

Activating Speed and Scale

Year End Report on the 2020 Business Plan

January 2021



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Letter from the CEO

The results and insights in the report you're about to read were gathered and assembled by the full TAF team, from their home offices, kitchen counters, couches, dinner tables and probably some other fun arrangements. Not only that, nearly all of the work to get here was also done in new ways, amidst a global pandemic, social uprisings, in addition to the trials and smiles of everyday life. Some files moved along as planned, and others, like our on-site building retrofit work, required significant pivoting by our team. I share this because, while it was a challenging year, we were still able to achieve so much, and in reviewing our results also realize how much opportunity is coming.

Our investment portfolio took a hit in late Q1/early Q2 as the market responded to the pandemic, but by the end of the year had recovered fully, a testament to the resilience of a responsibly invested portfolio and the wise guidance from our Investment Committee and advisors. We also took precautionary action to rein in expenses and avoid crystalizing potential losses. Our team adapted to new ways of working, board and committee activities moved online, a capacity previously unavailable to us, and towards the end of the year we added new capacities including for operations, impact investing, and communications.

And we rapidly adapted our message and focus to advocate for climate-oriented economic recovery, supporting the ambition to build back better. In Canada in November 2020, the federal government unveiled the first ever plan to achieve our 2030 and 2050 targets, including a rising price on carbon.

By the end of 2020, we finalized the agreement with the Federation of Canadian Municipalities and received the \$40 million Canada endowment; we are now part of the Low Carbon Cities Canada (LC3) a network of seven urban climate action agencies, the others modelled on TAF.

The work we undertook in 2020 to identify pathways for scaling climate solutions expanded on previous concepts of commercialization to include policy, technical, financial, economic, institutional and socio-behavioural change pathways. The insights that multiple pathways must be pursued simultaneously, and the importance of seeking to leverage climate action to resolve multiple urban challenges simultaneously, including to enhance social equity, can now be leavened into how we intentionally design TAF's programs for scale up and measure the progress and results.

The strategic and governance support and engagement of TAF's Board and Committee members has been instrumental in the accomplishments presented here, as has the collegiality and functional involvement of our many partners in GTHA municipalities, the buildings and transportation sectors, community organizations, and others. It's become a mantra because it is true: TAF does nothing alone, and we share in the accomplishments, lessons learned, and motivation to keep advancing the carbon-neutral agenda.

Julia Langer

CEO, The Atmospheric Fund

1. Programs Demonstrating Low-Carbon Solutions

The pandemic created unprecedented challenges for TAF's building retrofit programs in 2020, leading to multiple delays in construction and project approvals. Nevertheless, one deep retrofit demonstration was completed and a second was nearly completed, with significant progress on other sites. Comprehensive protocols were developed to allow in-suite retrofit work to be conducted safely, and new approaches developed for online resident engagement. A model and strategy to scale up deep retrofits in multi-family housing was developed, with multiple funding proposals submitted and discussions underway with major housing providers. Proposed EV programming was delayed due to COVID-related capacity constraints, but preliminary program design and fundraising were completed to enable program launch in 2021.

Activity: Undertake deep retrofits and demonstrate the benefit

2020 Objectives	Status & Outcomes
1.1 Complete construction and commissioning for first TowerWise deep retrofit site	Construction was substantially completed in Q3 and commissioning completed in Q4.
1.2 Complete design work and measurement and verification plans for three new deep retrofit sites	Design work completed and M&V plan drafted for Argyle site, and construction 80% completed. Preliminary design work completed for Hollyburn and Sparroway. Delays faced due to building owner approvals and related delays in funding approval from CAIF program.
1.3 Share case studies, outcomes and learnings from our deep retrofit work to advance policy-maker knowledge and industry buy-in	Published final two case studies on TowerWise sites; held a successful webinar in March on TW case studies, attended by over 100 participants; also published the <i>Case for Deep Retrofits</i> report and promotional video. TAF team members participated in a number of additional webinar presentations highlighting TowerWise learnings.
1.4 Identify 3-5 viable innovative energy efficiency products for consideration as TAF investment opportunities and/or implementation via TowerWise	Identified Stash, Innova, Aeroseal, and new GAHP product (Vicot), commercial CO2 heat pump water heater (Laars). Innova will be demonstrated at Hollyburn along with Vicot GAHP (pending final owner approval). Have identified potential sites for other tech demonstration.

Activity: Incubate a model to deliver retrofits at scale

2020 Objectives	Status & Outcomes
1.5 Develop a business model and theory of change for the 'retrofit delivery centre' starting with supporting retrofits at scale in the multi-unit residential buildings sector	Developed model and <u>outline for RDC</u> including 5-year plan for GTHA MURBs.

1.6 Establish basic operations, processes, and relationships to rapidly evaluate feasibility	Operating model developed including approach, key staff roles, core functions/services and budget; concept reviewed and presented to a range of stakeholders including NRCan, NYSERDA, McConnell, Trottier, ECCC, Toronto Community Housing and EnergieSprong, as well as via webinars and events hosted by Efficiency Canada and Corporate Knights.
1.7 Initiate a first cohort of retrofits under the new model, with a target of 1,500 suites and \$30 million in investment	Ongoing into 2021. Discussions underway with several municipal housing providers to develop a portfolio of projects meeting the target; sites to be confirmed in early 2021.

Activity: Accelerate EV charging to support electrification of transportation

2020 Objectives	Status & Outcomes
1.8 Develop a region-wide strategy for accelerating and improving EV charging, identifying TAF's role including grant-making, investing/financing, policy solutions, and programming. Staff and resource new activities in 2020	Delayed due to COVID and related capacity constraints. Have initiated development of a program of work for 2021 and writing a funding proposal to resource the work. Program launch targeted for Q2 2021.

2. Policy Development and Advocacy

This year we saw significant momentum on climate policy, driven by public pressure, investor trends and market behavior, climate crises affecting communities, and concerted post-pandemic economic recovery activities and investments across the globe. TAF's policy advocacy work leveraged this momentum on priority focus areas for the GTHA, specifically decarbonizing transportation and buildings.

Activity: Advance 'near zero' new construction through building codes and municipal green standards

2020 Objectives	Status & Outcomes
2.1 Support a municipality to develop a green development standard with mandatory energy/carbon performance requirements, and in a way that serves as a model for similar municipalities in the region	TAF successfully worked with the Town of Whitby and Whitby Council adopted staff recommendations for green development standards that included energy/carbon performance requirements similar to Toronto's.
2.2 Collaborate with stakeholders to ensure a strong 2020 National Building Code and support for harmonization and enhanced compliance in Ontario	TAF worked closely with Efficiency Canada and other stakeholders on this file. While the current draft is a significant improvement, including a tiered approach and introduction of absolute targets, it still excludes carbon emissions and mandatory air tightness testing was removed at a late stage. Ontario announced intent to harmonize although whether this improves on current Ontario code will depend on details to be determined in 2021. With support from TAF, Efficiency Canada released its report on "Strengthening Canada's Building Codes Process to Achieve Net Zero Emissions" in October. This forms the basis for engaging with the government on the next code cycle.

Activity: Advocate for enhanced and strategic funding for climate action

2020 Objectives	Status & Outcomes
2.3 Intervene through both proactive and reactive opportunities to ensure that federal and provincial governments deliver on key climate commitments, including funding for home retrofit loans, commercial building retrofits, new 'near zero' homes, electric vehicle (EV) charging infrastructure, electric buses, and the Ontario Carbon Trust	TAF participated in multiple federal budget processes in 2020 to advocate for these initiatives and there has been positive announcements on retrofits, EV charging infrastructure and electric buses. The Province's proposed Ontario Carbon Trust remains on hold indefinitely.
2.4 Strengthen targets and funding for natural gas and electricity conservation through the post-2020 conservation frameworks and related proceedings through ongoing	TAF worked closely with stakeholders to advocate against further cuts to electricity conservation, and a new framework has been adopted maintaining funding at 2020 levels. OEB proceedings on a new gas framework were paused for most of 2020,

consultations with the Ontario Energy Board and Independent Electricity System Operator	although a year-long extension of the current programs and funding ensures continuity. Work on a post-2021 gas conservation framework will resume in 2021.
2.5 Continue to support utility regulatory reform by engaging with progressive utility stakeholders in delivering promising strategic climate action and demonstrating distributed energy resources	TAF has engaged with other stakeholders in a number of ongoing OEB proceedings on utility reform, but progress has been very slow due to COVID and OEB restructuring. At the request of City Council, TAF worked with the City of Toronto to identify options for strengthening Toronto Hydro's role in climate solutions, and this work continues in 2021.

Activity: Strengthen minimum energy performance standards for key equipment

2020 Objectives	Status & Outcomes
2.6 Collaborate with stakeholders to advocate for window standards that comply with the energy and carbon requirements of National Resources Canada's market transformation roadmap, and support next generation space and water heating equipment in line with the roadmap	Consultation on national window standards was paused by NRCan in 2020 due to COVID impacts. TAF has joined two "Expert Teams" assembled by NRCan to support market transformation and regulatory advancement in space and water heating respectively.

Activity: Accelerate electrification of transportation through key policy interventions

2020 Objectives	Status & Outcomes
2.7 Work with key stakeholders to ensure Canada's Clean Fuel Standard for the transportation sector effectively accelerates investment and adoption of clean energy sources	A TAF grant to Pembina supports a coalition of stakeholders who provide technical input and sustained outreach. TAF serves on the steering committee. Draft regulations were published in December and TAF is working with the coalition to provided unified feedback.
2.8 Engage key partners to raise and sustain stakeholder demand for a national zero emissions vehicle mandate	With Efficiency Canada, Pembina, Clean Energy Canada, Electric Mobility Canada and other organizations, TAF advocated for a national zero emissions vehicle (ZEV) mandate. Canada's updated climate plan includes reference to exploring a ZEV mandate and the Minister has indicated the option will be raised bilaterally with the Biden administration.
2.9 Ensure the City of Toronto resources and implements the recommendations of the Toronto EV Strategy adopted by Council in January 2020	TAF continues to liaise with the relevant City divisions to assist in their efforts to implement TO's EV Strategy ranging from on street charging, to electrification of vehicles for hire. Progress in 2020

	was slow due to COVID impacts and consequent secondment of the staff lead at the City to other duties.
2.10 Identify at least one municipality to support in developing an EV Strategy	Peel Region is doing great work on this front and TAF has been supporting development of their plan, as part of a formal steering committee.
2.11 Ensure Canada's vehicle standards are aligned with California's and other climate-focused U.S. states	For better or worse, Canada's vehicle standards are automatically aligned with the United States', and there has been little opportunity to influence the Canadian position. We are hopeful the Biden administration will reverse the direction of the previous administration, heralding more aggressive efficiency standards for the North American market.

Activity: Advance the adoption of regulatory requirements for retrofits of existing building

2020 Objectives	Status & Outcomes
2.12 Support the City of Toronto's working group in developing and adopting an effective retrofit policy strategy for existing buildings, which can serve as a model for other cities	Activity is in progress as timelines shifted due to COVID. TAF has been actively participating in the advisory committee as well as a sub-committee for financing. The strategy is due to go to Toronto Council in the first half of 2021.
2.13 Identify at least one additional municipality that can champion a similar policy	This is a fundamentally new policy approach for Ontario cities. A tangible model and example, such as in Toronto, will be critical for other cities to considering such an approach. This will continue to be a priority in 2021.

Activity: Accelerate fuel switching in the buildings sector through strategic policy interventions

2020 Objectives	Status & Outcomes
2.14 Work with stakeholders to provide recommendations to ECCC in support of a strong federal Clean Fuel Standard regulation for gaseous fuels, including a building electrification compliance pathway	TAF prepared a policy proposal for a building electrification pathway under the CFS based on a stakeholder roundtable held in 2019. Unfortunately, as part of its updated climate plan, the Federal Government announced it was cancelling the gaseous stream of the CFS entirely.
2.15 Promote expansion of the renewable natural gas (RNG) sector by engaging with industry and investment partners to advocate for the Provincial government to reduce regulatory obstacles and red tape that deters investment in RNG	TAF made several recommendations for streamlining RNG, including related to connections from production facilities to the gas distribution grid. There has been no movement on a policy, although a voluntary program is being launched.

3. Impact Investing and Finance Innovation

TAF is a recognized leader in impact investing and innovative financing tools to support low-carbon solutions. In 2020 the team grew to start meeting a larger mandate for investment opportunities, including the receipt of the LC3 federal endowment in late 2020.

Activity: Invest \$4 million in 3-5 new prudent and high-impact opportunities, in keeping with SIOP and asset mix guidance

2020 Objectives	Status & Outcomes
3.1 Continue to build awareness among potential investees and co-investors of TAF's impact investing 'strike zone' and value proposition	TAF presented at 5 impact investing events this year, reaching key audiences, sharing experience and learning, and forming the basis for future partnerships, as well as direct outreach to investees and co-investors.
3.2 Host a "technology exchange" event that attracts at least five new strike zone-aligned investment opportunities and five new pertinent co-investors	The event, "Generate", was pivoted to a 'virtual' format and is scheduled for February 2021. https://taf.ca/generate/
3.3 Mobilize additional capital investment through syndicated co-investment at a 1:3 ratio, striving for at least \$16 million.	Approximately \$635K advanced. Almost \$7M additional capital committed, and \$10M in syndicated co-investment. Investment targets have not been met, in part as a result of COVID and the need to undertake a detailed review of our existing investment portfolio. The team worked with the Investment Committee to increase our risk evaluation, timelines and governance processes, and this will be a priority in 2021 to enable achieving our scale-up targets.
3.4 Finalize a co-developed, standardized process with Efficiency Capital Corporation to reduce burden and improve efficiency, in support of increasing the volume of ESPAs financed	A standardized process was implemented and each new ESPA provides additional learning which is supporting ongoing refinement.
 3.5 Standardize and implement new processes to drive efficiency and improve tracking: Direct investing functional capacity including account management (transaction origination, screening, and due diligence) 	Work was initiated to shift all files to a standardized naming convention and structure, to facilitate implementation of a transaction tracking tool to improve efficiency and compliance. A qualified Administrative Assistant was recruited to support the impact investing activities.
 Investment syndication (co-investor origination, relationship management, and reporting); Governance with the Investment Committee, Direct Investment Sub-committee, and Board 	We implemented a transaction pipeline report to support origination and flow. 57 new potential investment partner organizations have been directly engaged; 30% are in syndication with current transactions.
	New Terms of Reference to establish an Investment Sub-committee and to include this in the SIOP were adopted by the Board, but Council approval has not yet been secured.

Activity: Help scale up low-carbon investment

2020 Objectives	Status & Outcomes
3.6 Coordinate the development of a 50- project pipeline and the submission of at least 10 high-quality proposals and applications to Federal and Provincial governments, in support of climate action across the GTHA	Research and analysis of current government funding programs was undertaken, but publication was not deemed relevant given the ever-changing nature of this space. Based on stakeholder priorities, this project was re-scoped to focus on supporting fundraising for retrofits (including via the RDC program), and for EV Charging in the GTHA.
3.7 Scope, profile, and mobilize additional investment in renewable natural gas (RNG) by:	In collaboration with the Quantification team, an RFQ was issued to engage a consultant to assess the investible opportunity for RNG in Ontario.
 Assessing the investible opportunity over the next 10 years 	TAF's relationship with the Ontario Clean Water Agency is proving fruitful; while still early, a path to
 Developing a standardized framework for third-party or partnership financing of municipal projects and initiating at least one of these projects with TAF investment 	investment in RNG technology at up to 5 municipal wastewater treatment plants is emerging.
3.8 Propose options for mobilizing the LC3 network's capital for high-impact direct investments including activities such as shared or third-party direct investment functions, tools and templates; co-investment opportunities; and business models	Objectives and a workplan was approved by the LC3 network and will be implemented in 2021, with support from an external consultant.

Activity: Develop innovative tools that address barriers to financing low carbon solutions

2020 Objectives	Status & Outcomes
3.9 A funding approach related to tax structured products to provide flexibility and value for for-profit clients and co-investors and apply it to at least one transaction	Early engagement has been made with a Vancouver- based company specifically investigating flow-through shares for the cleantech sector.
3.10 To finance and operate the 'retrofit delivery center'; including how we coordinate multiple sources of capital and structure offerings	Planning initiated. TAF submitted several proposals to raise funds for the RDC. Work in this area will be a priority in 2021.
3.11 A performance contract approach for decarbonizing transportation and initiate at least one transaction	Transaction opportunities in the transportation sector, aligned with TAF's investment strike zone, have been difficult to realize, but will continue to be pursued.

4. Grants and Capacity Building

Despite operational disruptions related to covid, we were able to maintain two grants intake rounds in 2020 and provided 13 grants with a total value of \$1,290,685. The vast majority of TAF grant funding in 2020 supported local initiatives that were directly aligned with TAF's strategic priorities. This year we also focused on improving the grants intake process with a goal of being more service-oriented for our grantees and improving the transparency and consistency of the grant assessment process. Finally, 2020 saw us expand TAF's capacity-building fund in an effort to support our grantees and staff in honing the skills needed to design, deliver and evaluate effective climate initiatives.

Activity: Build capacity to bolster climate action

2020 Objectives	Status & Outcomes
4.1 Initiate two new service offerings through the Social Innovation Skills	The Climate Action Skills Fund (formerly the Social Innovation Skills Fund) includes three new service offerings:
Fund to enhance the capacity of GTHA practitioners to deliver high-impact climate projects	 Dedicated funding for policy advocacy coaching and developmental evaluation Program design and evaluation training modules that can be accessed online and completed independently by grant seekers (in development) A pool of funding available to TAF grantees to pursue other training opportunities or coaching services that will enhance the outcomes of their TAF-funded project

Activity: Improve grant-making processes to support even more climate action work across the region

2020 Objectives	Status & Outcomes
4.2 Develop and implement new policies and procedures to more effectively meet the needs of our grantees; increase the efficiency of	In spring 2020, scheduled check-ins with all active grantees to assess the impacts that COVID-19 was having on their projects and organizations and offered flexibility in reporting requirements and deadlines in response.
administering of TAF's grants program for TAF staff; the Grants Committee and Board; and improve the quality and outcomes of TAF's grants and	Revised the grant application forms to simplify the application and allow grant seekers to identify training or coaching needs that support project design and delivery
internal programs	Updated the grant assessment forms and review process to increase consistency, transparency and efficiency among all reviewers.
	Incorporated an Expression of Interest (EOI) stage into the grant application process, intended to increase transparency for grant seekers and streamline the assessment process. EOI is being piloted in the 2021 Grant Intake Round 1.

Activity: Cultivate high-impact grants

2020 Objectives	Status & Outcomes
4.3 Support a strong portfolio of climate action initiatives across the GTHA, including:	Complete / ongoing 23 applications received in two funding rounds (Spring 2020
At least two grant applications in each of TAF's focus areas	was cancelled)York (3)Toronto (14)
At least one grant application in each of the GTHA's regional and single-tier municipalities	 Durham (1) Halton (1) Peel (3)
At least three new grant applications led by non-environmental climate allies	Hamilton (1) Focus area:
	 New construction: 7 Retrofits: 6 Electric mobility: 8 Energy policy: 2
	6 applications from non-environmental climate allies: Building Up, Heating, Refrigeration and Air Conditioning Institute (HRAI), Harbord Village Residents' Association (HVRA), City of Mississauga, Town of Halton Hills, Durham Region Transit (DRT)

5. Communications and Regional Outreach

The Comms Team provided vital communication and messaging strategy support across TAF throughout the year. This included improvements to the briefing process, and cross-team meetings with policy, grants and impact investing teams in particular. We assessed our communications approaches and messaging as the climate movement adjusted to impacts of the global pandemic and largely maintained steady performance, with a focus on growing our TAF e-newsletter list, and providing, providing TAF expertise and perspective through media, publishing reports and hosting webinars and events to promote knowledge transfer.

Activity: Expertly deliver the communications and regional outreach aspects of TAF's 2020 plan

2020 Objectives	Status & Outcomes
5.1 Improve the use of a communications briefing process to create more effective, audience-oriented materials	Created new <u>briefing template</u> and conducted 15+ briefings in collaboration with teams.
5.2 Market TAF's key messages and	13 blogs published in 2020
materials through digital and social channels, traditional media, TAF-hosted events, external meetings and webinars	4 webinars hosted with TowerWise and Carbon Data Network
	20+ TAF presenters on externally-hosted webinars, estimated over 2,000 combined viewers
	7 earned media stories
	Monthly e-newsletter and steady social media presence on Twitter and LinkedIn
5.3 Support TAF's policy, granting, investment and programs objectives by identifying events, policy processes, collaborations, and other strategic opportunities across the region	Identified local stakeholders who came forward to express their support for a strong Whitby Green Standard, facilitating its passage.
	Supported TAF's participation in Green Development Standards consultation for York Region (Richmond Hill, Vaughan, Markham) and Brampton, and policy deputations in Burlington and Whitby.
	Facilitated and provided event support for meetings of the Carbon Data Network.
	Supported the TowerWise team with meeting coordination and/or presentations to several non-profit and community housing agencies in the GTHA.
	Participated in more than 100 regional events in person or remotely during 2020.
5.4 Support the development of proposals and reporting to external funders, making clear our value proposition, and ensuring strong funder recognition and	Supported editing, design, and distribution of all major funder reports for TowerWise.
	Contributed to development of RDC fundraising materials, including social media, presentation, and blog.

acknowledgement on key communications materials	
5.5 Enhance TAF's relationships with finance audiences – specifically potential co-investors – through a concerted marketing campaign and through hosting a "technology exchange"	Supporting Impact Investment team with event strategy and promotion. Hired external event team to design and manage event planned for Feb 2021. www.taf.ca/generate
5.6 Publicly celebrate the receipt of the \$40 million LC3 endowment by announcing the first LC3 project	Well-received announcement shared via TAF enews, blog and social media Personal appreciation packages mailed out to most valued partners and TAF allies in this process

Activity: Support a scaling organization with improved internal communications

2020 Objectives	Status & Outcomes
5.7 Support a great TAF culture by sending out a monthly staff update that improves staff understanding of TAF's work and recognizes individual contributions	Shifted newsletter idea to Slack and supported redesign of weekly staff meetings to improve internal communication and collaboration.
5.8 Deepen staff awareness of local, dinner table issues, local politics and stakeholders influencing local climate action the GTHA	Provided regular updates on GTHA climate action news at all-staff meetings. Leveraging Slack #news channel. Created an internal resource guide that identifies priority sources of news and events related to climate action across the GTHA.
5.9 Compile a comprehensive list of stakeholders throughout the GTHA needed to help the entire team identify and seize new opportunities to advance our strategic objectives across the region	Developed a master TAF <u>stakeholder list</u> across the GTHA with over 300 stakeholders categorized by sector and thematic area.

Activity: Support climate action and TAF's influence by increasing audience engagement with our work

2020 Objectives	Status & Outcomes
LinkedIn engagement rate: 6% (maintaining strong second-half of 2019)	Almost to goal with 5.79%
LinkedIn average post impression: 550 (maintaining strong second-half of 2019)	Exceeded goal; average 800 impressions per post
Twitter engagement rate: 1.65% (steady with 2019) • Twitter average post impression: 1,500 (steady with 2019)	Exceeded goal with 1.79% engagement over 2020 (1.55% in first half, 2.03% in second half of year) Met goal with average 1,504 impressions per post
Twitter 'sweet spot' posts: 4 a month (steady with 2019) (sweet spot = 1,250 impressions, 1.67% engagement rate)	Exceeded goal with 5 sweet spot posts per month (first half of year = 4.6, second half of year = 6)

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Web visitors: 4,200 a month (5% growth from 2019) Page views: 12,000 a month (10% growth from 2019)	Did not meet goal with 3,677 average monthly visitors (April to August were lowest months, now trending upwards). Did not meet goal with 9,775 page views per month. New content and improvements to navigation are priorities in 2021.
Growth of "key audiences" on LinkedIn: 20% from 2019	Up 19.4% as of October – expect 20% by year end.
Growth of e-news audience: Double subscriber numbers outside Toronto	Partially achieved. 67% growth in e-news subscribers from beyond Toronto.

6. Finance, Operations and Governance

This team provided vital resources and capacity for TAF as we responded to the impacts of the pandemic on our office and ensured a steady hand on all key processes so we could stay running.

Board and committee meetings were adapted for virtual and remote attendance. On governance, the collegial relationship we have built with City, Ontario and FCM has been critical to success and to avoid time-consuming challenges. We need to continue to stick to the principle of minimizing administrative burden. Having the proceeds from three funds is a major opportunity and will require deft management to ensure it does not lead to triple the governance and accountability work.

More than ever this year, TAF used internal staff to provide support services typically provided through external consultants (especially legal and HR). This served both to reduce professional services expenses and build TAF-specific knowledge and capacity among staff. We intend to continue this trend where possible in 2021.

Activity: Maintain TAF's high standard of accountability to our Board, Funders, Committees and Council

2020 Objectives	Status & Outcomes
6.1 Deliver timely, effective reporting on City and provincial endowments, including audited financial statements and impact analysis. Extend this standard of accountability to TAF's forthcoming federal endowment and implement new procedures as required to meet the federal funding requirements with excellence	All reporting requirements met in 2020. Strengthened relationships with key stakeholders. Engaged with Ministry of Municipal Affairs and City of Toronto to address accounting issues which will streamline reporting for all three funds.
6.2 Finalize TAF-City of Toronto-FCM LC3 Funding Agreement (FA) and the process for reporting on use of these funds	Funding agreement (FA) approved and executed by Board and Council. Responsibilities for operationalizing the FA assigned. Risk Register implemented, with benefits for management of all three funds.
6.3 Update TAF's core governance documents in coordination with the City, specifically the Relationship Framework, TAF Act, and bylaws to ensure compliance with provincial and federal funding agreements	Partially complete. Relationship Framework: assessment of needs and opportunities completed. Investment Policy (SIOP): Board approved amendments but City has not advanced request for Council approval. Meanwhile, additional amendments are needed for compliance with FA and to allow Board to delegate some functions to the Investment Committee.

Activity: Support a scaling organization with stronger internal processes

2020 Objectives	Status & Outcomes		
6.4 Complete research into models for scaling adoption of climate solutions, identify opportunities for adopting the	Comprehensive research review by the Rotman School of Management at U of T completed to assess different pathways to scale.		

insights, and incorporate into TAF's Popularized summary version of the research paper activities and operations shared with over 60 community affiliates during three webinars and via blog. Retroactive assessment of three TAF programs – Impact Investing, TowerWise and TransformTO – generated practice-based insights about designing programs for scale. All of the above informing the development of a scaleoriented theory of change and new scale metrics to be adopted by TAF and the LC3 Network in 2021. 6.5 Develop and implement new policies Implemented rapid response to remote working including improved internal communication via All and procedures to help TAF run smoothly, Staff meetings (weekly) and Senior Management including: Team meetings (weekly); increased pandemic HR HR improvements support including quarterly 1:1 check-ins with full Project management and accounting team, and designed and provided cash stipend, support internet and cell subsidy to support workplace costs borne by employees. An annual operations calendar of major organizational activities Implemented improvements to eliminate bias and increase inclusivity in our recruiting process through adoption of Applied platform. Implementation standardized leave tracking process and payroll change forms. Developed a consolidated approval authority schedule to clarify limits and responsibilities across all TAF activities, from accounting to grants to project management. Annual operations calendar developed to support activities that impact more than one TAF team. 6.6 Ensure staff resources stay focused on All staff engaged in the annual planning process, supporting the development of team-wide objectives, highest value work and yet can respond used as a basis to establish individual work plans quickly to emerging opportunities, with a business plan tracking process and strong (quarterly tasks and standards). individual work plans Developed tracker that enabled regular reporting across entire Annual Plan. Increased focus on recalibration of priorities in light of emerging opportunities and challenges. Increased management dialogue on project scoping and definition to ensure staff resources appropriately allocated. Supported Impact Investing and TowerWise teams in clarifying roles and responsibilities. 6.7 Implement new systems and tools to CRM software was not initiated in response to COVID support the management of TAF's growing and resourcing adjustments. number of relationships, financial Procurement of new accounting software initiated; functions and direct investment processes

final contracting and onboarding starting in Q1 2021.

6.8 Support a vibrant, resilient and inclusive TAF team through staff-wide implicit bias training, the adoption of Equal by 30 Commitments, and a new HR recruitment policy that reflects principles of equity, diversity, and inclusion	All staff participated in a two-part implicit bias training course. Equal by 30 Commitments adopted. New hiring process established, incorporating EDI objectives and a new applicant recruitment platform, Applied. Updated indigenous land acknowledgment and			
	procedure, and shared with staff and Board/Committee Chairs for regular use in TAF activities.			
6.9 Organize a steady beat of staff social events and collective learning opportunities throughout the year	Despite being apart for the majority of the year, the team kept together and vibrant with regular virtual socials including trivia and games nights, and several in-person, distanced social gatherings in the warmer months.			

7. Quantification and Evaluation

Guiding all our work – from policy analysis to investments, granting to program design – is the evaluation of carbon reductions potential as well as other social and environmental benefits.

The coming year will see us continue to improve the inputs, methodologies, and assumptions we need to ensure practitioners across the region and the LC3 network can measure and evaluate their progress towards carbon-neutrality goals and a just transition.

Activity: Continue to improve quantification protocols and analytical tools to more accurately track and estimate carbon emissions and other benefits, supporting decision-makers and practitioners throughout the GTHA and LC3 Network

2020 Objectives	Status & Outcomes		
7.1 Update, improve and republish our Electricity Emissions Factors and Guidelines and TAF's Carbon Emissions Quantification Methodology	Completed and will be published in Q1 2021.		
7.2 Investigate fugitive methane emissions from fossil natural gas extraction, transmission, and distribution, and determine how this should be accounted for in carbon emissions quantification	Completed in parallel with MEF update.		
7.3 Research emerging protocols for quantifying Scope 3 emissions in the GHTA and improve TAF's capability to evaluate projects and policies that target these sources	Draft is finalized but delayed due to insufficient resources; now on track. The report supports the ability to estimate the large scale impacts of building material substitution to reduce net-carbon emissions via different projects and programs.		
7.4 Develop and publish a guideline for calculating and interpreting the various types of cost-per-tonne metric	Draft is finalized but delayed due to insufficient resources; now on track. The report helps us to understand the different varieties of cost-pertonne metrics, select and apply the appropriate metric and interpret and compare cost-per-tonne figures to support decision-making.		
7.5 Incubate a community of practice to improve access to and quality of data and methods for eliminating errors, to reduce duplication of effort (and associated time and cost), and to explore methods for measuring co-benefits of climate action, by collaborating with municipal partners and other stakeholders	Initiated the "Carbon Data Network" (CDN) in 2020. Hosted 3 webinars and another in collaboration with Clean Air Partnership, with strong participation from municipal partners, including at least one staff person from GTHA regions, utilities and stakeholders. Webinars focused on streamlining utility data		
At least one staff person from each GTHA region participate	gathering and GTHA emission inventory data and methods.		
All regions are aware of what kind of quantification-related assistance TAF can provide	CDN has proven to offer valuable space for stakeholders and will continue into 2021.		

Activity: Develop the 2020 GTHA GHG Inventory, tracking progress toward carbon neutrality in 2050

2020 Objectives	Status & Outcomes			
7.6 Build anticipation about the release of the inventory and develop a strategic distribution plan to get it into the hands of key stakeholders	Analysis of 2019 distribution plan and input from CDN participants have informed distribution plan for upcoming GHG Inventory. Will be released in early Q1 2021.			
7.7 Include useful and actionable municipal-level insights to guide local attention and resources	Feedback and input from regional partners and CDN members was sought out and collected. The input is valuable and will require invement in longer-term improvements such as providing greater granularity in our data and analysis, and inclusion of carbon sequestration impact and Scope 3 emissions. We will continue to solicit input and feedback from stakeholders to increase the value of our inventory and GHG reports.			

Activity: Provide insightful, strategic and fit-for-purpose program evaluation and project-level analysis of impact

2020 Objectives	Status & Outcomes		
7.8 Continue to improve TAF's key performance indicators and collaborate with LC3 to develop a harmonized approach, including carbon emissions reductions and financial capital mobilization, as well as a metric to evaluate scaling solutions	Provided direct support to the Federation of Canadian Municipalities to examine best practices in GHG quanification to set the standard for LC3 GHG KPI and evaluation protocols. Independently assessed scale-oriented metrics approaches and created a scale-metric prototype to support LC3 evaluation protocols.		
7.9 Provide developmental evaluation support to guide the incubation of the 'retrofit delivery centre'	Paused; will be re-visited when funding received.		
7.10 Undertake carbon emission estimation of all potential and key completed grants, direct investments, programs, and policies, using credible, purpose-built models and assumptions to streamline the process and provide useful information	Reviewed and evaluated the emission reduction potential of over 30 grants and 20 impact investing projects.		

8. Performance Indicators

TAF regularly evaluates and measures the impact and results of all of our work, in an effort to inform decisions and recommendations, and monitor progress. This happens throughout the year.

On an annual basis, the two most important performance indicators we report on include:

- Greenhouse gas reduction potential
- The capital we mobilize towards low-carbon solutions

In order to accurately estimate those reductions in a fast-changing scientific context full of uncertainties, a constant review of our technical background and methodologies is critical. This allows us and other stakeholders correctly and continuously identify and address challenges so we only get better over time.

To understand the magnitude of the challenge and track progress towards our goal of carbon neutrality in 2050, we need a robust Regional GHG Inventory for the GTHA.

Result of the inventory help policy- and decision-makers better understand the quantity and sources of carbon emissions in their area, to influence scope, speed and direction of actions.

The results of our inventory of emissions in 2018 show that the region emitted 55.5 million tonnes of carbon dioxide equivalents (CO₂eq), a 5.2% increase compared to 2017.

Proceeding the steep decline in emissions from Ontario's coal phase-out, the increases and decreases over the past few years are mostly due to fluctuation in weather and population growth. These small fluctuations make it clear we are still not on track to achieve the deep carbon reduction necessary to reach the 2030 and 2050 climate targets.

TAF continues to support high-impact carbon-reduction initiatives

To measure the impact of initiatives funded and undertaken by TAF in 2020, different types of metrics including cumulative direct and potential carbon reductions from all activities are estimated (see table below). We only consider the grants and impact investing projects within the year when the first disbursement of the investment is executed, and allocate the full amount expected to invest over the lifetime of the project, as well as co-investment if the information is available.

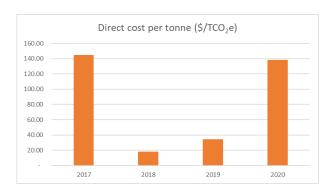
Please see the <u>TAF's carbon emissions quantification methodology</u> for definitions and methods used for these calculations.

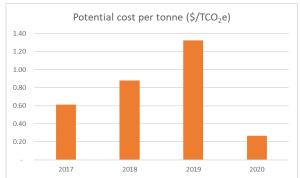
Direct Emissions Reductions (tCO₂eq)	Direct Cost per Direct Tonne (\$/tCO₂eq)	Potential Emissions Reductions (tCO₂eq)	Total Project Cost per Potential Tonne (\$/tCO₂eq)
7,300	138.4	41,799,827	0.27

The **direct emissions** reductions estimated for 2020 is the result of two initiatives, TAF's impact investment in the Woodgreen ESPA project to audit and install energy conservation measures in a multi-unit residential building and one internal project. The overall value is significantly less than 2019 which was 112,237 tCO2eq. We consider the fact that 2020 was the COVID year and an unusual and at times difficult year for investors and investees. The cost per tonne of direct emissions reductions for 2020 is \$138.4/tCO2e compared to \$34.3/tCO2 (for one impact investing and one internal project) in 2019.

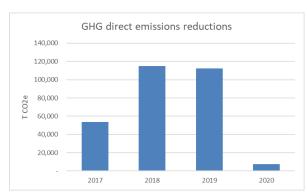
Key Performance Indicator: GHG emissions reduction potential

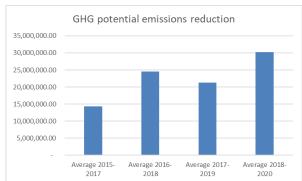
TAF's carbon KPI measures potential emissions reductions at scale over 20 years for projects funded in a given year. It provides valuable information about the transformative nature of projects funded by the organization. In 2020, the total potential greenhouse gas emissions reductions of initiatives is 41,799,827 tCO₂eq, achieved through six quantifiable grants. Half of this value is associated with our work on clean fuels and the Clean Fuel Standard. The rest are mainly focused on vehicle electrification. For context, potential reductions in 2019 was 11,256,160 MtCO₂eq. It's also worth considering that non-quantifiable projects can often contribute to significant carbon impacts — they are simply not feasible to estimate at the outset. The potential cost per tonne is 0.27 \$/tCO₂eq, lower than previous years (0.99 in 2019 and 0.88 in 2018).





The following graphs show direct and potential GHG reductions over recent years. Potential emissions reductions are presented as a three-year rolling average to provide a more meaningful trend. Most of TAF's projects are multi-year, but the associated potential is only added in one year, and a rolling average provides a clearer sense of the impacts associated with TAF's current body of work. We do not have enough historic data to apply the same methodology to our direct emissions reductions although we may do so in future reports.





Key Performance Indicator: Financial capital mobilized

This includes TAF direct investments, grants and program spending, as well as external contributions and co-financing. We consider an investment within the year when the first draw of the investment is executed, and allocate the full amount expected to invest over the lifetime of the project, as well as co-investment if the information is available.

In 2020, TAF mobilized \$22,187,098 for low-carbon solutions in the GTHA. We also raise funds from other organizations to advance our climate projects. In 2020 we raised 40,420,000\$ from external sources including:

- TAF's endowment has grown by an additional \$40,000,000 from the Government of Canada, as part of LC3
- Climate Action Incentive Fund (CAIF): \$250,000 for Ranee ADER project, raised in 2020 to support TAF leading projects and will be used in 2021
- Climate Action Incentive Fund (CAIF): \$90,000 for Hollyburn ADER project, raised in 2020 to support TAF leading projects and will be used in 2021
- Enbridge for Hollyburn project: \$80,000 raised in 2020 for ADER project, raised in 2020 and will be used in 2021

Co-Benefits of GHG emission reduction actions achieved in 2020

Our activities have positive impacts beyond carbon reductions, accounting for them is valuable input in our decision-making process is vital to maximize co-benefits. This will be an increasing area of focus in 2021 as we adopt new metrics as part of LC3, including metrics to evaluate scale potential, social outcomes, as well as carbon impacts.

Economic Benefits in 2020

	Job-years created	Increase in GDP (\$)		
Potential	14	\$1,932,804		
Direct	133	\$18,574,500		

We only measure economic benefits for projects related to energy efficiency. Finding multipliers or estimates to assign economic benefits for other types of projects is necessary to improve this metric.

Air Quality Benefits

We measure the reduction of criteria air contaminants (CACs) based on the energy source we target in order to reduce GHG emissions. 2020 years' projects mainly involved 2 activities; reducing natural gas and electricity in buildings, and transportation electrification that saves gasoline and diesel.

Significant air quality improvement is attributable to one grant, Pembina Institute, for the Coalition for Clean Fuels and a Clean Fuel Standard associated with high potential reductions of natural gas and vehicle fuels. An additional 4 grants,1 impact investment and 1 internal project also produced air quality reductions but which are much lower in scale.

As a result, the CACs reduction are much higher than 2019 and years before.

	Criteria Air Contaminant (CAC) Emissions Reductions							
	TPM (t)	PM10 (t)	PM2.5 (t)	SOx (t)	NOx (t)	VOC (t)	CO (t)	NH3 (t)
Potential	2,748,968,106	2,695,093,641	1,499,022,233	262,577,725	87,378,552,495	70,176,155,035	1,146,231,915,3 89	5,232,953,071
Direct	848	836	815	83	32,071	751	10,012	352

Improving our metrics in 2021 and beyond

We have been working with FCM and the LC3 network to update and improve the performance indicators we use to guide our decision-making. New and updated indicators will be phased in over a two-year period to include areas we do not formally integrate and monitor today, but which are vital to advancing climate action: social impacts and scale potential. This will begin in 2021 and Board and Committees will be engaged to ensure this adds the value and improves our work, as intended.