
2025 Hydrogen Innovation Fund

Application Guideline
Stream 2

November 2025

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1. Overview

The Hydrogen Innovation Fund (HIF) enables the IESO and project proponents to test existing and emerging technologies with a view to objectively determine how hydrogen resources can support reliability, affordability and sustainability of Ontario's electricity system, as well as broader decarbonization efforts in heavy industry and transportation.

The 2023 HIF Call for Applications ("2023 HIF Call") supported projects spanning from electrolytic hydrogen production to the use of hydrogen blended with natural gas for electricity generation. Early findings from these projects have identified key opportunities and challenges for integrating hydrogen into Ontario's electricity system.

On July 31, 2025, the Minister of Energy and Mines ("the Ministry") directed the IESO to launch a [2025 HIF Call for Applications](#) ("2025 HIF Call") in support of Ontario's Low-Carbon Hydrogen Strategy.

The 2025 HIF Call aims to support innovative hydrogen pilot projects focused on two separate \$15 million streams:

1. **Stream 1** – Demonstration projects supporting the integration of low-carbon hydrogen into the electricity grid to increase electricity supply, capacity, or storage, which could include peak demand management, ancillary services, and long-term/seasonal storage of surplus renewable energy.
2. **Stream 2** – Demonstration projects directly or indirectly enabling broader applications of low-carbon hydrogen, such as new industrial and transportation sector applications including innovative hydrogen fueling infrastructure, as well as creating hydrogen "hubs" that connect producers with end users.

The purpose of this guideline is to provide prospective **Stream 2** applicants an overview of the requirements and application process of the 2025 HIF Call.

Up to \$15 million in total funding over three years is available for approved **Stream 2** projects.

Please carefully review this document in its entirety before submitting an application.

Note – The IESO recognizes that some proposed projects may deliver benefits that align with both streams. However, applicants may only apply to one stream (Stream 1 or Stream 2) per project. To assist in this determination, applicants should review the project categories and evaluation criteria for each stream and submit their project under the stream that aligns best with their project attributes. The selected stream should reflect where the majority of benefits and outcomes are expected. If applications for the same project are submitted under both streams, IESO will notify applicants pursuant to the rectification process, as set out in Section 2.1 below, the applicant will have **two business days to inform the IESO which submission should proceed for review**. On receipt

of a rectification notice, applicants that fail to inform IESO which submission should proceed for review within the allotted time will be removed from further consideration.

Potential applicants are welcome to contact the Hydrogen Innovation Fund team at hydrogeninnovationfund@ieso.ca with questions about their application before January 27, 2026.

1.1 Process and Timelines

The 2025 HIF Call consists of six stages, as illustrated and described below.

Note – Proposed timelines are subject to change.



1. Public Stakeholder Session (October 1, 2025): The IESO presents the program design including scope, eligibility requirements, and evaluation criteria for stakeholder feedback. To register for the session, please visit the IESO's Stakeholder Engagement website - [Hydrogen Innovation Fund \(HIF\)](#).

2. Open Submission Window (November 4, 2025 - February 11, 2026): The IESO publishes final versions of the guideline and other application documents. Applicants form teams, develop their project proposals, and submit applications to the hydrogeninnovationfund@ieso.ca. Applicants are welcome to contact the HIF team with questions about their application before January 27, 2026, and the IESO will provide a written response by January 30, 2026. Applications will not be accepted after 11:59 p.m. on February 11, 2026. See Section 3 for more details.

3. Application Evaluations (February - April 2026): The IESO evaluates applications per the three-stage evaluation process outlined in Section 2 below.

4. Notification of Project Selection (May 2026): Applicants are notified of the funding decision on their project. Applicants whose projects are selected for funding may also be notified of any Indigenous consultation identified by the Ministry, as appropriate.

5. Contracting (May - July 2026): The IESO enters into a HIF funding agreement with each of the successful applicants (the "Contribution Agreement"). During this stage, the IESO and applicant work together to ensure project activities and deliverables are clearly captured. See Section 3 for more information.

6. Project Execution (August 2026 – August 2029): Projects commence and start to incur project related costs. The IESO will setup kick-off meetings with the successful applicant project teams, followed by bi-monthly touchpoint meetings. Successful applicants are encouraged to connect with TSSA and ESA after contract execution, see Section 4 for more information.

1.2 Stream 2 Objectives

Stream 2 aims to accelerate the adoption of hydrogen in industries such as steel, cement, chemicals, and heavy-duty transportation, with applications in decarbonization, fertilizer production, and steel manufacturing processes such as desulfurization. The goal is to advance Ontario's hydrogen economy while delivering benefits to communities, including Indigenous communities.

Stream 2 is intended to de-risk emerging hydrogen technologies, and business models by supporting demonstration projects in their initial and critical development phase, while also promoting the growth of the hydrogen economy in the province.

The high-level objectives of Stream 2 include:

1. Support and accelerate **decarbonization and emissions reduction** of high-emitting priority sectors in the province, such as cement, chemicals, steel, and heavy-duty transportation.
2. Support **economic growth and job creation** in the province and support innovation in local manufacturing of low-carbon hydrogen solutions.
3. Promote **hydrogen technology integration advancements** in areas such as transportation, manufacturing and heavy industry.
4. Support hydrogen sector development and evolution through **collaboration and knowledge sharing** of lessons learned and key project findings.

1.3 Project Type and Categories

The 2025 HIF will consider applications for demonstration projects that are at least at the Technological Readiness Level 7 (TRL 7). These will be real-world projects located in Ontario involving physical assets/equipment, construction, and field operations.

Stream 2 is seeking demonstration projects that will directly or indirectly enable broader industry sector applications of low-carbon hydrogen, which could include enabling hydrogen production for transportation, switching existing hydrogen users in key sectors to low-carbon hydrogen produced in Ontario, and supporting the advancement of the Ontario hydrogen economy and benefits to local municipalities, including Indigenous communities. Demonstration projects must include at least one of the following project categories as part of the project scope. Examples of applicable projects are also provided below each category, but do not represent a fulsome list.

Note – Applicants are allowed to include more than one of the below categories as part of their project scope.

Category 2A – Low carbon hydrogen production and usage in industrial sectors

2.A.1 Demonstration of low-carbon hydrogen production technologies, such as water electrolysis, methane pyrolysis, steam methane reforming (SMR) with carbon capture/utilization, biomass

gasification or reforming, and other novel low-carbon production methods can support decarbonization efforts of a hydrogen off-take partner.

2.A.2 Demonstration of decarbonization applications by enabling low-carbon hydrogen integration as a cleaner alternative to fossil fuels, such as feedstock in steel production, ammonia or other chemical synthesis, high-temperature industrial heat applications, etc.

Category 2B – Low carbon hydrogen usage in transportation sector

2.B.1 Demonstration of development of fuel cell vehicles or innovative solutions that displace diesel-powered engines with low carbon hydrogen, such as transit buses, school buses, delivery trucks, garbage trucks, heavy-duty trucks, rail, or airport and port handling equipment.

2.B.2 Demonstration of hydrogen fueling station integration to support hydrogen adoption in the province's heavy-duty transportation sector.

Category 2C – Integrating hydrogen within a broader hydrogen economy

2.C.1 Demonstration of regional hydrogen "hubs" that strategically locate hydrogen production, storage and end-use through collaboration with suppliers, end-users and industry associations.

2.C.2 Demonstration of circular economy models, such as industrial symbiosis using hydrogen byproducts, integration of heat and fuel systems, water reuse, etc.

2.C.3 Demonstration of ecosystem-level transformation through advancement of regulatory innovation, community and Indigenous engagement across hydrogen value chains, etc.

2.C.4 Demonstration of novel technologies in hydrogen storage or hydrogen transportation and cross-cutting innovation, such as smart monitoring systems, hybrid and modular storage systems, etc.

1.4 Key Performance Indicators (KPIs)

Key performance indicators (KPIs) have been developed to measure the ability of successful projects to meet the objectives outlined in Section 1.2 above, and to measure the overall success of the 2025 HIF Call. Applicants will outline their methodology for each KPI listed in Appendix A to present how the objectives will be achieved, using publicly recognized/standardized methodologies where appropriate. Applicants are encouraged to propose additional KPIs aligned with demonstrating the achievement of the HIF objectives. Refer to Appendix A for details.

1.5 Project Requirements and Final Report

The proposed projects should focus on gathering, analyzing and disseminating insights to help achieve the objectives of the 2025 HIF Call. To support proponents, the IESO has streamlined the application process, including updates to required templates. The IESO will also provide guidance to assist applicants in completing and submitting their applications in a timely manner. Using the 2025 HIF Application template for Stream 2, parts A and B, each proposed project should be structured

around a maximum of three milestones. After completion of each milestone, the applicant will be required to submit a milestone report that includes a summary of the project progress, the percentage of completion of the 2025 HIF Call KPIs, information on lessons learned to date, and technical achievements thus far.

For each milestone, applicants should identify all potential risks and propose corresponding mitigation measures. Each milestone should be specific, measurable, realistic and relevant to the project objective(s). All milestones and their associated activities should follow a logical sequence, including the timelines and/or duration of each, as well as detailed descriptions. Examples of potential milestones may include engineering, procuring and construction/commissioning in place, required permits and licenses, etc.

Please note, applicants whose projects are selected for funding may also be notified of any Indigenous consultation identified by the Ministry as appropriate, which must be carried out by the applicant. The Ministry or the IESO may request additional information about a project. Applicants must provide such requested information within the time specified.

At the end of the project, applicants are required to submit a final report using an IESO provided template. This final report should document the project's analysis, outcomes, and knowledge-sharing activities.

2. Project Evaluation

To determine if Stream 2 applications qualify for funding, the IESO conducts a three-stage evaluation process: (1) screened for eligibility, (2) reviewed by the IESO's Technical Review Committee (TRC), and (3) reviewed by the Ministry's evaluation team, as described below.

2.1 Stage 1: Eligibility Criteria

In this stage, applications are checked against key eligibility requirements, and a review that the applicants have submitted the application to only one stream for funding, as described below. The project must meet all eligibility criteria to proceed to Stage 2 of the evaluation process. Please refer to Appendix E for all required documents.

To allow for administrative flexibility during screening, the IESO may, at its discretion, email a rectification notice to the main applicant identifying specific deficiencies in an application. **Applicants will have a limited window of two business days to correct the issue.** This process is intended only for minor administrative or technical errors (including an inclusion by the applicant of the same project for applications for both Streams 1 and 2), and will not permit changes to project scope, partners, or funding requests. Applicants that fail to rectify identified deficiencies within the allotted time will be removed from further consideration.

2.1.1 Project Type and Timeline

To be eligible for funding under the 2025 HIF, the project must meet the following project type and timeline requirements:

CRITERIA	REQUIREMENT
Project Location	Ontario
Project Length	36 months maximum
Data Collection	6 months minimum
TRL ¹	7 or higher

Projects involving electrolysis must record and submit 8760 hourly kWh load profile energy data for the production equipment and balance of plant equipment, separately.

2.1.2 Project Applicant

Eligible applicants include non-profit and for-profit incorporated entities. Funding is not available to individuals, including incorporated individuals, sole proprietorships, partnerships, trusts, or joint ventures. The applicant must be the main beneficiary of the project.

Applicants are required to secure a minimum of two partners to participate in the project. Additional partners are encouraged to strengthen the project team and will be considered in the evaluation criteria. For purposes of HIF, a project partner is defined as any company that is contributing either cash or in-kind to the project – refer to Section 2.1.3 for details. Affiliates may count toward the minimum partner requirement, provided that the minimum funding requirements are met (e.g. applicant and their partner(s) must provide cash contribution that totals 30% of the total project value)

At the time of submission, the applicant must provide audited or reviewed financial statements and signed letters of support specifying the contribution amount and the type of contribution (cash and/or in-kind) from all financial contributors to the project to demonstrate the ability of the project team to carry out their financial obligations associated with the project.

Applicants who are [IESO Market Participants](#) or are under contract with the IESO for participation in the IESO administered markets or other related programs must be in good standing to be eligible to receive funding under HIF.

¹ See Appendix B for a method for assessing the maturity of proposed technology

2.1.3 Project Funding

Stream 2 has a total budget of \$15 million over three years. Applicants are required to submit a budget as part of their application, detailing the project financials including a breakdown of how each expense is funded. Eligible projects must meet the following funding requirements:

CONTRIBUTION	REQUIREMENT
IESO	\$1M to \$4.5M and up to a maximum of 50% of total project value
Applicant	Minimum cash contribution of at least 15% of total project value
Applicant and Partners	Minimum combined cash contribution of at least 30% of total project value

Any remaining project costs are accounted for via in-kind contributions from the applicant and/or project partners.

In-kind contributions are defined as eligible non-monetary resources that can be provided by the project lead or partners. These are assets and services that are essential to the project that would have otherwise been purchased by the applicant and may include capital items that partners donate to the project, professional services and training.

Eligible cash contributions are expenses for the direct costs of activities that are directly related to achieving the objectives and deliverables for which the HIF funding was awarded.

Grant stacking with other *non-IESO* sources of funding is encouraged so long as there is no duplicate funding for project expenses (e.g. for a given expense, the sum of funding from all sources cannot exceed the cost of the expense). Applicants receiving additional grant funding for their project will be required, as part of the application process, to attest that there is no duplication/overlap in funding of IESO-supported tasks.

Eligible and non-eligible expenses are described in further detail in Appendix C. All budgeted expenses using IESO funds are subject to audit. Examples of eligible expenses include the cost of electrolyzer equipment (proton exchange membrane/alkaline/solid oxide electrolyzer cell), labour for installation and integration of technology, safety and control systems, and energy and design services directly related to system integration.

2.2 Stage 2: IESO Evaluation Criteria

Applications meeting all the eligibility requirements in Stage 1: Eligibility Screening will advance to Stage 2: IESO Evaluation Criteria, where they are assessed against the evaluation criteria listed below. The IESO's TRC, a group of internal subject matter experts across various IESO business units, will evaluate the applications that proceed to Stage 2: IESO Evaluation Criteria.

Projects that achieve a minimum of 70 points in Stage 2 of the evaluation will move on to Stage 3: Ministry Evaluation Criteria. Refer to Section 2.3 for more details.

CATEGORY	EVALUATION CRITERIA	WEIGHT
Project Team (Applicant + Partners) and Engagement	The application clearly demonstrates that the project team (comprising of the applicant and the partner(s)) possesses a diverse and complimentary skillset with sufficient hydrogen expertise to successfully execute the proposed project. Partnerships and experience across the hydrogen supply chain from producer to integrator to off-taker are evident. The team is well-positioned to scale/commercialize the project, building on the learnings and successes from the pilot phase. (13 points)	30
	The number of project team members is three or more and is contributing greater than 60% of external funding (cash and in-kind). (2 points) - The project team has demonstrated experience in delivering innovative, large-scale strategic projects. (10 points) - Relevant, early and meaningful engagement with municipalities, and/or communities and Indigenous communities are evident (such as consultation, capacity-building, equity, employment, or shared benefits). Demonstrated strong partnerships (e.g. past engagements, MOUs, partnerships, etc.) are rewarded due to their added capacity and credibility. (5 points)	
Project Design	- The project's scope and schedule are clear, reasonable, and logically structured to meet Stream 2 objectives. Work plan and tasks are well defined and support project execution, including clear descriptions of how they are being executed. The proposed deliverables demonstrate how the project will enable hydrogen technology integration within industry sectors (e.g. transportation, heavy industry) and help the IESO and the Ministry understand the opportunities and challenges of such integration. The project clearly outlines the commercialization activities and strategy that the organization plans to take post-project demonstration/piloting. (20 points) - Budget items are appropriately allocated to proposed project activities, and risk is appropriately distributed among the partner(s). (5 points)	30

CATEGORY	EVALUATION CRITERIA	WEIGHT
	The approach to measure and validate relevant KPI(s) for each project objective is clearly stated and uses publicly recognized/standardized methodologies where appropriate. (5 points)	
Project Impact and Innovation	- The project outlines innovative technology, utilization model, service, or business approach not yet deployed in Ontario. The project outlines a clear and credible plan for maturing the proposed technology (advance the TRL), and clearly articulates its competitive advantage (e.g. efficiency, cost-competitiveness) over alternatives. (15 points) - The project supports and influences Ontario's low-carbon hydrogen sector evolution and demonstrates a barrier or gap that the proposed hydrogen solution will address. (15 points) - The project demonstrates net annual GHG emissions reductions over the course of the project. The project evaluates the potential GHG emissions impact if the proposed solution is to be implemented at scale. (10 points)	40
TOTAL SCORE		100

2.3 Stage 3: Ministry Evaluation Criteria

Applications that achieve a minimum of 70 points will proceed onto Stage 3, the final stage of evaluation, where the Ministry will evaluate the applications based on the provincial criteria outlined below, which consider economic development and broader public policy objectives.

Canadian Status policy evaluation points will be assessed as part of the Ministry's evaluation criteria. Refer to Appendix D for further details on assessing Canadian Status policy.

CATEGORY	EVALUATION CRITERIA
Decarbonizing Hard-to-Abate Industries	- The project directly supports GHG emissions reductions within the Province with demonstrated market potential to further reduce GHG emissions through broader adoption of the technology. - The project advances hydrogen use in sectors for which low-carbon hydrogen is recognized as, over the long term, having significant potential as a cost-effective decarbonization option, including but not limited to applications in steel manufacturing, cement, ammonia production and heavy transportation, and does not promote hydrogen use in industries for which electrification is a more cost-effective alternative (such as domestic heating, light transportation).

CATEGORY	EVALUATION CRITERIA
Job Creation, Retention and Upskilling in Ontario	For example, projects blending hydrogen in the natural gas network would not qualify under this criterion where electrification would be a technically viable and cost-effective alternative. • Project demonstrates market potential to reduce greenhouse gas emissions through broader adoption by target sector, or other applicable sectors.
	• Project would directly retain and create new jobs in Ontario. • Project supports long-term job creation in Ontario, including indirect creation of new jobs (i.e. through development of specialized skills or workforce that attracts new investment or encourages creation of new Ontario companies that generate jobs). • Project would support existing Ontario workers obtaining certification in skilled trades needed for development of the hydrogen market.
Hydrogen Infrastructure Development in Ontario	• The project would build permanent infrastructure that would support long-term growth of the hydrogen market. • Project demonstrates how infrastructure could leverage follow-on investment to benefit future projects through the facilitation of hydrogen production, storage or distribution (for example hydrogen production facilities, pipelines, transportation fueling facilities). • Infrastructure would be dedicated to hydrogen only; projects building or enhancing natural gas infrastructure to facilitate blending hydrogen into the natural gas network would not qualify. • Project encourages hydrogen hub development by being located near other projects in the same area and demonstrates a strategic connection to these projects and key stakeholders
Enabling sustained domestic demand for low-carbon hydrogen	• For producers and distributors, or technology developers in this space: The project demonstrates potential to considerably reduce costs or increase efficiency of generating, compressing, storing or transporting low-carbon hydrogen to enhance domestic market pull for low-carbon hydrogen. • For technology installations/ hydrogen users: Project has in place or indicates strong potential to result in offtake agreements for low-carbon hydrogen. This could be through partnership agreements that support future end use. • Project sector or application has significant potential for near- and medium-term demand for hydrogen, including based on state of technology, economics and infrastructure and end users. • Example on the production and distribution side could be production technologies that have multiple value streams, the net result making the production pathway economically viable with low-cost product.

CATEGORY	EVALUATION CRITERIA
	Example on the demand side could be a technology installation that addresses a niche market where clients are content to pay a 'green premium' to meet decarbonization goals and long-term use of low-carbon carbon hydrogen can be sustained through an off-take agreement.
Supporting Ontario-Based Small and Medium Businesses	- Proponent is a small- or medium-sized business (less than 500 employees) with operations in Ontario. - Project would lead to measurable benefits for other Ontario small- or medium-sized businesses. - Project would support growth of hydrogen-specific or other supply chains that could benefit small- or medium-sized businesses.
Canadian Status	Project meets defined criteria for Canadian status.
Regional Representation	Project is located outside the GTA to support regional economic development.

2.4 Project Selection

The IESO will provide the Ministry with an unranked list of all projects that achieve the minimum technical score of 70 points from Stage 2: IESO Evaluation Criteria. Funding allocation will be based on the evaluation of Stage 3: Ministry Evaluation Criteria, with final project selections subject to approval from the Government of Ontario. Applications are selected for funding by ranking order (highest to lowest) until the funding is fully accounted for.

Successful applicants will then proceed to the contracting phase, where they will enter into Contribution Agreements with the IESO. Refer to Section 3 for more details.

3. Administration

3.1 Application Process

Potential applicants are welcome to contact the Hydrogen Innovation Fund team at hydrogeninnovationfund@ieso.ca with questions about their application during the open submission window.

The IESO will accept for consideration applications submitted via email to hydrogeninnovationfund@ieso.ca between November 4, 2025 and February 11, 2026 with the words

“Hydrogen Innovation Fund Application” in the subject line. See Appendix E for a list of all submission documents. Applications **will not be accepted after 11:59 p.m. on February 11, 2026**. The timing of an application is based on when the application is received by IESO’s email (hydrogeninnovationfund@ieso.ca), regardless of when the applicant began the submission process. The onus and responsibility rest solely with the applicant to ensure its application is received no later than the above stated deadline.

The IESO will respond by email to each applicant to confirm receipt of the submission within two business days.

Applicants must not engage in any unethical conduct, including lobbying or other inappropriate communications, offers of gifts or benefits of any kind to IESO or Government of Ontario employees, officers or board members (as applicable), deceitfulness, submitting applications containing misrepresentations or other misleading, fraudulent or inaccurate information, or any other conduct that compromises or may be seen to compromise the integrity of the applicant, application or the 2025 HIF Call process. The IESO will disqualify an applicant from the 2025 HIF Call if that applicant engages in any of the foregoing activities or conduct, or if that applicant’s application contains a misrepresentation or any inaccurate, fraudulent, misleading or incomplete information (including as it relates to the disclosure of financial or in-kind contributions).

Please note, that by submitting an application, you agree that the IESO may also share your application with the Government of Ontario on a non-confidential basis.

3.2 Contribution Agreement and Funding Disbursement

Successful applicants will be required to enter into a Contribution Agreement, in the form of provided in Appendix E, which may be subject to further revisions by the IESO.

Note: this agreement is non-negotiable; the IESO will not make changes to the agreement at the request of successful applicants.

Funding is disbursed on a milestone basis as projects complete key deliverables identified in the application and by the IESO. Submitted applications must set out the number, content, timing, and budget of milestones in their application.

The final milestone will be funded by the IESO and must represent a minimum of 25% of the total IESO contribution.

4. Standards Authorities

4.1 Technical Standards and Safety Authority (TSSA)

TSSA is supporting Ontario's transition to a low-carbon hydrogen economy through an enhanced hydrogen safety framework. The framework is designed to ensure the safe use of hydrogen across various sectors, helping to unlock its potential as a cleaner fuel.

TSSA regulates areas of hydrogen infrastructure such as refueling station design, pipeline installation, and high-pressure piping in accordance with these key regulations and codes:

- O. Reg. 214/01: Compressed Gas regulates the safe handling, storage and transportation of hydrogen, covering the licensing and permitting requirements for the installation, operation, and maintenance of facilities and appliance that use hydrogen as a fuel.
- CAN/BNQ 1784-000/2022 Canadian Hydrogen Installation Code: Requirements for hydrogen generation, usage, storage, and associated piping systems.

Applicants should consider the following TSSA requirements of safe adoption of hydrogen technology ([Hydrogen Safety](#)):

- Licensing Requirements to Transport Compressed Hydrogen in Bulk Containers
- Licensing of Existing Hydrogen Facilities
- Licensing of New Hydrogen Facilities
- Refueling Stations
- Maintenance and Conversion Facility
- High-Pressure Piping
- Hydrogen Contractor Registration
- Hydrogen Technician Certification

4.2 Electrical Safety Authority (ESA)

Applicants should consider the following Electrical Safety Authority (ESA) codes and standards when drafting their application.

The Electrical Safety Authority (ESA) regulates and promotes electrical safety in Ontario. The Ontario government has given ESA a mandate to improve public electrical safety. The ESA administer Part VIII of the Electricity Act and oversee these four related regulations:

- Ontario Electrical Safety Code (Regulation 777/21) — sets out how to do electrical work.
- Licensing of Electrical Contractors and Master Electricians (Regulation 570/05) — sets requirements for businesses and certain people who can do electrical work.
- Electrical Distribution Safety (Regulation 22/04) — provides objective-based electrical safety oversight and sets out the accountabilities of companies licensed to distribute electricity.
- Electrical Product Safety (Regulation 438/07) — governs pre-market approval of electrical products before their sale, distribution and advertisement.

The Ontario Electrical Safety Code (OESC) has comprehensive requirements related to product approval, applying for inspection, submitting plans for review and connection authorization requirements. Including this program (*), any work (where the OESC applies) on an electrical installation will need to comply with the above requirements, which include what to install, who is eligible to install and how to install. Installers and designers are required to meet and satisfy the current OESC requirements and are encouraged to refer to the latest bulletins issued by the ESA. The bulletins include interpretations, clarifications, and sometimes easements.

- A sample of these published bulletins are located on the following website link: <https://esasafe.com/electrical-products/bulletins/>
- Notifications can be filed on the following website link: <https://esasafe.com/fees-and-forms/forms/>
- Plan Review submissions can be filed on the following website link: <https://esasafe.com/business-and-property-owners/electrical-plan-review/>
- For more information about ESA technical requirements, please refer to the following website link: <https://esasafe.com/code-technical/>

(*) OESC requirements apply to work on an electrical installation related to this program. Work on an electrical installation may include but is not limited to, the installation (e.g. new equipment, future modifications, replacement and retrofitting) of;

- DERs (e.g. energy storage systems, renewable energy systems such as solar/wind/fuel cell assets, generators); energy management systems; - example of related bulletins are Bulletin 64-1-*, 64-7-*, 84-1-* which can be found along with other bulletins in the following link <https://esasafe.com/electrical-products/bulletins/>
- Section 18 – Hazardous locations and related bulletins – examples of related bulletin is Bulletin 18-1-* which can be found along with other bulletins in the following link <https://esasafe.com/electrical-products/bulletins/>

All the generating facilities must be inspected by ESA prior to be connected to the distribution grid. See Bulletin 2-28-* in the following link <https://esasafe.com/electrical-products/bulletins/>

Generation equipment that is grid interconnected shall meet all the applicable requirements of the OESC including section 84 and Bulletin 84-1-* in the following link <https://esasafe.com/electrical-products/bulletins/>

Appendices

Appendix A: Key Performance Indicators (KPIs)

Applicants will be asked to outline their methodology for each KPI listed below to present how the objectives of the 2025 HIF call will be achieved, using publicly recognized/standardized methodologies where appropriate. Applicants are encouraged to propose additional KPIs aligned with demonstrating the achievement of the HIF objectives.

KPI	KPI DESCRIPTION	PROPOSED UNIT	RELEVANT OBJECTIVE
GHG Emissions Reduction	Quantifies the reduction in GHG emissions throughout the course of the project resulting from the decarbonization of applications by switching to low-carbon hydrogen.	tonnes of CO2 or CO2e	Decarbonization and Emissions Reduction
Jobs Created	Quantifies the number of direct and indirect jobs created through the project.	# of jobs	Economic Growth and Job Creation
TRL Advancement	Quantifies the advancement of the technology readiness level	# delta TRL	Hydrogen Technology Integration Advancements
Knowledge-sharing activities	Quantifies the number of events and publications held to support knowledge transfer and lessons learned.	# of events and publications	Collaboration and Knowledge Sharing

Appendix B: Technology Readiness Levels (TRL)

The project must be at the Technology Readiness Level 7 (TRL 7) or higher, to be considered for funding.

There are 9 technology readiness levels, with 1 being the least ready and 9 being already used in real-life conditions².

Level 1: Basic principles of concept are observed and reported

Scientific research begins to be translated into applied research and development. Activities might include paper studies of a technology's basic properties.

Level 2: Technology concept and/or application formulated

Invention begins. Once basic principles are observed, practical applications can be invented. Activities are limited to analytic studies.

Level 3: Analytical and experimental critical function and/or proof of concept

Active research and development are initiated. This includes analytical studies and/or laboratory studies. Activities might include components that are not yet integrated or representative.

Level 4: Component and/or validation in a laboratory environment

Basic technological components are integrated to establish that they will work together. Activities include integration of "ad hoc" hardware in the laboratory.

Level 5: Component and/or validation in a simulated environment

The basic technological components are integrated for testing in a simulated environment. Activities include laboratory integration of components.

Level 6: System/subsystem model or prototype demonstration in a simulated environment

A model or prototype that represents a near desired configuration. Activities include testing in a simulated operational environment or laboratory.

Levels 7 through 9 represent the pre-commercialization gap for innovations.

Level 7: Prototype ready for demonstration in an appropriate operational environment

Prototype at planned operational level and is ready for demonstration in an operational environment. Activities include prototype field testing.

Level 8: Actual technology completed and qualified through tests and demonstrations

Technology has been proven to work in its final form and under expected conditions. Activities include developmental testing and evaluation of whether it will meet operational requirements.

² <https://ised-isde.canada.ca/site/innovation-canada/en/technology-readiness-levels>

Level 9: Actual technology proven through successful deployment in an operational setting

Actual application of the technology in its final form and under real-life conditions, such as those encountered in operational tests and evaluations. Activities include using the innovation under operational conditions.

Appendix C: Eligible and Ineligible Expenses

Eligible cash contributions cover direct costs related to project activities, design, development, demonstration, installation, implementation, testing, measurement and performance verification of the project.

In-kind contributions include non-monetary resources, such as donated goods or services, and must be documented with invoices or payroll records. The value of in-kind contributions should reflect market rates for goods and services provided.

The following table summarizes eligible and ineligible expenses.

Eligible Expenses	Ineligible Expenses
✓ Purchase or use of capital assets (improvements and equipment), listed and itemized, required for the delivery of the project ✓ Project-specific raw materials, products, tools and software, upgrades ✓ Costs associated with the monitoring, verification and evaluation of the project's impacts, including data collection, processing, analysis and management ✓ Salaries and benefits of employees directly involved in the design, selection, purchase and installation of the project ✓ Professional, engineering, scientific, technical, management and contracting services, including training ✓ Permits and license fees ✓ Funding for marketing, communications and workshops directly related to project activities	✗ Budget deficits ✗ Activities completed or costs incurred before the funding is approved or after the project is completed ✗ Costs over \$50,000 for any single consultant or contractor that has not been selected through a competitive process ✗ Costs associated with applying for other government grants and programs ✗ Routine testing and maintenance ✗ Costs associated with the purchase of land or real estate ✗ Any overhead costs generated by the lead applicant or third parties, such as operating costs related to general maintenance and repair ✗ Professional fees unless directly associated with the project ✗ Hospitality, incidental or food expenses for the project team ✗ Hospitality or travel costs not in compliance with the Government of Ontario's Travel, Meals and Hospitality Expenses Directive ✗ Any costs not directly related to the achievement of the project's objectives as

Eligible Expenses	Ineligible Expenses
	defined in the Contribution Agreement between the IESO and the applicant

Appendix D: Canadian Status Policy

In response to ongoing international tariff and trade tensions, the Government of Ontario introduced the Protect Ontario by Unleashing our Economy Act, 2025, which among other things provides the government the authority to give preference to businesses with Canadian ownership in Ontario’s energy sector. The Government of Ontario aims to support and strengthen Ontario’s energy transition and economic resilience by implementing a Canadian Status policy.

To be eligible to receive evaluation points for having Canadian Status, the applicant must provide supporting documentation through the form of an attestation from an authorized representative of the applicant, that confirms that the applicant, and where applicable, the person that ultimately controls it, satisfies the Canadian Status definition.

CATEGORY	EVALUATION CRITERIA
Canadian Status	The applicant has provided an attestation form from an authorized representative of the applicant [in the form provided by the IESO], that confirms the applicant, and where applicable, the person that ultimately controls it, satisfies the “Canadian Status” definition

An applicant has “Canadian Status” if the following requirements are met:

- (a) If the applicant is not Controlled by any other Person, the headquarters or main office of the applicant are located in Canada; or
- (b) If the applicant is Controlled by any other Person, other than a natural person, both the applicant and the Person that ultimately controls the applicant meet the requirements set out in (a) above; or
- (c) If the applicant is Controlled by a natural person, the applicant meets the requirements set out in (a) above and the natural person that ultimately controls the applicant is ordinarily resident in Canada.

For the purpose of attesting to Canadian Status:

- (d) “Control” means, with respect to any Person at any time:
 - holding, whether directly or indirectly, as owner or other beneficiary (other than solely as the beneficiary of an unrealized security interest), securities or ownership interests of that Person carrying votes or ownership interests sufficient to elect or appoint fifty percent (50%) or more of the individuals who are responsible for the supervision or management of that Person, or

- the exercise of de facto control of that Person, whether direct or indirect and whether through the ownership of securities or ownership interests, by contract or trust or otherwise.

(e) "Person" means a natural person, firm, trust, partnership, limited partnership, company or corporation (with or without share capital), sole proprietorship, governmental authority, or other entity of any kind.

Please note, if the applicant attests to having Canadian Status, it (and its ultimate parent, where applicable) must have and retain Canadian Status for a minimum of six months following execution of the HIF contribution agreement. The contribution agreement may be terminated if Canadian Status is not retained for this period.

Canadian Status criteria will apply only to the applicant (the project partners will not be assessed). The applicant and, where applicable, the person that ultimately controls the applicant, will need to maintain their Canadian Status for a minimum of six months following the execution of the HIF Contribution Agreement.

Appendix E: Submission Documents

HIF 2025 Application Templates Documents are found on the following links, and must be completed and submitted as part of the application:

- [2025 HIS Application Part A – Stream 2](#)
- [2025 HIF Project Application Part B](#)

With the application submission, the following supporting documents are required:

- Copy of the applicant's certificate of incorporation
- Signed Letters of Support from all project partners, confirming contribution amounts (\$) and type (cash/in-kind)
- Applicant's most recent audited or reviewed Financial Statements
- Project Team's Curriculum Vitae's (CVs)
- Signed Letter of Attestation of Canadian Status (where applicable)

Successful applicants will be required to enter into the following agreement:

- [2025 HIF Contribution Agreement Template – Stream 2](#)