

Lurgi making fuel from biomass

- **Lurgi and Forschungszentrum Karlsruhe officially inaugurated the first stage of the joint research plant for the generation of fuels from biomass**
- **Contract for the realization of the second stage signed**

No. 4 · Frankfurt am Main · 20 June 2007: The first stage of a two-stage pilot plant for the generation of fuels from biomass was officially inaugurated today in the presence of representatives from the Federal Ministry for Nutrition, Agriculture and Consumer Protection (BMELV), the Agency of Renewable Resources (FNR), Lurgi AG, and Forschungszentrum Karlsruhe GmbH. Also today, the cooperation partners signed the contract for the realization of the second stage of the plant.

In the first plant stage, the biomass is converted to the preliminary product Bioliq-SynCrude. The concept of a decentralized pyrolysis in upstream plant units offers farmers the benefit of reducing transport costs thanks to lower transport volumes. In the second stage, the products from the pyrolysis process are gasified in a central plant and converted to synthesis gas. This syngas is used as feedstock for synthetic fuels, the so-called "designer fuels".

"Designer Fuels" are ultra-modern synthetic fuels that are not only mixable at any ratio with mineral oil-based fuels, but also perfectly suited for today's and tomorrow's engine generations. They are completely sulfur-free and low-emission. Addition of as little as around ten percent of such fuels already brings down harmful emissions considerably. The CO₂ emissions of cars, for example, can be substantially reduced with "designer fuels".

Lurgi AG, Frankfurt, and Forschungszentrum Karlsruhe GmbH, had signed a cooperation contract for the first stage of the two-stage pilot plant for fuel production according to the Bioliq process in August 2006. Forschungszentrum Karlsruhe had commissioned Lurgi with this project because Lurgi commands technologies for the overall process and has great experience in running pilot plants. Both companies have been working together for a long time. Preparatory research for this project has already been performed at Lurgi's Research and Development Center in Frankfurt.

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Against the backdrop of energy resources becoming scarcer and more expensive every day and based on the findings of a Prognos study, the Federal Government stipulated that 17 % of all fuels be generated from renewable resources by the year 2020. Hence, also the cooperation between Lurgi and the FZK for the construction of the second stage of the research plant is to be subsidized by the Federal Ministry for Nutrition, Agriculture and Consumer Protection (BMELV) and the Agency of Renewable Resources (FNR).

Lurgi is a leading technology company operating worldwide in the fields of process engineering and plant contracting. The strength of Lurgi lies in innovative technologies of the future focusing on customized solutions for growth markets. The technological leadership is based on proprietary technologies and exclusively licensed technologies in the areas gas-to-petrochemical products via synthesis gas or methanol and synthetic fuels, petrochemicals as well as renewable resources/food. Lurgi is a company of GEA Group Aktiengesellschaft.