# Building Tomorrow: Getting Resilient Infrastructure Projects Ready for Financing - Webinar

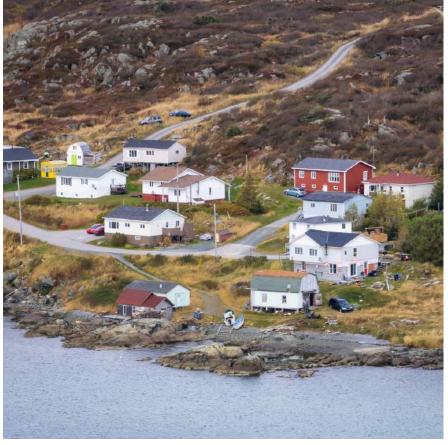
March 5, 2024

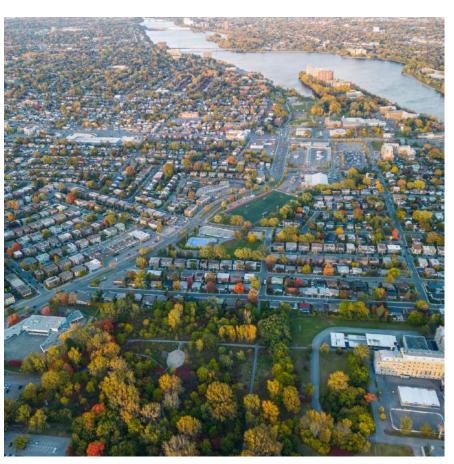






We respectfully acknowledge that our work happens across Turtle Island which has traditionally been and is home to many diverse First Nations, Inuit, and Métis peoples since time immemorial. We recognize that reconciliation is a fundamental component to building net-zero resilient communities. We are committed to strengthening relationships with Indigenous groups and knowledge keepers, knowing that reconciliation requires ongoing learning, unlearning, reflection, and action. We endeavour to listen to and learn from Indigenous Peoples on an ongoing basis in the process of our work.







### AGENDA

10 min - Financing Resilient Infrastructure Project (FRIP)

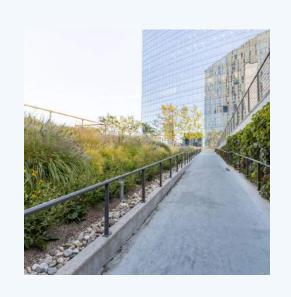
20 min – Reflections from selected FRIP Project Participants

10 min – Getting Ready to Finance Toolkit Launch

45 min – Panel discussion on Innovative Financing Solutions (Q&A)

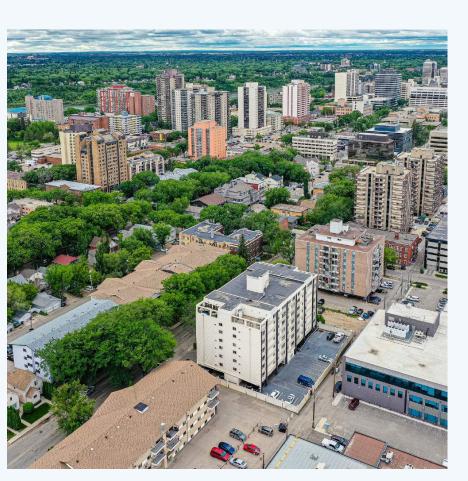












Financing Resilient
Infrastructure Project (FRIP)

## By the Numbers

Infrastructure types identified

22

Possible Resilient Infrastructure
Projects Identified and Prepared
for Financing

Resources developed

## Financing Resilient Infrastructure Project (FRIP)

#### **Participating Municipalities**

- New Glasgow, Nova Scotia
- Halifax, Nova Scotia
- Fredericton, New Brunswick
- Laval, Québec
- Mississauga, Ontario

- Timmins, Ontario
- Saskatoon, Saskatchewan
- Canmore, Alberta
- Port Moody, British Columbia
- Saanich, British Columbia



### **Project Types**

6 Resilient Infrastructure project types were identified throughout the FRIP project.

Flood resilience



Resilient community planning



Resilient development







Water and wastewater system resilience

## Climate Hazards



**Coastal erosion** 



**Heavy rainfall** 



**Storm surges** 



**Coastal flooding** 



**Hurricanes** 



Urban and pluvial flooding



**Extreme heat** 



Ice and wind storms



**Urban heat island** 



**Extreme snow** 



**Overland flooding** 



Wildfires



**Extreme temperature** 



Riverine/fluvial flooding



Wildfire smoke



**Extreme weather** 



**Sea level rise** 



Winter storms

## Acknowledgement

This project was undertaken with the financial support of Co-operators.





### Today's Speakers

Reflections from selected Financing Resilient Infrastructure Project (FRIP) Participants and Partners

- Co-operators
- Addenda Capital
- City of Saskatoon, SK
- City of Laval, QC
- ICLEI Canada



Ewa Jackson, ICLEI Canada



Chad Park, Co-operators



Paul Manias, Addenda Capital



Erin Placatka, City of Saskatoon



Dominique Bastien, City of Laval



Adrián Tóth, ICLEI Canada





### **About Co-operators**

### Our purpose

Financial security for Canadians and our communities

### **Our vision**

We will be a catalyst for a resilient and sustainable society.

### Resilient Infrastructure Projects

### City of Saskatoon









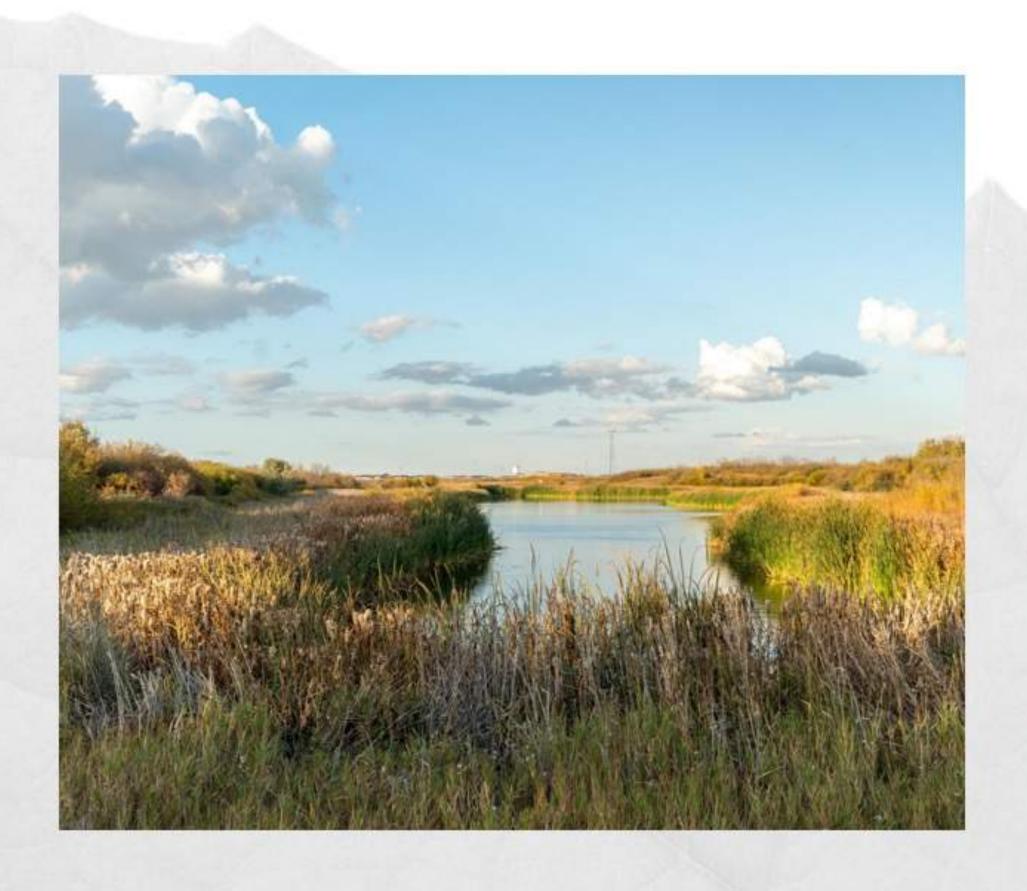
### Storm ponds

\$ Large price tag

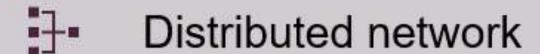
**††††** Defined beneficiaries

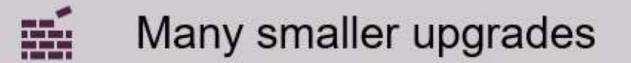
Visible, trackable improvement



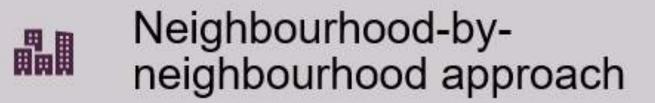


### Stormwater system





\$ Harder to quantify benefits









### Resilient co-located housing & fire station

Many co-benefits

Efficient use of land

Fire department natural partner

- - Potential commercial space







### Building blocks to financing



Financing models already in use



Natural capital asset valuations



Establishing local costs of climate change



Embedding climate risk awareness in Finance, Asset Management, Corporate Risk



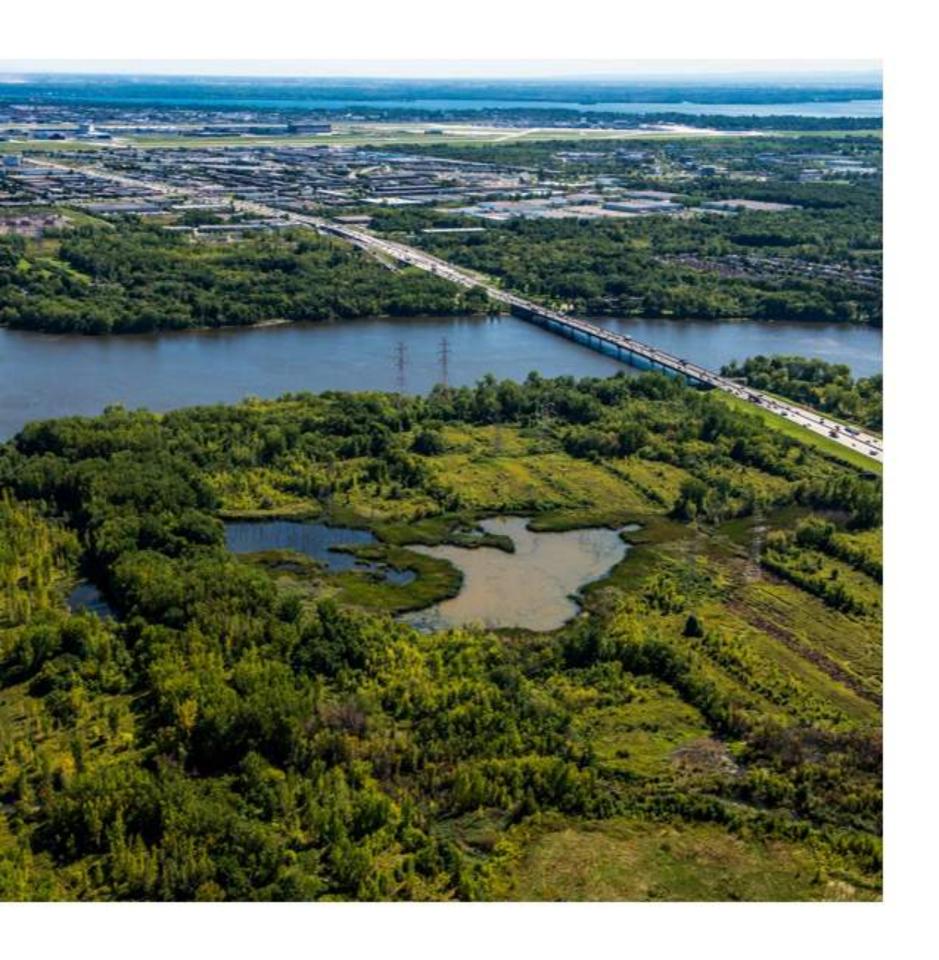
### Resilient Infrastructure Projects

## City of Laval



Dominique Bastien, Environmental Advisor





### Ville de Laval

Building Tomorrow: Getting Resilient Infrastructure Projects Ready for Financing

Presented by: Dominique Bastien

Date: March 5th 2024





## Initiatives for better flood risk management

#### Project idea

- Main river flooding in Laval: 2017-2019-2023
- Significant damage (financial, stress, administrative)
- Some houses are at high risk of flooding again
- Need for proactive and permanent flood mitigation measures. For example:
  - Dikes
  - Wetland restauration
  - Resilient architecture for home
- Co-benefits :
  - Converting private riverbanks into public spaces
  - Demineralizing some sector for improved resilience
  - Make it accessible to citizens, enhancing the natural and recreational value of the riverbank



## Initiatives for better flood risk management

#### Climate hazards addressed

River flooding

#### Intended beneficiaries

Municipality, flood-prone households, taxpayers, public infrastructure owners, property owners, and the wider community

Possible sources of cash flows proposed by Co operator (not yet studied by our financial department)

Taxation options based on the increase in property value and the proximity of a large riverside part of the remaining protected residences



## Evaluating a home's resilience to flooding

#### Project idea

- Home assessment of residences located in flood-prone areas by certified home inspectors and how they might be vulnerable to water damage
- Homeowner will get a curated report that includes various adaptation strategies and how to implement these
- Better understanding of local home weaknesses for the municipality and information on the cost of adaptation strategies
- Allow us to evaluate the potential for permanent municipal program



## Evaluating a home's resilience to flooding

#### Climate hazards addressed

Flooding (river, fluvial, pluvial, etc.)

#### Intended beneficiaries

Municipality, flood-prone households, local emergency services, public infrastructure owners, property owners, and the wider community

#### Possible sources of cash flows

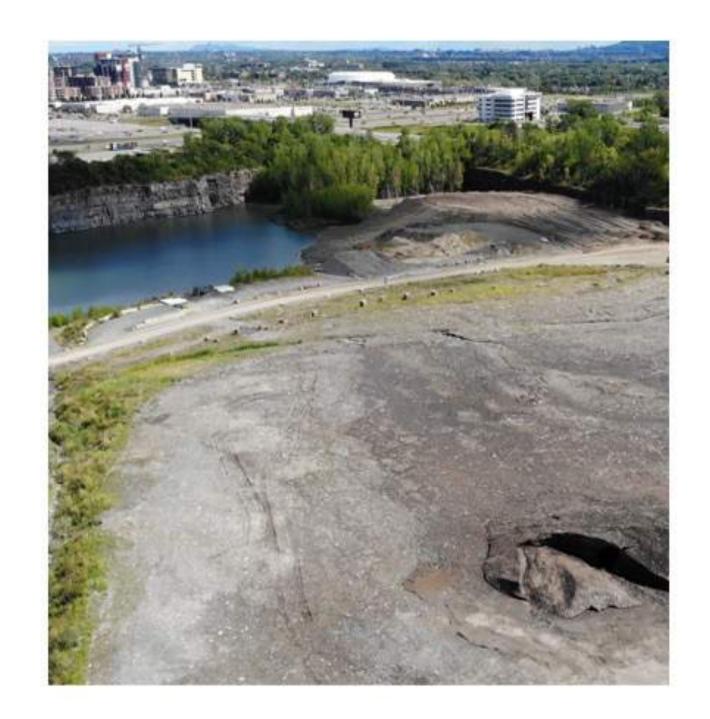
A PACE-style program could provide homeowners with very low interest rates loans to implement the suggested renovations from their evaluation. The interests could be kept in this specific fund and reinvested



### Parc de l'innovation du Carré Laval

#### Project idea

- Planning for an innovative Eco-district, mixed-use development with low carbon footprint
- Large public green space in downtown Laval
- Creating an oasis of freshness in a mineralized area with a high vulnerability to urban heat
- Implementing optimal and ecological drainage systems reducing risk of overflow during extreme rain events
- Strategies to restore and reconnect existing habitats and contribute to urban biodiversity at a larger scale
- Building development around a regional park and public spaces



## Parc de l'innovation du Carré Laval

#### Climate hazards addressed

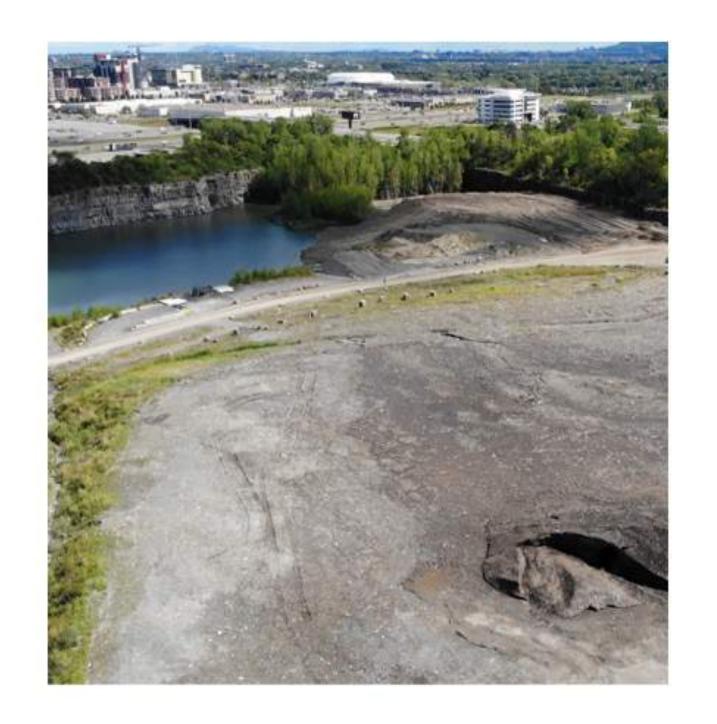
Extreme temperature and urban / pluvial flooding

#### Intended beneficiaries

Municipality, surrounding residents and workers, visitors, citizens of the downtown area, citizens of the region.

#### Possible sources of cash flows

Leasing revenue and revenue from the implementation of the smart energy grid



## Challenges

- Calculating the right return on investment (economic benefits of damage avoided)
- Legal barriers (ex. PACE program not allowed in Québec province)
- Administrative barriers of using new financial tools
- Developing strong adaptation indicators to guide and reassure investors

## Learnings

- New economic tools for our municipal projects (ex. PACE, TIF)
- Methodology to calculate return on investment (economic benefit of damage avoided)
- How important are quantifiable data
- Lack of flexibility at municipal level to implement these financing

## Merci!



### **4 NEW RESOURCES!**

## **Getting Ready to Finance Toolkit**



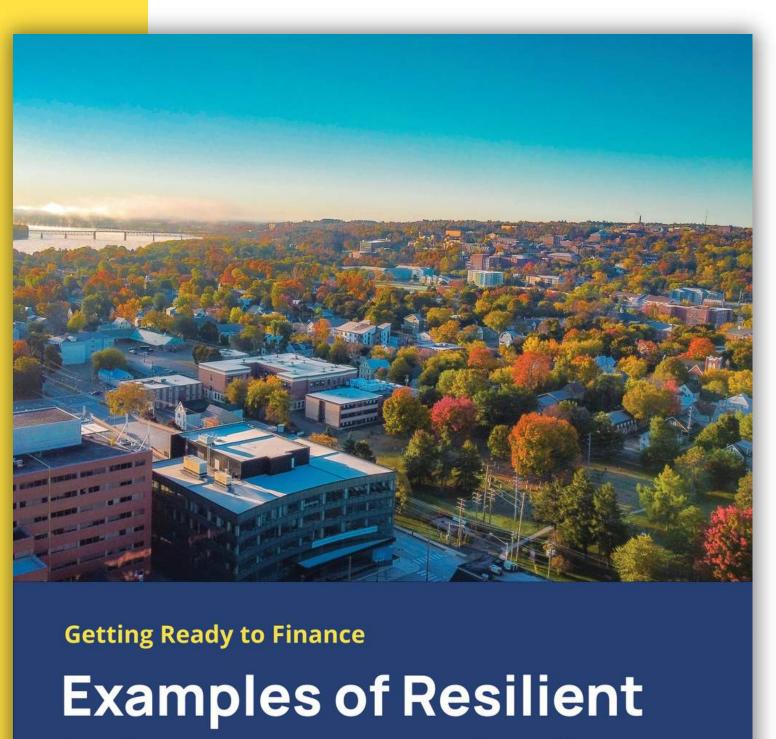


Ewa Jackson, Managing Director, ICLEI Canada

### **Getting Ready to** Finance: Examples of Resilient Infrastructure **Projects**

Discover examples of resilient infrastructure projects that could be realized with the help of innovative financing and start thinking about projects that could be implemented in your community.

\*Available in English and French



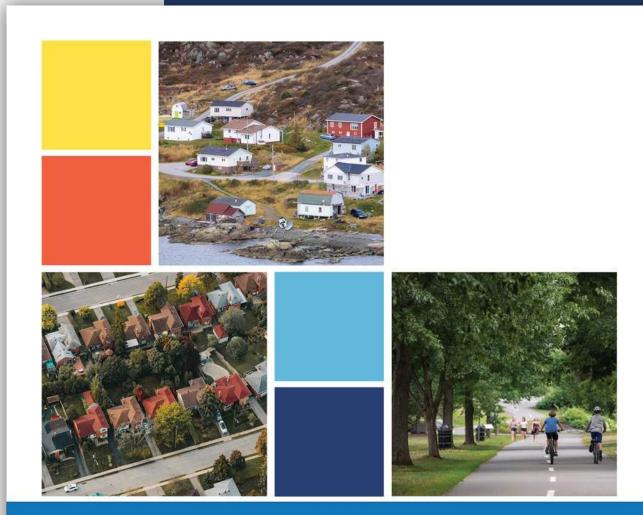
Infrastructure Projects

co-operators



## Getting Ready to Finance: Project Ideation Guide

This editable Excel spreadsheet is designed to help municipal practitioners identify and prioritize potential projects. Use this spreadsheet to choose which project(s) to prepare for financing.



**Getting Ready To Finance** 

## Project Ideation Guide





<sup>\*</sup>Available in English and French

### Getting Ready to Finance: Project Preparation Template

This editable Word document provides a mechanism to prepare resilient infrastructure projects for financing. Once filled out, the template can be used to apply for public and/or private funding.

\*Available in English and French

**Getting Ready To Finance** 

## Project Preparation Template







## Getting Ready to Finance: Project Preparation Template Instructions

Refer to these detailed instructions while filling out the Project Preparation
Template. The two resources are designed to be used simultaneously.

\*Available in English and French





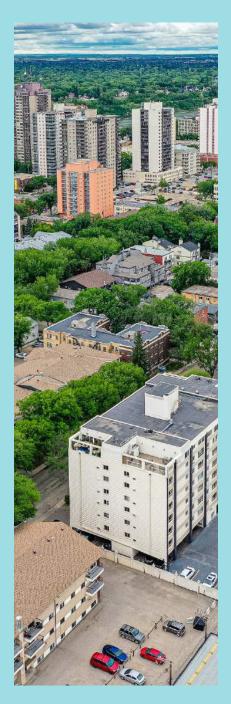


## Access the Getting Ready to Finance Toolkit

DOWNLOAD 9

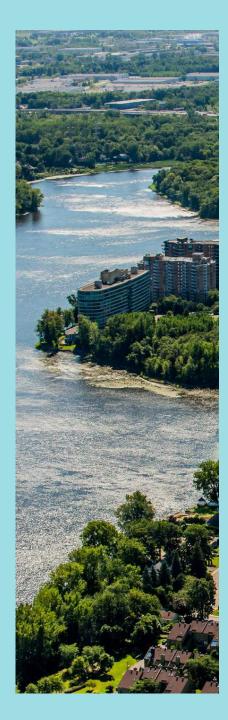
Visit icleicanada.org/project/gettingready-to-finance/ to access all resources from the Toolkit and identify bankable resilient infrastructure projects in your community.











### PANEL DISCUSSION



Building Tomorrow: Getting Resilient Infrastructure Projects Ready for Financing

Innovative Financing Solutions

2:45 to 3:30 pm



## Thank You

Connect with us online to find more resources and follow our work.





cooperators.ca

icleicanada.org/

cooperators.ca/en/contact-us

iclei-canada@iclei.org

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