

### Carbon Sequestration leadership forum

www.c/lforum.org

# Projects Approved at the Projects Interaction and Review Team (PIRT) meeting Riyadh, Saudi Arabia

**Andrew Barrett** 

**PIRT Chair** 

# Review of Projects Nominated for CSLF Recognition



- CO<sub>2</sub> Capture Project, Phase 4
- CO2CRC Otway Project Stage 2
- Oxy-Combustion of Heavy Liquid Fuels Project
- Carbon Capture and Utilization Project CO<sub>2</sub> Network Project
- Dry Solid Sorbent CO<sub>2</sub> Project

The Technical Group recommend to the Policy Group that the five projects be recognised by the CSLF

### **CO2 Capture Project, Phase 4**



- Nominated by United Kingdom, Canada and United States
- Overall goal of CCP is to advance technologies which will support deployment of large-scale CCS
- CCP4 began in February 2015, will run through end of 2018
- CCP4 members are BP, Chevron, Petrobras, and Suncor

#### **CO2CRC Otway Project – Stage 2**



- Nominated by Australia and United States
- Overall goal is to advance knowledge for CO<sub>2</sub> storage in saline formations
  - Improved storage model robustness
  - Improved means of predicting subsurface CO<sub>2</sub> behavior and plume stabilization
  - Project to run to 2020
  - Expected outcome is an improvement in methodologies for the characterization and monitoring of CO<sub>2</sub> stored in deep saline formations

### **Oxy-Combustion of Heavy Liquid Fuels Project**



- Nominated by Saudi Arabia and United States
- Joint project between Saudi Aramco and Alstom
- Overall goal is to investigate the performance of oxy-fuel combustion technology when firing difficult-to-burn liquid fuels such as asphalt
- Anticipated outcomes include demonstration of feasibility for oxy-combustion with heavy liquid fuels at a 30-60 MW scale
- Project will help push technology forward toward commercialization of oxy-combustion of low value fuels

# Carbon Capture and Utilization Project / CO2 Network Project



- Nominated by Saudi Arabia and South Africa
- Located in Jubail Industrial City, Saudi Arabia
- Sponsored by Saudi Arabia Basic Industries Corp.
- Overall goal is to capture and utilize CO<sub>2</sub> from ethylene glycol production facilities
- Large-scale project, 1,500 tonnes CO<sub>2</sub> per day
- Project to include 25 km pipeline network
- CO<sub>2</sub> to be utilized as feedstock for production of methanol, urea, oxy-alcohols, and polycarbonates

# **Dry Solid Sorbent CO<sub>2</sub> Capture Project**



- Nominated by Korea, United Kingdom and Norway
- Submission was for Hadong (10 MW pilot-scale facilities) and Daejon (lab scale units) but PIRT recommends only the 10 MW component
- Project to continuously operate 180 days per year through 2017
- Will provide useful O&M information, as well as overall performance and cost data
- Provides pilot test facility for testing of solid sorbent technologies