

# Press release

## Fifth hydrogen filling station opens in Baden-Wuerttemberg

- Daimler, Linde and TOTAL continue expansion of the hydrogen station network
- Integration of H2 fuelling technology into an existing filling station in Fellbach
- Other stations planned in the southwest, including Karlsruhe and Ulm
- Project is part of the Clean Energy Partnership (CEP), funded by the National Innovation Programme (NIP)

Munich/Stuttgart/Berlin, 1 October 2015 – Daimler, Linde and TOTAL are continuing their joint plans for the expansion of a national hydrogen  $(H_2)$  infrastructure. After the openings at the Geiselwind motorway service area, the first  $H_2$  filling station on the autobahn, and at two locations in Berlin, the partners have now taken another step towards a nationwide supply network for locally emission-free electric vehicles with fuel cells.

Today at the TOTAL multi-energy filling station in Fellbach, Dr Veit Steinle, Director-General, Departmental Policy Issues at the Federal Ministry of Transport and Digital Infrastructure, joined Ministerial Director Helmfried Meinel of the Baden-Wuerttemberg Ministry for the Environment, Climate and Energy, in symbolically refuelling the first vehicle, a Mercedes-Benz B-Class F-CELL. The  $\rm H_2$  station in Fellbach is the fifth of its kind in Baden-Wuerttemberg, more are to follow in the months ahead.

Mr Meinel, who heads the State Ministry for the Environment, Climate and Energy, emphasized how important it is to the Baden-Wuerttemberg state government to support the establishment of Germany's H<sub>2</sub> infrastructure: "Hydrogen and fuel cells have great potential to become a key technology for environmentally friendly mobility. They can help us to reduce our dependence on oil imports."

He added that hydrogen could also play an important role in many other areas, for example, as a temporary storage medium for electricity from renewable energy sources. "In the past three years, the Environment Ministry has invested a total of four million euros in promoting Baden-Wuerttemberg's H<sub>2</sub> infrastructure in in the form of hydrogen filling stations and facilities for producing and storing renewable hydrogen through the H2BW innovation programme. To continue encouraging the development of this infrastructure, we have launched another programme called 'Power to Hydrogen', with which we are supporting the large-scale



production, distribution and use of hydrogen from renewable sources. The state is making a total of 1.4 million euros available for this purpose in 2015 and 2016."

The Fellbach station features the compact 700-bar fuelling technology from Linde that is ideally suited for retrofitting existing, conventional filling stations. Linde uses its proprietary IC90 ionic compressor, which combines advantages in power consumption, maintenance and noise. With around 100 filling stations set up in 15 countries, Linde is the leader in hydrogen technology. The company operates the world's first small-series production facility for H<sub>2</sub> fuelling stations in Vienna.

The construction of a nationwide hydrogen infrastructure in Germany is accompanied by the planned market ramp-up of fuel-cell cars from various manufacturers. By 2016, an initial strategic stage shall be realised: 50 hydrogen filling stations – built and operated as part of the Clean Energy Partnership (CEP) – will supply Germany's metropolitan areas and main corridors (www.cleanenergypartnership.de/fileadmin/Assets/ user\_upload/50\_TS.pdf). As part of this expansion programme, the Daimler-Linde initiative is participating in a total of 20 new H<sub>2</sub> stations with a total investment of approximately 20 million euros.

Daimler plans to start marketing competitive fuel-cell vehicles from 2017. One advantage of fuel cell vehicles is their high range of about 400 to 500 kilometres. Another great benefit of this technology is the very short refuelling time. The gradual expansion of the  $H_2$  infrastructure represents one of the most important factors for a successful launch of such vehicles.

TOTAL has been a trailblazer in building a Germany-wide  $H_2$  service station infrastructure since 2002. Eight of the 19 public H2 filling stations now open in Germany are TOTAL multi-energy service stations. Other hydrogen filling stations are planned in Ulm, Karlsruhe and at Cologne airport. In Fellbach, TOTAL covers all construction and permitting costs, and handled the project management for building the hydrogen technology, including service and maintenance components.

The Federal Ministry of Transport and Digital Infrastructure supports the project as part of its National Innovation Programme for Hydrogen and Fuel Cell Technology (NIP). The programme is managed by NOW GmbH (National Organisation for Hydrogen and Fuel Cell Technology).



## About The Linde Group

In the 2014 financial year, The Linde Group generated revenue of EUR 17.047 bn, making it the largest gases and engineering company in the world with approximately 65,500 employees working in more than 100 countries worldwide. The strategy of The Linde Group is geared towards long-term, profitable growth and focuses on the expansion of its international business with forward-looking products and services. Linde acts responsibly towards its shareholders, business partners, employees, society and the environment – in every one of its business areas, regions and locations around the globe. The company is committed to technologies and products that unite the goals of customer value and sustainable development.

For more information, see The Linde Group online at <a href="www.linde.com">www.linde.com</a>

## About Daimler

Daimler AG is one of the world's most successful automotive companies. With the divisions of Mercedes-Benz Cars, Daimler Trucks, Mercedes-Benz Vans, Daimler Buses and Daimler Financial Services, the Daimler Group is one of the biggest producers of premium cars and the world's biggest manufacturer of commercial vehicles with a global reach. Daimler Financial Services pro-vides financing, leasing, fleet management, insurance, financial investments, credit cards, and innovative mobility services. The company's founders, Gottlieb Daimler and Carl Benz, made history with the invention of the automobile in 1886. As a pioneer of automotive engineering, Daimler continues to shape the future of mobility today. The company focuses on innovative and green technologies as well as on safe and superior cars that appeal and fascinate. Daimler systematically invests in the development of alternative drive systems – up to purely electric vehicles with battery or fuel cell hybrid vehicles - with the goal of making emission-free driving possible in the long term. Moreover, the company vigorously promotes accident-free driving and an intelligent network up to autonomous driving, because Daimler willingly accepts the challenge of meeting its responsibilities towards society and the environment.

Daimler sells its vehicles and services in nearly every country in the world and has production facilities in Europe, North and South America, Asia and Africa. Its current brand portfolio includes the world's most valuable premium automotive brand, Mercedes-Benz, as well as Mercedes-AMG and Mercedes-Maybach, the smart, Freightliner, Western Star, BharatBenz, Fuso, Setra and Thomas Built Buses brands, as well as the Daimler Financial Services brands: Mercedes-Benz Bank, Mercedes-Benz Financial, Daimler Truck Financial, moovel and car2go. The company is listed on the Frankfurt and Stuttgart stock exchanges (stock exchange code DAI). In 2014, the Group sold more than 2.5 million vehicles and employed 279,972 people. Its revenues totalled €129.9 billion and EBIT amounted to €10.8 billion.

Further information about Daimler is available online at: <a href="www.media.daimler.com">www.daimler.com</a> and <a href="www.daimler.com">www.daimler.com</a>

#### About TOTAL

Germany is a pioneer in the testing of hydrogen in the transport sector, and for more than twelve years, TOTAL has operated hydrogen filling stations and supported various demonstration projects in partnership with car manufacturers and industrial gas producers. The Clean Energy Partnership (CEP) hydrogen test fleet of just over 50 vehicles, for example, is fuelled with 100% green energy at TOTAL's flagship multi-energy filling station at Schönefeld airport, Berlin. Here – in addition to conventional quality fuels, LPG and natural gas – quick charge stations for battery-powered electric mobility are also available. The on-site hydrogen production facilities are coupled with a photovoltaic system, and a wind farm is planned. The project partners TOTAL, Linde and McPhy show that zero-emissions mobility from green sources is already feasible today, completing a sustainable cycle for mobility. Apart from reducing  $\mathrm{CO}_2$  emissions, the domestic production of hydrogen using wind energy can make an important contribution to security of supply.



Hydrogen can therefore also play an important role as a storage medium for renewable energy, and in the overall switch to renewables. TOTAL operates a total of eight H<sub>2</sub> filling stations in Germany: Four in Berlin and one each in Fellbach, Munich and Hamburg, plus the first motorway service station with a hydrogen fuel pump, in Geiselwind. More are planned as part of the federal government's programme of 50 H<sub>2</sub> service stations, in places including Bavaria, Baden-Württemberg, Hamburg and North Rhine-Westphalia.

## de.total.com/de

#### About the CEP

The Clean Energy Partnership – an alliance of 19 leading companies – has set itself the task to establish hydrogen as the "fuel of the future". With Air Liquide, Bohlen & Doyen, BMW, Daimler, EnBW, Ford, GM/Opel, Hamburger Hochbahn, Honda, Hyundai, Linde, OMV, Shell, Siemens, Stuttgarter Strassenbahnen SSB, Total, Toyota, Volkswagen and Westfalen, technology, oil and energy companies are participating in this pioneering project for the future as well as most of the largest automotive manufacturers and leading public transport companies. Since 2008, the CEP has been funded by the National Hydrogen and Fuel Cell Technology Innovation Programme (NIP).

## www.cleanenergypartnership.de

#### About NOW

NOW GmbH (National Organisation Hydrogen and Fuel Cell Technology) was founded in 2008 by the Federal Government, represented by the Federal Ministry of Transport, Building and Urban Development (today the Federal Ministry of Transport and Digital Infrastructure — BMVI). NOW coordinates and manages two federal development programmes — the National Innovation Programme for Hydrogen and Fuel Cell Technology (NIP) as well as the BMVI's Electromobility Model Regions. Both programmes serve to prepare the market for ensuring efficient, ecofriendly mobility and energy supply in the future. Funding is focused on research and development as well as demonstration projects.

www.now-gmbh.de

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