



Partnering with the Municipalities & Haulers to Support Fleet Electrification

Introductory Overview - 2024





Significant Benefit to Haulers & Municipalities - 50 Refuse Truck Electrification Example



Up to \$20.0 million in TCO savings over 10 years, equal to ~\$100 per household



\$10.0 million in fuel savings over 10 years, equal to ~\$50 per household



\$2.0 million in environmental savings from V2G revenue & carbon credits



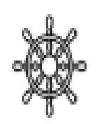
~32,500 MT in CO2 emissions eliminated in neighborhoods



~3.0 million gallons of diesel usage eliminated



Reduced downtime freeing up ~ 50 additional working days/ year/ refuse truck



Better employee experience; increased retention, retraining opportunities

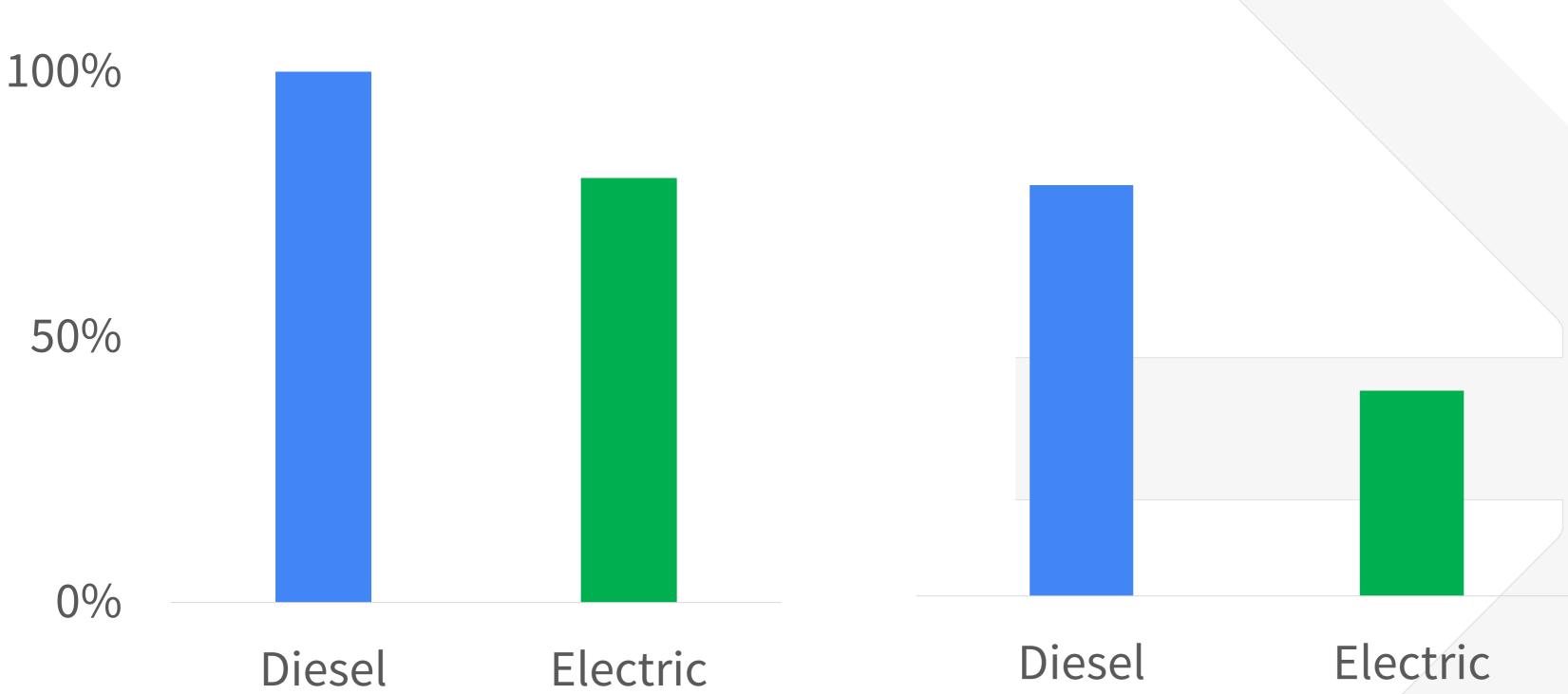
Note: Based on a 50-truck fleet; derived from Roundtrip EV based on working with a Northeast City



Why Start with Refuse: Financial (1) – The City Will Generate Savings and Free-Up Operating Budget

Refuse Total Cost of Ownership (TCO) Refuse Operating Cost (Parts and Fuel)





According to the Solid Waste Association of North America (SWANA), Electric Garbage Truck TCO is 15-20% cheaper than Diesel

Source: SWANA. The total cost per mile for diesel was \$5.43 compared to \$4.58 for electric and \$5.70 for CNG. Fuel and Maintenance costs were \$4.36/mile for diesel compared to \$2.71 for electric and \$4.43 for CNG

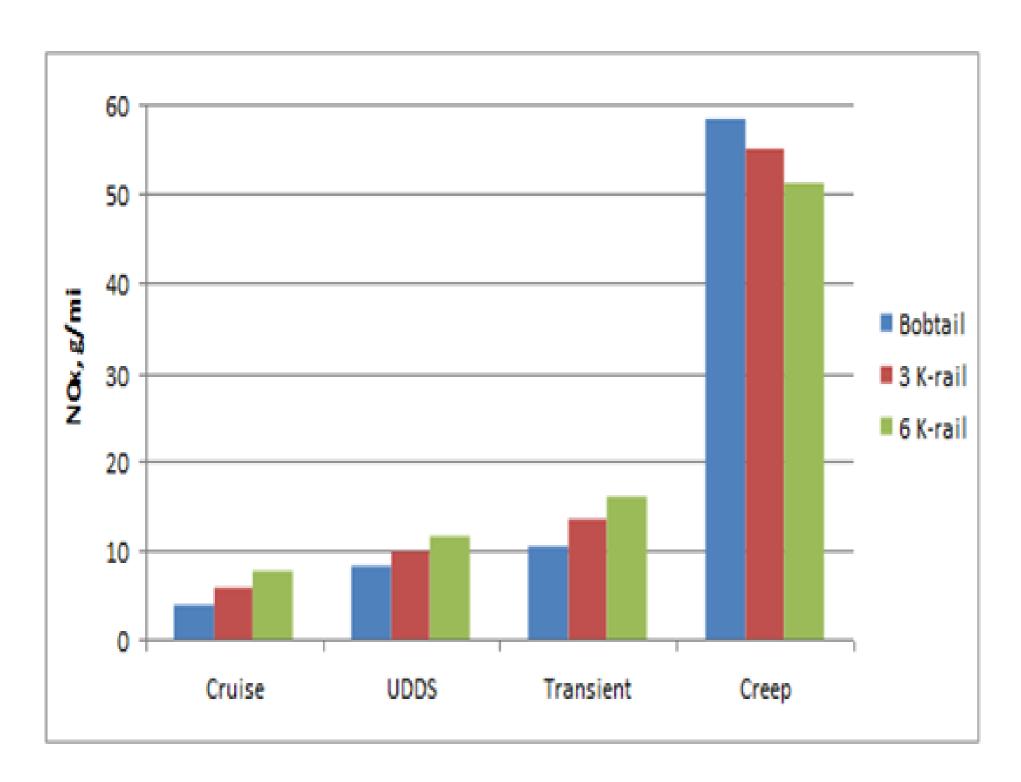
Electric operating costs (Parts and Fuel) are 40% cheaper than Diesel



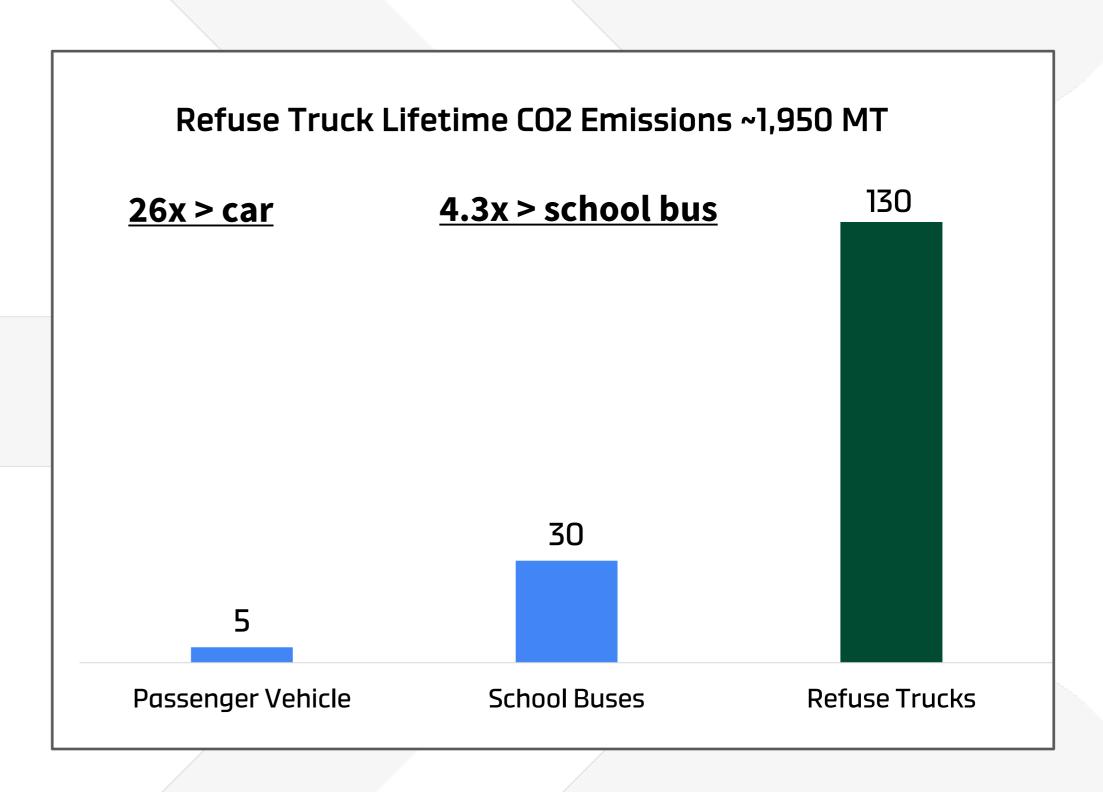
Why Start with Refuse: Environment (2) - Emissions are 4x School Bus & 26x Passenger Car

Refuse trucks operate 8-10 hours, making ~ 1,000+ pickups each day, generating lifetime emissions of ~1,950 MT

Garbage trucks generate 7X pollutants than an 18-wheeler

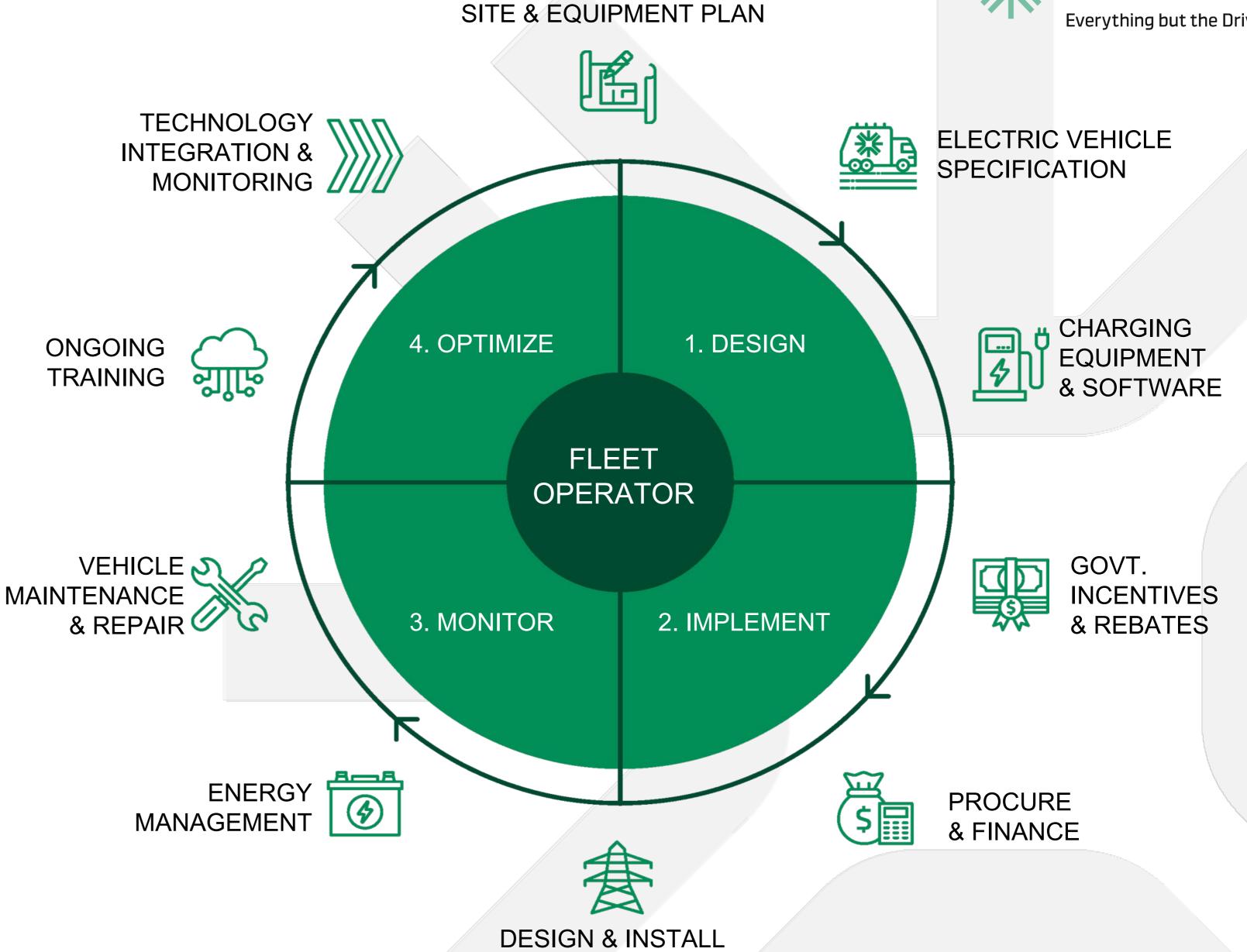


Refuse truck emissions exceed those of school buses and passenger cars





- Implementing an EV
 Transition Takes a Long
 Term Coordinated
 Effort
- Roundtrip is a Partner in All Aspects of Fleet Electrification Execution & Operation
- Not Just Upfront, But Over the Long Term



EV INFRASTRUCTURE