



# Raising the bar in Oil Sands

October 4, 2012

Stephanie Sterling, Vice President, Business & JV, Heavy Oil

USEA Annual Energy Supply Forum, Washington

## Shell's Canadian Oil Sands Assets



## Why Heavy Oil?





## Industry initiatives

- CAPP Oil Sands CEO Task Group has led significant progress in past two years on industry communication in Canada
- Shell involvement in developing **Oil Sands Tailings Consortium** (launched Dec 2010) and subsequently **Canada's Oil Sands Innovation Alliance** (launched March 2012) – to accelerate improvement in environmental performance in the issues common to oil sands operators



## Shell Environmental Performance

**Vision:** To be the leading company in environmental performance in Heavy Oil through actions that generate significant improvement in CO<sub>2</sub>, water and land management.

GOAL	CO <sub>2</sub>	Fresh Water	Land
	Equivalent intensity to average barrel refined in US	No use of river water	Net neutral land disturbance
	<ul style="list-style-type: none"><li>▪ Energy efficiency</li><li>▪ Lower carbon energy</li><li>▪ Quest CCS</li><li>▪ Business related offsets</li></ul>	<ul style="list-style-type: none"><li>▪ Optimize current use</li><li>▪ Brackish H<sub>2</sub>O for insitu</li><li>▪ Technology R&amp;D</li><li>▪ Facility integration</li></ul>	<ul style="list-style-type: none"><li>▪ Interim reclamation</li><li>▪ Conservation offsets</li><li>▪ Tailings management</li><li>▪ Ore recovery R&amp;D</li></ul>

# Quest carbon capture and storage



Carbon Capture and Storage could be one answer to rising CO<sub>2</sub> emissions.

It captures CO<sub>2</sub> from industrial facilities and stores it permanently deep underground.

Beginning in 2015, the Quest CCS project will capture CO<sub>2</sub> from the Scotford Upgrader in Alberta.

Learn more at: [www.shell.ca/quest](http://www.shell.ca/quest)

**CARBON CAPTURE  
AND STORAGE.  
PUTTING CO<sub>2</sub> IN  
ITS PLACE.**



