



# **Fuel Cells and Hydrogen Joint Undertaking (FCH JU) 3<sup>rd</sup> Stakeholders General Assembly**

***"Towards a green Fuel Cell and Hydrogen market"***

**Management Centre Europe  
Rue de l'Aqueduc 118, B-1050 Brussels**

**For further information:  
<http://ec.europa.eu/research/fch>  
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***Programme 9-10 November 2010***

## Tuesday 9 November

08:00 – 09:00

**Registration and welcome coffee**

### Session 1: Opening plenary session: Commercialising clean energy

09:00-10:15

Fuel cell and hydrogen technologies can play a versatile role in a cleaner energy system through a range of applications. This opening session will focus on the steps needed to bring fuel cell and hydrogen technologies into the market. Commercialisation prospects and conditions will be examined by speakers representing different facets of the industry, institutions of the European Union and national public research, with a view to defining what their needs and capacities are vis-à-vis other actors in the value chain and how to advance market introduction through cooperation and coordinated actions.

Welcome address by **Gijs van Breda Vriesman**, Chair of the FCH JU Governing Board

**Máire Geoghegan-Quinn**, European Commissioner for Research (video address)

**Lena Ek**, Member of the European Parliament, Committee on Industry, Research and Energy

Prof. **Herbert Kohler**, Vice President e-Drive & Future Mobility, Group Research, Chief Environment Officer, *Daimler AG*

**Pierre-Etienne Franc**, Director, Technologies of the Future, *Air Liquide*

**Bernard Frois**, Director, Management Unit of New Energy Technologies, CEA; Chairman of the States Representatives Group of the FCH JU

### Session 2: Moving towards market creation – investing in a decarbonised transport system

10:15-12:30

While it is not in doubt that our current ways of energy production and consumption are not sustainable even in the relatively short term, the massive cost involved in replacing infrastructure and equipment to achieve a shift to a more sustainable energy system stands in the way of the necessary change. Smart and sufficient investment is therefore a key condition to a successful transition that cannot wait. This session will look into the best ways and mechanisms of investment at different levels and how these should interact to make fuel cell and hydrogen technologies commonplace and capitalise on their public benefits particularly in the transport sector.

*Moderator* – **Klaus Bonhoff**, Managing Director, *NOW (German national programme)*

**Jean-Eric Paquet**, Director, Trans-European transport networks & Smart transport, DG Mobility and Transport, *European Commission*

**Martin Linder**, Associate Principal, *McKinsey & Company Inc.*

**Philippe Mulard**, Hydrogen Programme Manager, *Total*

**Edward F. Kiczek**, Global Director – Hydrogen Energy Systems, *Air Products*

**Axel Strang**, Policy advisor on smart grids, energy storage and hydrogen, *French Ministry of Ecology, Energy, Sustainable Development and the Sea*

**Gunnar Münt**, Head of Division- RDI, Innovation & Competitiveness, *European Investment Bank*

**Davide Damosso**, Vice President, *HyRaMP*

12:30 – 13:45

**Lunch**

### Session 3: International session: Global perspectives on Fuel Cell and Hydrogen Technologies

13:45-16:00

The session will give insights into public policy and private initiatives and progress made in fuel cell and hydrogen technologies worldwide. Presentations will introduce current policy and business strategies with a view to assessing how the two can best interact to produce commercial successes.

<b>Moderator - Raffaele Liberali</b> , Director, Directorate "Energy", DG Research, <i>European Commission</i>
<b>Sunita Satyapal</b> , Deputy Director, Hydrogen Program, <i>US Department of Energy</i>
<b>R. Daniel Brdar</b> , CEO, <i>FuelCell Energy</i>
<b>Haruhisa Koguchi</b> , Deputy Director, Hydrogen & Fuel Cell Promotion Office, Agency for Natural Resources and Energy (ANRE), <i>Japanese Ministry of Economy, Trade and Industry (METI)</i>
<b>Kiyoshi Okamura</b> , Chief Manager, Residential Fuel Cell Business Development Dept., Fuel Cell Engineering Group, <i>Tokyo Gas Co.</i>
<b>Won-Yong Lee</b> , Fuel Cell R&D Program Director, <i>Ministry of Knowledge Economy of the Republic of Korea</i>
<b>Sae Hoon Kim</b> , Principal Research Engineer, Fuel Cell Vehicle Team 1, Eco-Technology Center, Research & Development Division, <i>Hyundai Motor Company &amp; Kia Motors Corporation</i>
<b>Adwin Martens</b> , Director, <i>WaterstofNet - Hydrogen Region Flanders- South-Netherlands (VSWB)</i>
<b>Patrick Françoisse</b> , Sustainable Energy Platform Manager, <i>Solvay</i>

16:00 - 16.30

**Coffee break**

## Session 4: The Fuel Cells and Hydrogen Joint Undertaking programme update

**16:30-17:00**

### **Presentation of the FCH JU Progress Report**

**Bert de Colvenaer**, Executive Director, Fuel Cells and Hydrogen Joint Undertaking

The purpose of this session is to review the progress of the FCH JU after two years of operation and discuss the future agenda of the Joint Undertaking. Aspects to be addressed include management of the public-private partnership, outcomes of the calls for proposals to date and planning of the research agenda. Speakers will represent the points of view of different FCH JU bodies, as well as its members.

The plenary session will begin with a presentation by the FCH JU's Executive Director on the state of play of the FCH JU and a presentation of the staff, followed by addresses from FCH JU members' representatives and advisory bodies and a Q&A session with the audience.

**17:00-17:30**

### **Q&A session**

FCH JU management and member groupings will take questions from the audience regarding all aspects of the programme.

#### **Session 4: Panel**

*Moderator* – **Matti Färkkilä**, Programme Officer, Fuel Cells and Hydrogen Joint Undertaking

**Rudolf Strohmeier**, Deputy Director General, DG Research, European Commission; Vice-Chair of the FCH JU Governing Board

**Lucio Gallo**, Member of the FCH JU Governing Board, NEW Industry Grouping

**Paul Lucchese**, Chair of N.ERGHY Research Grouping, member of the FCH JU Governing Board

**Bert de Colvenaer**, Executive Director, Fuel Cells and Hydrogen Joint Undertaking

**Georg Menzen**, Vice-Chair, FCH JU States Representatives Group

**Knut Harg**, Chair of the FCH JU Scientific Committee

**17.30-19.15**

### **Cocktail reception**

**19:30-22:30**

**Stakeholders' Dinner at the European Parliament, hosted by Mr Herbert Reul, MEP (by invitation only)**

## Wednesday 10 November

8:30-9.00

**Registration and welcome coffee**

### Session 5: European projects in fuel cells and hydrogen today: Looking at the progress being made and identifying cooperation opportunities for the future

09:00-11:15

**Parallel sessions by application areas**

These sessions will provide a platform for an exchange of information on interesting new and ongoing projects at national, regional and European level. The sessions will offer an opportunity for the participants to familiarise themselves with different initiatives in the field and in this context discuss the state of progress and remaining bottlenecks of the technologies. The session will also aim to identify future R&D needs to be considered in the revision of the FCH JU Multi-Annual Implementation Plan.

#### **A. TRANSPORTATION AND REFUELLING INFRASTRUCTURE**

**Conference room "B" (main plenary room)**

**Moderators - Jörg Wind**, Application Area leader, *NEW Industry Grouping*  
**Steffen Møller-Holst**, Application Area Leader, *N.ERGHY Research Grouping*

**Ulrich Bünger**, Senior Scientist, Ludwig-Bolkow-Systemtechnik GmbH:  
*H2 Moves Scandinavia (FCH JU Project)*

**André Martin**, Coordinator, Auto-Stack project: *Auto-Stack - Implementing a European Automotive Fuel Cell Stack Cluster (FCH JU Project)*

**Hubert Landinger**, Project Manager, Ludwig-Bolkow-Systemtechnik GmbH:  
*Overview and Status Quo of the NextHyLights Project (FCH JU Project)*

**Monika Kentzler**, Coordinator, CHIC Project: *Clean Hydrogen in European Cities (FCH JU Project)*

**Wido Westbroek**, Vice President and General Manager, Hydrogenics: *Electrolysers for hydrogen production at filling stations*

**Jörg Wind**, Coordinator, HySYS Project: *HySYS - Fuel Cell Vehicle System Components*

#### **B. STATIONARY POWER GENERATION AND CHP**

**Conference room "CD"**

**Moderators - Lucio Gallo**, Application Area Leader, *NEW Industry Grouping*  
**Angelo Moreno**, Application Area Leader, *N.ERGHY Research Grouping*

**Dimitrios Niakolas**, Researcher, Foundation for Research and Technology Hellas (FORTH/ICE-HT):  
*ROBANODE project: Understanding and minimizing anode degradation in hydrogen and natural gas fuelled SOFCs (FCH JU Project)*

**Stylianos Neophytides**, Coordinator, DEMMEA Project: *Understanding the Degradation Mechanisms of Membrane-Electrode-Assembly for High Temperature PEMFCs and Optimization of the Individual Components (FCH JU Project)*

**Jari Kiviaho**, Coordinator, ASSENT Project: *Assent project (FCH JU Project)*

**Pietro Bedont**, Technology Development & Engineering, Ansaldo Fuel Cell: *Operating experience on MCFC full size power plants: the key to develop new opportunities in MCFC*

**Laila Grahl-Madsen**, IRD fuel Cells: *Lolland Hydrogen Community*

### **C. HYDROGEN PRODUCTION, DISTRIBUTION AND STORAGE**

**Conference room "EF"**

**Moderators - Philippe Mulard**, Application Area Leader, *NEW Industry Grouping*  
**Luis Correias**, Application Area Leader, *N.ERGHY Research Grouping*

**Christos Agrafiotis**, Researcher, APT Lab, CPERI/CERTH:  
*Hydrosol III - Scale Up of Thermochemical Hydrogen Production in a Solar Monolithic Reactor: a 3rd Generation Design Study (FCH JU Project)*

**Pieterneel Claassen**, HYVOLUTION Project Coordinator, Wageningen UR Food & Biobased Research: *Hyvolution: A novel bioprocess for hydrogen production from biomass*

**Pedro Casero Cabezon**, Project Manager, Engineering and R&D Direction, Elcogas S.A.: *First learnings from the CO2 capture and H2 production Pilot at Puertollano IGCC Plant*

**Eugenio Guelbenzu**, Head of Hydrogen and Electrical Vehicle R+D department, Acciona: *SPHERA project*

**Athanasios Stubos**, NESSHY Project Manager, NCSR Demokritos Greece: *Novel Efficient Solid Storage for Hydrogen: An Overview of the NESSHY Project*

### **D. EARLY MARKETS AND CROSS-CUTTING ISSUES**

**Conference room "H"**

**Moderators - Dennis Hayter**, Application Area Leader (Acting), *NEW Industry Grouping*  
**Ralph-Uwe Dietrich**, Application Area Leader, *N.ERGHY Research Grouping*

**Aarne Halme**, Director, Centre of Excellence in Generic Intelligent Machines Research, Aalto TKK: *In situ H2 supply technology for micro fuel cells – ISH2SUP-project (FCH JU Project)*

**Joannis Kallitsis**, Coordinator, IRAFC Project: *Development of an Internal Reforming Alcohol High Temperature PEM Fuel Cell Stack (FCH JU Project)*

**Marianne Julien**, Programme Director: *Horizon Hydrogène Energie (H2E)*

**Marc Steen**, Head of Unit "Cleaner Energy", Joint Research Centre: *The Joint Research Centre's contribution to cross-cutting activities of the FCH JU*

**Hugo Spowers**, CEO, Riversimple: *City car concept*

11:15-11:45

**Coffee break**

## Session 6: The Multi-Annual Implementation Plan

**11:45-12:30**

### Session with the audience for revising the Multi-Annual Implementation Plan

The session will focus on the revision of the Multi-Annual Implementation Plan of the FCH JU. The revision process is currently being initiated and is due to be finalised in March 2011. The session will start with a presentation of the work plan for the revision and a summary of outcomes from the presentations and discussions in Session 5.

The rest of the session will be dedicated to an open discussion and Q&A with the audience. The panel will consist of representatives of FCH JU bodies and leaders of the Application Area working groups. The feedback received will feed into the revision process.

<b>Session 6: Panel</b>
<i>Moderator – Enrique Giron, Project Manager, Fuel Cells and Hydrogen Joint Undertaking</i>
<b>Joaquin Martin Bermejo</b> , DG Research, <i>European Commission</i>
<b>Aksel Mortensgaard</b> , Vice-Chair, <i>FCH JU States Representatives Group</i>
<b>Florence Lefèbvre-Joud</b> , Vice-Chair, <i>FCH JU Scientific Committee</i>
<b>Jörg Wind</b> , Application Area Leader, "Transport", <i>NEW Industry Grouping</i>
<b>Steffen Møller-Holst</b> , Application Area Leader, "Transport", <i>N.ERGHY Research Grouping</i>
<b>Lucio Gallo</b> , Application Area Leader, "Stationary", <i>NEW Industry Grouping</i>
<b>Angelo Moreno</b> , Application Area Leader, "Stationary", <i>N.ERGHY Research Grouping</i>
<b>Philippe Mulard</b> , Application Area Leader, "Hydrogen Production", <i>NEW Industry Grouping</i>
<b>Luis Correias</b> , Application Area Leader, "Hydrogen Production", <i>N.ERGHY Research Grouping</i>
<b>Dennis Hayter</b> , Application Area Leader (Acting), "Early Markets", <i>NEW Industry Grouping</i>
<b>Ralph-Uwe Dietrich</b> , Application Area Leader, "Early Markets", <i>N.ERGHY Research Grouping</i>

**12:30- 14:00**

### Lunch

## General Assemblies of the NEW Industry Grouping and the N.ERGHY Research Grouping (NEW-IG and N.ERGHY members only)

**14:00-17:00**

**NEW IG – Conference room "CD"**  
**N.ERGHY – Conference room "EF"**

The session is dedicated to the General Assemblies of the NEW Industry Grouping and the N.ERGHY Research Grouping. **Please note that these sessions are only for representatives of the member organisations of NEW-IG Industry Grouping and N.ERGHY Research Grouping.**