



CSLF-T-2007-06
updated 24 January 2008

DRAFT AGENDA

CSLF Technical Group Meeting and 3rd CSLF Workshop on Capacity Building for Carbon Capture and Storage (CCS)

Al Khobar, Saudi Arabia
27-29 January 2008

Sunday, 27 January, Le Meridien Gulf Al Khobar Hotel

08:00-13:00 **Meeting Registration**

13:00-14:00 **Technical Group Business Meeting** (*Al-Dana Room*)

- 1. Opening Remarks**
Trude Sundset, Norway, Chair
- 2. Introduction of Delegates**
Delegates
- 3. Adoption of Agenda**
Trude Sundset, Norway, Chair
- 4. Review and Approval of Minutes from Paris Meeting**
Trude Sundset, Norway, Chair
- 5. Review of Paris Meeting Action Items**
Trude Sundset, Norway, Chair
John Panek, CSLF Secretariat
- 6. Secretariat Reports and Updates**
 - Website Updates
 - Stakeholders Registry
 - Results of Survey on Paris Workshop
 - Other*John Panek, CSLF Secretariat*

14:00-14:15 **Coffee/Tea** (*Hallway outside Al-Dana Room*)

14:15-17:00 **Technical Group Business Meeting** (*Al-Dana Room*)

7. Report from Projects Interaction and Review Team (PIRT)

- Prioritization of Strategic Plan Activities
- CSLF Technology Roadmap
- Completed Projects

Nick Otter, United Kingdom

8. IEA GHG Coordination and Cooperation on Future Studies

John Bradshaw, Australia

Nick Otter, United Kingdom

9. Commercial Aspects of CCS Technology Deployment

Ashok Bhargava, Asian Development Bank

10. Adjourn for the day

18:00-20:00 **Dinner** (*Al-Ghawar Hall, Saudi Aramco*)

Monday, 28 January, Le Meridien Gulf Al Khobar Hotel

08:00-12:15 **Meeting Registration**

09:00-09:45 **Capacity Building Workshop** (*Al-Dana Room*)

Plenary Session

Host Country Welcome

Session Moderator: Hesham Al-Musaiid, Manager, Environmental Protection Department, Saudi Aramco, Saudi Arabia

Saudi Arabia Perspectives on CCS

His Royal Highness, Prince Abdulaziz Bin Salman Bin Abdulaziz, Assistant Minister for Petroleum Affairs, Ministry of Petroleum and Mineral Resources, Saudi Arabia

The Importance of Capacity Building

Trude Sundset, Norway, Chair of CSLF Technical Group

Introduction to the Themes of the Capacity Building Workshop

Justin Swift, United States, Chair of CSLF Capacity Building Task Force

09:45-10:00 **Coffee/Tea** (*Hallway outside Al-Dana Room*)

10:00-11:30 **Capacity Building Workshop** (*Al-Dana Room*)

Theme I: Commercial Aspects and Opportunities for Storage of CO₂ in Oil and Gas Reservoirs

Moderator and Thematic Speaker

Pierre Le Thiez, Executive Vice President GEOGREEN and CASTOR Project Manager, IFP, France

CO₂-EOR Operations:
The IEA GHG Weyburn-Midale CO₂ Monitoring and Storage Project
Frank Mourits, Senior Science Advisor, Natural Resources Canada

CO₂-EOR Research in Saudi Aramco
Nabeel I. Al-Afaleg, Chief Technologist, EXPEC Advanced Research Center, Saudi Aramco, Saudi Arabia

Potential for CO₂ Sequestration from Natural Gas Production:
The Sleipner/CO₂STORE and Snøhvit Projects
Trude Sundset, Executive Vice President for the Environment, StatoilHydro, Norway

Economics of CCS for EOR
Michael E. Moore, Vice Chairman, Coalition for Enhanced Oil Recovery, United States

Discussion among Panelists

Audience Interaction

11:30-13:00 **Lunch** (*Al-Mawad Rooms III-V*)

13:00-14:45 **Technical Group Business Meeting** (*Al-Dana Room*)

11. Reconvene Meeting

Trude Sundset, Norway, Chair

12. Host Country Presentation: “Steadily Increasing Recovery Efficiency”

Waleed A. Al-Mulhim, Manager, Reservoir Management Department, Saudi Aramco, Saudi Arabia

13. Report from Storage Capacity Estimation Task Force

John Bradshaw, Australia

14. Report from Risk Assessment Task Force

George Guthrie, United States

15. Introduction and Review of Possible Projects

- Presentations by Projects Seeking CSLF Recognition
Project Sponsors
- PIRT Recommendations
Nick Otter, United Kingdom

14:45-15:00 **Coffee/Tea** (*Hallway outside Al-Dana Room*)

15:00-17:00 **Technical Group Business Meeting** (*Al-Dana Room*)

16. Reports on G8/IEA/CSLF Workshops in Norway and Canada

Jostein Dahl Karlsen, Norway
Bill Reynen, Canada, Vice Chair

17. **Review of CSLF Workshops**
 - Capacity Building Workshop – Pittsburgh, May 2007
Justin Swift, United States
 - Capacity Building Workshop – Porto Alegre, October 2007
Marcelo Ketzer, Brazil
18. **Discussion of South Africa Meeting**
Trude Sundset, Norway, Chair
19. **Proposal for Graduate Student Discussions on CCS Topics in CSLF PuMP**
John Bradshaw, Australia
20. **New Business**
Trude Sundset, Norway, Chair
21. **Adjourn**

18:30-20:00 *Dinner (Heritage Village)*

Tuesday, 29 January, Shaybah Recreation Center

07:30 **Bus Departs from Le Meridien Gulf Al Khobar Hotel for Field Trip to Shaybah Field**

09:00 **Flight Departs for Shaybah Field**

10:15-10:45 **Tour of Shaybah Gas-Oil Separation Plant**

10:45-11:00 **Presentation on Shaybah** (*Shaybah Recreation Center, Al-Maha Hall*)

11:00-11:30 **Light Lunch** (*Shaybah Recreation Center*)

11:30-13:15 **Capacity Building Workshop** (*Shaybah Recreation Center, Multipurpose Room*)

Reconvene Workshop
Justin Swift, United States, Chair of CSLF Capacity Building Task Force

Theme II: Technology Roadmaps and Their Importance

Moderator and Thematic Speaker
Nick Otter, Director of Technology and External Affairs, ALSTOM Power Ltd., United Kingdom

Saudi Aramco's CO₂ Carbon Capture & Storage Technology Roadmap
Ali A. Al-Meshari, Carbon Capture Management Coordinator, Saudi Aramco, Saudi Arabia

Australia's Carbon Dioxide Capture & Storage Technology Roadmap
Dennis Van Puyvelde, Technical and International Projects Manager, Cooperative Research Center for Greenhouse Gas Technologies (CO2CRC), Australia

Canada's CO₂ Capture and Storage Technology Roadmap

Bill Reynen, Director, National Resources Canada, Geological Survey of Canada

United States Carbon Sequestration Technology Roadmap and Program Plan / FutureGen
Joseph Giove, Senior Program Manager, Office of Fossil Energy, United States Department of Energy

The European Union's ZEP Platform
Derek Taylor, Energy Advisor, European Commission DG Energy and Transport
Discussion among Panelists

Audience Interaction

13:15-13:30 **Coffee/Tea** (Location TBD)

13:30-16:30 **Capacity Building Workshop**

Theme III: Issues that Impact CCS

Moderator and Thematic Speaker
Derek Taylor, Energy Advisor, European Commission DG Energy and Transport

Legal and Regulatory Issues
John Bradshaw, Chief Scientist, CCS, Geoscience Australia

Risk Assessment
George Guthrie, Program Director, Fossil Energy and Environment Program Office, Los Alamos National Laboratory, United States

Societal Issues related to CCS Deployment
John Bradshaw, Chief Scientist, CCS, Geoscience Australia

Public Outreach and Education
Anne-Marie Thompson, Program Manager CO₂ Storage, Canmet Energy Technology Centre, Natural Resources Canada

Discussion among Panelists

Audience Interaction

Theme IV: The Needs of Emerging Economy Countries

Moderator and Thematic Speaker
Ashok Bhargava, Senior Energy Specialist, Asian Development Bank

Panel on Needs of Emerging Economy Countries
(with optional brief presentations by panelists)
Marcelo Ketzer, Director, PUCRS-CEPAC Carbon Research Center, Brazil
Sanjay Sharma, Deputy Director (TE&TD), Central Electricity Authority, India
Jeff Kgobane, Deputy Director, Coal and Gas, Department of Minerals and Energy, South Africa

Audience Interaction

Next Steps

Justin Swift, United States, Chair of CSLF Capacity Building Task Force

John Panek, CSLF Secretariat

Audience

Closing Remarks

Justin Swift, United States, Chair of CSLF Capacity Building Task Force

- 16:30 **Bus departs to Uphill Tent**
- 17:45-19:00 **Dinner at Uphill Tent**
- 19:00 **Return from Field Trip back to Le Meridien Gulf Al Khobar Hotel**

Workshop Concept

- Four themes have been identified, based on feedback from previous workshop and input from CSLF Technical Group delegates:
 - Commercial Aspects and Opportunities for Storage of CO₂ in Oil and Gas Reservoirs
 - Technical Roadmaps and Their Importance
 - Issues that Impact CCS
 - The Needs of Emerging Economy Countries
- Each theme features a panel consisting of a moderator and several experts.
- Moderator gives a short (no more than 10 minute) presentation that introduces and explains the theme, perhaps providing an overview of what CSLF is doing or has done in this area.
- Each expert gives a short (no more than 10 minute) presentation on his or her individual topic.
- Following the presentations, there will be a discussion (about 15 minutes) among the panelists, facilitated by the moderator, which is intended to inspire and enable the audience to come up with questions for the panelists.
- Following the panelist discussion, there will be an Audience Interaction Q&A session (about 30 minutes). Note that no questions will be taken from audience until this point.
- This is repeated for each theme.