2024 Issue No. 21
1 April 2024

Tax Alert – Canada

Canada's proposed clean hydrogen investment tax credit

EY Tax Alerts cover significant tax news, developments and changes in legislation that affect Canadian businesses. They act as technical summaries to keep you on top of the latest tax issues. For more information, please contact your EY advisor or EY Law advisor.

Draft legislative proposals for the introduction of Canada's clean hydrogen investment tax credit (ITC), which was initially announced in the 2022 federal budget and confirmed in the 2023 federal budget,[1] were released for public consultation on 20 December 2023. The draft legislative proposals also contained measures related to the clean technology manufacturing ITC, which was discussed in a separate Tax Alert.

In this Tax Alert, we provide an overview of the draft legislative proposals, including the key design features of the clean hydrogen ITC included in proposed section 127.48 of the *Income Tax Act* (the Act) and the associated labour requirements included in proposed section 127.46 of the Act.[2]

Overview of the clean hydrogen ITC

The clean hydrogen ITC legislative proposals are generally consistent with the previous announcements relating to the credit by the federal government. The purpose of the credit, as provided for in proposed subsection 127.48(31), is to encourage the investment of capital in the production of clean hydrogen and clean ammonia in Canada.

[1] See EY Tax Alert 2023 Issue No. 20, *Federal budget 2023-24*.
[2] The labour requirements will apply in respect of property prepared or installed on or after 28 November 2023.

Building a better working world

The ITC will be refundable and available to *qualifying taxpayers* that make investments in eligible clean hydrogen property on or after 28 March 2023 and before 2035. The tax credit rate varies depending on the expected carbon intensity of the production process,[3] the year in which the property is acquired and becomes available for use, and whether certain labour requirements are met (see "Labour requirements" below). The tax credit rates are outlined below (see "Clean hydrogen ITC rates").

The credit is available in respect of the capital cost of certain eligible equipment that qualifies as clean hydrogen property (see "Clean hydrogen property" below). Eligible equipment will include certain property described in capital cost allowance (CCA) Class 43.1 paragraph (d)(xxii) used to produce hydrogen through electrolysis of water or natural gas reforming, as well as clean ammonia equipment, dual-use electricity and heat equipment, and dual-use hydrogen and ammonia equipment. Eligible equipment also includes various supporting equipment and infrastructure costs, along with control, monitoring or safety systems in support of the equipment. Eligible equipment will also be eligible for enhanced first-year depreciation under the accelerated investment incentive if acquired and available for use before 2028.

The legislative proposals include several definitions that are relevant for the purposes of determining the clean hydrogen ITC of a taxpayer.

Qualifying taxpayers

A *qualifying taxpayer* is defined as a taxable Canadian corporation. The definition ensures that the clean hydrogen ITC is only available to taxable Canadian corporations and taxable Canadian corporations that are members of partnerships that acquire eligible clean hydrogen property.

The allocation of the clean hydrogen ITC is also subject to proposed section 127.47, which provides a number of rules relevant to the allocation of certain tax credits by partnerships to their members. In the case of a limited partnership, the ITC allocated to the limited partner is restricted by the "at risk" amount in respect of the partnership, as defined in subsection 96(2.2) of the Act.

Eligible clean hydrogen property

As indicated above, to qualify for the clean hydrogen ITC, an investment must be made in eligible equipment that qualifies as clean hydrogen property. Eligible clean hydrogen property is defined in proposed subsection 127.48(1) of the Act and includes the following properties (also, see "Excluded property" below):

[3] *Carbon intensity* is defined in proposed subsection 127.48(1) as the quantity in kilograms of carbon dioxide equivalent per kilogram of hydrogen produced.

- Property described in CCA class 43.1 paragraph (d)(xxii), which generally includes equipment used all or substantially all by the taxpayer, or a lessee of the taxpayer, to produce hydrogen through electrolysis of water, including electrolysers, rectifiers and other ancillary equipment, water treatment and conditioning equipment, and equipment used for hydrogen compression and storage.
- Property that is used all or substantially all to produce hydrogen through natural gas reforming including pre-reformers, auto-thermal reformers, steam methane reformers, pre-heating equipment, syngas coolers, shift reactors, purification equipment, fired heaters, water treatment and conditioning equipment, equipment used in hydrogen compression and storage of hydrogen, oxygen production equipment and methanizers.
- Clean ammonia equipment, which includes equipment used solely for the purpose of producing ammonia, such as equipment for:
  - Converting hydrogen to ammonia;
  - Heat recovery and conversion;
  - Nitrogen generation;
  - Feed storage (other than stored hydrogen feed) and feed compression; and
  - Refrigeration and storage of ammonia.
- Dual-use electricity and heat equipment, which includes:
  - Qualifying energy generation equipment if more than 50% of the electrical or heat energy expected to be produced over the first 20 years of project operations, based on the most recent clean hydrogen project plan (see "Clean hydrogen project plan" below), is expected support a qualified carbon capture, utilization and storage (CCUS) project or a clean hydrogen project. This equipment cannot use fossil fuels or emit carbon dioxide unless captured by a CCUS process.
  - Qualifying electrical transmission equipment used to directly transmit electricity generated if more than 50% of the electrical energy generated over the first 20 years of operations is expected to be transmitted to a qualified CCUS or clean hydrogen project, in accordance with the clean hydrogen project plan.
  - Energy distribution equipment that supports distribution of heat or electricity for either of the two categories above.
- Dual-use hydrogen and ammonia equipment, which is used for the generation of oxygen and nitrogen to be used in both hydrogen and ammonia production.
- Equipment integrated with the property described above and that is ancillary equipment used solely to support a hydrogen or ammonia production process as part of:
  - An electrical system;
  - A feed supply system;

- A cooling system;
- A process material storage and handling and distribution system;
- A process venting system;
- A process waste management system; or
- An oxygen or nitrogen distribution system.

- Safety equipment or control and monitoring equipment used solely to support the equipment described above.

In addition, the eligible equipment described above must meet the following conditions to qualify as clean hydrogen property that is eligible for the ITC:

- It must be acquired by a qualifying taxpayer in connection with a qualified clean hydrogen project of the taxpayer in Canada (see "Qualified clean hydrogen project" below) and become available for use on or after 28 March 2023.
- It must be situated in Canada.
- It must be new property (not previously used equipment).

Excluded property

Certain property is specifically excluded for purposes of the clean hydrogen ITC, including:[4]

- Property included in Class 57 or 58 (i.e., equipment related to the CCUS ITC);
- Equipment used for:
  - Off-site transmission, storage or distribution of hydrogen or ammonia;
  - Production or transmission of hydrogen;
  - Transmission or distribution of electricity; and
  - Off-site storage.
- Automotive vehicles or related refuelling equipment;
- Construction equipment, furniture or office equipment;
- Certain auxiliary electrical generating equipment; and
- Buildings and other structures.

[4] Excluded property is listed in CCA Class 43.1 paragraph (d)(xxii), Clauses (A) to (E) and in the definition of *excluded property* in proposed subsection 127.48(1).

Qualified clean hydrogen project

A *qualified clean hydrogen project* is a clean hydrogen project where a project plan has been filed with the Minister of Natural Resources and the taxpayer has received confirmation in writing that:

- The hydrogen will be produced from an *eligible pathway*, which includes electrolysis or natural gas reforming with carbon dioxide captured using a CCUS process.
- The expected carbon intensity included in the taxpayer's most recent clean hydrogen project plan is determined in accordance with proposed subsection 127.48(6), which outlines various rules for the determination of carbon intensity. This proposed subsection also provides that any carbon intensity modelling guidance published by the federal government at the time the taxpayer files their most recent clean hydrogen project plan will apply conclusively.
- If the project is intended to produce clean ammonia, the taxpayer has demonstrated in the project plan that there is sufficient production capacity to satisfy the needs of the taxpayer's ammonia production facility, and that hydrogen can be transported between the taxpayer's hydrogen production facility and ammonia production facility, if required.

Clean hydrogen project plan

A *clean hydrogen project plan* must be filed with the Minister of Natural Resources in the form and manner determined by the Minister and requires the following information:

- A front-end engineering design study or equivalent study as determined by the Minister of Natural Resources for the project;
- Expected carbon intensity of the hydrogen to be produced as required by the Fuel LCA Model[5] and supported by a report prepared by a qualified validation firm;
- If the project is intended to produce clean ammonia, the plan must demonstrate that there is sufficient production capacity to satisfy the taxpayer's ammonia production facility, and that hydrogen can be transported between the hydrogen and ammonia production facilities, if required; and
- Any other information required by the Minister of Natural Resources.

[5] The Fuel LCA Model is defined in proposed subsection 127.48(1) as Canada's Fuel Life Cycle Assessment Model published by the Minister of the Environment and is used to determine the carbon intensity of a fuel, energy source or material input using life-cycle inventories for various pathways.

Clean hydrogen ITC rates

Qualifying clean hydrogen property (other than clean ammonia equipment) is eligible for the ITC at the following rates, depending on the expected carbon intensity of the hydrogen to be produced, the time of acquisition, and whether certain labour requirements are met (discussed below). Similar to other ITCs addressed in section 127 of the Act, under proposed subsection 127.48(5), the equipment is deemed to have been acquired by the taxpayer in the year the property becomes available for use. However, this deeming rule is not applicable for property acquired before 28 March 2023. Property acquired before 28 March 2023 and after 31 December 2034 will not be eligible for the ITC.

	Acquired after 27 March 2023 and before 2034	Acquired in 2034	Acquired after 2034
Carbon intensity is less than 0.75	40.0%	20.0%	Nil
Carbon intensity is 0.75 or greater and less than 2	25.0%	12.5%	Nil
Carbon intensity is 2 or greater and less than 4	15.0%	7.5%	Nil

If the expected carbon intensity of the hydrogen to be produced by the project is 4 or greater, the rate applicable is nil.

A 15% ITC rate is also available on the capital cost of clean ammonia equipment acquired for use in a clean hydrogen project before 2034 if the hydrogen used in the ammonia production has a carbon intensity of less than 4 and the hydrogen and ammonia are produced by the same taxpayer. The ITC rate is reduced to 7.5% for eligible property acquired in 2034 and is reduced to nil after 2034.

These ITC rates are reduced by 10 percentage points if the taxpayer does not elect to meet the labour requirements in proposed section 127.46 of the Act, which are discussed in further detail below.

Calculating the ITC base

The capital cost base on which the ITC is calculated must be adjusted for any other ITCs applicable to the property under section 127 of the Act. In addition, the clean hydrogen ITC cannot be claimed on property that is eligible for the CCUS ITC, clean technology ITC[6] or other clean energy credits once they are enacted.

[6] For more information, see EY Tax Alert 2024 Issue No. 6, *Canada's new clean technology investment tax credit*.

Special rules apply where the property is transferred between non-arm's length parties.

If the taxpayer has received assistance or is entitled to receive assistance, either from the government or non-government organizations, the capital cost of the property eligible for the ITC must be reduced by the amount of assistance received or expected to be received in respect of the property. If the assistance is subsequently repaid or the taxpayer is no longer eligible, the amount by which the property was reduced may be eligible for the ITC.

Amounts in respect of a *preliminary clean hydrogen work activity*[7] as well as excluded equipment (as defined above) are also excluded from the capital cost of an eligible clean hydrogen property. Adjustments may also be required to exclude the portion of certain equipment that can reasonably be expected to support a process other than the production of hydrogen or ammonia.

Furthermore, the cost of certain property used in both hydrogen and ammonia production is allocated between the two capital cost categories based on the percentage of the expected use of the equipment for hydrogen production versus ammonia production.

If a portion of the cost of the property capitalized remains unpaid after 180 days from the end of the taxation year in which it became available for use, the capital cost of the property must be reduced by the unpaid amount. The amount can later be added back to the capital cost upon payment of the outstanding balance.

Time limit for ITC application

Proposed subsection 127.48(4) places a time limit on filing the prescribed form necessary to be eligible for the clean hydrogen ITC. Specifically, the prescribed form must be filed on or before the day that is one year after the taxpayer's filing due date for the year. A consequential change to subsection 220(2.2) removes the discretion of the Canada Revenue Agency (CRA) to waive this requirement.

Annual compliance requirements

When a taxpayer deducts a clean hydrogen ITC during a taxation year, it is required to file a prescribed form containing certain information regarding the operations of the project in its tax return.

[7] As defined in proposed subsection 127.48(1) of the Act. Broadly speaking, a *preliminary clean hydrogen work activity* is defined as an activity that is preliminary to the acquisition, construction, fabrication or installation (by or on behalf of a taxpayer) of eligible clean hydrogen property.

A compliance report containing certain information in respect of the average actual carbon intensity at the end of the compliance period (see "Recovery tax – change in carbon intensity" below) is also required to be filed with the Minister of National Revenue and the Minister of Natural Resources within 180 days after the end of each operating year. The report will be used to determine whether any recovery tax is payable under proposed subsection 127.48(18) of the Act. This reporting data will be used by the Minister of National Revenue in consultation with the Minister of Natural Resources to make a determination or redetermination of the actual carbon intensity of the hydrogen produced.

Recovery tax – change in carbon intensity

For a clean hydrogen project, the *first day of the compliance period* marks the start of the compliance period. The first day of the compliance period is generally 120 days after the day when hydrogen is produced in any amount. The *compliance period* ends on the last day of the fifth operating year of the project. The compliance period may be longer than five years as the definition of *operating year* is a 365-day period that excludes any shutdown time during the year.

Broadly speaking, the recovery tax rules may require a taxpayer to pay a recovery tax if, at the end of the compliance period, the project's average actual carbon intensity is greater than the most recent expected carbon intensity that was used to determine the clean hydrogen ITC for the project. This recovery tax imposed will be subject to a *de minimis* threshold if the difference between the actual average carbon intensity during the compliance period and the expected carbon intensity is 0.25 or less.

Recapture of credit

A recapture of the ITC received will apply if the property is converted to a non-eligible use, disposed of or exported from Canada within 20 years of the date it was acquired. The amount of the ITC repayable is calculated as the lesser of the ITC received and the amount calculated by multiplying the ITC by the amount of the proceeds of disposition in an arm's length transaction, or the fair market value of the property when it is sold to a non-arm's length party, converted to a non-eligible use or exported from Canada, as a percentage of the capital cost of the property on which the ITC had been claimed.

If a recapture event is triggered, certain reporting requirements must be met by the taxpayer to notify the Minister before the taxpayer's filing due date for that taxation year.

An election is available to avoid recapture where a qualifying taxpayer disposes of all or substantially all of the properties that are part of a clean hydrogen project to another taxable Canadian corporation. The election allows the purchaser to assume the relevant tax history of the vendor so that the recapture rules can apply at a later time, if necessary. This rule is designed to facilitate bona fide intercompany transfers of assets that represent all or substantially all of a clean hydrogen project without triggering recapture tax.

Separate recapture rules apply to partnerships.

Labour requirements

The draft legislation also proposes that certain labour requirements be achieved in order to fully maximize the incentive available under the clean hydrogen ITC. If the labour requirements are not met, the maximum credit rate is reduced by 10 percentage points.

To meet the labour requirements, the ITC claimant must elect in prescribed form and manner for each installation taxation year (i.e., a taxation year during which preparation or installation of the clean hydrogen property occurs). The reduced rates of ITC will automatically apply in situations where the taxpayer has not elected in the prescribed manner to meet the prevailing wage and apprenticeship requirements for an installation taxation year.

Prevailing wage requirements

The taxpayer must meet the following labour requirements to qualify for the full incentive:

- Each covered worker must be compensated for their labour in accordance with the worker's relevant collective agreement (e.g., a labour agreement with a trade union in agreement with provincial laws). If no collective agreement exists, the amount of compensation (including benefits) must be at least equal to the amount specified in the most comparable agreement that is relevant to the given worker's experience level, tasks and location (calculated on a per-hour or similar basis). This condition is referred to hereinafter as the "prevailing wage".

- The ITC claimant must attest in prescribed form and manner that the prevailing wage requirement (described above) is met with respect to its own covered workers and that a reasonable effort was taken to verify that covered workers employed by others involved in the installation of clean hydrogen property also meet the prevailing wage requirement.

- The ITC claimant is also required to take steps to ensure that all covered workers are aware of the requirements by posting notices that are clearly visible and accessible or by electronic means. The ITC claimant must also provide a plain language explanation of what the prevailing wage requirements mean for workers and instructions as to how to report any failures to meet these standards to the Minister.

For these purposes, a covered worker means an individual:

- Who is engaged in the installation of the clean hydrogen property at the designated work site;

- Whose work duties are primarily manual or physical in nature; and

- Who is not an administrative, clerical or executive employee, or a business visitor to Canada (within the meaning of section 187 of the *Immigration and Refugee Protection Regulations*).

Apprenticeship requirements

In addition to the prevailing wage requirements set out above, the ITC claimant must make reasonable efforts to ensure that apprentices registered in a Red Seal trade work at least 10% of the total work performed by Red Seal workers on the installation of the clean hydrogen property. If a labour law or other agreement restricts the use of apprentices, then the ITC claimant must make every effort to ensure the highest percentage of labour hours is achieved. *Red Seal worker* is defined as a covered worker whose duties are, or are equivalent to, duties normally performed by workers in a Red Seal trade.

Proposed subsection 127.46(16) provides specific steps required by the ITC claimant to demonstrate that the ITC claimant is deemed to satisfy the reasonable efforts requirement noted above. According to the Finance Explanatory Notes, the steps are intended to be illustrative of a means of meeting the reasonable efforts tests, as such variations to take into account the ITC claimant's specific circumstances may also be considered reasonable efforts.

Certain steps must be taken at least every four months in respect of the installation year. These steps are mainly in respect of satisfying specific job posting requirements, communicating with the trade unions and various educational institutions, and confirming the availability of apprentices at designated work sites. The remaining steps require the ITC claimant to review and duly consider all applications received and to attest compliance of the requirements in prescribed form and manner.

In addition, the ITC claimant must attest in prescribed form and manner that it has met the apprenticeship requirements in respect of covered workers at the designated work site.

Note, Red Seal trade is defined as a designation managed by the Canadian Council of Directors of Apprenticeship under the Red Seal Program and, in any other case, an equivalent provincially registered trade.

Penalties for non-compliance with labour requirements

The proposed legislation includes a penalty in the form of an additional tax amount payable when the taxpayer has claimed the ITC based on electing to satisfy the labour conditions but fails to meet the requirements. The penalty is calculated as $20 for every day a covered person was not paid the prevailing wage rate during the installation year and, with respect to the apprenticeship requirements, $50 for every hour the total apprenticeship time falls below the specified hours. The amounts used to calculate the penalty will be indexed to inflation after 2023.

Gross negligence

If the ITC claimant has claimed the regular ITC rate based on meeting the labour requirements (as outlined in the table above) and it is later determined that the claimant knowingly (or in circumstances amounting to gross negligence) did not satisfy the conditions, the taxpayer must pay back the portion of the incentive they were not eligible for, as well as a penalty equal to half of that ineligible amount.

Corrective measure

If the ITC claimant receives a notification from the Minister specifying that it did not meet the prevailing wage requirement set out above, the claimant may provide a "top-up" amount, plus interest, to each covered worker for the shortfall in pay to remain in compliance with the requirements. The claimant must pay the top-up amount (including interest) within one year after receipt of the notification, unless the CRA considers a longer period to be acceptable in the circumstances. The top-up amount would be considered paid salaries in the year and deductible from income but will not qualify for the ITC.

If the top-up amount is not paid to any particular covered worker, a penalty equal to 120% of the top-up amount will apply.

Conclusion

The clean hydrogen ITC is one of several new proposed ITCs aimed at helping Canada transition to a clean economy, along with the clean technology ITC, the CCUS ITC and the clean technology manufacturing ITC. To date, draft legislation for the clean technology ITC and the CCUS ITC have been included in a bill.

Learn more

For more information, contact your EY or EY Law tax advisor, or one of the following professionals:

Ontario

Dharmesh Gandhi
+1 416 932 5755 | dharmesh.gandhi@ca.ey.com

Martin McLaughlin
+1 416 932 5751 | martin.mclaughlin@ca.ey.com

Atlantic Canada

James Christianson
+1 902 421 6249 | james.christianson@ca.ey.com

Brett Copeland
+1 902 421 6261 | brett.copeland@ca.ey.com

Quebec

Julia Bolpois
+1 514 879 2709 | julia.bolpois@ca.ey.com

Prairies

Korey Conroy
+1 403 956 5778 | korey.conroy@ca.ey.com

British Columbia

Sean Verret
+1 604 891 8341 | sean.verret@ca.ey.com

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation is available via ey.com/privacy. For more information about our organization, please visit ey.com.

About EY's Tax Services
EY's tax professionals across Canada provide you with deep technical knowledge, both global and local, combined with practical, commercial and industry experience. We offer a range of tax-saving services backed by in-depth industry knowledge. Our talented people, consistent methodologies and unwavering commitment to quality service help you build the strong compliance and reporting foundations and sustainable tax strategies that help your business achieve its potential. It's how we make a difference.

For more information, visit ey.com/ca/tax.

About EY Law LLP
EY Law LLP is a national law firm affiliated with EY in Canada, specializing in tax law services, business immigration services and business law services.

For more information, visit eylaw.ca.

About EY Law's Tax Law Services
EY Law has one of the largest practices dedicated to tax planning and tax controversy in the country. EY Law has experience in all areas of tax, including corporate tax, human capital, international tax, transaction tax, sales tax, customs and excise.

For more information, visit http://www.eylaw.ca/taxlaw

A member firm of Ernst & Young Global Limited.

ey.com/ca