

PRESS RELEASE | May 12, 2011, Denmark

## Denmark and Hyundai•KIA signs MoU on fuel cell electric vehicle and hydrogen infrastructure deployment

Today the City of Copenhagen, H2 Logic A/S and Hydrogen Link Denmark Association signed a Memorandum of Understanding (MoU) with the Hyundai•KIA Motors on enabling deployment of fuel cell vehicles and hydrogen infrastructure in both Korea and Denmark onwards 2015. The signing was done in the presence of the President of the Republic of Korea and the Prime Minister of Denmark. In advance of the event a fully homologated hydrogen powered Hyundai•KIA fuel cell electric vehicle drove all across Denmark on a single three minute hydrogen refueling provided by H2 Logic, as the first electric car ever.

Ensuring sustainable mobility for generations whilst satisfying the variety of transportation needs, takes an important portfolio of hybrid gasoline vehicles, bio fuels, battery electric vehicles as well as fuel cell electric vehicles (FCEV) powered by hydrogen.

The MoU signing between Denmark and Korea provides an important step towards enabling electric vehicles with the same long range and fast refueling as gasoline powered vehicles.

Hydrogen can contribute to the vision of fossil independent mobility in future, by acting as an energy storage for fluctuating renewable energy sources. Use of hydrogen as fuel in FCEV's, can enable electric mobility with a comparable long range and fast refueling as gasoline but with a fuel consumption half that of gasoline and the potential for fossil independence.

The sustainable and comfortable mobility provision with hydrogen, was proven in advance of the MoU signing by a 340 km ride all across Denmark on a single 3 minute refueling of hydrogen, the first electric car ever in Denmark to accomplish a cross-country driving.

Major efforts of most leading car manufacturers worldwide in recent years have advanced FCEV's to a stage where mass production is in preparation, aiming towards a market introduction beyond 2015. FCEV's today provide a comparable range and fast refueling as gasoline and with cost reductions in sight to reach competitive price levels by mass production. Safety is sufficiently handled with necessary vehicle homologation legislation in place, e.g. in the European Union, which also was the basis for ensuring Danish license plates on the FCEV's that crossed Denmark.

On hydrogen refueling, sufficient international standards are already in place on e.g. refueling nozzle design and fueling procedures in the SAE J2601 standard, enabling a fast, safe and uniform 700bar refueling at any refueling station to any vehicle worldwide.

Remaining obstacle is a coordinated roll-out of hydrogen refueling infrastructure and FCEV's whilst ensuring a pathway towards sustainable and fossil independent hydrogen production.

The MoU between Korea and Denmark addresses exactly these issues by aiming towards collaboration on:

- Preparing, and conducting vehicle demonstration activities with the aim to continuous build-up of vehicle volume onwards 2015 in both countries; and advocating for necessary financing and support mechanisms for vehicle commercialization beyond 2015
- Preparing and conducting hydrogen refueling demonstration activities, with the aim to a country-wide and urban dense network by 2015 in both countries; and advocating for necessary financing and support mechanisms for hydrogen refueling infrastructure commercialization beyond 2015

Besides the sustainable mobility perspectives, the motivation for the MoU is also the potential for green growth and clean tech development in the two countries. Therefore the parties will also strive to emphasize joint collaboration on knowledge exchange, development and Green Growth in the activities to be pursued in the MoU, by encouraging research and business collaborations between actors in both countries.

Whereas the MoU between Korea and Denmark provides a significant contribution, similar steps are taken by vehicle manufacturers and infrastructure companies in other world regions such as Germany, Scandinavia, USA and Japan. These global efforts are welcomed and underline the necessity of ensuring a global volume basis and a coherent collaboration and coordination on the market deployment beyond 2015.

### Further information

**YouTube video: Hydrogen car crosses Denmark as the first electric car ever**

**YouTube** <http://www.youtube.com/watch?v=Ib04PInKCAA>

### Picture from MoU signing in Copenhagen



#### Persons in picture (from left to right)

- President of the Republic of Korea, H.E. Lee Myung-bak
- Woong Chul Yang, Vice Chairman, R&D Division, Hyundai•KIA Motors
- Prime Minister of Denmark, H.E. Lars Løkke Rasmussen
- Hjalte Aaberg, Chief Executive Officer, City of Copenhagen (representing Bo Asmus Kjeldgaard, Mayor for the Technical and Environmental Administration)
- Jacob Krogsgaard, Director H2 Logic A/S
- Flemming Wennike, Association manager, Hydrogen Link Denmark Association

High resolution picture at: [www.hydrogenlink.net/news/pics/denmark-hyundai-kia-fuel-cell-electric-agreement-signing.JPG](http://www.hydrogenlink.net/news/pics/denmark-hyundai-kia-fuel-cell-electric-agreement-signing.JPG)

#### About the MoU partners:

**Hyundai•KIA Motors** | [www.hyundai.com](http://www.hyundai.com)

A world leading supplier of conventional passenger vehicles and fuel cell electric vehicles

**City of Copenhagen** | [www.kk.dk](http://www.kk.dk)

Capital of Denmark with the aim to become the world's first CO2 neutral capital by 2025

**H2 Logic A/S** | [www.h2logic.com](http://www.h2logic.com)

A world leading supplier of fuel cell systems, H2Drive® and hydrogen refueling stations, H2Drive®

**Hydrogen Link Denmark Association** | [www.hydrogenlink.net](http://www.hydrogenlink.net)

National network for advancing use of hydrogen for transport in Denmark