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# Submission for the Pre-Budget Consultations in Advance of the 2019 Budget

By:

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(On behalf of Low Carbon Cities Canada)

**low carbon  
cities canada**

**ligue des communautés  
canadiennes  
sobre en carbone**

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**RECOMMENDATION:** That the government provide funding in the amount of \$161 million for the Low Carbon Cities Canada (LC3) initiative – \$145 million (over 2 years) as Working Capital for investment in low-carbon projects to generate operating revenues and environmental impact and \$16 million (over 3-4 years) in start-up Operating Funds.

## **Cities are key to Canada's competitiveness in the low-carbon economy**

Canada cannot reach its 2030 and 2050 climate targets without reducing carbon emissions from its cities, where 50% of our emissions originate. Despite many promising urban low-carbon solutions, many fail to progress from ideas or pilots to full-scale, widespread implementation.

Low Carbon Cities Canada / Ligue des Communautés Canadiennes sobre en Carbone (LC3) – is a Pan-Canadian network of six urban climate centres. LC3 will help major city regions reach their full emissions reduction potential while unlocking co-benefits such as local job creation, improved public health, and better mobility. Through impact investing, strategic seed funding, and demonstration/de-risking projects, LC3 will bridge the “valley of death” between innovative ideas and pilots and mainstream implementation at scale. Ultimately, LC3 will be a key asset for achieving the goals set out in the Pan-Canadian Framework on Clean Growth & Climate Change at an advantageous cost-benefit ratio.

The six LC3 Centres, hosted by local organizations with the readiness and capacity to deliver on these goals, will serve communities that account for 43 per cent of Canada's population and almost half of Canada's GDP<sup>1</sup>, namely:

- Vancouver & Lower Mainland (City of Vancouver Zero Emissions Building Centre for Excellence)
- Edmonton (Alberta Ecotrust Foundation)
- Greater Toronto & Hamilton Area (The Atmospheric Fund)
- Ottawa (Ottawa Community Foundation)
- Montreal region (Trottier Family Foundation)
- Halifax region (Province of Nova Scotia and EfficiencyOne).

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<sup>1</sup>Source: 2016 Census population and 2013 Statscan GDP

## Recommendation: Capitalize Low Carbon Cities Canada

Recommendation	Funding Type & Timeframe	Uses and conditions
\$145 million	<b>Working Capital</b> (Over 1-2 years)	For investment in low-carbon activity that generates financial returns and stable, sustainable operating funds for each Centre  Working Capital will not be spent down. It could be retained by local Centres based on achievement of mutually-agreed milestones, or returned as investments mature.
\$12 million	<b>Start-Up Operating Funds</b> (over 3 years)	To kick-start operation of 5 Centres (excluding TAF) while Working Capital is deployed into impact investment vehicles and local funding secured, after which the Centres will use investment earnings to cover operating expenses.
\$4 million	<b>National Office Operating Funds</b> (over 4-5 years)	To support shared services including research, administration and accountability, knowledge-sharing, and investment support.  Subsequently to be sustained by membership fees.

To leverage and amplify the impact of the federal investment, LC3 members will attract local funding with a 1:1 target ratio. To date, over \$50 million has been identified including provincial, municipal, and philanthropic sources.

## Replicating a Proven Model

LC3 will leverage a proven model. The Atmospheric Fund (TAF) has a track-record of demonstrating and helping scale local climate solutions. Its model provides the independence and flexibility to undertake and demonstrate innovative projects and ideas not typically possible within many public sector agencies, accountability for the \$45 million endowment, and financial self-sufficiency through investment of its working capital, covering all its own operating expenses at no cost to the taxpayer for 27 years. Since its inception in 1991, TAF has invested three times its original capital into local projects while retaining the initial funding. Over this period, TAF contributed to a 25 per cent reduction in Toronto's emissions while the population grew by 20 per cent. TAF's mandate now extends to the Greater Toronto and Hamilton Area.

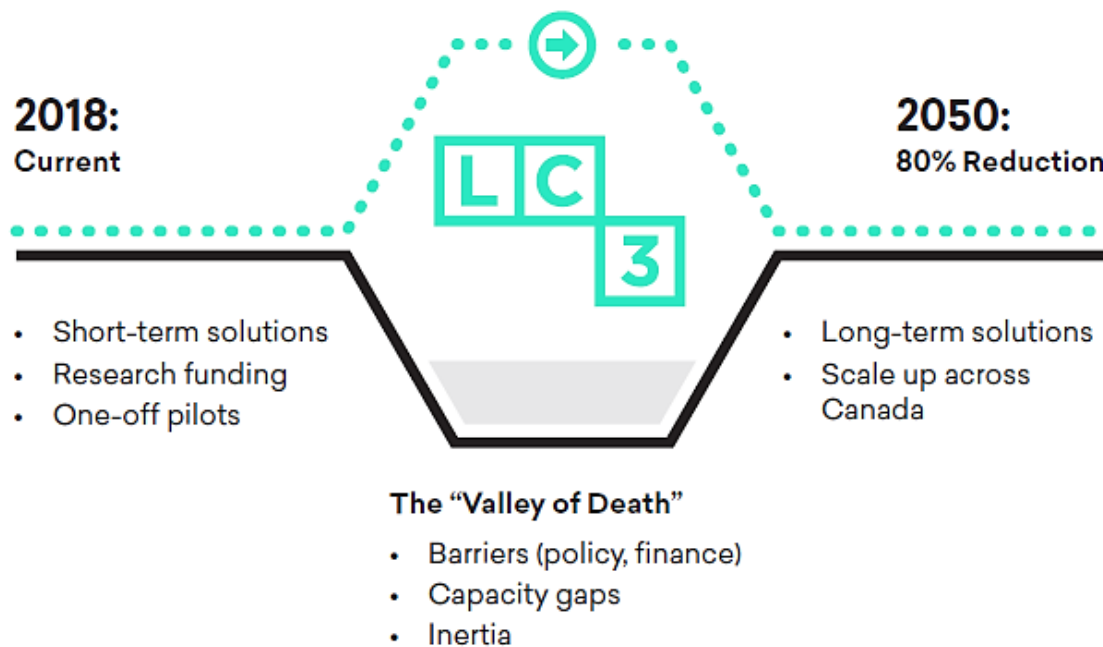
In 2017, Natural Resources Canada and several Foundations tasked TAF with exploring the viability of leveraging TAF's success. The feedback from over 60 local stakeholders across the country was clear: There is a pressing need to build on-the-ground capacity in Canadian cities to accelerate the adoption of climate solutions.



*Credit: Marc Olivier Jodoin*

## Bridging the Urban “Valley of Death”

While there is no shortage of viable ideas and pilots proposed to reduce urban carbon emissions, Canada’s cities lack the capacity to scale up implementation of proven approaches. LC3 will bridge this “valley of death” by shepherding high-impact solutions from the incubation phase through to the deployment phase. LC3 Centres will achieve this by making and attracting investments, strengthening workforce capacity, advancing favourable policy conditions, harnessing social and technological trends, and delivering valuable co-benefits that expand public support for action and strengthen Canada’s economic centres to be competitive in a low-carbon future.



## Core Tools and Priority Action Areas

LC3 Centres will use three core tools to advance the most promising low-carbon ideas:

- Impact Investing – **direct investment in local low-carbon projects** to achieve financial and environmental ROIs, demonstrate the business case, and mobilize public and private resources, as well as tapping into the expertise of external fund managers in the low-carbon investment space to generate superior rates of return.
- Strategic Seed Funding – support for high-impact initiatives by local stakeholders that build community capacity and engagement, tests new ideas, and prepares proven solutions for full deployment.

- Local Programs — where there is unmet strategic need, LC3 Centres will design programs to generate thought-leadership, undertake policy research and convening, or create and pilot new technological, financial or social solutions.

Guided by local climate and energy plans, each Centre will respond to the specific emissions profile in their communities and address local barriers while drawing on best practices from the other Centres. Key areas of focus include:

- accelerating **energy efficiency in buildings and industry** through new design standards, retrofit programs, workforce development, etc.
- advancing **urban renewable energy** (including solar, biomass, and renewable natural gas) and solutions such renewable district energy, heat pumps, and smart electricity grids.
- lowering **transportation**-related emissions by demonstrating mechanisms for electric vehicle adoption and charging, efficient inner-city freight, shared mobility and demand management.
- selecting solutions with strong **co-benefits**: economic, public health, and social equity.

## Local and Pan-Canadian Structure and Governance

Each LC3 Centre will be autonomous, bringing its own local resources, knowledge, and leadership specialties. Drawing from TAF's experience, LC3 Centres will be incorporated and follow good governance via a Board of Directors, bylaws, and accountability mechanisms.

The Centres will initially be housed within robust local institutions, such as an existing foundation or public agency. Sustainability planning beyond the initial five-year period will be a key deliverable for each Centre.

LC3 Centres are well positioned to work within their communities alongside local municipalities. Relationships with municipal leaders will be critical to ensure that solutions receive local government scale-up support. All Centres will proactively collaborate with local Indigenous groups, and seek to incorporate Indigenous knowledge and reconciliation activities into local climate action.

Each LC3 Centre will manage their Working Capital, drawing on TAF's experience while leveraging local financial expertise and opportunities. The LC3 investment policy will be guided by the following principles:

- Visionary & Focused on Impact: to achieve significant local carbon emissions.

- Prudent & Diversified: underpinned by knowledge and understanding of investing realities, including climate-related risks and low-carbon opportunities.
- Strategic & Sustainable: recognizing the role of and mechanisms for investment to achieve objectives, including financial expectations, scaling of mandate-related change, community needs, etc.
- Leadership, Leverage & Learning: take prudent risks required to demonstrate & de-risk innovative solutions, and mine the lessons and insights to move the market.
- Robust Governance: clear articulation of decision-making process, investment boundaries, oversight and compliance, etc.
- Data-Driven: due diligence and decision-making based on explicit criteria and data.
- Management Excellence: implementation of innovative, leadership investing requires innovative and strategic capacity including fiduciaries (Board, Committee), staff, consultants, partners, etc.

For administrative, accountability and collaboration purposes, LC3 will establish an independent, non-profit national organization to provide support to the Centres including shared professional services (e.g. impact investment advisory services); convening members to share best practices and knowledge; co-creation and application of shared performance metrics; liaison with federal and other agencies; and administrative support to reduce transaction costs for all parties. Its board will be made of up representatives from each LC3 Centre.

## **Federal Return on Investment and KPIs**

Based on TAF's 27-year pre-deployment track record, we conservatively estimate that LC3 can unlock eight megatonnes of GHG emissions reductions annually by 2030. Given the \$161 million funding request, this represents an average cost of \$20 per tonne in annual reductions; since \$145 million is revolving, the cost could be as low as \$5 per tonne.

In addition to GHG reduction – direct and lifecycle potential -- Key Performance Indicators will include:

- Impact on Canadian economy such as local jobs created;
- Return on investment of working capital funds deployed in impact investments;
- Energy cost savings – direct and potential;



- Financial capital mobilized;
- Direct and potential renewable energy capacity;
- Impact on public health, social equity, and mobility; and
- Successful knowledge sharing among LC3 Centres and with non-members.

## **Value for the Canadian Government**

In collaboration with local municipalities and community stakeholders, LC3 Centres will offer unique capacities for refining and demonstrating climate solutions to drive deep emissions reductions and co-benefits. By bridging the “valley of death” for urban climate solutions, the LC3 Centres will accelerate Canada’s transition to the low-carbon economy and unlock financial, social, and environmental benefits. A federal investment of \$161 million will create a functional and lasting asset for achieving Canada’s 2030 climate target and setting the stage for deep emission reductions by 2050. And the impact need not end at our borders – the LC3 initiative can serve as a new model for national/city-level climate cooperation, underscoring Canada’s climate leadership and competitiveness in a changing, low-carbon future.

## **Expressions of Support**

### **Federation of Canadian Municipalities (FCM)**

“We do not feel there is any duplication of FCM programs and there is opportunity for complementarity. [...] Having supported hundreds of pilot projects over two decades, we generally agree with the thesis underpinning Low Carbon Cities Canada, namely that dedicated local effort is needed to address the policy, financial and/or social barriers which block good ideas and successful pilots from achieving deployment at scale. The Atmospheric Fund, as an example, has demonstrated the value of sustained capacity for demonstrating and de-risking local solutions.”

- Shannon Joseph, Project Director of the Municipalities for Climate Innovation Program

## **Halifax**

“Halifax knows that transitioning to a low-carbon economy is about more than energy, it’s about more efficient and effective transportation systems, finding and experimenting with innovative solutions to meet our city’s challenges, and fostering a place where people want to live and work. By collaborating with the many successful organizations doing work in this area, a low-carbon innovation centre in Halifax will be game-changing for emission reductions and the economic and social vibrancy of Halifax, and other smaller cities in our region.”

- Mike Savage, Mayor of Halifax

## **Vancouver**

“Vancouver City Council has approved \$700K to incubate the Low-Carbon Building Centre of Excellence and we look forward to collaborating with industry, academic and non-profit partners to move strategic, low-carbon innovations from idea to implementation in Metro Vancouver. By collaborating with like-minded centres across the country, we can leverage all our experiences and successes to grow our economies, fight climate change and grow a more resilient city.”

- Gregor Robertson, Mayor of Vancouver

## **Montreal**

“We favourably view your project as it will help the City of Montreal in its efforts to fight climate change and air pollution. [...] The City of Montreal welcomes your willingness to combine the efforts of public and private organizations as well as civil society organizations. We are also optimistic about the proposed approach which identifies the mobilization of stakeholders as the main engine of the energy transition. Businesses and organizations in Montreal are in need of financial tools that are adapted to their reality. The establishment of [the Montreal LC3 Centre] could have a significant impact in achieving our GHG emissions reduction objectives.”

- Valérie Plante, Mayor of Montreal