#### **CSLF WORKSHOP**

# "Overcoming Barriers to CCS Deployment" Paris 27 March 2007

#### **Programme**

#### **Objectives**

- To identify possibilities for deploying CCS technologies at large scale
- To identify ways of removing obstacles to deployment of CCS
- To identify where actions and initiatives/projects are required to address some
  of the critical issues and gaps.

#### **Programme**

• Morning Programme

#### 0900 Start: Chair/Olivier Appert

- o Introduction and scene-set for the workshop (10 mins)
  - Olivier Appert [IFP]
- o Stakeholder input to policy development (EU ZEP) (10 mins)
  - Nick Otter [ALSTOM]
- Ongoing work to remove obstacles for large scale industrial initiatives (60 mins)
  - EC Sustainable FF PG Communiqué of 10 January 2007
    - Wiktor Raldow [European Commission DG RTD]
  - USA Regional actions and engagement
    - George Guthrie [Los Alamos National Laboratory]
  - Canada infrastructure issues
    - Bill Reynen [National Resources Canada]
  - Australia storage legislation
    - John Hartwell [DITR/Australia]
  - Developing country viewpoint what is needed to deploy CCS
    - R.R. Sonde [NTPC/India]
- o Discussion Session (15 mins)

# 1035-1100 Refreshment Break POSTER SESSION for CSLF projects

- Industrial initiatives: what is needed to make them happen? (120 mins)
   a series of case studies
  - Planned industrial demonstrations and `first of a kind` plant
    - Pre combustion capture from gas

       Gardiner Hill [BP]

       IGCC/pre combustion capture

       Howard Morrison [ZeroGen]
    - FutureGen USA
      - Victor Der [U.S. Department of Energy]
    - Oxyfuel capture Canada
      - Bill Reynen [Natural Resources Canada]

• Oxyfuel capture France

- Luc de Marliave [TOTAL]

• Post combustion capture from gas Norway

- William Christensen [Ministry of Petroleum and Energy]

• Post combustion capture from coal Germany

- Matthias Krumbeck [RWE]

• CO<sub>2</sub> storage in depleted fields France

- Marc Florette [GDF]

Note : the aim is to get a range of capture technologies (pre/post/oxy) with different fuels (gas/coal) and at different parts of the world with different  $CO_2$  storage site types and use.

1300-1400 Lunch: Walking buffet with time for interactions

#### • Afternoon Programme:

#### 1400 Start: Afternoon Chair/Trude Sundset

- o The Business Case for CCS an industry perspective (25 mins)
  - Mike Morris [AEP]

#### **Panel Session**

- o Introduction to Panel Sessions (10 mins)
  - Explain aims, objectives and format: Trude Sundset [Statoil]
- o What next? Technology (40 mins)
  - Chair : Manuel Sánchez [EC DG-RTD]
  - Overview of Gap Analysis work conducted by CSLF/PIRT and way forward with possible new/extended projects (10 mins)
    - John Bradshaw [GeoScience Australia]
  - Panel discussion (30 mins)
    - Pierre Le Thiez [IFP]
    - Steve Crookshank [American Petroleum Institute]
    - John Bradshaw [GeoScience Australia]

# 1515-1540 Refreshment Break POSTER SESSION for CSLF projects

- What next? Communication and Public Acceptance (40 mins)
  - Chair: Gardiner Hill [BP]
  - Preparative talk for Panel (10 mins)
    - David Reiner [MIT/Cambridge University]
  - Panel Discussion (30 mins)
    - Peta Ashworth [CSIRO Australia]
    - Jason Anderson [Inst. For European Environmental Policy UK]
- o What next? Legislation and Regulation (40 mins)
  - Chair: John Hartwell [DITR/Australia]
  - Preparative talk for discussions (to identify key regulatory issues, ...) (10 mins)
    - Scott Brockett [EC DG-ENV]

- Panel discussion: (30 mins)
  - Stefan Bachu [Alberta Energy & Utilities Board]
  - Arthur Lee [ChevronTexaco]
- O What next? Putting a value on  $CO_2$  (40 mins)
  - Chair: Jeff Chapman [CCSA]
  - Preparative talk outlining issues (10 mins)
    - Howard Herzog [MIT]
  - Panel discussion : (30 mins)
    - Gardiner Hill [BP]
    - Bill Koppe [Anglo]

#### **Final Session**

#### **1740 Conclusions**

- o Summary and Closure (5 mins)
  - Trude Sundset [Statoil]

### 1745 Closure of Workshop