

Chief Executive Officer's Report

Date: November 6, 2024
To: Board of Directors of the Toronto Atmospheric Fund
From: Chief Executive Officer

GOVERNANCE MATTERS

Board and Committees

In anticipation of Kim Marshall's departure from the Board when her second term ends in summer 2025, we are planning a transition of Committee chairs. Recommendations for appointment of Board members to Committee chair roles are included in item TA8.5.

Risk Register

Senior management's quarterly analysis, using the updated Risk Register, highlights the most notable risks for this period and our mitigation responses:

- **Financial** – a direct investment underperforms: In July, TAF was notified that an investee was dissolved and ceased operations because of issues with their proprietary technology, which resulted in the company making no further interest payments and defaulting on returning the principal of TAF's investment. The investment yielded \$180,000 in revenue in prior years. The write-off, including accrued interest, is ~\$1.29 million. Analysis by staff and discussion with the Direct Investment Committee indicated the due diligence undertaken in support of the investment was sound and further investigation would not have foreseen the outcome nor would additional or earlier engagement with the investment manager changed the outcome. TAF's cash flow is not affected as the full investment was advanced in 2019. Robust due diligence and thorough consideration by the relevant TAF Committee will continue for all potential investment opportunities however, given TAF's aim for a diversified portfolio, inclusive of a portion being higher risk and early stage, not all investments will be successful.
- **Program** – risk aversion constrains TAF's ability to fulfill its mandate: Despite an agreement to collaborate with the City of Toronto to advance mutual objectives, staff had concerns regarding whether and when funding from the City for TAF work would flow and therefore constrain key activities. What is emerging from this prudent risk aversion is a more appropriate process for collaborative work between a City division and Agency which does not treat TAF as a "vendor" and can be utilized in a variety of contexts going forward.

There is no material non-compliance in respect of The Atmospheric Fund's (TAF) legislative, regulatory or contractual obligations of which I am aware.

TO/TAF Governance

An appropriate process for the City to provide TAF with funds to implement specific activities to achieve mutual objectives has been established, utilizing the transfer payment mechanism. This will be utilized to support TAF's work, alongside the City's, to advance a Buildings Emission Performance Standard.

ON/TAF/TO Transfer Payment Agreement (TPA)

In September, TAF met with and briefed the new team at Ministry of Municipal Affairs and Housing (MMAH) regarding activities and outcomes. To the best of my knowledge, this confirms that TAF is in compliance with the terms of the TPA.

FCM/TAF/TO Funding Agreement (FA)

Earlier this year the TAF Board [approved](#) minor amendments to the tripartite FA between TAF, the City of Toronto and the Federation of Canadian Municipalities. These amendments have been incorporated into an updated FA which will soon be circulated to all parties for signature.

STAFF AND OPERATIONAL MATTERS

The Retrofit Accelerator continues to build the team needed to scale up our work of supporting building owners through the deep retrofit process. Please join me in welcoming three new staff to the TAF team who will contribute to our priority objectives related to existing buildings:

- Retrofit Accelerator Analyst, Louise Lam, will be on the front lines of TAF's retrofit work, coordinating key project deliverables, engaging in site visits, troubleshooting challenges, undertaking leading-edge measurement and verification processes, and analyzing and reporting on energy, carbon and indoor environmental quality (IEQ) data.
- Net-Zero Buildings Research Lead, Natalia Enriquez Goyes, will provide research, analytical and technical capacity to advance TAF's decarbonization goals in new construction and existing buildings.
- Communications and Campaigns Lead, Colleen Mahaffie, will facilitate the design and implementation of communications and campaigns to accelerate retrofits and net-zero buildings in the GTHA.

We are also excited to have another intern working with the Impact Investing team over the fall season; Rakshith Nagaraj joined as Junior Analyst in September and is supporting due diligence of investment opportunities.

In September, the full TAF team participated in a two-day retreat. It was an opportunity to explore and learn about another city in our region as we traveled – mostly by public transit – to Hamilton. Our days in Hamilton were full, starting on day one with a panel of six speakers from Hamilton providing 'lightening talks' to give our staff a more detailed and up-to-date understanding of the needs and opportunities that exist for achieving

carbon emissions reductions in the GTHA, and a collaborative session on what needs to be done in 2025 to achieve the goals set out in TAF's strategic plan, approved by the Board earlier this year. Day two focused more on individual learning and growth as we participated in two facilitated sessions, on eco-anxiety and creating a culture of feedback. Our follow-up survey showed that the team benefited from this extended time together, away from our desks and day-to-day tasks.

Bryan Purcell and Ian Klesmer attended an LC3 summit in Ottawa in early November. The summit covered a range of topics including the first network-wide strategic plan, a partnership agreement to guide our future work together, and our collective work on Reconciliation and program delivery. Through this and other regular touchpoints, the network continues to build its capacity to develop and scale climate solutions across Canada's biggest cities.

STRATEGIC PROGRAMS

Accelerating Retrofits

TAF continues to support the City of Toronto in advancing the Building Emissions Performance Standards (BEPS) for existing buildings. We are participating in the Finance and Research working group (one of six) to provide technical input on by-law implementation and advise on potential risks, barriers and opportunities, as well as the Building Emissions Advisory Committee, providing guidance and oversight on the development of the by-law, reviewing research and modeling analysis done by consultants, and advising on sector-specific policies required for successful implementation of the by-law. TAF is also hosting a steering committee of multi-sector stakeholders to co-develop a related engagement campaign. Our goal is to mobilize champions and supporters of BEPS, resulting in Toronto Council adopting a by-law in Q3 2025, with at least one other municipality in the GTHA close behind.

Construction is underway on our most ambitious retrofit to date; [an affordable seniors' apartment building pursuing Passive House certification](#) and an 80% reduction in carbon emissions. This Toronto Community Housing (TCHC) project will be transformational and will allow residents to live in a healthy, comfortable, future-ready building running on all electric heat pumps. The project features prefabricated insulated overcladding, high-performance ventilation, and a ground-source heat pump system for heating and cooling.

TAF is sponsoring the next [Retrofit Canada Conference](#), hosted in Toronto in June of 2025. Fatima Crerar has joined the Advisory Board for the conference, along with other leaders in the retrofit space (many of whom are collaborators and/or friends of TAF). Sponsorship provides us with an opportunity to shape the content and direction of the conference, which is the only conference focused on retrofits in Canada and is increasing in importance and popularity every year.

Electrification of Transportation

TAF is wrapping up its [EV Station Fund](#) program which has provided rebates to support the rollout of electric vehicle (EV) charging infrastructure across the GTHA. The funding from Natural Resources Canada's Zero-Emissions Vehicle Infrastructure Program (ZEVIP) has been fully allocated and will result in the installation of 848 chargers by the end of November 2024, including 712 in 48 multi-family buildings which were identified as a priority use case for the program. Building off the learnings from this program, in September we submitted follow-up funding proposal to ZEVIP to demonstrate the technical and financial viability of comprehensive EV-ready retrofits in multi-family buildings (i.e., where every resident parking space has an energized outlet to support the future installation of Level 2 chargers). The application included signed letters of intent to participate in the project from three condo boards and three apartment landlords representing a total of 11 properties across the GTHA. The project involves a unique financing model, with the roughly \$5.4M project cost covered by a combination of NRCan, participating building owners, and TAF via an impact investment (subject to final Board approval, see Item TA8.15).

We continue to make progress in developing an affordable financing solution to help vehicle-for-hire (VFH) drivers make their next car an EV. A market research firm has been retained to focus test the offering with high-milage VFH drivers; their feedback will be used to validate the program design and inform promotional activities. A financing partner has been engaged to source private capital from the marketplace and a service provider has been selected to manage the loan administration process, develop the program website, and facilitate partnerships with auto dealers. Once the financial model is finalized, we will be seeking the Direct Investment Committee's final approval of the terms and conditions for TAF's \$3.5M investment in the solution, as [previously directed](#) by the TAF Board. We plan to launch the offering in early 2025.

Decarbonizing the Grid

TAF will be launching a solar concierge program targeted at the residential market in early 2025. We are currently putting the finishing touches on program design and have shifted focus to program implementation, including initiating work on service delivery, local partnerships, branding and marketing, and regulatory and process reform. This will be the anchor of our multi-faceted approach to scale solar adoption in the GTHA and help the grid meet the [75% increase in electricity demand expected](#) by 2050, much of which will take place in transmission-constrained urban areas.

There have been several recent developments on issues critical to electrification and grid decarbonization, including long-term procurements for electricity supply, demand-side management, energy efficiency, integrated resource planning, and connections to local utility grids. In addition to actively engaging on all these files (see Climate Policy below), we also acknowledge the role municipalities have been given in providing final approval on future large-scale electricity projects. Most of these projects will impact local communities for decades to come and are connected to a complex policy and regulatory ecosystem that often require specialized knowledge to navigate. We are

exploring ways we can support municipalities to make prudent decisions for their communities while ensuring alignment with local climate action plans.

Climate Policy

The City of Mississauga and the City of Hamilton have both adopted Green Development Standards (GDS) since our last update. TAF provided grants to New Majority, a grass roots youth engagement organization in Mississauga, to increase awareness and drive civic participation and to the Bay Area Climate Change Council to assist in Hamilton. Clarington, Oakville, Newmarket and East Gwillimbury are all looking at adopting GDS in 2025.

TAF is providing comments on a range of Environmental Registry of Ontario (ERO) postings that are material to the direction of Ontario's electricity and energy system out to 2050 including the efficiency, conservation and Demand Side Management programs, changes to how utilities collect charges for system upgrades, and two related to Bill 214 the Affordable Energy Act (2024).

Using a new "policy brief" approach to engage municipal staff on pressing policy topics, TAF has developed and shared two publications: [Low-Carbon Considerations for Maximum Temperature Bylaws](#) with support from the Research & Innovations team and [How Cities Can Reward Green Development](#), with excellent feedback from city staff and earned media coverage from NRU publishing.

Research & Innovation

The Research & Innovation team has putting together the annual carbon emissions inventory for the GTHA. Preliminary findings have been presented to city staff at Toronto, Hamilton, Durham, Peel, York, Halton and Markham. The 2023 carbon inventory will, for the first time, feature city-level data and key insights to help municipalities with planning their climate programs. Other new features include a deep dive on the performance of existing buildings drawing on Ontario's Energy and Water Reporting and Benchmarking (EWRB) data, updated aviation emissions, and improved transit ridership estimates. A [webinar](#) presenting the inventory results, insights, and policy recommendations will be held on launch day, November 19.

The team supported TAF's third grants round by evaluating eleven expressions of interest and six full applications including projects involving updates to green development standards that target sustainable construction practices while supporting local development, an equitable development of building emission performance standards, portfolio-wide roll out of building retrofits in small and medium size affordable housing, and improvements in appliance and equipment standards needed to achieve net-zero emissions.

A new research project has been launched to help characterize the gap between design and post-occupancy performance in commercial and multi-family buildings across the GTHA. This work is supported through the federal Codes Acceleration Fund, will be

undertaken in collaboration with municipal planning divisions, and attracted considerable industry interest during the procurement process.

Communications & Campaigns

Communications and campaign activities and results are shared within the Focus Area updates above which included the joint announcement of our Danforth retrofit project with Toronto Community Housing and campaign development to support Toronto's Building Emissions Performance Standard. TAF experts continue to earn media interviews including a breaking news story about air quality impacts of the Port Lands Energy Centre in [Toronto Star](#), a [CityTV interview](#) about our investment in demand management of EV charging, and two interviews in NRU Publishing about [extreme heat bylaws](#) (p.2) and our [Sparroway retrofit project](#) (p.2).

Impact Investing

The Impact Investing team has had a busy quarter with due diligence completed on four new investment opportunities which were each reviewed by the Direct Investment Committee; recommendations are presented as part of this Board package. All are aligned with TAF's annual plan targets and longer-term strategic directions, including one opportunity expected to demonstrate a new financing model and two fund investments, one in private credit and the other in venture capital. The fund investments will help realize our goal to bring the Alternatives Asset class to the target allocation of 10%.

Management and monitoring of our portfolio of direct investments is always on the agenda, and the team has been supporting the Accelerating Retrofits team to update the financing arrangement for a deep energy retrofit project, originally approved by the Board in 2018. Details about this transaction are included separately in the Board package.

An investment approved by the Board late last year focused on supporting vehicle for hire drivers acquire electric vehicles using an innovative financial structure has progressed. The marketing agreement business terms are confirmed, other key activities to establish the investment framework are underway, and final terms and conditions are anticipated to be available soon for review by the Direct Investment Committee to achieve a program launch early in the new year.

TAF's follow-on investment in convertible notes in kite Mobility, approved by the Board in July, saw completion in September. The first draw has been advanced and the nominal cost warrants exercised. kite was recently approved for a \$550,000 Ontario Center for Innovation (OCI) grant which will have a significant positive impact on their cash flow needs and development of their technology

TAF's investment in Assembly, which closed late in 2023, is being monitored closely through monthly meetings with the CEO which has given TAF the opportunity to provide

informal input into Assembly's operations and strategy. Due to issues on two large projects Assembly has experienced delays in achieving planned revenue growth which will be closer to 100% for 2024; however, the delayed revenue recognition provides a solid foundation for growth in 2025. Assembly management has received conditional approval to pursue development of a pre-fabrication facility and a partnership with one of the largest pre-fabrication builders globally which is a very positive development that will support scaling the business and enhances the company's long-term prospects. Overall, TAF remains optimistic about this investment and the direct investment portfolio as a whole.

Grants, including summary of completed Grants

The Grants and Programs Committee's recommendations from the third and final grants intake of 2024 are included in Item TA8.10.

A summary of the two recently completed grants is provided below.

Town of Halton Hills – Halton Hills Green Development Standards Training Workshops

\$25,000 over 6 months, approved November 2020

The objective of this project was to facilitate workshops for development industry professionals to increase their awareness of the Town's updated Green Development Standards (GDS) and to provide guidance on how to comply with these new regulations. A recording of the December 2021 training workshop for developers is available online at <https://www.haltonhills.ca/en/residents/green-development-standard.aspx>. The town has continued to make the recording available to developers and other industry professionals, so they are equipped to apply the Standards to their projects. The Town also developed and implemented a survey of community members to determine the level of community support for green buildings and GDS, and to improve awareness and understanding in the community of GDS and green homes and their benefits. The survey was implemented through both online and in-person engagements and survey results showed that residents were aware of and support GDS, saw buildings as connected to climate change, and acknowledged the importance of addressing new developments as a form of climate change mitigation. While residents expressed a willingness to pay more for green homes, most residents would not pay more than 5% more. Finally, project results were shared through the Halton Region Climate Group (Regional and local municipal staff) and the Halton Climate Committee (Region, municipal, non-profit and institutional members). This grant provided an interesting road map for creating an alliance between a municipality and environmental association allowing staff to augment their work and have community support for feedback purposes. This proved useful and resulted in significant Town buy in. The grant was also a useful demonstration of small municipalities being able to pursue green standards.

Quest – ReCover Initiative in Burlington and Oakville

\$141,565 over 20 months, approved April 2021

The project's objective was to conduct deep energy retrofit feasibility studies on two municipally owned buildings in Burlington and Oakville, document lessons learned and develop on-the-ground capacity to implement municipal retrofit strategies. A municipal retrofits working group was established and feasibility studies of panelized deep energy retrofits were completed on the two identified sites, one each in Burlington and Oakville. The findings of both feasibility studies did not support the hypothesis that substantial TCBO savings for municipal buildings could be achieved through Net Zero Energy retrofits by prioritizing high performance building enclosures, electrification of all systems and adding solar PV. Both feasibility studies and the supporting documentation were reviewed by TAF's Retrofits team. On TAF's recommendation, the grantee prepared an analysis of the likely co-benefits resulting from the implementation of these retrofits as this creates a more holistic case for the retrofits. A publicly available report was also prepared to assist municipal staffers in getting deep retrofit work off the ground in their municipality. The feasibility studies are available here:

<https://www.retrofitcanada.com/news/recover-case-studies>

The report titled, *Getting the Most Out of Your Retrofits*, is available here:

<https://questcanada.org/getting-the-most-out-of-your-retrofits-tirez-le-meilleur-parti-de-vos-renovations-energetiques/>

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