

City of Mississauga

Corporate Policy & Procedure



Policy Title: Corporate Green Fleet and Equipment Policy

Policy Number: [Policy No.]

Draft Only – September 30, 2020

Section:	Environment and Conservation	Subsection:	General
Effective Date:	[Effective Date]	Last Review Date:	[Last Review]
Approved by: Click here to enter text.		Owner Division/Contact: Environment Section, Parks, Forestry and Environment Division, Community Services Department	

Policy Statement

The Corporation of the City of Mississauga is committed to reducing Greenhouse Gas (GHG) emissions that contribute to Climate Change by prioritizing investment in low and zero emissions Fleet, Equipment and Infrastructure.

Purpose

This policy:

- Communicates the City’s commitment to Climate Change and sustainable environmental stewardship (e.g. improved air quality and decreased noise pollution)
- Provides direction to management and staff to meet the goal of prioritizing investment in low or zero emissions City Fleet and Equipment, as defined in this policy, and improve in-service utilization of existing City Fleet and Equipment (e.g. driver behaviour training, right-sizing, upgrades to existing equipment) to reduce Greenhouse Gas emissions (GHG)
- Outlines the City’s guiding principles and objectives in managing Corporate GHG reductions from Fleet and Equipment, and
- Identifies roles and responsibilities of staff for the electrification of the City’s Fleet and Equipment and aligning Infrastructure (as needed)

Scope

This policy applies to all City departments and to all City-owned or operated Fleet and Equipment that consume fossil fuels, therefore producing GHG emissions.

This policy is supported by an Electric Vehicle Charging Station Standard attached as Appendix A.

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In addition to this Policy, several key strategic documents form part of the City's overall response to Climate Change, including but not limited to the City's:

- Strategic Plan
- Living Green Master Plan
- Climate Change Action Plan
- Transportation Master Plan
- [Unnecessary Vehicle Idling](#) policy
- [Sustainable Procurement](#) policy
- Business Plan and budget and long-range financial plans

Definitions

For the purposes of this policy:

“Auxiliary Power Unit” (APU) is a type of Equipment that provides energy for functions other than propulsion to provide electrical, hydraulic, heating and air-conditioning functions while a vehicle is stationary.

“City” means the Corporation of the City of Mississauga.

“Climate Change” means a change in global or regional weather patterns that persists for an extended period, usually decades or longer.

“Electric Vehicle (EV)” is a vehicle that uses one or more electric motors for propulsion. They can be classified as Battery Electric Vehicles (BEVs), which use only electricity, or Plug-in Hybrid Electric Vehicles (PHEVs), which use fossil fuels via an internal combustion engine and electricity via a high capacity battery. Both plug in to recharge.

“Electric Vehicle (EV) Charging Station”, also known as Electric Vehicle Supply Equipment, is equipment that connects an EV to a source of electricity to recharge the battery.

“Equipment” includes all City-owned or operated units, including but not limited to non-licensed off road and hand-held equipment (e.g. trimmers , chain saws), riding and push lawn mowers, forklifts, backhoes/loaders, snow blowers, generators, Auxiliary Power Units, and other auxiliary equipment (e.g. pumps, wood chippers, generators and handling tools).

“Fleet” includes all City-owned or operated on-road licensed light, medium and heavy-duty vehicles, including but not limited to cars, trucks, transit (including buses) and fire vehicles.

“Fleet Managers” are responsible for the procurement and life cycle management of Fleet and/or Equipment.

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“Greenhouse Gases (GHGs)” are a set of gases created by the burning of fossil fuels: gasoline, diesel fuel, natural gas or propane. GHGs absorb infrared radiation that can trap heat from the sun’s rays, contributing to a rise in global temperatures. The key GHGs of concern are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

“Green Fleet and Equipment Working Group” means the cross-departmental/divisional team of subject matter experts that carry out the responsibilities outlined in this policy and may include the creation of sub-working groups to further support implementation of the policy.

“Infrastructure” means the items required to support low or zero emissions Fleet and/or Equipment, including vehicle charging stations, electrical infrastructure, Information Technology (IT) infrastructure, networks and management software, or other charging devices.

“Internal Combustion Engine” (ICE) is a vehicle that uses an engine that is powered by the burning of gasoline, diesel or other fossil fuels.

“Low Emissions Vehicle” (LEV) is a vehicle that emits relatively low amounts of tailpipe emissions, including mild hybrid vehicles (with no plug-in capabilities) and alternative fuel vehicles which have combustion engines that run on lower emissions fuels, such as compressed natural gas or biodiesel.

“Right-Sizing” is a management practice that examines fleet size and composition in conjunction with fleet operations to identify opportunities to reduce fleet size, repurpose or convert vehicles to more fuel efficient alternatives (e.g. diesel-electric hybrids).

“User Groups” are the end user(s) and/or operators of the Fleet or Equipment.

“Zero Emissions Vehicle” (ZEV) is a vehicle that has the potential to produce no greenhouse gas emissions during its operation. Battery-electric vehicles (BEV) and hydrogen fuel cell vehicles are all considered to be zero emissions vehicles.

Administration

This policy is administered by the Green Fleet and Equipment Working Group, in consultation with all City departments. Administrative revisions to this policy (e.g. changes to definitions) or updates to the appendices may be made by the Environment Section, with the support of the Green Fleet Working Group and the approval of the Director, Parks, Forestry and Environment, Community Services Department.

Background

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The majority of emissions from municipal operations are the result of operating the City's Fleet and Equipment, which accounts for ~80% of total corporate emissions (as of 2017). In order to achieve the City's GHG reduction targets of 40% by 2030 and 80% by 2050, the City will need to significantly decrease emissions from its Fleet and Equipment. This can be achieved by making investments in zero emissions options, such as EVs, which will require new and/or upgraded Infrastructure. The electrification of the City's Fleet and Equipment will be phased in over time and will depend on available Infrastructure. The Green Fleet Policy will complement other efforts in the City that contribute to reducing GHG emissions and improving air quality, such as the Idling Control By-law and the Unnecessary Vehicle Idling policy.

Guiding Principles

The City's guiding principles for the Green Fleet Policy are to:

- Continue to work towards being a leader in climate action, with a long-term goal of becoming a net zero community
- Coordinate decision making across divisions/departments to meet operational goals while reducing the City's overall Fleet and Equipment emissions, and
- Ensure decisions are made within a consistent framework and are informed through discussion with all relevant internal stakeholders

Objectives

The following objectives will support the Corporate Green Fleet and Equipment Policy:

- Reduce Greenhouse Gas (GHG) emissions by investing in low carbon and fuel efficient Fleet, Equipment and Infrastructure
- Prioritize and optimize the electrification of all City Fleet and Equipment that is sustainable, market ready and meets operational requirements
- Increase the overall number of zero and low emission Fleet and Equipment
- Establish a hierarchy to facilitate decision making criteria for the procurement of Fleet and Equipment (see Low Emissions Technology Hierarchy attached at Appendix 2)
- Optimize current operations of in-service Fleet and Equipment and continue to identify opportunities for proper vehicle allocation, route optimization and Right-Sizing Fleet and Equipment
- Establish the roles and responsibilities of staff to support the electrification of Fleet and Equipment
- Coordinate the purchase of electric Fleet and Equipment with installation and/or upgrading of Infrastructure
- Align the City's Business Plan and budgeting process with the principles of the Corporate Green Fleet and Equipment Policy to advance electrification, and
- Create consistent standards for EV charging infrastructure and technology

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- To document decision making and outline the implications of deferral or choosing conventional technology on the City's Climate Change targets

For more information on asset acquisition and optimizing operations, please see Appendix B.

The Asset Acquisition Worksheets are included as Appendix C.

Roles and Responsibilities

Directors

Directors are responsible for:

- Ensuring applicable managers/supervisors are aware of and trained on this policy and any related policies (e.g. acceptable use, data retention) including subsequent revisions
- Fostering and supporting the objectives of this policy wherever possible
- Facilitating decision making that favours electrification opportunities for the City's Fleet and Equipment
- Ensuring resources and budgets are available to support the implementation of this policy
- Ensuring alignment of Strategic and Business Plans in relation to this policy
- Incorporating GHG reduction and green Fleet and Equipment procurement initiatives into their business planning processes, where applicable

Managers/Supervisors

Managers/supervisors are responsible for:

- Ensuring applicable staff are aware of and trained on this policy and any subsequent revisions
- Creating and initiating implementation plans to meet the objectives of this policy
- Developing and implementing GHG reduction improvements
- Applying the decision making framework when procuring new Fleet or Equipment and ensuring appropriate documentation is completed and approved for all Fleet and Equipment acquisitions
- Optimizing the operations of assets currently in service in consultation with the Green Fleet and Equipment Working Group and as per the framework outlined in this policy,
- Facilitating decision making that favours electrification opportunities of the City's Fleet and Equipment, and
- Maintaining records, such as documentation of decision making, acquisitions, etc.

Green Fleet and Equipment Working Group

The Green Fleet and Equipment Working Group is responsible for:

- Being GHG reduction ambassadors

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- Ensuring that the criteria and hierarchy for evaluating potential purchases of Fleet and Equipment, criteria for optimizing current operations, and the EVCS standard are current and are kept up to date through annual reviews
- Supporting alignment of Strategic and Business Plans in relation to this policy
- Recommending the appropriate tools and resources to ensure the City meets the objectives of this policy
- Ensuring roles and responsibilities throughout the organization are clearly defined
- Promoting cross-collaboration within the City to ensure standardized and consistent methodologies are followed in decision making related to the procurement of Fleet and Equipment
- Developing an 1-3 year implementation plan for the policy to support the of installation of associated Infrastructure
- Track new advancements in low or zero emissions technologies for Fleet and Equipment
- Providing expert advice on the direction the City should be taking with respect to the acquisition of low or zero emissions Fleet and Equipment and the sustainability of existing assets in service (e.g. training programs),
- Attending ongoing meetings (e.g. quarterly) to review and address any overarching issues or concerns, as needed
- Establishing sub-groups as appropriate (e.g. internal engagement, training, etc)

All Employees

All Employees are responsible for:

- Identifying opportunities for GHG reduction during day-to-day operations and/or when planning for procurement and following the process outlined in the policy

Records Retention

Official records must be retained in accordance with the Records Retention By-Law 0097-2017, as amended.

Revision History

Reference	Description
Enter previous review - e.g. GC-1234-2015	Click here to enter text.