

Chief Executive Officer's Report

Date:	April 13, 2023
То:	Board of Directors of the Toronto Atmospheric Fund
From:	Chief Executive Officer

GOVERNANCE MATTERS

Board and Committee News

Please join me in welcoming Dan Zilnik to the Board. Dan is a management and environmental expert with 20 years of experience in integrating sustainability into corporate strategy. His consultancy was recently acquired by EY where he is now Partner - Environment, Social, Governance.

To comply with TAF's Statement of Investment Objectives and Principles (SIOP) and ensure coordinated management of the full investment portfolio, the Chairs of the Direct Investment Committee and Investment Committee met on January 17, 2023. The outcomes of the meeting include further clarity on what each committee is responsible for and what information they will receive; an open invitation to committee members to participate as observers in the alternate committee meetings; and making all materials for each committee accessible to all committee members.

TAF will be hosting a volunteer appreciation event for all Board and Committee members this September. Stay tuned for a save the date!

Risk Register

The most notable risks for this period, based on senior management's quarterly review, and our responses, are highlighted below. There is no material non-compliance in respect of TAF's legislative, regulatory or contractual obligations of which I am aware.

- Financial: There is a significant capital market downfall. Notwithstanding volatility
 and challenges in various sectors, TAF's portfolio has not been adversely affected in
 this period. A granular assessment of revenues and expenses based on 4 months of
 activity will be undertaken and any required management of endowment-funded
 expenses, including staffing costs, implemented.
- Financial: A direct investment under-performs. The impact of the recent US bank failures, and Silicon Valley Bank in particular, was evaluated across each of the asset classes in the portfolio. Although SVB was very active in the cleantech and clean energy space, TAF has no direct and little indirect exposure, and any increased risk of this exposure has been mitigated by the actions of the US Federal regulating authorities. Two of the direct investments are close to finalizing significant capital raises indicating the current environment has not impacted them and a third is preserving cash, but also progressing through a financing round. The main

implication for TAF at this time is likely to be an increase in the frequency of capital calls on our committed capital from two of our current Private Equity Funds. A watching brief is being maintained on the broader banking environment to remain vigilant regarding any longer-term implications to our portfolio. TAF's Energy Saving Performance Agreements are each functioning as expected. Overall, there is a reduced likelihood of under-performance among TAF's current direct investments, and any impact would be moderate to TAFs investment portfolio. TAF is staying close to its investments, with ongoing monitoring and regular performance reporting to both investment committees.

- Operational: Staff Capacity are inadequate to deliver on TAF's Mandate. Due to recruitment that is underway for two vacant roles, required current staff have been picking up unexpected workload; this is highly appreciated and there have been some learning benefits for these team members. And in addition to their core responsibilities, staff have been involved in onboarding new staff, Board and Committee members.
- Operational: Information Technology disruption. Low internet quality at 75 Elizabeth continues to impact general productivity, significantly limiting our ability to host and participate in online meetings and undertake other bandwidth-heavy tasks, including some accounting. Despite some recent support from ModernTO and other City departments there is no approach or timeline for resolution. Given the generally increased threat, regular monitoring for and communication with staff about cybersecurity is being undertaken; the current priority focus is on phishing awareness and detection. Also, we are examining the opportunities for and implications of ChatGPT and similar tools.

TO/TAF Governance

Most of the governance updates approved by the TAF Board and City Council in 2022 are being operationalized and the rest are underway. A Grants Policy is presented for Board approval (see Item TA2.16), a consultant is being engaged to assist in developing the Purchasing Policy and the procedures for its implementation, and a Debt Policy (which also requires Council approval) has been scoped and will be completed before year end.

ON/TAF/TO Transfer Payment Agreement (TPA)

A draft of our Annual Report profiling key accomplishments and documenting compliance with key terms was presented to the Ministry of Municipal Affairs and Housing and will be finalized by April 30 as required. To the best of my knowledge, this confirms that TAF is in compliance with the terms of the Transfer Payment Agreement.

FCM/TAF/TO Funding Agreement (FA)

The Annual Report for 2022/23 will be submitted to FCM by May 31 including documentation of the initiatives supported by TAF with the Canada endowment, accomplishments achieved and a case study highlighting a specific success story, and a program audit.

Strategic Directions

While the major sources of urban carbon emissions remain the same as when the Board approved TAF's current Strategic Directions, TAF's operating context has changed considerably. Externally, there is a greater public and political commitment to climate action; bold investments in the green economy are increasingly viewed as an imperative for global competitiveness; changes to the geopolitical and macroeconomic contexts are altering the flow of capital into both fossil fuels and clean energy; and there is a heightened consciousness around the intersection between climate and social equity goals. Internally, TAF has secured and fully deployed the Canada endowment, nearly doubling its net asset value; we have a larger team with more resources to invest in our mandate; and we have combined forces with the pan-Canadian LC3 network and adopted a shared theory of change that emphasizes the importance of embedding scale, co-benefits and equity objectives into the climate solutions we support. We will consider how best to adapt to and position TAF within this shifting landscape as part of our 2023 strategic review exercise. The review will draw on various sources including a landscape analysis of emerging trends, survey input from TAF's stakeholder network, and facilitated sessions with the Board and other strategic advisors. We aim to present a refreshed set of strategic directions for Board approval at its November meeting.

STAFF AND OPERATIONAL MATTERS

Please join me in welcoming Uzoma Erondu as our Senior Manager, Impact Investing. Uzoma brings experience in investment advisory and management services, financial and credit analysis, portfolio management and evaluation, and infrastructure and sustainability finance.

Simone Hacikyan, inaugural Manager of TAF's EV Charging Program, has recently left TAF, although we are sure our paths will continue to cross. A recruitment process is underway for a replacement who will now have an expanded EV Station Fund to deploy (see below).

Natasha Matthews will be joining the Retrofit Accelerator team as Building & Environmental Researcher in June when her internship with the Research & Innovation team ends. She has made a great contribution already and we are delighted to be able to promote internally.

The Equity, Diversity and Inclusion (EDI) Working Group has circulated the second EDI Survey to TAF Staff, Board and Committee members and is looking for full participation. The results and insights will be compiled and presented by June 2023.

STRATEGIC PROGRAMS

Accelerating Retrofits (including TAF's MURB Retrofit Accelerator)

An application to NRCan's <u>Deep Retrofit Accelerator Initiative</u> is being prepared with the goal of securing three-year funding to build the Retrofit Accelerator team and dramatically increase the scale and impact of our retrofit work. We're also connecting with potential collaborators and other applicants from across Canada (including other LC3 centres) to help establish a network of Retrofit Accelerators that can learn from and support each other in our shared goal of rapidly decarbonizing existing buildings.

Four projects supported by TAF's Retrofit Accelerator have secured Deep Retrofit Challenge (DRC) funding; details about the specific projects will be shared via a public announcement. We are now working with the City's DRC team to integrate their requirements into the projects.

A case study of our recently-completed heat pump retrofit demonstrates the excellent performance of this <u>Stepwise apartment retrofit</u> including 46% reduction in heating energy and emissions and improved engagement and user experience. The new webbased case study format presents our key learnings in a concise, engaging manner. Two more deep retrofit case studies coming soon.

Electrification of Transportation

In December 2022, Natural Resources Canada (NRCan) invited TAF to apply for additional funding for distribution via the <u>TAF's EV Station Fund</u>. Given the strong demand generated by the program – we were massively oversubscribed almost immediately – TAF applied for the maximum of level of funding available. This month we received an additional \$3M, for a total of \$5M, to be spent by the end of 2024. The program will be launched once a new EV Program Manager is hired and onboarded.

In March, TAF <u>submitted recommendations</u> to Environment and Climate Change Canada on the design of its forthcoming zero emission vehicle (ZEV) mandate, a regulation requiring an increasing proportion of light-duty vehicle sales to be ZEVs until they reach 100% of new vehicle sales by 2035. TAF's submission included novel analysis using Health Canada's own methodology to monetize the health co-benefits of the ZEV sales mandate. These had heretofore been omitted from the federal government's cost-benefit analysis and are worth billions of dollars *annually*, far exceeding even the substantial net energy savings and GHG emission benefits generated by the policy. Our analysis of the health co-benefits was referenced in the submissions of multiple allies including Electric Mobility Canada, Clean Energy Canada, and Affecting Change.

Electricity Systems

Building on the learnings from and subsequent outreach related to the modelling study released at the end of 2022, TAF is exploring opportunities to directly support and scale local, low-carbon solutions that will offset the need for increased reliance on gas-fired generation over the next decade, with a focus on distributed energy resources (DERs). Funding streams and tax credits announced in the 2023 Federal Budget (detailed below) should further strengthen the economic case for these solutions.

TAF continues to engage with and respond to requests for input from all three levels of government, with a focus on solutions that can both support electrification of the broader economy and are aligned with federal, provincial, and municipal climate targets. This includes offering briefings and sharing information packages with councillors in municipalities that are likely to consider critical energy infrastructure decisions related to ongoing long-term procurements for 4,000 MW of new electricity supply.

Climate Policy

The Federal Government released <u>Budget2023 in March</u>. As has been widely reported, there were positive aspects focused on scaling clean energy and manufacturing via tax credits, in direct response to the US Inflation Reduction Act (IRA). The Smart Renewables and Electrification Pathway program was recapitalized, which TAF advocated for in our pre-budget recommendations. However, unlike the IRA, there was no new investment in local implementation of retrofits or EV charging. There were no notable commitments to lowering carbon emissions or supporting a transition to a low carbon economy in the Ontario budget.

To support and encourage municipalities interested in advancing Building Performance Standards (BPS) – a proven tool to accelerate the pace of retrofits and achieve climate targets -- we will host a Dan Leckie Forum in September. The session will bring together the wide range of stakeholders including perspectives from US jurisdictions that have already implemented such requirements, from legal experts (including based on a a model BPS bylaw TAF is commissioning), building owners, and the industry that will support implementation with goods, services and capital.

Comments have been submitted in response to several consultations including the national <u>Zero Emissions Vehicle Mandate version Canada Gazette I</u>, EV-Ready MURBs, electricity grid modernization, and inclusion of carbon and energy efficiency in the National Model Codes.

Research & Innovation

The potential impact of twelve Expressions of Interest were quantified during the first grant intake this year, and the potential impact of several grant proposals was modelled including phasing out gas-fired electricity generation, distributed energy resources for a reliable net zero grid, and technologies for low carbon communities. The R&I team also supported the impact investment team in evaluating several investment opportunities and worked with other LC3 centers to better estimate the market size for some of these opportunities.

Drawing on our own analysis and Health Canada's recent modeling of air quality benefits associated with transportation emission reductions, we <u>monetized the health</u> <u>impacts</u> of Canada's electric vehicle sales targets; in short, it is significant. This analysis emphasized the importance of monetizing such health benefits, which are typically externalized or referenced in qualitative terms despite their financial significance.

Two heat pump focused studies have been completed in collaboration with the retrofits team. The first, best practices for heat pump aggregation/bulk procurement, aims to accelerate adoption through cost-compression and was funded by CMHC. The second is a high-level, cost-effective CDM program design that aims to incentivize heat pump adoption in commercial and institutional buildings and was supported by the Independent Electricity System Operator (IESO). Findings from both these studies will be shared widely and with key stakeholders.

TAF's <u>Carbon Emissions Quantification Methodology</u> has been updated to reflect recent improvements on fuel combustion and fugitive methane emission factors and quantification of the embodied carbon in materials.

Communications & Campaigns

TAF provided an urban climate perspective on the recent federal budget including this rapid response <u>media release</u> and a <u>blog</u> by Kristian Knibutat about impact investing opportunities. To complement our policy submission for a robust ZEV mandate and to popularize the favourable health impacts of the policy, we published a <u>statement</u> and social media content featuring a quote from a health organization. Complementing our advocacy for modernizing the electricity system, this <u>blog</u> tells the story of two recent municipal resolutions on gas plants.

Impact Investing

A recommendation for a direct investment is included in this agenda which, if approved, will deliver half the direct investment target for 2023. Due diligence is underway on three new opportunities. A recommendation is also included for two Alternative Investments which, if approved, will be an important diversification of the portfolio in keeping with the portfolio asset mix target and accomplish a key 2023 Annual Plan target.

Two of TAF's current direct investments are progressing to their next round of financing, providing TAF with significant paper gains (35% and 41%) in a relatively short period of time. More importantly, these companies are scaling and continue to achieve significant carbon emission reductions from the foundation TAF helped create.

Low Carbon Cities Canada (LC3)

The LC3 network presents an opportunity to leverage the power of Canada's biggest metropolitan centres to address shared urban climate challenges together. Here are three recent examples:

- Co-funded contribution to Efficiency Canada to support policy work on building codes including development of a <u>municipal guide</u> to net-zero energy ready building codes and a <u>roadmap</u> for municipalities to work towards net-zero ready new buildings and sharingthese with municipal stakeholders from coast to coast.
- Jointly initiated <u>a study</u> to identify the optimal approach to enabling comprehensive EV-ready retrofits in multi-unit residential buildings from a technical, financial and legal perspective. The study will be led by Dunsky Energy + Climate Advisors and is due for completion in summer 2023.
- Collaborated on the due diligence of a direct investment opportunity which is currently being advanced for approval by the TAF Board and by two other LC3 centres. Rod Ruff, Vice President at Alberta Ecotrust said "I feel like we initiated the LC3 project many moons ago with a vision of being able to collaborate in this manner. It is an incredible achievement to have been able to work this way and collectively advance our local mandates."

Grants, including summary of completed Grants

The Grants and Programs Committee's recommendations from the first grants intake of 2023 are included in this agenda. The intake is underway - proposals are due May 12.

A summary of recently completed grants is provided below.

University of Toronto - Expanding an Off-Peak Delivery (OPD) Program in the Greater Toronto Area

\$92,000 over two years, approved in February 2020

This grant supported the University of Toronto's Smart Freight Centre to assess freight deliveries during off-peak hours in the GTHA and their impact in reducing greenhouse gas emissions, air quality pollutants, and traffic congestion. The project's objective was to offer recommendations to build support for a permanent, multi-region OPD program in the GTHA. This work followed the TAF-funded Peel Region OPD pilot project, which demonstrated the feasibility of emissions reductions and improved delivery efficiency among participating retailers. The project team established a regional working group comprising representatives from Ontario's Ministry of Municipal Affairs and Housing, City of Toronto, and the Regions of York and Peel to guide the research. A key output of the project was a resource document to inform the development of the Province of Ontario's permanent OPD regulation which outlines best practices to mitigate any negative impacts of OPD, and includes an analysis of noise complaints, community survey responses, and collision data to strengthen the case for OPD. In November 2020, the Ontario government passed the Main Street Recovery Act which permitted OPD on a permanent basis across the province, fulfilling the ultimate goal of this project. It is believed that the project team's engagement on this file and its sharing of best practices likely had some influence on the final provincial legislation. The results of this project have been presented by the project team at various national and international conferences.

City of Brampton - Sustainability Score Threshold Update and Training Video

\$35,000 over 12 months, approved in April 2021, rescinded March 2023 The objective of this grant was to update the sustainability performance scores for new construction in Brampton and to develop training videos for municipal staff and the development industry to support increased compliance as part of the *Sustainability Metrics Program* launched jointly with the municipalities of Markham, Richmond Hill, and Vaughan. The grantee was unable to sign the contribution agreement due to irresolvable challenges in meeting key funding conditions and the grant was rescinded in March. Nevertheless, we understand that some of the work contemplated under this grant was undertaken by the City of Brampton independent of TAF funding.

CONTACT

Julia Langer Chief Executive Officer