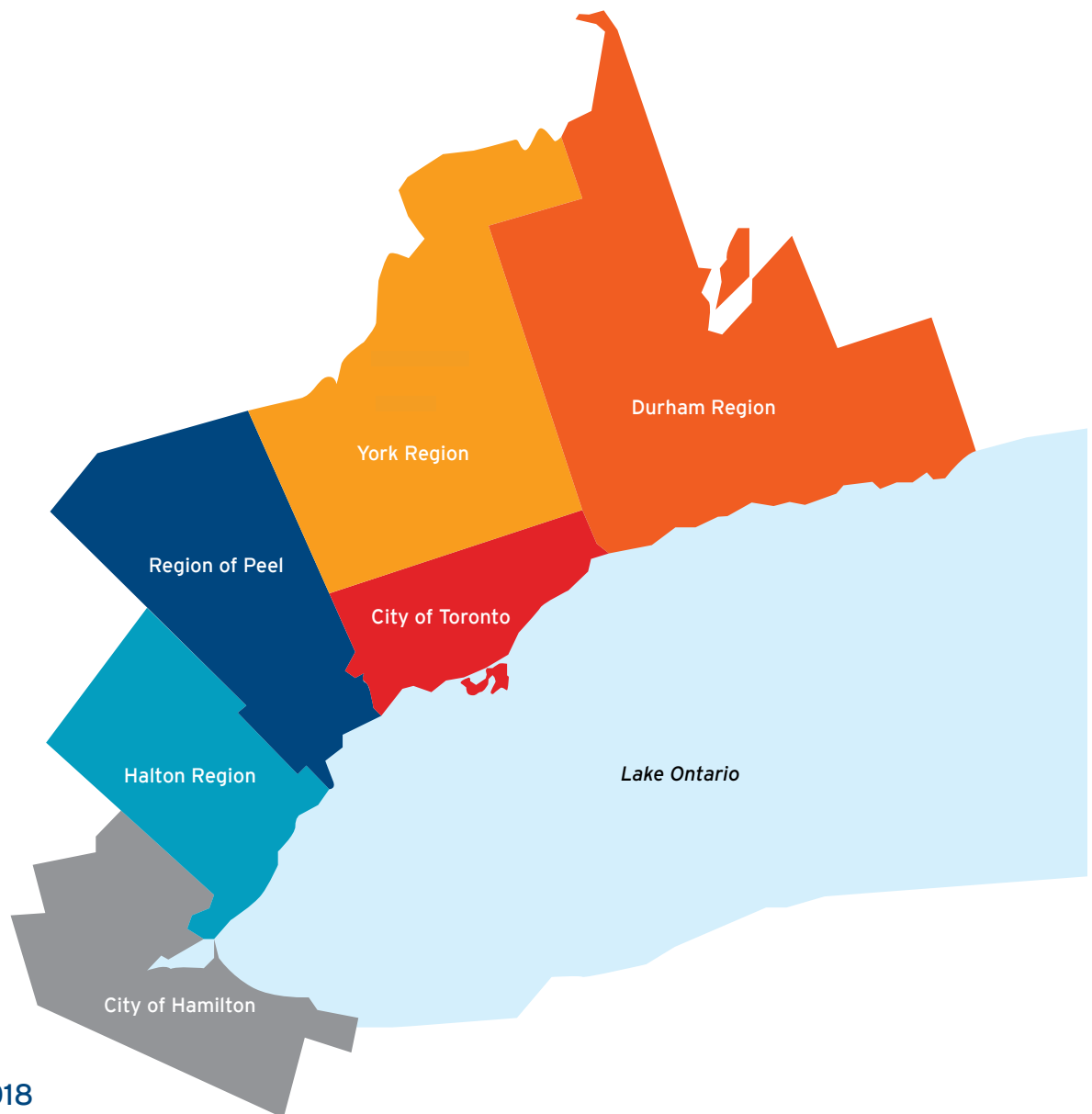


# 2017 Business Plan Report

## Embracing a Regional Approach



January 2018

# Summary of Key Results

In 2017, The Atmospheric Fund (TAF) started its regional expansion into the Greater Toronto and Hamilton Area (GTHA) by undertaking research and stakeholder engagement, gaining a better understanding of our new clients and their needs, and investing in five regional initiatives. The TransformTO plan, co-developed by TAF, received unanimous Toronto City Council approval and sent a strong signal about the need to consider climate action in light of the multiple community benefits. It's an approach that we found has even greater resonance in cities outside of Toronto.

TAF's TowerWise retrofit program completed its first phase and attracted new interest and resources to ratchet up the energy savings expectations through a new suite of multi-residential high-performance retrofit demonstration projects. TAF leveraged its sustainable finance knowledge in support of the province's new Green Ontario Fund, and supported a new version of the Toronto Green Standard that presents a pathway to net zero building standards.

- 1. Accelerating Energy Efficiency:** - We completed energy efficiency retrofits at all ten current TowerWise demonstration sites, implementing \$6 million in capital improvements. Preliminary data shows we reached our energy savings and emission reduction goals for each building. We also collected 300M data points concerning indoor environmental conditions to support better understanding of the link between retrofits and resident health. Based on this successful work, we secured almost \$1 million in funding for the next phase of TowerWise that will aim for a minimum of 40 per cent in energy and emissions savings. We also welcomed City Council approval for the Toronto Green Standard 3.0. Co-developed by TAF, the guideline puts Toronto on the path to zero-emissions new construction by 2030.
- 2. Electrification:** TAF completed its multi-faceted research project Pumping Energy Savings including a rigorous market assessment of the province-wide conservation potential from converting Ontario's Electrically-heated Multi-Unit Residential Buildings (EMURBs) to heat pumps. We developed recommendations how to accelerate the use of heat pumps for conservation results and we created resources for EMURB sector stakeholders for planning and implementing heat pumps retrofits. TAF also explored the opportunity to advance low-carbon electric mobility. This included the publication of regional research on electric vehicle (EV) attitudes and barriers to ownership with Plug'n Drive and collaboration with Electric Mobility Canada, the City of Toronto EV Working Group, and other stakeholders.
- 3. Mobilizing Financial Capital:** A team of third-party professionals evaluated the process of incubating Efficiency Capital. This encompassed an analysis of the business development planning, decision-making, and investment, interviews with key internal and external stakeholders, and a comparison with best practices. The evaluation captured 15 key insights that will help TAF and potentially other non-profits to decide if and how to develop social ventures. We financed two retrofits using TAF's non-debt Energy Savings Performance Agreement (ESPA™). We also made improvements for existing ESPA clients, including those whose retrofits are over-performing. TAF hired two new sustainability-focused equities managers to facilitate deployment of the Ontario endowment which complements the current, well-performing portfolio.

4. **TransformTO:** Together with the City of Toronto's Environment & Energy Division, TAF co-developed the TransformTO climate plan that received unanimous Toronto City Council approval on July 4, 2017. At the core of the design process was a long-range carbon emissions modelling exercise, supported by advice and additional analysis by a diverse and cross-sectoral 30-member Modelling Advisory Group. The findings informed the development of a high-impact carbon strategy to reach Toronto's 2050 climate goal.
5. **Mobilizing Community Innovation & Action:** TAF approved nine grants totalling \$477K, including five supporting region-wide emission reduction. The completion of a nine-month research project yielded an in-depth understanding of TAF's regional clients and their needs and informed the development of TAF's Regional Cultivation Strategy. Taking advantage of public policy discussions related to climate action, TAF prepared and submitted recommendations on 16 policies across all levels of government, consulting with 20 different groups to develop integrated policy advice. In particular TAF's submission for the Ontario Building Code Review was created with input from the more than 100 organizations taking part in the Clean Economy Alliance.
6. **Modal Shift:** We continued to support and participate in Move the GTHA to reinforce the ongoing importance of investment in public transit, and explored opportunities associated with shared mobility.
7. **Operational Excellence:** TAF commissioned an external review of operational systems and initiated an action plan to implement the recommendations. These will improve overall performance and compliance with our new provincial Transfer Payment Agreement. To enhance our working environment, we developed a premises upgrade plan for implementation in 2018. We generated strong social media growth (we grew our new Facebook page to 2,270 likes; we doubled our Twitter following to 3,250). We created dozens of media hits in mainstream media (e.g. on TransformTO) and in industry publications (especially around TowerWise and building energy efficiency standards).
8. **Recognition, Influence & Leadership:** TAF CEO Julia Langer received the Ontario Minister's Award for Environmental Excellence, and the Canadian Urban Institute's David Crombie Award for TransformTO. She was also named to the federal Generation Energy Council. Tim Storate, VP Impact Investing, joined the board of the Green Ontario Fund, advising on investment of Ontario's cap-and-trade proceeds. TAF's expertise was sought out to explore and build Pan-Canadian urban climate innovation capacity that could leverage our model and expertise. TAF was also selected to spearhead the international Partnership Brokers Association training program in Ontario.

# 2017 Key Insights and Lessons Learned

- 1. The waves keep coming:** Public and government interest and activity in the climate solutions sector continues to grow. This creates many opportunities for TAF to influence public policy and spending and to accelerate GHG emissions in the GTHA. However, we must exercise caution with respect to our limited staff capacity, so that we maintain the ability to deliver all our projects with excellence.
- 2. Government funding does not always equal impact:** Increased provincial and federal spending in the climate sector offers critical opportunities, but only if spending is directed in ways that are effective. TAF's experience is being sought to guide government spending priorities, and we must take the opportunity to help government colleagues by offering our practical experience to support good program design and policy development.
- 3. GTHA - The same, but different:** TAF's regional research shows that carbon emission sources throughout the GTHA are similar, with transportation and buildings as the key overall priorities. However, the needs of potential grant recipients and partners are different, reflecting diversity in leadership and a strong need to position climate action in ways that are relevant to local community priorities. In response, TAF will strengthen its capacity-building offerings to support action in ways that meet the needs of our new clientele. This will include support for emissions quantification, climate communications that focus on co-benefits, and policy convening to help GTHA municipalities co-develop responses to policy consultations.
- 4. Deliberate planning pays:** External evaluation and embracing a Developmental Evaluation approach has reinforced the need and benefits of establishing plans and budgets, setting milestones (including go/no go points), and having clear governance and advisory support for all our innovation projects. This is both a matter of operational excellence and a pressing necessity for TAF to carefully prioritize our work.
- 5. Make room for scanning and learning:** Understanding the shifting landscape in which we develop and advance climate solutions, and drawing lessons from our day-to-day work is critical to our success. However, with many concurrent projects, it can be challenging for TAF staff to search the horizon for new ideas and information. In response, we may need to consider making reflection and scanning an embedded component of TAF's managerial staff job descriptions.
- 6. TAF in theory:** Over the course of 2017, an internal team assessed TAF's role and activities and distilled them into a new "theory of change" to describe TAF's role and niche. This tool will play a critical role in improving TAF's internal program evaluation process to help us continuously improve our program and organizational outcomes. The new theory of change reveals a need to adjust TAF's key performance indicators, a task that will be undertaken in 2018.
- 7. The speed of trust:** TAF started to build new relationships with diverse stakeholders - a key element of the TransformTO approach - as well as cultivate new partners, collaborators, and clients throughout our expanded regional service area. Deliberate outreach creates good results, but moves at a necessarily slow pace as we interact with new contacts. We must allow the time for relationships of trust to emerge to allow us to work more deeply with new collaborators.

# Project #1: Accelerating Energy Efficiency

**OBJECTIVE:** Accelerate improved energy efficiency in the built environment while maximizing and demonstrating the multiple benefits.

**TAF LEAD:** Bryan Purcell, Director of Policy & Programs, Ekaterina Tzekova, Low Carbon Buildings Manager, Jimmy Lu, GHG Quantification Manager, Ian Klesmer, Grants Manager & Policy Advisor

**KEY PARTNERS:** Toronto Community Housing Corporation (TCHC), Federation of Canadian Municipalities, Natural Resources Canada, Independent Electricity System Operator (IESO), Enbridge Gas Distribution, McConnell Foundation, various provincial ministries, ecobee, engineering firms, various equipment manufacturers.

## A. TowerWise

- **Complete and commission 10 TowerWise energy efficiency demonstration retrofits**, including seven Toronto Community Housing buildings, and three independent social housing cooperatives.

**COMPLETE.** We completed all planned retrofit work on time and on budget.

- **Continue the 'living lab' Indoor Environmental Quality (IEQ) research** at TCHC retrofit sites, analyzing the post-retrofit results to demonstrate the links between improved energy performance and IEQ in multifamily buildings.

**ON-TRACK AND ONGOING.** Data collection will continue through Q1 2018 to allow for 12 months of post-retrofit data to be collected. We will complete the data analysis in Q2 2018.

- **Advise and assist Toronto Community Housing in scaling up** the implementation of deep energy and indoor environmental quality retrofits across their portfolio leveraging the TowerWise energy efficiency demonstrations and IEQ results. Also support other social housing providers to the greatest extent possible.

**ON-TRACK AND ONGOING.** TAF is consulting with TCHC on a number of additional retrofit projects on a fee-for-service basis. Discussions are underway for potentially undertaking further retrofits as part of a new deep retrofit demonstration program.

- **TowerWise communications.** Share knowledge and tools with the aim of assisting professionals, policy-makers and others to better understand and achieve energy efficiency outcomes. Key channels include articles in trade and academic publications, TAF's blog, social media platforms and e-newsletter, conferences and events, as well as earned media and awards. Key content will include:

- **A guideline** to support the use of Integrated Design Process for retrofits.

**ON-TRACK AND ONGOING.**

- **A design resource for retrofitting heating systems of existing multi-family buildings.**

**ON-TRACK AND ONGOING.**

- **Case studies** of TowerWise retrofits, incl. the use of Gas Absorption Heat Pumps. **PARTIALLY COMPLETE.** The case studies are in progress (one completed, five remaining) pending completion of 12 months of monitoring for remaining sites.
- **TAF's Benefits of Efficiency Policies Calculator**, which will allow stakeholders to quantify the broader societal benefits – health, economic development, etc.– of accelerating energy efficiency in their jurisdiction. **COMPLETE.** The Building Energy Efficiency Policy Calculator (BEE-Cal) has been completed and launched. This includes an instructional video and infographic.
- **Emerging actions** in the TowerWise program include:
  - **Attract funding to launch a deep retrofit project** with the aim of demonstrating, de-risking and building capacity for achieving at least 40 per cent carbon emission reduction and viable returns on investment, working with up to five sites (also see Mobilizing Financial Capital). **ON-TRACK AND ONGOING.** We raised \$1 million for the next phase of the TowerWise program (technical name: Accelerating Deep Energy Retrofits). We submitted a full proposal of \$5.75 million to the Federation of Canadian Municipalities (750K grant, \$5 million low interest loan). We shared the news through a media release in December. We also submitted a \$5 million expression of interest to another funder.
  - **Explore retrofit capacity-building needs, opportunities and partnership efforts** targeting key sectors such as: property-managers; engineering service providers; trades and contractors; as well as project originators/aggregators. **ON-TRACK AND ONGOING.** We are in discussion with multiple parties around capacity building needs for deep retrofits, with funding secured for this element through the next TowerWise phase.

## B. Advancing Policy Solutions

- Leverage Building Value partnerships to **advance implementation of the Pan-Canadian climate plan's commitments to energy efficiency improvement.** **MOSTLY COMPLETE.** TAF developed recommendations for the implementation of key building sector commitments in the Pan-Canadian Framework, including elements on financing, building codes, equipment standards, and benchmarking. We also developed and disseminated a report titled [Energy Efficiency Financing Tools for the Canadian Context](#) to support federal, provincial and municipal governments in implementing appropriate financing tools for each market.
- **Support implementation of Ontario's Energy Reporting & Benchmarking.** While the provincial government must provide the core platform, TAF will develop a plan for non-government stakeholder involvement, drawing on best practice examples in other jurisdictions, and help secure funding for implementation. **COMPLETE.** A Western University consulting team developed a detailed plan for supporting the regulated sector (building owners) in achieving compliance with the new

regulation. We also activated a grant with City of Toronto to support the implementation of the benchmarking policy in Toronto. There's also an ongoing liaison with the Ministry of Energy to review and advise on its implementation strategy.

- Work with City Planning to **secure approval of Toronto Green Standard Version 3.0, including a near-net zero goal for 2030**; support industry implementation; and leverage for wider adoption GTHA-wide.

**COMPLETE.** Toronto City Council approved the policy at its December 2017 meeting. TAF is also cultivating a potential grant application for implementation support. We secured endorsement of Clean Air Council and Clean Economy Alliance for the development of an Ontario Energy Step Code based on the Toronto Green Standard 3.0.

- **Monitor climate policy developments at all levels of government and provide strategic recommendations** where warranted, working in consultation with key stakeholders to align recommendations where possible.

**COMPLETE AND ON-GOING.** We completed sixteen formal policy consultations and/or submissions, five of them closely aligned or in partnership with other stakeholders. TAF also participated in numerous informal consultations and discussions with all levels of government.

- **Communications** will support policy objectives by building support in key audiences and raising awareness of the multiple benefits of climate change mitigation policies. TAF will work in collaboration with other groups to reach diverse audiences and maximize our reach across multiple constituencies.

**COMPLETE AND ON-GOING.** TAF's communications efforts included the publication of seven energy efficiency-related blogs, dozens of social media posts, and regular newsletter articles. We also authored or co-authored four media releases and generated 10 building energy efficiency-related media hits.

# Project #2: Electrification

**OBJECTIVE:** Analyze and advance opportunities to power end-uses such as heating and transportation with low-carbon electricity instead of fossil fuels.

**TAF LEAD:** Bryan Purcell, Director of Policy & Programs; Devon Calder, Heat Pump Researcher

**KEY PARTNERS:** IESO, electric utilities, property managers, equipment manufacturers, Canadian Standards Association, relevant government agencies, engineering firms, and investors.

- **Pumping Energy Savings: Assess the feasibility and business case for converting to heat pump technologies for space heating** in seven archetypal electrically-heated multi-unit residential buildings (EMURBs) and one gas-heated MURB (including technical aspects, costs, savings, etc.) as well as develop detailed financing plans for four of these.  
**MOSTLY COMPLETE.** TAF completed eight pre-feasibility study final reports and four draft investment-grade audit reports. The funder has approved the final reports.
- **Formulate and advance recommendations for programs, financing mechanisms, practical tools, resources and capacity-building** that will accelerate heat pump adoption.  
**MOSTLY COMPLETE.** We submitted the *Barriers, Opportunities, and Recommendations* report draft to the IESO; we will complete the final report in Q1 2018.
- **Pumping Energy Savings communications** will align with TowerWise and focus on the conservation potential and business case for heat pump retrofits to target audiences including utilities, industry, building owners, and investors.  
**COMPLETE AND ONGOING.** TAF created numerous blogs, magazine articles, and presentations. We will publish a series of blog posts to showcase the final deliverables in 2018.
- **Emerging actions focused on the potential for carbon emission reductions through electrification including heat pump retrofit demonstrations.** This includes the implementation of ground-source, air-source and/or other technologies in up to four of the participating EMURBs, working with the utility, property portfolio manager, heat pump industry and co-investment partners; this is part of both TowerWise and Mobilizing Financial Capital and the main focus for Electrification project-related fundraising.  
**ON-SCHEDULE AND ONGOING.** Plans for a micro demonstration pilot project of 10-12 suites are underway for two public housing sites in Hamilton and Toronto. We are currently selecting four sites to participate in a larger deep energy retrofit demonstration program as part of the TowerWise program to get EMURBs to 40 per cent energy savings from a multi-measure retrofit including heat pumps.
- **Explore TAF's potential role** in advancing regulatory reforms and business strategies that will allow local utilities to play an essential, strategic role in achieving low-carbon cities.  
**NOT UNDERTAKEN.** While we discussed this in the context of TransformTO and other work, we did not scope the activity and did not have the capacity to undertake it. Toronto Hydro has appointed a TAF representative to the Local Advisory Committee on Toronto's Long Term Electricity Plan. In this role we advanced key planning concepts including the establishment of local avoided cost and bottom-up distributed resource inventory.



# Project # 3: Mobilizing Financial Capital

**OBJECTIVES:** Develop investment opportunities that demonstrate and de-risk financial strategies and structures that will mobilize capital for energy efficiency and other low-carbon solutions, and generate a risk-adjusted return on investment.

**TAF LEAD:** Tim Storate, VP Impact Investment

**KEY PARTNERS:** Investment Committee members, colleagues in the financial sector and responsible investing organizations, owners of Efficiency Capital, accounting and legal professionals.

## A. Impact Investing TAF's Endowment

- **Maximize both the financial and carbon-positive impact of TAF's full endowment.** Prudently deploy the new Ontario endowment, in tandem with the original endowment, in compliance with the investment policy's investment beliefs and to demonstrate, de-risk and mobilize investment in low-carbon opportunities. A key focus is to reduce the carbon exposure of TAF's fixed income portfolio.  
**ON-TRACK AND ONGOING.** We hired two additional Global Equities managers - NEI and Dimensional - after a full search process. We started the incremental deployment of the Ontario funds into TAF's full portfolio with the aim of having proportional holdings (except for past Direct Investments) by the end of 2018. Fixed Income research has not yet been undertaken.
- **Warehouse energy efficiency retrofit transactions,** structured as Energy Savings Performance Agreements™ (ESPAs) for purchase by Efficiency Capital, with a total value of approximately \$9 million. We will also streamline the sales/marketing, client relations, reconciliation and payment, and reporting processes to facilitate volume and ensure performance.  
**ON-TRACK AND ONGOING.** We closed two new ESPAs (\$778K). One ESPA is in discussion (approx. \$350K), with an aim of closing in early 2018. Two ESPAs were repaid in full (one TAF, one Efficiency Capital ESPA) totaling \$780k.
- **Secure senior debt co-financing for ESPA transactions.** Leveraging TAF's Social Venture Connexion listing and first commitment of \$1 million from the Ivey Foundation, attract \$3 million as non-recourse 'take-out' financing for commissioned retrofits, with TAF maintaining at least 20 per cent of each transaction.  
**DEFERRED.** Saleable ESPA™ transactions have been limited and new ones are not expected until mid-2018. The Ivey Foundation's commitment has been reduced to \$700k due to the length of time taken to close transactions. We identified new purchasers and reached verbal agreements to purchase \$170k in ESPAs. We established acceptable disclosure for previously-sold ESPA transactions in the 2016 Financial Statements, and guidance for how future sales should be contracted to ensure appropriate accounting treatment on TAF's books.

- **Help commercialize low-carbon goods & services.** Invest, with co-investor partners, in deployment of up to three measures which generate both GHG reduction and financial return on investment to demonstrate the value, opportunity, and speed of market uptake. Emerging action is to explore if/how to leverage success in this space into a more formal and collaborative investment vehicle.

**ON-TRACK AND ONGOING.** We added a new core position of Account Manager to the team, greatly increasing capacity for intake and due diligence. No new transactions have been completed and paused the consideration of a new fund/vehicle. We currently have a pipeline of seven excellent investment opportunities.

- **Impact investing communications.** Demonstrate TAF's leadership in impact investing including retrofit financing experience (in collaboration with Efficiency Capital) and other past and current investment case studies and results. Key audiences include the financial sector and investees and key channels will include conference presentations, earned media, and guest writing for external blogs and publications. Improve the TAF's website content about impact investing to serve as an entry point for potential investees and co-investors.

**ONGOING.** In 2017, impact investing communications took off with a number of communications deliverables, including blogs and a new ESPA brochure aimed at housing co-ops. We also wrote a guest contribution for the fall edition of the Condominium Manager magazine. Progress is also well underway to overhaul all impact investing website content.

## B. Low-Carbon Finance Structures, Tools and Capacity

- **Secure funding for a retrofit financing facility** from the emerging Canada Infrastructure Bank (CIB) dedicated to demonstrating and de-risking deep retrofit financing, attracting co-financing, and stimulating retrofit origination/aggregation capacity in Canada; this dovetails with TowerWise.

**ON-TRACK AND ONGOING.** We followed up on our proposal for \$100 million retrofit fund. We also developed a response to demonstrate capital market failure in the energy efficiency financing to bolster the case for CIB investment in this space. We also launched the findings as a report titled [Money on the table: Why investors miss out on the energy efficiency market.](#)

- **Craft specialized financing approaches/structures to accelerate investment in retrofits and commercialization of low-carbon goods and services.** Key opportunities include addressing the specific barriers and needs faced by suite-metered buildings and privately-owned rental apartments, to implement fuel-switching, to maximize the use of LIC financing, and to continue de-risking performance contract financing.

**MOSTLY COMPLETE.** We are developing a financing mechanism to address the specific barriers and needs faced by suite-metered buildings. We largely completed research to determine the potential of a tax structure to raise risk capital for TAF's impact investments. We also completed initial research into TAF's ability to sell its carbon credits gained from ESPA transactions to maximize return. Additionally, we developed changes to the ESPA tool to align it better with the preferences of privately-owned rental apartments to implement fuel-switching.

- **Advance practical financing programs and strategies for the emerging Ontario and federal 'green banks'** that can maximize emissions reductions, with a priority focus on energy efficiency, fuel switching in key markets and mobilization of additional capital.

**COMPLETE.** TAF participated in consultations leading to the launch of the Green Ontario Fund, and directly advised the provincial implementation team regarding tools, programs, policies, capacity needs, etc. We also contributed to the Infrastructure Canada consultation regarding energy efficiency retrofits, and how the emerging Canada Infrastructure Bank could operate in that space. In addition, we developed a proposal to the CIB for a \$100 million deep retrofit fund that would leverage federal dollars 1:1. As mentioned before, we also authored a briefing note on energy efficiency to the CIB providing evidence of the capital markets' failure to invest in this space. Tim Stoate, VP Impact Investing, was appointed to the board of the Green Ontario Fund.
- **Engage a sustainability finance officer** to attract low-carbon implementation funding to Toronto, and second the position to the City of Toronto. Leverage the learnings to build financing capacity throughout the GTHA.

**COMPLETE.** TAF approved funding for a new position, but the decision was superseded by the 2017 City budget; the position was finally filled in October. TAF led a half-day workshop for the Canadian Urban Sustainability Practitioners network which endorsed the need for capacity building and targeting investment-readiness activity at key projects.
- **Low carbon finance communications** will focus on the emerging Federal and Ontario 'green banks' and their capacity to accelerate low-carbon solutions in cities, and the opportunities to mobilize capital in this space.

**ONGOING.** TAF welcomed the launch of the Green Ontario Fund, Ontario's green bank, with a media release and social media activity. We covered the fund's programs and incentives for Ontario homeowners and businesses repeatedly through our digital channels and newsletter. Developments regarding the launch of the Canada Infrastructure Bank have been delayed until 2018.

# Project #4: TransformTO

**OBJECTIVE:** Create excellent decision-support and inspirational information to guide development of a carbon reduction strategy to achieve the City of Toronto's 2020 and 2050 emissions reduction targets (i.e.: 30 and 80 per cent respectively compared to the 1990 baseline).

**TAF LEAD:** Mary Pickering, VP Programs & Partnerships; Julie Leach and Tim Ehlich, Communications Managers

**KEY PARTNERS:** City of Toronto Environment & Energy Division, Toronto Public Health, Federation of Canadian Municipalities

- **Complete 2050 scenario modelling and multi-criteria analysis.** Supported by our external technical consultants, SSG, and with the oversight of the 35-member Modelling Advisory Group, we will develop new knowledge about how to drive deep carbon reduction... in Toronto, and assess which measures bring the most overall benefit to the city considering the City's social equity, public health, and local economic goals.

**COMPLETE.** Two reports were published: the *TransformTO Modelling Advisory Group Summary Report* - see link [here](#), and *Modelling Toronto's Low Carbon Future: Results of Modelling Greenhouse Gas Emissions to 2050* - see link [here](#)

- **Develop a 2050 Pathway strategy.** Based on the new knowledge developed, and considering best practices in public engagement, advocacy, financing, and urban low-carbon programming, create a strategy to support Toronto's success in reaching its 2050 carbon reduction target.

**COMPLETE.** The low-carbon pathway was published as a staff report to Toronto City Council - see link [here](#).

- **Help secure City Council approval and resourcing** to achieve Toronto's emissions 2050 target. The report to Council will highlight key actions and present new interim targets, describe capacity-building and partnership opportunities, address community engagement and identify policy priorities, along with a two-year implementation strategy, work-plan and budget request.

**COMPLETE.** The TransformTO plan received unanimous approval by Toronto City Council on July 4, 2017. The budget request is part of the current 2018 Toronto Budget deliberations.

- **Support implementation of Council-approved 2020 Action Plan.** Remain involved in the implementation of the City's 2020 Action Plan, synchronizing City and TAF efforts to maximize success.

**COMPLETE.** TAF staff have undertaken 50+ community meetings to advance TransformTO objectives. Ian Klesmer has been appointed vice-chair of the City's EV working group and supports the development of an emerging EV campaign; Bryan Purcell actively advanced the Toronto Green Standard Version 3.0, which addresses a key energy efficiency strategy embedded in the TransformTO plan. Mary Pickering explores ways to consult with the Indigenous community in Toronto and integrate Indigenous traditional ecological knowledge into the TransformTO approach.

- **TransformTO communications.** Initiate a communications and social media plan to highlight the new knowledge and associated recommendations as they emerge from the TransformTO process, leveraging the Modelling Advisory Group, community participation, graphic design consultants, and Environment & Energy Division's corporate communications team.

**COMPLETE.** TAF led the creation and promotion of a popular report to explain the TransformTO plan in laypersons' terms - see link [here](#); Tim Ehlich supported a social media campaign to highlight the co-benefits of key TransformTO recommendations.

- **TransformTO stakeholder development.** Continue cultivation of partnerships with community and academic groups, regional counterparts, and potential supporters, leveraging relationships already established through the TransformTO Modelling Advisory Group.

**COMPLETE AND ONGOING.** TAF VP Mary Pickering developed emerging stakeholder relationships with: a consortium of University of Toronto academics and members of the public to advance a \$5 million public engagement initiative designed to address TransformTO engagement objectives; a consortium of community groups that works on activating communities that have not traditionally been involved in climate strategy development; a consortium of academic, NGO and private interests to explore a suite of visualization techniques to visualize TransformTO outcomes as a way of supporting community engagement. As mentioned above, TAF also established ties to representatives of the Indigenous community in Toronto. Discussions have also been initiated with the Chief Resilience Officer and the City of Toronto Office of Innovation.

- **Emerging actions focus** on initiating a 2050 implementation strategy, including co-developing a set of quick-start projects to ensure the longer-term reduction; and positioning TAF and/or others to advance them.

**ON-TRACK AND ONGOING.** TAF cultivated and supported emerging initiatives related to TransformTO objectives including: advancing employment opportunities related to energy retrofits; creating effective ways to use health co-benefits as a way to gain broader public support for climate action; and identifying community programs that could collaborate in advancing climate actions at the local level.

# Project #5: Mobilizing Community Innovation and Action

**OBJECTIVE:** Cultivate high-impact grants and engage with key partners to advance TAF's 2015-2020 strategic directions.

**TAF LEAD:** Mary Pickering, VP Programs & Partnerships, Ian Klesmer, Grants Manager & Policy Advisor

**KEY PARTNERS:** Community climate advocates, climate and energy funders

- **Understand the Greater Toronto and Hamilton regional context.** With the support of a consultant: undertake research to understand best practices in regional (versus municipal) approaches, the stakeholder landscape in the GTHA and key strategy elements to support TAF's regional expansion; develop and test recommendations and ideas with the community; and set priorities by mid-year.

**COMPLETE.** TAF engaged Dunsky Energy Consulting and the Clean Air Partnership to undertake research. This included interviews with 20 key stakeholders, research on best practices in the realm of regional approaches, the creation of a preliminary report, the development and implementation of a focus-testing format with 50+ stakeholders, and a final analysis and recommendations report. We leveraged the research results to create a regional cultivation strategy.

- **Cultivate regional grant opportunities.** Based on the findings and directions established, establish a regional cultivation strategy and initiate outreach and proactive searches, aiming for three aligned opportunities in 2017.

**ON-TRACK AND ONGOING.** TAF has made significant progress in building new relationships and cultivating new low-carbon projects throughout the region. The TAF Board has approved the following projects with a region-wide scope: a grant to the Clean Air Partnership to assess the interest among municipal political staff from across the GTHA in a Municipal Champions for Climate Action Network; a grant to the MaRS Discovery District to design effective shared mobility pilots for future deployment in the GTHA (MaRS is currently working with partners to design pilots in York, Durham and Peel); and an internal project allocation to support the continued participation of core members from around the region in Move the GTHA, including organizations based in Hamilton (Environment Hamilton), York (Transport Action Ontario) and Peel (Western GTA Summit Move Task Force). The TAF Board approved two new grants to applicants outside of Toronto in December 2017.

- **Cultivate thematic grant opportunities.** Based on TAF's recent assessment of high-impact opportunities, undertake proactive cultivation of grants in key areas, including:
  - Renewable natural gas;
  - Shared mobility;
  - Enhancing climate communications; and
  - Understanding Scope 3 emissions

**ON-TRACK AND ONGOING.** TAF undertook cultivation efforts in all areas identified. We identified the four GTHA municipalities which are most active on renewable natural gas; we held an initial exploratory call with identified municipalities followed by an expression of interest in advancing a project funding request; and set out project funding parameters to guide ongoing discussions in this area. TAF also cultivated a grant to MaRS to design shared mobility pilots in the GTHA. In addition, we facilitated a grant to the Ontario Public Health Association to develop a communications strategy that applies health-based messaging to enhance climate communications. For understanding scope 3 emissions, TAF staff attended a C40 workshop on municipal leadership in measuring and addressing consumption-based emissions; we also worked with the City of Toronto to commission a Toronto-specific case study in this area; and we are investigating an initial project idea with community partners.

- **Initiate the development of a regional carbon emissions inventory** which is required to support regional grantmaking and investment decisions, and ultimately to track progress; completion will likely require two years, and TAF will work with multiple partners to ensure a robust approach that serves the needs of municipalities and stakeholders. Best-available information will be used to assess early regional investments.

**COMPLETE AND ONGOING.** TAF staff Jimmy Lu advanced this important work consulting with regional municipal staff to create a baseline of information about emissions inventory practice and findings in the region. He then assessed various options for creating a regional GHG inventory and the selection of the best option for TAF. In the next steps, Jimmy collected and analyzed the necessary data from multiple sources to create a draft regional inventory as well as a cost-effective plan for updating the inventory periodically. This was followed by an internal review of the regional GHG findings, analysis of the implications, and the creation of communications to share and discuss the findings with key stakeholders. A public report is planned for Q1 2018.

- **Support implementation of Ontario's Climate Plan and the Pan-Canadian climate action plan.** In collaboration with Environmental Defence, the Clean Economy Alliance and others, continue to participate actively in shaping Ontario's climate policy and its implementation, providing an urban solutions-focused perspective and sharing TAF's insights on policies and practical approaches.

**COMPLETE AND ONGOING.** TAF coordinated a joint response with the Clean Economy Alliance to the Ontario Building Code (OBC) consultations and influenced the responses of several other key stakeholders; we also participated in meetings with key government ministries responsible for the OBC updates. We submitted responses to priority climate consultations related to the development of the Ontario Climate Change Solutions Deployment Corporation (which led to the creation of the Green Ontario Fund), reforms to Ontario's minimum energy performance standards (MEPS), and the development of Ontario's Food and Organic Waste Action Plan. TAF also submitted joint letters regarding proposed reforms to the Condominium Act, and the draft Regional Transportation Plan. We also convened and participated in a group campaign to promote strong supply-side federal policies to support the acceleration of electric vehicle uptake.

- **Grants and programs communications.** Develop a communications plan to help broaden and diversify TAF's partners and followers in a way that drives grant applications from outside the pool of "usual suspects". Following on emerging grants strategy, create communications strategy to support grant cultivation and new partnership development in the region.

**COMPLETE.** Key outreach and communications activities in 2017 included: expanding TAF's regional network through attendance at regular Clean Air Council meetings; attending events throughout the region such as: the Canada Green Building Council Municipal Leaders Forum; the Durham Sustainability Energy and Innovation Forum. TAF also participated in a TRCA Board meeting; a Bay Area Transportation Forum with Hamilton and Burlington stakeholders; a community transportation meeting in Hamilton; and the annual Electric Mobility Canada conference in Markham. Additionally, we held meetings with municipalities and community groups in every GTHA region to explore grant cultivation opportunities. We conducted three focus groups in November 2017 to better understand how TAF can most effectively support community groups and municipalities in the GTHA.

- **Grants and programs fundraising.** Seek out a co-funding opportunity that focuses on social equity, public health or local economic development.

**COMPLETE.** Our efforts included a grant to the Toronto Environmental Alliance, which partnered with the CEE Centre for Young Black Professionals and Social Planning Toronto, to co-develop a strategy for engaging marginalized communities regarding low-carbon solutions that promote social equity. The Atkinson Foundation also supports this initiative. We also cultivated a grant with the Ontario Public Health Association to develop a communications strategy aimed at enhancing climate communications through health messaging.



# Project #6: Modal Shift

**OBJECTIVE:** Identify and advance opportunities to create transportation options that support a shift away from use of the single occupancy vehicle.

**TAF LEAD:** Ian Klesmer, Grants Manager & Policy Advisor

**KEY PARTNERS:** Evergreen CityWorks, MaRS, Metrolinx

- **Participate in Move the GTHA.** Continue to identify effective ways to jointly support development of new revenue tools to offset the expense of planned regional transit, and maintain an effective forum for knowledge-sharing and campaign coordination across multiple sectors. On an opportunistic basis, work with specific Move the GTHA member groups on strategic initiatives.

**COMPLETE AND ONGOING.** The TAF board approved an internal project allocation to enable continued core member participation, organize capacity building workshops in collective impact for core participants; and develop an updated communications strategy to attract further financial support in order to promote long-term self-sufficiency. TAF continues to participate in knowledge-sharing and coordination through regular update calls and strategy development meetings. We co-signed a joint letter with priority policy requests in response to the Metrolinx Regional Transportation Plan consultations.

- **Advance the microtransit opportunities identified in the 2016 scoping study.** Work with partners and prospective funders to explore priority use cases in more detail. This could include securing funding to initiate a microtransit pilot within the GTHA and/or conducting further research to better understand the most promising GHG reduction opportunities within this sphere.

**COMPLETE AND ONGOING.** The TAF Board approved a grant to MaRS to design up to three shared mobility pilots throughout the GTHA based on priority use cases identified in the 2016 scoping study. TAF staff attended the MaRS “Urban Mobility Design Camp” to meet leading practitioners and learn about emerging practices in the shared mobility sector. We also explored a potential opportunity for a joint funding application with MaRS and Coop Carbone after identifying mutual priorities in Toronto’s and Montreal’s shared mobility agenda.

- **Modal shift communications.** Leverage the growing media trend focused on microtransit and shared mobility to embed TAF recommendations about the importance of modal shift in relevant and controversial dialogues. Work with Move the GTHA partners to continue developing communications around the need for dedicated funding for regional transit.

**COMPLETE AND ONGOING.** TAF funded the development of an updated communications strategy for Move the GTHA. We also cultivated several grant proposals for shared mobility.

# Project #7: Operational Excellence

**OBJECTIVE:** Maintain a high standard of performance in the areas of governance, management, operations, communications and fundraising.

**TAF LEAD:** Julia Langer, CEO; Richard Rysak, Finance Director; Mary Pickering, VP-Programs and Partnerships; Julie Leach, Communications Manager

- **Support governance and decision-making.** Provide TAF's Board of Directors and Committees with relevant information, advice and/or recommendations needed to ensure compliance and alignment with City and Provincial requirements, evaluate performance against KPIs, and approvals and decision-making in keeping with the strategic plan and TAF's mission.

## COMPLETE AND ONGOING.

- **Establish and undertake a streamlined process for implementation of the Transfer Payment Agreement (TPA)** including securing BPSAA exemption, consequential amendments of the TAF/City Relationship Framework, and tune-up of TAF's management systems based on application of non-profit best practices.

**COMPLETE AND ONGOING.** The City of Toronto has not yet formalized a request for BPSAA exemption; this is in the hands of the City Manager's Office. Amending the TAF/City Relationship Framework is paused pending the adoption of a new Code for Agencies which will standardize governance and potentially eliminate the Relationship Framework. We completed a review of TAF's management systems and received 'tune-up' recommendations based on application of non-profit best practices. In response, we developed an 18-month implementation plan.

- **Provide excellent financial and investment stewardship and compliance.** Ensure internal operations are in keeping with best practices and compliance with City and TPA requirements including: financial operations (cash management, payables/receivables, payroll); project management and accounting; corporate and government filings; management of TAF's subsidiary (CAIT Ventures Inc.); annual budget and Audited Financial Statements); HR functions; IT and information management systems.

**COMPLETE AND ONGOING.** We received board and audit committee approval for our 2016 Consolidated Financial Statements; the process included resolving an accounting treatment issue. We also updated our HR policy regarding employment contracts and decided to implement a cloud-based solution for TAF's data.

- **Maintain and support the TAF staff to optimize their performance.** Undertake best practice mentoring and HR support to ensure TAF staff are learning and maximizing their professional potential in service of TAF's mandate, including providing compelling opportunities to stretch and enhance TAF staff capacity and attention to team-building and supporting TAF's culture of innovation. Secure suitable premises to facilitate team functions and staff productivity.

**ON-TRACK AND ONGOING.** TAF engaged staff in two internal study group projects - one to build internal capacity to undertake developmental evaluation within TAF's projects, and one to develop a new theory of change and associated KPIs. We also undertook two

successful staff retreats to build team cohesion and develop TAF strategy and plans. Additionally, we developed a plan to renovate TAF's premises to ensure a more productive working environment.

- **Corporate communications.** Build TAF's profile and recognition as a leader and innovator of urban climate solutions. Expand media presence by increasing social media and online news subscribership by 25 per cent, developing media relationships, and making further website improvements to create an accessible resource on urban climate action for stakeholders and the public. Increase subscribers and followers by continuing to test and refine key messages and content. Encourage networking and presence at relevant events. Promote the relevance of climate solutions by emphasizing co-benefits such as equity, economic development and health. Clearly articulate TAF's value proposition vis a vis the City of Toronto and Province of Ontario.

**COMPLETE.** TAF hired a Communications Manager, Tim Ehlich, to cover a maternity leave and added capacity by hiring a Communications and Regional Outreach Coordinator, Diana Yoon. We focused on advancing communications related to TransformTO and successfully drove new social media and conventional media interest. We also created a TransformTO social media campaign around co-benefits and the planned acceleration campaigns. We also created a blog series titled TransformTO Talks featuring multi-sector members of TransformTO Modelling Advisory Group discussing their reasons for supporting the development of Toronto's climate plan. More recently we started a blog series dubbed TransformTO Steps that highlights the policy developments underpinning the climate plan's success. TAF's email list saw robust growth while we doubled our Twitter following from 1,375 to 3,055 (122 per cent increase). Our LinkedIn page grew organically by 23 per cent to almost 900 followers. Our social media efforts were bolstered through the creation of a Facebook page with over 2,200 followers. TAF received various awards: the TowerWise program was the runner-up for the Canada Green Building Council - Greater Toronto's innovation award; TAF CEO Julia Langer received the Ontario Minister's Award for Environmental Excellence; as mentioned above, TAF VP of Impact Investing Tim Stoate was appointed to the board of the Green Ontario Fund.

- **Corporate fundraising.** Explore opportunities to attract contributions and/or financing for TAF's core capacities through emerging federal and provincial climate programs. Develop refined stewardship methods for existing funders to solidify their ongoing commitment.

**PARTIALLY COMPLETE AND ONGOING.** A priority has been the successful stewardship of the Province of Ontario endowment via compliance with the Transfer Payment Agreement. We also explored the incubation and building of national urban climate innovation network which resulted in the advancement of a \$156 million joint funding proposal to Natural Resources Canada (NRCan). We successfully attracted funding from the IESO and NRCan for our TowerWise and Pumping Energy Savings work.

- **Emerging actions will focus** on a more systematic approach to scanning and responding to changing conditions and new opportunities, and on implementation of management best practices based on "tune-up" assessment.

**ON-TRACK AND ONGOING.** We hired McNally Brown to undertake a process audit. The report has been received and in response we created a workplan to implement key recommendations over the next 18 months.

# Key Performance Indicators

## Mobilizing Financial Capital (\$)

Direct Investments + Grants + Leverage = Mobilized Financial Capital	
Summary Years 2007-2017	\$188,284,010
Percentage of Target (Actual vs Forecast)	82%
Target	\$230,000,000

## Region-Wide Carbon Emission Reductions

Cumulative Emissions Savings Potential from TAF-supported projects (Mt CO <sub>2</sub> eq)	
1991-2006	70.3
2007-2010	34.8
2011-2014	42.2
2015-2017	37.2
Cumulative	184.6
1990 Toronto baseline (annual)	27.3

## Mobilizing Social Capital - 2017 Partnerships

**Toronto Community Housing:** TAF continues to work jointly with Toronto Community Housing on the TowerWise retrofit program. In the most recent phase, we collaborated with the agency to design, co-finance, implement and monitor retrofits in seven high- and mid-rise residential buildings. With the retrofit work now complete, we are still monitoring and collecting data to help inform next steps in scaling up retrofits in multi-residential social housing stock in Toronto and across the region.

**City of Toronto, Energy & Environment Division (EED):** Guided by a formal MOU, TAF worked with EED staff to develop the TransformTO plan for submission to Toronto City Council, with TAF VP Mary Pickering serving as a co-director for the initiative. TAF provided funding and senior staff capacity, and helped to recruit and manage a 30-member advisory group. The resulting plan will serve as a core strategy to guide TAF's future Toronto-based activities.

**Efficiency Capital:** Initially incubated by TAF to commercialize the innovative, non-debt Energy Savings Performance Agreement (ESPA™), Efficiency Capital is evolving, adding new senior management, staff, investment and financial offerings. The relationship with TAF is also changing. While TAF continues to benefit financially from Efficiency Capital's sales, Tim Stoate, VP Impact Investing, provides strategic advice as the company fine-tunes its target market and business model.

**University of Toronto:** TAF is partnering with U of T on multiple fronts to provide financial and advisory support, practical program implementation, and knowledge transfer. In affiliation with TAF's TowerWise program we work with the University of Toronto to quantify the energy and air leakage benefits associated with window replacement and overcladding retrofits, and to assess the relationship between energy efficiency retrofits and indoor environmental quality (IEQ). TAF provides TowerWise pilot sites for data collection and benefits from the resulting energy and air quality analysis conducted by the university. We also co-develop academic presentations to add original knowledge to the sector.

**ecobee:** The Toronto-based company donated over \$166,000 worth of smart thermostats for installation in four multi-residential buildings that participate in the TowerWise program. TAF and ecobee collaborate to evaluate the energy efficiency savings associated with these thermostats. We also jointly undertook a number of tenant education sessions surrounding heating during the winter months.

## Task Completion

The 2017 Business Plan outlined 52 action items. Over 60 per cent (31 tasks) have been completed or are largely complete. Roughly 37 per cent (19 tasks) are partially completed or are ongoing. Two tasks had to be deferred.

