



REPORT FOR INFORMATION

Chief Executive Officer's Report

Date: December 4, 2017
To: Toronto Atmospheric Fund Board of Directors
From: Chief Executive Officer

GOVERNANCE & ORGANIZATIONAL MATTERS

Electronic Participation

The Board's request for amendment of the *TAF Act* to remove the open meeting requirement for TAF Committee (not Board) meetings was not approved by Council. TAF will proceed with amending its operating By-law to reflect current authority for electronic participation, which requires a Quorum of members in person, and no electronic participation during In-Camera items. The City Clerk's office has indicated that a new policy regarding electronic participation in the context of open meetings is under development.

Transactions beyond Term of Council

As approved by Council in October 2016, TAF's and the City's Solicitors are developing the compendium required to initiate amendment of Section 11 (8) and (9) of the *TAF Act*.

Staff news

Emma Loewen has joined the TAF team as our Policy Research & Advocacy Coordinator. She will be responsible for low-carbon and sustainable finance policy research and analysis, stakeholder engagement, and project management. In just her first month she has pulled together two submissions which are outlined below.

We also welcome Diana Yoon as Communications & Outreach Coordinator, supporting our corporate communications work including keeping the newsletter, blog and website fresh and relevant, raising TAF's media presence, and building regional relationships.

Grants and Programs Committee Membership

Deb Doncaster has stepped down from the Grants & Programs Committee. We have very much appreciated Deb's valuable contribution of time and perspectives over the past two and a half years. Recruitment of two new members of the Grants & Programs Committee is underway to bring the membership to nine.

Q3 Financial Report

In compliance with TPA Section F.3.1, a Q3 Financial Report must be submitted by October 30; this was forwarded separately since results were not available at the time of the September Board Meeting.

Compliance with Transfer Payment Agreement

This confirms that TAF is in compliance with the terms of the Transfer Payment Agreement with the Province of Ontario.

STRATEGIC PROGRAMS

TowerWise

The next phase of work, titled Accelerating Deep Energy Retrofits, is underway. The team has installed pre-retrofit monitoring at two of the four new demonstration sites and retained an engineering firm to advance the retrofit design for these. The deep retrofit proposal for one of the sites was presented at a town-hall meeting, recognizing that tenant engagement is a key to success. An agreement has been signed with one of the new demonstration sites to do an initial pre-retrofit of six suites with heat pumps, and use the experience to help with bidding out the full retrofit. TAF submitted an expression of interest to NRCan seeking \$5M from the Green Infrastructure Phase II program to support this work.

Our 4-year Accelerating Energy Efficiency project is now in its final phase. The team has completed six months of post-retrofit Measurement and Verification at the seven TCHC retrofit sites and, after six months, utility cost savings are 205K, which is 15% better than projected. The project findings are being actively disseminated: TAF presented at the Construct Canada conference, participated in full day workshop held by NRCan on the future of space and water heating technology in Canada, and participated in another NRCan consultation related to equipment regulatory standards including providing a site tour, and a consultation with Durham Region on sustainability standards for new construction.

The project was a finalist for the CaGBC's Innovation in Sustainability Award, which has provided great exposure for TAF, TCHC and our focus on deep retrofits and indoor air quality improvement. Ekaterina Tzekova has been invited to join the National Research Council's Commission on Construction Materials Evaluation

Regional GHG Inventory

TAF has developed a first-ever draft GHG Inventory for the GTHA. It will be circulated to regional stakeholders for commentary and published in Q1 2018.

Policy Research and Advocacy

TAF led the development of a detailed package of recommendations for the future of the Ontario Building Code energy and climate requirements. The submission was endorsed by over one-hundred other stakeholders through the Clean Economy Alliance. TAF also worked to coordinate key recommendations with other stakeholders, including the CaGBC, the Clean Air Council, QUEST, Tesla, and the City of Toronto. Key

recommendations included: (1) a transition to absolute performance targets for energy and carbon; (2) creating a pathway to net zero emissions through a set of performance targets; and (3), empowering local governments to go beyond the minimum code standards for energy and carbon.

TAF has been working closely with the City on the Toronto Green Standard 3.0 for the past year. The policy was advanced to the Planning and Growth Management committee on October 12; TAF submitted comments supporting the TGS, and ensured other stakeholders were aware of the opportunity to do so as well. TGS 3.0 was adopted with minor amendments by the committee and advanced to the November Council meeting. The item was deferred to the December Council meeting due to time constraints and various Councillors and stakeholders have suggested further amendments to strengthen the standard; TAF is working with City Planning to review these.

TAF has responded to several other policy consultations during this quarter, including:

- Metrolinx Regional Transportation Plan (with Pembina Institute)
- Ontario Cap & Trade Offset Regulation and Biogas Offset Protocol (with Clean Economy Alliance)
- City of Toronto Development of Low-Carbon Thermal Energy Networks (EX29.7)
- City of Toronto Traffic-Related Air Pollution (PE23.7)

Pumping Energy Savings

TAF's research and analysis over the course of this 2-year project culminated with a report outlining key barriers to widespread uptake of heat pumps in Ontario's electrically-heated multi-unit residential building (EMURB) sector and a suite of recommendations for overcoming these barriers, grouped into four key themes:

- Demonstrating heat pump retrofit viability, ie: provide the market with a better understanding of the technical and financial feasibility of heat pump retrofits.
- Improving the heat pump retrofit business case in EMURBs, ie: identifying and developing financing options, providing enhanced incentives, establishing bulk purchasing programs, and developing strategies to address split incentives, and leveraging government funding for large scale projects
- Raising awareness and targeted promotion of heat pump retrofit opportunity for EMURBs, ie: strategically deploying IESO and LDC marketing and engagement resources, and advance work to prepare for including heat pumps in the next Ontario Building Code update.
- Addressing service sector knowledge and capacity gaps, ie: training and certification related to heat pump retrofits for key stakeholders.

A detailed conservation assessment of technical and achievable potential for heat pump retrofits in the EMURB sector using IESO metrics to gauge cost effectiveness was developed and peer reviewed, adding significantly to the knowledge-base.

The Heat Pump Retrofit Guide and Business Case Assessment Tool developed during this project is targeted at raising awareness amongst EMURB building owners and

operators, and can be used as marketing tools by Local Distribution Companies who wish to strategically advance EMURB retrofits in their service areas.

Impact Investing

A pipeline of potential investments is being actively evaluated with a focus on companies commercializing products and services that have potential to reduce urban GHG emissions. Our impact evaluation is now considering GTHA-wide reduction potential.

Proteus Performance Management, TAF's third-party investment advisor, is exploring options for more mandate-related fixed income investments, and also alternatives given the low returns currently available and expected.

A range of stakeholders are urging the new Canada Infrastructure Bank to invest in energy efficiency retrofits. This would require a different approach than what is used for large infrastructure projects, which has been demonstrated to be effective by 'green banks' around the world. To bolster the case and address a key question posed by federal colleagues framing the CIB's mandate, TAF has produced "[Money on the Table: Why investors miss out on the energy efficiency market](#)". It provides evidence of three key capital market failures which limit the flow of capital into cost-effective retrofits, and three failure fixes that provide further evidence that challenges exist and how the CIB can help unlock this market potential. TAF's analysis has been and will continue to be presented to government and industry players.

Low Carbon Cities Canada (LC3)

With funding from Natural Resources Canada (NRCAN) and the Clean Economy Fund (specifically Trottier Family, McConnell Family, Echo and North Growth Foundations), TAF continues to explore the interest in and need for building capacity to demonstrate, de-risk and help scale up low carbon solutions in cities across Canada. Through a six-month process of research, in-person dialogues, webinars and direct engagement, interest has coalesced as a Pan-Canadian 'alliance' of six Centres: Vancouver/Lower Mainland, Edmonton, Ottawa, Montreal, The Region of Halifax and the Greater Toronto & Hamilton Area (TAF). The emerging centres have expressed interest in leveraging current best practice – including TAF's experience – to speed up the full-scale deployment of GHG reduction actions in Canadian cities. The group intends to co-develop a joint funding proposal with the aim of attracting support from various federal sources and other regional and local supporters.

Earlier this month, in co-operation with Canadian Urban Sustainability Practitioners (CUSP) and with support from the Urban Sustainability Directors' Network (USDN), TAF hosted a two-day workshop for with representatives from each of the cities (including municipal staff, provincial representatives and community champions) to flesh out the joint proposal. The session included briefings from colleagues from City of Toronto Finance and the City Manager's Office. For now, TAF has been designated as the project lead and, based on positive feedback from federal, provincial and municipal contacts, we are in the process of refining a business plan and funding proposal

requesting working capital and start-up operating funds for each Centre, including new capital funds to support TAF's work across the GTHA.

Communications

TAF's social media presence continues to grow: the Facebook page has 2,200 supporters, and we have 2,900 Twitter and 830 LinkedIn followers. The monthly TAF newsletter is sent to 2,235 stakeholders, and subscriptions to TAF's 80X50 Blog have grown to 750. Your help in increasing TAF's audience is always appreciated!

TAF continues to communicate actively on low emissions buildings, electric vehicles and advancement of TransformTO, including via sponsorship of a TransformTO-themed photo contest called #Picture2050 organized by the Toronto Climate Action Network (TCAN). A new publications overview page on TAF.ca will provide easy access to dozens TAF reports, including reports produced through TAF projects and by grantees and partners. A significant refresh of TAF's impact investing communications is underway including the website and external marketing of our investment priorities. We are also preparing to announce the next exciting phase of the TowerWise program in mid-December, featuring IESO and NRCAN who are providing funding and expertise to support a new suite of projects with ever-deepening GHG reduction impacts.

Updates from Completed Grants and Programs

Grants

York University – Developing Practical Local Experience with Urban Renewable Energy Charging Stations for Electric Vehicles – \$35,000 over one year. On July 5, 2011, TAF's Board of Directors approved a grant to York University in the amount of \$35,000 to install a renewable energy EV charging station, monitor its performance over a year, and publish results analyzing the environmental and business case for renewable energy charging stations and deriving policy recommendations aimed at accelerating the uptake of such stations.

Many elements of this project were completed successfully. However, the revised final report did not adequately fulfill deliverable 1.1.3 of the contribution agreement, “[p]ublication of project results with recommendations on the environment and business case for renewable energy charge stations for electric vehicles as well as policy recommendations.” As this deliverable represented a key component of the project, TAF rescinded the final instalment of \$3,500 for this grant.

Internal Projects

Developing a Methodology for Analyzing TAF's Direct Investment Portfolio – \$10,000 over 1 year. TAF's Investment Advisor, Proteus Performance Management (Proteus), compiles quarterly performance, compliance and outlook analysis which provides the Investment Committee with the information needed to effectively oversee and manage TAF's endowment. However, this is only undertaken for TAF's marketable securities. Given the growing emphasis on Direct Investments (with up to 60% of TAF's

endowment available for this asset class), a methodology for overseeing this part of the portfolio is also required.

To this end, the Investment Committee's advised staff to work with Proteus to establish a methodology for analyzing TAF's Direct Investments which is parallel to the analysis of its Marketable Securities. A holistic analysis of TAF's investment portfolio would ultimately allow for an integrated Full Portfolio report which brings together the performance, compliance and outlook elements for both 'sides' of the portfolio. TAF's Investment Committee adopted the proposed methodology for reporting on Direct Investments, and Proteus is now including this in its Quarterly Reports.

OPERATIONS

Fundraising

Since Q3, TAF has received one contribution, which does not overlap any current funding from the Province or from any other organization.

Funding Organization	Amount	Project Purpose
Colleges and Institutes Canada	\$15,000	Intern Stipend for the TowerWise program
Total	\$15,000	

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SIGNATURE

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