



Petroleum Technology Alliance Canada (PTAC) and the Alberta Energy Research Institute (AERI) are pleased to announce the completion of the PTAC Carbon Capture and Storage (CCS) study. This PTAC initiated study included collaboration from 16 producers, transportation pipeline companies, water and power utilities, and provincial government departments which have provided funding for this project and have overseen its implementation through a Technical Steering Committee. Findings of this study will be released to the public July 1, 2009.

Carbon capture and storage (CCS) could substantially reduce Canada’s greenhouse gas emissions. The process of CCS is self describing; carbon dioxide is first captured from large emission sources such as coal-fired electricity plants, upgraders, refineries, etc., then purified and transported to geological storage sites where it can be utilized for enhanced recovery of hydrocarbons and sequestered.

Conducted by SNC-LAVALIN, the study evaluated representative CO₂ sources in the Fort Saskatchewan area in order to understand what is required to aggregate different quality types of CO₂. Process design included CO₂ purification, dehydration and compression requirements. The study reviewed the merits of CO₂ compression economies of scale and other facility configurations to demonstrate an efficient design for CO₂ capture.

The study has found that significant volumes of CO₂ could be aggregated in the Fort Saskatchewan area. Capture of CO₂ from hydrogen production facilities used in the upgrading and refining process is feasible and some hydrogen creation processes create a pure source of CO₂ that could be captured.

Ultimately it is hoped that this study will facilitate the discussion and advance the science and knowledge of CO₂ capture for enhanced oil and gas recovery and sequestration.

Soheil Asgarpour, PTAC President said “This is an important step in producing clean energy from Alberta’s world class hydrocarbon resources. It will create business opportunities for the producers, transporters, CO₂ emitters, small and medium enterprises while minimizing the environmental foot print.”

PTAC is a not-for-profit organization. Our vision is to help Canada become a global hydrocarbon energy technology leader through facilitation of innovation, collaborative research and technology development, demonstration and deployment for a responsible Canadian hydrocarbon energy industry. The complete listing of PTAC related projects is available on the PTAC website at www.ptac.org.

AERI promotes energy research, technology evaluation and technology transfer in areas including oil and gas, heavy oil and oil sands, coal, electricity, renewable and alternative energy. AERI promotes consortia and builds networks by integrating knowledge, skills and investment potential of industry players, federal and provincial governments, research providers and universities.

Project funders and sponsors include:

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For more information please contact:

Dr. Soheil Asgarpour, PTAC President
Telephone: (403) 218-7701
Email: sasgarpour@ptac.org Website: www.ptac.org

