

## European project to gain customer acceptance for electric vehicles with fuel cells in Scandinavia

*Oslo, 6 July 2010* - - Following a recent signing ceremony with Norwegian officials, it was made public today, that a large demonstration project called H2MOVES on electric vehicles with fuel cells will take place in Scandinavia the coming years. The project will bring seventeen of the latest state-of-the-art electric vehicles with fuel cells from Daimler and FIAT to Oslo including the establishment of a large scale hydrogen refuelling station in the city by H2 Logic. This is to advance the commercialisation of hydrogen for transport in Scandinavia as well as connecting the region with the strong German initiatives within the area. The project has a budget of € 19,5 million financed by company contributions as well as European and national funding from Norway and Denmark.

Electric vehicles with fuel cells that run on hydrogen are seen to be one among several sustainable supplements to fossil fuels enabling the same convenient transportation as today.

Ten Mercedes-Benz B-class F-CELL cars from *Daimler (Germany)*, two Alfa Romeo MiTo fuel cell vehicles from *Centro Ricerche FIAT (Italy)* and five electric city cars with fuel cell range extension from *H2 Logic (Denmark)* will in 2011 be provided for daily operation in Oslo and on specific tours in southern Norway and the whole Scandinavian region.

Thanks to its long range of around 400 kilometres and short refuelling times, the Mercedes-Benz B-Class F-CELL combines local zero-emission mobility with long-distance comfort and compelling performance. Driving pleasure and performance on a par with a 2.0-litre petrol car come courtesy of the 100-kW/136-hp electric motor, which develops effortlessly superior torque of 290 Nm. The B-Class F-CELL consumes the equivalent of 3.3 litres of diesel per 100 kilometres in the New European Driving Cycle (NEDC).

The Alfa Romeo MiTo Fuel Cell car combines the high innovation of a green hydrogen vehicle with the "happiness" to drive a small sport vehicle. The MiTo uses a Nuvera Fuel Cell stack combined with a compact Li-ion traction battery pack to supply power to the electric motor; this allows the vehicle to reach a top speed of 150 km/h and to perform an acceleration from 0 to 100 kilometres in 10 sec, with hydrogen consumption of 3.2 l<sub>de</sub>/100 km and a range of 450 kilometres in NEDC, thanks to 700 bar H<sub>2</sub> tanks.

A hydrogen refuelling station from H2 Logic will be designed and built in Oslo. The objective is to provide hydrogen with a fully integrated purchase interface and in an urban environment within one of the densest hydrogen fuelling station network in Europe. The station will comply with the latest international hydrogen refuelling standard SAE J2601 that ensures a safe and fast refuelling in few minutes with the same ease of use and convenience as today. The hydrogen supply will be based on a combination of onsite production and trucked-in hydrogen, all based on Norwegian electricity of which more than 90% is based on renewable hydro and wind power.

During the project some of the fuel cell vehicles will be employed on a European hydrogen vehicle demonstration tour, coordinated by *Hydrogen Sweden* and in collaboration with *the European Regions' and Municipalities' Partnership on Hydrogen and Fuel Cells (HyRaMP)*. For the on-site refuelling of hydrogen during the vehicle demonstration tours *H2 Logic* will also develop a mobile hydrogen refuelling concept for provision of almost 100% CO<sub>2</sub> free hydrogen. A safety and certification study will be carried out by *TÜV SÜD, (Germany)* and *SP Technical Research Institute of*

Sweden to identify the certification gaps in Scandinavia to accelerate full commercialization of vehicles and fuelling stations.

The € 19,5 million project called H2MOVES will be the first large scale demonstration project supported by the newly established European *Fuel Cells and Hydrogen Joint Undertaking* Programme. This collaborative public private partnership whose total budget amounts to €1 billion to be invested by 2014 supports the H2MOVES project together with national funds from the Norwegian "*Transnova programme*" and the Danish "*EUDP programme*" as well as industry contributions.

"These initiatives will help take yet another crucial step towards the mass production of electric vehicles with fuel cells around 2015 and the establishment of sufficient infrastructure to provide renewable hydrogen", said Dr. Ulrich Bünger, of *Ludwig-Bolkow-Systemtechnik, Germany* Project Coordinator of H2MOVES Scandinavia.

"One of the key technology contributions in the fight against climate change will be the electrification of the drive train in cars and city busses. The combination of batteries and fuel cells allow the drivers to enjoy the same range, and even better comfort and performance than commercially available vehicles provide today", said Dr. Steffen Møller-Holst, at *SINTEF, Norway* Project Coordinator of H2MOVES Oslo.

For more information see [www.h2moves.eu](http://www.h2moves.eu) and [www.scandinavianhydrogen.org](http://www.scandinavianhydrogen.org), or contact the projects' secretariats as per below.

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