

November 9, 2023

MEMO TO: Park Board Commissioners

FROM : Amit Gandha - Director, Park Services

SUBJECT : Emissions Free Landscape Equipment Renewal Strategy Update - Board

Briefing Memo

Dear Commissioners,

This memo provides an update on the January 28, 2019 Board Motion titled "Renewal Strategy for Landscape Equipment – Towards an Emission Free Reality", and the subsequent Board memo titled "Emissions Free Landscape Equipment Renewal" issued on December 7, 2020.

Transitioning to replace gas-powered landscape maintenance equipment has been an iterative process with many successes, however obstacles remain in the transition to battery powered operations. These obstacles continue to limit progress in some areas.

Successes include:

- 35% of small equipment fleet has been converted to electric;
- Partial adoption of hedge trimmers, line trimmers and chainsaws that manage small jobs allowing adequate charge life, satisfactory operation and ergonomics;
- Employee Engagement and adoption of technology employees want to be green;
- Battery powered ride on zero turn mowers for Park Attendants; and
- Battery powered robotic mowers.

Obstacles include:

- Battery technology provides limited battery charge life, especially for emergency operations such as storm response requiring chainsaw operation;
- Charging infrastructure is limited with many services yards requiring significant electrical upgrades to support multiple batteries for equipment increasing demand;
- Ergonomics and noise-levels continue to pose challenges, however suppliers are responding to this user feedback;
- Supply chains continue to present hurdles and delays to procuring equipment;
- Safety is an ongoing concern for some equipment when working in the rain; and
- Power and torque levels are limited in some equipment, especially when managing wet heavy material.



To maintain Park Board assets we will continue working with a small equipment fleet that consists of both electric and gas-powered technology to suit operational circumstances. In parallel, Park Operations will continue to pilot new equipment as it evolves with Fleet Management Services (FMS) and work with Real Estate & Facilities Management (REFM) to increase electrical capacity at facilities when renovations occur and funding is made available.

Regards,

Amit Gandha (he/him)
Director – Park Services

cg/jm/vt

Copy to: PB Senior Leadership Team

PB Communications