

## German solar energy corporation Inventux, awards wide-ranging gas supply contract to Linde

Munich, August 2008 - Inventux Technologies AG, the Berlin-based thin-film solar module manufacturer, has contracted Linde Nippon Sanso (LNS), a company of The Linde Group, to provide the full range of high purity gases used in the manufacturing process of their new Berlin plant.

The long term contract comprises turn-key gas systems engineering plus exclusive supply of all gases to the solar cell production line including onsite generated bulk nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), hydrogen (H<sub>2</sub>) and silane (SiH<sub>4</sub>), as well as all cylinder gases. LNS will also provide an onsite Total Gas Management service. Gas was turned on at the end of June 2008, with the first thin-film modules expected to leave the 33 MWp factory soon after.

“We are extremely proud to be working with Inventux for this leading-edge project” said Andreas Guenther, President of Linde Nippon Sanso. “This collaboration with a pioneering manufacturer reinforces our goal to develop and apply advanced gas technologies to help solar cell and module manufacturers move toward grid parity.”

Volko Loewenstein, CEO of Inventux, said “LNS impressed us as a partner who can help reduce the cost of thin film solar modules by deploying innovative gas technology in areas such as chamber cleaning gases. Additionally, with supplies from the state of the art electronic gases plant in Unterschleissheim, security of supply is assured.”

Inventux is one of the earliest users of the micromorph tandem technology, a process that has the potential for high efficiencies and low production costs. Instead of a single light trapping layer, tandem uses two different layers in the cell - one working with the blue part of the light spectrum, and one with red - to boost efficiency by more than 40%.

### About Linde Nippon Sanso

Linde Nippon Sanso is a joint venture of the technology group The Linde Group and the Japanese Taiyo Nippon Sanso Corp. The corporation, headquartered in Pullach near Munich, Germany, offers gases, turnkey supply systems and services for numerous applications in semiconductor, solar cell, and optical fibre production.

### About The Linde Group

The Linde Group is a world leading gases and engineering company with more than 50,000 employees working in around 100 countries worldwide. In the 2007 financial year it achieved sales of EUR 12.3 billion. The strategy of The Linde Group is geared towards earnings-based and sustainable 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. Linde is committed to technologies and products that unite the goals of customer value and sustainable development. For more information, see The Linde Group web site at [www.linde.com](http://www.linde.com)

### About Inventux Technologies

Founded in spring 2007, Inventux Technologies AG is a solar enterprise specialising in the development, production and marketing of micromorph thin film solar modules. The company uses proprietary micromorph tandem technology aimed at boosting solar efficiency and simplifying manufacturing.