Clean Power for Transport initiative

An EU sustainable alternative fuels strategy including the appropriate infrastructure
Main problems to fix

Energy supply at risk:

Transport - largest oil consumer: 55% and rising
Oil counts for 94% of transport fuels, 84% imported
New oil reserves expensive

High oil import bill:

Up to € 1 billion per day in 2011
Trade balance deficit: ~ 2.5 % of GDP
7% of household expenditure
Oil price ($/bl)

Speculative bubble 2007-2008: Cost for EU transport = 90 b€
North-Africa unrest 2010-2011: Cost for EU transport = 40 b€
Sustainable transport

**CO₂ emissions from transport:**
30% of total CO₂ emissions from the EU economy in 2009
Increased by 34% between 1990 and 2009

**GHG emissions reduction from transport of 60% by 2050**

- Large-scale deployment of low-CO₂ alternative fuels can contribute significantly
- Alternative fuels, together with increased transport efficiency, are indispensable

**Clean fuels are also beneficial in urban areas**
Competitiveness / Growth and jobs

Risk for the EU industry:
Loss of world leadership

- Market opportunities for European industry – support for innovative sectors where EU companies are leading

- If the EU acts as a first-mover, global competitiveness of EU vehicles, vessels and relevant infrastructures industries will be enhanced

- Employment creation in a wide range of sectors in the EU (construction, manufacturing, electricity, ICT technology and applications, advanced materials)
What is the current situation?

**Important efforts** to promote alternative fuels by some Member States and industry,

but:

**Different technological choices lead to:**

- **Isolated** national/regional markets
- **Fragmentation** of the internal market for alternative fuels
- Technology "border lines", which **inhibit mobility** with alternative fuels across Europe
Closure of the Missing Link

EU-funded Projects
- Green Car Initiative
- FCH-JU
- TEN-T projects on LNG

Regulatory measures
- CO2 and pollutants
- Fuel quality and renewable energy Directives
- Green procurement

Market incentives
- Subsidies
- Fiscal advantages
- EIB loans

Sustainable Market

Infrastructure
- Common standards

Transport
What is the EC response?

The Clean Power for Transport Package will contribute to:

- Build a competitive, resource efficient and sustainable transport system in the EU
- Establish a long term fuel strategy
- Remove technical and regulatory barriers across the EU
- Facilitate the development of a single market for alternative fuel infrastructure and alternative fuel vehicles and vessels
Clean Power for Transport initiative

- Communication “A European alternative fuels strategy”

- A proposal for a Directive on the deployment of alternative fuels infrastructure
  
  *Focusing on the "missing link" - infrastructure and standards*

- Staff Working Document on Actions towards a comprehensive framework on LNG for shipping
The Communication

- a comprehensive alternative fuels strategy for the long-term substitution of oil as the primary energy source for transport
- a framework to guide investments and technological development
- Single-fuel solution is not possible => a package of alternative fuels

Priority actions

- For infrastructure with common standards
- For technology development
- For consumer acceptance

WE CONTINUE ON ALL FRONTS!
TEN-T and R&D projects

- Horizon2020
- European Green Vehicles Initiative
- Smart Cities initiative
- LNG projects

Etc.
A legislative proposal for infrastructure build-up, with common standards

- **Obligation of means** (national policy frameworks + EC assessment and recommendations)

- **Obligation of results** (minimum infrastructure)
  - Conservative approach; no disproportionate targets

  => would help MS to reach their projections

- A proposal developed in **close consultation with MS and industry**

- **A network approach/creation of economies of scale**

- Unlock private investment = **a pro-growth initiative**

- **Flexibility = Full freedom given to MS for implementation**

- **EU support** offered
The proposed Directive creates:

the conditions to establish a single market and economies of scale

=> Confidence for investors & consumers

Stable framework including minimum infrastructure
  • Investments encouraged

EU common standards
  • Interoperability

Consumer information
  • Fuel / vehicle compatibility
Costs of electric recharging points

Private = \( \sum 520 \times (90\% \text{ total number in MS}) \)
= 520\( \times \) 7.2 M = \(\text{3.7 bn } \€\)

Public = \( \sum 5,280 \times (10\% \text{ total number in MS}) \)
= 5,280\( \times \) 800,000 = \(\text{4.2 bn } \€\)

Total number of recharging points = 8 M

Number of recharging points in each MS are calculated as:

\[
\frac{\text{Car stock (MS}_1\text{)}}{\text{Car stock (EU)}} \times \frac{\text{Share of urban population (MS}_1\text{)}}{\text{Share of urban population (EU)}} \times \text{EV stock (EU)} \times 2 = \text{Number of charging points needed in MS}_1
\]
# Minimum number of electric vehicle recharging points in each Member State

<table>
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<th>Member State</th>
<th>Number of recharging points (in thousands)</th>
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Existing standards for slow charge

Type 2
Type 3

うこと = Shutter Regulation
Competing standards

Type 2

Chademo

Type 3

COMBO Type 2
**Common standards: conclusions**

*Type 2 standards is the only one interoperable plug for slow and fast charge stations*

*Compatible with national safety requirements (shutters)*

*Supported by ACEA, Eurelectric and CLEPA – Position paper adopted by all in May 2012*

- Decision on a single connector is needed
- Type 2/Type 2 Combo to be used in the EU as a standard for AC/DC charging both on the vehicle and public charging
- Type 2/Type 2 Combo can be used both on vehicle and public infrastructure side and is ready for all kinds of charging and ensure interoperability EU-wide

*Help the developments in internal market & negotiations with third countries to achieve common or compatible standards – still pending under TEC*
Thank you for your attention!