

**HyLights**  
**A Coordination Action to Prepare European Hydrogen and Fuel Cell  
Demonstration Projects on Hydrogen for Transport**

***Overview and first results***

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*On behalf of the HyLights consortium*

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HyLights is funded  
by the  
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*The European Commission is supporting the Coordination Action “HyLights” and the Integrated Project “Roads2HyCom” in the field of Hydrogen and Fuel Cells. The two projects support the Commission in the monitoring and coordination of ongoing activities of the HFP, and provide input to the HFP for the planning and preparation of future research and demonstration activities within an integrated EU strategy.*

*The two projects are complementary and are working in close coordination. **HyLights focuses on the preparation of the large scale demonstration for transport applications**, while Roads2Hycom focuses on identifying opportunities for research activities relative to the needs of industrial stakeholders and Hydrogen Communities that could contribute to the `early adoption of hydrogen as a universal energy vector.*

*Further information on the projects and their partners is available on the project web-sites [www.roads2hy.com](http://www.roads2hy.com) and [www.hylights.eu](http://www.hylights.eu).*

# HYLIGHTS

# Roads2 HyCOM

FP6-2004-Hydrogen-2

## Outline

- Project facts and partners
- Basic approach
- Strategic results expected
- Outlook on individual results



## Project facts

### Project outline

- Coordination Action (CA), FP6, Jan 06 – Dec 08
- 21 partners (industry: 7 auto, 5 oil, 2 utility, 3 process; 4 institutes)
- Funding ~ 4 M€ and additional funds from industry

### Framework

- Focus: Demonstration Activities on “Hydrogen for Transport”
- In close co-ordination with the project *Roads2HyCom* assisting the EC and EU industry to plan R&D and demonstration projects of the 7<sup>th</sup> Framework Programme (FP7) and Joint Technology Initiative (JTI)
- International dimension anchored in Executive Advisory Board (EAB), Associate Partner Group, proposal for liaison partnership with IPHE and by activities in individual work packages

# Project partners



No.	Participant name	MS
01	L-B-Systemtechnik	D
02	Air Liquide Advanced Technology Division	F
03	Air Products	UK
04	Bayerische Motoren Werke	D
05	BP	UK
06	Centro Ricerche Fiat	I
07	DaimlerChrysler	D
08	Deutsche Energie-Agentur	D
09	Energy Research Centre of the Netherlands	NL
10	EniTecnologie	I
11	Ford Forschungszentrum Aachen	D
12	GM/Opel	D
13	Kellen Europe	B
14	Linde	D
15	Norsk Hydro	N
16	PSA Peugeot Citroën Automobiles	F
17	Repsol YPF	E
18	Shell Hydrogen	NL
19	Total	F
20	Vattenfall Europe	D
21	Volkswagen	D



European Commission



Associate Partners\*


# HYLIGHTS



\* To grow over time



## Basic approach

„Hydrogen for Transport“	
<b><i>Demonstration Program Framework</i></b>	
<ul style="list-style-type: none"><li>• Learn from past/ongoing activities</li><li>• Support EC to prepare of FP7/JTI</li><li>• Harmonise between EC/industry</li><li>• Plan large scale demo projects</li></ul>	<ul style="list-style-type: none"><li>• Establish the group</li><li>• Create a group identity</li><li>• Provide services (workshops)</li><li>• Create visibility by branding</li></ul>



# „Hydrogen for Transport in Europe“

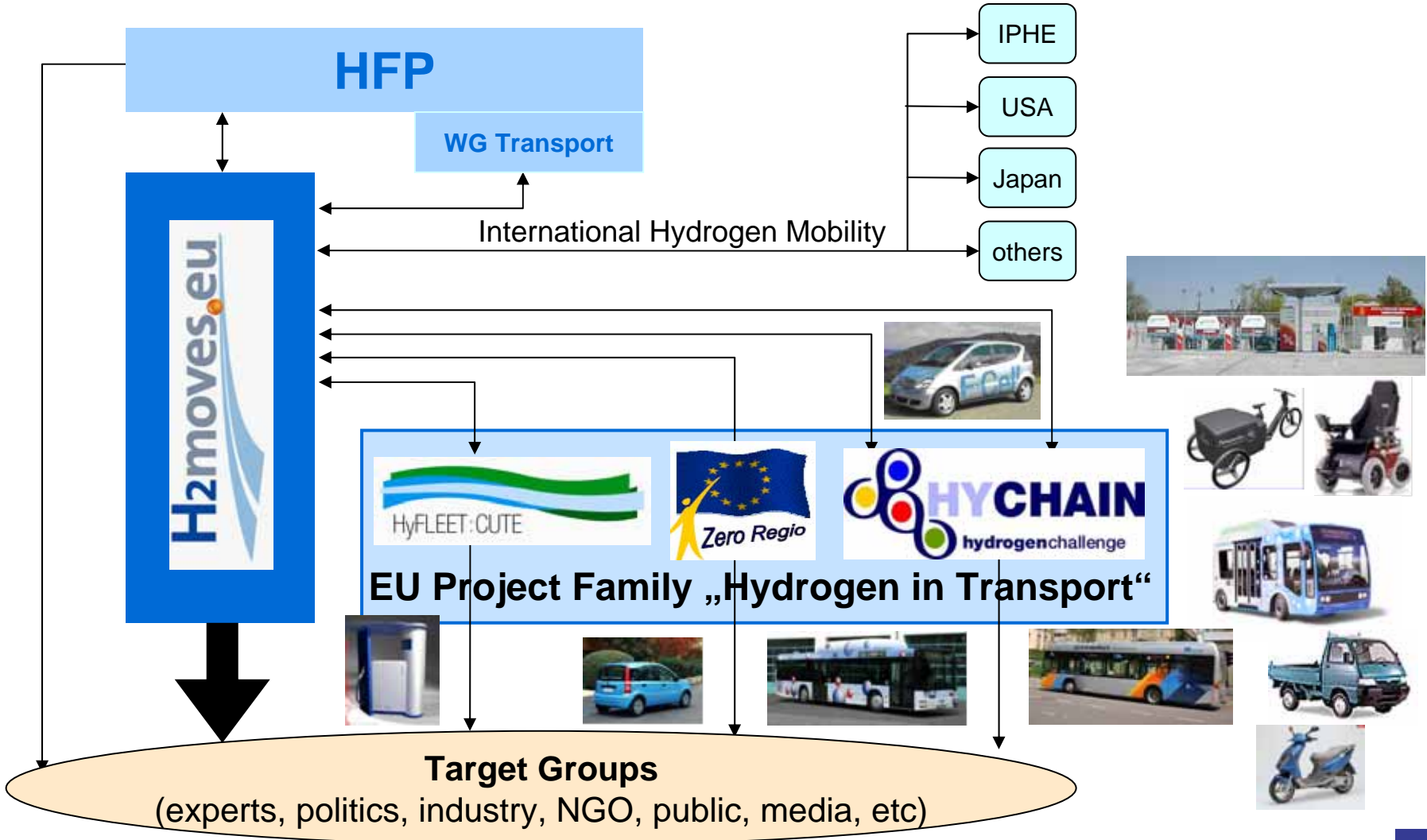
## Tasks of H2moves.eu

- Provide overview of all ongoing demonstration activities in Europe also including national level (create website [www.h2moves.eu](http://www.h2moves.eu) / leaflet).
- Handle, manage and forward all kinds of information requests towards relevant demo projects.
- Organise and facilitate annual non-expert conferences and workshops in the field of „Hydrogen for Transport“ with maximum public outreach.
- Foster lessons learnt between ongoing demo projects  
*increased efficiency by information exchange on cross-cutting issues among stakeholders to avoid duplication and to develop rules for best practice*
- Increase awareness and customer acceptance to prepare the markets.

# Website home page



# EU Project Family "Hydrogen for Transport"



# Demonstration Program Framework



## Demonstration Program Framework

### Strategic results expected:

- Prepare the upcoming (series) of large scale demonstration projects, (also dubbed 'Lighthouse Projects' in EC terminology)

### By:

- Developing a 'Project Monitoring & Assessment Framework Toolbox'
  - ✓ What data need to be collected?
- Design of the project:
  - ✓ Legal issues
  - ✓ Financing issues
  - ✓ What are suitable locations for these future 'lighthouse projects' – development of selection criteria, not selection of actual locations
  - ✓ Political framework issues (such as municipal, regional and national interests, strategies and activities)
- What is the gap between market requirements and current vehicle performance? – GAPS Analysis

## Political framework Assessment

- **Objective:** Assessment of regional & national H<sub>2</sub> activities and strategies with respect to demonstration in a comparable and transparent way:
  - ✓ Influence of specific actors
  - ✓ Detailedness of H<sub>2</sub> strategies
  - ✓ upcoming activities for engaging H<sub>2</sub> demonstration projects
  - ✓ Management and financing strategies
  - ✓ Importance of different drivers / obstacles
  - ✓ Importance of different early markets
  - ✓ Needs for support and coordination

## Political framework Assessment

- **Desired Results:** Profiles of the EU member states and regions regarding the political framework conditions in regard to H<sub>2</sub> for Transport
  - **survey form on political frameworks (on [www.hylights.eu](http://www.hylights.eu))**
- **Next Steps:**
  - Analysis of the collected data
  - Feedback of the analysis to the regions
  - Provide input to the HFP and EC

**Please help us to complete the picture ...**

## Outlook on individual results

Elements of the MAF Toolbox:

- **Demo project description (1)**

*Document containing relevant non-operative project data.*

- **Project monitoring templates (x)**

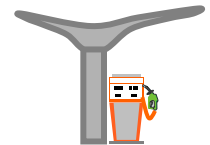
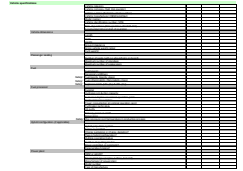
*Data collection (generic and descriptive) for vehicles, hydrogen production & supply, with manual on “how to use the templates” extracted from handbook.*

- **Project performance report (1)**

*Compilation of data from demo project description and project monitoring templates using the MAF handbook.*

- **Handbook (1)**

*Includes the definition and description of the relevant **Performance Indicators** (PI) of the project, including recipes how to collect and document project relevant data on (a) vehicles, (b) H<sub>2</sub> production & supply, and (c) project management from a technical, socio-economic and environmental perspective. The handbook is used for training the operators (vehicles and fuelling stations).*



## Acknowledgement

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Thank you for your  
attention