca/app/uploads/sites/436/2018/12/CleanBC_Full_Report.pdf

climate impacts. Unfortunately, the government is not actively measuring impacts on the ground so a robust evidence base is lacking.

The project is viewed to have a 40-year lifespan, and would thus still be operational in 2064. BC's legislated target for 2050 is for an 80 per cent reduction in GHG emissions relative to 2007 levels. However, this target is arguably too generous as most climate scientists are now calling for net-zero emissions by 2050 (any emissions would need to be offset by carbon sequestration elsewhere). Approving a massive fossil fuel infrastructure project intended to be operational several decades into the future is an example of what is known as "carbon lock in" and would likely result in BC missing its GHG emissions targets.

Misleading and exaggerated claims for LNG benefits

ALRIGHT, YOU MIGHT BE THINKING, is this not the price we have to pay to get a record \$40 billion investment off the ground, one that will create abundant jobs and feed revenues to support schools and hospitals? If the LNG Canada project did not go ahead, the net revenues to BC would be zero.

Well, the BC government's own documents, based on LNG Canada's environmental assessment application, reveal that Phase 1 (the part that is actually going ahead) has a construction cost of \$12.9 to 20.6 billion. The \$40 billion number comes from the range of \$22.6 to \$36 billion for both Phases 1 and 2, rounding up to the high end of the range (2015 dollars so some upward adjustment for inflation makes sense), but this is also for all capital spending around the world. Only \$2.5 to \$4.1 billion will be spent in BC for Phase 1.²⁴

What about jobs? LNG Canada's own filings estimate an average of 3,470 jobs over a five-year construction phase (7,500 at the peak of activity), much lower than the 10,000 construction jobs being claimed by the BC government. Once open, LNG Canada only reckons 350–550 full-time-equivalent permanent jobs in BC—much lower than the 950 claimed by the government in its news releases. While these jobs would be important for people in Kitimat, the cost of getting those jobs in public subsidies and environmental damage is truly massive. BC would do much better by accelerating investments in its CleanBC plan, which would deliver far more jobs than LNG Canada ever will.

As we have seen, the likely contribution of LNG revenues to the BC Budget over 40 years will not be huge. And any positives in terms of jobs and revenue must be weighed against GHG emissions and other environmental impacts. I and others have debunked claims that BC's LNG exports will lower global emissions due to displacement of coal.²⁵ Such justifications are at best wishful thinking.

There is also a strong likelihood that the magnitude of LNG Canada's production leads to higher gas prices for British Columbians, an additional project cost that has not been mentioned. This reared its head in Australia after large new LNG facilities began operating, prompting a full-blown political crisis. Earth scientist David Hughes has demonstrated that BC has less supply of

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24 Government of British Columbia, Environmental Assessment Office, *LNG Canada Export Terminal Project: Assessment Report*, May 2015, <https://www.ceaa-acee.gc.ca/050/documents/p80038/101852E.pdf>

25 M Lee, "LNG Canada: Short-term politics trumps long-term climate responsibility" in *Policy Note*, Oct 4, 2018, <https://www.policynote.ca/lng-canada-short-term-politics-trumps-long-term-climate-responsibility/>

gas going forward than the government has let on.²⁶ The ultimate price may be that we have privatized a public resource for a pittance and that resource won't be available to future British Columbians. BC has basically handed the keys to its gas reserves in exchange for a handful of jobs and a small amount of future revenue.

So it's full steam ahead with blinders on, precisely at a time when scientists and youth are telling us we do not have the luxury of taking our time on climate action. By allowing a massive piece of new fossil fuel infrastructure to be built, any moral authority around climate action and leadership on the part of the BC government has been abrogated. The LNG Canada Agreement shows BC to be subsidizing climate change at a time when we need to keep fossil fuels in the ground.

A rich province like BC — blessed with a well-educated populace and abundant resources — could be a true leader on climate, has instead backed a massive fossil fuel expansion project. In spite of lofty rhetoric and ambition in the CleanBC plan, the LNG Canada project shows BC moving in completely the wrong direction.

Any moral authority around climate action and leadership on the part of the BC government has been abrogated.

²⁶ D Hughes, *A Clear Look at BC LNG: Energy security, environmental implications and economic potential*, CCPA and Corporate Mapping Project, May 26, 2015, <https://www.policyalternatives.ca/publications/reports/clear-look-bc-lng>

This report is part of the Corporate Mapping Project (CMP), a research and public engagement initiative investigating power dynamics within the fossil fuel industry. The CMP is jointly led by the University of Victoria, the Canadian Centre for Policy Alternatives, and Parkland Institute. This research was supported by the Social Sciences and Humanities Research Council of Canada (SSHRC).



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The Corporate Mapping Project shines a bright light on the fossil fuel industry by investigating the ways corporate power is organized and exercised. The initiative is a partnership of academic and community-based researchers and advisors who share a commitment to advancing reliable knowledge that supports citizen action and transparent public policy making.

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