

### Energy Sector Division Fossil Power Generation

Erlangen, Germany, March 20, 2009

#### **Eco-friendly power generation – Siemens develops CO<sub>2</sub> capture technology for combined cycle power plants**

**Siemens Energy is to adapt its proprietary process for carbon dioxide capture to the special conditions prevalent in and mode of operation of combined-cycle power plants for the Norwegian utility Statkraft. The project kicked off in January 2009 and is scheduled to be completed within two years. This technology will then be available for industrial-scale applications.**

Fossil energy will remain the cornerstone of power generation for the foreseeable future. The task to be performed here is to meet increasing energy demand while simultaneously protecting our environment. "Technical innovations are the most important lever for combating climate change effectively," said Michael Suess, CEO of the Fossil Power Generation Division of Siemens Energy. Siemens is already working on a proprietary process for CO<sub>2</sub> capture from the flue gas of coal-fired power plants. "Cooperation with Statkraft will allow us to now further develop this future-oriented technology to also permit its use in gas-fired combined cycle power plants ", Suess added.

Combined cycle power plants are in great demand throughout the world due to their high efficiency and low environmental impact. They do, however, impose stringent requirements on the process used for CO<sub>2</sub> capture. Their flue gas has a lower CO<sub>2</sub> concentration than that in coal-fired plants while simultaneously exhibiting a high oxygen content, conditions which have a very negative impact on known solvents. "The agreement also includes investigations into the behavior of our solvent under these special flue-gas conditions," said Tobias Jockenhoevel, head of Post-Combustion Technology in the Fossil Power Generation Division. "We will also be matching the CO<sub>2</sub> capture process to the dynamic load profile of combined cycle power plants, which is characterized by frequent load cycling. We will optimize the entire process to enable easy backfitting of a CO<sub>2</sub> capture system in future combined cycle power plants."

The technology for CO<sub>2</sub> capture from the flue gas of power plants is an important feature of the Siemens environmental portfolio. In 2008, revenue from the products and solutions of Siemens environmental portfolio was nearly EUR 19 billion, which is equivalent to around a quarter of Siemens total revenue.

The **Siemens Energy Sector** is the world's leading supplier of a complete spectrum of products, services and solutions for the generation, transmission and distribution of power and for the extraction, conversion and transport of oil and gas. In fiscal 2008 (ended September 30), the Energy Sector had revenues of approximately EUR22.6 billion and received new orders totaling approximately EUR33.4 billion and posted a profit of EUR1.4 billion. On September 30, 2008, the Energy Sector had a work force of approximately 83,500. Further information is available at: [www.siemens.com/energy](http://www.siemens.com/energy).