

VOLVO

Electrification of heavy duty vehicles

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Sustainable transport solutions

- The Volvo Group's vision is to become the world's leading provider of sustainable transport solutions
- Volvo Group welcomes developments which allow our vehicles to run on non-fossil fuels



Roads towards sustainable transports

Alternative fuels

Energy efficiency

Fuel alternatives

- Methane, preferably biogas
 - MethaneDiesel technology and liquid gas will open up for long-distance applications
- Electricity
 - City buses are the first area. In the long term, a dynamic supply of electricity from the road could power long-haul trucks
- DME
 - In principle this can in the long term be adapted to the majority of applications



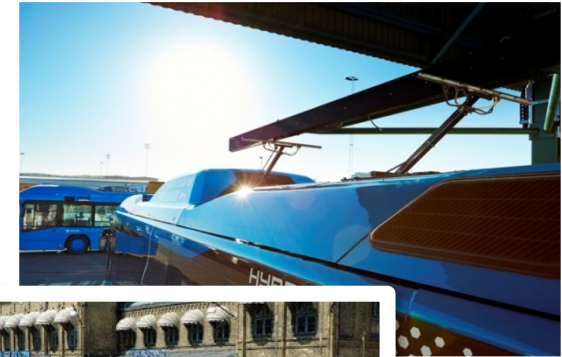
Electrified buses - hybrids are only the beginning

- Plug in Hybrid
 - Currently in field tests
 - Electric drive 70% of route = silent
 - 70-80% CO₂ reduction
 - 60% energy use reduction
 - Further reduction of total operating cost
- Fully Electric to be launched 2015
 - Silent and emission-free
 - Renewable energy
 - Energy efficient



ElectriCity - operational 2015

- Ultramodern bus service in Gothenburg city centre
- Both plug-in hybrids and full electric buses
 - Electric drive 70 - 100% of route
- Interactive services and redesigned bus stops
 - Increased public attractiveness
- Silent drive secured for city centre to reduce noise levels
- 60-80 % energy reduction
- 80-100 % CO₂ reduction



Partnerships and cooperation needed



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