

**Carbon Sequestration Leadership Forum**

[www.cslforum.org](http://www.cslforum.org)



# **CSLF Capacity Building in Emerging Economies Task Force Meeting**

Report by the Secretariat

John Panek, Deputy Director, CSLF Secretariat

Tuesday, June 30, 2009

# Workshops

- **1<sup>st</sup> Capacity Building in Emerging Economies Workshop**  
Pittsburgh, USA, May 7-11, 2007
- **2<sup>nd</sup> Capacity Building in Emerging Economies Workshop**  
Porto Alegre, Brazil, October 18-19, 2007
- **3<sup>rd</sup> Capacity Building in Emerging Economies Workshop**  
Al Khobar, Saudi Arabia, January 28-29, 2008
- **4<sup>th</sup> Capacity Building in Emerging Economies Workshop**  
Mexico City, Mexico, July 9-10, 2008
- **5<sup>th</sup> Capacity Building in Emerging Economies Workshop**  
Salvador, Brazil, September 8-9, 2008
- **6<sup>th</sup> Capacity Building in Emerging Economies Workshop**  
Washington, DC, USA, November 16-20, 2008

# Achieved Real Progress

Accomplishments include:

- Six Capacity Building Workshops over two years helping educate over 700 CCS academics and professionals.
- Workshops in South America, Asia, and North America attracted many countries.
- Raised profile of CCS as a viable option.

# Definitive themes

- Targeted specific audiences.
- Saudi Arabian workshop conducted at two locations and included a technical tour of the Shaybah Field Gas-Oil Separation Plant.
- Washington Workshop in Nov. 2008 included attendance at the 9<sup>th</sup> International Conference on Greenhouse Gas Control Technologies (GHGT-9). Great opportunity to interact with 1,500 CCS professionals from 42 countries and hear 80 presentations.

# Presentations from World-Class Experts

- More than 80 presentations are on the CSLF Website. Broad range of topics, including:
  - Why CCS
  - Commercial aspects of EOR
  - MM&V
  - Technology roadmaps
  - Needs of emerging countries
  - Individual country reports

# 1<sup>st</sup> Capacity Building Workshop

**Pittsburgh, USA, May 7–11, 2007**



- More than 50 participants from 7 countries
- Held in conjunction with the Annual Conference on Carbon Capture and Sequestration
- *Large-Scale Commercial Deployment of CCS*
- *CO<sub>2</sub> Storage in Geological Media*
- *MM&V*
- *Tour of the National Energy Technology Laboratory (NETL)*

# 2<sup>nd</sup> Capacity Building Workshop

**Porto Alegre, Brazil, October 18–19, 2007**



- Significant number of undergraduate and graduate students from Brazil's top universities
- Legal and Regulatory Aspects of CCS
- CCS Safety and Analogues
- Sustainable Oil and Gas Production
- CO<sub>2</sub> Storage in Saline Reservoirs
- CO<sub>2</sub> Well Integrity and Wellbore Monitoring
- Source-Sink Matching



# 3<sup>rd</sup> Capacity Building Workshop

**Al Khobar, Saudi Arabia,  
January 27–29, 2008**



• Prince Abdulaziz bin Salman bin Abdulaziz opened the workshop and emphasized innovation, markets, and technological development in mitigating climate change. The workshop featured four main themes:

- Storage of CO<sub>2</sub> in oil and gas reservoirs
- Technology Roadmaps
- Legal, regulatory and risk issues
- The needs of emerging economy countries



# 4<sup>th</sup> Capacity Building Workshop

**Mexico City, Mexico, July 29–10, 2008**



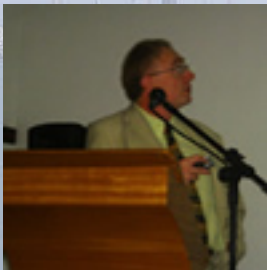
Taller de Secuestro y Captura de CO<sub>2</sub> (CCS)  
México, D.F. 9 Y 10 de julio del 2008  
Museo Tecnológico de la CFE



- 140 attendees from Mexico's energy industries
- Identification and quantification of capacity of CO<sub>2</sub> storage sites
- Enhanced oil recovery using CO<sub>2</sub>
- PEMEX experience in CO<sub>2</sub> injection
- Development of a framework for a proposed CCS Action Roadmap in Mexico
- Scenarios for electricity generation and CO<sub>2</sub> emissions in Mexico for 2050

# 5<sup>th</sup> Capacity Building Workshop

**Salvador, Brazil, Sept. 8–19, 2008**



- Workshop held in conjunction with a Petrobras seminar on CCS
- Why CCS in Brazil
- Carbon Capture
- Legal Frameworks to Enable CCS in Offshore Waters
- Overview of CCS Projects Around the World
- Stakeholder Integration and Involvement
- MM&V of CCS Projects
- Risk Analysis -- Geologic and Policy Issues

# 6<sup>th</sup> Capacity Building Workshop

Washington, USA, Nov. 16–20, 2008



- Held in conjunction with the 9th International Conference on Greenhouse Gas Control Technologies (GHGT-9)
- Financing the first CCS projects
- Getting Large-Scale Geological Sequestration Projects Started
- Global CCS Legal & Regulatory Developments
- The Role of CCS in the EU
- International Marine Regulation of CO<sub>2</sub> Geological Storage
- The EU Enabling Legal Framework for Carbon Capture and Geological Storage
- Informed Public Opinion on CCS
- Designing and Implementing Regulatory Frameworks

# Pathway Forward

- Hosts have provided extraordinary support
- Past workshops targeted for specific audiences
- Planning and structure are vital
- Major conferences present opportunities for adjacent events
- Key contributions from the Policy and Technical Groups