



UPS Green Fleet

Dale Morin
Automotive Engineering
Environmental & Training
Manager



About UPS

- A global leader in logistics
- Headquartered in Atlanta, serves more than 220 countries and territories worldwide
- 397,600 employees worldwide
- 16.3 million packages and documents per day
- 32 million packages on Peak Day
- 2013 revenue: \$55.4 billion
- 96,028 vehicles worldwide
- One of the world's largest airlines
- UPS and its employees contributed \$102 million to communities
- Employees gave 1.8 million hours in volunteer service



Recent Recognition

- *FORTUNE* magazine – World’s Most Admired Companies
- Ethisphere Institute – World’s Most Ethical Companies
- Interbrand – Named one of 2013’s Best Global Green Brands
- Dow Jones North American & World Sustainability Indices
- CDP’s “Carbon Disclosure Leadership Index” of S&P companies
- Natural Gas Vehicles for America – 2013 Achievement Award
- *Corporate Responsibility Magazine* – 100 Best Corporate Citizens
- U.S. Chamber of Commerce Foundation’s Business Civic Leadership Center – UPS named 2013 “Best Corporate Steward”
- NCOC, Bloomberg, Points of Light – “The Civic 50”



UPS: No Bias As To Alternative Fuels/Advanced Technologies

- UPS' "rolling laboratory" tests virtually all alternative fuels/advanced technologies with more than 3,100 vehicles in operation worldwide
- Natural gas – CNG and LNG
- Hydraulic hybrid
- Propane
- Biomethane
- Hybrid electric
- First alternatively-fueled vehicle was all-electric in NYC – 1934
- Fleet to drive 1 billion alternative fuel miles by end of 2017



UPS Fleet of Plug-in Electric Package Cars, New York City, 1930's



Global Alternative Fuel and Advanced Technology Vehicles

Total Alternative Tech Vehicles (U.S. & International): 3,152

U.S. Alternative Tech Fleet: 2,077

- Compressed Natural Gas Vehicles: 877
- Hybrid Electric Vehicles: 380
- Liquid Natural Gas Vehicles: 249
- Propane Vehicles: 28
- Electric Vehicles: 102
- Hydraulic Hybrid Vehicles: 41
- Composite Body Diesel: 400



International Alternative Tech Fleet: 1,075

- Compressed Natural Gas Vehicles: 88
- Hybrid Electric Vehicles: 6
- Propane Vehicles: 846
- Electric Vehicles: 56
- Ethanol Vehicles: 50
- Biomethane Vehicles: 29



Electric Vehicles



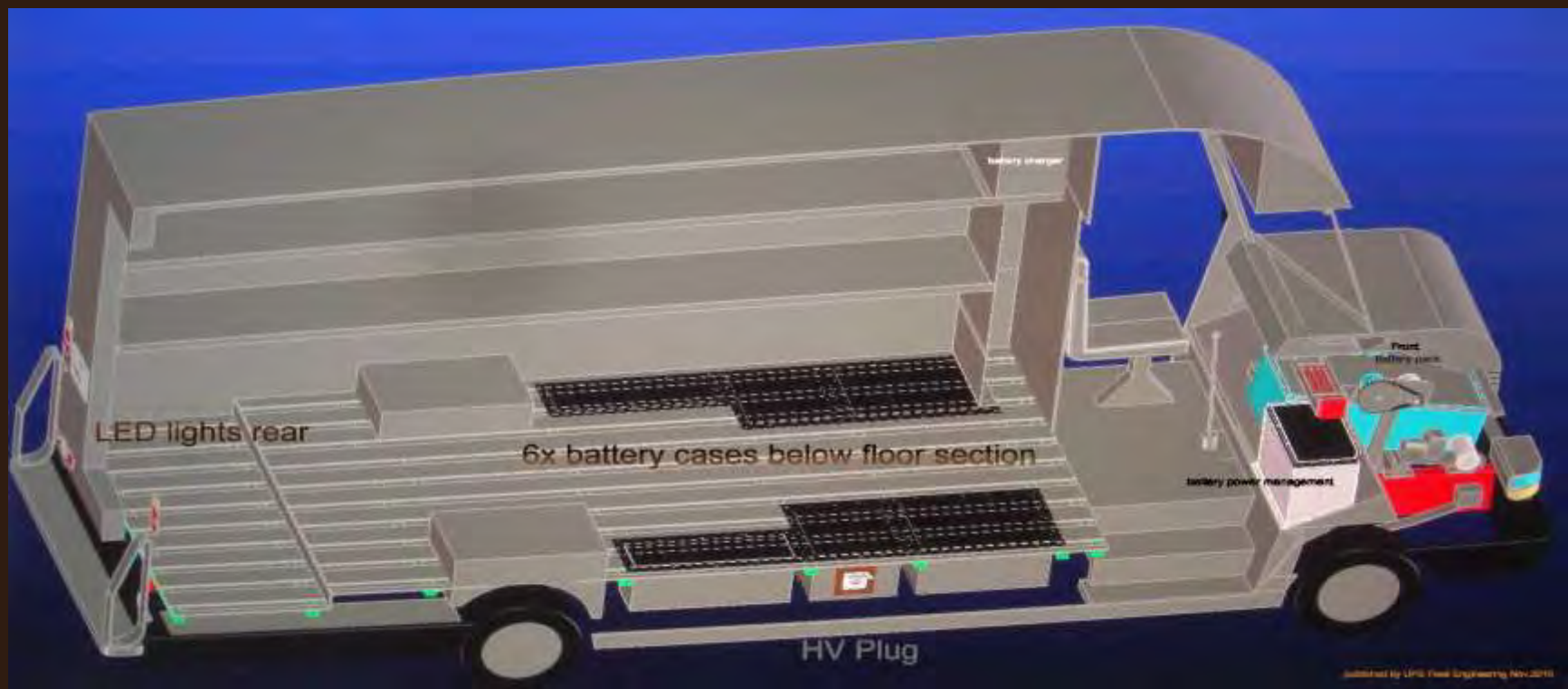
Electric Vehicles



JAC M30RB







CAD drawing



“Free DUCk ZEV”

- Manufacturer: Ducati
- Drive: Electric
- GVW: 420 kg
- Kerb weight: 220 kg
- Payload: 200 kg
- Volume: 0,3 m³
- UPS Type: Bike
- Range: 45 km
- Engine 1: Electric hub engines 2x 2 kW
- Tank / Battery: Lead acid 0,5 kWh (42Ah/12V)
- Cost approx.: 6.000 €



City Cruiser

- Manufacturer: Veloform
- Drive: Muscle / Electric
- GVW: 444 kg
- Kerb weight: 144 kg incl Batteries
- Payload: 300kg
- Volume: 1m³
- UPS Type: Bike
- Range: 50Km (depending on human effort)
- Engine 1: (muscular propulsion)
- Engine 2: 250W/36V
- Tank / Battery: 22 Ah, 792 Wh



Thank You

