

# ENERGY MARKETS AND GLOBAL POLITICS

**2006 Forum on Global Energy, Economy and Security**  
**J. Bennett Johnston, Chair**

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## *Foreword*

High energy prices, growing demand and competition for oil and gas supplies, war or instability in some producing regions, and the increasing threat of the use of energy as a political weapon have focused the world's attention on energy markets and global politics. To explore these issues, the Aspen Institute organized a forum on issues at the intersection of energy, economics, geopolitics, and security. A select group of U.S. and international leaders and policy experts from energy producing and consuming industries, governments, and research organizations assembled for a dialogue designed to encourage new, collaborative, cross-disciplinary thinking on issues of critical national and global importance. An informal atmosphere and a not-for-attribution rule encouraged candid exchanges and creative thinking.

The dialogue was chaired by J. Bennett Johnston, partner in Johnston and Associates and former Chairman of the Senate Committee on Energy and Natural Resources. His many years at the center of U.S. and global energy policy discussions gave him the experience to focus the discussion and the skill to chair the meeting with firmness and grace. The highly qualified group of speakers listed in the agenda provided a wealth of information and a variety of perspectives, and the deep and diverse expertise of the participants contributed substantially to the richness of the dialogue.

The Institute acknowledges and thanks our sponsors — Aramco

Services Company, DaimlerChrysler, and Invictus Capital — for their financial support. Without their generosity and commitment to our work, the Forum could not have taken place. MeiLi and Robert Hefner III graciously hosted the group for a reception and dinner at their home, Ramiilaj, and Idemitsu Corporation generously hosted a dinners for the Forum.

On behalf of the Institute and the Forum participants, I also thank Leonard Coburn, who served as rapporteur. With a strong background in energy, he was able to identify the important threads from a wide-ranging discussion and skillfully weave them into this summary report. Katrin Thomas managed the administrative arrangements for the Forum with her usual efficiency and grace. Her hard work was responsible for a pleasant and smoothly run meeting. Along with the participants, I am grateful for her cheerful and conscientious support.

This report is issued under the auspices of the Aspen Institute, and neither the Forum speakers, participants, nor sponsors are responsible for its contents. Although it is an attempt to represent views expressed during the Forum, all views expressed were not unanimous and participants were not asked to agree to the wording.

John A. Riggs  
Executive Director  
Energy and Environment Program

## APPENDICES



# *Agenda*

## *Energy Markets and Global Politics*

Aspen, Colorado  
July 12-15, 2006

**Forum Chair: J. Bennett Johnston**, Johnston & Associates

### **Oil**

Recent developments have placed oil in the center of global economic and geopolitical discussions in a way not seen in a quarter century. Have we seen a structural change, or are current high prices a temporary aberration? Will demand growth outpace new production, or will current prices call forth sufficient investment and cause another price decline? Is there a continuing role for OPEC, or has it lost control of the oil market? What will be the role of unconventional supplies? What are the implications of efforts by national oil companies of importing nations to control energy resources?

*Long-term projections and variables*

**Scott Nauman**, ExxonMobil

*Oil imports and US foreign policy*

**David Goldwyn**, Goldwyn International Strategies, LLC

*Oil sands*

**Vincent Lauerman**, Canadian Energy Research Institute

## Natural Gas

Will high gas prices force a shift in demand toward coal? Will increasing U.S. demand for LNG help keep world gas prices high? How much will issues of regulation, siting, safety, and terrorism impede new imports? Will regional differences in gas prices continue to cause chemicals and other gas-intensive industries to move? Does a global LNG market make national energy security concerns more or less severe? Will consumers sign long-term contracts that will allow pipelines and LNG terminals to be built? What are the global sources of supply, and how much will political concerns influence where they will go?

*Russia and Central Asia*

**David Victor**, Stanford University

*Japan and world gas trade*

**Takashi Tanaka**, Tokyo Gas

*Pacific LNG trade*

**Yonghun Jung**, Asia Pacific Research Centre

*U.S. LNG imports*

**James R. Lee**, Jefferies Energy Consulting

## National and Regional Strategic Considerations

National concerns influence the energy decisions of both exporting and importing nations, and these decisions can affect world markets. Will Russia's January decision to reduce gas supplies to and through Ukraine cause Europe to seek more diversified sources of supply and more effective demand reduction policies? Will the effort of Asian importing nations to lock in supplies of oil and gas make the world market less resilient and put upward pressure on prices? Will national barriers to cross-border acquisitions intensify? How will rising nationalism in some countries affect energy markets? Will the G-8 discussions of energy security influence policies in member countries? A focus on several significant countries will help illuminate the broader questions.

*European Union*

**Boyko Nitzov**, European Energy Charter Secretariat

*Iran*

**Hooshang Amirahmadi**, American-Iranian Council  
and Rutgers University

*Russia*

**Leonard L. Coburn**, Coburn International Energy Consultants, LLC

*China*

**Xiaoje Xu**, Research Institute of Economics,  
China National Petroleum Corporation

## Refineries and Refined Products

To what extent has tight refinery capacity contributed to the recent increase in crude oil prices? Have the concurrent tightening of environmental regulations in the U.S. and Europe significantly limited refinery flexibility and capacity? Will recent high margins lead to an expansion of capacity, or will historically low margins discourage expansion? Where is new capacity likely to be built?

*Product and crude prices*

**Phil Verleger**, PK Verleger LLC

*Strategic issues*

**Timothy Donohue**, Booz Allen Hamilton

*Refinery capacity*

**Blake Eskew**, Purvin & Gertz

## Transportation Fuels and Technologies

What are the prospects for reducing demand for oil? Will high gasoline prices accelerate the development of more fuel-efficient automobiles? How rapidly will non-petroleum fuels penetrate the transportation market? What are the strategies of major auto producers? What impact will potential transportation technology developments have on oil companies' investments in new supply?

*Toyota's view of the future*

**Bill Reinert**, National Manager, Advanced Technology Group

*DaimlerChrysler's view of the future*

**Paul Traub**, Assistant Corporate Economist

*GM's view of the future*

**Mustafa Mohatarem**, Chief Economist

*Alternative fuels and technologies*

**Dan Cohn**, MIT

## *List of Participants*

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## ***Selected Publications***

### ***Program on Energy, the Environment and the Economy***

#### **Energy: The New Normal?**

The 2006 Aspen Energy Policy Forum considered which is more likely, that current high prices are a new paradigm or merely a high point in traditional cycles. The diverse participants explored the question from various perspectives: policy drivers such as energy supply and demand, climate change, and geopolitics; the R&D and financing challenges of new technologies; demand reduction possibilities; and how various fuels are likely to fare as utilities make decisions on new generation capacity.

2006. 66 pages. ISBN: 0-89843-461-0, \$12 per copy

#### **A High Growth Strategy for Ethanol**

A distinguished group of business, government, environmental and academic leaders met for two and a half days at Wye Woods in late March to discuss the potential of biofuels to improve energy security, the environment, and the economy. Co-chaired by Booz Allen Hamilton Vice President and former CIA Director R. James Woolsey and former Congressman Tom Ewing (R. IL), they developed a series of recommendations to stimulate the widespread commercialization of both corn and cellulosic ethanol as a replacement for gasoline.

2006. 83 pages. ISBN: 89843-453-X, \$12 per copy

## **The New Energy Security**

The first annual Forum on Global Energy, Economy and Security was held in October 2005. Co-chaired by James R. Schlesinger, former US Secretary of Defense and Energy, and Luis Giusti, Senior Advisor at CSIS and former CEO of Petrol os de Venezuela, the Forum discussed recent increases in oil and gas prices, global competition for reserves, whether oil production will peak soon, growth in demand in China and India, prospects for increased production in Saudi Arabia and Russia, US reliance on LNG imports to meet demand growth, and the links between globalized energy markets and perceptions of national security.

2006. 55 pages. ISBN: 89843-442-4, \$12 per copy

## **Slow Fuse: Journalistic Approaches to Climate Change**

At the 2005 Conference on Journalism and the Environment, leading newspaper editors, broadcast producers, policy experts and environmental journalists explored coverage of issues like climate change that are slow to develop but likely to have serious long-term consequences. The report, written by Larry Pryor, suggests 10 steps to help news organizations develop innovative and compelling reporting. The conference was convened by two Aspen Institute Programs—Energy, the Environment, and the Economy; and Communications and Society—and the Nicholas Institute for Environmental Policy Solutions at Duke University.

2006. 53 pages. ISBN: 0-89843-448-3, \$12 per copy

## **Electricity: Who Will Build New Capacity?**

The report of the 2005 Energy Policy Forum, chaired by Cinergy Corp. Chairman and CEO James E. Rogers, examines who will build needed new power generation and transmission facilities in a new regulatory environment. The report is organized around recommendations on market design, energy efficiency, innovation and technology choice, carbon management, and infrastructure security.

2005. 46 pages. ISBN: 89843-440-8, \$12 per copy

## **A Silent Tsunami: The Urgent Need for Clean Water and Sanitation**

Based on a 2005 dialogue co-sponsored by the Aspen Institute and the Nicholas Institute for Environmental Policy Solutions at Duke University, this report provides a series of recommendations for governments, businesses, and other organizations. Co-chairs William K. Reilly and Harriett C. Babbitt highlight the urgency of the challenge and the array of public and private initiatives to tackle it.

2005. 40 pages. ISBN: 0-89843-435-1, \$12 per copy

## **Conserving Biodiversity**

Co-chaired by Bruce Babbitt, former U.S. Secretary of Interior, and José Sarukhán, Professor of Ecology and former President of the National University of Mexico (UNAM), this 2004 dialogue was based on commissioned discussion papers and focused primarily on the policy drivers of ecosystem degradation and biodiversity loss. This report seeks to educate policy makers and opinion leaders on the loss of critical ecosystems and biodiversity and to recommend specific changes in policies that may affect biodiversity, such as trade, aid, and lending policies.

2004. 120 pages. ISBN: 0-89843-423-8, \$16 per copy

## **A Climate Policy Framework: Balancing Policy and Politics**

The Aspen Institute, in association with the Pew Center on Global Climate Change, convened a diverse group of leaders to develop a politically feasible framework for a mandatory U.S. climate change policy. Co-chaired by Eileen Claussen and Robert W. Fri, the group did not discuss *whether* mandatory action is now warranted. It did, however, reach consensus on several fundamental elements of a national policy, *if* one is adopted.

2004. 100 pages. ISBN: 089843-397-5, \$8 per copy

## **Tackling the Critical Conundrum: How Do Business, Government and Media Balance Economic Growth and a Healthy Environment?**

Former EPA Administrator Christine Todd Whitman and former Undersecretary of State Frank Loy co-chaired a Forum in Aspen on balancing economic growth and a healthy environment. This report includes their conclusions and discussion papers exploring the tradeoffs from the perspectives of business leaders, elected officials, investment firms, journalists, and economists.

2004. 102 pages. ISBN: 089843-435-1, \$12 per copy

## **Fossil Fuels, the Hydrogen Economy, and Energy Policy**

The 28th annual Energy Policy Forum considered key variables affecting supply and demand for each of the fossil fuels, domestically and globally, including new technologies and the competition offered by alternatives such as renewables and nuclear. It then examined the problems and potential of hydrogen, including its primary fuel source. Finally, based on these discussions, it suggested guidance for the development of near-term government energy policy. Red Cavaney, President and CEO of the American Petroleum Institute, and Susan Tomasky, Executive Vice President and CFO of American Electric Power Company, co-chaired the Forum.

2004. 62 pages. ISBN: 0-89843-422-X, \$8 per copy

## **Electricity Restructuring**

The 2003 Energy Policy Forum focused on electricity restructuring. Chaired by former Director of Central Intelligence and Undersecretary of Energy John Deutch, participants discussed the advantages and disadvantages of national rules governing transmission, economic and market power issues affecting ownership, whether the market's choice of fuel is in the national interest, whether natural gas supplies

are adequate, and how restructuring will affect the future of nuclear power, renewables, efficiency, and distributed generation. A series of Electricity Recommendations were sent to Congressional and Administration leaders following the Forum.

2003. 55 pages. ISBN: 0-89843-389-4, \$8 per copy

### **U.S. Policy on Climate Change: What Next?**

Following U.S. withdrawal from the Kyoto Protocol, the Aspen Institute invited a distinguished group of scientists, business leaders, and environmental experts to discuss what the U.S. should do next. The non-technical discussion papers provide useful background and innovative policy suggestions. Forum co-chairs Frank Loy, Undersecretary of State under President Clinton, and Bruce Smart, Undersecretary of Commerce under President Reagan, summarize the discussion and the Forum's conclusions in a compelling introductory essay. The group concluded that the U.S. government needs to send a signal now that carbon emissions will have a cost in the future.

2002. 200 pages. ISBN: 0-89843-344-4, \$16 per copy

### **Dam Removal: A New Option for a New Century**

This report offers a series of recommendations and practical advice to make it easier to integrate the consideration of dam removal into river management decisions, and to evaluate fairly and, if appropriate, to implement dam removal effectively. It is the product of a two-year dialogue among a group of people who represent a wide range of interests and disciplines. The imprimatur of this diverse group, with interests that are often at odds, lends a unique weight to the wide-ranging and practical recommendations.

2002. 68 pages. ISBN: 0-89843-360-6, \$12 per copy

## **U.S. Policy and the Global Environment: Memos to the President**

Prior to the 2000 election the Aspen Institute convened a distinguished group of leaders as a hypothetical committee to advise the new President on global environmental policy. Experts prepared this set of policy memos to tell the President, concisely and in understandable language, “what he should know” and “what he should do” about climate change, biodiversity, population, oceans, water, food and agriculture, and other problems. A thematic summary of the group’s conclusions, written by co-chairs Donald Kennedy of Stanford University and Roger Sant of the AES Corporation, communicates the urgency of the challenges, the complexity of the inter-related issues, and the optimism necessary to tackle them.

2000. 220 pages. ISBN: 0-89843-303-7, \$16 per copy

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