

## Press Release

### Linde invests over EUR 110 million in China to strengthen position as supplier of choice for electronics manufacturers

- Linde secures multiple long-term supply contracts with new and long-time customers
- Investment extends commitment to on-site plants and building electronic specialty gases infrastructure

Shanghai, China, 13 March 2017 – Gases and engineering company The Linde Group, through its electronics gases joint venture in China, Linde LienHwa, is expanding its commitment to China and the Asia Pacific region through investments of over EUR 110 million. The capital is being allocated for new on-site gas production facilities in major electronics manufacturing clusters in the eastern and central provinces of China. These investments with new and established customers will support multiple long-term contracts to provide electronics gases to leading-edge foundry, memory and flat panel display fabs.

Sanjiv Lamba, Member of the Executive Board of Linde AG and Chief Operating Officer for Asia Pacific, said, “These significant capital investments underscore Linde’s continued commitment to our business in Asia Pacific in general, and China, in particular, and build upon earlier investments and capabilities in the region, including the recent start-up of our state-of-the-art R&D center in Taichung, Taiwan. Asia will continue to be a growth driver for Linde and we will continue to invest in Asia.”

Stan Tang, President and General Manager of Linde LienHwa in China added, “Linde’s over EUR 110 million in new on-site plant investments demonstrates our commitment to the rapidly developing Chinese electronics manufacturing sector. The supply contracts that Linde has secured in China validate our customers’ confidence in the safety, quality and reliability of our gases supply and systems.”

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SEMI (Semiconductor Equipment and Materials International), the global trade association that represents the electronics industry, estimates that more than 50 percent of new semiconductor fab investments in the next few years will be in China. China has made a large commitment to the electronics industry through the National IC Industry Investment Fund, more commonly known as The Big Fund, where it has pledged around EUR 20 billion from 2014 through 2017 to build the semiconductor industry in China. An additional EUR 82 billion is expected to be added from private equity funds and local governments.

Linde LienHwa, together with Linde's Engineering Division, will design and construct these facilities. Linde SPECTRA-N® nitrogen generators have the highest level of operational efficiency, enabling lowest cost of ownership and reducing environmental footprint. These projects include multiple gaseous nitrogen plants, with a combined capacity of over 110,000 Nm<sup>3</sup>/hr (normal cubic meters per hour), plus several other bulk gas supply systems. All the plants will be on stream by the end of 2017.

Linde and its joint venture partners in China currently deliver gases solutions and systems to more than a dozen electronic production facilities across the major segments of the electronics industry, including those in semiconductor, display, solar and LED. Linde is also committed to meeting the electronic special gas (ESG) needs of its growing Chinese customer base. For example, Linde produces bulk amounts of key ESGs like ammonia (NH<sub>3</sub>) and nitrous oxide (N<sub>2</sub>O) in China, South Korea and Taiwan to ensure local supply and regional supply chain security.

Linde Electronics, the global electronics business of The Linde Group, supplies the world's largest semiconductor manufacturers in Taiwan, Korea and the US, and is securing a leading position in China with international and domestic manufacturers. Linde Electronics is committed to building an infrastructure of specialty gas capabilities and co-investment partnerships in China.

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### About The Linde Group

In the 2016 financial year, The Linde Group generated revenue of EUR 16.948 bn, making it one of the leading gases and engineering companies in the world, with approximately 60,000 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](http://www.linde.com)

### About Linde Electronics

Linde Electronics is an industry leader in gases for the electronics market—semiconductor, solar, display and LED. Linde Electronics helps electronics companies achieve their goals through a strong focus on quality and environmental leadership, its expertise, commitment to the industry through ongoing investments in processes, engineering, and on-site and localized solutions, a broad portfolio that includes environmentally sustainable and highly specialized and rigorously measured electronic specialty gases (ESGs), bulk/pipeline gases, equipment, and services, and through working closely with customers to better meet their evolving needs.

For more information, visit [www.linde-gas.com/electronics](http://www.linde-gas.com/electronics) or contact [electronicsinfo@linde.com](mailto:electronicsinfo@linde.com).