

Pre-Conference Symposium
CARBON CAPTURE TECHNOLOGY SHOWCASE
Wednesday, July 15, 2009
Washington DC

8:00-9:00 *Registration and Continental Breakfast*

9:00-9:15 **Chairman's Opening Remarks**

9:15-10:15 *Presentations:*
Independent Engineering Assessments of Capture Systems

Presentation 1: PC Post-combustion Capture

- *Feasibility*
- *Integration*
- *Cost*
- *Role in DOE's Technology Roadmap*

Presenter:

Michael DeLallo, *Vice President and Director of Gasification and Carbon Services, WORLEYPARSONS GROUP*

Presentation 2: Oxyfuel Capture

- *Feasibility*
- *Integration*
- *Cost*
- *Role in DOE's Technology Roadmap*

Jim Sears, *CTO and President, A2BE CARBON CAPTURE, LLC*

10:15-10:45 *Morning Break*

10:45-11:45 *Presentations:*
Generation Capture Solutions
A surprisingly wide range of approaches to capturing carbon from coal generation plants are in development, from lab R&D stage to initial commercialization in tandem with established companies. This series of half-hour presentations will profile cutting-edge breakthroughs and solutions for both chemical capture and oxyfuel approaches.

Presenters:

Jonathan Carley, *Vice President, Business Development, CO₂ SOLUTION INC.*

Alex Fassbender, P.E., *Chief Technology Officer*, ThermoEnergy Corp.
and *Chairman*, Babcock Thermo Carbon Capture

11:45-1:15 *Group Luncheon*

1:15-2:15 **Generation Capture Solutions Presentations** (continues)

Bob Hilton, *Vice President, Power Technology for Government Affairs*,
ALSTOM

Lionel Kambeitz, *Chairman and CEO*, HTC PUREENERGY

2:15-2:45

Presentations:

Carbon Recycling Solutions

Given the expense and other complexities of injecting CO₂ into the earth, alternative approaches to handling carbon are being explored under the umbrella term, "Carbon Recycling." Carbon as an algae feedstock has received the most attention thus far, in tandem with the interest in biofuels. Another approach involves co-firing the resulting algae mass with coal, instead of trying to produce fuel or other byproducts. Other approaches, such as genetically engineered organisms and thermo-chemical conversion of carbon via sunlight, are also being explored. This presentation will offer an introductory survey of such research.

David Haberman, *President*, IF, LLC

2:45-3:15 *Afternoon Break*

3:15-4:15

Presentations:

Atmospheric and Other Alternative Capture Solutions

Given a robust carbon credit market in the US, non-point source capture methods may become commercially viable. Power generators would buy credits to offset their carbon footprint and non-point source capture providers would sell the credits. These methods range from extracting CO₂ directly from the air to compounds that absorb CO₂ in bulk, such as new cements and limestone. These presentations will provide an overview of the R&D approaches underway, and which are most likely to be commercial in the next 5 years.

Presenters:

Brent Constanz, Ph.D., *Founder and CEO*, CALERA CORPORATION

Klaus Lackner, Ph.D., *Maurice Ewing and J. Lamar Worzel Professor of Geophysics, Chair, Department of Earth and Environmental Engineering,*

*Director, Lenfest Center for Sustainable Energy, THE EARTH
INSTITUTE AT COLUMBIA UNIVERSITY*

4:15-4:30 **Chairman's Closing Remarks**

4:30 Showcase adjourns