

Hitachi begins construction on test facility for CO₂ capture technology

21 November 2013

Hitachi today announced that construction has begun on a Carbon Capture Test Facility ("CCTF") designed to capture CO₂ emissions from coal-fired power plants. Hitachi and its partner, Saskatchewan Power Corporation ("SaskPower"), agreed to build this demonstration project in March of 2012. The construction work is expected to be completed during the fall of 2014, and the CCTF will be operational by the end of that year. The goal of the demonstration project is to determine the necessary properties required to scale up to a large, commercial-size facility, and demonstration tests will be conducted to comprehensively evaluate the facility's overall reliability and economic feasibility.

Canada is currently promoting the development of Carbon Capture & Storage (CCS) technology, and the implementation of demonstration projects as part of its national energy management strategy. SaskPower, in line with this initiative, is now working to further develop CCS technology for various clean coal projects. Hitachi began researching and developing technology to capture CO₂ in the 1990s. Since then, the company has conducted demonstration projects using its own research equipment and it is using pilot facilities in Japan and overseas.

SaskPower's experience in integrating CCS into commercial projects combined with Hitachi's expertise in Carbon Capture Technology will enable the parties to comprehensively test and evaluate the technology's overall reliability, [economic feasibility](#), and the necessary properties required to scale up to a large, commercial-size facility.

The CCTF will have capabilities to capture 120 tons of CO₂ per day from the flue gas emitted from SaskPower's Shand Power Station (298MW) located near the city of Estevan, Saskatchewan, using a chemical scrubbing method with an amine based absorbent. Hitachi will produce and supply

its CO₂ capture solvent (H3-1) and the main equipment for the facility. Hitachi Group companies Babcock-Hitachi K.K. and Hitachi Power Systems Canada, Ltd. from the Province of Saskatchewan will be in charge of production and supply.

Through this [demonstration project](#) with SaskPower, Hitachi will focus on achieving commercial operations, reducing costs, realizing innovative technologies and will contribute to the realization of a low-carbon society.

Provided by Hitachi

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