

## Evonik invests in a hollow fiber spinning plant for gas separation membranes used in energy efficient upgrading of biogas

January 20, 2012

Evonik Industries is investing an upper single-digit million Euro amount in a plant producing SEPURAN® hollow fiber membrane modules at its Schörfling, Austria, site. In particular, the novel membrane technology facilitates energy efficient upgrading of biogas to biomethane. Biomethane is fed into the public natural gas grid. The new hollow fibre spinning plant will come onstream within 2012 to meet the growing demand on the biogas market.

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“With this investment, we're systematically strengthening our activities in the area of gas separation membranes proving our commitment to renewable energies by producing biomethane that can be fed directly into the grid,” says Dr. Axel Kobus, head of the growth segment Fibres & Membranes. “By contrast to other processes, our membrane technology needs no auxiliary chemicals; nor does it generate any solid wastes or effluents that would need to be disposed of.” The Evonik process is offered on the market by leading plant engineering and construction partners, and works cost effectively, even in relatively small plants. It is therefore particularly suitable for the local energy supply of tomorrow.

The novel technology is based on membranes produced from high-performance polymers that in the past have been, for example, processed into fibers and used in hot-gas filtration. At pressures of up to 25 bar, such membranes allow significantly improved separation of carbon dioxide and methane with stable selectivity, in a single process step. The method yields methane of purity higher than 99 percent. Neither energy-intensive recycle streams nor costly downstream processing steps are required, which significantly distinguishes the Evonik method from the technologies currently available on the market.

At present, biogas is still largely converted to electricity at its production site, with a maximum of 40 percent of its energy being utilized by the conversion to power. In such local power generation the waste heat often remains largely unused. When fed into the natural gas grid, however, the

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raw material can be stored much more efficiently, and more than 90 percent of its energy utilized as power and heat.

#### **Company information**

Evonik, the creative industrial group from Germany, is one of the world leaders in specialty chemicals. Its activities focus on the key megatrends health, nutrition, resource efficiency and globalization. In 2010 about 80 percent of the Group's chemicals sales came from activities where it ranks among the market leaders. Evonik benefits specifically from its innovative prowess and integrated technology platforms.

Evonik is active in over 100 countries around the world. In fiscal 2010 more than 34,000 employees generated sales of around €13.3 billion and an operating profit (EBITDA) of about €2.4 billion.

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