

New Technology to Trap CO2 and Recover Methane from Coal Beds

Japanese In an ongoing effort to develop technology that utilize coal's ability to adsorb carbon dioxide (CO2) in order to trap CO2 in coal beds, a field study was launched in November 2004 in Yubari, Hokkaido, Japan's northernmost island. Technology for coal bed sequestration of carbon dioxide involves using coal to adsorb injected CO2 that has been collected from a large emission source such as power plant flue gas. When coal adsorbs CO2, it releases methane, which can be recovered and used as an energy source. This costeffective technology has two merits; CO2 emission reduction and effective use of untapped methane from coal beds.

The project is subsidized by the Ministry of Economy, Trade and Industry and project members have been preparing basic research for this field test since 2002. Project members include the General Environmental Technos Co. and other companies, universities and other research institutions, the Japan Coal Energy Center, the Research Institute of Innovative Technology for the Earth (RITE).

The field test project team will collect basic data on CO2 injection and attempt to improve monitoring technology to assess safety and environmental impacts. A demonstration test at a pilot plant will start as soon as an interim evaluation is completed at the end of fiscal 2004 (March 31, 2005). The focus of the demonstration test will be on the overall system in practical situations.

The General Environmental Technos Co., a key member of the project, expects that this technology will help prevent further global warming and enhance the effective use of methane. The company will also look into the technology's the business potential, as it could be transferred to developing countries with rich coal resources or used in Clean Development Mechanism (CDM) and Joint Implementation (JI) projects as part of the Kyoto Mechanisms.

+ + +

Posted :	2005/04/11(Mon) 20:31:27
Updated :	
Data No. :	946

^{*} Information on this Web site has been screened from a vast pool of articles in the Japanese-language media, then edited and translated into English. In selecting and writing articles, JFS makes an effort to provide information that will convey the key trends and breakthroughs in a variety of fields.

^{*} For readers who want more details, we have provided links to related JFS articles. If you find any failed links or have suggestions on other links to make, please let us know.