

3M: Lithium-Ion Batteries for Powered Industrial Vehicles

3M is converting lead-acid battery powered industrial vehicles (PIVs) to lithium-ion PIVs at 10 sites, improving reliability and safety, lowering maintenance costs, and realizing energy and greenhouse gas reductions of more than 250,000 kWh and more than 140 metric tons of CO₂e in the initial pilot.



Used a multiple benefits approach to weigh various advantages including shorter payback, less batteries needed overall, and improved EHS conditions in the battery storage area



Improves ergonomics by removing need for employees to lift and move heavy batteries into the charging stations, and allows for the ventilation system to be removed



Includes an increased warranty for the lithium-ion batteries, reducing the need to keep a stock of spare batteries

