



CES Newsletter

Winter 2010



www.enrg.lsu.edu

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CES Completes Port of Venice Impact Analysis

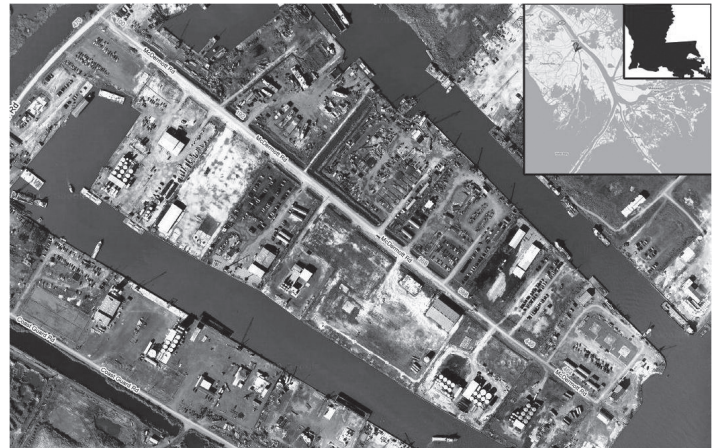
A CES study shows that timely investment in the Port of Venice Complex could elevate the port into a world-class offshore oil and gas service port. Known as the "Gateway to the Gulf," the port would benefit considerably from service and maintenance activities arising from new drilling and production operations in the eastern Gulf of Mexico.

The economic impact analysis of the port was based upon a detailed tenant and port user survey that incorporated economic impact models and analyses, as well as sophisticated satellite tracking measurements to examine vessel movements into, out of, and through the port to state and federal drilling and production locations.

"The Port of Venice is exceptionally well positioned to take advantage of new eastern Gulf of Mexico drilling and production prospects, creating economic development opportunities for the local and state economies, and reducing U.S. dependence on foreign sources of energy," said Professor David Dismukes, CES associate executive director and principle investigator for the study. "However, these opportunities won't happen without continued investment in the waterways and channels leading into the port complex."

Venice's contribution to the Louisiana economy is not well known. While other, more visible ports in the state focus almost exclusively on federal deepwater production, Venice provides support to a balanced mix of state and federal drilling and production activities in the Gulf. Most importantly, Venice supports in-state production activities that are estimated to contribute more than \$350 million per year in mineral revenues directly to Louisiana and not to the federal government. The area serviced by Venice accounts for some 20 percent of all in-state mineral revenues.

Over the past five years, Venice has supported in-state oil and gas production activities that have contributed \$1.69 billion in state mineral revenues. An investment in Venice is clearly a direct investment in Louisiana, one that yields almost immediate economic and financial benefits that are not dependent upon the irregularities of federal royalty revenue policies.

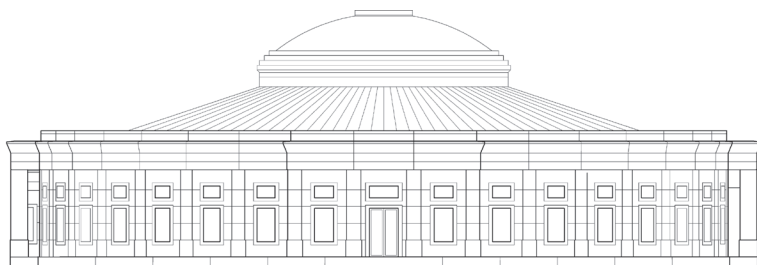


The CES impact study estimates that the port will have made more than \$117 million and \$188 million in capital investments in 2008 and 2009, respectively. These capital investments, comprised of infrastructure improvements and marine vessel expenditures, will lead to more than 1,070 jobs for the local economy and neighboring Louisiana parishes.

Annual operations at the port are estimated to have created more than \$197 million in economic activity in both 2008 and 2009. Over the past two years, the port has employed, on average, more than 850 people in the local economy.

The port has a significant competitive advantage in serving the new offshore areas recently slated for drilling in the eastern Gulf. The geographic location of the Port of Venice gives it the ability to provide oil and gas service companies a 6-to-95-percent fuel cost advantage to important eastern Gulf of Mexico lease sales relative to other central and eastern GOM ports in Louisiana, Mississippi, Alabama and Florida.

A copy of the full report can be found on the CES website at www.enrg.lsu.edu/portofvenice



In the Rotunda

Market Challenges, Opportunities Explored at Energy Summit 2009

The Center's annual Energy Summit, held October 28, addressed policy challenges for domestic oil and gas production, natural gas hydrates, midstream and transportation developments, changes in electricity demand, speculation in oil markets, and workforce development.



Porter Bennett, founder and president of Bentek Energy, an independent energy market analytics company, discussed market impacts of new natural gas resources at Energy Summit 2009.

The event opened with a presentation on the outlook for U.S. natural gas production by Porter Bennett, founder and president of Bentek Energy. Bennett explained how technology is opening up unconventional gas resources, which are transforming the market, and as a result, natural gas should no longer be viewed as unavailable, unreliable, or too expensive. He predicted that today's low prices would likely persist for several years, and that demand would have to rise considerably relative to supply for prices to move beyond the three-to-five-dollar range.

Following Bennett, the American Petroleum Institute's senior economist, Sara Banaszak, provided an outlook on the new policy challenges that affect domestic production, including drilling moratoria, taxes on oil and gas production, and environmental policy compliance.

After the morning break, Dan McConnell of AOA Geophysics explained how the Gulf of Mexico Gas Hydrate Joint Industry Project discovery of thick gas hydrate-bearing sands demonstrates that resource quality gas hydrate deposits could be found in deep marine sediments in the GOM, as well as in other basins around the world, warranting "a fresh look at gas hydrates in the future energy portfolio."

Enbridge Energy Company, Inc., president Terrance L. McGill discussed the changing regional midstream and new developments in transportation. He showed how new supply areas for natural gas, such as the mid-continent and Gulf Coast, have caused a shift in transmission patterns, and he provided an overview of constraints to new supply development, including federal climate change legislation, right-of-way issues, and efforts to expand municipal jurisdiction.

Afternoon sessions began with George Given, head of global power for Wood MacKenzie, who outlined changes in electricity demand, explaining that decreased demand, along with the economic downturn and record sales declines, are creating a challenging near and mid-term operating environment for the electric power industry, one that will likely worsen before it improves.

Michael E. Shepherd, vice president of business development for Babcock & Wilcox Modular Nuclear Energy, described a modular nuclear reactor that could be sized to local transmission, site, and power requirements.

The afternoon break was followed by a presentation by the chair of the Department of Petroleum Engineering of Texas Tech University, Lloyd Heinze, who spoke of the challenges of workforce development in the oil and gas industry. The conference wrapped up with Ken B. Medlock, III, a fellow in Energy and Resource Economics of the James K. Baker III Institute for Public Policy, who discussed speculation in the oil markets.

View conference presentations at www.enrg.lsu.edu/conferences

CES Partners with Ourso College for Supply Chain Management Symposium

The Center expanded its annual Energy Summit event to introduce a new supply chain management program for the E. J. Ourso College of Business. The inaugural Supply Chain Management Symposium included presentations on materials management, perspectives from oil and gas service companies, developments in supply chain technology, and the future of transportation infrastructure. The program opened with keynote Adam Knapp, president and CEO, Baton Rouge Area Chamber, followed by George Adams, materials management and logistics director with BP, who gave an overview of the company's Gulf of Mexico operations. Brandi Rauch, Shell's supply chain--performance manager for exploration and production, Americas, discussed methods for procurement and logistics efficiency. Perspectives from service companies were shared by Halliburton's Kell Lewis, senior supply chain manager--Gulf of Mexico, and Tim Wheeler, director of procurement, materials and logistics. Discussing challenges companies face in supplying products, systems, and services, Cameron's vice president, supply chain, Wayne Wootten, stressed the importance of collaboration between customers and suppliers and internal alliances within a company to "raise performance." Providing a CIO's perspective on supply chain technology were Tom Keiser, former CIO, Limited Brand, and Edward Stark, vice president and global supply chain lead for CapGemini. The half-day event concluded with an outlook on supply chain transportation infrastructure by Brooks A. Bentz, partner, Accenture.



George Adams, materials management and logistics director for BP, speaks at the Supply Chain Management Symposium October 29.

Energy Efficiency Workshop Makes Impact

On November 19, CES joined Entergy Corporation, the Pew Center on Global Climate Change, and America's WETLAND Foundation to present "Make an Impact," a workshop on climate change, emissions reduction policy, impacts for Louisiana, and the role of individual action. The program also featured exhibits by community vendors sharing information on local programs and services, ranging from recycling to transit options to home energy audits.

Following a morning press conference and welcoming remarks from Mayor-President Kip Holden, the program began with a panel discussion and question-and-answer session featuring community leaders and energy and environmental experts.

LSU Vice Chancellor for Research and Economic Development Brooks Keel provided opening remarks. Mike McDaniel, CES professional-in-residence, discussed the status of waste heat recovery units in the state. Sidney Coffee, senior adviser to the America's WETLAND Foundation, and representatives from Entergy and the Pew Center took questions from the audience.

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Students from the E. J. Ourso College of Business attended the first Supply Chain Management Symposium, co-hosted by CES and the Ourso College.



Baton Rouge Mayor-President Melvin "Kip" Holden participated in the Make an Impact press conference. The energy efficiency-focused event was presented by Entergy and the Pew Center on Global Climate Change, with CES and America's WETLAND.



Vendors of home energy efficiency products participated in November's Make an Impact expo.



An LSU Transit System representative was on hand to share Tiger Trails details at the Make an Impact expo.

The "Make an Impact" program includes a website (<http://entergy.pewclimate.org/>), launched in July by Entergy and the Pew Center, designed to provide tools for consumers to manage their environmental impact, reduce energy costs, and help lower CO₂ emissions. The site offers personalized tips to help consumers lower energy bills and includes a customized carbon calculator to analyze personal energy use and an interactive page of local resources.

Interdisciplinary Team Studies Geographic Units for Socioeconomic Impact

The Center for Energy Studies, the Minerals Management Service, and faculty from the LSU Departments of Agricultural Economics and Environmental Sciences are evaluating geographic units currently used by MMS to discharge its planning and analysis responsibilities. The units assist MMS in recognizing and understanding socioeconomic impacts attributable to offshore oil and gas activity. The study will use industrial cluster analysis, regional input/output analysis and modeling, and geographic information systems to delineate Economic Impact Areas (EIAs) in the GOM, with the goal of better facilitating compliance with the National Environmental Policy Act (NEPA).

Current units include 132 county or parish units divided into 23 Labor Market Areas (LMAs) spreading across the five GOM states from Texas to Florida. Not all of these EIAs currently are significantly impacted by offshore oil and gas activity or by MMS actions or decisions. The interdisciplinary team approach ensures a wide variety of factors are considered including industry location, supply/demand linkages, and regional development indices such as social participation, human health and environmental health. The objective of the project is to identify those EIAs, LMAs and/or counties that are or may be affected significantly, either negatively or positively, by trends in offshore activity. The report should be finalized by late 2011.

CES Hosts Greater Baton Rouge Clean Cities Coalition with DNR, DOE



The Center for Energy Studies is working in partnership with the Louisiana Department of Natural Resources and the U. S. Department of Energy to support the efforts of the Greater Baton Rouge Clean Cities Coalition. GBRCCC is one of around 90 similar organizations located throughout the U.S. that focus primarily on promotion of alternate fuels and alternate fuel vehicles. CES professional-in-residence Mike McDaniel is president of the board for GBRCCC, and research associate Lauren Stuart serves as coordinator for the Clean Cities organization.

GBRCCC attempts to mobilize local stakeholders in government and industry to collaborate on public policy issues, develop joint projects, and promote use of alternative fuels in their communities. Visit GBRCCC.org for information on the organization's outreach activities and training programs, and opportunities to participate in the Clean Cities effort.

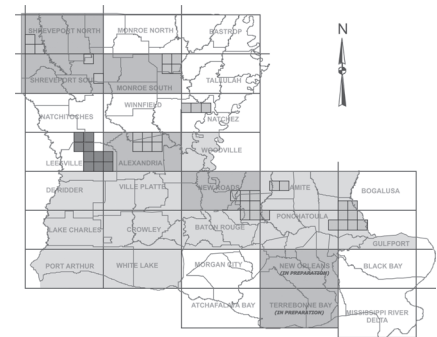
Louisiana Geological Survey to Continue Surface Geologic Mapping of State

The Louisiana Geological Survey (LGS) has received a grant for \$141,983 in funding from the U.S. Geological Survey (USGS) for surface geologic mapping in Louisiana for fiscal year 2010 as part of the STATEMAP component of the National Cooperative Geologic Mapping Program. Originally begun in the early 1990s, STATEMAP projects are conducted in annual cooperative agreements with the USGS. Investigators for this mapping project are Louisiana Geological Survey research associates Rick McCulloh, Paul Heinrich, John Sned, Marty Horn, and Hampton Peele.

Through STATEMAP, the LGS plans to map the surface geology of the entire state at a scale of 1:100,000, which allows for abundant detail while covering relatively large areas. A current STATEMAP project involves mapping the surface geology of a substantial portion of the Mississippi River delta plain in southeastern Louisiana, an area that experienced some of the most significant land loss in the Louisiana Coastal Zone as a direct result of the last four hurricane strikes. Such detailed geologic maps aid in planning for hurricane protection because they depict aspects of landforms, such as their relative elevations, composition, and texture, which correlate with engineering properties.

Past STATEMAP-supported mapping projects have led to the discovery of previously unknown features of substantial geologic importance as well as refinements of previous mapping. The most noteworthy discovery is an anomalous structure in the northern Florida parishes now understood to be Louisiana's only known impact crater.

Links to 1:100,000- and 1:24,000-scale open-file maps from the main publications catalog may be found at the LGS website www.lgs.lsu.edu. These preliminary drafts are available for reference by members of the public, and to aid in applied research by consultants and other investigators in geotechnical, geoarchaeological, and other earth-science subdisciplines.



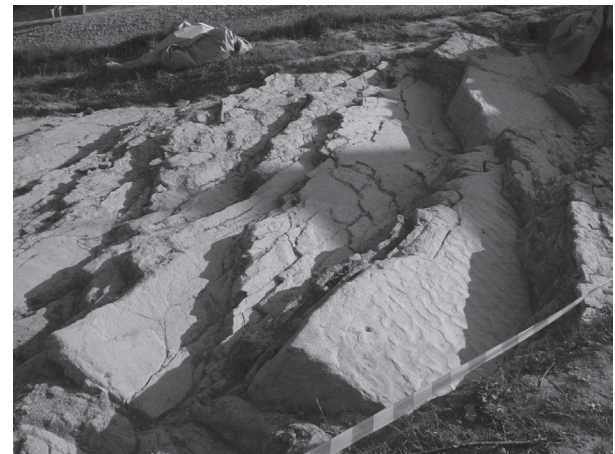
Louisiana Geological Survey Researcher Quoted in *Smithsonian Magazine*

Louisiana Geological Survey research associate Paul Heinrich was quoted in a December 2009 *Smithsonian* article on controversial pyramid-like landforms in Bosnia. Described by Heinrich as a "quite common" type of landform commonly called a flatiron, the formations in the hills near Sarajevo became the focus of international attention in October 2005 when an archeology enthusiast claimed they were the largest of a group of ancient man-made pyramids, dwarfing the Great Pyramids of Egypt. With the backing of Bosnian authorities and the support of a very small minority of geologists, belief in the pyramids is widespread in the region, and tourists flock to see the formations, which have become a source of Bosnian pride.

A flatiron is often a ridge on the side of a mountain, having a narrow apex and a broad base, resembling a huge flatiron when viewed from the side. One side consists of the surface of a steeply inclined layer of resistant rock that is called a "dipslope" by geologists.

"The so-called 'Bosnian Pyramids' are just one of many natural geologic features that have been mistaken for the ruins of manmade structures," said Heinrich. Other such formations include the "Bimini Road" of the Bahamas; the "rock walls" of Rockwall County, Texas; a deeply buried "tiled floor" found on Battlement Mesa in western Colorado; and the Yonaguni Pyramid of the island of Yonaguni-jima, Japan.

To read the *Smithsonian* article, visit <http://www.smithsonianmag.com/history-archeology/The-Mystery-of-Bosnias-Ancient-Pyramids.html>. Detailed analyses of the geology and politics of Bosnian pyramids can be found on "Le site d'Irma" at <http://irma.lautre.net>.



*The controversial "Bosnian pyramids" have been identified as flatiron formations by geologists like LGS research associate Paul Heinrich, who was recently quoted on the subject in *Smithsonian magazine*.*

CES Faculty on the Road

CES faculty are sought-after speakers. Below are just few recent events at which they were invited to share their research and expertise.

Wumi Iledare, director of the CES Energy Information and Data Division, presented “Worldwide Deepwater Petroleum Exploration and Development Prospectivity: Comparative Analysis of Efforts and Outcomes” at the 2009 SPE Annual Technical Conference and Exhibition in New Orleans in October. In November, he spoke on global petroleum supply and pricing at the Louisiana Department of Natural Resources. Later that month, he spoke at the annual meeting of the Nigerian Association of Petroleum Explorationist (NAPE), where his topic was “Funding Incorporated Joint Ventures in Nigeria: Challenges, Constraints & Opportunities.”

In September, CES associate executive director **David Dismukes** presented his “Gulf Coast Energy Outlook: Issues and Trends” to the new Southeast Louisiana Chapter of the Women’s Energy Network in Baton Rouge. In October, he spoke at the annual meeting of the Louisiana Chemical Association/Louisiana Chemical Industry Alliance on “Louisiana’s Stakes in the Greenhouse Gas Debate—The Billion Dollar Budget Crisis: Catastrophe or Change?” Dismukes spoke to the New Orleans Chapter of the Energy Bar Association January 28. His topic: “Natural Gas Supply Issues: Gulf Coast Supply Trends and Implications for Louisiana.”

Mike McDaniel was invited to talk about Louisiana’s bioenergy resources at Congressman Bill Cassidy’s Green Energy Summit, held in Baton Rouge August 13. He presented “Funding Opportunities for Natural Gas Vehicles” to a gathering of the Louisiana Gas Association and spoke to the Louisiana Chapter of the American Public Works Association on “Fleet Management and Alternative Fuels,” both in October. Before the holidays, McDaniel provided an “Update on Climate Change Legislation” to the LSU AgCenter’s Agriculture Communications in Education (ACE) meeting.

To view CES faculty presentations online, visit www.enrg.lsu.edu.

Rushing Off to Spain

CES bid farewell to coordinator Johanna Rushing, who departed in January for a teaching position in Barcelona. Fluent in Spanish, Johanna accepted a position teaching the language to immigrants. We at CES already miss Johanna’s generous spirit, dedication, and bright smile. We wish her the best in her endeavors.



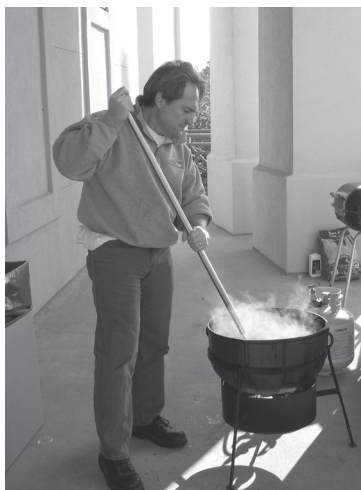
*Former coordinator
Rushing now teaches in
Barcelona.*

Goddard Honored with Retirement Potluck

Don Goddard's retirement tribute on December 9 was a potluck lunch with international flair. Don's friends and co-workers enjoyed oysters—grilled and on the half-shell—David Dismukes's famous jambalaya, Don's Venezuelan black beans, Yunke Yu's Chinese tea eggs, and Sid Narra's Indian curry pies. For dessert it was back to New York with Brenda Baumann's masterpiece turtle cheese cake. Thanks, Don, for ten years of great service to the Center.



Don Goddard, with daughter Nicole, enjoys oysters on the half shell at his December 9 retirement potluck.



Chef David Dismukes paddles the jambalaya at the Goddard fiesta.



Jordan Gilmore provides a delicious cooked option for oyster eaters.



A special request: Mrs. Baumann's cheese cake.

The CES Newsletter is published by the Center for Energy Studies at Louisiana State University.

Send correspondence to Marybeth Pinsonneault, communications manager, at mtherio@lsu.edu.

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Visit www.enrg.lsu.edu to read about the latest news and events at the CES.

The Center for Energy Studies conducts, encourages, and facilitates research and analysis to address energy-related problems or issues affecting Louisiana's economy, environment, and citizenry. Whether conducted by its staff or by others it supports, the Center's goal is to provide a balanced, objective, and timely treatment of issues with potentially important consequences for Louisiana.

Alternative Energy Conference

GREENING AN ENTERPRISE ECONOMY

APRIL 21, 2010
 8:00 A.M. – 5:30 P.M.

LSU CENTER FOR ENERGY STUDIES

Clean Fuels Symposium

DRIVING ALTERNATIVE TRANSPORTATION

APRIL 22, 2010
 9:00 A.M. – Noon

Louisiana Clean Energy Expo

renewable energy, alternative fuels and vehicles, energy efficiency

APRIL 22, 2010
 1:00 P.M. – 4:00 P.M.

Co-hosted by Clean Cities

Register for all three events at www.enrg.lsu.edu/conferences Dalton J. Woods Auditorium - LSU Energy, Coast & Environment Building - Baton Rouge