

China's Role in the Global Energy Landscape



Program

Welcome Remarks

Paul Brockman | *Joseph R. Perella and Amy M. Perella Chair, Perella Department of Finance, Lehigh University*

Introduction of Speakers

David Knapp | *IAEE/Energy Intelligence Group*

Overview of China's Energy Landscape From E.I.A. Perspective

Guy Caruso | *CSIS/U.S. EIA*

Current Challenges and Outlook for Chinese Natural Gas Market

Zhen Zhu | *University of Central Oklahoma*

Lunch | *Rauch Business Center, Rooms 291, 292, and 293*

ExxonMobil's Global Energy Outlook: A View to 2040 featuring China

Lynne Taschner | *Exxon Mobil*

Evaluation of China's Emission Trading Scheme (ETS) Pilots

Da Zhang | *Massachusetts Institute of Technology*

Panel Discussion

Transformation of Chinese Electricity Sector

Co-Moderators

David Knapp

Alberto Lamadrid | *Professor, Department of Economics*

Panelists

Ayaka Jones | *U.S. Department of Energy*

Andrew Kleit | *The Pennsylvania State University*

Lynne Taschner '74G

Da Zhang

Closing Remarks

David Knapp

Perella Auditorium

Rauch Business Center 184

April 20, 2018



Guy F. Caruso is a senior adviser in the Energy and National Security Program at the Center for Strategic & International Studies (CSIS). Prior to joining CSIS, he served as administrator of the U.S. Energy Information Administration (EIA). Caruso was awarded the French National Order of Merit in 2008 and was elected president of the U.S. Association for Energy Economics this year. He holds a B.S. in

business administration and an M.S. in economics from the University of Connecticut and an M.P.A. from Harvard University.



Ayaka Jones is an international technical advisor at Department of Energy's (DOE) Office of Fossil Energy. She provides technical expertise and advisory services for bilateral and multilateral efforts between DOE and energy ministries of Asia-Pacific countries to leverage DOE's research, development, and demonstration programs for clean coal and carbon management.

Jones holds an M.S. in technology and policy from MIT and an M.E. in thermal engineering from Xi'an Jiaotong University in China.



Andrew Kleit is Professor of Energy and Environmental Economics at The Pennsylvania State University and founding chair of its program in Energy and Business Finance. He has served as a staff economist and economic advisor for the Federal Trade Commission and the Canadian Competition Bureau and as a visiting scholar at the Commodity Futures Trading Commission and the Federal Energy

Regulatory Commission. Kleit has written more than 70 articles, including publications in leading economic and legal journals, and written or edited five books. He has consulted widely on antitrust enforcement, competition, and regulatory issues.



David Knapp is Chief Energy Economist and Senior Editor for Global Oil Market Analysis at Energy Intelligence Group in New York where he served as Editor of Oil Market Intelligence for over a decade. He was a founder and currently serves as president of the board of the New York Energy Forum. Knapp is also a Senior Fellow of the U.S. Association for Energy Economics, is the current vice president of business

and has served on various committees. He has been an appointed advisor to five recent USAEE presidents. Knapp holds a Ph.D. in economics from the University of California at Santa Barbara and is a member of numerous professional organizations in the energy area.



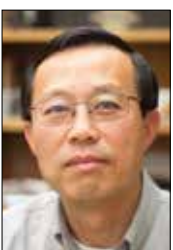
Lynne Taschner is an energy advisor in ExxonMobil's Corporate Strategic Planning Department. In this capacity, she is responsible for assessing economic and energy trends and related market and public policy issues. She is a principal contributor to *The Outlook for Energy: A View to 2040*, identifying potential implications for energy markets and the corporation's strategic plans. Taschner has worked

for ExxonMobil for more than 25 years in a variety of economic and commercial advisory roles. She holds a B.S. in business administration and economics from The King's College (New York) and an M.B.A. from Lehigh University.



Da Zhang is a research scientist at the Joint Program on the Science and Policy of Global Change at MIT. He researches the economic and environmental analyses of China's climate policies and their distributional consequences, analyzing climate policy options, in particular, cap-and-trade, energy cap, and their alternative disaggregation schemes in China. Zhang has a B.S. in industrial engineering and a Ph.D. in

management science and engineering, both from Tsinghua University.



Zhen Zhu is Professor, Dr. Michael Metzger Endowed Chair at the University of Central Oklahoma. He teaches International Economics, Business Statistics, Quantitative Business Forecasting, and other economics courses. His research interests are in the areas of international financial markets and energy markets (in particular natural gas markets). Zhu's research papers have appeared in many academic

journals, including *Energy Economics*, *Energy Journal*, and *Journal of Economics and Management Strategies*.

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The United States is at an inflection point with world leadership in global climate change policy. The current administration has withdrawn from the Paris Climate Agreement. In contrast, *The New York Times* reported that President Xi Jinping of China, in a landmark speech to the Communist Party Congress, promised his country would take a "driving seat in international cooperation to respond to climate change."¹ As the world's second largest economy, China consumes more than one quarter of total global energy each year. As such, major changes in Chinese energy policy could have significant global impact, given the sheer quantity of Chinese energy markets. Recently, the Xi-Li administration's aggressive pursuit of mitigation and clean energy has shifted the traditional focus of China's energy policy. With Xi's commitment to green development and climate mitigation, the Chinese energy sector is bound to undergo rapid transformations.

Today, the Lehigh University Student Chapter of (USAEE) and the College of Business and Economics is jointly hosting an energy symposium to evaluate China's evolving role in the global energy landscape. This symposium will bring together a group of renowned energy experts from government, industry, and academia for a day of insightful presentations and open discussions on key issues such as:

- China's electricity market reform
- Gradual replacement of coal by natural gas
- Future market for renewables and electric vehicles
- Establishment of carbon emissions trading market
- Changes in oil and gas policy and implications
- Appropriate methodology to evaluate China's energy role

By addressing such topics, the symposium aims to provide an outlook for China's energy future, as well as a comprehensive assessment of the global impact of China's environmental and energy policy.

¹ NYT, Nov. 15, 2017