

## June 2008 Overview

### 1. EHA in Action

#### **EU SET Plan and homologation of hydrogen vehicles discussed at EHA's AGM.**

**2008-06-30.** In the presence of the responsible officers of the EU Commission the EU Strategic Energy Technology Plan (SET Plan) and the EU Regulation for the homologation of hydrogen vehicles was discussed at the Annual General Meeting on June 30 of the EHA in Brussels. EHA president Lars Sjunnesson presented the first copy of the new EHA paper "Hydrogen and fuel cells as strong partners of renewable energy systems" to Stefan Tostmann, head of EU Commission's Unit D2 - Innovation and technological development in energy and responsible officer for the EU Strategic Energy Technology Plan. The paper is the result of the EHA's contribution to the SET Plan that started April 19, 2007 with the hearing on this topic that the EHA organised in collaboration with the Commission. At the AGM Mr Tostmann explained the SET Plan developments so far and the Call that will come out this September. Ferenc Pekar of DG Enterprise updated the AGM on the developments of the EU Regulation of hydrogen vehicles that is expected to be approved this autumn by the EU Parliament and the Council and will enter into force in two years time.

#### ***EHA presented Regional developments at the Belgian/Dutch Hydrogen Region Seminar.*** 2008-06-25

The EHA presented Regional developments in Europe with regards to hydrogen and fuel cells at a seminar organised by the VSWB, the Flanders Hydrogen and Fuel Cell Association, member of the EHA. In the presence of the Minister of Economy of Flanders a bilateral project was presented to establish a Hydrogen Region (Waterstof Regio). A Masterplan has been developed that will involve local industry, research institutes and local government with a budget of € 16 mln. See also National News.

#### ***EHA attended meeting at the Commission on effect of ETS on clean technology development.*** 2008-06-19

EHA was invited to a joint meeting with COGEN Europe at the Commission on the effect of ETS and IPPC proposals on the development of clean technologies. The EHA outlined its position laid out in its position papers submitted to the Commission on these two dossiers. The Commission seems sensitive to the arguments but is determined to position the EU's ETS as a model for the rest of the world not allowing to many concessions. EHA suggestions have been included in amendments on the ETS of certain MEP's.

#### ***EHA issued media campaign with Euractiv to promote new paper "Hydrogen and fuel cells as strong partners of renewable energy systems."***

A weeklong media campaign in the online European news portal Euractiv featured the new EHA paper "Hydrogen and Fuel Cells as strong partners of renewable energy systems", on the contribution of hydrogen and fuel cells to increase the use of renewable energy and the role of batteries and fuel cells in sustainable urban transport. The paper

has also been sent to renewable organisations and the rapporteurs of relevant dossiers in the EU Parliament.

**EHA submitted contribution to EC consultation on off shore wind development.**

*2008-06-12.* The European Commission last April issued a consultation on the priorities with regards to development of big off shore wind parks. The EHA contributed to this consultation emphasizing the need to demonstrate the use of hydrogen as an energy vector to store excess wind energy and balance the grids to allow more wind energy being effectively used. The EHA also emphasized the opportunities with hydrogen to link renewable energy other than biomass with zero emission urban transport and asked the Commission to support more demonstration projects in this field. The EHA contribution can be viewed under no. IPM reference number is: 730401739561717008

**EHA proposed session at European Sustainable Energy Week 2009** *2008-06-04*

The EHA has submitted a proposal for a session on “Hydrogen and fuel cells as strong partners of local renewable energy systems” for the third edition of the European Sustainable Energy Week 2008 from February 9-13, 2009.

**EHA facilitated HyRaMP Board meeting and Workshop on EU projects on local development.** *2008-06-03.*

The EHA facilitated the meeting of the Board of the European Regions and Municipalities Partnership for hydrogen and fuel cells, HyRaMP, in Brussels on June 3. Before the Board meeting representatives of EU projects Roads2HyCom and HyLights presented their research on local projects and recommendations for the maintenance of a database with relevant data on local development.

## 2. EHA Promotion

### Press

Euractiv, the EU online news agency featured a weeklong EHA campaign to launch the new EHA paper on “Hydrogen and Fuel Cells as strong partners of renewable energy systems”.

### Membership

EHA Regions membership was discussed at the June 3 Board meeting of HyRaMP. The EHA suggested Regions membership to continue to finance the organizational support of HyRaMP that the EHA is facilitating. No final decision has been made. For some Regions membership to a semi industry organisation could be a problem, The EHA also suggested a service fee for operating the permanent office of HyRaMP in Brussels instead of EHA membership.

### Conferences

- EHA presented regional activities and the HyRaMP initiative on June 20, at a Belgain/Dutch workshop on developing a Hydrogen Region in the South of the Netherlands and Flanders in the north of Brabant .
- EHA Board member Johannes Topler presented educational activities in hydrogen and fuel cell activities in Europe on June 18 at the WHEC 2008 in Brisbane;

- EHA was invited to present European developments at a conference of the Region of Liguria in Italy on June 6.

### 3. EHA Taskforces

#### **1. Hydrogen in the City:**

The EHA was invited to a meeting with one of the main Belgian forklift truck distributors located in Brussels to discuss the integration of hydrogen applications in the new Brussels logistics centre (BILC). The EHA is collaborating with the Flanders Fuel Cell and Hydrogen Association to increase visibility of hydrogen applications in Brussels.

#### **2. Strategic Energy Technology Plan (SET Plan).**

The EHA has proposed a meeting the beginning of August with Dr . Tostmann responsible DG TREN officer of the SET Plan to discuss possible projects for the first Call of the SET Plan this autumn, see also EHA in Action.

**3. EHEC:** discussions with the FCH Stakeholders event and the Grove event are being continued to ensure an EHEC type of event in 2009.

#### **4. Statutes**

The proposal for the change in the EHA Statutes to allow community organisations to join the EHA has been approved by the EHA Annual Assembly.

### 3 EU News

#### ***Energy Efficiency needs to be taken more seriously EP study says. 2008-06-27***

The ENERGY-EFFICIENCY-WATCH (EEW) goal is to ensure ambitious national energy efficiency action plans (NEEAP) in all EU Member States. The scientific partners of the EEW – Wuppertal Institute and Ecofys – published the first results of their NEEAP screening. They come to the conclusion that the plans offer very heterogeneous designs, contents and levels of information. The overall impression is that the issue of Energy Efficiency is not taken seriously enough. The Energy Efficiency and Energy Service Directive (ESD) requires Member States to achieve a reduction target in end-energy use of 9% by 2016, and therefore to submit three National Energy Efficiency Action Plans (NEEAPs) to show on how they are planning to reach that goal. The first NEEAP was due by June 30, 2007. Within the Energy Efficiency Watch project, Wuppertal Institute and Ecofys carried out a screen-ing of all available plans. Only few MS took the deadline seriously but by today almost all Member States have submitted an action plan. In a second phase the EEW will now evaluate 12 of the NEEAPs in depths to find out best policy practices that then can be communicated all over Europe as advice for the second round of NEEAPs in 2011.

***Public procurement of clean vehicles gets boost by EP and Member States. 2008-06-24.*** The European Parliament's Environment Committee voted in favor of earlier

implementation of plans making it mandatory for government authorities to ensure public transport fleets and other utility vehicles are clean and energy efficient.

The Commission proposal for a Directive on the promotion of clean and energy efficient vehicles want to make it compulsory for public authorities to consider not only the purchase price of buses, garbage lorries or delivery vans when acquiring them, but also their environmental impacts. The criteria include life-cycle costs for fuel consumption, CO<sub>2</sub> emissions and air pollution. The EP and the Council would like the Directive to enter into force as early as January 2010. This is two years earlier than what the Commission is proposing.

**Antonio Tajani, new EU Commissioner for transport will invest in trans-European infrastructure projects, 2008-06-16** "Without a strong transport policy, there is no united Europe," incoming Transport Commissioner Antonio Tajani told MEPs. Ireland's rejection of the Lisbon Treaty and demonstrations across Europe against oil price rises show we need a Europe "capable of responding to citizens' short-term needs", he said, adding that transport is clearly an area where we need "more Europe", because modern transport infrastructure and affordable services "are a driver for economic and social development, growth, and jobs."

**EU Parliament president Hans-Gert Pöttering promotes hydrogen at AGORA's meeting. 2008-06-12** The president of the EU Parliament in his presentation at the Agora meeting of the European Parliament on Climate Change to which the EHA was invited, mentioned as the EU's priority of the first half of the 21st century "to lead the way to the third industrial revolution". Prof. Pöttering said that "with that aim in view, an ambitious research policy to develop clean and renewable energy technologies and hydrogen-based energy storage systems is urgently needed; at the same time, more stringent measures must be taken to improve energy efficiency. "In that respect, we must focus our efforts in particular on the construction industry. Buildings consume up to 40% of our energy worldwide – and produce equivalent amounts of CO<sub>2</sub>. According to Prof. Pöttering the three pillars of the 'third industrial revolution' are:"greater use of renewable energies, the construction of buildings which produce their own energy and the transition to the use of hydrogen for energy storage". For more info on Agora activities please visit: <http://forum.agora.europarl.europa.eu/>.

**IEA presented latest edition of Energy Technology Perspectives (ETP). 2008-06-06.** "The world faces the daunting combination of surging energy demand, rising greenhouse gas emissions and tightening resources. A global energy technology revolution is both necessary and achievable; but it will be a tough challenge", said Nobuo Tanaka, Executive Director of the International Energy Agency (IEA) today in Tokyo, at the launch of the latest edition of Energy technology Perspectives (ETP). As current levels of carbon emissions approach "unsustainable levels", the International Energy Agency (IEA) has released a report urging governments to implement a "global energy technology revolution" to reverse existing trends. The IEA analysis demonstrates demonstrates how energy technologies can make a difference in an ambitious series of global scenarios to 2050. The study contains technology road maps for all key energy sectors, including electricity generation, buildings, industry and transport and includes references to the use of fuel cells and hydrogen. Fact sheets are available at: [www.iea.org](http://www.iea.org).

***Assessment of the demand for higher education in hydrogen safety. 2008-06-05.***

The European Commission is developing a system of postgraduate education and training in hydrogen safety. This has resulted in the development of an International Curriculum on Hydrogen Safety Engineering ([www.hysafe.org/Curriculum](http://www.hysafe.org/Curriculum)) and its implementation into the world's first higher educational programme in Hydrogen Safety Engineering ([www.hysafe.org/MSchSE](http://www.hysafe.org/MSchSE)). To take this development further the EU project HYSAFE is asking companies to fill in a questionnaire, [www.hysafe.org/QuestHSE](http://www.hysafe.org/QuestHSE), to assess the involvement of companies/institutions in hydrogen related activities on a global scale and to estimate the demand for higher education in hydrogen safety. Companies are asked to contribute to this initiative to better define the content and structure of the training.

#### 4. National News

##### **Belgium**

***Belgian and Dutch Regions present Masterplan for joined Hydrogen development.***

*2008-06-25.* The VSWB, the Flanders Hydrogen and Fuel Cell Association organised a workshop in the presence of the Minister of Economy of Flanders to present a bilateral project to establish a Hydrogen Region (Waterstof Regio). A Masterplan has been developed that will involve local industry, research institutes and local government with a budget of € 16 mln for the period of 2008- 2012. The Masterplan highlights four areas of interest:

- Maritime sector: development of two vessels for touristic journeys in a natural reserve;
- Forklift trucks;
- Back up power for utility vehicles: a dentistry practice on wheels;
- Trains on hydrogen.

##### **Germany**

The Berlin Transport Authority, the Berliner Verkehrsbetriebe (BVG) is preparing the acquisition of 50 more hydrogen buses this year to be delivered next year. With 14 hydrogen buses already in daily service the BVG saved 130 t CO<sub>2</sub> since 2007. The BVG is operating also 5 CNG buses, but as the costs of natural gas has gone up no acquisition of CNG buses have been communicated.

##### **Italy**

H2IT organised a seminar on "Italy and the JTI". A key note speech of Andre Martin, executive director of the FCH Instruct office, outlined the JTI activities and the development of the German Hydrogen Strategy. This led to a vivid discussion of Italian priorities. Guided by a representative of the Italian Ministry for the Environment Pierpaolo Garibaldi, the discussion focused on the best way of going forward to ensure that hydrogen and fuel cell applications contribute to Italian carbon reduction efforts in the most effective way and how to link those activities with the JTI.

## Netherlands

**Rotterdam and Amsterdam set up national hydrogen coalition.** 2008-06-25. The local authorities of Amsterdam and Rotterdam have set up a National Hydrogen Coalition. This platform will include companies, knowledge institutes, civil society organisations and governments, working together towards the large-scale application of hydrogen. The coalition will make an important contribution to national policy objectives with respect to the climate, air quality, energy supplies and innovation. 'We see hydrogen as one of the best options to improve the air quality and climate. The Rotterdam/Antwerp (the Netherlands-Belgium) basin is the largest chemical and petrochemical basin in Europe, representing 12% of the entire European refining capacity. Air Liquide has invested over €800 million in this basin in the last 12 years. The hydrogen market in this basin continues to witness sustained growth of +20% per year. In Rotterdam, Air Liquide has just won a long-term contract to supply hydrogen to Neste Oil's Renewable Diesel plant. To meet the industrial gas requirements of Nestlé Oil, Air Liquide is investing in a new world-scale hydrogen production unit (Steam Methane Reformer - SMR) with a production capacity of 130,000 m<sup>3</sup>/hour. This represents an increase of more than 30% of its existing hydrogen production capacity in the basin. This unit is due to start up in 2011. Group investment amounts €160 million.

## Spain

**Zaragoza inaugurated the World Expo 2008 in hydrogen fashion.** 2008-06-21. From May 1, 2008, a hydrogen fueling station is operating in Zaragoza as part of the celebration of the International Exposition (Zaragoza-EXPO 2008). The on-site hydrogen production, developed in collaboration with Air Products, will be generated via water electrolysis, since the thematic key of this EXPO is "Water and Sustainable Development". The selected electrolyzer produces a minimum of 15 kg of hydrogen per day and the station is designed to supply hydrogen to a fleet of "Fuel Cell Midibus" (Hydrogenics) with a nominal filling pressure of 250 bar and a hydrogen capacity of 6 kg. The station is prepared to carry out quick-filling in a maximum time of 10 minutes. Supporting supply is provided if necessary by tank trucks in the event that on-site hydrogen production can't match the demand. The compression is provided by two diaphragm compressors. The first step is connected to the on-site electrolyzer and boosts the pressure from 7 bar to 40 bar where the hydrogen is stored in a low pressure buffer tank. The second compressor (two stages), increases the pressure up to 350 bar, the high pressure storage. This last consists of three separate tanks operating in cascade with a total capacity of 77 kg of hydrogen. The main goal of the project is to simulate with HYSYS software, the behaviour of the hydrogen fuelling station in transient mode and be able to gain more insight about the strategies and the optimized process variables at the different scenarios that will be regular in a foreseen near future.

## Japan

**Suzuki cleared to test SX4-FCV in Japan** 2008-06-28 At the G8 conference in Hokkaido next month Suzuki will be present with a new hydrogen fuel cell version of its SX4 crossover, the SX4-FCV. Fitted with a fuel cell supplied by GM, and a 70 MPa (10,000 psi) storage tank, the SX4-FCV has a maximum operating range of 250 kilometers and a top speed of 120 km/h (around 75 mph). Power output from the fuel cell is rated at 80 kW, while the motor delivers 68 kW. Road testing has been approved by Japan's Ministry of Land, Infrastructure, and transport, and will commence soon. Japan

will set itself the goal of reducing emissions by 60-80% compared with current levels by 2050, with a mid-term reduction target of 14% by 2020 based on 2005 levels. The announcement was made by Japanese Prime Minister Yasuo Fukuda on 9 June as part of the government's vision "towards building a low-carbon society in Japan". Furthermore, the Japanese government is planning the massive introduction of existing advanced technologies, including a forty-fold increase in solar power capacities by 2030. There are also plans to introduce an emissions trading scheme similar to the one launched by the EU, but on a voluntary and experimental basis.

### **News form the secretariat**

We ask our new members to include our secretariat in their PR database so we receive their latest press releases.