

Chief Executive Officer's Report

Date: October 22, 2021
To: Board of Directors of the Toronto Atmospheric Fund
From: Chief Executive Officer

GOVERNANCE MATTERS

Board and Committee News

Please join me in welcoming Jean Olemou and Stuart Galloway to the Board. Jean brings extensive investment experience including in the securities and project financing space, has internationally-recognized expertise related to the circular economy, and is founder GreenDev Inc., a circular economy-focused incubator. Stuart is CEO at Canadian Energy Services Association and Managing Director at Espirito Corp. He brings specialist expertise in developing and procuring complex project delivery models, financing structure, strategy advisory, partnering arrangements, and portfolio management.

Andrew Dooner will be shifting from the Grants & Programs Committee to the Executive Compensation and Performance Review Committee (see Item TA 14.13). Stuart Galloway will Chair the Audit Committee. Formal appointment of Board members to Committees is not required. Once the Direct Investment Committee is formalized through Council approval of a By-law change, we will undertake a membership review and appointments to both the Investment Committee and Direct Investment Committee.

Bill 13 was tabled on [October 7, 2021](#) including amendment of the TAF Act to delete Section 11 (8) and (9). These clauses, which constrain TAF's ability to undertake contractual financial obligations beyond the term of Council, are considered obsolete. Council approved seeking amendment in [October 2016](#).

TAF and City staff have finalized the Statement of Investment Objectives and Principles (SIOP) to the satisfaction of the Board Chair and Chair of the Investment Committee as directed by the Board. We are working with the CFO's office to present the amendments for Council approval mid-December.

Risk Register

TAF's Risk Register has been updated drawing on best practices in the literature including: enhancement of the impact and likelihood scales from 3-point to five-point scales to enable more meaningful differentiation and prioritization among risks, and addition of a 5-point speed of onset scale to inform the development of appropriate risk responses which is particularly important for managing financial risks related direct investments and marketable securities due to the mismatch between the speed at which

financial risks can arise and the months-long intervals between decision-making meetings of TAF's Investment Committee and Board.

The process has also been updated with senior staff assigned to assess specific risks and to prepare and present proposed responses. This report will continue to feature any which are elevated or relevant and comments and advice are welcome. From time to time I may ask specific Board members for advice regarding response to priority risks that arise in between Board meetings.

Notable risks for this period and our response include:

- Financial - TAF mismanages its finances. No mismanagement has occurred; however we have a) identified and instituted more accurate coding of "administrative" expenses in keeping with managing this key metric and b) addressed the potential for double-counting labour costs by eliminating them from Program Allocation requests and more rigorously tracking the source of funds for salaries, ie: Endowment or Externally funded.
- Reputational - Actions taken by TAF staff, Board or Committees or by LC3 colleagues damage TAF's reputation in the eyes of its stakeholders, funders and/or the public. As we approach the Provincial and Municipal elections, staff have been reminded of the strict policies guiding activity during election periods. Activity in the lead up to the 'snap' Federal election was in compliance with policy. Communications and engagement regarding Ontario's electricity system (ie: gas plants and beyond) has been on-brand, ie: fair, well-documented and optimistic.
- Operational - Staff capacity and/or governance capacity are inadequate to deliver on TAF's mandate. We are noting salary-related challenges in hiring and retaining staff and have a variety of initiatives in process including a compensation study and budget allocations aimed at reducing gaps within the Total Rewards framework, improving career development, other investments in retention, along with continuing to make TAF a stimulating and rewarding place to work and make a difference.
- Financial - There is a significant capital market downturn. While no-one has a crystal ball, there are concerns regarding the equities market given sustained period of gains and valuations, QE and inflation, economic recovery challenges, Evergrande, etc. which emphasizes the importance of boosting the Direct Investment allocation/reducing equities as per the Target Portfolio and maintaining conservative projections for Budget 2022.

Agreement-Related Matters

TO/TAF Agreements

Due to City staffing challenges, work to update the Relationship Framework and By-Law is behind schedule. Discussions are ongoing with the City's purchasing division regarding the procurement process to be followed for retrofit projects.

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.

FCM/TAF/TO Funding Agreement (FA)

A small amendment to the FA has been signed by all parties to recognize the establishment of a Direct Investment Committee.

STRATEGIC PROGRAMS AND OPERATIONS

Staff News

We recently welcomed Simone Hacıkyan to TAF, in the role of Electric Vehicle (EV) Charging Program Manager. Ekaterina Tzekova, Director of Research and Innovation is on parental leave until August 2022 and a contract will cover while she is away. Ryan O'Connor, Grants Manager, will be leaving TAF as of October 22; a review of the job functions will be undertaken before initiating recruiting.

All TAF staff are vaccinated against COVID-19, and records are stored on our HR platform. While we continue to work remotely, staff have enjoyed several recent in-person get-togethers, both formal and informal.

Operations

The Operations team has been updating the office in anticipation of a return. New policies in support of a hybrid workplace are being developed and updates will be in the Employee Handbook; the goal is to maintain individual flexibility and autonomy granted through remote work, while regaining collaboration and sense of community at TAF.

To support growth, more efficient virtual work, and enhance security, we are (finally) moving to the cloud and the migration will require significant work and training over the next year. Salesforce is now being used for managing and reporting crucial functions such as grants applications, investment opportunities, the EV charging program, retrofit origination, and communications including broader relationship management, audience engagement and outreach. The Retrofits and EV Charging teams are now using Teamwork for project management, and we will look to extend that platform to other teams.

Equity, Diversity & Inclusion (EDI)

TAF Staff recently participated in an organization-wide activity for Canada's first National Day for Truth & Reconciliation, including learning opportunities as well as time for personal reflection.

In February 2022, the Board and Committees will receive the second annual survey to measure and track representation and other equity, diversity and inclusion metrics at TAF. The goal is to enable transparency, accountability and focus on these important metrics which are key to TAF's governance and mission. All are expected to participate to ensure sufficient data to evaluate ourselves and report to stakeholders.

Accelerating Retrofits

A joint [advocacy effort](#) between TAF, ReCover and Pembina Institute's ReFramed Initiative is calling on the federal government to provide \$100 million in annual support for rapid retrofit market development in Canada. We need to nearly quintuple the pace of retrofits taking place in Canada's homes and buildings to reach our net-zero by 2050 goals. Funds would support efforts like TAF's Retrofit Accelerator for MURBs in the

GTHA to originate, aggregate, and support implementation of high-quality deep carbon retrofits that yield strong social and health co-benefits.

We're somewhat obsessed with measuring the performance of retrofits completed through the Retrofit Accelerator in order to learn from our work, quantify our impact, and ensure our projects are meeting (or better yet exceeding) performance goals. The first operational analysis of a heat pump retrofit of a 12-storey tower in Mississauga found that heating energy savings are right on track at 44%. These results aren't a surprise to us, but it's always good to see real-world project performance aligned with modeled projections. Not only are these cold-climate heat pumps saving energy and emissions, they are keeping residents warm and comfortable throughout the entire winter.

We recently completed installation of another electric [heat pump retrofit](#) of a 9-storey tower featuring a packaged heat pump system manufactured by Innova. The hybrid approach to this retrofit -- a single heat pump system to provide most, but not all, of the heat required for individual apartments -- will now be closely monitored for performance, especially since these systems are relatively new (to Canada). We are partnering with Toronto Region Conservation Authority (TRCA)'s STEP team to assess the field efficiency (i.e. Coefficient of Performance or COP) of these units.

Bryan Purcell represented TAF at PassiveHouse Canada's [Tower Retrofit Symposium](#); over 70 people attended the "Public Funding and Undertaking Deep Energy Retrofits Towards Building a Retrofit Economy" session to hear about the urgent need for public funding of Retrofit Accelerators which can help building owners navigate the complexities of deep retrofits and ensure that retrofit funding programs achieve social, environmental and economic benefits at scale.

Electrification of transportation

TAF is preparing to launch its Zero Emission Vehicle Infrastructure Program (ZEVIP) which will distribute funding incentives to install electric vehicle (EV) charging infrastructure across the GTHA; this is the focus of the presentation. The contribution agreement from NRCan has been signed, detailed program design is nearing completion, program criteria have been presented to the Grants & Programs Committee for approval, and branding and marketing is being developed with an agency (stay tuned for the name and look!). The 'soft' launch with a select group of clients will be in November followed by public launch in December. If Board members are aware of stakeholders who are seeking to install EV infrastructure in public places, in multi-unit residential buildings (MURBs) on-street locations, please share their contacts with EV Charging Program Manager [Simone Hacikyan](#).

TAF was interviewed on CBC Radio One and featured in an [online](#) article encouraging accelerated investment in EV charging infrastructure in Toronto.

TAF was invited join Ontario's Transportation Electrification Council, a cross-ministerial initiative led by the Ministry of Transportation to inform the government's work in electrifying the transportation sector; Ian Klesmer is representing TAF. The Council is meeting six times between September and December 2021 to provide perspectives on key factors affecting the electrification of the transportation sector in Ontario.

Over the past year TAF has been involved in the creation of the Accelerate Alliance, a new membership-based organization whose mandate is to ensure that Canada capitalizes on the economic and job creation opportunities in leading the global transition to zero-emission vehicles (ZEVs). Accelerate [officially launched](#) on September 28, 2021 with 20 founding members representing the breadth of the ZEV supply chain, from mining to charging to manufacturing to labour. A strong domestic supply chain is expected to strengthen Canada's economy while broadening support for the passage of EV-supportive policies.

Carbon and Co-benefits Quantification

TAF hosted a sixth successful Carbon Data Network workshop, a Community of Practice for practitioners engaging in GHG quantification. About 40 participants discussed research on fugitive methane, how work-from-home policies can sustain GHG reductions, municipal green development standards, and a strategy discussion about connecting data with decisionmakers. Our quantification presented at the Ontario Water Works Association and Water Environment Association of Ontario (OWWA/WEAO) Climate Change series to deepen understanding of how this sector can contribute to achieving net zero emissions by 2050.

TAF has been awarded Mitacs support to deepen our understanding of the sources of industrial emissions in GTHA and how to secure robust data on an ongoing basis; this will be undertaken by an academic team alongside the TAF quantification team.

We have collected 2019-2020 GTHA carbon emissions data, used updated quantification methodologies for analysis, and reviewed and validated our findings with the six GTHA regions. This inventory will provide the first detailed look at the impact of the pandemic on regional emissions and will be published Q4 2021 to align with COP26 momentum. Sneak peek: emissions are heading in the wrong direction and we need far more urgent and strategic action to bend the carbon curve. Due to the significant increase in media coverage of climate science and emissions data since we first began publishing the local inventory in 2015, we expect this year's to have broad relevance and high profile. By normalizing robust annual inventory development and analysis we aim to help decisionmakers better understand the sources of carbon emissions in their area and to influence the focus and speed of actions.

Climate Policy

Communication of TAF policy perspectives is bringing mainstream awareness to regulatory issues that rarely earn media attention, like gas conservation in Ontario. An article in the [Toronto Star](#) was based on our [blog response](#) to the Ontario Energy Board's decision on the Demand Side Management Framework. Strong digital engagement and positive feedback from consultants, engineers, and municipalities has resulted from our [blog critique](#) of the IESO's recent study on gas plant phaseout. To support municipalities further on this issue, TAF and Ottawa Climate Action Fund collaborated on a letter in support of City of Ottawa's motion to phase out gas plant generation; the item passed at Council and we trust this will be the first of many joint activities with LC3 centres.

TAF worked closely with the City of Toronto to update the Toronto Green Development Standard v4 as well as the Net-Zero Building Standard, both of which passed at Toronto City Council during the summer. We will continue to work with Toronto staff on implementation while also working with a range of other GTHA more municipalities as they advance adoption of Green Development Standards.

Prior to the federal election, TAF created a [brief](#) outlining six key recommendations for tackling building and transportation emissions and accelerate a shift to a low-carbon economy intended for all federal political parties of Canada to develop credible climate policy platforms. It was also provided to our LC3 and other colleagues to support alignment in messaging. A similar non-partisan brief will be prepared in the context of the forthcoming provincial and municipal elections.

In the wake of the election, TAF and colleagues are connecting with relevant departments to reinforce the importance of implementing the Clean Fuel Stand (CFS), and to advocate in support for retrofit market development and various other policies and programs that are needed during the 43rd Parliament to achieve the aggressive GHG reduction targets promised in the lead up to and during the election.

Impact Investing

We were pleased to announce [with a media release](#) the strategic partnership between BerQ RNG and Starwood Energy Group, specifically Starwood Energy's investment in BerQ RNG and acquisition of BerQ's first renewable gas project in London, Ontario which TAF and co-investors incubated.

A process is underway to refine the direct investment strategy. The first of two sessions took place last month focused on investment objectives and thesis including achieving impact and financial return, leveraging/mobilizing capital for low-carbon solutions and TAF's role in a rapidly changing and competitive market for ESG/impact. The second session will take place November 22 with focus on operationalizing the strategy including metrics, ensuring the right mix of internal and external expertise, and processes. Wayne Miranda's expert design support and facilitation made the session functional and productive.

TAF has been contracted by the LC3 network to support development of their impact investing capability. A needs assessment scan, elaboration of a direct investing framework, and resource library has been delivered. We are also tasked with identifying opportunities for LC3 collaboration, which is being supported by SVX who will develop options and bring together the LC3 centres to determine the most appropriate mechanisms, for instance shared capacity/ies, co-investment or syndication. TAF is also providing half-day consultations for each LC3 centre starting later this year.

Grants, including summary of completed Grants

City of Markham – Berczy Glen Geothermal Community Energy System

\$225,100 over two years approved TAF Board in April 2018

The objective of this grant was to support the planning, review, and approvals process to install a district energy geo-exchange system in a new residential development in Markham. TAF funding was used to develop the technical feasibility study and to share lessons and key findings with municipal staff and elected officials, utilities, and developers across the GTHA. In April 2021, the project team (including representatives from the City of Markham, Mattamy Homes, and Enwave) delivered a [presentation to the TAF Board](#) which summarized learnings and project outcomes. In this presentation, Markham staff highlighted the importance of securing buy-in from senior leadership and elected officials and confirmed that standard municipal access agreements and processes could be adapted to accommodate the development of geo-exchange systems. Mattamy Homes expects to complete construction in Q1 of 2022. At the time of reporting, nearly all homes available in the first sales phase had been purchased. The development, which includes 312 homes over a 64-acre site, is the largest net-zero community in Ontario.

Passive House Canada – Zero Emissions Buildings Exchange Concept Development

\$40,000 over six months approved by TAF Board in May 2020

The purpose of this project was to develop a business plan for a Zero Emissions Buildings Exchange (ZEBx) that would support GTHA municipalities in meeting or exceeding their mitigation, adaptation and economic development goals in relation to buildings, and to equip building industry members with the skills and tools needed to deliver zero-emission buildings. Over six months, Passive House Canada consulted a wide range of industry members, municipal staff, and non-profit organizations to identify program partners, potential revenue and funding sources, governance structure, and operating budget for the ZEBx. The final report demonstrates a high level of interest among key stakeholder groups for the programs and capacity building support that a ZEBx could provide. The report also notes that several GTHA municipalities are currently developing their own building innovation initiatives, which the ZEBx could help coordinate through workshops and training events. The project team presented the concept plan to three potential funders, as required by the terms of their TAF grant, but have yet to secure the funding required to take next steps towards launching the ZEBx.

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SIGNATURE

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