For Professionals in Business, Government and Stakeholder Organizations Building capacity to address energy sector challenges worldwide

THE 7TH ANNUAL

NEW ERA

IN OIL, GAS & POWER VALUE CREATION

May 7-18, 2007 Houston, Texas







Global Scan of Energy Trends
& Value Chain and Commercial
Frameworks Fundamentals

Oil Value Chain & Commercial
Frameworks

Natural Gas Value Chain &
Commercial Frameworks

Value Chain &
Commercial Frameworks

Interactions

Offered by
Center for Energy Economics,
The University of Texas at Austin

An Invitation ...

We invite you to participate in an innovative, capacity-building program designed to improve the qualifications, experience, knowledge and management skills of energy professionals. The Center for Energy Economics, and our sponsors – an impressive group of government agencies, international organizations and multinational energy companies – believe that public and private enterprises, alike, need this type of training to optimize private markets and investment opportunities for more effective energy development in their home countries and worldwide.

Background

The dynamic transformation of oil, natural gas, and power markets underscores the need for more productive dialogue on commercial practices and energy sector reforms. Practice shows that:

- Natural gas commoditization has added critical new functions all along the energy value chain.
- Increased market complexity created by these new functions simultaneously increases energy price volatility and provides more sophisticated tools for managing price risk.
- More sophisticated risk management and more flexible government control creates new private market options for project financing.
- Greater private involvement raises the awareness and participation of local communities in the infrastructure expansion necessary to meet new domestic needs and increasing commodity exports.
- Infrastructure expansion complicates the environmental and social issues that affect not only individual projects but also fuels markets.

To effectively navigate these changes, project developers and host governments need the foresight to design and implement strategic policy reforms that attract private investment and optimize the value of oil and gas resources. New Era provides a comprehensive, in-depth view of energy value chain development. It emphasizes the development of commercial frameworks - public policy and private practices along with appropriate institution building compatible with effective, community-specific energy investment and development. Through participation in the Era training and alumni community, energy professionals will see cutting edge technologies; debate advanced energy market and commercial issues with leading experts and each other; hone their management skills; share experiences; make valuable contacts; and develop a strong technical foundation for analyzing specific problems and building locally appropriate solutions.

New Era takes advantage of the Center's distinctive research environment, corporate and government relationships, university base, and associated talent pools. It offers practitioners and researchers a Center of Excellence on commercial frameworks for energy development. Our international team of faculty, researchers, experts and practitioners spans a range of technical and commercial disciplines - including earth sciences, engineering, finance, economics, political science and law - with both professional and international experience. Our combined international experience includes the Americas, the Caspian, Western Europe, Africa, and East and South Asia and multinational organizations. Houston provides a unique geographic base to showcase advanced technologies and approaches across the energy value chains, as well as access to a concentration of commercial expertise. New Era offers a neutral, universitybased research atmosphere to encourage open discussion and provide a sound intellectual foundation.

Major Program Features

Program building blocks are the following.

Contextual construction

- > Global perspectives on world energy outlooks;
- > Macroeconomic considerations for private investment and commercialization;
- > Country dialogues on the role of government and markets, including economic reforms, technology change and adaptation; and
- > Integration of external challenges and internal concerns.

Globalizing perspectives

- > Energy value chain segments and linkages that must be addressed in policy, regulatory and commercial practices.
- Distinctions between international and regional export businesses (such as crude oil, petroleum products and LNG movements) as compared to regional gas transportation and gas-power flexibility.
- > Global capital movements and their impact on national and sub-national investment policies and patterns.

Diverse program components

- > A virtual composite country case and our "Energy Inc." business simulation form the platforms for team-based participant activities and interaction.
- > Experience sharing, actual country and industry case studies and group discussions targeted to specific project and policy development issues.
- > Informal idea exchanges on topics identified by program participants and on case studies.
- > Negotiation game.
- > Bidding game.
- > Unique opportunities for site visits to fully explore and combine technical, business and policy concepts.
- > Closing, one-day summary session with invited keynote speakers and special guests.

Interdisciplinary scope

The course combines commercial, policy, and regulatory aspects of energy value chain investment and development. We include:

- > Innovations in upstream arrangements for private participation;
- > Contractual distinctions for natural gas resource exploitation;

- > Oil and gas pipeline transportation issues;
- > Refining economics and investment;
- > Specific considerations for integrated, natural gas field-to-electric power projects; and
- > Implications for midstream and downstream oil and gas value creation from upstream resource ownership models.

Project implementation

Following a logical project investment "deal flow", structured participant teams undertake specific assignments and exercises to improve skills in:

- > strategic planning;
- > development of strategic policy approaches;
- > implementation of policy initiatives;
- > development of commercial frameworks;
- > evaluation of project investments within the context of commercial frameworks;
- > investment negotiation;
- > implementation and dealing with operational issues (including environmental and social considerations);
- > risk management; and
- > dispute resolution and conflict management.

Internet support

In-class sessions and activities are supplemented by extensive internet support for participants and alumni.

- > Participants can access pre-program materials and resources and interact through electronic communication.
- > Participants use computers and Internet extensively throughout the program.
- > Alumni can remain networked and access a continuous learning and information sharing environment.

New Era serves as a long-term platform for a worldwide network of professionals engaged in energy policy and regulatory development and implementation, and commercial energy operations that span government ministries and agencies and energy companies.

Summary of Topics Covered

- Commercial Frameworks[©]
- Energy Value Chain Concepts and Economics
- Contract Negotiation
- Dispute Resolution
- Administrative Agency

Practices

- Energy Project Implementation and Operation
- Emerging Wholesale Markets
- Local Benefits Issues ("Smart Development" ©)

Program Site Visits

Site tours integrate instruction and demonstration of energy solutions and the commercial frameworks in which they work. Visits address:

- Key economic, financial, and operational differences among energy value chain segments that should be reflected in legal/policy/regulatory considerations and risk assessments.
- > Natural gas monetization issues.
- > International trade considerations.

- > E-commerce, information technology and management across the energy value chains.
- > Bundled energy services platforms.

Previously visited sites include:

Upstream - Edison Chouest C-Port

Regulatory Agency - U.S. Minerals Management Service, Public Utility Commission of Texas, The Railroad Commission of Texas

Midstream – Lake Charles LNG Terminal, El Paso Tennessee Pipeline, Reliant Energy San Jacinto Cogen Plant

Wholesale Markets – Sabine Pipeline/Henry Hub, Duke Energy Trading, ERCOT Independent System Operator

Reference Materials

Case studies

More than 30 case studies on more than 20 countries provide snapshots of strategic issues faced in a variety of resource environments, and present the array of challenges, opportunities, and problem solving approaches that have succeeded and failed. Examples include:

- > Deepwater developments in Angola and Brazil;
- Electricity restructuring in Argentina, Chile, Peru, Turkey and California;
- > Environmental and social development;
- > Upstream fiscal terms;
- > Gas and power in Peru;
- > Gas monetization in Bangladesh, Bolivia and Nigeria;
- > LNG projects;
- > Product subsidies;
- Oil and gas industry sector restructuring in Russia and Brazil;
- > Oil monetization in Azerbaijan;
- International pipelines (Bolivia-to-Brazil and Trans-Caspian);
- > Oil refining and oil product pricing (U.S., Kazakhstan).

Training manuals

Economics of the Energy Industries, developed and continuously updated by CEE is our main textbook. Participants also have access to a comprehensive set of reference materials, including:

- > Administrative Agencies;
- > International Petroleum Agreements;
- > Oil and Gas Accounting;
- > Project Finance; and
- Strategic Planning.

Key Personnel and Instructors

Dr. Michelle Michot Foss, Chief Energy Economist and Head of CEE, *New Era* program director

- Dr. Gürcan Gülen, Senior Energy Economist, CEE
- Dr. Mariano Gurfinkel, Associate Head of CEE
- Ms. Miranda Ferrell Wainberg, Senior Researcher, CEE
- Dr. Bhamy Shenoy, Consultant, CEE Senior Advisor
- Mr. Alfred Boulos, JD, Boulos International (Adjunct Professor, UH Law Center)

Dr. Roger Blakeney, Associate Professor, Department of Management, C.T. Bauer College of Business, University of Houston

Dr. Dale Rude, Associate Professor, Department of Management, Bauer College of Business, University of Houston

The CEE draws upon our worldwide networks and international advisors as well as faculty from the University of Texas, University of Houston and other institutions for guest lecturers. Our roster includes experts from leading energy companies and key government agencies and nongovernmental organizations. Some of the trainers from past programs included:

- > Mr. John Bowman, Partner, Fulbright & Jaworski L.L.P.
- > Mr. John Enloe, Senior Vice President, Duke Energy International
- Mr. Javier Estrada, former Commissioner, Comisión Reguladora de Energía, Mexico
- > Mr. Fred Gibson, Consultant (former Chevron Texaco)
- > Prof. Stephen K. Huber, UH Law Center
- Ms. Benigna Leiss, Vice President of Business Development, ChevronTexaco WorldWide Power & Gasification
- > Dr. Raúl Monteforte, Commissioner, Comisión Reguladora de Energía, Mexico
- Ms. Shirley Neff, Adjunct Lecturer and Research Scholar, Center for Energy Marine Transportation and Public Policy, School of International and Public Affairs, Columbia University (former senior economist, U.S. Senate Committee on Energy and Natural Resources)

- > Mr. Roland Priddle, Consultant, former Chairman of the National Energy Board-Canada
- Mr. Brian Rabe, Vice President, Devon Energy Corporation
- Mr. John Rodi, U.S. Department of Interior,
 Minerals Management Service Gulf of Mexico
 OCS Region
- > Mr. J. Dee Simpson, President Conoco Africa Inc.
- > Mr. Tim Tyler, Mayer, Brown, Rowe & Maw L.L.P.
- > Dr. Robert Wasserstrom, Senior Partner, Terra Group
- > Ms. Gail Watkins, Partner, Akin, Gump, Strauss, Hauer and Feld
- > Mr. Wayne White, Senior Attorney, Globeleq

Organization Involvement

Your organization may participate in many ways.

- Nominate and sponsor your professionals
- Sponsor delegates from your host countries which will help you fulfill contractual training and education obligations to host governments
- Provide research information and case studies
- Host site visits
- Offer guest presentations
- Participate in discussions and program functions
- Network with the participants and instructors

Participant Profile



Fast-track energy professionals will profit most from the New Era program. For a more intimate and productive environment, the Institute selects up to 25 mid- to senior-level managers and technical professionals nominated by government ministries, regulatory commissions, and national and private energy industry enterprises. We target delegates on the basis of their credentials, experience and potential value of the New Era experience to their home markets. Delegates should come with a strong foundation in economic and finance principles and knowledge of global trends and market reforms. Working fluency in English is necessary for the program.

Over the past six years, New Era alumni have comprised 108 representatives from 26 countries, including: Algeria, Angola, Bangladesh, Brazil, Chile, China, Colombia, Côte d'Ivoire, Ecuador, Gambia, Ghana, Honduras, Indonesia, Iraq, Kenya, Korea, Mexico, Namibia, Nigeria,

Peru, Republic of Congo, Republic of Georgia, Trinidad & Tobago, Turkey, Turkmenistan, the United States and Venezuela. The diversity of experience and opinions enriches the program for all involved.

Delegates who attended New Era had this to say about the program:

"New Era provides a global view of the whole energy value chain that will improve management efficiency inside my organization."

"New Era will be very useful in preparing for our negotiations with state companies and government agents that are opening their oil and gas industry, as well as evaluating new business opportunities and understanding the energy value chain."

"These two weeks have changed the way I see the energy world!"

The CEE and New Era are supported by the following organizations.

Corporate and Government Partners and Executive Board

Akin, Gump, Strauss, Hauer & Feld, LLP

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Mayer, Brown, Rowe & Maw LLP

McKinsey & Company

PA Consulting

Reliant Energy

Shell E&P

Sutherland Asbill & Brennan LLP

U.S. Department of Energy - Office of Fossil Energy and Office of Policy and International Affairs

U.S. Agency for International Development -Bureau for Economic Growth, Agriculture and Trade, Office of Infrastructure & Engineering

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Shell Gas & Power

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ChevronTexaco de México

Chevron Oil Congo*

Conoco Africa - Libya*

Côte d'Ivoire Ministry of Energy

Duke Energy International

Exxon Mobil Upstream Public Affairs

ExxonMobil México S.A. de C.V.

GasAtacama - Chile

IPD Latin America - Venezuela

Jackson School of Geosciences, UT-Austin

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Tobago

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Shell Namibia

State Planning Organization - Turkey

Texaco Global Gas & Power*

Unocal Indonesia Company

U.S. Agency for International Development

U.S. Department of Energy

* Pre-merger organizations

About the Center for Energy Economics

Established in June 2005 at the Bureau of Economic Geology, the CEE is an interdisciplinary Center of Excellence that provides research, training and outreach on energy economics, markets and frameworks for commercial investment.

We concentrate on the frameworks that facilitate sustainable energy resource and infrastructure development and the ingredients for successful, "bankable" energy investments.

Houston provides a unique setting for the CEE, which is externally funded through corporate and government partnerships, research grants and contracts and revenues from training programs and publications. The CEE

network consists of our professional energy economics staff; BEG and UT researchers and faculty; international research fellows; current and former graduate student interns; and more than 60 corporate and government partner fellows, advisors, senior associates and visiting scholars.

For more information about CEE, the Bureau of Economic Geology, the University of Texas at Austin, as well as information about Houston please visit:

www.beg.utexas.edu/energyecon/

www.beg.utexas.edu/

www.utexas.edu/

www.cityofhouston.gov

Logistical Information

1. Tuition Cost

The participation fee is \$4,950 per participant (or \$4,500 if payment is received before March 1, 2007).

This fee covers the following.

- Program tuition (including preparation and instruction)
- Course materials
- Conference room rental
- Program site visits (2-3)
- Living accommodations at a hotel for 13 nights (arrival May 6, departure May 19)
- ➤ Meals (Monday Friday) breakfast, lunches and at least two special occasion dinners.

The fee does not include the following.

- Round trip travel to Houston.
- U.S. visa fees

➤ Ground transportation to and from Bush Intercontinental Airport-Houston, and other locations in Houston for personal activities.

2. Pre-program materials review

All New Era delegates are expected to arrive prepared for the program. Course materials and related information will be available for registered delegates from the CEE Web www.beg.utexas.edu/energyecon/new-era, once delegates are registered for the course. For instructions to access the New Era page and course materials for pre-program preparation, please contact the CEE. For more information about the program, please complete and submit the nomination form.

3. Venue

CEE Conference Facility 1801 Allen Parkway, Houston, Texas 77019

Program Cancellation Policies

Program Registration Fee

- Program Registration Fee is \$4,950 (or \$4,500 if payment is received before March 1)
- Non-refundable deposit of \$500 will be made to guarantee a place in the program.

Cancellation by Delegates

- Delegate request for course cancellation must be submitted in writing to CEE via fax (281-340-3482) and email at energyecon@beg.utexas.edu.
- Cancellation refund schedule:
 - ° Cancellation after March 1 Registrants will receive 75% of registration fees paid in the form of refund.
 - Cancellation after April 1 Registrants will receive 50% of registration fees paid in the form of refund.
 - No refund will be available for cancellation request received by CEE after May 1.
 - No refund (full or prorated) will be provided to those delegates who arrive after the start of the program regardless of the reason for delay (including flight delays, etc)
- **Delegate replacements are allowed**. A written note should be submitted to CEE fax (281-340-3482) and email at energyecon@beg.utexas.edu informing about the replacement.

Cancellation by CEE

- CEE reserves the right to cancel New Era program due to insufficient enrollment or other reasons by providing notice to delegates at least 14 days prior to scheduled start date.
- In the event of cancellation by CEE, delegates will receive a full refund of registration fees paid.
- CEE will not be responsible for non-refundable tickets purchased, reservations or other costs incurred by delegates.

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1633				Do you have a valid U.S. visa	NO YES
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Background. Below o	r on a separate shee	et(s) provide summa	ary of your main r	esponsibilities at your organization (C	√ or resume m
attached).					

Submit via email or fax to:

Center for Energy Economics Bureau of Economic Geology, The University of Texas at Austin Fax: 281-340-3482

energyecon@beg.utexas.edu www.beg.utexas.edu/energyecon