

July 2008 Overview

1. EHA in Action

EHA presented new paper “Hydrogen and Fuel Cells as strong partners of renewable energy systems” to deputy director Energy of DG TREN. 2008-07-28

In a meeting with Fabrizio Barbaso deputy director for Energy of the Directorate Transport and Energy the EHA presented its new paper referring to the EHA contribution to the EU Strategic Energy Technology Plan Initiative that proposed support for the development of local sustainable energy production chains that included renewable energy and hydrogen. Dr. Barbaso recently has become a member of the Governing Board of the JTI for fuel cells and hydrogen.

EHA invited to submit a chapter to FC and H2 Observatory publication. 2008-07-

14. The European Fuel Cell and Hydrogen Business Observatory, coordinated by the University of Bocconi in Milan and including 12 of the leading business and economics universities in Europe, is publishing a book “Innovation, Markets and Sustainable Energy: The Challenge of Hydrogen and Fuel Cells”, (Edward Elgar Publisher (2009)) on hydrogen and fuel cell market introduction and development. The book highlights the introductory phase of the process of technological change, taking fuel cells and hydrogen applications as their focus. While most studies and approaches look at industry dynamics in their development or maturity stage, this work focuses on the uncertainty of the innovation processes in the formative phase of the emerging fuel cell industry. The book analyzes the implications of introducing FC in the industrial system and explores the complexity of market development for new technological solutions. The EHA has been asked to contribute a chapter on the future prospects of the use of hydrogen in Europe.

EHA met with EUREC to discuss efficient renewable hydrogen pathways. 2008-07-

09. The EHA presented its new brochure to the new director of the European Renewable Energy Research Centres Agency (EUREC) Paola Mazzucchelli. The EHA invited EUREC to join a dialogue with the hydrogen industry to define energy chains that make the best use of renewable energy and include hydrogen. EUREC also reviewed the EHA paper. EUREC currently is seeing battery powered cars as a more short term solution for emission reduction and to increase the use of renewable electricity. The EHA argued that both battery and fuel cell vehicles are being developed. Therefore the development of a sustainable hydrogen production and distribution network is becoming more imminent also in view of the latest views of the council of the EU and EU Parliament that include renewable hydrogen in their targets for the use of renewable energy in transport and stationary applications. THE EHA and EUREC agreed to identify financing opportunities to confront the use of different electricity storage technologies with regards to efficiency and emission reduction. More info on the activities of EUREC at www.eurec.eu.

EHA and EIGA promote support for regulation, codes and standard development and dissemination in JTI. 2008-07-08 EHA's sister organisation, EIGA, the European Industrial Gas Association, has a long history of support to the development of codes and standards regarding industrial gases including hydrogen. The EHA with its 14 national associations is well positioned to disseminate RCS developments to local officials to facilitate authorisation procedures. In a meeting with the FCHInstruct office EIGA and the EHA offered their expertise to respectively facilitate the development and disseminate regulations, codes and standards under the JTI, to accelerate the authorisation of the installation of fuel cell and hydrogen applications in Europe.

EHA met with Electrabel/Suez to discuss visibility of clean energy systems in Brussels. 2008-07-01. One day before the joint venture of Suez and Gaz de France was announced the EHA and Electrabel discussed the installation of fuel cells and other clean technologies in the new "Rue de la Loi Plan" for the European "quartier" in Brussels. The EHA is facilitating meetings with the Brussels regional government, EU institutions and companies interested in increasing the use and visibility of hydrogen and fuel cell solutions in Brussels. De Commission announced its intention to green the European quarter in Brussels last Spring.

2. EHA Promotion

Press

The Euractiv campaign to promote the new EHA paper had a successful run till July 14. A new campaign is being planned for October to announce the session on hydrogen infrastructure development that the EHA is co-organizing with the JTI during the JTI Stakeholders event October 13, 2008 at 1800 in the Autoworld Museum. More info on how to register please visit www.hfpeurope.org.

Membership

- EHA met with the London Hydrogen Partnership (LHP) to discuss collaboration on educational activities. Since the election of a new London mayor, Boris Johnson, last May, many have asked how hydrogen will fair under his new governance. According to the LHP a new plan for hydrogen still has to be confirmed as well as participation in the new European Regional and Municipalities Partnership for hydrogen and fuel cells of which the EHA is hosting the secretariat.
- The EHA submitted its membership application to PATH, the International Partnership for Advancing the Transition to Hydrogen. PATH changed its organisational structure recently and membership is now for free. The EHA has been asked to join the PATH Board. EHA national association members are encouraged to become members of this voluntary organisation. For more information visit www.hpath.org.

Conferences

- EHA is co-organizing a session at the FCH Stakeholders event on October 13, 2008 in Brussels with Fuel Cell Europe and the FCH Instruct office. Programme and registration info at www.hfpeurope.com.

3. EHA Taskforces

1. Hydrogen in the City:

The EHA is organising a meeting with the technical staff of the EU Parliament and the Commission to discuss the possible installation of small fuel cells in EU buildings. European Commission president Barroso announced this Spring that the Commission is looking at restructuring the EU buildings in a more sustainable way. The meeting is planned for late August or beginning of September.

2. Strategic Energy Technology Plan (SET Plan).

After the presentation of Stefan Tostmann at the last EHA AGM responsible for the SET Plan, the EHA sent a request for a meeting to discuss possible funding for local sustainable hydrogen production chains in upcoming Seventh Framework Calls. Mr. Tostmann indicated that the Commission is looking to support industry led projects that demonstrate economic and technical feasibility of new energy technologies. The EHA suggested to use the Commission plan for a sustainable European quarter as a possible project location.

3. EHEC

The EHA has asked Elsevier, who is organizing the Grove Fuel Cell Symposium, to send a proposal before the next EHA board meeting on the organisation of a one-day EHEC type conference as part of the Grove Symposium with the possibility of its own visibility and use of the EHEC (or other) name.

4. Statutes

With the approval at the last EHA AGM of the change in the EHA Statutes to allow community organizations like regions and other organizations to join the EHA, the work of this taskforce has been completed. The Statute's change will be translated in French and sent to the Belgian registry. EHA members will receive the new Statutes shortly.

5. EU 2009

At the last EHA AGM it was proposed to set up a small taskforce of EHA members to identify key messages for the new EU Parliament, after the elections in June 2009, and for the new EU Commission. EHA members are encouraged to submit their interest to participate their ideas to the secretariat. A proposal will be sent to the Board before the next Board meeting on October 13.

3 EU News

Variety of fuel cell vehicles at British Motor Show 2008-07-29. At the British Motor Show, that opened July 23 in London and finishes on August 3, a variety of models demonstrated that fuel cell car development is alive and kicking. The Morgan LIFECar, that saw a public appearance at the Sexy Green Car Show at the Eden Project in Cornwall, is powered by fuel cells developed in the UK and has been developed in partnership with a number of companies including the Linde Group. Honda is showing its FCX Clarity hydrogen car for the first time in the UK. Also on display is the new

hydrogen-fuelled version of the Nissan X-Trail. The nifty display of the GM HydroGen 4 has reached YouTube as well: <http://youtube.com/watch?v=HCbDmFNQjYg&feature=user>.

EU Wind Technology Platform says grid connection is crucial to reach 2030 targets. 2008-07-25. Wind energy could provide for more than 25% of the EU's electricity by 2030 provided that wind farms are better connected to existing electricity grids and that a new grid to exploit the offshore wind industry is built, according to a stakeholder action plan developed by the EU Wind Energy Technology Platform (TP Wind). In 2030, wind energy will be a major modern energy source; reliable and cost-competitive in terms of cost per kWh," according to the European Wind Energy Technology Platform. The Action Plan should facilitate that wind will provide up to 28% of EU electricity consumption by 2030, corresponding to a total of 300 GW, explained the Secretary general of TPWind, Nicolas Fichaux. Currently, 57 GW are installed and connected to electricity grids, corresponding to some 3% of the total EU consumption. The action plan can be downloaded at the TP Wind website <http://www.windplatform.eu/>.

European Commission presented Communication on Green Public Procurement (GPP) including transport and energy. 2008-07-16 Each year European public authorities spend the equivalent of 16% of the EU Gross Domestic Product on the purchase of goods. The general objective of a new Communication of the EC on GPP is to provide guidance on how to reduce the environmental impact caused by public sector consumption and to use GPP to stimulate innovation in environmental technologies, products and services. Several Member States have set ambitious GPP targets: the Dutch government has set a 100 % Sustainable Procurement target to be reached by 2010; the Austrian Government has identified different targets to be met by 2010 for 5 product groups: IT: 95 %, electricity : 80 %, paper: 30 %, cleaning products: 95 %, vehicles: 20 %. In France, 20 % of total annual renewal of vehicles purchased by central government should consist of "clean" vehicles. A recent study on GPP performance across EU Member States has provided the Commission with clear indications on the current level of GPP in the best performing Member States, which is the baseline for the target set in the renewed Sustainable Development Strategy. On this basis, the Commission proposes that, by the year 2010, 50 % of all tendering procedures should be green, where "green" means "compliant with endorsed common "core" GPP criteria. The percentage would be expressed in both number and value of green contracts as compared to the overall number and value of contracts concluded in the sectors for which common "core" GPP criteria have been identified.

French Environment Minister calls for earmarking ETS funds for energy efficiency and CCS 2008-07-15 Revenues obtained from the auctioning of emissions permits under the EU ETS should be channeled into energy efficiency improvements in the buildings, transport and energy sectors, the French Minister of Environment Jean-Louis Borloo said. He also welcomed the financing plan for carbon capture and storage (CCS) technologies proposed by UK Liberal MEP Chris Davies, rapporteur on the Commission's proposal on the geological storage of CO₂, and Irish Conservative MEP Avril Doyle, rapporteur on the Commission's proposal to revise the EU ETS. They want to grant up to 500 million tonnes of EU ETS emissions allowances, which would normally be reserved for new entrants to the scheme, to large-scale CCS demonstration plants. The aim is to provide an incentive to industries concerned about the high cost of

building CCS plants. But member states have not indicated any willingness to divert funds obtained through EU ETS auctioning towards common EU projects, and the Doyle-Davies proposal has not been enthusiastically welcomed by technical experts in the Council, according to Davies, who addressed the issue during the exchange of views. One of the three technologies currently used for CCS, the pre-combustion methodology, could facilitate centralized hydrogen production.

First meeting of Governing Board of the Joint Undertaking for Fuel Cells and Hydrogen held in Brussels. 2008-07-14. Only 6 weeks after the approval by the EU Competiveness Council of the Joint Undertaking for fuel cells and hydrogen, the first meeting of its Governing Board was held in Brussels. Six members representing the Industrial Grouping and six EU Commission members will steer the commercial development of fuel cell and hydrogen applications to a new level. The Joint Undertaking will be kicked off during a big FCH Stakeholders event October 13-15, 2008 in Brussels. The EHA is co-organizing a session on October 13. For more information on sponsorship and registration please visit: www.hfpeurope.org/jti.

EU Parliament Industry Committee approves report on SET Plan 2008-07-11
The EU Parliament Industry Committee approved the EU Strategic Energy Technology Plan (SET Plan). At the last EHA AGM the responsible EU officer for the SET Plan, Stefan Tostmann answered questions on the structure, financing and timeline of the SET Plan. The EHA submitted an initiative to the SET Plan consultation regarding the development of efficient energy chains including hydrogen, fuel cells and renewable energy. Last June the first meeting of the Steering Group on the implementation of the Strategic Energy Technologies Plan (SET Plan) set the agenda for an EU energy technology policy, enhancing the coordination of national and European research and innovation efforts to position the EU in the forefront of the low-carbon technologies markets. The group, jointly hosted by Energy Commissioner Andris Piebalgs and Research Commissioner Janez Potočnik includes high level energy, research and finance representatives from Member States. Together they will identify areas for mission oriented actions through joint programming of R&D policies and programmes to achieve Europe's set climate change targets and security of energy supply objectives while boosting Europe's competitiveness in this area. Mr. Tostmann invited the EHA to submit ideas through the national and EU representatives in this Steering Group. To find out more, please follow the link: <http://ec.europa.eu/energy/res/setplan>

The European Parliament's Environment Committee voted to scale down the proposed EU-wide 10% biofuels target by 2020 to 4% by 2015. 2008-07-07. The vote confirmed a cross-party and cross-national compromise tabled by Swedish MEP Anders Wijkman in the name of the EPP-ED Group, Dutch MEP Dorette Corbey in the name of the Socialist Group, Danish MEP Johannes Lebech in the name of ALDE, Marie Anne Isler Béguin (FR) and Claude Turmes (LU) in the name of the Greens/EFA, Italian Roberto Musacchio in the name of GUE/NGL and Dutch MEP Johannes Blokland in the name of IND/DEM. It supports a target of "at least 4%" of "renewable sources" in road transport fuels by 2015, "out of which at least 30% is met by the use of electricity or hydrogen from renewable sources, biogas or transport fuels from ligno-cellulosic biomass and algae". Such a target would in fact be even lower than the 5.75% by 2010 goal set out in the EU's original 2003 Directive on the promotion of biofuels, The move to

include non-biofuel sources into the target also highlights this shift, echoing statements by European energy and environment ministers at an informal meeting the beginning of July. The EHA has campaigned actively to include hydrogen in the target of renewable energy for both transport and energy. As Member States struggle to achieve an agreement on core criteria for biofuels, the text agreed by MEPs could serve as a basis for a compromise, although it is much stronger than standards eyed by the Commission and a number of governments. Parliamentarians have opted for a two-stage approach, under which biofuels that fail to deliver life-cycle CO₂ savings of at least 45% compared to fossil fuels would be banned from the start, while those delivering less than 60% savings would be excluded as of 2015.

European Commission presents Communication on “Greening Transport” . 2008-07-08. The Commission presented its Communication on Greening Transport putting forward two different types of initiatives to redouble its efforts to make transport greener and more sustainable. The first type is to “get the prices right” through internalising the external costs of transport. Here the Commission’s strategy is to act in a way that is tailor-made to each impact and transport mode, taking into account the fact that the EU has already started work in this area. As such the EU rules on energy taxation and the Commission’s proposals to include the aviation sector in the EU’s Emissions Trading System are significant first steps in the strategy. The second type is a set of complementary measures comprising regulatory instruments, infrastructure measures and research and development measures. Here too there are many EU measures on which efforts can build. According to the Commission's communication, "the advantages and disadvantages of mandatory versus optional charging schemes for road freight transport were compared. It was found that while there are clear and immediate benefits to be reaped in member states with a lot of traffic, the financial viability of charging systems for external costs in member states with low traffic requires further studies". The Commission says it will review the situation in 2013.

4. National News

Belgium

The EHA was contacted by the Cabinet of Patricia Ceysens, Flemish minister for Economy, Enterprise, Science, Innovation & Foreign Trade to facilitate a round trip in Europe with her BMW Hydrogen 7. The EHA provided the minister with the locations of liquid hydrogen refuelling stations in Europe and offered to facilitate meetings with local project coordinators and authorities.

France

The French Hydrogen Association, AFH2 will be present at the Fête des Transports et De la Mobilité Durable (Stand AFH2) at the Jardins du Trocadéro (Paris, September 12 - 14 2008. More info at the AFH2 website www.afh2.org; the site is also featuring a banner referring to its 10 year anniversary! Together with the Norwegian Hydrogen Forum and the German Hydrogen and fuel cell Association AFH2 is one of the oldest hydrogen associations in the world!

Germany

ZEMSHIPS is a project for the realization of the first fuel cell powered passenger ship world wide in the category of up to 100 passengers. The project is financially supported by funds of the EU-LIFE program. The idea was born to operate a fuel cell passenger in the city of Hamburg in 2005. ZEMSHIPS stands for “zero emission ships”. The fuel cell passenger ship will be operated on the Alster lake, a very sensible part of the inner city of Hamburg. Therefore operating a passenger ship without emitting any CO₂ has been a major objective of the project. Two fuel cell stacks manufactured by Proton Motor power the ship, offering a total output of 50 KW each. The ship has a total carrying capacity of up to 100 passengers.

Iceland

Thorsteinn Sigfusson, a well known promoter of many national and international hydrogen projects and professor at the University of Iceland, published a new book: “Planet Hydrogen - The Taming of the Proton”; The Coxmoor Publishing Company, Longborough (UK) 2008. ISBN 978-1-901892-27-7, 230 p., dealing with the relationship of hydrogen to other renewable energies, production, storage, and use as well as the global efforts to understand and to use it as part of a comprehensive future energy strategy. Apart from a summary of the state of science and technology the author presents the countries that are currently the most important drivers for hydrogen and fuel cells in the world.

Italy

H2IT appointed its new Board for 2008-2010. The Board elected as its president Aldo Fumagalli, chair of the Sustainable Development Committee of the largest industry organisation in Italy, Confindustria and CEO of Sol a multi-national industrial gas company. The newly elected president indicated five priority areas for H2IT:

- Development of adequate Regulations, Codes and Standards;
- Mapping and pursuing finances for national and local projects;
- Inventarisation of Italian competences and research and industrial level;
- Collaboration with the World Expo 2015 which will be held in Milan;
- Education and Training.

News from the secretariat

Linda Romans our intern since January of this year has finalized her internship this month. Linda has been working on our contact database of regional local actors, in addition she has worked on the developing and maintaining a database with the publishable results of EU Research projects. Those results, especially when the project website is not maintained when the project has ended, are very difficult to find. Linda also assisted in updating the EU Regulatory Watch database with the latest EU dossiers.