



European Alternative Fuels Strategy

- **Policy Drivers**
- **EU actions on alternative fuels**
- **Clean Transport Systems initiative**

Franz Söldner

European Commission

Directorate General for Mobility and Transport



Energy/Transport Policy Drivers

- **High demand on finite energy sources**
(Range of conventional oil: ~ 45 years)
- **Increasing energy import dependence**
(Import dependence for oil: 80% now; ~ 90% in 2030)
- **Increasing greenhouse gas emissions**
(Increase of transport CO₂ emissions: 25% since 1990)



Alternative Fuels Strategy

Comprehensive long-term fuel strategy
All transport modes, all segments to be covered

White Paper on Transport - Initiative 24 - Technology roadmap:

Sustainable alternative fuels strategy
including also the appropriate infrastructure

White Paper on Transport - Initiative 26 - Regulatory framework:

- **Appropriate standards for CO₂ emissions of vehicles in all modes, where necessary supplemented by requirements on energy efficiency to address all types of propulsion systems**
- **Rules on interoperability of charging infrastructure for clean vehicles**
- **Guidelines and standards for refuelling infrastructures**



Clean Transport Systems Initiative

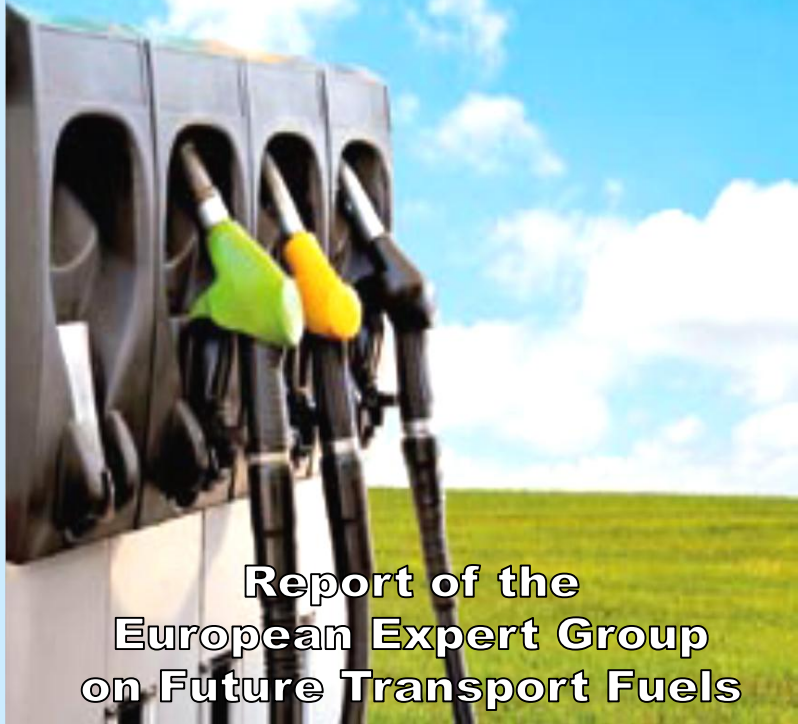
- Activities -

- **European Expert Group on Future Transport Fuels**
Stakeholder experts
Future Transport Fuels Report: 25 January 2011
Alternative Fuels Infrastructure Report: November 2011
- **Joint Expert Group Transport & Environment**
National experts
European Alternative Fuel Strategy Report: May 2011
- **Conference on Future Transport Fuels**
13 April 2011 (European Sustainable Energy Week)
- **Studies**
Clean Transport Systems study: final report October 2011
European Alternative Fuel Strategy Implementation study: launch 10/2011
- **Public Consultation**
11 August – 20 October 2011



Future Transport Fuels Expert Group

Future Transport Fuels



Report of the
European Expert Group
on Future Transport Fuels

European Expert Group on Future Transport Fuels

Members:

- Manufacturers, operators, users
- Energy and fuel suppliers
- Civil society

Scope:

Long term energy supply to transport

- All transport modes
- All fuels and energy carriers

Report published on 25 January 2011

http://ec.europa.eu/transport/urban/vehicles/road/clean_transport_systems_en.htm



Alternative Transport Fuel Options

Main fuel options:

- **Electricity / hydrogen → *electromobility***
- **Biofuels (liquid)**

Bridge from fossil to biomass based fuels:

- **Synthetic fuels (from coal, methane, biomass)**

Complementary:

- **Methane (natural gas and biomethane)**

Supplement:

- **LPG (now: from oil, natural gas; future: from biomass)**



Fuel Choice

Range		Road - passenger			Road - freight			Rail	Water			Air
		short	medium	long	short	medium	long		inland	short-sea	maritime	
Electric	BEV											
	HFC											
	Grid											
Biofuels (liquid)												
Synfuels												
Methane	CNG											
	CBG											
	LNG											
LPG												



Summary

- ◆ **Comprehensive long-term European fuel strategy**
Substitution of oil for all transport modes, all segments
- ◆ **Future transport fuel mix**
Electromobility and biofuels highest priority
Synthetic fuels bridging from fossil to biomass sources
Methane complementary
LPG supplementary
- ◆ **Alternative fuel infrastructure**
EU-wide coverage important