HYLIGHTS

Hydrogen for Transport in Europe

Deliverable 3.4

Report on HyLights Regions Workshop:

"Supporting the Regions to Integrate Hydrogen" in Consideration of the EC Workshop "The Role of the Regions in the Implementation Plan and the JTI"

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A Coordination Action to Prepare European and Fuel Cell Demonstration Projects on Transport

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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 and www.hylights.eu.

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Disclaimer

This document is the result of a collaborative work between HyLights Industry and Institute partners. The results of the research were subsequently elaborated and presented in a coherent manner, which involved extensive stakeholder consultation in locations around the world as well as feedback from the “HyLights” Industry Partners.

The ideas presented in this document were reviewed by certain "HyLights" project partners to ensure broad general agreement with its principal findings and perspectives. However, while a commendable level of consensus has been achieved, this does not mean that every consulted stakeholder or "HyLights" Industry Partner necessarily endorses or agrees with every finding in the document. The producer of this document is the sole responsible for its content and recommendations.

TABLE OF CONTENTS

1 Overall Objectives

After the Torino Workshop in March 2006 which gave a forum for discussion on the role and potential association of the European regions to the preparation and successful implementation of the Joint Technology Initiative (JTI) on Hydrogen and Fuel Cells, this two-part-workshop aimed to resume these discussions. The objective was to get a better insight in the activities of European regions, to allow a better definition of the hydrogen research and demonstration agenda in the 7th Framework Programme and the JTI. On the other hand the workshop provided a suitable “vehicle” to convey needs of the European regions and to exchange information on their activities and experiences.

2 Participants

The invitation and program (see Annex 1) to the workshop was sent by email to approximately 100 persons of 38 different European regions and 10 municipalities. At the first part on Wednesday 4th October the final number of participants was 56 individuals, consisting of 38 representatives of regions or municipalities with commitments to Hydrogen and Fuel Cell Technology, 5 Commission officials and 13 project managers of the two organising projects HyLights and Roads2HyCom. At the second part on 6th October the final number was 60 individuals with 50 representatives from regions and municipalities, 5 Commission officials and 5 project managers.

The most numerous delegations (all data are overall numbers of both workshop days) came from Italy (18 participants), the Nordic Regions as Norway, Sweden and Denmark (15 participants), Spain (14 participants), Germany (13 participants) and UK (10 participants). Less represented were the French regions (8 participants), regions from the Netherlands (3 participants) and the east part of Europe as Poland, Lithuania and Hungary (6 participants). Within the delegations participants came from institutions and agencies (mostly related to energy and innovation), public authorities (representatives from ministries, regions and municipalities), research and development institutions and industry. All regions who had participated have activities and/or commitments (on-going or planned) to hydrogen and fuel cell technologies.

For more details see the attendance lists of both workshop parts in Annex 2.

3 Workshop Approach and Structure

The Workshop consisted of two parts, building up a bracket around the European Hydrogen & Fuel Cell Technology Platform (HFP) General Assembly (5th to 6th October). The first part on 4th October laid the ground in the forefront of the HFP GA discussion, whereas the second part on 6th October wrapped up the discussions of the HFP GA (detailed information in Annex 1 – invitation of the workshop).

The first part on Wednesday, 4th October gave the regions the opportunity to present their activities in the field of hydrogen R&D and demonstration and was organised by the two projects HyLights and Roads2HyCom jointly. Seven exemplary regions delivered insight into their strategies, finance schemes, actors, co-operations, barriers, obstacles and ongoing projects. Furthermore the “HyLights-Questionnaire” on national and regional hydrogen activities (relating to HyLights deliverable 3.1) was kicked of. This questionnaire aims to collect relevant information and to identify the commitments of EU member states, regions and municipalities in hydrogen demonstration projects in the field of transportation. Its topics are the attitudes and strategies, the finished, ongoing and planned support programmes and frameworks, the key actors and their influence and the drivers and obstacles relating to the introduction of hydrogen as fuel within the European regions. The outcome will be a report providing comparable and transparent pictures of the political framework conditions and also consisting of national, regional and local profiles.

The second part on Friday, 6th October was arranged in the framework of the HFP General Assembly as one of the “Dedicated Workshops Anticipating FP7 and JTI” and aimed primarily to sum up and discuss what the regions learned during the HFP General Assembly regarding to the JTI. The recommendations for technical and non-technical actions that arose from the Implementation Plan and the contents of the General Assembly in relation to the regions were discussed. This part was organised on behalf of the European Commission as an explicit follow up event to the JTI Regions workshop in Torino (March 2006).

4 The Issue of Interest for the Workshop

In the forefront of the workshop the speakers of the exemplary regions were provided with a “Guidance of presentation” including relevant questions and a proposed structure for the presentations. These items were attuned to the “HyLights Questionnaire” as well as to the Roads2Hy.com communities assessment and coordinated by both projects. The items can be find below.

Initiators/ Drivers/ Actors
What are the main actors for the regions in hydrogen and fuel cell activities? Which advantages do they anticipate from H2&FC deployment (e.g. environment, pollution, business, development/ employment creation)? What is their willingness to pay for these perceived advantages?

Funding and support
Availability of regional funds (H2&FC specific or general energy-environment budgets), regional policy or other instruments for support of H2&FC, demonstration and deployment, interactions with other regulatory frameworks

Problems/ Obstacles/ Barriers/ Difficulties
Obstacles in H2&FC deployment, regulatory barriers, lack of technology standards, engaging industry, the role for the EU in overcoming these obstacles

Acceptance and participation
Public involvement in hydrogen projects (simply informed or active roles), treatment of the issue of participation and acceptance within projects, status of public information (from the beginning of projects or while the project is already running), feedbacks from early forms of participation

Finance needs
Supplement of investments, specification of instruments, requirement of rates from the EU (%), awareness of alternative financial instruments, needs of financing mechanisms

Cooperation
Involvement of cooperation of different actors into the hydrogen issue work (private companies, public, research labs, etc.), kind of engagement of the different actors by the region (distributors of hydrogen, producers, research institutes, etc.), arrangement of actors (regional champion or cooperation between smaller actors), cooperation activities with other regions

Other support
Quantity of information supply (more and better information about hydrogen?), forms of information supply, other support from the federal governments and from the EU

5 Summary of the Workshop

This summary gives an overview about the presentations of regions and the fruitful discussions of both workshop parts. We want to thank all the representatives for laying the ground for these discussions, also the volunteers for having an open eye during the HFP GA '06 and for preparing the presentations and at least all participants that made the successful meeting happen.

5.1 WORKSHOP PART 1: SUPPORTING THE REGIONS TO INTEGRATE HYDROGEN

The first part laid the ground for the JTI Regions workshop on October 6th and also for the HFP General Assembly. As an introduction the two projects Roads2HyCom and HyLights presented their approaches by presentations of Mr. Nick Owen (project coordinator Roads2HyCom) and Mr. Dario Scapaticci (representative of CR Fiat as industry partner within the HyLights project) regarding the assessment of regional hydrogen activities and strategies. Roads2HyCom presented with respect to research, development and engagement and HyLights with respect to demonstration and a focus on transportation. In the main part seven of exemplary European regions made presentations. They presented their activities and actors, delivered insights to their funding background, strategies, needs, obstacles and finance needs. A round table discussion formed the end of the first day.

Exemplary regions and representatives:

French regions: Jean-Marc Agator, French Atomic Energy Commission (FR)

Nordrhein-Westfalen: Andreas Ziolek, Fuel Cell and Hydrogen Network Nordrhein-Westfalen (DE)

London: Greg Vaughan, Department of Trade and Industry (GB)

Region of Valencia: Carlos Martinez-Riera (ES)

Rijnmond region: Remco Hoogma, SenterNovem (NL)

Region of Cieszyn: Zdzislaw Matysiak (PL)

Nordic regions (Norway): Birte Holst-Jørgensen, Nordic Energy Research Norway (NO)

5.1.1 GENERAL OVERVIEW

The regional level of hydrogen engagement and activities differ, and therefore there are also different needs and expectations of the regions towards EU and industry. All attendand regions have on-going or planned activities on hydrogen and fuel cell technologies but some of them are in the early stages yet whilst other have to be seen as forerunners.

The Nordic Regions for instance have a strong co-operation and an overall collective involvement in national or transnational programmes with objectives for hydrogen economy and long term targets for hydrogen use and emission reduction. These regions are very active in research and development. Demonstration plays an important role in general with strong national support.

On the other hand there are regions which are very active but currently without an existing overall coordinating programme, network or platform on transnational level. The British regions for instance operate in a quite autonomous way. Even if there are comparable levels of competence and basic interests in renewable energies, the industrial and economical backgrounds differ as well as the concrete approaches towards renewable energy.

For example some regions are more active or first interested in stationary applications of hydrogen technology and R&D and demonstration projects are mainly aligned to this field. So far the transport sector plays a minor role there, but nevertheless the introduction of hydrogen in transport could become relevant at medium term. On the other hand there are regions with a strong focus on the introduction of hydrogen in transport first. This spread of priorities and timeframes results in high market differences and special requirements in view of EU funding. Funding is asked to become more specific to the regional properties.

5.1.2 INITIATORS/ DRIVERS/ ACTORS AND CO-OPERATION

Actors: The most relevant actors in H2&FC technology on regional level are research and development centres and institutes, hydrogen and fuel cell specific industry and also automotive and energy industry. In regions with specific hydrogen frameworks (national, local or regional) the actors are supported by public funds, state governments and the industry. Exemplary in that case are the French regions with the national framework “Plan d’ Action National pour l’Hydrogène – PAN-H” with public and private actors in research and development on H2&FC and long term targets for automotive use, the German “Fuel Cell and Hydrogen Network Nordrhein-Westfalen” and

the “Scandinavian Hydrogen Highway Partnership”. These exemplary frameworks or programmes have clear visions and targets like automotive use, first deployments in niche markets or being one of the first regions where hydrogen is available and in use.

Co-operation: During the presentations it became apparent that the regions vary from autonomous ones without any co-operations with other regions to those which have strong inter-regional co-operations on national level or even on transnational level.

Well structured programmes mostly implicate strong co-operations among different actors within projects supported by national or regional public authorities. For instance French actors in PAN-H develop key elements for a clean production, transport/distribution, storage and prior use in PMFCs and are supported by public funding. In 2005 the National Research Agency-ANR supported 25 projects and provides an amount of 30 Mill. € for the next 3 years. The co-operation within active French regions (e.g. Rhøne-Alpes and Provence-Alpes) is characterized by strong regional actors in public research (e.g. The French Atomic Energy Commission-CEA) and industry (e.g. Air Liquide) supported by clusters (e.g. TENERDIS-Renewable Energy and Energy Efficiency) and network platforms.

The German “Fuel Cell and Hydrogen Network Nordrhein-Westfalen” constitutes a co-operation of various stakeholders, R&D and industry (approximately 210 companies) funded by the state government and the “German National Innovation Programme”. National programmes in The Netherlands are financed by the Department of Economic Affairs. As Dr. Remco Hoogma from SenterNovem had mentioned 218 projects with a total amount of 17,4 Mill. € were financed at national level (excluding European projects, direct funding of universities and unknown projects) in 2005.

The Nordic regions (containing Denmark, Finland, Sweden, Norway, Iceland and Greenland) shape the special case of a regions’ co-operation on transnational level, showing increasing common hydrogen activities. Very active are the regions of South Norway with a public private partnership of 5 co-operating but independent nodes for different ways of hydrogen production, one refuelling station and demonstration vehicles. Also active are the Danish Regions with West Jutland’s strategy for renewable pathways and focus on commercialisation and a public private Energy and Environmental Test Centre in Jutland. The regions of West Sweden are integrated in the HyFuture programme for hydrogen introduction through collaboration and a Public-Private-Partnership of over 100 organisations and partners from industry, finance, academia and local/regional/national government. As cross-national co-operations the “Nordic-Hydrogen-Energy-Foresight” and the “Scandinavian-Hydrogen-Highway-Partnership” were named. The

"Nordic-Hydrogen-Energy-Foresight" (2003-2005) was a Joint Research Project involving 16 partner organisations including R&D institutes, energy companies and industry from the 5 Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) with 12 work packages from preliminary studies over system analysis to evaluation. The "Scandinavian Hydrogen Highway Partnership" as a co-operation of Norway, Sweden and Denmark describes a coordination network of actors, refuelling infrastructure and demonstration against the background or vision to make the Scandinavian Regions one of the first regions in Europe where hydrogen is available and in use.

The British regions have to be considered as largely autonomous regarding hydrogen activities. London, East and West Midlands, Wales, Yorkshire, Tees Valley and Scotland all established visions and strategic road maps for hydrogen and fuel cell future, have programmes for co-ordination of R&D and demonstration, engaged numerous stakeholders, incubator units to assist new entrant hydrogen and fuel cell companies and active H2&FC Research Centres. London is dedicated to become a leading early adopter of hydrogen technology. Partnerships, networks, programmes and projects are in preparation or realisation. Exemplary are the "London Hydrogen Partnership (LHP)" with plans for vehicle deployment over the next 5 years, a compact network of development and demonstration with renewable hydrogen projects and existing hydrogen production facilities in Wales, an emphasis on stationary application in a low carbon setting in Tees Valley and plans for a development of hydrogen infrastructure in Scotland.

Drivers: Drivers for an engagement in hydrogen technology are economical and environmental aspects in parallel. The potential of industrial subcontracting and of end use of hydrogen, business development, new markets, opportunities for regional promotion (image and attraction increase through lighthouse projects and demonstration), security of energy supply and the establishment of early markets are in almost the same manner as carbon reduction, environmental preservation, interests in renewable energies and a hydrogen vision.

5.1.3 FUNDING AND SUPPORT

As frameworks and co-operations for different actors in regions vary, funding schemes are also diverse. Numerous regional policies on sustainable energy are in place but only a few of them are explicit hydrogen and fuel cell policies. Regions like Rhône-Alpes, Nordrhein-Westfalen, South Norway, West and South Sweden, regions of the Netherlands and Denmark have developed strategies with specific funds and engagement of different actors such as

industry, research centres, universities and regional agencies collaborating in public private partnerships.

On the other hand regions in early stages of hydrogen technology and deployment have upcoming or actually planned activities and funding often is linked to general funds for renewable energy with budgets for H2&FC research and development and demonstration. Under consideration of different funding schemes there is a demand for sensible and specific programmes and funds and for information on the right placement of investments.

Active regions as Nordrhein-Westfalen have recognized the importance of industry commitments to ensure developments close to the market. Information of such experiences should be made available for regions in early stages and considered in project planning and funding.

5.1.4 PROBLEMS/ OBSTACLES/ BARRIERS/ DIFFICULTIES

The presentations and discussions at the Regions Workshop give a brief survey of experienced difficulties. A couple of regions – first of all the French ones - complained about the lack of national demonstration and deployment strategies and projects rather than about insufficient national R&D priorities in the field of H2&FC technology. There is an obvious need for the support of such projects. Another criterion appointed by the representative of the French regions that could delay the commitments of regions is the governmental attitude towards regulation. There is no governmental impetus to adapt national regulation to hydrogen technology. This could hamper the introduction of a hydrogen infrastructure.

For the up-coming regions the competitiveness amongst European regions and the concentration of technological capacity in just a few regions seem is an obstacle. Especially regions that try to get in the new technology and that have collected yet just first experiences look with concerns at forerunners and model regions. At some extend the perception is existent that upcoming regions just can act as customers, not as drivers. They are afraid to come too late to compete in development. At this point they see a role for projects as HyLights and Roads2HyCom with the challenge for the identification of areas for competitiveness of European regions and companies. They ask for access to knowledge and technology and a share of information and experiences to certain extend between fore-running and upcoming regions as the cornerstones for the introduction for the new technology.

The presentations also reflected that Spanish and British regions are mostly diverse and autonomous within the appropriate countries. This is largely characterised by diverse industrial and economical background, different approaches to renewable energy and to available markets in accession to

structural funds of the EU. In detail structural funds are non-applicable or just partially applicable to the broad number of regions particular where regions in early stages or diverse from each other. National programmes and funding schemes that are adequate for model regions are not necessarily applicable to those regions in early stages of hydrogen technology.

5.1.5 ACCEPTANCE AND PARTICIPATION

In general, regions are very interested to co-operate on national or international level. They also are disposed to set investments, but not without concerns. The high regional expectations towards the creation of new markets are faced by concerns of risks, especially for upcoming regions. Even early movers can get dominant positions but also take the risk of early failures that might put them out of business. To counter these concerns, uncertainties how, where and when investments are to place should be avoided by providing clear information (by the industry and the EU) to the regions.

They regard themselves as the relevant playground for deployment and therefore they demand an adequate role in the implementation process. They want to benefit from participation in the implementation process regarding business development, environmental preservation, opportunities for regional promotion and establishment of strategic alliances for further steps into the hydrogen technology. Nevertheless for successful co-operations some frameworks or basic conditions for the overall planning of hydrogen projects may be required. These conditions refer to participation, information and also to the public awareness of hydrogen R&D and demonstration projects (e.g. application of adequate instruments to raise awareness and interest).

Regions want to play an active role in the project development but also with clear information about the deployment of investments (decision making aid - how, where and when to place investments?). Industry commitments are a must to secure regional targets and the investments need to be co-ordinated from public and private sources.

5.1.6 FIANCE NEEDS

Statements on finance needs were made only by the representative of Valencia, also representing the Spanish regions in general. According to his statements there is most of all a demand for information on the supplement of investment capital: What are the subventions grants and loans for European, national, local and regional programmes or at smaller extents the

private capital through research and technology development (RTD), personnel effort, equipment and infrastructure?

For collaborative research grants in all regions specific instruments are necessary. Regions and municipalities need specific programmes for example for hydrogen fleets. The mentioned requirements are long term loans, non refundable subventions, more intense specific funds for hydrogen related projects, fiscal incentives and European Investment Bank (EIB) funds for large infrastructure and demonstration projects.

5.1.7 OTHER SUPPORT AND RECOMMENDATIONS

In general, there is a high demand for public information to raise awareness. Suggestions for instruments are campaigns, databases and projects (demonstration and lighthouse). Such suggested high quality database on main EU actors on hydrogen and fuel cells should be developed and widely distributed. The content should reach from industries with expertise in product development, demonstration and commercialisation over relevant R&D centres and R&D projects within the different regions to local ventures. Furthermore incentives linked to renewable energy, increase of efficiency and emission reduction are areas where other kind of support is required. For Spanish regions a “Spanish Hydrogen and Fuel Cell Research and Demonstration Programme” should be launched with a few, but clear technological objectives and under industrial leadership. For autonomous or industrial and economical diverse regions sensible projects seem to be very important. Special and different frameworks make high demands for specific research and development programmes and specific institutions or undertakings at regional level.

5.2 WORKSHOP PART 2: THE ROLE OF THE REGIONS IN THE IMPLEMENTATION PLAN AND THE JTI

During the 2nd part of the workshop at 6th October recommendations for technical and non-technical actions arising from the Implementation Plan and the Joint Technology Initiative and questions from the General Assembly were discussed. The Commission introduced to the workshop giving details of the Joint Technology Initiative and the Implementation Plan. EC DG RTD gave an overview on the JTI with insights into the membership, the proposed financing schemes, timelines, leveraging Member States and regions resources and a conclusion of the Torino Workshop in March 2006. EC DG JRC illustrated the concepts of the ‘Implementation Plan’ for the support and integration of regions with statements to the programme foundation, key

priorities, budget, implementation, messages and issues. Afterwards five regional representatives volunteered to sum up their impressions and conclusions of the HFP General Assembly (volunteers were invited at the first part of the workshop). A round table discussion also closed this workshop.

Statements by representatives of the regions:

Nordrhein-Westfalen: Andreas Ziolek, Fuel Cell and Hydogen Network Nordrhein-Westfalen (DE)

London: Ben Mayo, Element Energy (GB)

Nordic regions (Western Denmark): Jens-Chr. Møller, Hydrogen Innovation & Research Centre (DK)

Nordic regions: Mikael Sloth, H2 Logic ApS (DK)

Region of Valencia: Carlos Martinez-Riera (ES)

5.2.1 GENERAL STATEMENTS REGARDING THE IMPLEMENTATION PLAN AND THE JOINT TECHNOLOGY INITIATIVE

In general the regional statements give a quite positive picture of the IP and JTI, these European initiatives both are very welcome. The structure and content of the IP are regarded as well defined and adequate to address regions issues. The action at European level is an important precondition to achieve the commercialisation targets. Both initiatives are considered as important and promising and able to further the exchange of experiences and information between European regions. Overall meanings are the importance of industry commitments to co-finance projects.

The importance of the regions integration to the implementation process was stressed once more as already done at the first part of the workshop. The regions see themselves as the drivers and the major playground for the implementation of hydrogen. However, they want to secure their financial contribution and industrial participation. They are ready and willing to align with EU and industry priorities, but most of all they need to know these priorities and the way of implementation. Therefore the extensive exchange between industry and regions and regions networking are essential.

Many regions criticised that the first proposal of the JTI does not reflect the regional dimension in an adequate way. The regional activities cut across the member states representation because they need to channel their views, inputs and research interests in the Governing Group. Regional interests are represented only in an indirect way as part of aggregated national interests.

The EC again reports only to the Member States and not to the regions. All in all, the structure of the JTI is asked to become more sensible to the regions.

5.2.2 QUESTIONS AND EXPECTATIONS OF THE REGIONS

Beside expectations towards the JTI and IP the regions also addressed open questions within the presentations and discussions. Questionable parts in relation to the IP are budget and financing and also organisation and timetable. For Nordrhein-Westfalen the budget allocation is not transparent enough and the Implementation Plan does not give any opportunity to compare present objectives and specified budgets. The most relevant question seems to be how the Governing Board will collaborate with active regions. Furthermore there is no adequate time frame for suggested activities available yet.

For the alignment of regional strategies and JTI concept the right addressing is crucial: The question has to be answered, when will which call with which amount of funding address which action clusters? Also questionable is the amount of the deployment benefits. Will it be in a wide range of regions or rather in a small range of selected ones?

The further named regional expectations towards the JTI and the Implementation Plan can be summarised: Regions need financial support for hydrogen strategies and for the continuation and expansion of their existing initiatives. As already declared in the 1st part of the workshop they see the importance of exchange of information and experiences. Therefore, the establishment of a dedicated forum is suggested. The regions expect an interregional co-ordination in the framework of the JTI an d the IP in a fast moving and dynamic way.

5.2.3 RECOMMENDATIONS AND PROPOSALS BY EXEMPLARY EUROPEAN REGIONS

Nordrhein-Westfalen	Need for a bottom-up approach: strong and well organized regions are excellent partners of the Governing Board with already close collaboration between local initiatives A time frame (as in FP6) should be worked out soon → answer to the question: What issue will be when addressed by which call? Need for an option for active regions to contribute and cross-

	check out-coming calls in order to align regional programmes Inclusion of regions into the process (they are the drivers) Search for adequate instruments to communicate with the Governing Board: suggestion = “Regional Committee”
London	Requirement for a plausible evidence base to justify the regions targets (actual situation: regions have to rely to the industries opinion that the IP will get them to the targets) Public aspects of the PPPs have to recognise the need to secure commitments to commercialisation deliverables from industry
Valencia	Networking of regions: as networking groups regions are legitimated Importance of integrations of regions: they can play a major role in industry diversification and enterprise creation to develop production and exploitation capacity of European territories Securing of right and early project identification not to prevent trans border regional initiatives that are eligible for funding outside the JTI (background: there may be projects falling out of the scope of JTI priorities but yet consistent with general FP7 goals) Securing that FP7 workplan for transport and energy must contemplate actions proposal by the IP, regardless the JTI (risk: if JTI is not created or undefended – FP7 can take over the entirety of the IP programme) Funding and finance: EIB also should be accessible for small companies in all regions of Europe Public awareness: social stakeholders need to be better involved in communication and dissemination
Nordic regions	Regional PPPs should be represented in the JTI Governing Board through a regional PPP Grouping (similar to the intended industry grouping) → main task: providing a voice for regions, SMEs and entrepreneurs involved in regional hydrogen activities Fund regional PPPs to provide means to initiate a range of small scale local and regional projects and demonstrations
	Not to set too much focus on technology push (it should be

	more on early markets) Motivation of OEMs and industry to join activities and projects SMEs and regional actors has to be integrated in the JTI body Creation of regions associations that can make possible translational collaboration Establishment of an EU hydrogen and fuel cell information portal to secure information management and the content of public outreach and education Activities on non-technical barriers are also needed and very important (regulatory frameworks, public information, others) National/local/regional level as parameters on “Action Portfolio”: they should contribute with financing projects, awareness, early purchase, market mechanisms and others

6 Annex

Invitation and programme

Participants lists (4th and 6th October)

Introduction

In March 2006 in Torino the European Commission launched a forum for discussion on the role and potential association of the European Regions to the preparation and the successful implementation of the Joint Technology Initiative (JTI) on Hydrogen and Fuel Cells. Within the framework of the 3rd General Assembly of the European Hydrogen and Fuel Cell Technology Platform (HFP) this two-part-work-shop is to resume these discussions. The aim is to gain better insight into the regional activities, that will allow a better definition of the Hydrogen research and demonstration agenda in the 7th FP and the JTI. For the participants the workshop should constitute a suitable "vehicle" to convey their needs and to exchange on information on their activities and experiences among each other.

The first part of the workshop at 4th October will give the European Regions the opportunity to present their activities in the field of hydrogen R&D and demonstration. Eight exemplary regions will deliver insight to their strategies, needs, actors and obstacles. This workshop is organised by the projects Roads2Hycom and HyLights jointly.

During the second part of the workshop at 6th October recommendations for technical and non-technical actions arising from the Implementation Plan and the discussions at the General Assembly will be discussed. The aim is to sum up the opportunities and modalities for participation of regions in the JTI and their future role in strategic planning of "joined-up" European initiatives. This second part of the workshop is organised on behalf of the European Commission as a follow up event to the JTI Regions workshop in Torino and as an official part of the 3rd HFP General Assembly.

Venue

European Commission
Charlemagne Building, Room S4
Brussels, Belgium

Language

English (no simultaneous translation to/from other EU languages is foreseen)

Contact Persons

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Two-Part-Workshop

Part I: 4th October, Brussels

Supporting the Regions to integrate Hydrogen

Part II: 6th October, Brussels

The Role of the Regions in the implementation Plan and the JTI

Roads2 HyCom
www.roads2hy.com

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Programme

Part I: 4th October, Brussels

Supporting the Regions to integrate Hydrogen

13:30 Welcome by the organisers

Assessing regional H_2 activities

13:35 Introduction to Roads2Hycom and HyLights, their approach and interaction with the regions.

- Research, development and engagement: Roads2Hycom
- Demonstration: HyLights

Regional strategies and activities for H_2 research, development and demonstration

14:00 Presentations of exemplary European Regions on their strategies and instruments regarding the coming introduction of H2 as an energy carrier.

- Jean Marc Agator, French Atomic Energy Commission (FR)
- Andreas Ziolek, Nordrhein-Westfalen (DE)
- Greg Vaughan, Department of Trade and Industry (GB) *
- Carlos Martinez Riera, Valencia (ES)

(15:00 - 15:15 Coffee break)

- Sergio Conti, Lombardia (IT) *
- Remco Hoogma, SenterNovem (NL) *
- Zdzislaw Matysiak, Ciezyn (PL)
- Birte Holst Jørgensen, Nordic Energy Research (NO)

16:15 Round table discussion

17:00 End of workshop

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Part II: 6th October, Brussels

The Role of the Regions in the implementation Plan and the JTI

JTI: Expectations from and benefits for the regions

14:00 Introduction by the EC with summary of the first JTI regions Workshop in Torino (March 2006)
Joaquín Martin-Bermejo, EC DG TREN

14:10 The concepts of the Implementation Panel for the support and integration of the regions
Estathios Peteves, EC DG JRC-IE

Regional H2 activities and integration with the JTI
Wrap up of the HFP General Assembly with regard to JTI: needs, lessons/conclusions and demands from a national/regional perspective.

14:20 Statements by 5 regions

15:00 Round table discussion

16:00 End of Workshop

Registration

Please register to the workshop
by 22nd September 2006.

Fax: +49 (0) 30 726165 – 699
E-Mail : braune@dena.de

Yes. I will participate in

☐ part I , 4th October
☐ part II, 6th October

_____
Name

_____
Region / State

_____
Administration / Institution / Company

_____
E-Mail

Important notice:

Since the second part of the workshop (6th October) is a part of the HFP General Assembly officially, participants will have to register also at the HFP homepage www.hfpeurope.org !

Deadline: Friday, 15th September

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Attendance list: Workshop "Supporting the Regions to integrate Hydrogen"
Brussels, Wednesday 4th October, 13:30 – 17:00

Roads2 HyCom
www.roads2hy.com

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Attendance list: Workshop "Supporting the Regions to integrate Hydrogen"
Brussels, Wednesday 4th October, 13:30 – 17:00

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Attendance list: Workshop "The role of the Regions in the Implementation Plan and the JTI"
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