



TORONTO PARKING AUTHORITY

EV Charging Q1 2023 Business Review

Phil Safos, Director Business Development & Partnerships
Arjun Mandyam, Director Financial Planning & Analysis

Audit and Risk Management Committee
May 5, 2023

Agenda

PURPOSE:

To review Q1 2023 financial performance of TPA's new off-street EV Chargers

CONTENT:

1. 2022 Off-Street EV Charger Delivery
2. Q1 2023 Financial Performance
3. 2023 Priorities

Executive Summary

Management Developed Forecast in 2022 to Establish Baseline Expectations

3 Financial Scenarios Were Developed to Forecast EV Charging Business Performance from 2023 to 2025

117 EV Chargers Installed at 11 Off-Street Facilities

EV charger installations began in 2022 and all 117 off street chargers were operational and available for customer use beginning in January 2023

Q1 2023 EV Charging Financial Performance Exceeding Forecast

Average Transaction Values exceeding forecast; operating costs lower than expected; and, average charger utilization is below forecast based on first 3 months of operation

Marketing Plan and Strategic Partnerships Will Accelerate Growth

Balance of 2023 will focus on growth through omni channel marketing initiatives as well as progress on securing strategic partner(s)

Comprehensive Financial Analysis Developed in 2022

- TPA undertook a financial analysis and developed a 2023 forecast. Operating cost assumptions included:
 - **Utility costs** as a direct variable expense based on Toronto Hydro's rate table.
 - **Network Operator Transaction Fees** as a direct variable expense. This is tied to the collection and processing of session fees and includes costs associated with credit card processing.
 - **Global Management Services (GMS) Subscription Fees** as a fixed direct expense and includes cellular network connectivity, real time monitoring dashboards, and 24/7 customer support.
 - **Repairs and Maintenance** as a fixed direct cost used for modelling purposes and included a conservative assumption of 10% of equipment book value annually.
 - **Warranty costs** as a fixed direct expense. Standard warranty assumed for L2 chargers (parts & labour) while extended warranties assumed for L3 chargers given technical complexity and value.
- Revenue assumptions were based on price/rates, length of stay, and number of daily transactions per available charging port.

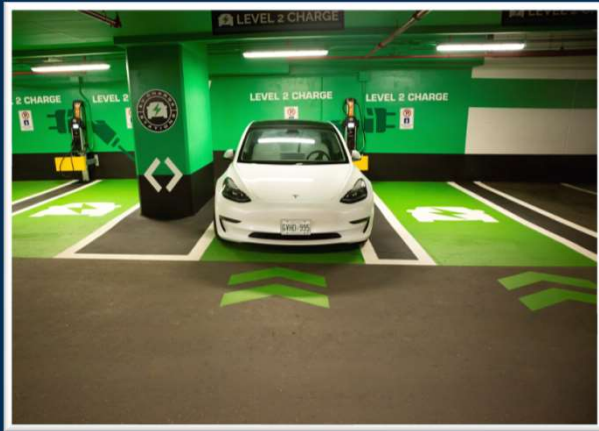


3 Scenarios Developed to Forecast EV Charging Business Performance 2023-25

Low, Medium and High scenarios were developed to provide sensitivity analysis of varying EV charging utilization rates. Assumptions summarized below:

	Low	Medium (Centre Cut)	High
Revenues	Low 4.2% Utilization L2 (in 2023/24, 6.7% in 2025) 2.8% Utilization L3 (in 2023/24, 7% in 2025)	Medium 8.3% Utilization L2 8.3% Utilization L3	High 18.8% Utilization L2 16.7% Utilization L3
	Varying assumptions driven by: - Utilization rates - Phased installation of chargers 2023-2025 in June, September and December of every year - Pricing for L2 and L3 charging driven by hourly price and length of stay (LOS) - Associated parking revenue driven by hourly price and LOS		
Operating Expenses	Assumptions included: - Utility costs based on Toronto Hydro kWh rate table for both electricity consumption and transmission for L2 and L3 charging (variable) - Network Operator Transaction Fees based on 15% of charging revenues (variable) - GMS Subscription Fees based on annual cost per Charger (fixed) - Repairs and Maintenance based on 10% of asset cost (including grants) annually (fixed) - Warranty costs based on per unit cost annually (fixed)		

117 EV Chargers Installed at 11 Off-Street Facilities



TPA Now Operating Mix of Flo and ChargePoint Equipment

Toronto Hydro-Led Installations:

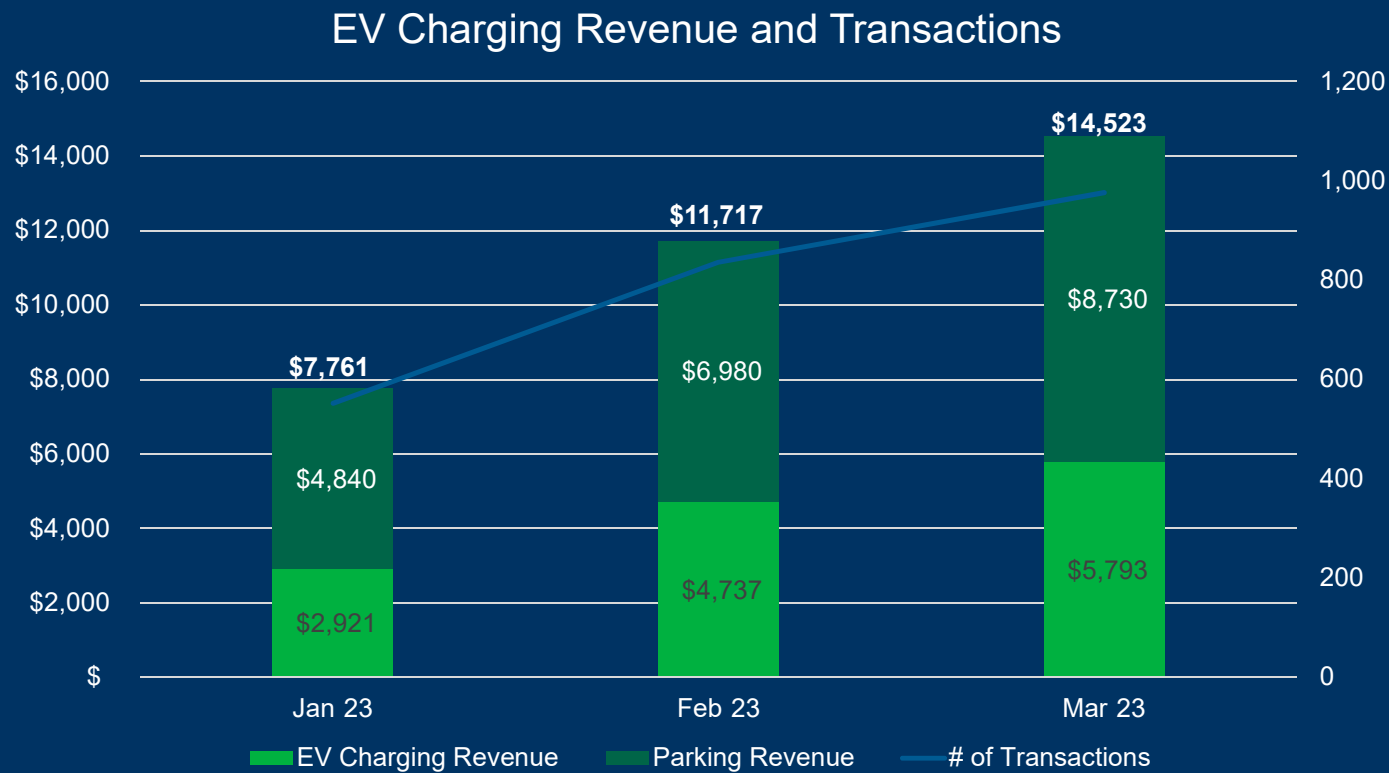
CP#	Address	Type of EV Chargers
13	20 Delisle Ave	(4) 7.2 kwh Flo Core + L2 Chargers
34	20 Dundas Sq.	(8) 7.2 kwh Flo Core + L2 Chargers
36	110 Queen St W.	(8) 7.2 kwh Flo Core + L2 Chargers (3) 50 kwh Flo SmartDC L3 Chargers
262	10 Soho St.	(4) 7.2 kwh Flo Core + L2 Chargers
286	51 Dockside Dr.	(5) 7.2 kwh Flo Core + L2 Chargers
32 Total Chargers @ 5 Locations		(29) 7.2 kwh Flo Core + L2 Charger (3) 50 kwh Flo SmartDC L3 Chargers

TPA-Led Installations:

CP#	Address	Type of EV Chargers
29	75 Holly St	(24) 7.2 kwh Flo Core + L2 Chargers (4) 19.2 kwh Flo CoRE + MAX L2 Chargers (1) 50 kwh Flo SmartDC L3 Chargers
43	2 Church St	(20) 7.2 kwh Flo Core + L2 Chargers (4) 19.2 kwh Flo CoRE + MAX L2 Chargers (4) 50 kwh Flo SmartDC L3 Chargers
51	365 Lippincott St	(10) 19.2 kwh Flo CoRE + MAX L2 Chargers
87	14 Arundel Ave	(8) 19.2 kwh Flo CoRE + MAX L2 Chargers
110	1612 Danforth Ave	(2) 19.2 kwh Flo CoRE + MAX L2 Chargers
304	9 Wellesley St W.	(8) 7.2 kwh ChargePoint CT4000
85 Total Chargers @ 6 Locations		(44) 7.2 kwh Flo Core + L2 Charger (8) 7.2 kwh ChargePoint CT4000 (28) 19.2 kwh Flo CoRE + MAX L2 Chargers (5) 50 kwh Flo SmartDC L3 Chargers



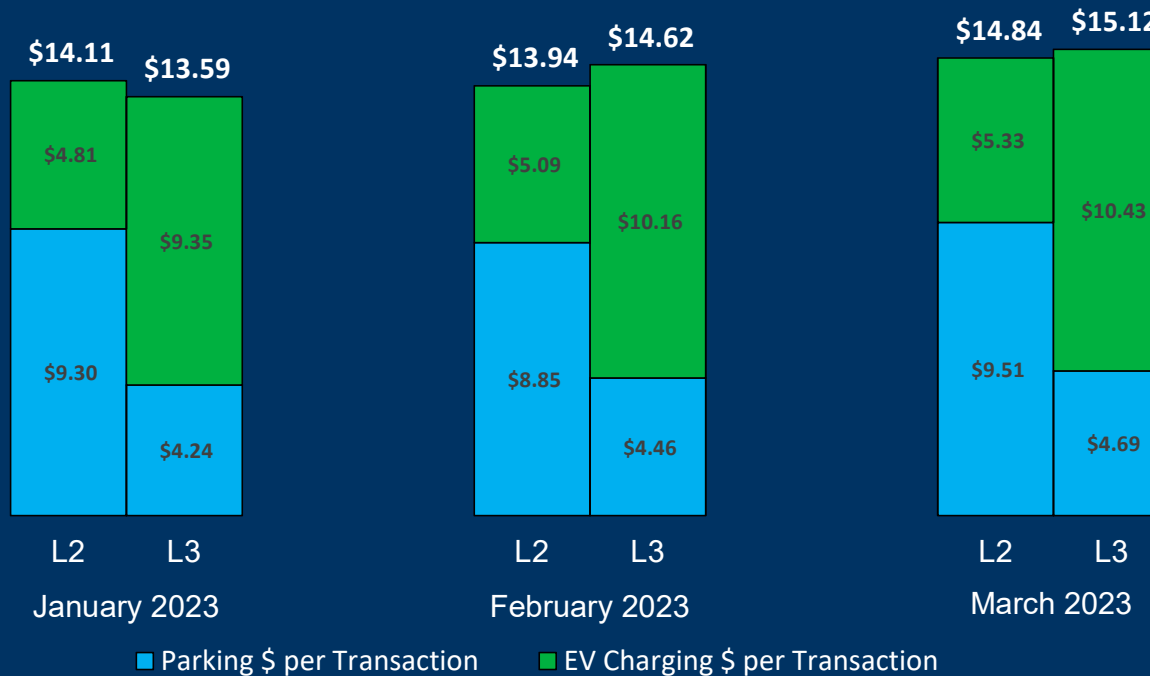
Q1 Saw Nearly 2,400 Transactions and \$34K in Revenue



Note: Includes Revenues from 5 Toronto Hydro Pilot Sites (32 EV Chargers)

Average Transaction Value is ~\$14-15

Average Revenue per Transaction

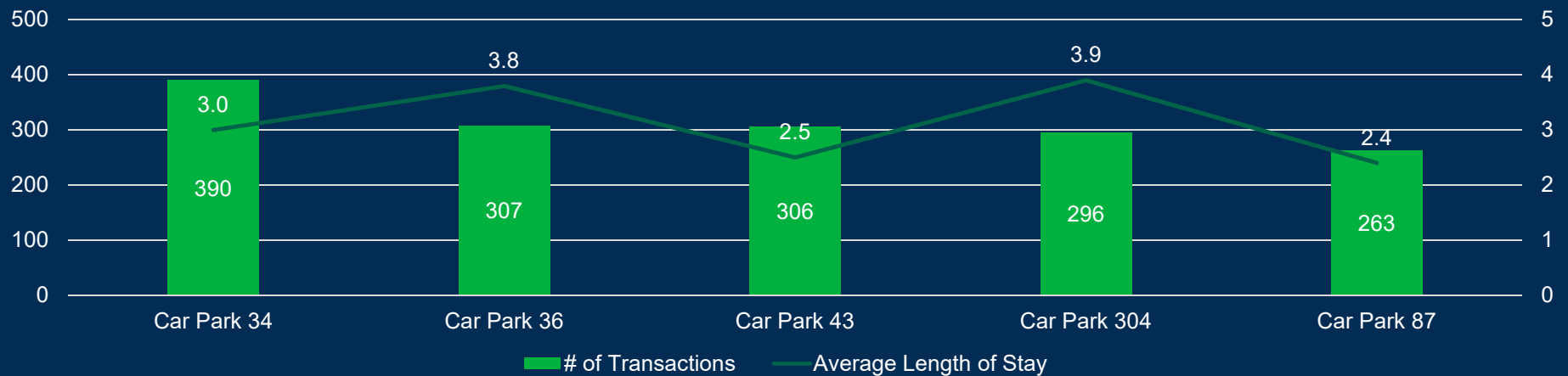


Q1 2023 Highlights:

- Average of 26 transactions per day
 - 23 daily for L2
 - 3 daily for L3
- Average Length of Stay is 3+ hours:
 - 3.4 hours for L2
 - 0.75 hours for L3

Dundas Square (CP34) Busiest TPA Car Park

Q1 2023 Top 5 Car Parks Based on Total EV Charging Transactions



Car Park	Total Transactions	Average Transactions per Day	Average Transaction Duration	Total Charging Hours	Total kW Distributed
34 (20 Dundas Square)	390	4.3	3.0 Hrs	1,170 Hrs	4,330 kW
36 (110 Queen St W)	307	3.4	3.8 Hrs	1,150 Hrs	6,670 kW
43 (2 Church St)	306	3.4	2.5 Hrs	753 Hrs	5,290 kW
304 (9 Wellesley St W)	296	3.3	3.9 Hrs	1,140 Hrs	6,110 kW
87 (14 Arundel Ave)	263	2.9	2.4 Hrs	629 Hrs	4,210 kW

Actual Revenues Exceeding Forecast

2023 Forecast Key Revenue Assumptions vs. Q1 2023 Actuals

Price

01

Average Transaction Value (ATV):

Includes both EV charging and parking revenues based on length of stay and time of day

2023 Forecast

\$7.23 ATV

Q1 2023 Actuals

\$14.38 ATV (▲ 99%)

Operating Costs

02

Average Operating Cost per Charging Port:

Fixed and variable expenses including utilities, repairs and maintenance, warranty costs and network operator transaction fees

2023 Forecast

\$210/month

Q1 2023 Actuals

\$50/month (▼ 76%)

Utilization

03

Daily Average Time Utilization per Charging Port:

Average time EV chargers are in use per day per charging port

2023 Forecast

2 Hours

Q1 2023 Actuals

0.7 Hours (▼ 65%)

Operating Margin above target at 54% vs. 15% forecast

March 2023 YTD P&L:

Toronto Parking Authority
Electric Vehicle Charging P&L
March YTD 2023

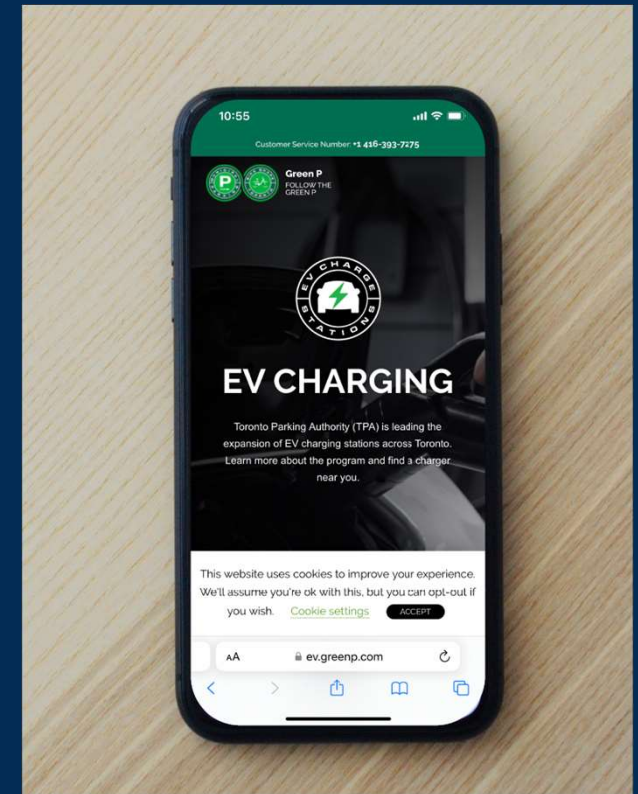
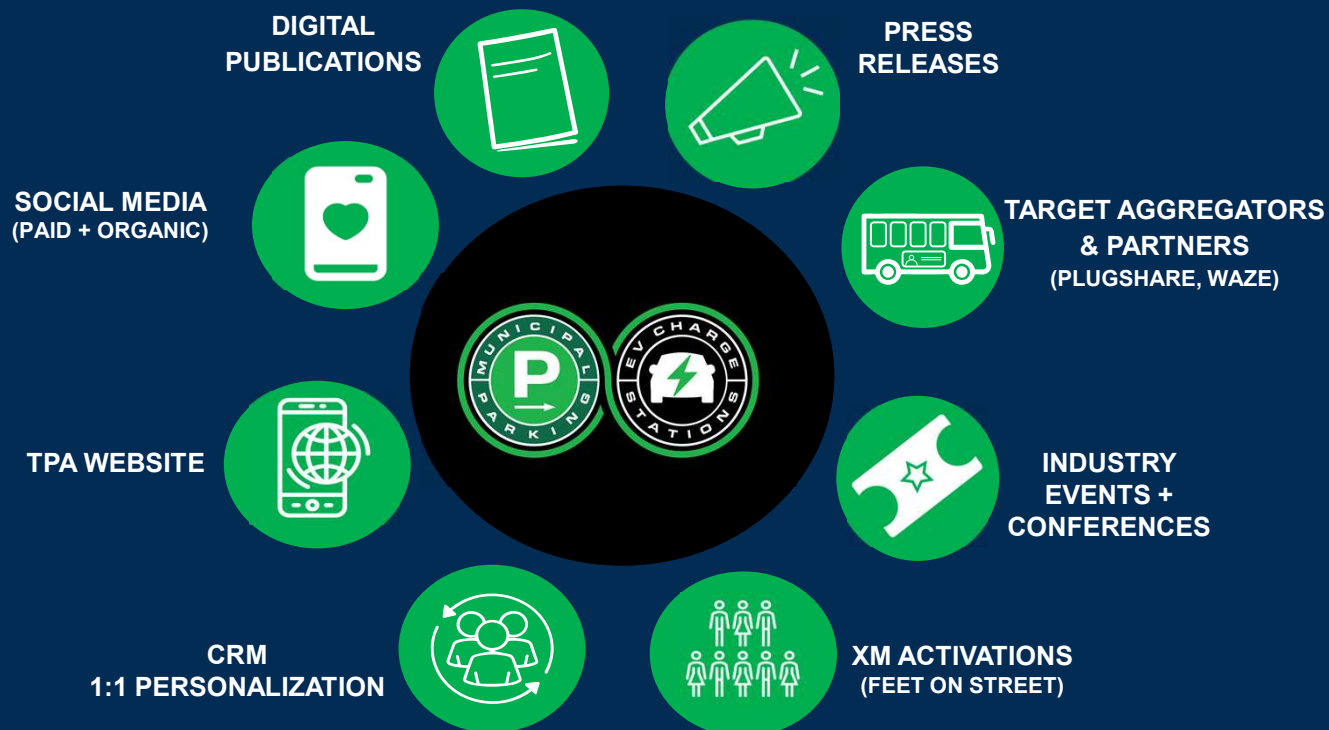
Revenue	Jan-23	% of Charging Sales	Feb-23	% of Charging Sales	Mar-23	% of Charging Sales	Mar YTD 2023	% of Charging Sales
Charging Revenue (excludes Toronto Hydro 5 Pilot Sites)	1,291	100%	2,460	100%	3,126	100%	6,877	100%
Associated Parking Revenue	4,840		6,980		8,740		20,560	
Total Revenue	6,131		9,440		11,866		27,437	
Utilities	1,152	89%	1,371	56%	2,236	72%	4,759	69%
Network Operator Transaction Fee	183	14%	355	14%	454	15%	991	14%
GSM Subscription Fee	1,551		1,551		1,551		4,654	
EV Warranty Charges	497		497		497		1,491	
EV Charger Insurance	239		239		239		716	
Direct Expenses	3,622		4,013		4,976		12,611	
Operating Income	2,509		5,427		6,890		14,826	
Operating Margins %	40.9%		57.5%		58.1%		54.0%	
Depreciation	7,595		7,595		7,595		22,785	
Net income	(5,086)		(2,168)		(705)		(7,959)	

Highlights:

- 58% operating margin in March 2023, 54% for Q1 2023
- Parking revenue exceeding EV charging revenue
- Charger utilization expected to ramp up over time
- Direct operating costs expected to grow over time (e.g. no repair and maintenance expenses incurred to date)
- Indirect operating costs are excluded from P&L and form part of Car Park cost structure

\$ATV and operating margins above forecast; Volumes and operating costs below forecast.

Omni-Channel Marketing Campaign Launching Week of May 15



Strategic Partnership(s) Solicitation Now Underway



EV Charging Expression of Interest

THE POWER OF PARTNERSHIP

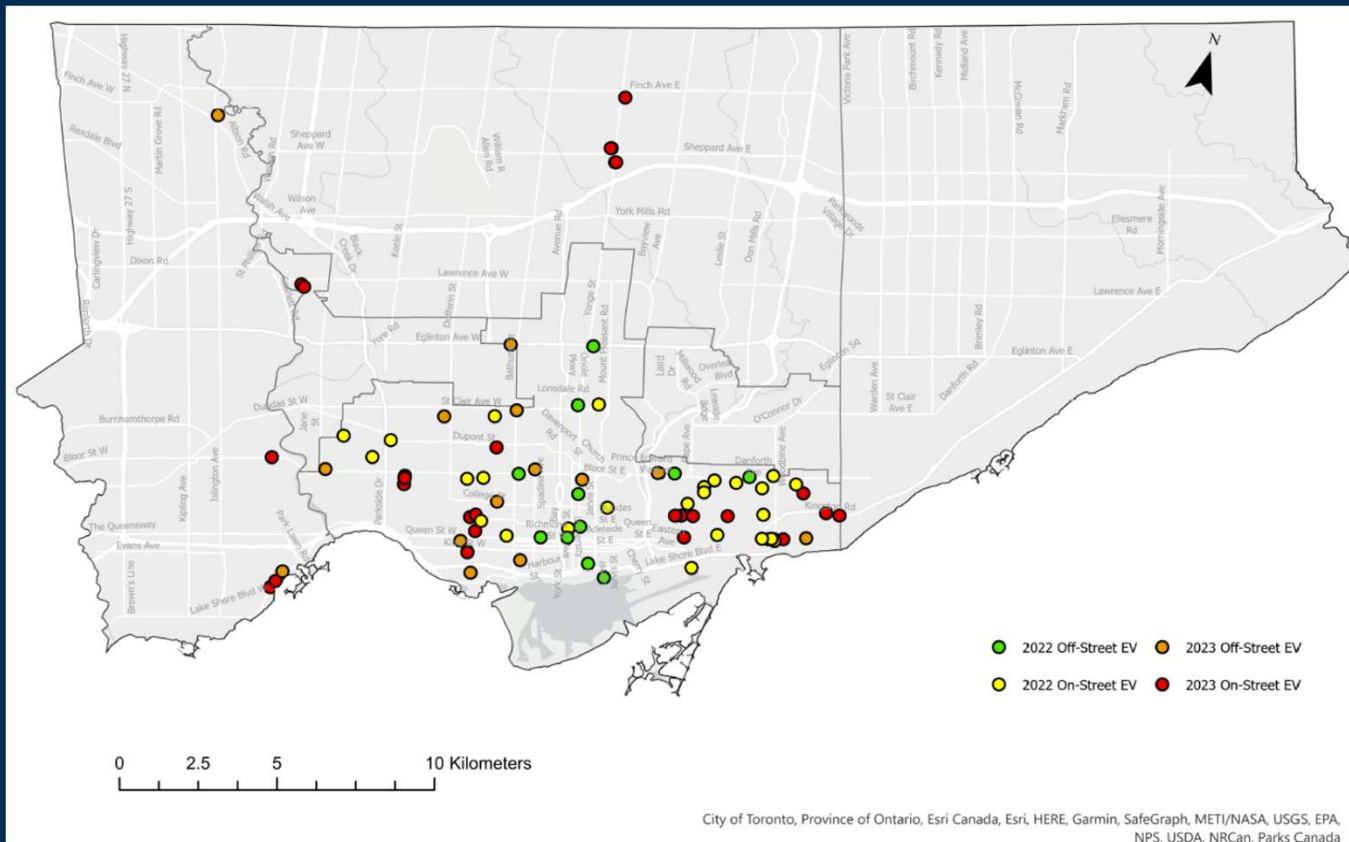
TPA is looking to assemble a consortium of like - minded partners to provide the necessary infrastructure, operational support and expertise in *marketing and analytics* to deliver best-in-class EV charging solutions and accelerate EV adoption in the City of Toronto and broader region.

An illustration of a dark blue electric car being charged by a person in a green shirt. The car is connected to a charging station. In the background, there are wind turbines, a city skyline, and a green location pin icon. The entire illustration is set against a light blue and green background with stylized clouds and trees.

Highlights:

- Expression of Interest released March 31/23
- 70+ individual private sector companies have signaled interest to date
- Discovery meetings starting mid-May

175 Off-Street and 50 On-Street New EV Chargers in 2023



Highlights:

- Currently in 8 wards, growing to 12 wards by end of 2023
- Construction beginning May 2023
- Up to 10% of new Off-Street EV chargers will be DC fast chargers

THE FUTURE IS ELECTRIC

