

# Grid Innovation Fund

## Application Guideline

February 2019

Grid Innovation Fund resources available at:

**[ieso.ca/gridinnovationfund](http://ieso.ca/gridinnovationfund)**

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## Who is eligible to apply?

The Grid Innovation Fund welcomes applications from non-profit and for-profit incorporated entities, including but not limited to local distribution companies (LDCs), technology companies, consulting firms, industry associations, educational institutions, and public sector organizations.

Funding is not provided to individuals, including incorporated individuals and sole proprietorships.

## What projects are eligible?

The Grid Innovation Fund only considers applications for projects that present a significant opportunity for ratepayer savings, either directly by enabling customers to better manage their own electricity use, or indirectly by reducing the costs associated with maintaining a reliable electricity system. This includes projects seeking to increase competition for the provision of products and services in Ontario electricity markets.

The Fund is focused on transforming the market and stimulating large-scale change, so proposed projects must be designed to deliver specific outcomes.

## Categories of eligible projects:

Project Type	Project Outcome
<b>Program</b>	Testing of a new program or specific program element, resulting in the creation of a new program, a new program element or the revision of an existing program. The project must test the concept in a real-world environment and involve suitable partners. To determine cost-effectiveness, projects must have an evaluation, measurement and verification component.
<b>Tool</b>	Development and assessment of a new energy management tool or approach (e.g., policy, benchmarking solution, mapping technology) to establish feasibility and broader potential.
<b>Training Program</b>	Pilot of a targeted training program designed to close a skills gap.
<b>Community of Practice</b>	Formation of a self-sustaining network designed to facilitate sharing of information and best practices to target groups.
<b>Strategic Research</b>	Research study investigating a project or program concept, or adoption barriers and mitigation strategies for innovative energy solutions.
<b>Emerging Technology Demonstration</b>	Demonstration, measurement and verification of emerging technologies. The project must test a near-commercial technology in a real-world environment. Projects must have a measurement and verification component to determine cost effectiveness, electricity savings potential. Projects must have a minimum technology readiness level of 7 – prototype ready for demonstration in an appropriate operational environment. <sup>1</sup>

<sup>1</sup> Innovation Canada technology readiness level descriptions can be found at <https://www.ic.gc.ca/eic/site/080.nsf/eng/00002.html>. IESO may make exceptions for software technology at its sole discretion.

<b>Strategic Opportunity</b>	Large-scale piloting of strategically important technologies, services, practices, or program approaches that cannot be effectively piloted at a smaller scale.
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In addition to delivering a specific outcome, projects must also directly address one of the following categories of conservation action:

<b>Objective Category</b>	<b>Action</b>
<b>Energy Efficiency</b>	Energy efficiency occurs when customers reduce their electricity consumption but retain a similar level of end-use service. Energy efficiency is the gain realized from using more energy-efficient equipment, processes and buildings.
<b>Demand Response</b>	Demand response occurs when customers reduce their electricity demand at certain times, such as during peak use hours (peak clipping), or shift some of their demand to off-peak hours (peak shifting).
<b>Conservation Behaviour</b>	Conservation behaviour occurs when customers reduce their electricity consumption by scaling back an activity that is powered by electricity.
<b>Load Reduction</b>	Load reduction occurs when instead of using common electric equipment, customers elect to switch away from using electricity to use another fuel source such as geothermal or solar heating or cooling.
<b>Load Displacement</b>	Load displacement is when electricity is generated by an onsite, behind-the-meter project driven by a primary energy source of process waste heat, waste power, waste by-product, or waste gas. Such applications must have a net efficiency benefit to the user and must not be fueled by diesel, coal or any other fuel disallowed by the IESO. Additionally, any project or technology (e.g. solar photovoltaic, wind, waterpower, bioenergy) previously eligible under the IESO Feed-in Tariff Program or the IESO Micro Feed-in Tariff program is not considered load displacement.
<b>Efficient Electrification</b>	Efficient electrification occurs when customers convert to electricity as a fuel source for equipment, processes, or buildings in such a way that minimizes overall consumption and/or peak demand impacts. This category excludes vehicle efficiency improvements.
<b>System Integration</b>	System integration occurs when multiple loads and/or other primarily behind-the-meter distributed energy resources within a Distribution System are integrated or managed, directly or indirectly, to produce a net energy efficiency benefit and / or reduce peak demand, and provide other electricity system benefits.

Applications relating to the research, development and demonstration of transmission, distribution and electricity generation technologies (except as noted in the Load Displacement Objective Category) are not eligible for Grid Innovation Fund support. Projects cannot have a net-positive greenhouse gas emissions impact.

The maximum Grid Innovation Fund project length is 36 months.

### **How do I submit an application?**

The Grid Innovation Fund accepts applications on a wide range of project concepts during open intake windows. This open call process is intended to solicit ideas from the market – some of which are granted funding, and some of which go on to profoundly influence Ontario’s electricity sector.

Before applying to the Grid Innovation Fund, potential applicants should review all posted eligibility criteria to confirm that both their organization and their potential project are eligible for Grid Innovation Fund support.

Upon confirming project eligibility, the first step to being considered by the Grid Innovation Fund is submission of a Project Overview Application form during an intake window. This form is available online and can be submitted by email to [gridinnovationfund@ieso.ca](mailto:gridinnovationfund@ieso.ca). The schedule of intake windows is posted on [ieso.ca/gridinnovationfund](http://ieso.ca/gridinnovationfund) and may be communicated through additional channels such as the IESO Bulletin. Review and feedback of complete Project Overview Applications typically takes four to six weeks but this timeline may be impacted by application volume.

Project Overview Applications are screened by business and technical review committees and, if positively reviewed, applicants are invited to submit a second-stage Proposal including a detailed budget and project plan. Second-stage Proposals are accepted by invitation only.

The Grid Innovation Fund project development process is collaborative – Fund staff will provide feedback and guidance to you at various stages in your Proposal’s development. In fact, as a condition of funding support, we may require you to make changes to your project scope or design. The Proposal stage can take four to eight weeks for review, feedback, and/or changes.

From time to time, the IESO may issue targeted calls for project Proposals addressing specific identified challenges and opportunities. Information on targeted calls and any special application instructions are posted on [ieso.ca/gridinnovationfund](http://ieso.ca/gridinnovationfund) and may be additionally communicated through other IESO channels such as the IESO Bulletin.

### How are applications assessed?

Applications (Project Overview Applications and invited second-stage Proposals) are rigorously reviewed, with top-ranked Proposals recommended for IESO executive approval. Funding decisions are made according to the extent to which a proposed project addresses the needs of Ontario’s electricity system and the Grid Innovation Fund criteria.

Project Overview Applications and invited Proposals will be assessed against the following evaluation criteria:

<b>Strategic Fit</b>	Does the project address a market gap and fit the Grid Innovation Fund and the IESO’s strategic objectives and priorities? How significant is the ratepayer cost reduction potential?
<b>Potential Impact on Market and Program Design</b>	What is the potential to influence electricity market and program design?
<b>Market Capability Building Impact</b>	Is the project building the skills and knowledge required by the market to accelerate the adoption of cost-effective solutions to meet the needs of customers and the electricity system?
<b>Market, program or technical advance</b>	Is the project novel and does it advance the “state of the art” in Ontario?
<b>Project Team &amp; Partners</b>	Does the project team have the qualifications and experience required to execute the project? Is there evidence of strong and appropriate partnerships?
<b>Local Distribution Company (LDC) Involvement</b>	If appropriate for the project concept, is an LDC partner involved in the project?
<b>Project funding</b>	Has the project secured the funding required to complete the project? Does the funding satisfy IESO leverage requirements? Does the funding appropriately allocate risk between the proponent, partners and the IESO?
<b>Project purpose and outcomes</b>	Are the project’s specific outcomes, performance targets and success factors clearly articulated?

<b>Project Design</b>	Is the project's design reasonable and likely to meet the stated objectives? For example, if recruiting participants for a pilot, is the recruitment strategy feasible?
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**What funding can I apply for?**

Grid Innovation Fund-supported projects may not receive any additional funding from the IESO or any IESO-administered or funded program.

As shown in the table below, the Grid Innovation Fund will consider providing support up to a specified maximum percentage of project costs. Applicant cash and in-kind contributions must therefore provide a minimum level of guaranteed leverage of IESO funds and in-kind contributions must be auditable. While other non-IESO sources of funding can be used as leverage and are encouraged, duplicate funding of IESO-supported tasks is not permitted.

The maximum Grid Innovation Fund support for a project varies according to Project Type as outlined below.

<b>Project Type</b>	<b>Maximum IESO support for project / Maximum % of project costs</b>
Program	\$500,000 / 75%
Tool	\$500,000 / 75%
Training Program	\$250,000 / 75%
Community of Practice	\$250,000 / 75%
Strategic Research	\$100,000 / 75%
Emerging Technology Demonstration	\$500,000 / 75%
Strategic Opportunity	No maximum / 50%

In-kind contributions consist of auditable, substantiated non-cash contributions to the project that contribute substantially to the completion of the project. For example, contribution of staff time to install and commission submeters for a technology demonstration project.

## What expenses are eligible?

Costs eligible for project support from the Grid Innovation Fund are those directly related to the design, development, demonstration, installation, implementation, testing, measurement and performance verification of the project. The following table summarizes eligible and ineligible expenses for the Fund.

Eligible Expenses	Ineligible Expenses
<ul style="list-style-type: none"> <li>✓ Project-specific materials, equipment, products and services</li> <li>✓ Salaries and benefits of employees directly involved in the design, selection, purchase and installation of the project</li> <li>✓ Professional, engineering, scientific, technical, management and contracting services, including training</li> <li>✓ Permits and licence fees</li> <li>✓ Funding for marketing, communications and workshops directly related to project activities</li> <li>✓ Costs associated with the monitoring, verification and evaluation of the project's impacts, including data collection, processing, analysis and management</li> <li>✓ Equipment and products, including diagnostic and testing tools and instruments and associated software</li> <li>✓ Costs associated with providing approved incentives to project participants</li> </ul>	<ul style="list-style-type: none"> <li>✗ Budget deficits</li> <li>✗ Activities completed or costs incurred before the funding is approved or after the project is completed</li> <li>✗ Costs over \$50,000 for any single consultant or contractor that has not been selected through a competitive process</li> <li>✗ Costs associated with the purchase of real estate</li> <li>✗ Any overhead costs generated by the lead applicant or third parties, such as operating costs related to general maintenance and repair</li> <li>✗ Hospitality, incidental or food expenses for the project team</li> <li>✗ Hospitality or travel costs not in compliance with the Government of Ontario's Travel, Meals and Hospitality Expenses Directive</li> <li>✗ Any costs not directly related to the achievement of the project's objectives as defined in the contribution agreement between the IESO and the applicant</li> </ul>

## Disclaimer

**Receipt of an application to the Grid Innovation Fund does not constitute a commitment by the Independent Electricity System Operator ("IESO") to support the application, nor does it create a business relationship between the applicant, its partners and the IESO. IESO executive approval is required for the Grid Innovation Fund to provide any financial support to any project, and the IESO will not provide financial support for the work of applicants performed prior to IESO executive approval of that project. The IESO executive decision is final and takes precedent over prior communications. Financial support from the IESO to an applicant to the Grid Innovation Fund will only be provided upon execution of the contribution agreement between the applicant and the IESO, and only according to the terms and conditions therein. The IESO reserves the right to make public the names of applicants, the title and a description of their proposed project, and the amount of funds applied for. All other information submitted by the applicant in their proposal application will be treated as confidential. Members of the Business and Technical Review Committee may be IESO staff or external experts.**