



POLICY BRIEF

Credit Check

Should Canada get climate credit for its liquefied natural gas exports?

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The Context: A chorus singing in harmony

Should Canada get credit for the climate change benefits that come from exporting our liquefied natural gas (LNG) to other countries?

A chorus of voices argues that Canada should be credited for exporting its LNG because the buyers of that gas would otherwise be using coal, which is much worse for the climate. They suggest that the Paris Agreement's Article 6 has provisions that could allow us to receive those sorts of credits, and they urge the federal government to negotiate arrangements along those lines with our trading partners.

That argument comes from many sources in more or less identical form:

- Article 6 LNG export credits appear as part of the Alberta government's 2024 *Emission Reduction and Energy Development Plan* (Alberta, 2024), and Premier Smith has publicly lobbied British Columbia's (BC's) premier to join forces in advocating for them (Canadian Press, 2023).
- At a gathering in 2023, the Western Premiers issued a statement arguing for such a credit (Office of the Premier, BC, 2023).
- On the other side of the country in New Brunswick, Premier Higgs made the same argument in 2024 with respect to East Coast exports of LNG (Farley, 2024).
- A number of research and advocacy groups, including the MacDonald-Laurier Institute (Gessaroli, 2023), the Public Policy Forum (Public Policy Forum, 2024), and the Boston Consulting Group (Green et al., 2023), have made the argument.



- Private sector representatives have also made the argument for Article 6 credits, including RBC (Leach et al., 2023), Energy for a Secure Future (Brunnen, 2023), and the Indigenous-led First Nations LNG Alliance (First Nations LNG Alliance, 2023). Others, including Alberta’s (now defunct) Clean Energy Centre, have picked up the message and amplified it (Ciona et al., 2023).
- Industry-funded research has appeared in peer-reviewed journals suggesting that Article 6 credits for LNG exports could be economically and environmentally significant (Kotagodahetti et al., 2022).

Despite the consensus of all these pundits, credit for Canada’s LNG exports along the lines they suggest is not just a bad idea; it is also likely impossible. There is one feasible variation of the basic proposal, but it too has pitfalls, and it is very far from the simple “sell gas, bank credits” model. This brief unpacks the proposals and explains their shortcomings.

How Does Article 6 Work?

The credits that are being argued for are internationally transferred mitigation outcomes (ITMOs). They are a feature of the Paris Agreement’s Article 6, under which the parties can voluntarily cooperate on reducing emissions.

Article 6.4 creates a project-based mechanism; countries can invest in emissions-reducing projects in other countries and receive credit that can be counted toward their national targets (nationally determined contributions [NDCs]).

Article 6.2, which creates ITMOs, describes a country-to-country arrangement where one party transfers its emissions reductions to another party for credit against its NDC. The transferring party has to make an adjustment to add those emissions to its declared inventory—the emissions reductions are no longer considered theirs.

There have not been many Article 6.2 deals to date, but they involve capacity building and/or investment in the activity that reduces emissions, like Switzerland’s investment in low-carbon rice cultivation in Ghana, as well as payment for the credits transferred (United Nations Development Programme, 2022).

ITMOs being a country-to-country deal, the Canadian government would have to strike a deal with some other Paris Agreement party under which we would take credit for the emissions reductions they experienced in burning exported Canadian LNG.

Why Is Credit for LNG Exports as Proposed a Bad Idea?

The most significant problem is that the emissions reductions in question would very likely not be real. That is, Canadian LNG exports would not result in a reduction in emissions in other countries. To be clear, that is a problem because if Canada claims emissions reductions that did not actually take place and we thereby claim to achieve our climate targets, then we do not



actually achieve those targets; we overshoot them by the number of false tonnes we claimed. We exacerbate climate change and fail to do our pledged part in addressing it.

The heart of the problem is the nature of the rules on Article 6.2 (for ITMOs), which, while they are not yet fully agreed upon, look to be very loose if and when they are. Article 6.4 will have very strict rules, including agreed methodologies to arrive at the numbers, rules to ensure that emissions reductions would not have just happened anyway (the problem of additionality), rules to ensure that emissions reductions cannot just be reversed in the future (the problem of permanence), and a central supervisory body to ensure that those rules are followed in each project. This is not so for Article 6.2, which will involve bilateral deals with no central scrutiny beyond making sure the paperwork is in order.

Why does that matter? Because the logic of our LNG exports actually reducing emissions elsewhere is dodgy, and so it needs that kind of strict review.

- Most challenging is the question of additionality: how do we prove that the facilities that burn our gas would have burned coal if not for Canadian LNG exports? Even if they did switch from coal to gas, if not for Canadian LNG, they might have simply bought gas from some other country. Or perhaps there is no switching involved, and our LNG is being sold to gas-fired generators that were never designed to burn coal. Additionality is a central requirement for Article 6, and it is hard to see how the LNG export proposals could meet it (Gessaroli, 2023; Sullivan et al., 2023).
- As well, our upstream fossil gas emissions are much higher than reported figures, as shown repeatedly in recent research (Chan et al., 2020), meaning that even if there is additionality, there may not be as many emissions reductions available as proponents argue. Some estimates of the advantages of LNG over coal rely on data from firms that are far better than the industry norm at preventing upstream methane emissions (Nie et al., 2020).
- In the same vein, when we take into account the energy needed to super-chill gas to a liquid, maintain it in storage and transport at those temperatures, and reconstitute it at the other end, LNG has a much higher greenhouse gas (GHG) intensity than just fossil gas. Some estimate that it is actually worse than coal if older transport vessels are used (Howarth, 2024), though others find that LNG is significantly cleaner (Nie et al., 2020). A rigorous methodology would be needed to accurately estimate the climate benefits, if any, of switching from coal to LNG.

Without strict rules on emissions accounting and additionality and without any independent critical review of individual deals, there is a high risk of a willing suspension of rigour by the trading parties. Both parties would benefit, but the world would suffer from more global GHG emissions.

The second problem is that, in making such a deal, Canada would be establishing a troubling principle. Under the United Nations Framework Convention on Climate Change (UNFCCC)



accounting rules, countries are responsible for the emissions that take place on their soil and credited for the emissions reductions that take place on their soil. Korea, for example, does not get credit for the emissions reductions that take place when a Canadian driver buys a Korean electric vehicle and stops burning gasoline. Canada asking for credit because of the way other countries use our exports is a novelty, and aside from how it would land in the UNFCCC negotiations, where it would challenge the existing accounting practices, we may not like where that principle takes us. Would we want to get credit (i.e., blame) for the emissions that take place when U.S. consumers burn our exported oil in cars? Just for context, that would be more emissions than are produced by the entire Canadian economy under the current accounting rules.

Why Is Credit for LNG Exports as Proposed Unlikely?

Article 6.2 deals are just that: deals. Canada, as the receiver of some other country's emissions reductions, would benefit, and the transferring country would also have to receive some benefit. The model to date—as intended by the Paris Agreement negotiators—has looked something like a development assistance project that results in emissions reductions. In one typical Article 6.2 deal, Switzerland is helping Ghanaian rice farmers adopt practices that both save water and reduce emissions. Ghana gets assistance for its farmers and payment for the emission reduction credits, and Switzerland gets the credits against its NDC.

So even if we could prove that Canadian LNG exports did cause our customers to reduce coal use, what benefit would they get from giving the resulting credits—which have monetary value, the transfer of which would mean working even harder to achieve their own national climate targets—to Canada? This is a very different case from the standard development assistance model. Our buyers do not get anything from Canada other than the LNG, for which they have already paid full price in a commercial transaction.

Are There Any Circumstances Under Which Credit for LNG Exports Could Happen?

Some analysts have suggested that Canada should, in fact, pursue more typical Article 6.2 deals, which would involve assistance in the form of technology transfer, capacity building, or finance for buyer countries to convert their coal-fired generators to run on Canadian gas (Gessaroli, 2023; Sullivan et al., 2023). Canada could then get the credits for the switch and the resulting lower emissions. This approach would go a long way to getting around the fundamental challenge of additionality.

However, this is not the model proposed by most of those calling for Article 6 credits for Canada's LNG exports. That is, only a couple of analysts suggest that Canada would have to engage in bilateral cooperation, and none of them assume that Canada would have to actually pay for the resulting credits. The difference matters. Gessaroli (2023) estimates that the value of ITMOs to Canada is anywhere between USD 75 billion and USD 880 million, based on 15–35



Mt CO₂ equivalent abated, but that could instead be the amount Canada would have to *remit* to foreign buyers of our LNG under an Article 6.2 deal if we had to pay for the credits.

Those are not particularly high prices for emissions (USD 10–50/tonne), so other things being equal, this might be a strategy worth pursuing. But it has significant challenges:

- Canada would not only have to spend money to purchase ITMOs but would also have to spend money on technology transfer, capacity building, and/or finance to incentivize foreign coal burners to switch to gas. To be clear, to be additional, the foreign actors would have to switch only because of Canadian assistance. That implies a steep price tag since coal-fired electricity generation (minus a carbon price) tends to be much cheaper than gas-fired, so our support would be filling a costly gap. Negotiating such deals and then monitoring and financing them across the many buyers of Canadian LNG would add another layer of cost to the proposal over and above the cost of purchasing ITMOs.
- The spending contemplated here would, in effect, be transfers to our LNG customers. Some of those customers are countries such as China and Japan that need little technical assistance from Canada—and in that case, it might be politically difficult to justify sending taxpayer money abroad to enable energy transition—even if the emissions reductions are cheaper—rather than spending the same money on energy transition in Canada.
- Financing an effort to encourage the consumption of Canadian LNG would violate Canada’s policy to end subsidies for the international unabated fossil fuel energy sector (Natural Resources Canada, 2022).
- Incentivizing foreign electricity generators to switch from coal to gas would amount to encouraging them to lock in new fossil fuel-burning infrastructure for 30 or 40 years, at a time when net-zero scenarios indicate that gas consumption should actually be decreasing (International Energy Agency, 2023). Sovereign nations and private sector actors can make their own choices about generating technology, but if Canadian fiscal support is to be dispersed, it should be helping coal-fired generators switch to renewables. It is worth noting that Canada’s proposed Clean Electricity Standard involves phasing out unabated gas generation in Canada fairly quickly, so arguably, our foreign assistance should aim to support no less a standard. Incentivizing our customers to use *abated* gas—that is, equipped with carbon capture and storage—would require even more significant subsidies, given the capital and operating costs that would entail.

Conclusions

Almost all proposals for Canada to get Article 6 credits for its LNG exports ignore some basic realities, including that it would be practically impossible to pass the essential test of additionality—proving that Canada’s LNG exports actually caused emissions reductions abroad. And the rules of Article 6.2 are loose enough to constitute a serious risk that any claimed emissions reductions would be over-stated, meaning increased global GHG emissions.



Most analysts also assume that Canada would receive ITMOs for free, but the purchasers of our LNG are unlikely to agree to that; the credits have value and transferring them makes it harder for the originating state to achieve its climate targets. Typical Article 6.2 deals involve the transferring state actually being paid for emissions reductions. This would make ITMOs for LNG exports a more costly proposition than what is being proposed.

Existing Article 6.2 deals are also very different from the LNG export credit model—they are essentially development assistance projects that have climate benefits. Some have proposed that Canada could do the same, using technology transfer, capacity building, and finance to help users of coal convert to using our LNG and receiving credit for the reduced emissions that would result. This would address the additionality challenge, but it has other drawbacks: it would be extremely costly; it would potentially send Canadian taxpayer money to gas customers like China and Japan that arguably do not need our technical assistance; it would violate our commitment to end international finance for unabated fossil fuel projects; and it would use Canadian assistance to incentivize the lock-in of gas technology for decades, at a time when net-zero scenarios indicate that gas use should actually be decreasing.

Ultimately, the only feasible route to claiming ITMOs for Canada's LNG exports looks like a costly, complex, environmentally damaging, and internationally controversial way of supporting Canada's LNG producers, dressed up as climate action. It is past time to put this conversation to bed.

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