

Towards Zero Emission Temperature Control

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THE FLEET

Van			1850
Rigid			458
Tractor			462
Trailer			971
Misc			61
			3807
			Total
Cars			1289



J L P A N D S U S T A I N A B L E F L E E T

Commitments:

- All heavy trucks biomethane powered by 2028
- Net zero carbon fleet by 2045

Ambition:

Eliminate fossil fuel fleet by 2030, giving an overall 80% carbon reduction vs BAU diesel

HEADLINE
NUMBER
BY 2030

504,000
TONNES OF
CO2 SAVED

HEAVY TRUCKS (15% of CV fleet, 80% of CO₂)

4

c25 million miles per year by end of this year

85 in place, 143 more this year, 600 total by 2028

ALTERNATOR DRIVE

- c50% net reduction in diesel consumption ?
- c9 tonnes of CO₂ saved
- c£1900 cost saving per tractor
- Reduced fridge engine hours



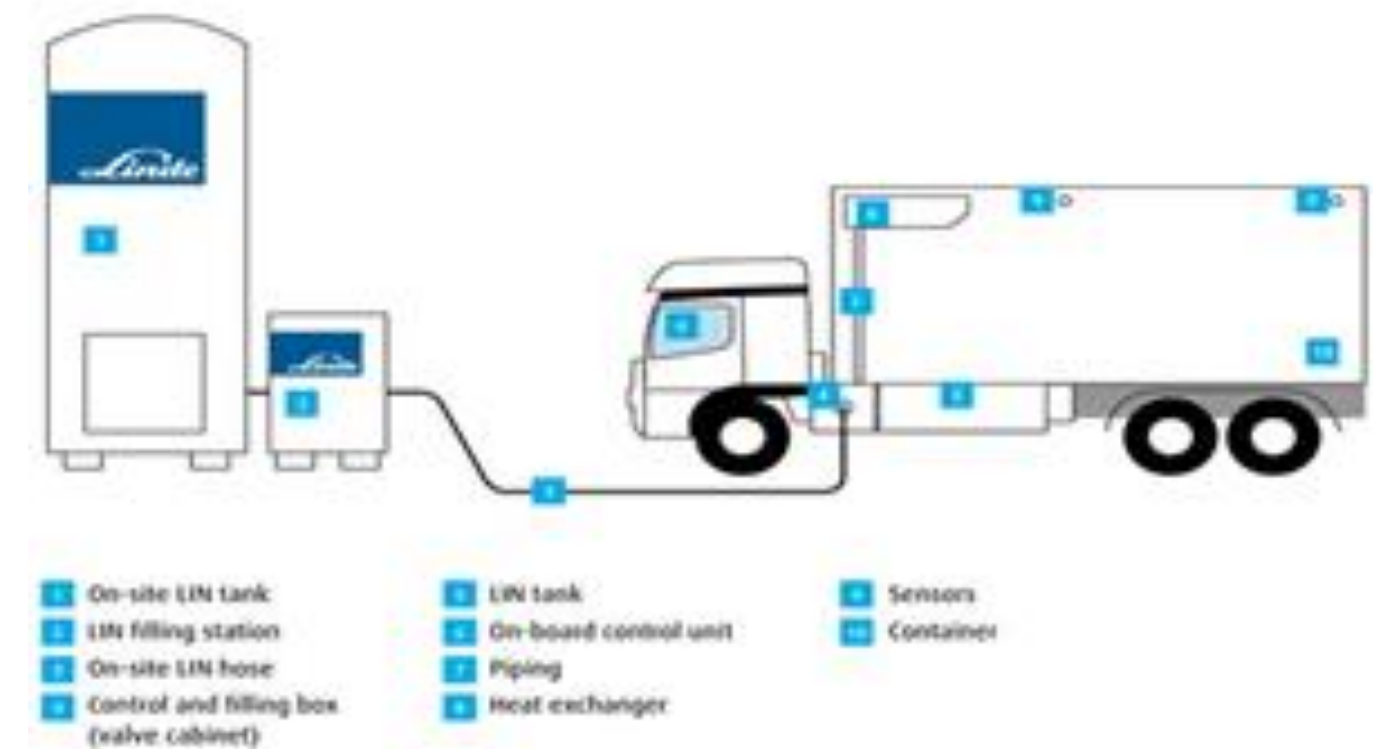
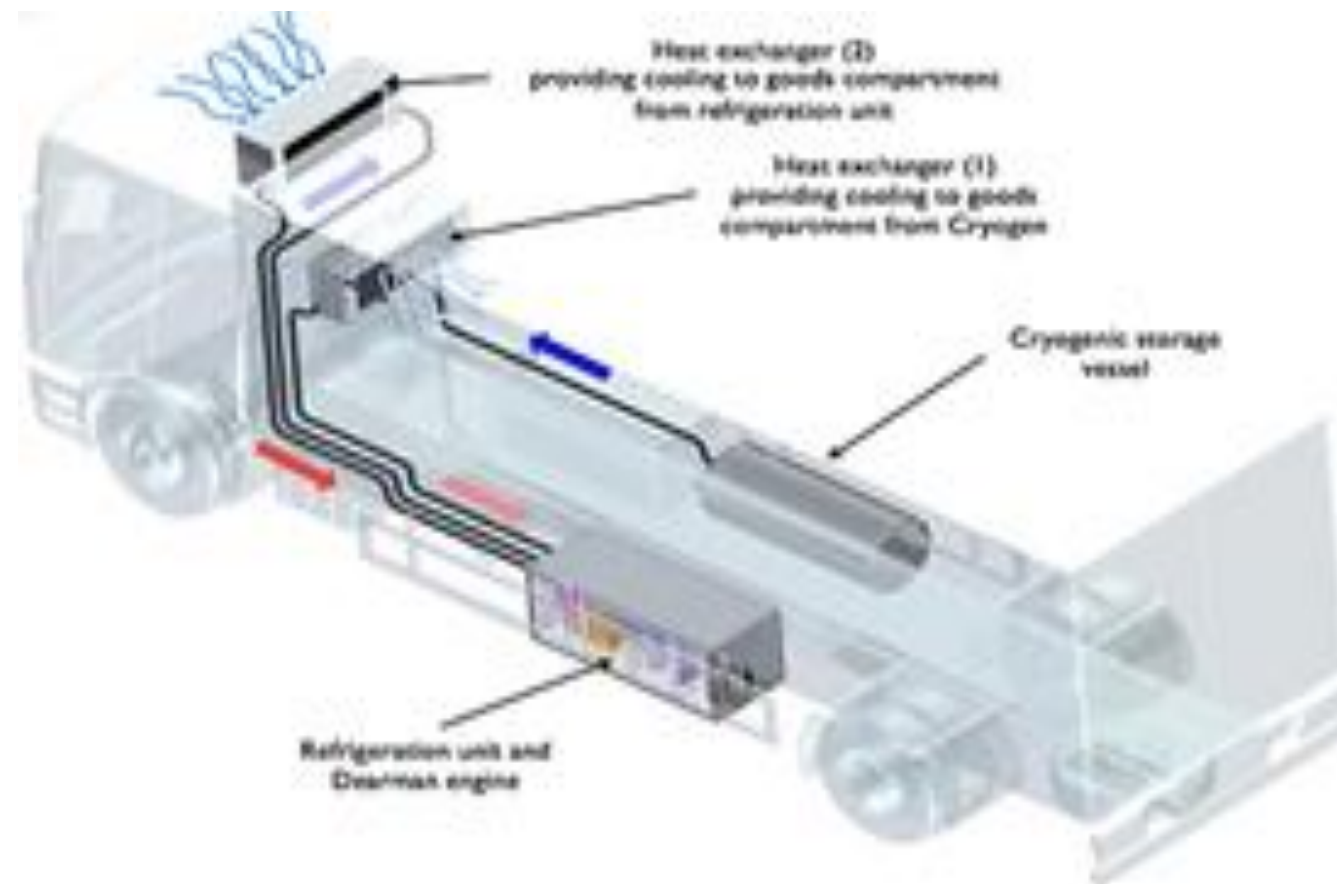
MAINS HOOK-UP

- c35% reduction in diesel consumption vs yard running
- c3.5 tonnes CO₂
- c£600 net fuel cost saving
- Reduced fridge engine hours



ALTERNATIVES

- Hydraulic generator drive
- Dearman
- Cryogenic



FRIDGES

8



- Biomethane truck
- Electric drive fridge
- Advanced aerodynamics

GROCERY HOME DELIVERY

- 50% greater payload drives a 5% reduction in fleet size
- Some opportunity for shared customer/van charging
- Fallback position – HVO
- 2 trial vehicles due April 2021



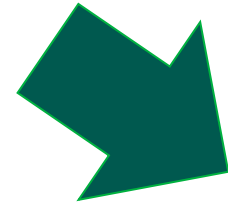
MANAGING ENERGY

Minimise energy requirement

Heat management

Weight

Solar?

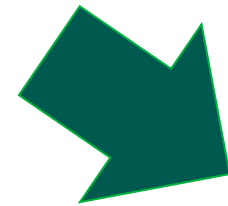


Smallest practical battery

Lower cost

Less charging

More payload

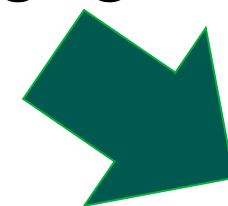


Charging strategy

Overnight, slow charging best

Some rapid charging

Smart scheduling



Alternative charging

Holistic view

Relocation

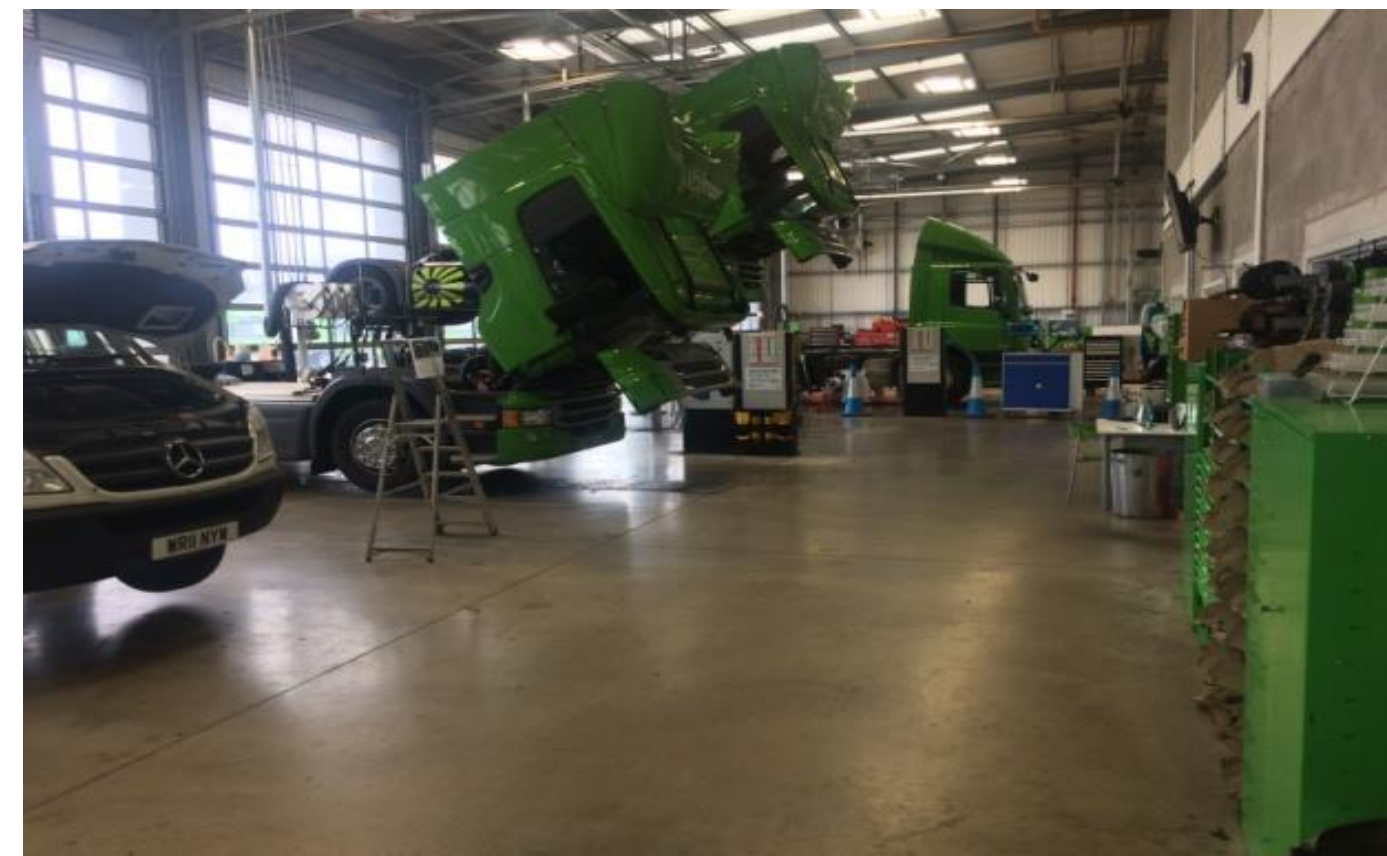


MITIGATIONS



WORKSHOP

- Different maintenance tasks
- Less routine maintenance on EVs
- New risks
- Longer EV lifecycles
- But...
- Simpler vehicles



TECHNICIANS

- HGV technician demographic
- Apprenticeship scheme
- Attracting best candidates through:-
 - Enhanced technical training
 - Career paths
 - Push for greater diversity



CONCLUSION

- Generally higher capital cost/lower running cost
- Energy management
- Risk management (safety, timing)
- New skills and knowledge needed
 - Logistics UK, SRF, LowCVP and others