



**Submitted to the House of Commons Standing Committee on Finance in
response to:**

PRE-BUDGET CONSULTATIONS IN ADVANCE OF THE 2024 BUDGET

World Energy GH2

4 August 2023

SUMMARY OF RECOMMENDATIONS

- 1. Ensure that Canada is a competitive jurisdiction for investments in clean hydrogen.** Canadian policy must compete with the US Inflation Reduction Act (IRA), or we will lose out on tens of billions of dollars of investments in the green hydrogen sector alone. Currently announced investment tax credits get Canada just under half-way to closing the competitiveness gap, so more action is needed.
- 2. Supplement the role of the Canada Growth Fund (CGF).** Many stakeholders expected the CGF, together with its \$15B envelope, to be able to remedy a significant part of the competitiveness gap in their sector caused by the IRA. However, with the CGF now up and running, it has become clear that the mandate is to recycle capital, rather than to take on substantial risk or provide a subsidy. This means that government needs to contemplate additional measures to compete with the US IRA's generous subsidies.
- 3. Establish dedicated funding for green hydrogen contracts for difference (CFDs).** World Energy GH2 recommends a funding envelope of \$2.5B over 10 years to de-risk the green hydrogen sector. It should be noted that while this program may have a cost associated with it in the short term, over the long term there is an opportunity for the Government of Canada to recuperate part of the investment as clean hydrogen prices solidify.

Introduction

World Energy GH2 is pleased to share this submission to the Standing Committee on Finance as it works to identify key priorities for the 2024 federal Budget.

World Energy GH2 is developing Project Nujio'qonik, Canada's first commercial-scale green hydrogen project, powered by a 3+ GW wind farm, on the west coast of Newfoundland, and associated electrolyzers in nearby Stephenville. The renewable, or green hydrogen will be coupled with nitrogen to form ammonia, to facilitate its transport abroad.

Our project carries with it considerable momentum, including a [\\$50M equity investment](#) by South Korea's second largest multinational, the SK Group, in mid-May; the [acquisition of the Port of Stephenville](#) in late-May; and just recently passing the First Stage Review for our Crown Lands bid with the Newfoundland Department of Industry, Energy, and Technology.

Phase one of our project represents an investment of approximately \$5B USD, with this figure reaching approximately \$12B once our third phase is completed. The opportunity to reduce emissions through green hydrogen, and to grow the Canadian economy are therefore immense.

As we move towards Budget 2024, it is more important than ever to ensure that Canada finalizes support for green hydrogen that levels the playing field with the US IRA. This means that financial incentives, coupled with policy, and other unique Canadian advantages all need to be at least as good, if not better, than in the US to attract investments.

If we are serious about attaining the goal of the "environment and the economy going together"¹ then we have no choice but to compete with the IRA. Failure to do so may not jeopardize Canada's ability to cut emissions and achieve net-zero, but it would mean that the economic benefits of producing these clean energies would happen disproportionately in other jurisdictions.

In contrast, World Energy GH2's vision is that Canada should continue to be an energy exporter; but that the kind of energy we are exporting should pivot towards renewable sources.

If Canada were to immediately implement all measures currently planned, our modelling estimates that **Project Nujio'qonik would receive less than half the incentive in Canada as under the US-IRA. In other words, we are currently at a global competitive disadvantage.**

The purpose of this submission is to put forward constructive recommendations to close this gap.

¹ As noted by Finance Minister and Deputy Prime Minister Chrystia Freeland after tabling Budget 2023. See: [What Chrystia Freeland told CTV News about Canada's 2023 budget | CTV News](#)

DETAILED COMMENTS

Ensure that Canada is a competitive jurisdiction for investments in clean hydrogen.

The US IRA has set the tone for the international clean energy landscape. In a world of limited production of key components to the race towards net-zero, countries that develop policy quickly will gain a first-movers' advantage. Other countries are following suit, notably with a recent \$50B EUR [announcement on carbon contracts for difference](#) in Germany, and the launch of a [Hydrogen Headstart](#) program in Australia.

Time is of the essence. For projects like ours which use wind as the source of that energy, there are four main manufacturers of wind turbines from which to choose. All four are over-committed on orders and see significant wait times. Recent inflationary pressures on the raw materials necessary to build the turbines meant the industry's margins evaporated. That, in turn, has led to a reluctance to increase capacity absent sector profitability.

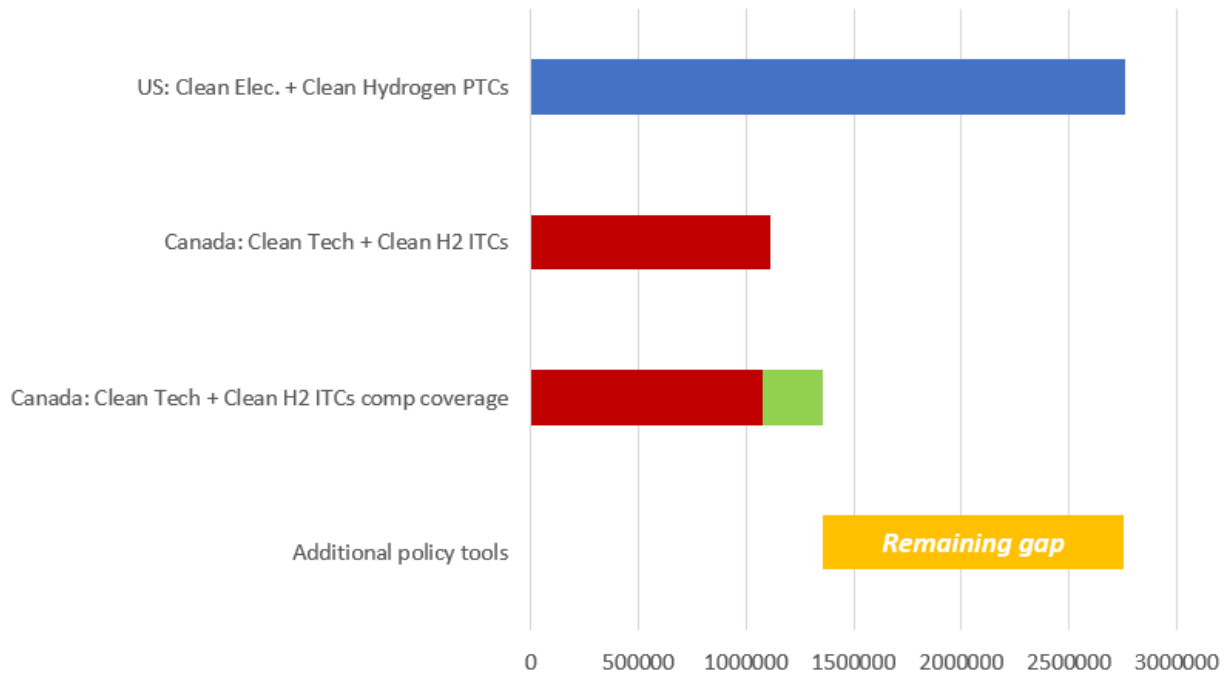
With regards to electrolysers, the entire global production capacity in 2022 was less than necessary to fulfill demand for Project Nujio'qonik alone. Depending on which forecast is legitimate, the demand for electrolysers is expected to outstrip an expanding manufacturing capacity for at least the next five to seven years. We are concerned that production wait times could almost double in the coming year, which could mean that industry would be confronted with five-year lead times.

Securing a delivery date as soon as possible is therefore of utmost importance otherwise projects delays will be compounded due to these supply chain constraints. If our policy is not finalized promptly, other jurisdictions will beat Canada to the punch of becoming the globe's lead clean energy producers. On the positive side, if we are successful in moving quickly in finalizing our policy supports for clean hydrogen, Canada could become ensconced as a world leader in clean hydrogen production.

Canada therefore needs to finalize its support mechanisms for clean hydrogen as soon as possible. As it stands, the main platforms of support are the Clean Hydrogen ITC (CH ITC) and the Clean Technology ITC (CT ITC). World Energy GH2 has undertaken our own project-specific analysis to determine to what extent the two ITCs close the competitiveness gap with the US IRA.

The figure below shows that for phase 1 of our project, if built in the US, it would benefit from roughly 2.76B in production tax credits. As currently understood, Canadian ITCs would provide 1.17B in support (42% of the amount offered in the US). If Finance Canada implements the ITCs in their most robust form, in accordance with our recommendations, the value for our project increases to 1.36B (almost half of the amount offered in the US).

Comparing Canadian/US supports for similar projects



N.B.: Green represents the amount of additional support should the ITCs be extended to all capital costs related to the project, and ammonia coverage increased from 15% to 40%.

So competing with the US is not just a matter of implementing ITCs, it's about finding which additional policy lever(s) can successfully complement the ITCs and get us the rest of the way there.

Finance Canada has committed to finalizing the two ITCs before Budget 2024. Against this backdrop, this submission is more focused on complementary policies required to close the remaining gap (illustrated in yellow above).

Supplement the role of the Canada Growth Fund (CGF)

The Canada Growth Fund, first announced in Budget 2022, and further articulated in a dedicated background to the 2022 Fall Economic Statement, has been largely misunderstood by the stakeholder community in Canada, and possibly by the political community as well. Many stakeholders expected the CGF, together with its \$15B envelope, to be able to remedy a significant part of the competitiveness gap in their sector caused by the IRA.

The fall 2022 Backgrounder goes as far as mentioning contracts for difference (CFDs), specifically noting that the mechanism could be used to “help manage perceived uncertainty around ... the price of a product, such as hydrogen”. So it was assumed that the organization would be equipped to take on a substantial de-risking role which would help investments get off the ground today on the basis of the future value of emission reductions. However, with the CGF now up and running as of a couple of months ago, it has become clear that the mandate is to recycle capital, rather than to take on

substantial risk regarding future price forecasts. This means that government needs to contemplate additional measures that compete with the US IRA's subsidies.

In the case of green hydrogen, the kind our project will produce, the uncertainty around price is very high, since no substantial production of green hydrogen is currently available on the market. We anticipate that green hydrogen will be much more valuable than fossil-based, grey hydrogen in the future, especially since green hydrogen will not be subject to carbon taxes, carbon border adjustment mechanisms, and so on. But in the present day, there remains strong price uncertainty.

The fact that CGF's mandate requires it to recycle capital means that it cannot spend the \$15B allocated to it as a subsidy, or on higher risk ventures. It must, in CGF's view, invest these dollars in a way that mitigates risk. CGF will likely play some role in de-risking green hydrogen production in Canada, but it is a substantially smaller role than many stakeholders and political offices may have initially assumed.

Ultimately, what this means is that as Finance Committee contemplates what measures should be implemented in Budget 2024, it is important to note that there remains a strong competitiveness gap for clean hydrogen, and we ought not to expect that the CGF will single handedly remedy this problem. Additional measures are required. This analysis is consistent with the findings of a [recent report, from Clean Prosperity and the Transition Accelerator](#) which finds there is an enormous "bankable gap" for green hydrogen produced in Canada versus the US.

Establish dedicated funding for green hydrogen contracts for difference

World Energy GH2 recommends a funding envelope of \$2.5B over 10 years to put in place CFDs for Canadian-produced green hydrogen. **Committing this level of resources will enable roughly 20-25B dollars worth of investments being made in Canada.** More than just an economics decision, it will allow Canada to jump ahead as a clean hydrogen leader, and cement our continued position as a global clean energy powerhouse.

Finance Canada should offer flexibility in how this new \$2.5B can be spent. It is worth noting that in the [Canada-Germany Hydrogen Alliance](#), there is a commitment to explore co-financing mechanisms to help establish Canadian hydrogen supply. An important way of multiplying the impact of Canadian funds could be to match them with German dollars supporting investments made in Canada.

Ultimately, World Energy GH2 believes that this \$2.5B of dedicated funding for green hydrogen would be sufficient to bridge the gap between the US IRA and measures currently in place in Canada.

CONCLUSION

World Energy GH2 is appreciative of the opportunity to engage with the Standing Committee on Finance as it contemplates the path forward for Budget 2024.

From our perspective, **Canada needs to choose to compete with the aggressive subsidies found in the US IRA. Failure to do so would mean that our country would miss out on over \$20B in investments.**

We remain available to provide further clarification, or to respond to any questions that Finance Canada may have.