

Notes from the CAC Fleet Meeting: Electrical Municipal Light-Duty Equipment

October 17th, 2024

Webinar Summary

The objective of this meeting was to gain insight into municipal efforts to transition from fossil fuel two-stroke engine equipment to electrical landscaping equipment. The City of Ottawa shared their experiences with electrical equipment for landscaping purposes.

Presenters:

- Allyson Downs, City of Ottawa
- Tim McGrath, City of Ottawa

Key Findings:

- Pilot projects provide valuable insights into equipment type, brand, and model performance that can be used to inform future purchases. Collecting regular feedback from operators ensures that this performance data is captured and can inform decision making
- Battery lifespan is a key barrier to phasing out gas powered equipment. It can interfere with performance requirements and may require multiple replacement batteries.
- Given how quickly equipment is evolving, adopting a gradual transition approach rather than making a large upfront investment can prevent municipalities from being stuck with subpar equipment that may become obsolete.

Presentation Summary:

- City of Ottawa began transitioning to electrical small equipment in 2020 and phasing out gas powered landscaping equipment in 2022. This included piloting several equipment types (i.e., leaf blowers and chain saws) to test performance across brands and models.
- Through pilots, the City identified performance discrepancies across brands and determined which brands/models work best for specific needs.
- The City collected feedback regularly from operators. This was critical to understanding battery life, equipment ergonomics, and operational challenges (i.e.,

zero emissions equipment exhibiting insufficient power compared to gas powered equipment).

- Feedback indicated that there were some issues with electrical equipment meeting performance needs during wet seasons or in areas of thick vegetation.
- Health concerns were also raised based on the weight of electrical equipment, which can be heavier than gas powered alternatives.
- Notable benefits related to the transition from fossil fuel to electrical equipment includes eliminating the need for pull start engines, reducing exposure to exhaust emissions, and lower noise and vibration levels when using electrical equipment.
- While City of Ottawa received daily feedback from operators, the City missed the opportunity to collect data during the springtime when grass is growing more rapidly. Thus, there is a gap in insight into how equipment performs under various seasonal conditions.
- City of Ottawa adopted a gradual approach to their transition in response to a rapidly evolving market. Immediately investing in large scale procurement may have resulted in being stuck with models that become obsolete due to improved products coming onto the market.
- Equipment and battery storage temperatures can influence battery performance. Because of this, City of Ottawa utilized open-air charging cabinets that allow heat from batteries to escape to ensure a stable charging environment.

Contact information:

Please reach out to us at any time with additional information, questions, or input.

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