

Press release

Linde to showcase clean energy innovations at HANNOVER MESSE trade show

Munich, 8 April 2013 – Technology company The Linde Group will be presenting the latest advances in eco-friendly energy carriers at HANNOVER MESSE 2013. It will be focusing in particular on hydrogen and liquefied natural gas (LNG).

Hydrogen fuelling technology from Linde in demand

As a leading provider of hydrogen fuelling solutions, Linde will once again be the exclusive supplier of hydrogen for the fuel-cell cars operated by the Clean Energy Partnership (CEP) in Hanover. CEP partners Daimler, GM/Opel, Honda and Toyota will be inviting exhibition visitors to take a test drive in their zero-emission vehicles in the open grounds. The cars will be refuelled with green hydrogen supplied by a mobile refuelling unit developed by Linde. The hydrogen will be sourced from Linde's pilot plant in Leuna, where it is manufactured from raw glycerol, a by-product of biodiesel manufacturing. Advanced to industrial scale, this production path has the potential to reduce greenhouse gas emissions by between 50 and 80 percent compared with conventional hydrogen production processes using natural gas.

Linde will also be showcasing the latest developments in stationary fuelling technologies. In the last two years, Linde developed and built three hydrogen stations which generate hydrogen directly on site through electrolysis. These have the potential to generate zero-carbon hydrogen using electricity from regenerative sources such as wind power. The most recent station of this type was opened in March in Stuttgart, built for EnBW Energie Baden-Württemberg AG, and is part of the CEP. "These next-generation stations not only contribute to Europe's growing hydrogen fuelling infrastructure," says Dr Andreas Opfermann, Head of Clean Energy and Innovation Management at Linde. "Enabled by power-to-gas technology, they also demonstrate the value of hydrogen as a storage medium in the transition to a cleaner energy landscape."

New applications for LNG

LNG is an economically viable bridging technology in the move towards more sustainable mobility choices. As the most environmentally friendly of all fossil fuels, LNG is a particularly attractive alternative to heavy oils or diesel for shipping and trucking companies. Driven by increasingly strict emission

thresholds, demand for LNG is rising in these and other industries. Last year, Linde entered into a joint venture with marine fuel specialist Bomin. The new company, Bomin Linde LNG, is already successfully establishing a maritime LNG infrastructure.

Linde also set up an LNG fuelling station for the Stobart Group logistics specialist in Great Britain. This will serve some of Stobart's dual-fuel vehicles. A new fuelling technology means that virtually no gas escapes during the fuelling process. This innovation greatly improves the environmental balance of this station relative to conventional systems.

Linde masters the entire natural gas value chain – from liquefaction through storage to delivery to the point of use.

All visitors are welcome to visit Linde's stand in hall 27 from the 8th to the 12th of April in Hanover. The company will be presenting a host of clean technologies – including those outlined above.

The Linde Group is a world-leading gases and engineering company with around 62,000 employees in more than 100 countries worldwide. In the 2012 financial year, Linde generated revenue of EUR 15.280 bn. The strategy of the 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 across the globe. The company is committed to technologies and products that unite the goals of customer value and sustainable development.

Under the "Clean Technology by Linde" label, the company offers a wide range of products and technologies that help to render renewable energy sources financially viable, and significantly slow down the depletion of fossil resources or reduce the level of CO₂ emitted. This ranges from specialty gases for solar module manufacturing, industrial-scale CO₂ separation and application technologies to alternative fuels and energy carriers such as liquefied natural gas (LNG) and hydrogen.

For more information go to <http://www.linde.com/cleantechnology>.

Further information:

Media Relations
Uwe Wolfinger
Phone: +49.89.35757-1320

Investor Relations
Dr Dominik Heger
Phone: +49.89.35757-1334

Stefan Metz
Phone: +49.89.35757-1322

Lisa Tilmann
Phone: 49.89.35757-1328