

June 2011

# Advanced Resources International QUARTERLY UPDATE

Unconventional Resources • Enhanced Recovery • Carbon Sequestration

Advanced Resources International (ARI) is a professional services firm that provides geological, reservoir engineering, business and policy analysis and advice on a global basis related to unconventional gas resources, enhanced oil recovery and geologic carbon sequestration. Our quarterly update highlights current industry trends, ongoing and completed projects, recent publications, upcoming workshops and events, and

company news. We encourage you to visit our website at www.adv-res.com to learn more about our

company history, research and technology activities, industry news and much more. You may also contact

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### INTERNATIONAL PERFORMANCE ASSESSMENT CENTRE FOR GEOLOGIC STORAGE OF CO2

Site Updates - June 28, 2011

our offices listed at the bottom of this page for additional information.

The Technical Committee Members web page has been updated, and individual members of the technical and associate committees responsible for the drafting of IPAC-CO2's first set of standards for geologic storage of carbon dioxide can now be found using the search function. Mr. Steven Carpenter, Vice President of Advanced Resources International, Inc. is a member on the Technical Committee.

For more information:

http://www.ipac-co2.com/



## SHALE GAS GOES GLOBAL: A LOOK AT HIGH IMPACT SHALE PLAYS

Mr. Vello Kuuskraa, President of Advanced Resources International, Inc., will participate in the Platts 6th Annual Oil & Gas Shale Developer meeting to be held on June 21 and 22, 2011 in Houston, Texas. Mr. Kuuskraa will participate in the Wednesday, June 22 morning panel discussion, International Opportunities and Investment, with his presentation entitled: "Shale Gas Goes Global: A Look at High Impact Shale Plays"

For more information:

http://www.platts.com/ConferenceDetail/2011/pc123/index





# RECS 2011 PARTICIPANTS VISIT SECARB ANTHROPOGENIC TEST

In June, 2011, participants of Research Experience in Carbon Sequestration (RECS) 2011 toured several components of the SECARB Phase III Anthropogenic Test. Thirty graduate students and early career professionals, as well as speakers and various stakeholders, visited Plant Barry in Bucks, Alabama, where they received briefings on the U.S. Department of Energy's Regional Carbon Sequestration Partnership Program by Ms. Traci Rodosta of the National Energy Technology Laboratory (NETL); the Citronelle dome geology and modeling plan for the SECARB Anthropogenic Test by Dr. Richard Esposito of Southern Company and Mr. David Riestenberg of Advanced Resources International; and field monitoring techniques and

methods and hands-on exercise by Mr. Rod Madsen of Li-COR Biosciences. Participants toured Plant Barry and the newly constructed capture unit that will supply the carbon dioxide (CO2) for the SECARB project. Southern Company has begun testing the capture unit in preparation for the CCS demonstration that will begin later this Summer. The group then travelled the Citronelle oil field in Citronelle, Alabama, for an injection and monitoring site tour of the SECARB project.

The intensive 10-day RECS program is led by a world-class faculty of CCS experts from industry, the research community, NGOs, and government. The interactive program combines classroom instruction with group exercises, CCS site visits, and hands-on activities including geologic storage site characterization, CO2 monitoring, modeling fluid flow in the subsurface, and communications training.

<u>RECS</u> is a collaboration between EnTech Strategies, LLC, <u>SECARB-Ed</u> (a program of the <u>Southern States Energy Board</u>), and <u>Southern Company</u> with sponsorship from the <u>U.S. Department of Energy Office of Fossil Energy</u> and <u>NETL</u>.

#### For more information:

http://www.secarbon.org/index.php?page\_id=12

PDF COPY OF NEWS RELEASE



#### CLEAN DEVELOPMENT MECHANISM (CDM) AS A REAL OPTION FOR CCS - HOW DO WE GET THERE?

Could much needed assistance for CCS come in the form of the Clean Development Mechanism?

Mr. Steven M. Carpenter, VP, Advanced Resources International submitted an article to the Carbon Capture Journal, May/June 2011, Issue 21 summarizing that EOR will continue to lead the way as an early entrant into the CCS project world. EOR provides an opportunity to address both climate and energy security. The role of government in the world-view of CCS is very important. Without the financial incentives provided by the governments around the globe, the rollout of numerous large-scale CCS projects is not likely. Is the development a binational American-Canadian carbon capture and storage standard for the geologic storage of carbon dioxide the answer? It is at least a good first step toward that end.

For more information:

http://www.carboncapturejournal.com/displaynews.php?NewsID=806& PHPSESSID=hcneed50086vim6allk39e9tm2

PDF COPY OF MAY/JUNE ISSUE 21



#### **EXPLORING EUROPE'S POTENTIAL OF SHALE GAS**

On May 26, 2011, Vello Kuuskraa, President of Advanced Resources International, Inc., participated in a meeting to discuss the recently released report "World Gas Shale Resources: An Initial Assessment of 14 Regions Outside the United States. The meeting was hosted by the Embassy of the Republic of Poland in Washington, D.C. Mr. Kuuskraa's presentation was entitled: "Exploring Europe's Potential of Shale Gas". Comments following Mr. Kuuskraa's presentation were offered by Ms. Sally Kornfeld of the U.S. Department of Energy and Mr. Trevor Smith of GTI.

For more information:

http://www.washington.polemb.net/



### LINKING CO2-EOR AND CO2 STORAGE IN THE OFFSHORE GULF OF MEXICO

On May 4th, 2011, Mr. George Koperna, Vice President of Advanced Resources International, Inc., gave a presentation at the Offshore Technology Conference, held at Reliant Park in Houston, TX entitled, "Linking CO2-EOR and CO2 Storage in the Offshore Gulf of Mexico". This work demonstrates that significant portions of the technically recoverable and economic EOR and CO2 storage capacity of the GOM reside in the Louisiana shallow water. The offshore will require high oil prices and low CO2 costs to become economic: as younger deepwater oil fields are more intensively drilled and placed under pressure maintenance or secondary oil recovery, fewer new wells will be required for CO2-EOR and the economics of CO2-EOR will improve. The final report of this study includes an examination of a royalty relief case and its effects on the economics of the reservoirs.

#### PDF COPY OF PRESENTATION



#### WORLD SHALE GAS RESOURCES: AN INITIAL ASSESSMENT OF 14 REGIONS OUTSIDE THE UNITED STATES

To gain a better understanding of the potential of international shale gas resources, in February, 2011 EIA commissioned an external consultant, Advanced Resources International, Inc. (ARI), to develop an initial set of shale gas resource assessments. This paper briefly describes key results, the report scope and methodology and discusses the key assumptions that underlie the results. The full consultant report prepared for EIA is in Attachment A. EIA anticipates using this work to inform other analysis and projections, and to provide a starting point for additional work on this and related topics.

For more information:

http://www.eia.doe.gov/analysis/studies/worldshalegas/

http://www.adv-res.com/pdf/ARIEIAIntlGasShaleAPR2011.pdf



#### **UPCOMING EVENTS**

Coal-Gen Conference & Exhibition Greater Columbus Convention Center August 17–19, 2011 – Columbus, Ohio http://www.coal-gen.com/index.html

SPE Eastern Regional Meeting Renaissance Columbus Downtown August 17–19, 2011 – Columbus, Ohio http://www.spe.org/events/erm/2011/

The 28th Annual Pittsburgh Coal Conference David L. Lawrence Convention Center September 12-15, 2011 - Pittsburgh, PA http://webster.engr.pitt.edu/pcc/2011conf.html

AAPG – Eastern Section Meeting Hyatt Regency, Crystal City September 25-27, 2011 - Arlington, Virginia

http://www.gswweb.org/aapg/aapg.html			
	ATCE 2011 – SPE Annual Technical Conference & Exhibition Colorado Convention Center October 20th – November 2nd, 2011 – Denver, Colorado http://www.spe.org/atce/2011/		
SAVE THE DATE: 2011 CO2 Conference Week The 9th Annual EOR Carbon Management Workshop – Houstor December 5-6, 2010 The 17th Annual CO2 Flooding Conference – Midland Field Trip and Theme Sessions December 7-9, 2010 http://co2conferencenet-eorgf.eventbrite.com/			