

# COMMISSION EXPERT GROUP ON FUTURE TRANSPORT FUELS

## Context

Decarbonising transport is a major theme of the EU-2020 strategy, the Commission Work Programme, and a new White Paper on a common transport policy 2010-2020. An Expert Group on Future Transport Fuels should advise the European Commission on the development of political strategies and concrete measures aiming at substituting fossil oil as transport fuel.

## Scope

The mix of future transport fuels to be considered should have the potential for:

- Full supply of the transport energy demand by 2050
- Low-carbon energy supply to transport by 2050
- Sustainable and secure energy supply to transport on the longer term, beyond 2050.

Alternative fuels are the ultimate solution to decarbonise transport, by gradually substituting the fossil energy sources, at the source of the CO<sub>2</sub> emissions of transport.

Energy carriers as transport fuels should be given particular attention, as they can be produced from a wide range of primary energy sources. They allow transport taking full profit from the expected gradual decarbonisation of the energy system resulting from a steady increase of the share of non-carbon emitting energy sources. Energy carriers as fuels also ensure security of energy supply to transport by providing diversification of energy sources and suppliers, whilst allowing a smooth transition from fossil to renewable energy sources.

Compatibility of new fuels with present vehicle technology and energy infrastructure, or alternatively the need for disruptive system changes should be taken into account as important determining factors influencing the introduction of alternative fuels.

Main options for alternative fuels are:

***Biofuels (liquid and gaseous), electricity, hydrogen***

A versatile form of fuels, which can be produced from fossil and renewable energy sources are:

***Synthetic (hydrocarbon) fuels***

Other supporting fuels are:

***LPG, CNG***

## Mandate

The Expert Group on Future Transport Fuels shall, on the basis of existing and new studies

1. Assess market potential, technological issues, economic viability, industrial implications, social and demographic aspects, environmental impacts, and safety, of the different fuels considered as part of a long term oil substitution for transport fuels
2. Systematically consider factors that could affect long term viability of alternatives – including security of supply, availability of feedstock, resources required for the fuel chain
3. Design scenarios towards full substitution of fossil energy sources for transport fuels
4. Devise a development and field testing programme and identify needs for public support
5. Recommend actions and policy measures towards full substitution of oil as transport fuel.

## Time line

1. Strategic input to the new White Paper on transport: 10/2010
2. Road map with recommendations on policy measures: 10/2011
3. Assessment of policy options and recommendations on implementation: 10/2012

## **WORK PLAN 2010**

### **Strategic input to the new White Paper on transport**

#### 1<sup>st</sup> meeting: 27.04.2010: Approach and strategic lines

Preparation: 08.03.2010: Discussion note to participants  
19.04.2010: Written contributions from participants  
21.04.2010: All contributions to participants

#### 2<sup>nd</sup> meeting: 29.06.2010: Synthetic overview and prioritisation

Preparation: 10.05.2010: Summary of 1<sup>st</sup> meeting and draft overview to participants  
14.06.2010: Written contributions from participants  
23.06.2010: Draft synthetic overview to participants

#### 3<sup>rd</sup> meeting: 05.10.2010: Strategy report

Preparation: 14.07.2010: Summary of 2<sup>nd</sup> meeting and draft strategy report to participants  
16.09.2010: Written contributions from participants  
28.06.2010: Revised draft strategy report to participants

## Expert Group on Alternative Fuels

### Members

	<b>Road</b>	<b>Rail</b>	<b>Airborne</b>	<b>Waterborne</b>
<b>Mineral oil products</b>	EUROPIA CONCAWE	EUROPIA CONCAWE	EUROPIA CONCAWE	EUROPIA CONCAWE
<b>Biofuels (liquid, gas)</b>	EBTP EBB EBIO EBA	EBTP EBB EBIO	EBTP EBB EBIO EBA	EBTP EBB EBIO EBA
<b>Natural gas</b>	ENGVA			ENGVA
<b>Electricity</b>	EURELECTRIC AVERE EUROBAT	EURELECTRIC	EURELECTRIC	EURELECTRIC
<b>Hydrogen</b>	FHC-JTI	FHC-JTI	FHC-JTI	FHC-JTI
<b>LPG</b>	AEGPL			
<b>Manufacturers</b>	ACEA EUCAR		Clean Sky JTI	CESA
<b>Suppliers</b>	CLEPA	UNIFE		
<b>Research</b>	ERTRAC EPOSS EARPA		Clean Sky JTI ACARE	
<b>Operators</b>	EUROCHAMBERS UITP IRU FIA	CER UIC	AEA ACI	EBU
<b>Civil society</b>	T&E WWF IEEP COPA-COGECA	T&E WWF IEEP COPA-COGECEC	T&E WWF IEEP COPA-COGECEC	T&E WWF IEEP COPA-COGECEC
<b>European Commission</b> MOVE, ENER, AGRI, CLIMATE, ECFIN, EMPL, ENTR, ENV, INFSO, RTD, JRC, SG, TAXUD, SANCO				

<b>ACARE</b>	Advisory Council for Aeronautics Research in Europe
<b>ACEA</b>	European Automobile Manufacturers' Association
<b>ACI</b>	Airports Council International
<b>AEA</b>	Association of European Airlines
<b>AEGPL</b>	European LPG Association
<b>AVERE</b>	European Association for Battery, Hybrid and Fuel Cell Electric Vehicles
<b>CER</b>	Community of European Railway and Infrastructure Companies
<b>CESA</b>	Community of European Shipyards' Associations
<b>Clean Sky JTI</b>	Joint Technology Initiative for Aeronautics & Air Transport
<b>CLEPA</b>	European Association of Automotive Suppliers
<b>CONCAWE</b>	The oil companies' European association for environment, health and safety in refining and distribution
<b>COPA-COGECA</b>	European Farmers; European Agri-Cooperatives
<b>EARPA</b>	European Automotive Research Partners Association
<b>EBA</b>	European Biogas Association
<b>EBB</b>	European Biodiesel Board
<b>EBIO</b>	European Bioethanol Fuel Association
<b>EBTP</b>	European Biofuels Technology Platform
<b>EBU</b>	European Barge Union (inland navigation)
<b>ENGVA</b>	European Natural Gas Vehicle Association
<b>EPOSS</b>	European Technology Platform on Smart Systems Integration
<b>ERTRAC</b>	European Road Transport Research Advisory Council
<b>EUCAR</b>	European Council for Automotive R&D
<b>EURELECTRIC</b>	Union of the Electricity Industry
<b>EUROBAT</b>	Association of European Storage Battery Manufacturers
<b>EUROCHAMBERS</b>	Association of European Chambers of Commerce and Industry
<b>EUROPIA</b>	European Petroleum Industry Association
<b>FHC-JTI</b>	Fuel Cells and Hydrogen Joint Undertaking
<b>FIA</b>	Federation Internationale de l'Automobile
<b>IEEP</b>	Institute for European Environmental Policy
<b>IRU</b>	International Road Transport Union
<b>T&amp;E</b>	Transport & Environment (European environmental organisation)
<b>UIC</b>	International Union of Railways
<b>UITP</b>	International Association of Public Transport
<b>UNIFE</b>	European Railway Industry
<b>WWF</b>	World Wildlife Fund