



AIChE® American Institute of Chemical Engineers

THE AIChE ENERGY INITIATIVE

The primary forum for
chemical engineers to discuss,
learn about and impact energy issues.

AIChE®

March 2009

Energy News

- Learn how to reduce your own personal energy consumption, by reading *Personal Sustainability Through Energy Efficiency*, CEP, pg. 54, January, 2009. Want additional copies of the article? Go to <http://www.aiche.org/cep/issues/2009-01/index.aspx>.
- Climate Change as a Business Opportunity: See helpful notes on how Chemical Engineers can make meaningful contributions to addressing climate change. [Page 5, CEP, January 2009.](#)
- Funding opportunity: DOE intends to award \$200 million over six years for development of pilot and demonstration-scale biorefineries for production of innovative biofuels. <http://www.energy.gov/news/6817.htm>.
- EPRI to host studies of the impacts of retrofitting advanced amine-based post-combustion carbon dioxide (CO₂) capture technology to existing coal-fired power plants. [http://www.aiche.org/uploadedFiles/Energy_Website/Publications/EPRI %20Amine%20CO₂%20Sequestration%20Project.pdf](http://www.aiche.org/uploadedFiles/Energy_Website/Publications/EPRI_%20Amine%20CO2%20Sequestration%20Project.pdf)
- PraxAir wins contract to supply hydrogen to Cetane Energy, LLC for the production of second-generation renewable diesel from tallow (animal fat). <http://www.praxair.com/praxair.nsf/AllContent/A487BBF62906113685257558005DF39D?OpenDocument>
- Researchers have improved bioethanol production by incorporating coniferyl ferulate into plant cell walls to degrade lignin. <http://www.ars.usda.gov/is/pr/2008/081209.htm>
- Gas hydrates in the Alaskan North Slope could provide 85.4 trillion cubic feet of natural gas http://www.doi.gov/news/08_News_Releases/111208.html
- Innovation in fusion power uses radio-frequency waves to push plasma which prevents loss of heat to the walls and reduces turbulence, improving the overall efficiency. <http://web.mit.edu/newsoffice/2008/fusion-results-tt1203.html>
- Massive lighting energy conservation will be possible due to innovations in photonics and solid state lighting by transitioning to task-specific light emitting diodes. [http://news.rpi.edu/update.do?artcenterkey=2524&setappvar=page\(1\)](http://news.rpi.edu/update.do?artcenterkey=2524&setappvar=page(1))
- The International Partnership for Geothermal Technology (IPGT) announced the completion of its new [International Partnership for Geothermal Technology Web site](#)
- Stimulus Bill benefits DOE energy research. Highlights include funding of the Advanced Energy Research Program (ARPA-E), \$6 Billion for DOE EM, which suggests the funding for the energy parks initiative, \$3.2 Billion for EERE, \$2 Billion for Advanced Battery Manufacturing grants, and \$3.4 billion for R&D activities for fossil energy projects. For details of the initial funding level, [see here.](#)

Update: Energy Initiatives of AIChE

- AIChE announces the Sustainability Energy Award. Nominations of individuals or teams in industry due May 1, 2009, [here](#).
- Carbon Management leaders from AIChE, ASME, AIME, SPE, AIST, SME, TMS, ASCE, and IEEE met on January 7 in Baltimore to plan 2009 projects for the Founders Society Technologies for Carbon Management Project. Contact ifs@aiiche.org for additional information.
- AIChE hosted industry leaders to discuss the development of metrics for consideration of renewable transportation fuels. The EPA will brief the group on their sustainability activities, part of the National Biofuels Development Project, at the upcoming AIChE meeting in Tampa. Interested companies along the biofuels supply chain are invited to participate by contacting sustainability@aiiche.org.
- How Green Is your Orange? [Click here](#) for an example of supply chain carbon foot-printing released by Pepsico along with commentary and relation to AIChE energy related activities.
- Missed the AIChE Center for Sustainable Technology Practices discussion on *Responding to Climate Change Legislation: Pros and Cons of Cap and Trade v. Carbon Tax Approaches*? See highlights presented by the Pew Center on Climate Change at <http://www.aiiche.org/IFS/Corporate/Education.aspx>

Learning More About Energy: Conferences, Workshops, Courses

Missed the AIChE January WebEx Conference on Climate Change? Go to http://www.aiiche.org/conferences/webinars/johnplodinec_archive.aspx for a downloadable presentation.

Join energy experts at the AIChE 2009 Spring Meeting, to be held April 26-30, 2009, in Tampa, FL. Energy highlights can be found [here](#), including over 200 cutting edge energy presentations. Register at <http://www.aiiche.org/conferences/spring/regfees.aspx>.

A few select papers are sought on the topics of *Solutions for Sustainable Transportation*, and *Solutions for Fossil and non-fossil Power*, for the First International Congress on Sustainability Science and Engineering, (ICOSSE Aug 09), Cincinnati Ohio, Aug. 9 to 13, 2009. Submit abstracts until March 15 at www.aiiche.org/IFS/Conferences/index.aspx.

A new class, *Energy Technology and Policy* is offered by Tom Edgar. The course is intended for undergraduates and provides a succinct overview of the U.S. energy landscape. [Click here](#) to access this and other AIChE links to Energy Courses and Training.

The AIChE Energy Initiatives Newsletter is sponsored by SAIC. SAIC is a FORTUNE 500® scientific, engineering and technology applications company that uses its deep domain knowledge to solve problems of vital importance to the nation and the world, in national security, energy and the environment, critical infrastructure, and health. The company's approximately 45,000 employees serve customers in the Department of Defense, the intelligence community, the U.S. Department of Homeland Security, other U.S. Government civil agencies and selected commercial markets. SAIC had annual revenues of \$8.9 billion for its fiscal year ended January 31, 2008. For more information, visit SAIC: <http://www.saic.com/energy> From Science to Solutions®



**Become more involved in AIChE's energy initiatives.
Email us at energy@aiiche.org regarding numerous opportunities.**

www.aiiche.org/energy

AIChE © 2009 American Institute of Chemical Engineers