


# TransformTO



## City of Toronto Electric Vehicle Strategy **Summary of Public and Stakeholder Consultation**



## Introduction

Toronto's first Electric Vehicle (EV) Strategy was approved by City Council on January 29, 2020. The Strategy identifies a range of actions to increase EV adoption in Toronto and support the achievement of a key goal in the City's TransformTO climate action strategy: 100 per cent of vehicles will be powered by zero carbon energy sources by 2050. With a focus on the electrification of passenger vehicles (cars, vans, trucks and SUVs) the Strategy identifies 10 actions the City can take to: increase charging availability, address cost and convenience barriers, increase public awareness and education, and create economic opportunities that will benefit the local economy.

The EV Strategy is available at: [toronto.ca/electric-vehicle](https://toronto.ca/electric-vehicle).

This report provides an overview of public and stakeholder engagement undertaken during development of the EV Strategy.

## EV Strategy Development

Between Q3 2018 and Q4 2019, City of Toronto staff worked with two consultants to develop the EV Strategy in two phases.

### Phase 1 – Assessment Phase

In Q3 2018 and through an Informal Request for Quotation procurement call, Pollution Probe in partnership with the Delphi Group were contracted to lead the work on an initial 'Assessment Phase' using a Strategy Framework that had been developed by the City's Electric Vehicle Working Group as a guideline.

The Strategy Framework outlined the goals, objectives, areas of alignment and areas of opportunity to be incorporated into the final strategy. The framework was the result of collaboration between the Environment & Energy Division and the Electric Vehicle Work Group (EVWG). It incorporated feedback from external stakeholders received during a consultation held in May 2018. The consultation session included academic experts, EV owners, and representatives from numerous non-profits and community organizations working on EV promotion in Toronto. A summary of this stakeholder engagement is provided in the Appendix to this report.

The Electric Mobility Assessment Phase Report was the culmination of a process to outline the considerations to incorporate into the strategy, while also establishing a baseline that subsequent actions and strategies could be assessed against. The objectives of the Assessment Phase were to:

- Conduct a comprehensive review of the state of electric mobility in Toronto;
- Identify barriers, opportunities, and best practices with regard to electric mobility;
- Identify and preliminarily engage key stakeholders who may be willing to contribute to the development of the subsequent strategy; and
- Summarize and present findings in a project report.

As part of the Electric Mobility Assessment Phase, an additional stakeholder consultation event was held in November 2018.

The final Electric Mobility Strategy Assessment Phase was completed in Q4 2018 and can be found here, along with the Strategy Framework: [toronto.ca/electric-vehicle](https://toronto.ca/electric-vehicle).

## Phase 2 – EV Strategy development

In Q2 2019 and through an RFP process, Dunskey Energy Consulting ('Dunskey') was contracted for the below scope to support the EV Strategy development:

- Review previous work including the Strategy Framework and the Strategy Assessment Phase reports;
- Conduct secondary research (other municipal EV strategies);
- Review initiatives currently underway at the City of Toronto and led by several divisions;
- Conduct a qualitative approach: through taking a collective approach to co-create the Strategy with a broad cross section of stakeholders and the public with a focus on equity issues; and,
- Conduct a quantitative approach: through a mapping exercise using Dunskey's Electric Vehicle Adoption model.

## Public and stakeholder consultation overview

Prior to and during EV Strategy development, the City engaged the public and stakeholders in five in-person sessions and through an on-line survey. The primary objective of the consultations was to solicit feedback on prioritizing actions, while also identifying areas of opportunity, gaps or potentially inequitable social or health outcomes, roadblocks, or key considerations for implementation.

Key consultation findings:

- The City should lead by example by implementing its own actions while also advocating and supporting other levels of government to implement actions;
- Residents who have no access to a private overnight parking space (e.g. garage orphans), or who live in Multi-Unit Residential Buildings ("MURBs"), are experiencing difficulty in accessing and installing charging infrastructure. Residents shared ideas to resolve these barriers;
- Educating stakeholders and the public remains key;
- Partnerships will help spread awareness; and
- Respondents from the online survey noted that improving charging availability would have the greatest impact.

## Engagement During EV Strategy Development (Phase 2)

During the development of the EV Strategy, three in-person engagement sessions were held – two by invite only with City staff and EV experts (in May and June 2019) and one open to the general public (in June 2019) – as well as a city-wide online survey. Over a hundred stakeholders representing a broad range of industry groups participated in the workshops, including automakers and manufacturers, EV charging infrastructure suppliers, EV technology companies, municipal, provincial and federal government, NGOs, oil & gas, electricity system operators, building owners/property managers and developers, educators, and business/economic groups.

### Stakeholder workshops - May 31, 2019 and June 27, 2019

The primary objective of the stakeholder workshops was to solicit feedback on prioritizing actions, while also identifying areas of opportunity, roadblocks, or key considerations for implementation. Due in large part to the high-level of engagement from stakeholders, these objectives were met.

In addition:

- The large number of participants indicates that there is high interest in EVs;
- Participants' diverse backgrounds provided a variety of opinions and perspectives to inform the Strategy design and implementation plan; and
- Stakeholders were eager to continue collaborating to influence the Strategy's direction and support its implementation.

Important feedback from the workshops included:

- The City should lead by implementing its own actions while also advocating and/or supporting other levels of government to implement actions;
- Equity remains a significant concern for the EV Strategy, however, opportunities exist to provide benefits for all (e.g. cleaner air). In general, the City should prioritize transitioning away from a reliance on personal vehicles, while electrifying those that remain when all other modes of transportation have been exhausted;
- Educating stakeholders and the public remains key;
- The EV Strategy will require both short- and long-term initiatives.
- Key performance indicators would be helpful at both the action and EV Strategy levels.

### Public workshop – June 27, 2019

The objective of the public engagement workshop was also to solicit feedback to prioritize actions, while providing an opportunity for the public to contribute to the Strategy's final design and identify gaps or potentially inequitable social or health outcomes. More than twenty-five citizens participated in a 1.5-hour workshop. Other than input on the strategic actions, key takeaways from this session included:

1. Residents who have no access to a private overnight parking space (e.g. garage orphans), or who live in high-rises (also referred to as Multi-Unit Residential Buildings, or MURBs), are experiencing difficulty in accessing and / or installing charging infrastructure. Residents shared ideas to resolve these barriers, including allowing front-yard parking permits for those who install charging infrastructure, creating an on-street charging hub in neighbourhoods with high concentrations of MURBs, or allowing residents to extend electric wiring from their properties to the street to allow for on-street charging;
2. Opportunities exist to educate citizens;
3. Partnerships will help spread awareness.

### Public online survey – June 24 to July 5, 2019

The City hosted an online public survey, which asked respondents to prioritize EV Strategy actions in each area of opportunity, while also flagging actions for which they perceived equity concerns. The survey received approximately 750 responses by individuals who either live or work in Toronto.

For each area of opportunity, survey respondents identified the following actions as having the highest priority:

- Incentives for residential housing: Explore providing financial incentives (rebates, tax incentives) to support the installation of EV charging infrastructure in homes, apartments and condominiums;

- Advocate for rebates: Advocate for provincial / federal policies that encourage a transition to EVs (including rebates for new and used EVs);
- Corporate fleet: Convert the City’s corporate vehicle fleet to EVs; and
- Related industries: Prioritize investments and technical assistance to attract EV-related industries/businesses.

Across the areas of opportunity, respondents noted that improving charging availability would have the greatest impact.

The public workshop and survey results helped to prioritize the Strategy’s actions.

### **Earlier workshops**

Two workshops were held before development of the EV Strategy, one during the Assessment Phase and one prior to the Assessment Phase.

#### **November 2018: Stakeholder Engagement Workshop**

The purpose was to engage key stakeholders including the City’s Electric Vehicle Working Group (EVWG), industry, academic experts, electric vehicle owners, non-profit organizations and the community in initial conversations about collective electric vehicle goals and objectives and identify potential collaborations.

#### **May 2018: Stakeholder Engagement Workshop**

This was the first of multiple engagement sessions to include external stakeholders to support the development of a Toronto-wide Electric Vehicle Strategy. Participants discussed and provided feedback on the draft Electric Mobility Strategy Framework. A summary of this workshop is provided in the Appendix to this report.

# Appendix

## City of Toronto Electric Mobility Strategy **Stakeholder Engagement Report: What We Heard**

May 23, 2018



## Project Overview

In July 2017, Toronto City Council unanimously adopted TransformTO: Climate Action for a Healthy, Equitable and Prosperous Toronto. Through technical modelling and community engagement, the electrification of transportation, including personal vehicles, was identified as one of the key strategies to meet Toronto's target of an 80% reduction in greenhouse gas emissions by 2050.

The Environment and Energy Division (EED) at the City of Toronto, in partnership with the Electric Vehicle Working Group (EVWG) which includes other City Divisions and organizations, are working together to develop the framework for the forthcoming Electric Mobility Strategy. The Strategy will serve as the roadmap toward the specific actions that Toronto will take to capture emissions reductions potential through the electrification of mobility.

## Purpose of Stakeholder Consultation

The May 23 meeting was the first of multiple engagement sessions to include external stakeholders. As Staff collaborated with the Electric Vehicles Working Group to coordinate programs, pilots and goals, the need arose for the City to begin developing a Toronto-wide Electric Mobility Strategy. Accordingly, Staff consulted with the Electric Vehicle Work Group and developed a draft framework of broad, high-level objectives and priorities which would guide the development of a Request for Proposals (RFP) and subsequent Electric Mobility Strategy.

The **external stakeholders** represented at the May 23 event included academic experts, EV owners, and representatives from numerous non-profits and community organizations working on EV promotion in Toronto.

The **Electric Vehicle Working Group (EVWG)** members who participated in the session included the following organizations and City Divisions: Toronto Hydro, Transportation Services, Toronto Parking Authority (Toronto Parking Authority), Toronto Atmospheric Fund (TAF), and the Environment and Energy Division (EED).

## Engagement overview

### 1. Presentations & Q&A

During the May 23 internal and external stakeholder engagement session, the Environment and Energy Division Staff presented the Low-Carbon Scenario Model compared to current conditions, and discussed the relationship between social equity and TransformTO. Both discussions were followed by Q&A. This is a summary of the discussions and topics covered:

### What we heard

Stakeholders posed the following questions regarding Pilot Projects for On-Street EV Charging stations:

- How are locations for pilot projects chosen?
- Is there an inventory for city-wide locations?
- Who is managing the EV on-street charging stations?
- What are the metrics used to define success?
- Can you foresee this becoming scalable?

Some of the following discussions on the pilot projects were around usage uptake, increased positive support, accessibility, legal considerations, and enforcement measures.

*We asked...*

## 2. Feedback on Objectives – Small Group Discussions

Participants were asked to come prepared to the session with reflections and feedback on the draft Electric Mobility Strategy Framework, which was distributed one week in advance. In small groups of 2 – 4 people, participants discussed their reflections on the draft and recorded suggested changes, edits, and new additions on paper. Participants were also invited to share detailed or additional feedback via e-mail with the project lead.

- What do you like about the framework?
- What about the framework needs to be changed?
- What is missing from the framework that should be included?
- Include **new objectives**, **gaps** in proposed objectives, and a **validation** of existing ones



## What We Heard

The written notes of participants were coded and organized according to theme.

### What we heard on:

#### Implementation Approaches:

- "Free EV parking downtown."
- "Financial incentives to purchase EVs."
- "Align charging with grid capacity."
- "EVs should be permitted in priority/transit lanes."
- "Replace City-owned vehicles with EVs to lead by example."

#### Framework gaps:

- "The Strategy should promote local EV innovation."
- "We need to consider the movements of goods, in addition to people."
- "Car manufacturing and distribution should be captured in this framework."

#### Goal Setting:

- "Establish goals for [EV] convenience & use-ability."
- "What does success look like? Needs more precise targets and metrics."

#### Consultation & Education:

- "Build awareness and educate the public."
- "Continue to engage with stakeholders including NGO and industry."

## 3. Areas of Opportunities - Idea Rating Frames

Following the small group discussion exercise, participants were asked to rotate through tables to discuss with others and record their ideas for specific actions that the City could use to operationalize the 5 Areas of Opportunity:

- A. Policy & Regulation
- B. Research, Community Awareness & Behaviour Change
- C. Financial & Non-Financial Incentives
- D. Availability of Charging Infrastructure
- E. Understanding and Developing the EV Industry, Workforce, and Training

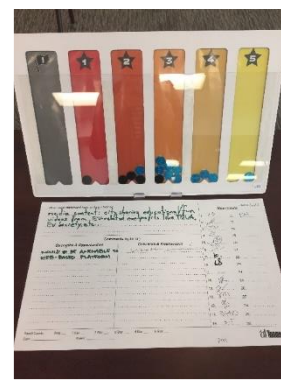
### We asked:

- What **specific actions** could the City take to help meet our Electric Mobility Goals?
- What are some of the easier & high impact action ideas?
- What are your top of mind suggestions?

Participants were also invited to share ideas for action not captured within these 5 areas, or to suggest new areas.

After spending 5 minutes at each Area of Opportunity, the ideas and suggestions were collected by Staff and displayed on a set of tables. Alongside each idea, Staff erected a "polling station" where other participants could rank their perspectives on the importance of that idea. Participants could drop a token into one of 5 slots, with slot 1 meaning "This is not a priority", and slot 5 meaning "This is a top priority".

Internal stakeholders were assigned black tokens, and external stakeholders were assigned blue tokens. This was done to identify ideas or issues that internal vs. external stakeholders might hold different positions on. Ultimately, no such major discrepancies were identified.



### What We Heard

NOTE: The themes, ideas, and comments featured below have been paraphrased to form complete sentences, clarify language, or capture similar views expressed in multiple comments. Further, the data below represents only a small sample of the 73 ideas that participants generated and ranked. These examples do not represent the most popular ideas, but rather, they have been chosen to show the wide range in priorities and popularity.

This technique allows staff to collect structured, quantitative and qualitative feedback from participants, and to gain a sense of their priorities. The following are some examples of ideas that were generated including their associated level of priority.

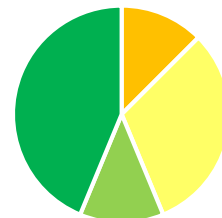
Idea	Comments	Rating
<p><b>Availability of Charging Infrastructure</b></p> <p><i>"Create a city-wide fast charging network to support future electric vehicles, fleet vehicles, transport trucks, etc."</i></p>	<p>"DCFS should be at the outskirts of the city."</p>	<p><b>4.7/5</b></p> 
<p><b>Policies and Regulations</b></p> <p><i>"Strengthen green taxi requirement to support EV adoption and extend to Uber, Lyft, etc."</i></p>	<p>"Could also offer incentives such as tax breaks."</p>	<p><b>4.4/5</b></p> 
<p><b>Financial &amp; Non-Financial Incentives</b></p> <p><i>"Free on-street parking for electric vehicles."</i></p>	<p>"EV or not, we shouldn't promote private vehicles over transit or active transportation. Maybe a discount instead of free?"</p> <p>"This isn't fair for people who can't afford EV's."</p>	<p><b>4.2/5</b></p> 
<p><b>Research, Community Awareness &amp; Behaviour change</b></p> <p><i>"Engage NGOs (EG EV Society, Plug n Drive, TEVA, Pollution Probe WEV) to deliver EV education"</i></p>	<p>Participants shared the names of their respective organizations, indicating willingness to participate in such initiatives.</p>	<p><b>4.1/5</b></p> 

### **Innovation / New Technology**

*"Encourage V2G technology deployment - Use Evs as battery storage to enable renewable energy integration"*

Dependant on OEM cars

3.9/5



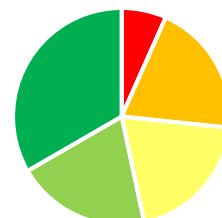
### **Financial & Non-Financial Incentives**

*"The City could finance car-share services in low-income neighbourhoods."*

"Could provide incentives to companies rather than financing."

"This sounds expensive."

3.9/5



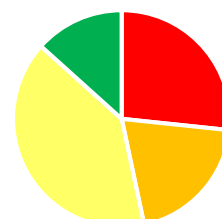
### **Understanding and Developing the EV Industry, Workforce and Training**

*"Each electric bus costs >\$1M. We should mandate a retrofit of existing diesel TTC buses in Toronto with local technology and work force."*

"This could create jobs and foster local innovation."

"Would this really be cheaper than buying new buses?"

2.5/5



### **Next steps**

The valuable ideas and feedback captured from the discussions and activities during the session will be considered in the creation of the RFP and subsequent Electric Mobility Strategy.

During the development of the Strategy, there will be more opportunities for public participation, which will support the creation of a comprehensive strategy. The presentation of the Strategy to City Council is planned for the fourth quarter in 2019.