REPORT FOR ACTION WITH CONFIDENTIAL ATTACHMENT

Direct Investment Request 2023 E

Date: November 7, 2023
To: Board of Directors of the Toronto Atmospheric Fund
From: Vice President, Impact Investing

REASON FOR CONFIDENTIAL INFORMATION

The attachment to this report contains commercial information, supplied in confidence to the Toronto Atmospheric Fund which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization.

SUMMARY

The Direct Investment Committee recommends an investment of up to $3,500,000 in an innovative financing structure designed to enable Vehicle-for-Hire (VFH) drivers to purchase electric vehicles (EVs). This investment is strongly aligned with TAF's mandate to mobilize capital for low-carbon solutions and accelerate EV adoption. The proposed allocation complies with TAF's investment policy and target portfolio.

RECOMMENDATIONS

The Vice President, Impact Investing, recommends that the Board of Directors of the Toronto Atmospheric Fund:

1. Approve an investment of up to $3,500,000 in a warehouse debt facility and unfunded credit enhancements, subject to the conditions outlined by the Direct Investment Committee at its meeting on October 17, 2023, and set out in Confidential Attachment 1;
2. Delegate final approval of the terms and conditions of the investment to the Direct Investment Committee;
3. Direct TAF's Vice President, Impact Investing to implement the investment to the satisfaction of TAF's Solicitor; and
4. Direct that the confidential information contained in Confidential Attachment 1 remain confidential in its entirety, as it contains commercial and financial information, supplied in confidence to the Toronto Atmospheric Fund, which, if

disclosed, could reasonably be expected to significantly prejudice the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization.

FINANCIAL IMPACT

There is no financial impact to the City resulting from the adoption of the recommendations in this report. Advancing this investment will move TAF's asset mix closer to the Target Portfolio which is designed to optimize risk/return and impact.

DECISION HISTORY

At its meeting held October 17, 2023, the Direct Investment Committee recommended that TAF's Board of Directors approve the investment described in Confidential Attachment 1.

COMMENTS

1. Process / Governance Note

The process for recommending this investment is different than usual. Specifically, while the overall architecture and risk/return expectation of the transaction have been established, and a key condition articulated, the detailed terms and conditions for the investment have not been formulated and due diligence has not been completed. This approach of obtaining Board approval that is conditional on the Direct Investment Committee's satisfaction will provide a signal to the relevant stakeholders that it is worth investing the time and effort to develop this opportunity. Further, we are mitigating the possibility that the timing for completing the investment and Board meeting dates will not align which could hinder progress. Direct Investment Committee (DC) members will be consulted as the deal terms are formulated and due diligence is undertaken, and the full deal terms will be presented to the DC for final approval.

2. Market Need for this Financial Innovation and Investment

Lack of Vehicle Financing Options for VFH Drivers:
In developing its strategy for a net-zero emission Vehicle-For-Hire (VFH) sector by 2030, the City of Toronto identified, through stakeholder consultations, that the high upfront cost of Zero Emission Vehicles (ZEVs) is a primary barrier to their adoption by VFH drivers. Many of these drivers prefer financing, leasing, or renting options due to cash flow considerations. However, there's a notable lack of EV-focused financing solutions tailored to the needs of VFH drivers, who are often newcomers to Canada with limited or poor credit histories and no guaranteed future income streams due to the nature of their work. Traditional banks who are looking to reduce risk in the wake of the current economic turmoil and are uncertain about the impacts of battery degradation and residual values of EVs are reluctant to extend financing to this underserved segment. Furthermore, a market scan has revealed these firms who have deep

expertise with internal combustion engine (ICE) financing lack effective educational tools to inform consumers about the financial advantages of operating EVs versus ICE vehicles. TAF’s recent discussions with a few of the major Canadian banks confirmed their disinterest in offering financing to this segment of borrowers, underscoring the urgent need for accessible and straightforward EV financing solutions accompanied by educational support to spur widespread adoption among VFH drivers.

City Policy Changes that Will Support the Sector's Path to EV Adoption:
On October 11, 2023, Toronto City Council adopted a net zero requirement for taxis and rideshares starting January 1, 2030:

- A clear regulatory requirement that all VFH be zero emission by January 1, 2031, with short-term exemptions for stretch limousines, accessible vehicles and plug-in hybrid EVs. This will send a clear market signal to the sector and inform future capital investment decisions.
- Increased affordability through the establishment of a grant program that incentivizes drivers to shift to EVs as soon as possible.
- Waived model-year maximum for ZEVs which allows drivers to use their capital-intensive vehicles over a longer timeframe.
- Maintain the net total of VFH licenses at the current levels, with the exception of new zero-emissions vehicles that are owned (rather than leased), until staff report back on the appropriate size of the VFH fleet by the end of next year.

The committee recommendations were passed by City Council on Wednesday October 11.

Significant Private Transportation Company (PTC) Fleet Turnover Required Over the Next Few Years:
The upcoming mandatory fleet turnover within Toronto’s Private Transportation Company (PTC) fleets presents a pivotal opportunity for drivers to transition into EVs instead of ICE vehicles. According to Toronto Municipal Licensing and Standards data, there is a requirement for over 60% of the PTC fleet to undergo turnover by 2026. Rather than investing in gas-powered cars, which will inevitably become stranded assets by 2031 due to Toronto’s recent commitment to mandate that rideshare drivers are net-zero by 2031, drivers need to be educated and presented with a compelling business case to make the switch to EVs now. This period of change serves as a strategic window for VFH drivers to embrace and invest in electric vehicles, paving the way for a greener, financially resilient future in the rideshare industry.

The chart below shows the annual mandated PTC fleet turnover as a percentage of total fleet:

Year of Replacement	PTC Replacements	
	Total #	%
2022	1,044	2.0%
2023	7,533	14.8%
2024	6,762	13.3%
2025	7,799	15.3%
2026	8,177	16.0%
2027	6,647	13.0%
2028	4,756	9.3%
2029	6,763	13.3%
2030	1,478	2.9%
TOTAL	50,959	100%

Strong Business Case for Going Electric:
High-mileage VFH drivers can generate significant economic benefits by transitioning to electric vehicles (EVs). First, EVs generally require less maintenance than traditional gasoline vehicles as they have fewer moving parts, which results in lower service costs over the lifetime of the vehicle. For example, the absence of oil changes, exhaust systems, and multi-speed transmissions in EVs contribute to reduced maintenance expenses. Second, drivers will experience substantial fuel savings due to the lower cost of electricity compared to gasoline. This difference is particularly pronounced for high-mileage drivers, who would otherwise spend heavily on gas.

4. Impact Potential

Carbon Emission Reduction Potential:
The transportation sector in Toronto is a significant contributor to the city's carbon footprint, accounting for approximately one-third of total emissions. Within this sector, the Vehicle-for-Hire (VFH) industry is responsible for 4-6% of transportation emissions. The introduction of electric vehicles (EVs) into the sector is pivotal in helping the GTHA reach its goal of being carbon neutral by 2050. The average emissions for an EV are remarkably low at around 9.4gr/km, in stark contrast to Internal Combustion Engine (ICE) vehicles that emit approximately 205gr/km, meaning EVs can reduce VFH operating emissions in the GTHA by greater than 95%. At a scale of 5000 drivers, this initiative has the potential to directly mitigate 80,855 tons of carbon emissions on an annual basis.

Multiple Benefits - and Health, Equity:
EVs significantly improve air quality in surrounding communities by emitting zero tailpipe pollutants, which is crucial for reducing respiratory problems, allergies, and other health issues commonly associated with emissions from ICE vehicles.

Electrifying the VFH sector is a crucial strategic move for equitable distribution of EV infrastructure:
Typically, higher-income residents have driven EV adoption, causing public charging infrastructure to primarily develop in affluent neighborhoods. Nonetheless, a significant number of VFH drivers reside in lower-income communities. TAF has developed a targeted EV charging initiative that actively seeks to address this disparity by focusing

on deploying funds from Canada's Zero Emission Vehicle Infrastructure Program (ZEVIP) towards installing Level 2 chargers in Multi-Unit Residential Buildings (MURBs) that have a high density of VFH drivers. Utilizing anonymized city demographic data, the EV Station Fund team at TAF can identify and proactively target suitable buildings for this infrastructure development. By providing VFH drivers with more convenient and cost-effective at-home charging options, TAF's initiative effectively incentivizes them to choose EVs over ICE vehicles, fostering a fair and inclusive transition to electric mobility while ensuring that the benefits of clean transportation are shared equitably across the community.

Scalability - a Catalyst for Broader EV Adoption:
The VFH sector is positioned to take a strategic leadership role in accelerating the adoption of electric vehicles (EVs) within the wider community. Serving as an "anchor tenant," the VFH sector can catalyze substantial investment in the development of charging infrastructure across the city, addressing the prevalent chicken-and-egg dilemma surrounding EVs and charging stations. The dilemma often unfolds as potential EV buyers hesitate due to insufficient charging options, while the private sector is tentative to invest in charging infrastructure without a significant number of EVs on the road. Electrifying high-mileage VFH vehicles generates a consistent and predictable demand for EV charging, promoting investments in infrastructure and encouraging the public to consider EVs as a viable option. The visible prevalence and normalizing effect of EVs in the VFH sector offer residents a familiarization opportunity, demystifying EVs and their operations, and showcasing their benefits first-hand to passengers. This increased visibility and firsthand experience with EVs not only normalize their presence but also enhance their appeal among potential buyers, ultimately creating a ripple effect that supports and sustains the business case for further investments in public charging infrastructure, thereby reinforcing a positive cycle of continued EV adoption and infrastructure development.

Please refer to the confidential attachment for further information on the opportunity.

CONTACT

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SIGNATURE

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ATTACHMENTS

Confidential Attachment 1 – Direct Investment Request 2023 E