

Chief Executive Officer's Report

Date: January 27, 2023
To: Board of Directors of the Toronto Atmospheric Fund
From: Julia Langer, Chief Executive Officer

GOVERNANCE MATTERS

Board and Committee News

Please join me in thanking two long-standing and hard-working members of the Grants & Programs Committee who have recently resigned. Sandra Odendahl served for twelve years, ably chairing the committee for four of those, and Corey Diamond served for nine years; both continued to volunteer on the committee when their terms on the TAF Board expired. I am confident that we will continue working together and have the benefit of their expertise and knowledge of TAF. For instance, in her new role at BDC Sandra is developing strategy and financing for Canadian businesses to retrofit their buildings and increase goods and services available for retrofits. And TAF has ongoing engagement with Efficiency Canada, which Corey leads.

Given Board changes, committee restructuring and the committee resignations, several appointments are being recommended; see Agenda Item 10.

Risk Register

The most notable risks for this period, based on senior management's quarterly review, and our responses, are highlighted below:

- **Financial:** Public market conditions improved somewhat with small unrealized gains in the last quarter although still down for the year which will require a careful and granular management of endowment-funded expenses, including staffing costs.
- **Operational:** TAF was victim of a sophisticated IT scam; it was an isolated incident and the value was not large. We are in process of recovering the funds and have instituted additional cybersecurity training and protocols for staff.
- **Program:** While TAF has taken divergent positions on several provincial policies and programs, these have consistently been based on robust analysis and consultation with relevant stakeholders, and presented and discussed in a constructive manner to maintain our reputation as a trusted advocate for climate solutions.
- **Operational:** Recruitment of an Accounting Clerk was delayed but has not adversely affected progress of the financial audit; the hiring is now completed. Overall team capacity is robust, supported by roll-out of the compensation adjustments.

TO/TAF Governance

Staff continue to progress on the implementation of the governance updates approved by the TAF Board and City Council in 2022. All of the governance updates are either operationalized or under way; the grants policy and purchasing policy are expected to be completed by the spring, and the debt policy (which also requires Council approval) before year end.

ON/TAF/TO Transfer Payment Agreement (TPA)

To the best of my knowledge, this confirms that TAF is in compliance with the terms of the Transfer Payment Agreement, with the exception that MMAH has been apprised that submission of the Audited Financial Statements is behind schedule. A summary of financial information using the unaudited financial statements has been provided and will be updated if necessary.

FCM/TAF/TO Funding Agreement (FA)

TAF submitted the 2023 Annual Statement of Plans and Objectives (ASPO) to FCM as required by the FA.

FCM and the Government of Canada are preparing to review the terms of the FCM-Canada Funding Agreement which includes the LC3 funding envelope and associated requirements. LC3 centres are working with FCM to identify key clauses requiring attention. FCM will then work with the LC3 centres to integrate any changes made to the FCM-CA Funding Agreement through renewed FCM-LC3 bilateral (or in TAF's case, trilateral) agreements.

STAFF & OPERATIONAL MATTERS

Nicole Leite, Director, Impact Investing has recently left TAF. We've appreciated her work on due diligence, streamlining ESPA retrofit financing repayments, seeking out investment opportunities and developing the direct investment strategy. A recruitment process is underway; as always, please share the posting with your networks to assist us in attracting great candidates to this exciting position.

Evelyn Hu joins the Finance team in February as Accounting Clerk. In this new role, Evelyn will add much-needed capacity including processing accounts receivable and payable transactions, contributing to the related reconciliations, assisting in the preparation of key financial statements such as expense reports, budget updates and the annual financial and program audit, and supporting corporate filings.

The approved compensation adjustments have been conveyed to staff and the first phase has been implemented. Management will monitor the financial picture and respond as per the contingency plan if necessary.

STRATEGIC PROGRAMS

Accelerating Retrofits (including TAF's MURB Retrofit Accelerator)

Building performance standards (BPS) are considered a best-in-class way to drive down energy use and carbon emissions and have now been promulgated in over a dozen US jurisdictions and the City of Vancouver. Establishment of a BPS is one of the mechanisms in the City of Toronto's Existing Buildings Strategy and TAF has commissioned development of a model bylaw to kick-start the conversation with key stakeholders in Toronto and other GHTA municipalities. We are actively seeking support and engagement from companies and organizations who will be affected by and benefit from BPS, and are exploring external funding opportunities to support this workstream.

TAF has completed installation of the first commercial Climaveneta air-to-water heat pump system in Canada at the French Quarter condominium in downtown Toronto. Staff were on-site and captured the crane-lift on [video](#) which has provoked a lot of interest in this technology; site visits with the various project partners on-hand are planned to showcase the system first-hand.

TAF is working with a number of building owners who, with our assistance, applied to the City of Toronto's Deep Retrofit Challenge program. We are awaiting funding confirmation for four projects totalling \$2M which will allow their retrofits to achieve much more ambitious energy and carbon reductions.

Robust Measurement & Verification (M&V) analysis is critical in order to ensure TAF supported retrofits are performing as expected and to optimize systems and improve performance if necessary. M&V of three heat pump retrofits -- one TCHC and two private apartment buildings -- has been completed and case studies drafted which synthesize retrofit performance, resident feedback and lessons learned. These case studies, and over 11 others, are shared widely to help building owners and organizations involved in heat pump retrofits; they can be found on TAF's [website](#).

Electrification of Transportation

[TAF's EV Station Fund](#) has conditionally approved \$1,700,000 for 26 projects that are collectively installing over 200 EV charging stations in the GTHA. This represents 100% of the initial tranche of capital funding allocated to the program by Natural Resources Canada. Installation has been completed for seven projects comprising 76 stations and we continue to be confident that all projects will be completed by the end of 2023. TAF recently submitted an application to recapitalize the EV Station Fund for 2023-2025.

TAF is spearheading a second collaborative EV project with Low Carbon Cities Canada (LC3) and the Green Municipal Fund (GMF). The [goal](#) of the project is to identify the optimal approach to enabling comprehensive EV-ready retrofits in multi-unit residential buildings (MURBs) from a technical, financial and legal perspective. The results, expected by mid-2023, will inform the design of appropriate financial, programmatic and/or policy solutions to facilitate EV charging access for MURB residents.

The federal government published a draft Regulation in December proposing that at least 60% of light-duty vehicle sales must be zero emission vehicles (ZEVs) by 2030 and 100% by 2035. If the regulation is finalized as proposed, it will help to ensure a predictable supply of ZEVs in Ontario as internal combustion vehicles are phased out of use. TAF continues to support advocacy efforts on this important file, primarily through the grant to Electric Mobility Canada.

Electricity Systems

TAF published a [modelling study](#) commissioned to explore various scenarios/pathways for achieving an affordable, reliable, net-zero electricity system in Ontario by 2035. The communications emphasized the multiple benefits, drawing on the narratives research we commissioned earlier in the year. The media briefing including the study consultants, media release, and blog post successfully disseminated a credible and alternative perspective to reliance on ramping up gas-fired generation to meet rising demand, earning media coverage from CBC, Toronto Star, Globe and Mail, Newstalk 1010, and other publications. The study and coverage also served to position TAF as expert commentators in the context of the Independent Electricity System Operator (IESO)'s Pathways to Decarbonization study which was released shortly after.

Climate Policy

Following introduction of Bill 23, the Build More Homes Faster Act, TAF engaged with Municipal Affairs and Housing officials and political staff to emphasize the impact on Green Development Standards (GDS) which are important local tools for achieving climate targets and for affordability including homeowner bills and avoiding costly electricity system investments. We proposed 'surgical' amendments and were invited to depute to the Standing Committee on Heritage, Infrastructure, and Cultural Policy. Our public awareness campaign attracted over 700 expressions of support for an [open letter](#). This resulted in amendments to the legislation to enable continued municipal implementation of local GDSs and, as an added benefit, a provincial opt-in standard will be developed, which we look forward to contributing to.

Research & Innovation

For the first time, TAF's [2021 GTHA Carbon Emissions Inventory](#) highlighted the impact of upstream fugitive methane emissions from fossil gas consumption, drawing on our [Fugitive Methane](#) findings. Highlights and policy recommendations were disseminated through a webinar, targeted meetings with municipalities across the GTHA, and briefing for the Ministry of the Environment, Conservation and Parks.

A formal process for identifying and screening new research opportunities has been developed for TAF. As part of this work, we have documented the best available online data visualization, inventory sources, and quantifications modeling tools which will be used when updating the quantifications methodology.

In support of TAF's functional teams and key projects, impact analysis for ten expressions of interest and nine grant applications received was undertaken; this forms part of the grant intake process.

A Conservation Demand Management (CDN) framework and incentives program for heat pump retrofits has been developed and shared with IESO; this is the final deliverable of project they funded.

Communications & Campaigns

The [2021 GTHA Carbon Emissions Inventory](#) showed that emissions increased in every region in the GTHA, an overall increase of 2.2 million tonnes, or 4.5% in 2021. The flatlining trend reflects little progress since 2015. This stands in contrast to the average year-over-year 8% decrease needed to hit most cities' 2030 targets. The report format was updated this year as an interactive website, and included recommendations for all three levels of government and corporations. This edition achieved 63% higher engagement than the previous year, including 11 media articles/interviews (including Toronto Star and CBC radio and television) and 86 participants (from municipalities, utilities, NGOs and academia) attended the [webinar briefing](#).

Impact Investing

The team is seeing sustained investor appetite for impact investment deals. We continue to have a strong pipeline of opportunities available, despite the current macro-economic climate associated with rising interest rates; looming recession indicators; and higher-than average inflation. Through the review of the Investment Strategy last year, adjustments were made to ensure the majority of prospective deals in our pipeline are clearly and directly aligned with one or more of TAF's Focus Areas. Importantly, the team is also regularly reporting to the Direct Investment Committee on our pipeline assessment and decision-making process. This has proven helpful in communicating how due diligence is prioritized and adding a further opportunity to seek Committee Members' advice. More specifically, due diligence is underway on two opportunities based on indication of interest from the Direct Investment Committee.

With the support of a subcommittee of the Investment Committee a search is underway for an Alternatives manager, with a focus on infrastructure, to meet our portfolio asset mix targets.

TAF hosted a hybrid session attended by 11 representatives of five banks, to provide an overview of financing retrofits, drawing on our experience and portfolio. The discussion and follow up, including via bi-lateral conversations and a survey, will inform the focus on additional multi-stakeholder engagement to mobilize this important source of capital and their project origination capabilities.

Low Carbon Cities Canada (LC3)

The J.W. McConnell Family Foundation has made a \$5 million over five years gift to six LC3 Centres for cultivating and funding local work that integrates climate, equity and Indigenous Reconciliation objectives. While none flows to TAF as we previously received a \$2 million gift from the foundation to support our Retrofit Accelerator (which also supports community benefit and equity objectives) we will nevertheless benefit as we work with our LC3 colleagues to build understanding of how to advance an equitable transition to a net-zero carbon economy. This work requires that those individuals,

groups and populations that have been traditionally excluded, marginalized or underrepresented in climate solutions, and those who are most vulnerable to the impact of climate change, be resourced and empowered to participate in climate solutions that affect them. The grant also supports efforts to advance a reconciliation economy where wealth and resources are equitably shared and sustainably stewarded for this generation and those yet to come, in relationship with both Indigenous and non-Indigenous peoples. Up to half the new funding will support grant cultivation, relationship building capacity, communications, and development of metrics and evaluation, with the balance for local grantmaking. Stewardship will be provided via the LC3 national office.

Grants, including summary of completed Grants

The first grants intake round of the year is under way, with proposals due on February 24. Funding recommendations from this intake will be considered by the TAF Board at its next meeting in April 2023.

A summary of recently completed grants is provided below.

University of Toronto - *Assessing the Impact of Energy Retrofit Strategies for Contemporary and Post-War MURBs*

\$112,011 over two years, approved in June 2017

The purpose of this grant was to analyze the energy intensity of multi-unit residential buildings (MURBs) constructed in the 1960s and 1970s and examine the potential GHG emissions reductions and cost savings resulting from their retrofits. The project assessed the impact of two retrofit approaches i) 'light' energy retrofits for contemporary buildings, ii) and 'deep' energy retrofits for post-war buildings. To diagnose building performance issues and identify pathways for energy savings in central systems of contemporary buildings, the project team installed smart thermostats in 54 suites of two high-rise condominiums. For the post-war buildings the project assessed suite-based air tightness and air flows in two buildings which had undergone enclosure retrofits. The project demonstrated the use of smart thermostats as a ubiquitous technology for diagnosing performance issues in buildings. Additionally, the findings from the post-war building performance contributed to a study evaluating the performance of centralized vs decentralized ventilation systems in Toronto Community Housing (TCH) buildings. The project team continues to work with TCH to help optimize and prioritize their retrofit strategies. Considering the size of TCH's portfolio, building performance improvements guided by these research outcomes can have a significant impact on MURB energy consumption in Toronto. The study's findings have also been shared with IESO, Toronto Hydro, Enbridge, and ecobee to help inform the design of their conservation programs.

Pollution Probe - *Municipal Consultation on 2021-2026 Natural Gas DSM*

\$30,040 over 8 months, approved April 2021

This grant enabled Pollution Probe to support GTHA municipalities' participation in proceedings of the Ontario Energy Board (OEB) and ensured that the next multi-year

natural gas demand side management program is aligned with municipal climate objectives. To help facilitate discussion and gather inputs on elements of the upcoming plan, Pollution Probe held a workshop with 55 participants from 26 municipalities. The capacity building and [feedback](#) from the municipalities resulted in a coordinated submission to the OEB outlining municipal priorities and needs. The outreach and engagement positively impacted future energy efficiency plans with the OEB agreeing to create a DSM stakeholder forum to consider several project recommendations in the next plan, such as for direct funding of municipal employees.

City of Pickering - *Integrated Sustainable Building and Development Standards*
\$86,000 over 12 months, approved April 2021

The objective of this project was to support the City of Pickering in developing [Integrated Sustainable Building Development Standards \(ISDS\)](#) and reduce carbon emissions associated with the construction of new buildings. The project saw municipal staff collaborate with development industry members to guide the creation of resources to support implementation of and compliance with the guidelines. The ISDS reflect multiple performance criteria including urban heat island reduction, energy efficiency, stormwater management, and building resilience. As some of these areas are not addressed in the Ontario Building Code, the ISDS allows an approach to ensure that there is an industry shift to energy efficient, low carbon, sustainable communities. The ISDS project also builds upon the goals of Pickering Council-adopted plans such as the Durham Community Climate Action Plan and the Durham Community Energy Plan. The ISDS were unanimously adopted by Pickering Council in September 2022 and came into effect on January 1, 2023. City of Pickering staff are currently reviewing two Site Plan Applications that will now be subject to the new ISDS performance standards.

Volta Research - *Residential Takeoff and Analytics Tool for Low Carbon Retrofits*
\$150,000 over two years, approved in February 2020

This grant supported Volta Research in developing a free online software that simplifies the energy modelling process and presents energy efficient solutions for increasing the emission reduction potential of retrofit projects in low-rise residential buildings. The tool assists service organizations (SOs) and energy advisors (EAs) by reducing the time required to collect data and simulate a wide variety of GHG-reduction solutions. The project team consulted stakeholders including Natural Resources Canada (NRCan), municipalities, academia, industry, and homeowners to strengthen the design of the tool and identify potential usage. Over the course of the project, the tool was able to leverage additional funding from Canada Mortgage and Housing Corporation (CMHC), NRCan, Alberta Ecotrust, and Royal Bank of Canada (RBC) to add features such as tiered code compliance. The tool is currently under beta testing and the project team is collaborating with NRCan, Canadian Home Builders' Association, and Canadian Association of Consulting Energy Advisors on enabling adoption at scale.

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SIGNATURE

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