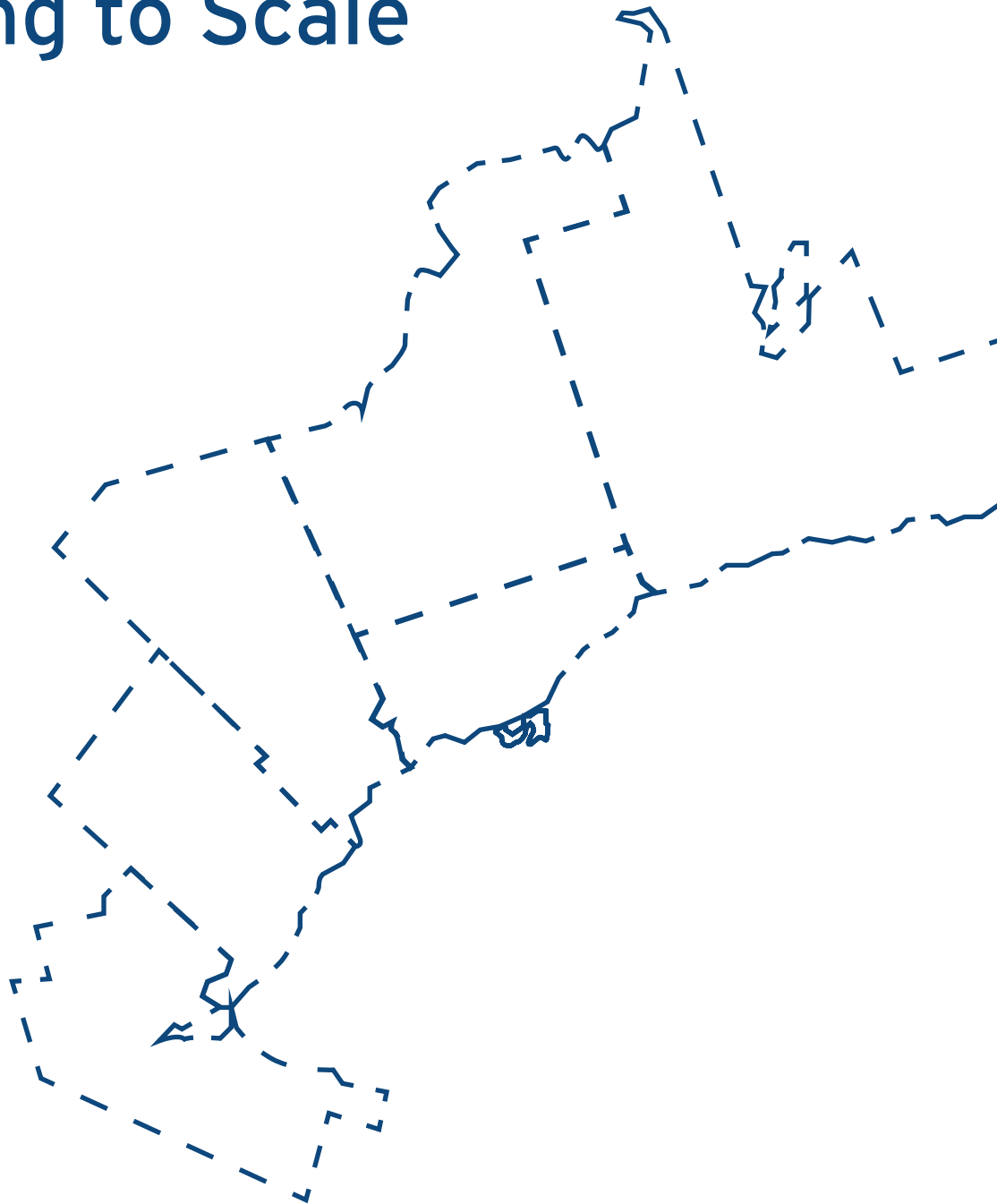




2019 Business Plan

Preparing to Scale

January 2019



A Message from the CEO

Since refreshing TAF's Theory of Change and Strategic Directions, and hearing the IPCC's warnings of the increasing pace of climate change, we are again reminded of the need to accelerate low-carbon solutions. 15 years ago, when electricity accounted for 26% of Toronto's carbon emissions, TAF became the first and biggest funder of the campaign to phase out coal-fired electricity generation in Ontario. While somewhat controversial at the time, TAF 'followed the carbon' and the results speak for themselves: we helped achieve the single largest climate action in North America. Electricity now accounts for just 5% of Toronto's emission profile. It begs the question - what is the 'next coal phase-out'? Again, we look to the data for direction: 50% of urban emissions are associated with heating buildings and 45% with transportation.

This year, TAF will shift its focus to take proven solutions and position them for full-scale adoption, beginning with accelerating building retrofits and electrification of transportation. Linked to the recognition that we must double the reduction impact in the next 11 years that it has taken us the last 30 years to achieve, TAF will explore and learn as we phase down our own demonstration work (instead building capacity in this area for others) and emphasize pre-scale activities. We will seek collaborations with seasoned commercializers and adopt best practices to enter into this exciting next phase with a regional perspective.

TAF's 2019 Business Plan will be implemented by a dedicated team of technical, policy, finance and communications professionals. But we rarely do anything alone and continue to invest in building relationships and collaborations to achieve mutual objectives. Evolving political dynamics from all levels of government present opportunities for TAF's expertise, and these may progress as the year unfolds.

As demonstrated by Toronto's recently released 2016 greenhouse gas emissions inventory, we are already halfway to our 2030 emissions target due to region-wide efforts and collaboration. We have made tremendous progress and are ready to tackle the next phase of action.

Sincerely,

A handwritten signature in black ink, appearing to read 'Julia', with a stylized, flowing script.

Julia Langer
CEO, The Atmospheric Fund

2019 Business Plan at a Glance

In 2019, TAF will focus its efforts on two high-impact opportunities: reducing the greenhouse gas intensity of large buildings and accelerating the electrification of transportation. We will begin shifting TAF's approach from hands-on incubation and demonstration of new climate solutions towards accelerating large-scale deployment of proven solutions, deepening TAF's role in policy reform in order to create effective drivers and market conditions for large-scale deployment of climate solutions. Building on the first two years of experience in the Greater Toronto and Hamilton Area (GTHA), TAF will continue to regionalize its work, build local capacity and collaborate with diverse stakeholders.

1. **TowerWise:** Keeping in mind the need to prepare the way for scaled-up retrofits in multi-unit residential buildings in the GTHA, TowerWise will be sharing six case studies revealing key lessons learned in our retrofits to date, while also pushing ahead even deeper demonstration projects achieving 40% carbon reductions, using the experience to help inform a deep retrofit scale-up strategy.
2. **Electrification of Transportation:** TAF will continue to support the development and implementation of a strong EV Strategy for the City of Toronto as well as strong, EV-supportive policies at the provincial and federal levels. At the same time, TAF will map out a broader strategy for accelerating the uptake of electric vehicles in the GTHA.
3. **Policy Development & Implementation:** TAF will continue to support the development, advancement and implementation of strategic climate policies and programs, with a priority focus on driving deep retrofits, transitioning to near zero new construction, and accelerating EV adoption.
4. **Impact Investing & Finance Innovation:** TAF will continue to invest the endowment to achieve positive financial and environmental returns, shifting emphasis to direct investments and fixed income strategies that fit our risk/return expectations. TAF's direct investments will focus on commercializing low-carbon solutions related to TAF's priority focus on buildings and electrification of transportation, working with co-investors with expertise in facilitating mainstream/market adoption. Opportunities to assist and advise others seeking to invest in low-carbon solutions will be explored as a means of mobilizing resources into the low-carbon space and building familiarity, champions and impact.
5. **Region-wide Grants & Capacity Building:** TAF will help to transfer the TransformTO co-benefits and long-term thinking approach with diverse regional stakeholders, and work to identify a suitable platform for creating and advancing a regional-scale climate action.
6. **Leveraging Co-Benefits to Build Strategic Partnerships:** Leveraging understanding of climate action co-benefits, especially related to job creation and workforce development, TAF will co-develop and promote climate solutions that address community priorities, building trust beyond our current spheres of influence.

TAF will model best practices in collaboration and partnership brokering and continue to host partnership brokering training and a community of practice in the GTHA.

7. **Communications & Fundraising:** TAF communications will continue to raise our profile and highlight positive low-carbon solutions across the region. An overall design refresh of the TAF website and other key communications channels will better reflect the geographic region and effectively tell our stories of co-benefits, share knowledge and mobilize strategic support and funding from key stakeholders.
8. **Governance & Operations:** TAF will ensure excellent governance and accountability by providing diligent and robust support for decision-making, compliance and stewardship, updating key governance documents including TAF's Statement of Investment Objectives & Principles and KPIs. We will uphold organizational excellence by supporting staff development, a collaborative organizational culture, and an internal working group focused on equity, diversity and inclusion.

#1: TowerWise

Objective: Accelerate the implementation of deep energy efficiency in the built environment by demonstrating the technical and economic feasibility of retrofits, showcasing the potential for multiple benefits, and developing policy and program recommendations for scale-up.

TAF Lead: Bryan Purcell, Director of Policy & Programs; Keith Burrows, Low Carbon Buildings Manager

Key Collaborators: City of Toronto, Toronto Community Housing Corporation, City Housing Hamilton, Federation of Canadian Municipalities, Natural Resources Canada, Independent Electricity System Operator, Enbridge Gas Distribution, various provincial ministries, ecobee, various engineering firms and equipment manufacturers.

- **Share what we learn:** Publish and disseminate six case studies and several technical papers documenting the outcomes and insights from TowerWise demonstration sites including the results of our Indoor Environmental Quality research, smart thermostats pilots, heat pump pilots and measurement & verification guidelines.
- **Going Deep:** Achieve substantial completion on at least one of the new deep retrofit projects in order to demonstrate the feasibility and co-benefits of achieving 40% carbon reductions. Advance other deep retrofit demonstration sites to construction readiness.
- **Mobilize financial capital:** Secure an additional \$5-15 million for TowerWise and potentially other deep retrofit projects.
- **Prepare scale-up across the GTHA:** Develop a preliminary scale-up strategy for deep retrofits in the multi-residential sector, including documenting the business case and financing options, consideration of capacity building needs, and required policy/program supports. Work directly with key stakeholders - including Toronto Community Housing - to accelerate investment in deep retrofits.

#2: Electrification of Transportation

Objective: To develop a strategic program for TAF's work in this area. Note that electrification of heating is addressed under TowerWise.

TAF Lead: Mary Pickering, VP Programs and Partnerships; Ian Klesmer, Grants Manager & Policy Advisor

Key Collaborators: TBD

- **Understand the landscape and TAF's strategic role:** Drawing on insights from TAF's EV300 program and current leading-edge work on electrification of transportation, research and identify opportunities for, challenges to and impact of electrification of transportation in the GTHA, including key stakeholders, potential co-benefits and co-harms of a transition. Identify gaps that TAF could fill related to policy, financing, technology or other approaches, and opportunities for partnerships and collaboration that could improve the potential for success and impact. Seek input from key stakeholders to map out TAF's program plan, including intervention points, milestones and an evaluation framework to guide implementation.
- **Raise the profile of EVs as low-carbon solutions.** As a member of Electric Mobility Canada's Board of Directors, establish partnerships with key stakeholders, showcase successful EV solutions, enhance EV-related communications and support strong provincial and federal policies which can accelerate EV uptake in the GTHA (also see #3 below).
- **Support a strong EV Strategy for Toronto and the GTHA.** As Vice-Chair of the City of Toronto's Electric Vehicle Working Group, support the development of a strong EV strategy which establishes Toronto as a leading jurisdiction. Disseminate the strategic recommendations to support EV adoption among other GTHA municipalities.

#3: Policy Development and Implementation

Objectives: Development, advancement and support for implementation of strategic policies to accelerate deep retrofits, net zero construction and electrification of transportation.

TAF Lead: Bryan Purcell, Director of Policy & Programs; Ian Klesmer, Grants Manager & Policy Advisor

Key Collaborators: TAF will work with key stakeholders, including municipalities, industry associations, non-profit organization (such as the Clean Economy Alliance, Pembina Institute, Canada Green Building Council, Clean Energy Canada, Efficiency Canada) academic institutions, and others.

- **Towards Near Zero new construction.** Work with diverse stakeholders to support the adoption of a more ambitious national model building code and Ontario Building Code to provide clear pathways to near zero emissions buildings by 2030. Collaborate with City colleagues and community groups on the successful implementation of Toronto Green Standard V3, and with regional stakeholders to support adoption and refinement of green development standards in the GTHA.
- **Stimulating deep energy retrofits.** Continue to support the development of minimum energy performance standards (MEPS) for high-impact product categories including windows, ventilation and heating. Support the expansion of natural gas conservation programs in Ontario. Continue to support implementation of Ontario's Energy and Water Reporting and Benchmarking Regulation, as well as strategic use of the data. Champion provincial and federal support for energy efficiency retrofits, including through the proposed Ontario Carbon Trust, federal climate funding programs, and tax incentives. Support the use of municipal property standards to drive basic energy efficiency retrofits in multi-unit residential buildings. Explore policy and program options to support electrification of heating (i.e. transition to heat pump technology).
- **Driving electrification of transportation.** Continue to promote the design and adoption of an effective Clean Fuel Standard in collaboration with allies via participation on the Multi-Stakeholder Consultative Committee; and to advance demand- and supply-side policies for EVs under the federal Zero Emissions Vehicle (ZEV) strategy.

#4: Impact Investing & Finance Innovation

Objectives: With a focus on low-carbon buildings and electrification of transportation, use direct investing capacity and expertise to help ‘commercialize’ technologies, services and approaches. Amend TAF’s investment policy and continue re-balancing and diversifying in keeping with the target portfolio asset mix and risk-adjusted return expectations.

TAF Lead: Tim Stoaite, VP Impact Investment

Key Collaborators: TAF Investment Committee, colleagues in the financial sector and responsible investing organizations, Efficiency Capital, federal and provincial ‘green bank’ actors.

- **Maximize the financial and carbon-positive impact of TAF’s endowments.** Prudently deploy both endowments in compliance with TAF’s investment policy, maintaining separate accounts. Increase Direct Investments to at least 30 percent of the portfolio to reduce potential market exposure and to mobilize investment in low-carbon opportunities. Identify Fixed Income options for reducing carbon exposure and improving return.
- **Structure, finance and secure co-financing for 3-4 deep retrofit demonstration projects.** Structured as Energy Savings Performance Agreements (ESPA™) or other financing mechanisms appropriate to the specific mix of short, medium and long-term payback measures including envelope cladding, window replacements and fuel-switching. All transactions will be first available to Efficiency Capital under the Warehouse Facility, or for refinancing with TAF maintaining at least 20% of each project. Streamline the sales, marketing, client relations, reconciliation and payment, and reporting to facilitate volume and ensure performance.
- **Invest and or Co-invest in two to three companies with proven but pre-scale technologies and/or services** that demonstrate the ability to generate buildings and transportation-related emissions reductions in the GTHA and financial return on investment through commercialization in Canada.
- **Develop and demonstrate innovative, barrier busting financing tools.** First, leverage TAF’s non-debt retrofit financing experience into performance-based financing for conversion of light-duty fleet vehicles to electric or other non-fossil fuels. Second, pilot deep retrofit “step loan” that combines short, medium and long-term financing into one loan with separate maturities that match the life and return on the asset being financing with the goal of minimizing transaction time and costs and facilitating financing of the long payback assets such as cladding. And use our ‘enterprise grant’ model -- which sets performance milestones for repayment -- to help remove barriers for emerging social enterprises.
- **Mobilize capital for low-carbon solutions:** Bring vetted/viable transactions to potential co-investors including public funds, private funds, foundations and others, with TAF maintaining at least 20% invested, and support others in deploying capital into low-carbon solutions.

#5: Region-wide Grantmaking & Capacity-Building

Objective: Cultivate high-impact grants, loans and capacity building initiatives to support high-impact climate work in the GTHA.

TAF Lead: Mary Pickering, VP Programs & Partnerships; Ian Klesmer, Grants Manager & Policy Advisor

Key Collaborators: Community and municipal practitioners, climate and energy funders, regional organizations in the GTHA

- **Connect with key stakeholders and local leaders:** Attend, present and/or co-sponsor 15-20 events to promote TAF's services. Meet with local practitioners in each of Hamilton, Halton, Peel, York, Toronto and Durham to cultivate projects and partnerships. Present TAF's value proposition to senior decision-makers and thought-leaders from around the region including, elected officials, municipal staff, representatives of community organizations and institutions, investors, and others.
- **Strengthen local capacity:** Continue to support capacity building for effective project selection, design and delivery through TAF's social innovation skills fund. Publish an updated regional GHG inventory report based on data from 2016 and 2017 to support GTHA municipal and community practitioners in identifying high-impact initiatives. Retain an expert consultant to provide specialized advice to prospective and existing grantees in the areas of program design and evaluation.
- **Support a portfolio of initiatives throughout the GTHA:** Continue to build an active grant portfolio with 10-14 initiatives occurring within at least four regional or single-tier municipalities and totaling \$750K in grants, internal projects and loans.

#6: Leveraging Co-Benefits to Build Strategic Partnerships

Objective: Support best practices in climate communications to broaden relevance of key climate actions. Enhance professional partnership brokering capacity in the GTHA. Create strategic partnerships and/or collaborations to incubate the Workforce for High-Performance Buildings campaign.

TAF Leads: Mary Pickering, VP Programs & Partnerships in support of all Program Leads

Key Collaborators: Canada Green Building Council, Toronto Community Benefits Network, Partnership Brokers Association

- **Deepen understanding of co-benefits:** Continue to work with City of Toronto divisions and agencies, community stakeholders, academics and others to better understand and quantify the benefits of increasing building energy performance and electrifying transportation in the spheres of public health, local economic development, social equity, and resilience.
- **Incubate partnership brokering capacity:** Help improve local partnership management capacity by hosting Partnership Brokering Association training opportunities in the GTHA. Deliver two four-day training workshops to support training for 40 people, and four community of practice events. Build the community of practice from 30 to 60 members. Support the development of one or two accredited trainers in the Toronto area to fill the gap in local training capacity.
- **Develop a Low-carbon buildings workforce campaign:** Support and collaborate with key stakeholders, including CAGBC, the Toronto Community Benefits Network, labour groups, Board of Trade, developers and others in exploring a workforce development strategy to ensure readiness to meet the demand for improved energy performance in larger buildings. Promote an understanding of the multiple social, economic and other benefits of building this workforce which is key to achieving our mid- and long-term carbon reduction objectives.
- **Low Carbon Cities Canada (LC3):** If successful, support the engagement of a national support organization, negotiation of funding agreements, roll-out of capital to six partner centres, and enhancement of TAF's endowment and capacity.

#7: Communications & Fundraising

Objective: Raise TAF's profile across the region as a low-carbon solutions leader. Effectively tell our stories, share knowledge and mobilize strategic support and funding from key stakeholders.

TAF Lead: Julie Leach, Communications Manager

Key Collaborators: Regional organizations, City of Toronto, Low Carbon Cities Canada members.

- **Expand TAF's social media presence:** grow combined Facebook, Twitter, LinkedIn by 40% through promoted content, email subscriber list by 25% through in-person networking, digital advertising campaign, and leveraging partner lists. Develop engaging social media content that highlights our unique role: our credibility and evidence-based approach; our diverse and inclusive partnerships; and our work seeking climate actions that achieve multiple community benefits.
- **Website refresh:** Redesign the homepage and general navigation to emphasize current updates, drive subscribership to the blog and newsletter, and incorporate brand messaging, regional content, and more human narratives. Publish 30-35 blogs to promote priority topics: TowerWise demonstrations, heat pumps, policy, technology, impact investing, TransformTO, and regional work.
- **Choose the right messengers to share stories:** Share positive, inspiring success stories to build TAF's profile with key audiences like the finance sector, building sector, community groups, cities, utilities and government agencies. Experiment with diverse messengers sharing our stories to help grow our relationships with diverse stakeholders beyond the usual suspects. Consider co-funding market research to establish a baseline for public opinion in the GTHA; experiment and track which narratives and framing are most impactful to inspire support for climate action.
- **Amp up earned media:** Secure 20 media mentions and three op-eds featuring TAF's work by building relationships with media contacts outside Toronto, industry publications outside of the environmental sphere, and financial publications.
- **Sharing program-related knowledge and insights:** Demonstrate TAF's value and share knowledge by sharing insights, lessons learned, and scale-up recommendations to key audiences, drawing from our high volume of programmatic content. Create accessible and digestible content to "popularize" findings from reports, case studies, and annual GHG inventories from Toronto and the region. Channels will include contributions to industry and academic publications, case studies, our 80x50 blog and e-news, conferences and events, short videos, as well as social and earned media. Focus on key programs:
 - **TowerWise** including efficiency, Indoor Environmental Quality study and heat pump results, and convening (event/forum) regarding the use of Integrated Design Process;

- **TransformTO** to promote Toronto City Council-approved climate actions and the upcoming 2019 implementation plan with a focus on the co-benefits of low-carbon actions and sharing knowledge of how key actions are relevant for other municipalities.
 - **Impact Investing** to demonstrate TAF's leadership in impact investing including retrofit financing experience (in collaboration with Efficiency Capital) and other investment case studies.
 - **Policy Development** in support of TAF and key partners' efforts related to low-carbon buildings and electrification of transportation.
 - **Communicate TAF's regional offerings and successes:** Disseminate information regarding TAF's regional programs and services through TAF's existing communications channels as well as other existing municipal networks and channels.
- **Fundraising & Stewardship:** Advance funding requests to support priority activities and provide accountability and insights to our supporters.

#8: Governance, Operations & Organizational Development

Objective: Ensure excellent and efficient operations and governance, including funder stewardship and accountability.

TAF lead: Julia Langer, CEO; Jason Wong, Finance Director; Mary Pickering, VP Programs & Partnerships

- **Provide diligent and robust support for governance, decision-making, compliance and stewardship:** Provide TAF's board and committees with timely and relevant information, advice, logistics and best-practice tools and approaches to support their decision-making, strategic guidance and financial oversight. Ensure that all decisions are compliant and aligned with City of Toronto and Province of Ontario requirements, Recruit expert committee members with an eye on regional representation, diversity and alignment with Strategic Directions .
- **Update key governance documents:** Changes including TAF's enhanced endowment, regional mandate, regulatory requirements and investment best practices must be reflected in the TAF/City of Toronto Relationship Framework, the Statement of Investment Objectives & Principles, and TAF's Operating By-Law.
- **Understanding the Pathway to Scale:** Deepen TAF's understanding of how to position proven urban climate solutions for full-scale adoption, starting with making connections with thought-leaders and experienced practitioners who are currently advancing solutions to full scale in various sectors. The aim is to determine what is needed in relation to scaling up urban climate solutions; develop a suitable pre-scale/commercialization role for TAF that builds on current strengths; and identify the capacity and other gaps we will need to fill in order to effectively implement the new Strategic Directions.
- **Support organizational excellence:** Provide staff with mentoring and relevant professional development opportunities that will enhance their performance. Foster a collaborative organizational culture; an internal team will focus attention on equity, diversity and inclusion.
- **Be a learning organization.** Use the new Theory of Change and KPIs, brand framework, Strategic Directions and tools such as TAF's Developmental Evaluation Guide to ensure that program design and analysis of activities and results - including failures -- lead to valuable lessons for TAF and our affiliates.

