

Early results of Peel's electric waste collection vehicle pilot shared

Electric garbage truck works well, but is limited to shorter, urban routes

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The Region of Peel is piloting the use of an electric garbage truck, a first in Ontario.

At a February 6 meeting of Peel's Waste Management Strategic Advisory Committee, Peel's Manager of Waste Planning, Cynthia Lucar Dias, shared results from the first year of the pilot, which began in December 2023.

The purpose of the pilot is to explore how electric waste collection vehicles can be integrated into Peel's waste collection fleet to reduce emissions and improve air quality.

Lucar Dias said there was a steep learning curve at the beginning with the electric waste collection vehicle, but it's performing much better now.

The vehicle was able to work 175 out of a possible 207 collection days in its first year, and handled a 12-hour workday where it would serve an average of 1,000 households.

The vehicle, however, is limited to use on short and urban waste collection routes. It has yet to be tested in Caledon or areas in Brampton and Mississauga with sparse housing. Due to the size and weight of its battery, its collection capacity is about 20 per cent less than that of a traditional garbage truck.

There was no need for a midday charge for the electric truck, and it can charge to full in 4.5 hours ? this was done overnight.

On particularly hot days, battery consumption increased by about seven per cent. A similar increase is also expected for very cold days.

Lucar Dias said drivers have reported a smooth and comfortable experience driving the electric truck. She also shared that other municipalities appreciate that Peel is testing out this new technology.

In the future, Lucar Dias said Peel will also investigate using hydrogen-fuelled waste collection vehicles.

Peel's Commissioner of Public Works Kealy Dedman said it's too early for a proper cost analysis of electric trucks and traditional trucks. However, he shared that the cost of a traditional truck is about \$475,000, and the cost of an electric truck is \$875,000.

Dedman noted electricity is cheaper as a fuel than fossil fuels, and expected maintenance costs for electric trucks are also cheaper.

Ultimately, the Region's pilot of the new electric waste collection vehicle is not yet complete. Regional staff will be reporting back to Regional Council with more details, including a cost analysis, when the pilot is finished. It is estimated to take 2.5 years total.