

Electric Vehicle Strategy Workshop

Group Discussion Summary Notes

Feedback and Next Steps from Nov 8th , 2019 Workshop



Group Sessions

Focus of November 8th workshop:

Gather input on barriers, opportunities, KPIs:

- EV Charging Infrastructure
- Green Fleet
- Education and Advocacy
- Regional EV Activities

	Action 1	Action 2	Action 3
What are the potential obstacles?			
What are the way to overcome obstacles?			
How to measure progress? KPIs			



Clean Air Partnership

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
1. Partnership/Advocacy			
Bring together stakeholders to advocate for more EV charging programs/incentives with provincial and federal governments	Provide input to CAP on the asks/strategy for asks	Identify voices that would lend support to such an effort; Invite to Workshops and Webinars; Draft letters on behalf of the coalition/identify target/process for ask	Utilities, Developers, Fleet Managers, EV service providers, Manufacturers, Ontario Good Roads Association, Province, Feds, PlugnDrive

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
1. Partnership/Advocacy			
Advance tax rebates, vehicle registration rebates; Augment incentives with a program to retire older vehicles	Identification of the asks/policies/incentives that would drive the uptake of EV charging we are seeking	Facilitate the consensus based ask across the network	Developers/Utilities/ EV Charging companies/ Building Owners/ PlugnDrive

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
1. Partnership/Advocacy			
Work with local hydro utility on planning for greater EV uptake, charging needs/infrastructure & capacity issues	Identify utility and staff that would be good to consult with and bring into this effort	Set up mechanisms for utilities and other stakeholders to explore this topic and track and share issues/concerns/questions	Toronto Hydro, Alectra Utilities, Burlington Hydro , Elexicon Energy Inc., VCT group, etc..

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
1. Partnership/Advocacy			
Establish a process with the utility in your jurisdiction for developers to alert the utility when major charging infrastructure projects occur	Exploration if there is an ability to place that requirement/ask as part of the planning process or some other mechanism where this can be put into practice	Explore what the options may be to advance this within municipal requirements/utility requirements/etc.	Developers/ Utilities

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
1. Partnership/Advocacy			
Hydro rate discounts for night time charging/pricing consistency and fairness	Provide input you may have to CAP	Compile municipal/utility feedback on this effort/consult with stakeholders on feasibility and structure to advance and report back to group	Utilities/OEB/Ministry of Energy, Northern Development and Mines/EV charging companies

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
1. Partnership/Advocacy			
Parking fines for improper use of EV charging spots Private members bill		Share info on private member bill on EV charging; challenges/approaches related to enforcement; provide feedback to private members bill	Province, EV charging companies

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/Obstacles/Notes
1. Partnership/Advocacy			
Encouraging partnerships between car companies/dealers and EV charging suppliers to sell bulk EV/charging packages		Research where this is being advanced elsewhere/Identification and outreach to key stakeholders	EV charging companies/Dealerships/PlugnDrive
Engage with Chambers, BIAs innovation centers	Identify contacts that should be reached out to, share with CAP	Set up an EV workshop specifically geared towards business audience	Toronto Region Board of Trade/Ontario Chamber of Commerce/

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/Notes
2. EV Charging			
2.1 Existing Buildings			
Identifying barriers/costing info and developing key considerations guidance document or resources to address them	Inform CAP of any input you may have or resources you may be aware of on this action	Research/share best practices guidance	
Inclusion of EV charging as an eligible measure for LIC/PACE program	Ensure that EV chargers are an eligible measures in LIC/PACE programs	Ensure that EV chargers are an eligible measure in LIC/PACE programs	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders /Obstacles/ Notes
2. EV Charging			
2.1 Existing Buildings			
Exploration of Retrofit code and inclusion of EV requirements		Exploration of leading practices re retrofit codes and EV actions in other jurisdictions	
Innovative financing mechanisms for EV charging in existing buildings/tracking of public EV charging business models occurring		Exploration of leading practices in other jurisdictions	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders /Obstacles/ Notes
2. EV Charging			
2.1 Existing Buildings			
EV readiness in social/affordable housing. Equity lens application to EV strategy	Reaching out to social housing providers/managers	Equity lens application to EV strategy effort/workshop	CUSP; USDN



Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.2 New Buildings			
Requiring EV charging in new homes through Green Development Standard (GDS) or Parking Requirements	Exploration across departments on incorporating EV readiness requirements into GDS/Parking Requirements/Report back to group on feedback and direction	Provide guides/metrics for developing GDS Provide case studies/best practices	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.2 New Buildings			
Verification processes for ensuring compliance with EV readiness requirements for Building staff/municipality	Exploration with building staff on feedback they would have on this effort	Facilitate feedback across municipalities	



Tasks	Municipal Efforts	CAP Efforts	Stakeholders/Obstacles/Notes
2.2 New Buildings			
Engage with developers to identify/address issues/increase their buy-in re increasing EV readiness/charging in new buildings	Identify developers that we should consult with/top questions seeking input from developers on	Organize developer consultations. Research/find/provide: Ontario-specific costing study for EV-ready building codes; best practices from other jurisdictions	BILD, OHBA, Tridel, Great Gulf Homes, Mattamy Homes

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/Obstacles/ Notes
2.2 New Buildings			
Explore reduced parking requirements for developers if they are EV ready	Explore this action within municipality and report back to group on feedback received	Follow up with municipalities on consultations that are occurring within their municipalities and create a mechanisms for that input to be shared across network	Based on feedback from Municipalities explore this with developers

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.2 New Buildings			
Development of a user policy for EV chargers for condo boards and building managers	Provide feedback on this action; identify stakeholders who should be brought into this action	Exploration of resources already available; Targeted engagement and training: developers, property managers, and strata/tenant boards. Exploring of parking transfer and billing issues that MURB and Commercial sector properties will need to address	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.3 Public Charging, Institutional and Private Sector Charging			
Exploring EVSE at outdoor parking lots and on street/leading practices on EV charging placement	Discussion with parking department/staff on EV charging being incorporated into public parking	Exploration and sharing of how other municipalities are incorporating EV charging and public parking. Placement	EV charging companies partnering with municipalities on public charging

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.3 Public Charging, Institutional and Private Sector Charging			
Work with schools boards and explore how they are addressing EV charging	Notify CAP of contacts that can be reached out to for this effort	Track how other school boards in BC and Quebec are advancing this. Models in US and EU that may be transferable to Ontario	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.3 Public Charging, Institutional and Private Sector Charging			
Identifying high priority areas for public EV charging; business models for fast charging hubs; tracking where private enterprises are installing charging infrastructure			

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.3 Public Charging, Institutional and Private Sector Charging			
Bylaw changes that may be required to allow for street parking or public charging requirements that can take the place or augment building EV charging requirements/efforts	Exploration with planning staff on how public charging access would work with private EV charging/readiness requirements	Exploration and sharing of leading practices from other jurisdictions/exploration with developers/building owners and managers	<u>Municipal EV Guide, provides examples from other jurisdictions</u>

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
2.3 Public Charging, Institutional and Private Sector Charging			
EV Charging sharing opportunities/improving public EV charging sharing/wayfinding/signage		Research EV charging sharing opportunities	
Other enabling actions: Promoting private charging sharing; Reduced parking permits cost; Adopting Low Emission Zones; Enabling off peak delivery			Provide examples of Low Emission Zones frameworks (ex. Denmark)

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
3 Green Fleet		CAP & Peel Region	
Establish Fleet EV Vehicle Targets	Exploration of EV targets with fleet staff and within Fleet Plans	Compilation of leading EV targets for Canadian municipalities/governments	
Establish a GTA Fleet Manager Group	Identify Fleet contact and notify CAP of contact	Facilitate and support network	FleetCarma; NAFA; FleetChallenge

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
3 Green Fleet		CAP & Peel Region	
EV fleet outreach resources/EV myths and perceptions that need to be addressed	Inform CAP/Peel Region of myths/perceptions/barriers that need to be addressed	Develop resources/actions to address those myths/perceptions /issues	
Exploration of Joint Procurement opportunities/issues/funding streams	Discussions with procurement and fleet on issues related to joint procurement of EVs and EV charging equipment	Exploration of funding opportunities associated with joint procurement of vehicles	FCM, TAF

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
3 Green Fleet		CAP & Peel Region	
Large vehicle low carbon opportunities	Fleet vehicles that are high on the radar for conversion but no vehicles available at present	Exploration of where the market is at and where it is going re lower carbon large vehicles	
Life Cycle Business Case Development	Align with leading EV business case methodologies/Provide EV business cases to CAP/Peel Region	Research and share business case development	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders/ Obstacles/ Notes
3 Green Fleet		CAP & Peel Region	
Training/ Engagement: Training fleet drivers; Training programs and certification for municipal mechanics on maintenance EVs and EVSE; Test driving for fleet managers Use corporate fleets as a community engagement tool	provide input to CAP/Peel Region on fleet needs/efforts that would be of value	Research/find/provide: technologies of interest (collective environmental scan) for municipal operations (incl. after market)	FCM
Progress reporting of Fleet Efforts	Identification of Indicators that can be tracked to monitor progress	Facilitation of consistent progress report metrics across jurisdictions	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders Obstacles/ Notes
4 Active Transportation, public transit, shared mobility			
4.1 Integrate active transportation, EVs into public transit and shared mobility	Notify CAP of projects that you are aware of; needs and issues that your municipality has raised	Research Pilot projects on bike-share programs, micro-transit programs, fleet management software solutions for public transit; life span of EV chargers from an asset management perspective; E scooter regulations; battery recycling efforts	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders Obstacles/ Notes
4 Active Transportation, public transit, shared mobility			
Establish a regulatory framework to encourage the deployment of car-shares, EVs in the private sector (taxis, tour vehicles, etc.)	Identify Vehicle for hire policies in place/efforts that would need to occur to address EV uptake in this sector. Report to CAP on municipal discussions	Case studies and Vehicle for Hire policies in other jurisdictions	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders Obstacles/ Notes
5 Engagement and Progress Monitoring			
Identify and Support EV champions on staff and council	Identify and notify CAP of local champions within municipal staff, council community	develop a strategy to empower and enable local champions	
Work with others to develop and deliver outreach and information materials on EVs	Notify CAP of resources available or that would be of value	Compilation of resources and efforts	PlugnDrive/EV organizations

Tasks	Municipal Efforts	CAP Efforts	Stakeholders Obstacles/ Notes
5 Engagement and Progress Monitoring			
Link to EV outreach resources on municipal web site	Develop EV web page and link to resources and efforts	Compile resources and streamline messaging for inclusion on municipal web sites	
Partner with EV ownership and outreach organizations Create EV society, when one doesn't already exist	Reach out to EV ownership networks within your community	Include EV ownership organizations in workshops and	EV ownership groups, PlugnDrive

Tasks	Municipal Efforts	CAP Efforts	Stakeholders Obstacles/ Notes
5 Engagement and Progress Monitoring			
Tracking of EV chargers, readiness and uptake	Identify mechanisms to track EV ready buildings	CAP to work with MTO to gather EV/PHEV uptake numbers; share with municipalities advancing EV strategies and map regionally	work with EV charging maps/ websites
Progress Reporting on EV Strategy Implementation	Ensuring EV Strategy Progress Reporting Mechanism	Facilitate leading practices and consistency re Progress Reporting across municipalities/ regional progress reporting/comparison across municipalities	

Tasks	Municipal Efforts	CAP Efforts	Stakeholders Obstacles/ Notes
5 Engagement and Progress Monitoring			
Tracking where EV vehicle and charging is occurring and where it is not and the factors that influence it	Work with team to identify opportunities to advance this over time	Work with team to identify opportunities to advance this over time	



EV Charging (New Buildings) – Obstacles/Ways to Address Obstacles

- Developer push-back in requests or changes to standards
- Pushback from city building standards (unwillingness/inability to evaluate things above code)
- Lack of clarity/awareness of how EVSE impacts electrical service requirements and how much this can be mitigated with software & hardware for demand management
- Shared charging stations
- Parking reduction incentives
- Early engagement with developers, education and training on internal departments to address knowledge gaps
- Best practices guide re including EVSE in new construction, covering legal issues, capacity issues, technical...
- Costing study
- Bring all stakeholders on the table including industry, standards development organizations
- Educating the public - getting the information out there. Clarifying the myths and outcomes
- Arranging partnerships with EV charging companies or OEMs
- Training to condo boards
- Councilor champions to help advance these initiatives

EV charging (Existing Buildings) – Obstacles/Ways to Address Obstacles

- Provide additional training for building departments
- Voluntary or mandatory standards for public EVSE
- Get end consumers educated. Involve millennials.
- Collaborative and strategic partnerships between multiple industries to enable EV adoption
- Utilize the municipal act climate change policies by planning legislation
- Public private partnerships with charging networks
- Garage orphan addressed with registered EV
- Rover app personal charging station sharing (ex. AmpUp)
- Public overnight charging lots, including municipal parking lots

Fleets: Obstacles/Ways to Address Obstacles

- Cost and supply
- Fleet user perceptions
- Space and capacity for EVSE
- Procurement
- Range anxiety; status quo mentality
- Infrastructure limitations
- No EV certified mechanics
- Install EV chargers where it can benefit both public and fleet
- Trials and test drives for fleet drivers
- Sharing best practices at AMO or other networks
- Include EV fleet in Green procurement policy
- Lobby province to require a certain % of car dealers to stock EVs
- Upgrading skills for mechanics
- Municipal fleet - establish collective demand, replacement timeframes, and mutually desirable specifications for different vehicle classes

If you have any input on the workplan/issues that need to be addressed please contact Desi Stefanova at DStefanova@cleanairpartnership.org

