



# Boundary Dam Integrated Carbon Capture and Storage Demonstration Project

<b>Project type</b>	Large-scale CCS demonstration project
<b>Project proponents</b>	SaskPower
<b>CO<sub>2</sub> source</b>	Unit 3 at the Boundary Dam power station
<b>Capture application</b>	Coal-fired electricity generation
<b>CO<sub>2</sub> storage type</b>	Enhanced oil recovery, with any excess stored in a geological formation
<b>CO<sub>2</sub> stored</b>	Up to 1 megatonne per year
<b>Exp. start date for storage</b>	2014
<b>Project locations</b>	Boundary Dam power station in Estevan, southeastern Saskatchewan, Canada
<b>Funding</b>	
<b>Government of Canada</b>	\$240 million
<b>Provincially owned utility</b>	\$1 billion
<b>Total project cost</b>	\$1.24 billion

## Project description

The Boundary Dam Integrated Carbon Capture and Storage Demonstration Project will transform Unit 3 at the Boundary Dam power station into a reliable, long-term producer of 110 to 115 megawatts (MW) of clean baseload electricity. This will also enhance provincial oil production and reduce greenhouse gas emissions by capturing up to 1 megatonne (Mt) of carbon dioxide (CO<sub>2</sub>) per year. This \$1.24-billion government-industry partnership includes the Government of Canada, the Government of Saskatchewan, SaskPower and private industry. The project will rebuild a coal-fired generation unit that has carbon capture technology into the operation of a commercial power station, resulting in low-emission electricity and CO<sub>2</sub> for enhanced oil recovery operations or storage in a deep saline aquifer. This leading-edge project will determine the technical, economic and environmental performance of carbon capture, utilization and storage (CCUS) technology.

## Expected outcome

This project is designed to capture and store up to 1 Mt of CO<sub>2</sub> per year, starting in 2014.

## Proponent profile

As the principal supplier of electricity in Saskatchewan, SaskPower serves more than 482 000 customers and manages more than \$6.3 billion in assets. The company operates three coal-fired power stations, seven hydroelectric stations, six natural gas stations and two wind facilities for an aggregate generating capacity of 3513 MW. The company also has power purchase agreements in place to provide an available capacity of 4094 MW. SaskPower maintains more than 152 000 kilometres of power lines, 55 high-voltage switching stations and 186 distribution substations. SaskPower has 2700 employees in 71 communities.

## Project Web sites

[www.saskpower.com/our-power-future/work-currently-underway/boundary-dam-integrated-carbon-capture-and-storage-demonstration-project/](http://www.saskpower.com/our-power-future/work-currently-underway/boundary-dam-integrated-carbon-capture-and-storage-demonstration-project/)  
[www.saskpower.com/wp-content/uploads/clean\\_coal\\_information\\_sheet.pdf](http://www.saskpower.com/wp-content/uploads/clean_coal_information_sheet.pdf)

*Aussi disponible en français sous le titre :  
Projet de démonstration du captage et du  
stockage de carbone intégré de Boundary Dam*

