



# European electricity industry views on enabling E-mobility

***European Strategy on Clean and Energy-efficient vehicles -  
Public Hearing  
11th March 2010***



## Electricity As A Solution

- **Electricity as a fuel can:**
  - Decrease the **GHG emissions** in the transport sector
  - Entail **energy-efficiency** gains through the efficiency of electric drive trains
  - Decrease EU's **oil dependence**
  - Maintain EU **competitiveness**
- **Environmental performance of EVs will further improve as the electricity industry is working towards a **carbon-neutral power supply****



## EV Implication On The Electricity System

- **Basic infrastructure is already in place**
  - Existing grid structure can fuel up great number of EVs
- **HOWEVER a mass market of EVs requires:**
  - **Intelligent connection** between car and grid
  - Roll out of **smart meters** and **smart grids**
    - To ensure security of supply under mass volume conditions
- **Need for information and communication technology to ensure data handling based on standardised metering protocols**



## Collaboration Between Automotive And Electricity Industry Is Indispensable

- Both industries have to **collaborate** to enable market take-up and mass commercialisation
  - **Standards** are a prerequisite
  - Pilot and demonstration **projects** to assess impact
  - More obstacles to tackle:
    - **ICT solutions** to enable communication ( procedures and protocols)
    - **Privacy rules** and laws have to be adapted to enable grid operators to monitor battery capacity