

Future-Proofing Forklifts

Converting propane-powered forklift fleet to electric-powered



The Project

Founded in 1994, Polaris Transportation Group is a leading Canadian transportation and logistics company providing cross-border Less-than-Load (LTL) shipping, global logistics, warehousing, and technology solutions across Canada and the United States. Polaris is committed to delivering industry-best supply chain solutions and exceptional customer experiences while focusing on their People, Customers, Communities, and the Planet.

Polaris operates 16 propane forklifts on the dock at their head terminal. They are in the process of converting their forklift operations from propane to electric. In April 2025, they purchased 4 electric forklifts to replace the propane ones as the first phase of a broader forklift electrification project. Polaris is aiming to complete the project by switching the remaining 12 propane forklifts to electric by the end of 2026.



📍 Mississauga, ON

⚙️ Transportation and Warehousing

The Benefits



Reducing Carbon Emissions



Reducing Energy Costs

Future-Proofing Forklifts



The Results

Forklift electrification directly supports Polaris' interim target of 30% emissions reduction by 2030. By converting the first 4 units to electric, Polaris' propane-related emissions dropped from 231.2 tCO₂e to 145.5 tCO₂e after one year. Fuel consumption dropped from 150,000L to 94,000L per year, resulting in approximately \$50k reduction in propane spend. This also comes with the added benefit of improved dock air quality from less tire scrubbing, black rubber dust, and no combustion.

Polaris also benefits from the Clean Fuel Regulations (CFR) credit program, generating and selling compliance credits based on the carbon-intensity reduction achieved by replacing propane with lower-carbon electricity.



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Project Advice
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Director, Sustainability

Engage your operations team early. Understanding shift patterns and changing behaviour is essential before anything else. From there, invest in the right data infrastructure: smart chargers and telematics are not optional. Without verified metering data, you simply cannot access CFR credits.