



SUPPORTING LOCAL ACTION ON ENERGY EFFICIENCY

Canada EU exchange on energy
efficiency in buildings and housing

18/05/2021

Oliver Rapf, Executive
Director, BPIE





Your Participation

Audio & Video:

- Please stay muted throughout the webinar. You will have the opportunity to speak and turn your camera on during the breakout session

Questions/Comments:

- Please submit questions and comments throughout the webinar via the chat box. We will address them during the different Q&A sessions

Note: Today's presentation is being recorded and will be provided within 48 hours, along with the slide deck.





16:00-16:05	Welcome & agenda – Oliver Rapf, Executive Director, BPIE	10:00-10:05
16:05 – 16:15	Opening remarks: Cities delivering on European Green Deal & climate neutrality worldwide - Eero Ailio, Advisor, Energy Transition and Local Governance, DG Energy, European Commission	10:05-10:15
Session 1 16:15-17:05	<p>Tools supporting local action from Europe and Canada</p> <ul style="list-style-type: none"> • European Local ENergy Assistance (ELENA), programme results and best practices for local energy efficiency projects Louise White, Senior Engineer, Energy Efficiency and Small Scale Energy, ELENA, European Investment Bank (EIB). Q&A with audience • FCM’s Green Municipal Fund – Forward Together, Federation of Canadian Municipalities (FCM) - Yi Liu, Senior Manager, Sector Development – Green Municipal Fund, FCM • Low Carbon Cities Canada (LC3) - Enabling Urban Climate Solutions in Canada - Oscar Espinosa, Senior Advisor, Low Carbon Cities Canada (LC3), FCM. Q&A with audience 	10:15-11:05
Session 2 17:05-17:55	<p>Breakout sessions with leading cities</p> <ul style="list-style-type: none"> • Moderated small group discussions with leading cities: Toronto, Edmonton, Vancouver, Ottawa, Lille, Dublin, Utrecht, Valencia • Interactive wrap-up from discussions 	11:05-11:55
17:55-18:00	Closing remarks - Eero Ailio, Advisor, Energy Transition and Local Governance, DG Energy, European Commission	11:55-12:00

Opening remarks



Eero Ailio, Advisor, Energy Transition and Local Governance, DG Energy, European Commission



Supporting local action on energy efficiency





Cities delivering on European Green Deal: case for energy efficiency

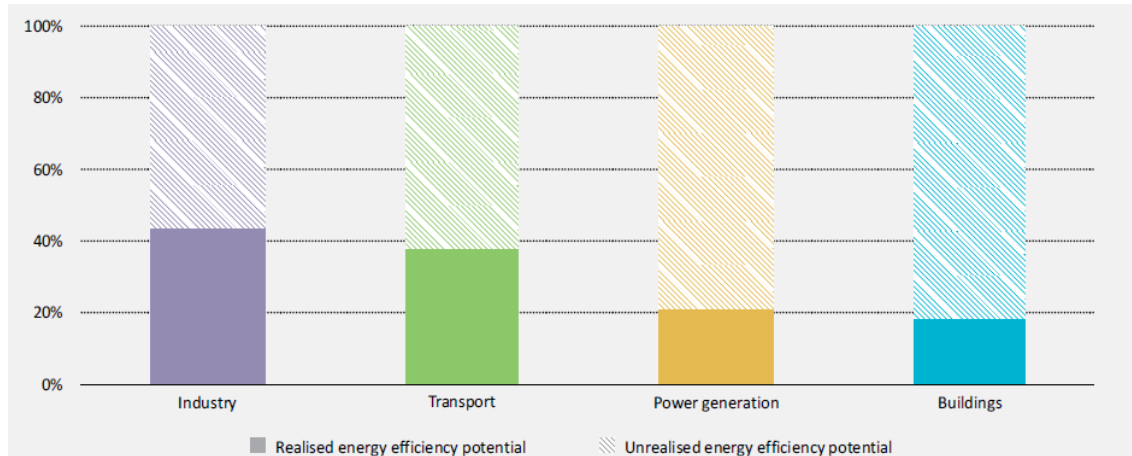


Eero Ailio, Adviser on Energy Transition and Local Governance, DG Energy

18 May 2021

Needs and challenges of EE investments

- Energy efficiency first
- Around €280 billion per year to meet the EU's 2030 energy efficiency target (buildings and industry).
- Energy-intensive sectors with untapped potential: buildings account for 40%, transport for 30% and industry for 25% of EU final energy consumption.
- Financial, technical barriers and challenges

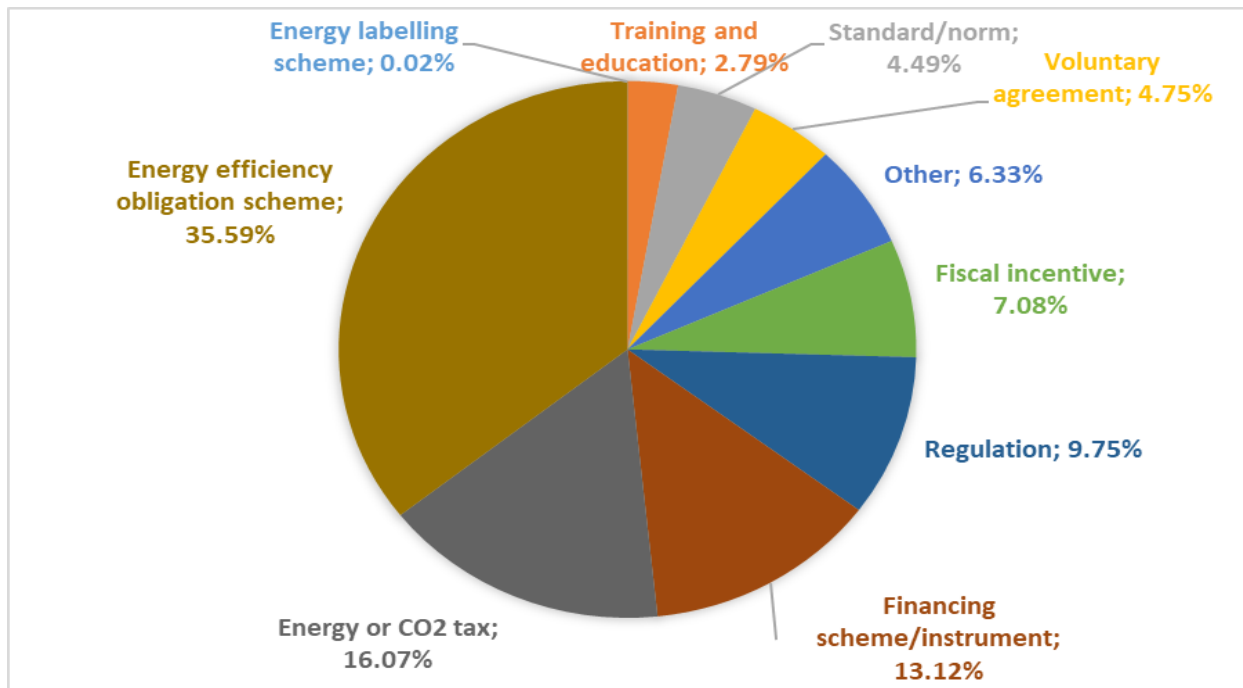


Source: EIB, EC



Become
climate-neutral
by 2050

Energy savings by policy measure



Source: EC 2014-2017 Energy Efficiency Directive annual report 2019



“Urban climate action is at the heart of the European Green Deal and is essential to achieving a Global Green Deal.”

Frans Timmermans
*European Commission Executive Vice-President
for the European Green Deal, Co-Chair,
Global Covenant of Mayors for Climate & Energy*



Specific challenges of EE investments

- Poor **information** (audits, Smart Metering, dynamic tariffs, web tools)
- **High transaction costs**: EE projects are combinations of fragmented small size sub-projects -> limited aggregation successes
- **Split incentives** (e.g. tenants gain from lower bills while landlords pay for investment) -> some success with building-bound mortgages, EPC requirements
- **Subsidised** energy prices, reducing incentives to invest
- Poor incentives for local banks to expand into EE lending (**capital constraints**) -> some successes in low risk
- Cities lack of **technical capacity**, incentives and often space in their balance sheets to implement EE programmes
- **Early project cycle** barrier -> European City Facility, GCoM Gap fund

Regional energy agencies developing of integrated renovation services for

- **Residential sector:** One Stop Shops with end to end service, with technical, financial and customer service expertise.
- **Public authorities**, accompany them step by step through the renovation of their buildings, using innovative financing, instead of pure grant models
- Example: French ADEME had a technical assistance programme to develop such renovation platforms.
- From **Project to Programme**, renovation projects must become renovation programmes. Upscaling requires knowledge on: market facilitation, project aggregation, engaging banks, mobilizing private investments, developing financial instruments (e.g. ManagEnergy curricula)

Top down + Bottom up Strategy



Covenant of Mayors in Europe



9,600+
European local
governments



300+ mio
inhabitants covered

EU States

refer to Covenant in
national action plans to
climate neutrality

Delivering on commitments...

Reducing CO₂ emissions
by 31% by 2020
(EU target: 20%)

And by 47% by 2030
(EU target: 40%).

*Through energy efficiency, RES, energy poverty, adaptation,
advice, training etc. New goal climate neutrality by 2050*



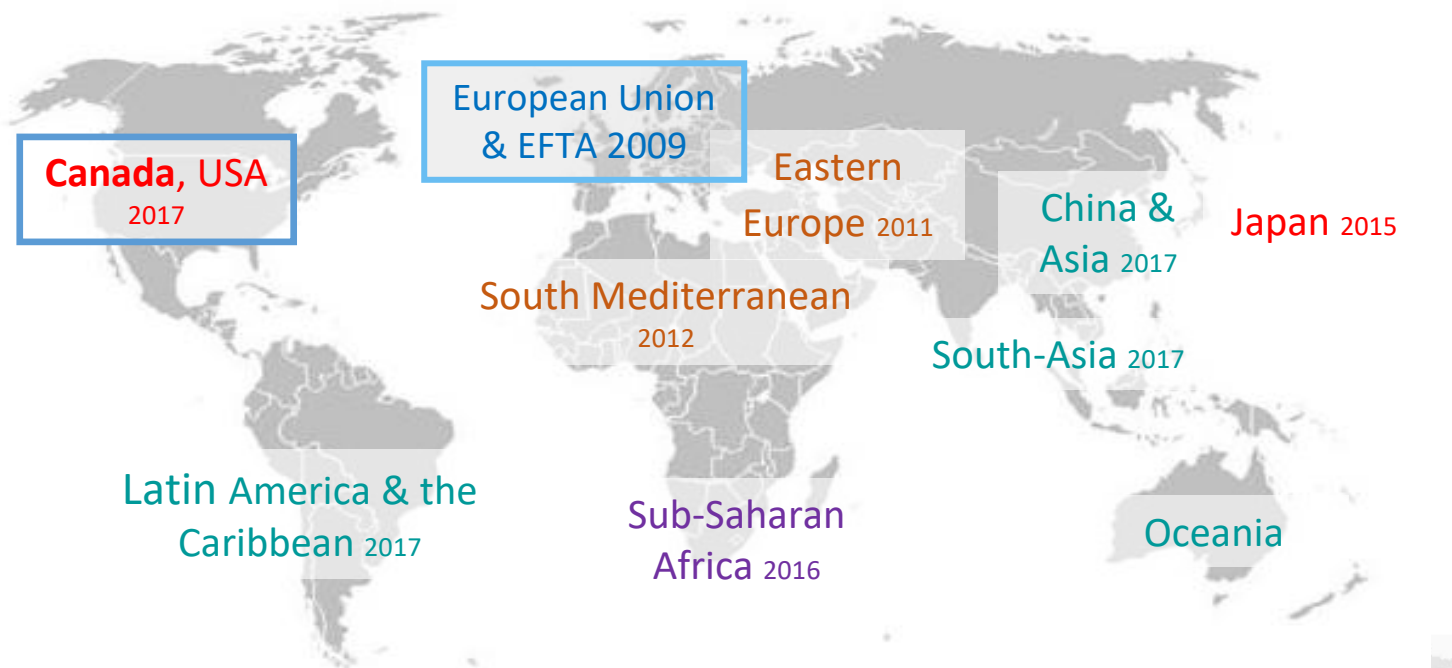
EU investing in Global Covenant of Mayors

10 000+ cities

Mitigation,
Adaptation
Access to clean,
affordable energy

Global Covenant
office Brussels +
Regional Covenants

MyCovenant Platform
+ 9,690 SIGNATORIES
312+ MILLION PEOPLE
&
CDP-ICLEI Platform
800 cities



Global Covenant of Mayors in Canada



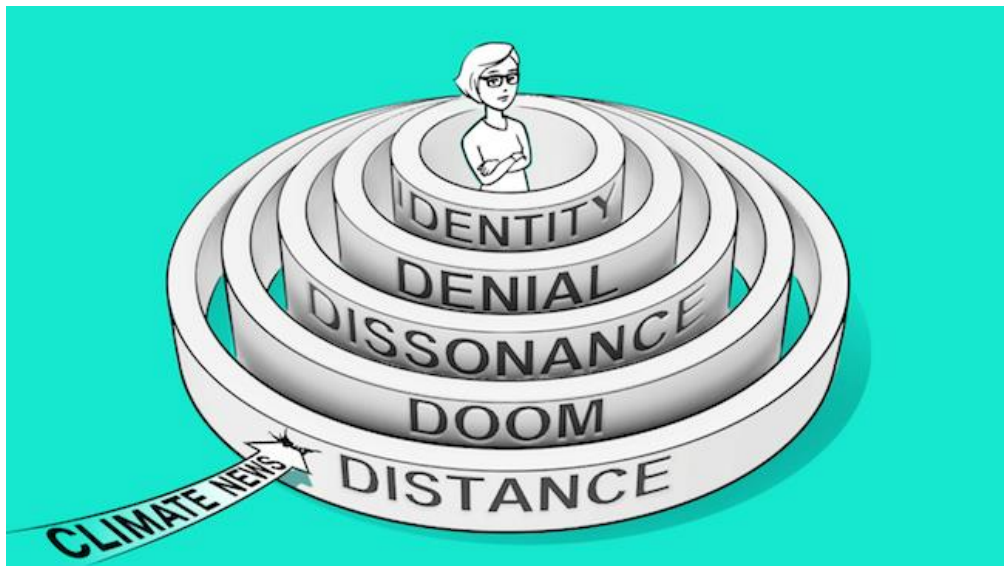
The Global Covenant of Mayors Canada is a collaboration between FCM, ICLEI Canada, the Global Covenant of Mayors Secretariat and the International Urban Cooperation Project funded by the European Commission.

*2017-> 2020 first phase:
Cohort of Canadian cities approach
Showcase cities: Kitchener, Beaconsfield & Fredericton*



*2021-2024 second phase:
Strategic partnership FCM, ICLEI Canada, European Commission, GCoM to grow EU-Canada relations*

Behavioural Change



NEW CLIMATE SOLUTIONS: FIVE SIMPLE & SHAREABLE STRATEGIES

SOCIAL: USE THE POWER OF SOCIAL NETWORKS.



° SHOW PEOPLE'S FACES



° SITUATE THE NEWS WHERE PEOPLE LIVE THEIR LIVES

SIMPLE: MAKE CLIMATE-FRIENDLY BEHAVIORS EASY AND CONVENIENT.



STORY-BASED: USE THE POWER OF STORIES TO CREATE MEANING AND COMMUNITY.

"GREEN GROWTH IS SMART"



SUPPORTIVE: USE POSITIVE FRAMINGS TO SUPPORT THE MESSAGE AND DISCUSSION.



"HEALTH"



"OPPORTUNITY"



"CLIMATE INSURANCE"

SIGNALS: USE EVERYDAY INDICATORS FOR FEEDBACK ON SOCIETAL + PERSONAL PROGRESS.



EXCERPTED FROM PART II IN: WHAT WE THINK ABOUT WHEN WE TRY NOT TO THINK ABOUT GLOBAL WARMING. BY PER ESPEN STOKNES, CHELSEA GREEN PUBLISHING, SPRING 2015
ART © IDNA FOX.

The European Green Deal

#EUGreenDeal



Tools supporting local action from Europe and Canada





European Local ENergy Assistance (ELENA), programme results and best practices for local energy efficiency projects

Louise White, Senior Engineer, Energy Efficiency and Small Scale
Energy, ELENA, European Investment Bank



ELENA

European Local Energy Assistance

Louise White

Energy Efficiency and Energy Advisory Division

Projects Directorate

EUROPEAN INVESTMENT BANK

Canada – EU Exchange on energy efficiency in buildings

May 18th 2021

Supporting local action

How governments can help businesses and public authorities make informed investment decisions: Tools and solutions for local authorities to trigger renovation

What is ELENA?



- **European Local Energy Assistance**
Established in 2009
- Support private and public bodies (e.g local, regional and national authorities) and to prepare their energy saving investment programmes
- Based on an agreement between EIB and EC
 - Managed by the EIB
 - Horizon 2020 Research & Innovation Programme
- Grant for **preparation** (not implementation) of investment programmes
- Over **€208m awarded** to projects supporting approx. **€7.2bn investments**

Who can benefit?



PUBLIC SECTOR

PRIVATE SECTOR

Local, regional or national authorities.

Other public bodies (e.g. energy agencies).

Groupings of such authorities or bodies.

Private entities planning to develop and support eligible investments (e.g. associations, mixed public/private, banks)

ELENA TA to go beyond “business as usual” i.e not just to produce a profit.

What do ELENA beneficiaries receive

- Allocated on a first come, first served basis - No calls or competitions
- Applicants will receive support to prepare the ELENA application for Commission approval
- Financial and technical support
 - ELENA will fund up to 90% of the investment preparation costs (with 10% provided by applicant)
 - Eligible activities are those necessary to develop and mobilise finance for a clearly identified investment programme (e.g external expertise, feasibility studies, energy audits etc)



Eligible costs under ELENA

ELENA



Internal staff

- Costs of personnel clearly assigned to the project
- Salaries, social security charges and other remuneration-related costs

External experts

- Feasibility, design and market studies
- Structuring of programmes, business plans, energy audits
- Legal/financial advisory
- Preparing of tendering procedures
- Bundling of smaller projects to form bankable packages

Eligible investment programmes:

SUSTAINABLE ENERGY

- EE renovations of public and private buildings
- Public lighting e.g. Street and traffic lighting
- Integration of renewable energy sources into the buildings
- Investments in district heating/cooling networks
- Local energy facilities that support EE/RE (e.g. smart grids)

Investment programmes implemented by the final beneficiary or by a third party

ELENA

Eligible investment programmes:

RESIDENTIAL BUILDINGS

- EE refurbishment of residential buildings
- Integration of renewable energy sources into the buildings
- Project development activities:
 - providing support for energy performance certificates or energy audits,
 - access to financing: help households to access financing from financial institutions, and/or available grants,
 - setting up One Stop Shops etc.

Investment programmes implemented by the final beneficiary or by a third party

ELENA

Eligible investment programmes:

SUSTAINABLE TRANSPORT

- Investments in the use and the integration of innovative solutions going for alternative fuels in urban mobility –technical or organizational
- Vehicles, recharging infrastructure, energy-efficient measures and systems
- Increasing efficiency and sustainability of Urban Logistics
- Intelligent Transport Systems (ITS)
- Integration of services and technologies.

Investment programmes implemented by the final beneficiary or by a third party

↑
ELENA

ELENA General Rules



Minimum investment recommended of **€30m**



Grant covers up to **90% of costs** related to **project development**



Budget allocation: first come, first served; range of **€30m – €50m** per year

Required level of maturity: preparatory studies carried out and main decisions taken before ELENA support request (ELENA proposal should demonstrate high probability that project will be implemented)



Obligation of investment implementation - leverage factor required:

20 for sustainable energy projects

10 for residential buildings and transport



If the leverage not achieved: grant may be clawed back



Investment: from Final beneficiary (applicant) and/or others

Timeframe: 3-4-year implementation periods

Preparation and Mobilisation of Financing for Sustainable Energy Investments in Primorska Region Municipalities (PM4PM)

Beneficiary: GOLEA Local Energy Agency; Goriška Lokalna Energetska Agencija

Results: With the ELENA grant, GOLEA assisted a combination of 33 Municipalities and public bodies to prepare their sustainable investments.

Investment supported: ~50 MEUR

ELENA grant: 2,025,000 EUR

ELENA supported:

- ❑ Conducting technical and economic feasibility analysis (setting of energy baselines; updating/conducting energy audits)
- ❑ Preparation of project design documentation
- ❑ Preparation of public procurement and Energy Performance Contracting (EPC) tender documentation (e.g. terms and conditions, contract samples, technical specifications and documentation)
- ❑ Consultancy during the procurement/negotiations process: tender evaluation and selection of Contractors
- ❑ Assisting in the preparation of works/Energy Service Company (ESCO) contracts



SLOVENIA

Picardie Pass Renovation ONE STOP SHOP FOR RESIDENTIAL SECTOR

Beneficiary: Regional Public Service Company for Energy Efficiency in Picardie

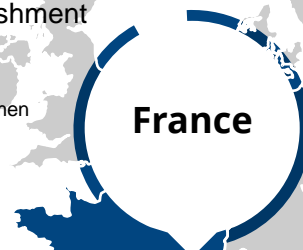
Objective: energy efficiency renovations of private houses through setting up a one stop shop (assistance during whole EE refurbishment cycle, including also dedicated loan for home owners)
(final balance: 1 240 homeowners assisted; providing work to more than 300 local craftsmen and companies)

Estimated investment programme cost: 33.5 MEUR

ELENA support: 1.67 MEUR

ELENA support used for:

- Development of an investment program with private home owners
- External assistance to support each homeowner in the works implementation phase
- Cooperation with partners in view of promoting the service, identifying potential homeowners and prepare contracts



Results



- Over EUR 208m disbursed and committed EU grant
- 119 ongoing and completed projects, mostly multi-sectoral
- Over EUR 7.2 bn realised and expected investments
- Average leverage ratio: 34
- Expected impacts: +/-4,800 GWh/y saved; 1,300 GWh/y RE generation and 1.8 million eq. t CO2 emissions reductions
- Most of EU covered through support to diverse range of applicants,
 - small & large cities, regional and national entities, financial intermediaries, housing companies, private entities etc
- Support to project “aggregators”

Summary

- Grant covers up to 90% of costs related to project development support
- The application process is very interactive between EIB and the applicant
- Budget allocation: first come, first served principle
- Required level of maturity of the investment programme - the ELENA request should be able demonstrate a high probability that the projects will be implemented
- Leverage factor is required i.e ELENA grant should lead to an investment
- Final beneficiary (i.e the applicant) doesn't have to be the one who is implementing the investment



THANK YOU

Louise White
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More information at: www.eib.org email: info@eib.org

ELENA facility www.eib.org/elena email: elena@eib.org



Q&A





FCM's Green Municipal Fund – Forward Together

Yi Liu, Senior Manager, Sector Development – Green Municipal Fund, Federation of Canadian Municipalities



Federation of Canadian Municipalities (FCM)'s Green Municipal Fund (GMF)

Forward Together

May 2021



FCM: Who we are

The national voice of Canada's local order of government:

- **2,000 member municipalities** in every part of Canada
- Nearly 80% are **rural, remote and northern communities**
- Our members represent **more than 90% of Canadians**



FCM Programs

- **Green Municipal Fund (GMF)**
- Municipal Asset Management Program (MAMP)
- Municipalities for Climate Innovation Program (MCIP)
- International Programs
- Women in Local Government

Green Municipal Fund (GMF)

FCM's Green Municipal Fund (GMF) supports innovative municipal sustainability projects across Canada through funding, resources and training.

\$946 M invested in over **1360** projects

GMF Funding Offers

➤ Core



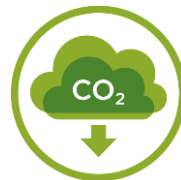
Energy



Waste



Brownfields

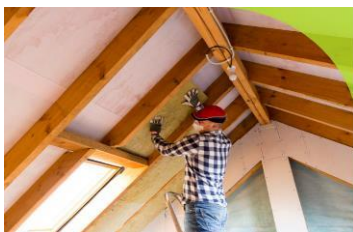


Transportation



Water

➤ **Expanded Mission:** Drive cost-savings energy efficiency in communities across Canada (\$950M)



Community Efficiency
Financing



Sustainable Affordable
Housing



Community Buildings
Retrofit



Low Carbon Cities
Canada

City of Varennes, QC – net-zero energy library



2013 - 2015



Green Municipal Fund

New program offerings



Community Efficiency
Financing



Sustainable Affordable
Housing



Community Buildings
Retrofit



Low Carbon Cities
Canada



CEF: Community Efficiency Funding

GMF's \$300 million Community Efficiency Financing (CEF) initiative helps municipalities create, launch and expand innovative financing programs for home energy projects.



CEF objectives

Triple Bottom Line Benefits



Environmental: Reduce energy use and GHG intensity

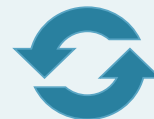


Economic: Create jobs and improve housing affordability



Social: Improve building quality; increase resident comfort, health & quality of life

Support Market Transformation



Provide **proof of concept** for successful financing models



Build confidence with investors to mobilize private capital and encourage **more financing** offers



Grow existing programs (volume & market impact)



What is an energy financing program?

A program with **built-in financing options** and services to help more homeowners undertake energy upgrades to improve the performance, comfort, and affordability of their homes.



Example models:

Property Assessed Clean Energy (PACE) financing

Utility on-bill financing

Direct lending
(third-party financing)



Toronto, ON – Home Energy Loan Program (HELP) Expansion



Green Municipal Fund

New program offerings



Community Efficiency
Financing



Sustainable Affordable
Housing



Community Buildings
Retrofit



Low Carbon Cities
Canada



SAH: Sustainable Affordable Housing

GMF's \$300 million SAH initiative offers support to local affordable housing providers – including municipal, not-for-profit organizations and housing co-ops – to retrofit existing affordable housing units, or construct energy efficient new builds that emit lower GHG emissions.



SAH Objectives

Triple Bottom-line Benefits



Environmental: Reduce energy and GHG intensity



Economic: Increase energy and housing affordability



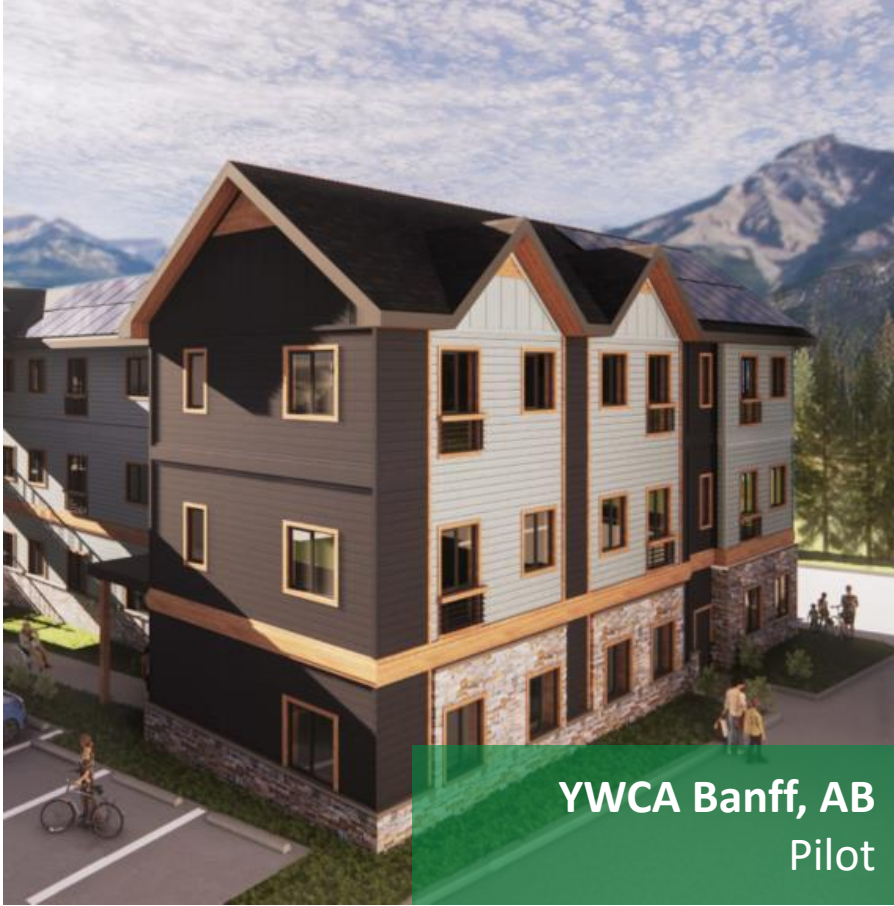
Social: Improve building quality; increase resident comfort, health & quality of life

Support Sector Transformation



Enable housing providers to **better plan, build, operate and maintain** energy efficiency / renewable energy projects.





**YWCA Banff, AB
Pilot**

**Antigonish Affordable
Housing Society, NS
Study**



Green Municipal Fund

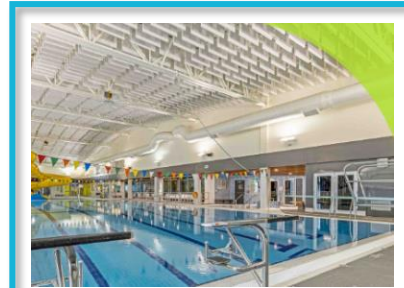
New program offerings



Community Efficiency
Financing



Sustainable Affordable
Housing



Community Buildings
Retrofit



Low Carbon Cities
Canada



CBR: Community Building Retrofits

GMF's \$167 million Community Buildings Retrofit (CBR) initiative helps municipalities optimize the energy performance of community buildings and reduce GHG emissions.



CBR objectives

Triple Bottom Line Benefits



Environmental: Reduce energy use and GHG intensity

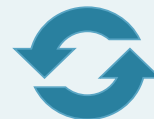


Economic: Decrease energy costs



Social: Improve building quality; support community benefits

Support Market Transformation



Empower municipalities to capitalize on the short and long-term GHG reduction potential of their community buildings



Scale deep GHG retrofits by developing implementation pathways for common building types and the capacity within municipalities to translate learnings across assets.



Village of Midway, BC – Community Centre Upgrade



2017 - Ongoing

Green Municipal Fund

New program offerings



Community Efficiency
Financing



Sustainable Affordable
Housing



Community Buildings
Retrofit



Low Carbon Cities
Canada





Low Carbon Cities Canada (LC3) – Enabling Urban Climate Solutions in Canada

Oscar Espinosa, Senior Advisor, Low Carbon Cities Canada
(LC3), Federation of Canadian Municipalities



Low Carbon Cities Canada (LC3)



Identification, incubation and widespread adoption of low carbon solutions to **maximize GHG reduction potential**



The LC3-FCM Collaboration on Community Climate Action

Canada 



**A proven
model for
successful
scale-up**



PROGRAMS



IMPACT
INVESTING



GRANTS



Vision & Goal



NET-ZERO GOAL



ENABLING &
ACCELERATING SCALE



EQUITY & COMMUNITY
BENEFITS





What's next?



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Contact us:

gmfinfo@fcm.ca or 1-877-417-0550





Q&A





Interactive breakout sessions with leading cities

Toronto, Lille, Ottawa, Dublin, Edmonton, Utrecht,
Vancouver, Valencia





Wrap-up from discussions



CLOSING REMARKS



Eero Ailio, Advisor, Energy Transition and Local Governance, DG Energy, European Commission



Stay tuned for our upcoming webinar: Innovative financing and business models

June 15th, 2021

www.bpie.eu

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