CRITICAL MILESTONES

The list of accomplishments shown below represents critical milestones achieved through Center for Energy Economics (CEE), including our origins as the Natural Gas Project, Energy Institute and Institute for Energy, Law & Enterprise from 1991-2005. Activities marked with "*" are research reports slated for update during FY2005-2006.

MAJOR RESEARCH PROJECTS AND PUBLICATIONS

**Commercial Frameworks for LNG Development** (funded by a consortium of companies and government entities), 2003-present.
- *Introduction to LNG*. First paper in the series of publications. May 2003 (Fisoye Delano, Michelle Michot Foss)
- *LNG Safety and Security*. Second paper, October 2003 (Foss, Delano)
- *North American Natural Gas Demand and Supply: the Role of LNG*. Third paper, September 2004 (Foss, Gürcan Gülen, Delano)
- *Interstate Natural Gas: Quality Specifications and Interchangeability*. December 2004 (Foss, Delano, Wardzinski)
- *Highlights from The CEE Guide to LNG in North America (2005)*
- *LNG Offshore Receiving Terminals briefing paper* (forthcoming, Fall 2005)


**Electric Power Studies:**
- "Demand Side Response and Dynamic Pricing," *USAEE Dialogue*, June 2002 (Gülen).

Studies from the Central Asian Consortium (U.S. Agency for International Development/Hagler Bailly Consulting Consortium):
• “Analysis suggests economic viability of trans-Caspian Sea gas line,” Oil & Gas Journal, November 15, 1999 (Shenoy, Gülen, Foss).
• The Commercial Viability of Proposed Trans-Caspian Pipeline, Energy Institute White Paper, 1999 (Shenoy, Gülen, Foss).
• “The Politics and Economics of Caspian Oil Export Pipelines,” Oil & Gas Journal, April 19, 1999 (Shenoy, Gülen, Foss).

North American Studies:

Canadian Energy Studies (Canadian Consulate General):
• Electric Power Restructuring in California and Texas: Implications for Canadian Provinces and Canadian Suppliers of Renewable Energy Technologies, August 2001
• A Review of U.S. and Canada Energy Business Expansion Indicators
• Eastern Canada Oil and Gas Value Chain, August 2001
• Canadian Energy Business Procurement, ongoing

Mexico Energy Studies:
• *Guide to Electric Power in Mexico, with ITESM, Fall 2005.
• *Natural Gas in Mexico – Revisited Again (García, Foss, Miranda Ferrell).
• Analysis of the Electricity Industry in Mexico: A Regional Approach (joint white paper with ITESM, 2001, in progress; Foss, Francisco García)


• “Mexico’s Gas Reforms Hang on New President’s Priorities,” GasMatters, July 1994 (Foss).

• "Outlook for Mexican Gas Market Good, but not without Pitfalls," Oil & Gas Journal special report on Mexico’s Petroleum Future, January 17, 1994 (Foss).

• "The Free Trade Agreement and Natural Gas," p. 53-61 in The Role of Natural Gas in Environmental Policy, University of Texas Bureau of Business Research, 1993 (Foss).


• Regional Demand for Natural Gas: The Case of the Northeast Region of Mexico. Natural Gas Project White Paper, 1992 (García).


Russian Energy Studies: ¹

• “Comparing Russian, Western Major Oil Firms Underscores Problems Unique to Russian Oil,” Oil & Gas Journal, February 1, 1999 (MBA students Tina Obut, Avik Sarkar, Sankar Sundar, Part 2).

• “Roots of Systemic Woes in Russian Oil Sector Traceable to Industry Evolution,” Oil & Gas Journal, January 25, 1999 (Obut, Sarkar, Sundar, Part 1)


Other Research:

• Ford Motor Company: Driving Change, case study completed for National Academy of Sciences/Houston Advanced Research Center-Center for Global Studies, 1999 (Foss).


Other Key Research Products from the Natural Gas Project (Center for Public Policy):


Case Studies for *New Era in Oil, Gas and Power Value Creation* (2004 session):
- Apertura in Venezuela
- Bolivia-to-Brazil Pipeline
- Brazil's Restructuring of the Oil & Gas Industry
- Chad-Cameroon Pipeline
- Convergence Merger
- Deepwater Development in Angola
- Deepwater Developments in Brazil
- Deer Park Refinery
- Electricity Restructuring in California (re-printed in Brazil Business, publication of the American Chamber of Commerce-Brazil, August, 2001)
- Energy Inc. Deepwater Project
- Environmental Catch-22 in Nigeria
- Gas and Power in Peru
- Gas Monetization in Bangladesh
- Gas Monetization in Bolivia
- Gas Monetization in Nigeria
- Hospital Power in Congo
- LPG Subsidies in India
- Natural Gas Marketization in North America
- Nigerian National Petroleum Company
- North Atlantic Canada
- Oil Monetization in Azerbaijan
- Power Marketization in Turkey
- Refining Sector in Kazakhstan
- Results of Electricity Sector Restructuring in Argentina
- Results of Electricity Sector Restructuring in Chile
- Results of Electricity Sector Restructuring in Peru
- Small Refiner Bias in the U.S.
- Soviet Legacy in Russian Petroleum Industry
- Trans-Caspian Gas Pipeline
- Trinidad LNG Project
KEY TEACHING AND TRAINING INITIATIVES
(By date of introduction)

- **July 4-8, 2005.** A short course on "Oil, Gas & Power Value Creation" in Port Harcourt, Nigeria, jointly with Petroleum Technology Development Fund, Gas Research Group, University of Port Harcourt.
- **January 9-12, 2005.** Workshop on *Oil, Gas & Power Value Creation* for energy industry professionals in Dhaka, Bangladesh, jointly with the Bangladesh University of Engineering & Technology.
- **May 9-20, 2005.** 2005 Houston session, *New Era in Oil, Gas and Power Value Creation*.
- **June 28, 2004.** A pre-conference workshop on "Fundamentals of LNG" as part of the "Latin America and the Caribbean Gas Summit: LNG as a driver for development" in Port of Spain, Trinidad & Tobago for delegates from Bolivia, Brazil, Chile, Dominican Republic, the Netherlands and United States.
- **January 2004-December 2005.** Association Liaison Office for University Cooperation in Development Partnership to Strengthen Local Capacity for Economic, Financial and Social Analysis of Energy Sector Initiatives in cooperation with the Department of Petroleum and Mineral Resources Engineering at the Bangladesh University of Engineering and Technology.
- **January 2004-June 2005.** “Smart Development” Initiative for Energy Sector Governance Program of USAID.
- **March 2002.** “Real Options for the E&P and Power Industries”. Joint workshop with Real Options Software, Inc.
- **May 14-25, 2001.** Launched *New Era in Oil, Gas and Power Value Creation*. Annual two-week training program based on Institute research experience that links commercial project development across the energy value chains with legal and regulatory frameworks to support energy development. Use of virtual countries for team projects and outcomes. Supported by U.S. Department of Energy and U.S. Department of State. Options for in-country offerings.
- **Spring 1999.** Launched Energy Economics course, taught university-wide at the undergraduate level and offered to MBA and law students at the graduate level.
- **September 29, 1997-March 27, 1998.** China National Petroleum Corp. Law Program, in collaboration with UH Law Center.
• **September 15-October 10, 1997.** Training program on oil and gas business practices and international contracts and agreements for China National Petroleum Corp., sponsored by Shell China.

• **June 1997-September 1998.** Assistance with training program development for the Central Asian consortium including international petroleum economics, oil and gas accounting, project finance, energy regulatory agency law, international petroleum contracts and agreements. In-country training programs.


**OUTREACH HIGHLIGHTS**

*Hosted, led or co-sponsored*

• **June 3-6, 2005.** IAEE International Conference, Taipei

• **May 26, 2005.** Joint workshop with Bureau of Economic Geology-University of Texas, “Opportunities and Issues in Carbon Markets”

• **May 5, 2005.** Joint Workshop on the Role of National Oil Companies (with James A. Baker Institute for Public Policy, Rice University)

• **March 14-17, 2005.** Gastech 2005 - The 21st International Conference & Exhibition for the LNG, LPG & Natural Gas Industries (Bilbao, Spain).

• **February 20-25.** Study abroad program for University of Alberta MBA-Natural Resources and Energy program.


• **September 23-24, 2004.** International Project Development conference, State Bar of Texas.

• **April 23, 2004.** Distinguished lecture by Adrian Lajous, former CEO of Petroleos Mexicanos, and currently a Repsol Fellow at Harvard University.

• **February 6, 2004.** Africa Roundtable to initiate USAID grant activities and to built support around its greater Africa Initiative.

• **February 5, 2004 - LNG and Risk Management & Communication Workshop for the LNG Consortium.**

• **December 11, 2003.** “Changing Dynamics of the North American Natural Gas Market” a half-day conference co-organized by the Houston chapter of IAEE/USAEE.

• **January 31, 2003.** Roundtable on Texas Retail Choice.

• **January 17, 2003.** “Behind the Gas Pump” conference, led by Professor Jacqueline Weaver, UH Law Center.

• **December 5, 2002.** “Cross-Atlantic Views on Natural Gas and Electric Power Market Developments” with the British Consulate General, Houston.

October 3, 2002 LNG Luncheon hosted for Association of International Petroleum Negotiators.


September 15, 1998. *World Energy Congress Student Program*. Demonstration of energy research at University of Houston to about 100 international graduate students attending the 17th World Energy Council Congress.


- **June 18, 1997.** *First International Colloquium on Energy Sector Reform.* Invitational research forum that focuses on efforts underway by Institute faculty members, students, staff and visiting researchers.


- **March 25-26, 1996, August 31, 1995.** Executive seminars on developments in Mexico, in Houston and at CEE/ITESM (NGP).

- **May 31, 1995.** Roundtable discussion on natural gas regulatory policy. At the request of the U.S. Department of Energy, on behalf of Mexico’s new Comisión Reguladora de Energía. Federal, state and provincial regulators and energy ministry officials from the U.S., Canada, Mexico.

- **October 1994.** *Border Energy Forum I* (Texas General Land Office). Ongoing, with *BEF VIII* held in Tucson, October 2001. The University of Houston through the Energy Institute/NGP has been a partner in all eight forums that address energy and environment in the border region.


- **March 19, 1992.** *International Workshop on the Natural Gas Industry*, at Centro de Estudios Estratégicos/Instituto Tecnologico y Estudios Superiores de Monterrey (NGP).