#### The New U.S. Role in Global Fossil Fuel Markets

Tuesday, December 11, 2012

# 8:00am to 5:30pm Bechtel Conference Center, Encina Hall, Stanford University 616 Serra Street, Stanford, CA 94305

8:00 Registration

8:45-9:00

**Opening remarks by Frank Wolak,** Director, Program on Energy and Sustainable Development

#### 9:00-10:00

Session 1: The Implications of the Unconventional Natural Gas Revolution for the U.S. Energy Industry and Global Gas Markets

- 1. Why does the U.S. lead in unconventional gas production, and how safe is this lead?
- 2. What is the outlook for shale gas development in other countries?
- 3. What is the demand outlook for U.S. natural gas at home and abroad?
- 4. What is involved technologically and legally in constructing a liquefied natural gas (LNG) export facility?
- 5. Are there lessons for the long-term financial viability of LNG export facilities from the U.S. experience with LNG import facilities?

Speaker—Rob James, Partner, Pillsbury Winthrop Shaw Pittman LLP

**Discussants: Matthew Suhr,** Director of Market Analysis, Calpine and **Lucas Davis,** Professor, Haas School of Business, University of California at Berkeley

#### 10:20-11:20

## **Session 2: The Relationship Between U.S. and World Oil Markets**

- 1. What is the WTI/Brent oil price differential?
- 2. What caused it and why has it persisted?
- 3. Does this differential invalidate the claim that oil trades in a global market?
- 4. How does it impact U.S. gasoline prices?
- 5. How has the differential affected the global oil market?

**Speaker—Severin Borenstein**, Director, University of California Energy Institute and Professor, Haas School of Business, University of California at Berkeley

**Discussants: Edgard Habib**, Chief Economist, Chevron and **Mark Thurber**, Associate Director, Program on Energy and Sustainable Development, Stanford University

### 11:40-12:40

## **Session 3: The Future of U.S. Transportation Fuels**

- 1. What role might natural gas play in the US transportation sector of the future?
- 2. Which segments of the transportation sector are most likely to see significant penetration of compressed natural gas (CNG) or liquefied natural gas (LNG) vehicles?
- 3. What role might plug-in hybrids and electric-only vehicles play in the transportation sector of the future?
- 4. What roles are biofuels likely to play in the future transportation sector?
- 5. What are the respective environmental impacts of the alternative fossil fuel futures for the transportation sector?

**Speaker—Christopher Knittel**, Co-Director of the Center for Energy and Environmental Policy Research and Professor of Economics, Sloan School of Management, MIT

**Discussants: James Boyd,** Former Vice Chair, California Energy Commission, and **Tom Eizember**, Planning Division Manager, Exxon Mobil Corporation

12:40-2:00 Lunch

### 2:00-3:00

# Session 4: The Role of the U.S. in the Growing Global Coal Market

- 1. Who are the major global producers and consumers of coal?
- 2. Which coal attributes do U.S. and global consumers value most and why?
- 3. What are the prospects for growth in U.S. coal demand and what producing regions will benefit most?
- 4. What are the barriers to increased U.S. participation in global coal markets?
- 5. What are the environmental impacts of increased U.S. participation in global coal markets?

**Speaker—Frank Wolak,** Director, Program on Energy and Sustainable Development, and Professor of Economics, Stanford University

**Discussants:** Ralph Cavanagh, Senior Attorney, Natural Resources Defense Council and Charles Kolstad, Senior Fellow, Stanford Institute for Economic Policy Research

3:20-4:20

Session 5: EXPERT PANEL – Can Natural Gas Become a Major Transportation Fuel in the U.S.?

Moderator—Frank Wolak, Director, Program on Energy and Sustainable Development

**Participants—Raj Agrawal**, Head of Infrastructure, KKR; **Hal Washburn**, CEO, BreitBurn Energy; **S. Shariq Yosufzai**, Vice President, Chevron Corporation

**Closing remarks** by **Frank Wolak**, Director, Program on Energy and Sustainable Development

**4:40-5:30 Reception**, wine and hors d'oeuvres