Methacton School District

Sustainability - Electric Charging Stations & Electric Vehicles

Objective:

Phase in electric vehicles as the current fleet of utility/district own vehicles reache their end of life. By moving to electric vehicles, the District can save costs associate with fuel and repairs. In addition, the migration to electric vehicles will reduce the District's carbon footprint; thereby supporting the sustainability goal in the strategic plan.

<u>Plan:</u>

The pilot phase of our venture into EV is to migrate up to four (4) of the District's aging maintenance vans to electric vans (2-2010 & 2-2013). Currently there are four (4) maintenance vans in need of replacement. Each of these vehicles would be replaced with the Ford E-Transit or similar model, which would be put out to bid to all Costars Dealerships.

Cost Analysis:

Total project costs are estimated to be about \$320,000.00. Methacton School District will be applying for financial incentives that could potentially reduce these costs, but they are not factored into the costs below:

Project Costs Charging Stations Van Customization E-Transit 350	Cnt 4.0 4.0	Cost \$20,317.50 \$10,000.00 \$56,995.00	Total Cost \$81,270.00 \$10,000.00 \$227,980.00	
Total Cost			\$319,250.00	-
<u>Project ROI:</u>				
Project Costs	Cnt	Cost	Yrs	Total Cost
Charging Stations	4.0	\$31,250.00	1.0	\$125,000.00
Est. Electric Cost per station	4.0	\$500.00	10.0	\$20,000.00
Increased EV Cost	4.0	\$5,000.00	1.0	\$20,000.00
Total Cost				\$165,000.00
Project Savings	Cnt	Cost	Yrs	Total Cost
Fuel per Vehicle	4.0	\$4,766.67	10.0	\$190,666.67
Annual Maintenance	4.0	\$500.00	10.0	\$20,000.00
Time Savings*	4.0	\$3,459.04	10.0	\$138,361.60
Total Savings				\$349,028.27

^{*} Estimated time saved by not having to fill up on fuel and vehicle in shop for repairs.

10 Year ROI