



Post-Combustion Capture – Amine Scrubbing / Clean Coal

Project Leader:
EPCOR Utilities Inc.

Project Title:
**Genesee Post-Combustion
Carbon Capture
Demonstration Plant**

CO₂ Source:
**Coal-fired electricity
power plant**

CO₂ Storage Type:
**Enhanced Oil Recovery
(EOR) and sequestration
in saline aquifer**

Location:
**EPCOR's Genesee Power
Plant, located west of
Edmonton, Alberta**

Project Description

EPCOR's Genesee Post-Combustion Carbon Capture Demonstration Plant involves the construction of a demonstration facility that will capture CO₂ from a greenfield coal-fired power unit at the Genesee plant (150 MW net) in Alberta. The CO₂ will be used for enhanced oil-recovery operations and/or sequestered in a saline formation located within 100 km of the Genesee plant. The captured CO₂ will be transported through collaboration with Enbridge Inc. and the Alberta Saline Aquifer Project (ASAP). ASAP is also responsible for measuring and monitoring the CO₂ that will be stored in the saline aquifer. The Genesee plant is expected to commence operation in 2015, capturing 3,000 tonnes of CO₂ per day, or nearly one million tonnes per year.

Expected Outcomes

The expected outcome from the project is to build a demonstration plant that will showcase post-combustion carbon capture. The emissions reductions will be measurable and quantifiable through the plant operation, as well as via measurement, monitoring and verification systems in place at the storage sites.

Company Profile

EPCOR's wholly owned subsidiaries build, own and operate power plants, electrical transmission and distribution networks, water and wastewater treatment facilities and infrastructure in Canada and the United States. With headquarters in Edmonton, EPCOR is one of Canada's top providers of energy and energy-related services and products. The company employs about 3,000 people and operates power generation facilities with a gross capacity of more than 3,400 MW. EPCOR is governed by an independent Board of Directors, and its sole shareholder is the City of Edmonton.

Project Leader Web Site

www.epcor.ca



Aussi disponible en français sous le titre :
La captage postcombustion – Épuration aux amines et charbon propre

© Her Majesty the Queen in Right of Canada, 2009
Cat No. M134-8/6-2009E (Print)
ISBN 978-1-100-13255-6
Cat No. M134-8/6-2009E-PDF (On-line)
ISBN 978-1-100-13256-3



Recycled paper