Volvo Buses

“Paving the way for electric mobility in Europe”

Karl Pihl, Director EU Public Affairs

5 March 2015
The Volvo Group is one of the world’s leading manufacturers of trucks, buses, construction equipment, marine and industrial engines.

The Volvo Group employs about 110,000 people, has production facilities in 18 countries and sales of products in more than 190 markets.
Volvo Buses – Leading bus manufacturer with focus on systems for sustainable public transport
Setting the scene:
Global drivers impacting our society

- Population growth and urbanization
- Changes of demography in Western World
- Climate change, air pollution and alternative fuels
- Shortage of natural resources and raw material
- Traffic (congestion) and road safety

[Diagram showing population growth with 1/2 in 2008 and 2/3 in 2060, indicating increase in people living in cities]
Why electrification?

Energy efficiency!
At the core of our electrification strategy and goes hand in hand with CO$_2$ reduction.

- Electricity is the most energy efficient fuel source
- Bus systems suitable for running on electricity
- Electricity 3 times more efficient than gas
Volvo electrified buses: A complete product offer
The future is already here!

Hybrid buses
- 30-40% Fuel reduction
- Silent take-off
- 40% lower on road emissions
- Improved passenger capacity

Electric hybrid buses
- 75% fuel & 60% energy reduction
- Electrical drive 70% of route = silent
- 75% CO₂ reduction*
- Charging 6 min at end stations

Full electric buses
- 80% energy reduction
- Electrical drive 100% of route = silent
- No local exhaust emissions
- 99% CO₂ reduction*
- Charging 6 min at end stations

* With CO₂ neutral electricity
A leader in electrified vehicles, exceeding 5,000 buses sold

More than 5,000 hybrid and full-electric buses sold
Levels of electrification in the city:
From full electric to hybrid solutions
How does a city implement electrified transports?

- Volvo work directly with city stakeholders to implement new transport solutions based on electric vehicles
- Addresses the challenges facing urban development
- A complete system – vehicles, charging infrastructure, information services
Going forward

- What can EU policy makers do?
  - Legislation can be a powerful green resource (e.g. Euro standards), DAFI?
  - Harmonization (divergent local restrictions LEZ, SUMP etc) & Standardization
  - Clean Vehicles Directive 2009/33 needs better implementation/compliance
  - Incentives/subsidies (e.g. scrapping schemes), R&D-funding

- Demonstration
  - Vehicles adapted for new fuels must be demonstrated to gain acceptance
  - Incentives and subsidies are often needed

- Collaboration
  - Many players have to work together
  - The Volvo Group can and will contribute to reach sustainable transport solutions

World premiere: Volvo's Electric Hybrid bus in commercial service in Hamburg, Germany

ABB and Volvo form global partnership for electric and hybrid bus fast-charging

29/01/2015
Volvo Buses and Siemens sign global agreement on electrified bus systems
Volvo Buses

Best practice partnership

Development of next generation workshop solutions

5 new innovative bus stops, where of 1 indoors

2 new bus types:
- Electric Hybrid
- Fully Electric

Test and development of new IT solutions
Electromobility in Bus Rapid Transit applications

- Distinctive image
- High-capacity buses
- Prepaid ticketing
- Telematics
- Stations or enhanced stops
- Dedicated lanes
Thank you for your attention!