

# CO<sub>2</sub> Enhanced Hydrocarbon Recovery Evaluation, Screening & Implementation

- Gaps and R&D Needs Analysis
- Screening Stage
- Evaluation Stage
- Implementation Stage

# Project Screening

- Screening Criteria are general and well established but the devil is in the details
- Each reservoir is unique and therefore very variable (oil weight, rock type)
- Dependent upon miscible or immiscible – CO<sub>2</sub>, acid gas (H<sub>2</sub>S), or flue gas
- Location and size of reservoir and source is important
- Include heavy oil and/or immiscible flood potential in the WCSB

# Project Screening

- What kinds of information is lacking? (Lab tests, simulation, pilot projects)
- What has already happened to the reservoir? (waterflood, original and present pressure)
- Water aquifer strength and water movement into the reservoir
- Ownership – are partners on board? Has the field been unitized?
- Does the organization have the expertise?

# Project Evaluation

- Base Case Studies – there are very few already done in Canada to follow
- Competitive pressures make the release of intellectual property unlikely (private companies will not give away their hard earned knowledge)
- No “Best Practices” manual for EOR
- New industry willing to try new things in a pilot project basis.
- Measurement/monitoring/verification is very important