

Press Release

Linde to supply to Evonik's second world-scale methionine complex in Singapore; underscores position as key industrial gases partner for Singapore's global chemicals hub

- Linde awarded a second long-term gases supply contract with Evonik in Singapore.
- New gases facility, for methane and hydrogen supply with carbon dioxide recovery, to be fully integrated with Evonik's DL-methionine production complex.
- Continued investments to expand and diversify offerings in Singapore.

Singapore, **11 January**, **2017** - Linde Gas Singapore, a member of technology company, The Linde Group, today announced that it has signed a long-term contract to supply methane and hydrogen to Evonik Methionine SEA's second world-scale methionine complex in Singapore (Me6). Linde is today already supplying a range of gases to Evonik's first methionine complex in Singapore (Me5) through its on-site gases facility, which began operations in 2014.

For this second contract, Linde will invest, build and operate a new gas production and supply facility that will be fully integrated with Evonik's production complex for DL-methionine. The investment includes a steam reformer with Linde-designed carbon dioxide recovery technology to limit carbon emission into the atmosphere and Linde's proprietary high performance methane pressure swing adsorption system.

The Me6 complex is expected to commence operations in 2019. Linde's Engineering Division will build the gases facility based on technologies designed to increase energy efficiency and environmental performance. Similar to the first plant, Linde's second integrated gas plant for Evonik will also use natural gas.

Sanjiv Lamba, Chief Operating Officer for Asia Pacific and Executive Board Member, Linde AG said, "I am delighted to further extend the relationship with Evonik following the award of the gas supply contract for Evonik's second world-scale methionine complex in Singapore. We are proud of the partnership we



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share with Evonik across the globe and pleased by Evonik's recognition of Linde's superior technology offering and operational capabilities."

He added "Asia is where the growth opportunities are and with our strong footprint across Asia, we are well positioned to capture this growth. We will continue to invest alongside world-class customers to ensure that we support them in their growth plans, while delivering on our strategy of sustainable, profitable growth in key market across Asia."

Dr Emmanuel Auer, Head of the Animal Nutrition business line of Evonik, said, "Evonik already works with The Linde Group in several facilities around the world, and we are very glad to extend our partnership with Linde in Singapore. With this latest investment, Linde becomes a strategic partner for the Evonik methionine complex in Singapore in on-site gases facilities and related improvement projects. I am pleased that we have reached this agreement with Linde and look forward to a very successful long-term partnership here at our Jurong Island premises."

Linde has the capability of using various feedstock sources to produce industrial gases. In the longer term, Linde will continue to evaluate various feedstock sources as it expands its network of industrial gases supply to the energy and chemicals cluster on Jurong Island.

Linde has steadily expanded and diversified its operations in Singapore over the past year. This includes its supply of specialty gases to the electronics and semiconductor industries. More recently, it has expanded into the healthcare business, supplying medical oxygen to more than a third of all hospitals in Singapore. Linde's business on Jurong Island, Singapore, remains the hub for hydrogen-carbon monoxide (HyCO) operations support in Asia Pacific, operating one of the largest integrated HyCO facilities in the region. The company also owns one of the largest liquid carbon dioxide production plants in Singapore.



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Industrial gases are the building blocks for the production of highly specialised chemicals products that are used to make consumer products such as plastics, polyester, synthetic rubber, styrofoam and household cleaning products.

DL-methionine is an essential amino acid, which must be absorbed through feed intake. As a feed additive, it is an important component of ensuring a sustainable animal protein supply for the world's growing population.

About Linde Gas Singapore Pte. Ltd.

Linde Gas Singapore (LGS) is the operations base of The Linde Goup's business in Singapore as well as the hub for hydrogen-carbon monoxide (HyCO) operations support in Asia Pacific. It owns the largest carbon monoxide and hydrogen facility in the region, and one of the largest merchant carbon dioxide production plants in Singapore. LGS also produces a range of specialised gases mixtures to support various industrial customers as well as medical gases for the healthcare sector. It also serves as Linde's regional supply chain hub for the storage and distribution of electronic specialty gases.

About The Linde Group

In the 2015 financial year, The Linde Group generated revenue of EUR 17.944 bn, making it one of the leading gases and engineering companies in the world, with approximately 65,000 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 across 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 www.linde.com.