



Municipal Infrastructure Innovation Fund Application

Overview:

The Communities of Tomorrow Municipal Infrastructure Innovation Fund (MIIF) supports the development of innovative infrastructure technologies and solutions that result in economically sustainable, longer lasting, and environmentally friendly products and services. The goal is to move promising technologies and ideas to a market ready product or applied municipal solution.

The fund supports innovations that solve real world problems that municipalities have identified as being of high importance and that are expected to create significant returns in terms of reducing costs for municipalities and having a positive economic impact.

Criteria:

The MIIF is available for companies, researchers and municipalities. Primary activities targeted for support are roads and transportation, water and waste water, and soil remediation; however, innovations in other municipal infrastructure sectors are encouraged and will be considered.

Applications to the MIIF will be evaluated on criteria which include:

- Whether or not there is a compelling market need for the innovation
- How likely it is that the innovation can be successfully commercialized or applied to a create a municipal solution
- Whether or not a municipality has a willingness to invest resources in attaining a solution
- Whether the investigator or a strategic partner(s) is capable of developing the technology

For Inquiries Contact:

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PROJECT NAME

Choose a brief descriptive title for the project.

APPLICANT AND COMPANY PROFILE

Name of organization	Name and title of applicant
Mailing Address	
Telephone number	Fax number
E-mail Address	Head Office Location (only if different)
Total number of employees in Canada	Website
Core business	

PROJECT SUMMARY

- In no more than 200 words; define your innovation, the municipal problem/issue it intends to solve, and what success looks like (use simple terms and analogues to better explain your idea)

MUNICIPAL INFORMATION

Describe the Municipal connection by addressing the following:

1. Clearly and in detail describe the municipal need/problem that this technology/service/ product / process will fill/resolve?
2. How will this technology/service/ product / process assist municipalities to reduce maintenance/operations/renewal costs, labor requirements/costs, or create efficiencies within their municipality?
3. Describe the support this technology/service/ product / process has from Municipalities, and their willingness to invest time and/or money into the development of this technology/service/ product / process.

Please attach any supporting documents or information (letters of support, etc.)

TECHNICAL INFORMATION

Describe the technical details by addressing the following:

1. Describe current and past efforts to address the problem/issue? How will your innovation address the gap that currently exists?
2. How will the proposed innovation work (Please provide a detailed technical description)?
3. What are the current and future plans for intellectual property management?

Please attach any background information (literature search, technical research results), drawings, models, references, and any other necessary technical documentation.

MARKET/USER INFORMATION

Describe the economic potential of the project by addressing the following:

1. What market/user information is available to support the need for this technology/service/ product / process? (Size/ geographic location/ end users/etc.)
2. Describe competing innovation(s) currently in the market place and describe the cost or/and differential advantage(s) of your innovation.

Please attach any background information, market assessments, literature searches, references, and any other relevant market information.

WORK PLAN

Describe the project’s work plan by addressing the following:

- What are the project’s milestones?
- Describe project’s tasks/activities to be undertaken within each milestone in the following table (insert rows as needed)

Number	Task/ Activity Brief Description	Start Date	End Date	Milestone (Yes/No)

WORK TEAM

Please list all project work team members and any knowledge or expertise they bring to the project. If possible, attach a brief CV for each work team member.

Name	Organization	Area of Expertise
Number of Graduate students involved:	Number of Post-Doctoral Fellows involved:	

PROJECT EVALUATION METRICS

Please indicate which of the evaluation metrics outlined in Appendix A your technology/service/ product / process can be evaluated against (minimum of 3 – Provide explanation as necessary).

Environmental Measures

Environmental Economics _____
 Environmental Sustainability _____

Economic Measures

Direct Cost Reduction _____
 Net Indirect cost reduction _____
 Net Impact on Labor Requirements _____
 Projected Labor Impact of Commercialization _____
 Net potential Economic Impact _____
 Net revenue generated by Commercialization _____
 Net Cost Savings over Status Quo _____
 Economic Derived from Avoidance of Disruptions _____

Net

PARTNERING ORGANIZATIONS

List any confirmed partners involved in the project (Industry firms, Research and Development Facilities, Municipalities, etc.) Attach written documentation of their commitment e.g. letter, e-mail, etc.

Organization	Contact Name	Position/Department	Contact Information
What is the role of this partner?		What is their contribution? (Attach written documentation of their commitment e.g. letter, e-mail, etc.)	
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PROJECT REVENUES (FUNDING SOURCES)

When describing labour as in kind support, please explain how the dollar amount was calculated.

Direct Financial Support:	Dollar Amount
Applicant	
Communities of Tomorrow	
Other (List Individually)	
In kind support:	
Applicant	
Other (List Individually)	
Total Revenues	\$

PROJECT EXPENSES (COSTS)

Category (e.g. labor, equipment, etc.) – Provide detailed breakdown	Dollar Amount
Total Expenses	\$

Applicant Declaration

By submitting this form the Applicant understands and accepts the CT application process. The Applicant understands and accepts that this information will be shared with CT stakeholders involved in the decision-making process. The Applicant agrees to indemnify CT against any potential claims that might arise from this process.

The Applicant understands that CT makes no guarantees that the Applicant will be approved for CT funding and services. The Applicant understands and accepts that if during the evaluation process an Applicant does not meet the minimum requirements for the evaluation criteria, the application will be denied.

Agreed and Accepted by:

Applicant
Date

Please submit your proposal to:

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Appendix A

Project Evaluation Metrics

Environmental Measures:

- **Environmental Economics:** Cost savings achieved through a new process or technology that can be linked directly to aspects of the project that yield environmental benefits

Calculation:

$$\text{Avoided costs (recycling, disposal, reprocessing) + Consumption-related savings (reduced resource usage) = Environmental Economics}$$

- **Environmental Sustainability:** Measure of impact of new processes and technologies on environmental sustainability (reduction in GHG/pollutants)

Calculation:

$$(\text{Level of emissions in current process} - \text{Level of emissions in new process}) / (\text{Level of emissions in current process}) = \text{Environmental Sustainability}$$

Economic Measures:

- **Net Direct Cost Reduction:** Material and Labor costs avoided through the use of a new technology or process

Calculation:

$$\text{Net new direct expenditures (not borne by existing processes)} - \text{Direct expenditures eliminated in new process} = \text{Net indirect cost reduction}$$

- **Net Indirect Cost Reduction:** Overhead and other costs avoided through the use of a new technology or process

Calculation:

Net new indirect expenditures (not borne by existing processes) – Indirect expenditures eliminated in new process = **Net indirect cost reduction**

- **Net Impact on Labor Requirements:** New positions created or labor capacity savings realized through implementation of a new technology or process

Calculation:

New positions created:

Incremental FTEs requirement compared to conventional approach + 'Net new' FTEs required due to process or technology that did not previously exist = **Total new positions created**

Capacity Savings Realized:

FTE compliment required using status quo approach – FTE compliment required using new technology or process = **Net capacity savings realized**

- **Projected Labor Impact of Project Commercialization:** Theoretical labor impact of broad technology or process adoption in Saskatchewan and beyond

Calculation:

Net impact on labor requirements factored by market intelligence estimates of demand in the domestic and export economies = **Projected Labor Impact of Commercialization**

- **Net Potential Economic Impact:** Net economic effects of broad project adoption in the domestic and export economies

Calculation:

Aggregate economic benefits as defined by **Net Direct Cost Reduction** and **Net indirect Cost Reduction** factored by market intelligence estimates of demand in the domestic and export economies = **Net potential Economic Impact**

- **Net Revenue Generated by Commercialized Technology:** Tracking of market share of expected project benefits overtime as the innovation or process gains traction in the market

Calculation:

$$\frac{(\text{Previous year's number of users} - \text{Current year's number of users})}{(\text{Previous year's number of users})} = \text{Annual growth in commercial use}$$

- **Net Cost Savings Over Status Quo:** Aggregate savings provided by a new technology or process compared to the industry accepted status quo

Calculation:

Sum of **Net Direct Cost Reduction** and **Net Indirect Cost Reduction** computed on activity basis = **Net Cost Savings Over Status Quo**