

## Press Release

### The Fuel Cell and Hydrogen Network NRW



The Fuel Cell and Hydrogen Network North Rhine-Westphalia (FCHN NRW) based in Düsseldorf was founded in 2000. The objective of FCHN NRW is to establish a new industrial sector by the targeted launch of fuel cell technology and system components in suitable pilot markets. Accompanied by specific research and development and the sustained creation of a suitable hydrogen infrastructure, it is also intended to open up step by step the mass markets in the mobile and stationary domains.

Around 350 members from industry and science utilise the Network's services. Approximately 70 % of the members are industrial partners (mostly small and medium-sized enterprises), 20 % are research institutes and 10 % come from other areas. The actors are based primarily in NRW, but also in other federal states and abroad. The Network is at present the largest of its kind in Europe.

FCHN NRW offers a series of service modules, such as the establishment of working groups or the implementation of specialist events. In the public relations field, the Network's activities include organisation of joint stands at international trade fairs, such as Hannover Messe, Hydrogen + Fuel Cells in Canada, the Fuel Cell Seminar in the USA and FC Expo in Japan.

The Network's activities focus mainly on the initiation and co-ordination of co-operative projects. The Network provides assistance in finding partners and initial consultancy when it comes to applying for funds. To date approximately 90 million euro has been made available for 90 projects by the state government and the European Union (European Regional development Fund - ERDF); with a total investment of nearly 160 million euro. The projects range from the development of individual system components such as compressors and sensors to the development and testing of complex fuel cell applications in the portable, stationary and mobile domains.

The lead project "NRW Hydrogen HyWay", which was decided upon in 2008 as part of the NRW energy and climate protection strategy, represents a further expansion of

the activities in NRW to date. The state government is providing a further 60 million euro for development and demonstration projects and for infrastructural measures. Between 2009 and 2011 it is intended to expand and intensify the existing activities along the hydrogen pipeline. Hydrogen as a by-product of existing industrial processes provides the starting point for the first applications and it will be available in the medium term in sufficient quantities under economically interesting conditions. Public transport fleets and locally operating delivery vehicles as well as passenger cars are to be tested as part of the planned projects. In the domain of stationary application it is planned, jointly with the locally committed companies, to establish as a focal demonstration project a "virtual network" of decentralised heat and power co-generation systems based on fuel cell units in the Ruhr Metropolis. Numerous special applications for fuel cell systems, such as light delivery vehicles, logistical or grid security technology etc. are to be steadily expanded. The state government also intends to employ this technology – following the Japanese example – for state facilities. It is intended to put the projects planned into visible form in time to present them to the anticipated 1500 participants at the 18th World Hydrogen Energy Conference (WHEC), which is scheduled for 16 to 21 May 2010 in Essen. Furthermore they are to be integrated in the comprehensive cultural and events programme in Essen when the city is the European Capital of Culture 2010.

The WHEC 2010, combined with the selection of Essen as the European Capital of Culture, offers an ideal opportunity to give major impetus to fuel cell and hydrogen technology within this internationally significant and high-profile framework.

The conference is therefore pursuing the goal of providing, in the form of scientific papers, strategic discussions and continuous training facilities, a unique forum for an exchange of information and transfer of knowledge between delegates from the fields of research

and science, politics and industry. Clear strategies and timetables for the introduction of these technologies in the participating countries are to be worked out. The technical excursions together with "Ride & Drive Events" and a technical and scientific exhibition will be used to demonstrate the efficiency of hydrogen and fuel cell development in industry and research and in the international and national environment. The patron of the WHEC events is the "International Association for Hydrogen Energy" (IAHE), and the EnergyAgency.NRW is acting as organiser. The WHEC takes place every two years on a different continent each time. The 17<sup>th</sup> WHEC 2008 was held in Brisbane, Australia. In 2010 the WHEC can boast a broad range of sponsors. Alongside the main sponsor, RWE AG, mention should be made of the German Hydrogen Association (DWV), the Jülich Research Centre (FZJ) and the trade fair body Messe Essen. Support is also forthcoming for the event from the European Hydrogen Association (EHA), die National Hydrogen and Fuel Cell Technology Organisation (NOW), the Co-ordinating Body of the Hydrogen Initiative Bavaria (wiba), the Centre for Solar Energy and Hydrogen Research (ZSW), North Rhine-Westphalia and the European Union.

## Hydrogen Energy



One particular focus of the conference is the involvement of the European actors. That is why NRW is represented in the EU regions partnership HyRaMP (Hydrogen and Fuel Cell Regions and Municipalities Partnership). The Director of FCHN NRW, Dr. Andreas Ziolk, has been elected first chair of the partnership. From Germany, in addition to NRW, the federal states of Baden-Württemberg, Hamburg, Hessen and the region of Oldenburg-Wilhelmshaven from Lower Saxony have joined the Partner-

ship. HyRaMP's guiding notion is to secure the influence of the regions and hence of NRW in the Joint Technology Initiative (JTI). The JTI is a public-private partnership between industry, the European research community and the EU Commission and it is concerned with handling fuel cell projects. In all nearly 1 billion euro will be invested over six years in research, technological development and demonstration. The purpose is the mass market launch of hydrogen and fuel cell technologies before the year 2020. Even during WHEC 2010 it is intended to show the specialists and a broader public in Essen vehicle fleets jointly with the National Hydrogen and Fuel Cell Technology Organisation (NOW).

Through the participation in the JTI ongoing activities can also be continued with NRW involvement. One example that can be quoted here is the accompanying support for the European HyChain:Minitrans project. Within the framework of a two-stage project over 5 years, a number of vehicle fleets consisting of up to five fuel cell applications will be deployed with innovative fuel cell engines in four regions of the European union (in France, Spain, Germany and Italy). In addition to building up the precommercial production lines, the most important aim is to conduct field trials for the vehicles lasting at least two years. For this purpose the EU is providing 17 million euro. With a sufficiently large number of vehicles it is intended to cut costs and to overcome barriers. By addressing so-called "early adopters" in the transport domain, the first business models for fuel cell systems will be initiated in the European regions where they have the best chance of surviving and of growing.

### **Fuel Cell and Hydrogen Network NRW**

c/o EnergieAgentur.NRW

Haroldstr. 4

40213 Düsseldorf

Germany

Tel: +49 (0)2 11 8 66 42 – 24

Fax: +49 (0)2 11 8 66 42 – 22

**e-mail: [info@fuelcell-nrw.de](mailto:info@fuelcell-nrw.de)**

Internet:

**[www.fuelcell-nrw.de](http://www.fuelcell-nrw.de)**

**[www.whec2010.com](http://www.whec2010.com)**

