UPS and Natural Gas Vehicles

Nick D’Andrea
About UPS

- A global leader in logistics
- Headquartered in Atlanta, serves more than 220 countries and territories worldwide
- 435,000 employees worldwide
- 18 million packages and documents per day
- 99,984 vehicles worldwide
- UPS and its employees contributed $102 million to communities
- Employees gave 1.8 million hours in volunteer service
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
Performance Statistics

In 2013…

• UPS vehicles traveled 2,373,467,743 miles
• UPS vehicles used 324,088,987 gallons of fuel
• Gasoline package cars averaged 8.54 MPG
• Diesel package cars averaged 10.18 MPG
• Tractors averaged 6.39 MPG

* Numbers represent domestic fleet only
Total Alternative Fuel & Technology Vehicles
5,088 total vehicles in service

U.S. Small Package Fleet: 4,003
(4.6% of US Small Pkg Fleet)
- Compressed Natural Gas Vehicles: 1,071
- Liquid Natural Gas Vehicles: 1,249
- Hybrid Electric Vehicles: 380
- Electric Vehicles: 102
- Hydraulic Hybrid Vehicles: 41
- Propane Vehicles: 760
- Composite Body Diesel: 400

International Small Package Fleet: 1,085
(7.3% of International Small Pkg Fleet)
- Propane Vehicles: 836
- Compressed Natural Gas Vehicles: 84
- Electric Vehicles: 78
- Ethanol Vehicles: 62
- Biomethane Vehicles: 19
- Hybrid Electric Vehicles: 6
UPS LNG/CNG Vehicle Deployment / Coverage

Tractor Coverage area up to 300 mile radius from fuel site

- UPS LNG Stations on site
- UPS CNG Stations on site
- UPS LNG deployment using off-site fuel station
Natural Gas in the Rolling Laboratory

The UPS "Rolling Laboratory" strategy is to field-test new fuels and technologies in the UPS network, and then scale up the combinations of fuel source, facility location, vehicle type, delivery role, and infrastructure investment that deliver the best ROI. We are now scaling up such optimum ROI combinations for liquefied natural gas (LNG), compressed natural gas (CNG), and liquefied petroleum gas (propane).

**LNG**
- Large, regional base
- UPS installs LNG storage tanks and fueling stations
- Long-haul tractors travel 500-600 miles roundtrip

**CNG**
- Large, suburban facility
- UPS installs natural gas compressors, storage tanks, and fueling stations
- Long-haul tractors travel 400-500 miles roundtrip

**Propane**
- Small, rural facility
- UPS installs storage tanks and fueling stations
- Package cars travel 100+ miles roundtrip
How Can Government Spur Investment

• Sales Tax exemption on AFVs
• Fuel Tax Holiday
• Incremental tax incentives
• Weight exemptions
• Fueling station incentives
Thank You