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Tax Policy Branch
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Via e-mail to Consultation-Legislation@fin.gc.ca

Dear Tax Policy team,

Subject: Legislative Proposals Relating to the Income Tax Act - Clean Hydrogen Investment Tax Credit

Writing on behalf of the Canadian Hydrogen and Fuel Cell Association (CHFCA) and our 200 members, I am enclosing below our feedback on the Clean Hydrogen ITC to elaborate on how the Government of Canada can better leverage an instrument of this sort.

The CHFCA has raised concerns about the complexity and inconsistency of Canada's clean economy ITCs. Varying phase out schedules, narrow eligibility criteria, knowledge sharing requirements, auditing risks, and a lack of clarity on the "stackability" of certain ITCs need to be simplified to improve Canada's ITC regime. Stringent ITC eligibility requirements for hydrogen capital assets, pathways, and processes as well as for projects with power-purchase agreements are issues that must be addressed.

We urge the Federal Government to decisively support the hydrogen industry as a crucial driver for achieving net zero, fostering substantial job creation and economic growth. Below are our key asks:

- ***Add a safe-harbour provision to allow qualified capital expenditures to continue accessing the ITCs even after the cut-off date.***
- ***Allow for the "stacking" of different clean economy ITCs for different project portions.***
- ***Adjust the CH ITC recapture period to five years.***
- ***Make all forms of partnerships eligible for the CH ITC.***
- ***Expand the ITC eligibility of capital assets that are critical to hydrogen projects.***
- ***Draw broader alignment between the CHITC with the CCUS ITC.***
- ***Include methane pyrolysis and by-product hydrogen in the CH ITC.***
- ***Make all viable carriers ITC eligible, including, but not limited to, e-methane, methanol, SAFs, LOHCs, etc. Hydrogen carriers should qualify for a 40% ITC credit rate.***
- ***Reduce the eligibility requirements for PPAs and make similar instruments ITC eligible.***
- ***Expand eligible sources of clean energy to nuclear, geothermal, and others.***
- ***Allow imported power from connected provinces as grids become more inter-connected.***

Contents

- 1 Context..... 3
- 2 De-risking Investments 3
 - 2.1 Timelines for CHITC Eligibility 3
 - 2.2 Stackability of ITCs and grants..... 3
 - 2.3 CHITC recapture – propose to shorten ITC recapture period..... 4
 - 2.4 Qualifying taxpayers (partnership restrictions) 4
 - 2.5 Qualifying taxpayers (exclusion of tax-exempts / first nations partners)..... 5
- 3 Inclusions 5
 - 3.1 Machinery and Equipment and Structures 5
 - 3.2 Pathways 6
 - 3.3 Carriers 7
- 4 Supporting Taxpayer Projects with PPAs 8

1 Context

Already boasting one of the cleanest energy supplies in the world, Canada is in a unique position to lead the energy transition. In 2020, the Government of Canada announced the *Hydrogen Strategy for Canada*, which lays out an ambitious framework for actions that will cement hydrogen as an instrument to achieve net-zero emissions by 2050.

On December 20, 2023, the Department of Finance released including the first draft of legislation for the clean hydrogen investment tax credit (CH ITC), which is one of the current implementation tools of the *Hydrogen Strategy*. The purpose of the CH TC is to encourage the investment of capital in the production of clean hydrogen and clean ammonia in Canada. The CH ITC proposes to provide a refundable tax credit of 15% to 40%, depending on the carbon intensity of the hydrogen produced, on eligible expenses incurred for a property that produces hydrogen and becomes available for use on or after March 28, 2023 (but before 2035).

The CH ITC is expected to cost \$5.6 billion over five years, beginning in 2023-24. Between 2028-29 and 2034-35, the CHITC is expected to cost an additional \$12.1 billion. Under a backdrop of the U.S. federal government taking a turn towards a punitive hydrogen policy, seen most notably in the rules of the United States Inflation Reduction Act Bill 45V (hydrogen production tax credit), Canada has a rare opportunity to swing the hydrogen balance of power in its favor by enabling taxpayers to fully benefit from federal commitments that can catalyze taxpayers' hydrogen investments.

2 De-risking Investments

2.1 Timelines for CHITC Eligibility

The current design of the CH ITC includes strict cut-off dates and eligibility criteria tied to clean technologies. Specifically, ITC rates are reduced by 50% in 2034 and are fully phased out after 2034.

Clean technology projects often face lengthy and unpredictable regulatory, permitting, and construction schedules. Delays in projects introduce risks managed through relationships with infrastructure lenders and financial organizations. Given these uncertainties, project developers would like comfort in knowing that flexibility will be provided if unforeseen risks delay a given project. In the United States, a provision exists that provides a 2-year grace period for clean hydrogen projects that have entered construction prior to phase out of the CH ITC program. We call on government to:

- ***Add a safe-harbour provision to allow qualified capital expenditures to continue accessing the ITCs even after the cut-off date.***

2.2 Stackability of ITCs and grants

Under the *Income Tax Act*, government assistance received by a taxpayer while earning income from a business or property may reduce related expenses, capital costs, or the taxpayer's income. The amount of assistance may also reduce the amount of an expenditure on which an associated investment tax credit is based.

In the US Inflation Reduction Act, there are provisions on combining the US ITCs with other government assistance. To ensure competitiveness with the US ITC, an exception should be made so that neither the Clean Technologies ITC nor CH ITC would be reduced by the presence of other government assistance. We call on government to:

- ***Allow for the “stacking” of different clean economy ITCs for different project portions.***

2.3 CHITC recapture – propose to shorten ITC recapture period

The Draft Legislation proposes a period of 20 years to recapture the value of the CH ITC claimed for a project should the property be converted to a non-hydrogen or ammonia use, be exported from Canada or disposed of.

In contrast, The US IRA imposes a five-year recapture period for its ITC. This recapture period is considered reasonable due to the fluctuating fair market rate of projects based on market conditions. Financing periods usually last 5-10 years, and projects may undergo multiple refinancing periods over a 20-year period. The potential for recapture during a refinancing period could limit a company's ability to secure favorable rates for project refinancing. We call on government to:

- ***Adjust the CH ITC recapture period to five years, keeping in line with the standards set in the US IRA and capital re-financing cycles.***

Furthermore, an exception to the CH ITC recapture should be added in circumstances where a taxpayer that claimed the ITC disposes of the particular property to a related party. The CH ITC recapture would be deferred where CH property is disposed to a related taxable Canadian corporation in circumstances where the property would be CH property to the purchaser and is used by the purchaser for a CH use.

2.4 Qualifying taxpayers (partnership restrictions)

The CH ITC can be claimed by taxable Canadian corporations as well as those through a partnership. For limited partnerships, the CH ITC allocated to a limited partner is further limited to their at-risk amount.

New partnerships have no tax history and may not generate revenues until their projects are operational. The inclusion of entities with varying levels of tax liability in partnerships can create challenges for investors. To fully unlock the potential of Indigenous groups, for example, interested in clean hydrogen projects, we urge the government to:

- ***Make all forms of partnerships eligible for the CH ITC.***

In terms of limited partnerships, Bill C-59 will further limit the CH ITC amount that can be allocated to and claimed by a limited partner. These restrictions come into play when a limited partner has financed a clean property through debt or has not contributed significant capital. In such cases, the limited partners may not have enough at-risk amount to fully benefit from the CH ITC, which becomes problematic for the clean energy sector, which often relies on debt financing.

Imposing restrictions based on the business organization goes against the goal of encouraging the investment of capital. Therefore, we urge the government to:

- ***Remove the limited partner restrictions or provide a mechanism to re-allocate restricted Clean Economy ITCs to general partners of the partnership.***

2.5 Qualifying taxpayers (exclusion of tax-exempts / first nations partners)

Currently, apart from the Clean Electricity ITC, partnerships that include tax-exempt partners, such as Indigenous-owned businesses, would not receive the same level of funding for eligible clean energy projects. This is a disparity in treatment, as Indigenous partners are unable to claim an ITC at the same rate as their taxable partners, creating an economic disadvantage.

To address this issue, our calls to action are that:

- ***In addition to the Clean Electricity ITC, the remaining Clean Economy ITCs should be expanded to provide equivalent financing support to all owners of eligible projects, regardless of their taxable status.***
- ***Make partnership governance structures that include non-taxable entities eligible for the full amount of the CH ITC.***

3 Inclusions

3.1 Machinery and Equipment and Structures

Through paragraphs (c) to (v) under ***Eligible Clean Hydrogen Property***, the Government of Canada enumerates conditions to which a property, would be ITC eligible. These enumerations should be expanded to include more capital assets. While we understand that any and every building cannot not be made ITC eligible, certain machinery and equipment connected to, or are external to a facility that are needed to support clean hydrogen production should be included. We call for including:

- ***Machinery and equipment and assets connected to, or are external to a facility, e.g., underground hydrogen storage, heating equipment, equipment housing, etc.;***
- ***and process material purification system, raw water system, process water system, stormwater system, and loading process equipment.***

Similarly, under ***Clean Ammonia Equipment***, the Government of Canada should expand the eligible list of clean ammonia equipment by **adding vapour capture and compression equipment.**

Furthermore, it is important that the Government of Canada supports the development of the entire hydrogen value chain to remain competitive. Liquefaction is equally important as distribution in the value chain as the former is a vital enabler of the distribution of hydrogen. The volumetric density advantage of liquid hydrogen enables distribution over greater distances and at a larger scale. This advantage also enables cost reductions and efficiencies essential for domestic hydrogen networks.

Likewise, "on-site hydrogen transportation," i.e., transportation within project boundaries, deserves equal attention. Feed and product pipelines for greenfield clean hydrogen projects, for example, are vital to normal operations.

Therefore, we call on government:

- ***To make liquefaction machinery and equipment and structures;***
- ***and on-site transportation machinery and equipment and structures, e.g., feed and product pipelines and hydrogen-specific trailers, eligible.***

3.2 Pathways

Natural Gas + CCUS

The CHFCA and its members seek broader alignment with the Carbon Capture, Utilization, and Storage (CCUS) ITC's features in several ways. For example, paragraph 127.48(10)(c) states that the capital cost of eligible clean hydrogen property must be reduced by the amount of government assistance in respect of the property. Such a reduction of the capital cost disincentivizes provincial or municipal assistance to clean hydrogen projects, as any amount of provincial or municipal assistance would otherwise reduce the Federal government's incentive. The CCUS tax credit is not subject to a similar reduction. We call on the government:

- ***To remove this stipulation that capital cost of eligible property be reduced by the amount of government assistance.***

As another example of a lack alignment, only the CCUS ITC allows tax benefits when expenses are incurred, rather than when eligible properties become available for use. To optimize the value of tax benefits, we call on government:

- ***To align the timelines of the CHITC with the CCUS ITC, enabling companies to efficiently deploy capital and reduce the need for additional borrowing/alternative funding sources.***

Furthermore, noting that the US CCUS (IRC 45Q) and hydrogen (IRC 45V) production tax credits do not impact the tax depreciation asset basis for projects, to improve Canada's competitiveness, we urge that ***the ITCs do not reduce the capital cost allowance (CCA) asset basis.***

Methane pyrolysis

Global and domestic experience with a proven technology like methane pyrolysis has brought about the rise of newer ultra-low emissions pyrolysis pathways that would easily qualify for the full 40% rate of the ITC. Taxpayers can utilize Canada's natural gas and biogas resources as well as clean electricity to produce hydrogen and by-product solid carbon without CO₂ emissions.

Methane pyrolysis's value proposition is unique, it is a form pre-combustion capture. By removing CO₂ before combustion is completed, CO₂ emissions from methane fuels are displaced without the need to use CCS technologies. Solid carbon enhances the advanced manufacturing sectors due to its convertibility into non-combustion high-value carbon products and materials.

The CHFCA understands that for a novel pathway like low-carbon methane pyrolysis to be assigned a CHITC credit level, Environment and Climate Change Canada (ECCC) must quantify its emissions.

Nevertheless, a glaring exclusion of this magnitude overlooks a golden opportunity to incentivize industries to reduce their CO₂ emissions by deploying pyrolysis machinery and equipment.

Therefore, due to the urgency in needing to table legislation in parliament and then implement a tax credit that rewards all eligible low-carbon pathways, we call on government:

- ***To include low-carbon methane pyrolysis in the CH ITC. To smoothen the process, we also ask Finance Canada to urge ECCC to recognize low-carbon methane pyrolysis pathways and finalize the corresponding Life Cycle Assessment (LCA) methodologies.***

By-product hydrogen

In 2021, Canada was the top exporter of sodium chlorate, whose low carbon-intensive production process creates hydrogen as a by-product. Similarly, the chloralkali industry, whose major products, chlorine, sodium hydroxide, caustic soda, sodium bicarbonate (baking soda), and sodium carbonate are used ubiquitously in everyday life and other industries, also produces by-product hydrogen. This by-product hydrogen, is currently being vented into the atmosphere, wasting its potential to contribute to decarbonizing Canada's economy.

To bridge the gap between the supply and demand of a fast-growing industry, it is crucial to leverage all low-carbon intensity hydrogen pathways. Capturing and purifying by-product hydrogen from the sodium chlorate process, and any other industrial process with hydrogen as a by-product, will be a great contributor to the effort of advancing the hydrogen economy in Canada. We urge:

- ***Including by-product hydrogen processes as ITC eligible processes.***

3.3 Carriers

The CHFCA is a strong advocate for the production of carriers from clean hydrogen and the ITC can help increase investment in compounds that will carry clean hydrogen to key export markets.

Nonetheless, CHFCA members have several doubts. First, members would like to understand the rationale behind the determination of 15% as the appropriate incentive tier for clean ammonia. Low-carbon ammonia should qualify for 40% as natural gas in the ammonia production process would be replaced by clean hydrogen sourced from low-carbon generation, e.g., renewables, abated-natural gas, etc. The CHFCA would support the creation of incentive tiers for ammonia based on the commodity's carbon intensity.

Secondly, and most importantly we encourage the Government of Canada to expand the CH ITC to also include other hydrogen derivatives, including e-methane, methanol, sustainable aviation fuels (SAF), liquid organic hydrogen carriers (LOHC), etc. These derivatives require incentivization as they are viable low-carbon alternatives to clean ammonia and possess qualities that make them equally as important as ammonia in the delivery of hydrogen. We call on government:

- ***To make all viable carriers of hydrogen eligible for the ITC. Other carriers may include, but are not limited to, e-methane, methanol, SAFs, LOHCs, etc.***

- ***These carriers qualify for a 40% ITC credit rate, with a tier system based on the carbon intensity of each carrier.***

4 Supporting Taxpayer Projects with PPAs

Budget 2023 indicated that Power Purchase Agreements (PPAs) and other similar instruments would be eligible for the ITC, subject to certain conditions. It alarms us that the Government of Canada omitted any reference to the term “other similar instruments” in the draft legislation.

Similar instruments are in a variety, such as renewable energy credits (RECs) and clean energy credits (CECs). RECs can be used to purchase clean electricity and achieve the highest CH ITC threshold. Through CECs, provinces that have invested significant amounts of capital to decarbonize its grid can utilize clean and reliable energy sources to lower the carbon intensity of hydrogen. We urge:

- ***Making other similar instruments, such as RECs and CECs, ITC eligible.***

In the 2023 Fall Economic Statement and now under *Eligible Power Purchase Agreement* in the draft legislation, the Government stipulates that electricity for taxpayer projects with PPAs must be:

“(a) sourced from hydro, solar or wind generation that

- (i) *first commenced electricity generation on or after March 28, 2023 and no more than one year before the taxpayer’s first clean hydrogen project plan is filed with the Minister of Natural Resources.”*

The “in-production date” is very similar to an “additionality” requirement as taxpayers would have to source their electrons from renewable generation that is to be in production on or after March 28, 2023, i.e., new projects. The timelines needed to develop new renewable power do not align with the timelines for hydrogen production, which limits the full realization of the incentive’s benefits. Flexibility must apply to a nascent industry that will only have a marginal impact on near-term energy demand. As an example, the European Union does not require additionality until 2028.

The CHFCA supports the gradual implementation of an “in-production” date of renewables by introducing ***a degree of phase-in for additionality requirements***. We call on government to:

- ***Change the 1-year look back to 36-months look back and including a transitional period (e.g. 2030 for early projects).***

With regards to sourcing the purchased electricity for PPAs, the language in (a) is prescriptive as it handpicks only a few eligible electricity sources. To incentivize all low-carbon sources in order to remain competitive, there should be an expansion of the list of eligible electricity sources. The CHFCA calls on government to:

- ***Modify the language in (a) along the lines of: “sourced from low-carbon electricity generation, e.g., hydro, solar, wind, abated natural gas, nuclear, geothermal, etc.”***

Finally, electricity markets will become increasingly inter-connected, with energy exports and imports becoming a key feature of system resilience. The language in the draft legislation does not facilitate expanded interconnection of provincial electricity markets. As an analogy, no region in Canada restricts eligibility for an electric vehicle subsidy – or support for the construction of charging stations – based on where electricity is generated. Thus, the CHFCA urges the government:

- ***To allow imported power from connected provinces as grids become more inter-connected.***

The Government of Canada's financial commitment to clean economy incentives is ambitious, and the objective to use these incentives to spur investment in the future clean economy is visionary. However, inconsistent, unclear, and discriminatory design features in the Clean Hydrogen ITC draft legislation could result in an under-subscription of the ITC. By de-risking investments through the simplification of tax systems and codes, including more low-carbon pathways, processes, and technologies and their relevant machinery, equipment, buildings, and structures, and better-supporting proponents using PPAs and other similar instruments, the CH ITC can thoroughly enable taxpayers to make investments in clean hydrogen assets that can boost clean growth in Canada.

We thank you for this opportunity to consider our feedback and to lay out our specific expectations of government in advancing hydrogen as a clean energy option for Canada. Time is of the essence, and developing an efficient and effective CH ITC will be crucial to the success of the sector. The CHFCA and our 200 members are ready to work together with the Government of Canada to ensure the successful deployment of the CH ITC, and we would like to take this opportunity to request an in person meeting to discuss the above-mentioned action items.

Please do not hesitate to contact me at your earliest convenience to schedule a time to discuss.

Sincerely,



Ivette Vera-Perez
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