

38th Annual PIRA Client Seminar

Thursday and Friday, October 12-13, 2017

Hilton New York, 1335 Avenue of the Americas New York, NY 10019

[Click here to register](#)

Registration deadline: Friday, October 6, 2017

For Hotel Reservations, call **1-212-586-7000** and request a reservation from the “PIRA Energy Group room block”, or reserve a room online at the Hilton reservation page for this event:

<https://aws.passkey.com/event/49001846/owner/6708/home>

Special pricing for room reservations ends on **September 11, 2017**

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Also happening in New York:

2nd Annual PIRA Executive Energy Conference

Wednesday, October 11, 2017

The 2nd Annual PIRA Executive Energy Conference is for professionals looking to understand the key factors shaping the global energy landscape. PIRA's experts will be joined by the best minds in the industry to discuss the markets, policies and technologies that will shape the global energy future.

[Click here to learn more](#)

PIRA Annual Client Seminar Agenda

Thursday, October 12

- 7:30 am Check-In and Breakfast | *Grand Ballroom East Foyer, 3rd Floor*
- 8:30 am **Welcome Address** | *Grand Ballroom, 3rd Floor*
- 8:40 am Opening Plenary Session: **Global Energy Outlook** | *Grand Ballroom, 3rd Floor*
World Oil Market Outlook – Dr. Gary N. Ross
Global Refining and Oil Product Markets – Richard L. Joswick
- 9:40 am Break
- 10:00 am Opening Plenary Session (cont.):
Global Gas Market Outlook – Ira B. Joseph
North American Natural Gas Outlook – Richard M. Redash
Power and Policy Outlook – Roman Kramarchuk
Longer-Term Issues and Concerns – Dr. Mark A. Schwartz
- 11:20 am Networking Reception | *Grand Ballroom East Foyer, 3rd Floor*
- 12:30 pm Lunch & Keynote | *Grand Ballroom, 3rd Floor*
The Future of Transport Technology; Perspective Required – Ellen Hughes-Cormwick,
Interim Associate Director and Senior Economist, University of Michigan Energy Institute
- 1:45 pm Break
- 2:05 pm **Breakout Session 1** *see page 3 for details*
- 3:20 pm Break
- 3:40 pm **Breakout Session 2** *see page 4 for details*
- 5:00 pm Cocktail Reception | *Grand Ballroom, 3rd Floor*

Friday, October 13

- 7:30 am Breakfast | *Petit Trianon, 3rd Floor* | *Sutton Foyer, 2nd Floor*
- 8:30 am **Breakout Session 3** *see page 5 for details*
- 10:00 am Break
- 10:20 am **Breakout Session 4** *see page 6 for details*
- 11:50 am Break
- 12:10 pm **Breakout Session 5** *see page 7 for details*

**Non-Shale, Non-OPEC Overview:
Prospects for Stabilization**

Outside of U.S. shale, non-OPEC liquids production continues to be impacted by lower prices, reduced spending, and a slowing project pipeline. Meanwhile, contributions from new projects sanctioned in a higher price environment are peaking. In this session, we examine the prospects for stabilization in non-OPEC. We also discuss trends in development costs and production in major non-OPEC countries.

- Shin Kim
- Bill Fuller
- Rene Santos
- Connor Wiik

**Global Refined Product Markets
and Crude Price Differentials**

This session will focus on product supply-demand trends, near-term and longer-term refining balances, and how operations will evolve as oil supply changes and product quality specs evolve (e.g., bunkers). The implications and outlook for product spreads, refining margins, and crude price differentials will be addressed.

- David A. Zinamon
- Gary M. Greenstein
- Richard L. Joswick

**Near-Term North American Gas
Balances and Henry Hub Price Risks**

A return of normal weather would inflate the call on U.S. supply during the 2017-2018 heating season, which is already being buoyed by capacity-driven expansion projects from the "Big-Three." While gas production is now growing again, U.S. balances may still require prices to ration supply. Moreover, the extent of below-normal end season U.S. storage would help justify more extended prices strength in 2018.

- Richard M. Redash
- Beth McKay
- Kevin Sakofs

**North American Power Outlook
and Sensitivities**

This session will review the assumptions underlying the new long term forecast and present regional results with a focus on energy and capacity prices and changes in the capacity and generation mix, including a detailed discussion of the impacts on domestic coal markets.

- Morris Greenberg
- Manan Ahuja
- Dana Lazarus
- Joe Aldina

**Electric Vehicles: Niche Market
or Disruptive Boom?**

Industry projections for the adoption of electric vehicles have been broadly raised across the board over the past year, but the range of opinions around the speed and ultimate penetration of EVs is still quite large. In this session, we will assess the key developments in EV technology and policy, and their interactions, as well as the potential impact on the liquid fuel and power outlooks.

- Mark Schwartz
- Roman Kramarchuk
- Mark Mozur

Is OPEC Still Relevant?

The role of OPEC and Saudi Arabia is evolving in the face of growing shale volumes. In this session, we discuss our views on policy direction in Saudi Arabia, the rising challenges and coping mechanisms of OPEC, and future OPEC production and trade flows.

- Mark Schwartz
- Shin Kim
- Paul Sheldon
- Sammy Six

Biofuels and Agriculture Outlook

The Trump Administration has changed the tone of environmental/biofuel regulations, and we will examine how this affects RIN balances and prices, as well as the prospects for E85 and E15. Global biofuel markets and California's LCFS requirements will be also reviewed. The session will cover our outlook on corn and soybean production in 2017 as well as what to expect in 2018 from both North America and South America.

- David A. Zinamon
- Dr. Bruce H. Pickover
- Corey Lavinsky
- Peter J. Meyer

Renewables and Battery Storage Outlook and the Impact on Fossil Fuels

While renewable capacity installations continue to accelerate globally, battery storage is beginning to penetrate the electricity sector at both the retail and wholesale level. This session will examine the cost and utilization outlooks for renewables and storage, and their impact on fossil fuel consumption.

- Bruno Brunetti
- Daniel J. Klein
- Jennifer McIsaac
- Jeff Berman

Outlook for Regional Natural Gas Prices in the Context of a Changing Supply Mix

The rapid increase in US natural gas production over the past five years has driven a wave of investment in new long-haul pipeline projects. Indeed, the Appalachia region could add over 20 BCF/D of new capacity this year and next. The substantial investment in midstream and supply has dramatically reshaped how gas flows in the US and the historic relationship between regional natural gas price hubs. What does the evolution in the U.S. supply mix mean for regional prices?

- Teri Viswanath
- Anne Swedberg
- Luke Jackson
- Bob Yu

Bunker Specification Changes: Will the Industry Be Ready?

Global bunker specifications are set to radically change in 2020 even though there is still considerable uncertainty on the details of how that change will be implemented. The implications for refining, shipping, product pricing, and product trade are tremendous. This session will do a deep dive into likely industry adaptations/adjustments, as well as the implications for operations, trade, and price.

- Kenneth M. Bogden
- Gary M. Greenstein
- Richard L. Joswick

North American Shale: Shifting Balances of Oil, NGLs, and Gas

Shale will continue to dominate U.S. production growth in oil, NGLs and natural gas. But ongoing efficiency gains and productivity improvements will face off with rising costs as activity accelerates. In this session, we detail PIRA's forecasts and assumptions for U.S. shale liquids growth by commodity.

- Shin Kim
- Rene Santos
- Jennifer Van Dinter
- Caleb Kao

North American Crude Oil Balances and Price Differentials

North American crude production is growing rapidly centered on shale but also including expansions for Canadian heavy and other projects. Crude exports will grow. Pipeline and terminal infrastructure will expand. This session will examine the implications for North American refinery operations, crude balances, imports and exports, and crude price differentials.

- Stephen Brink
- James D. Feaster
- Jenna Delaney

Regional North American Gas Trends and Prices and the Evolving Role of the Power Sector

While the unfolding structural increase in the call on supply is heavily skewed in favor of the U.S. Gulf Coast given the significant role the industrial demand and exports are playing, the participation of the power generation sector stands to create more widespread opportunity for production across the continent. However, infrastructure considerations will play a major role in shaping the composition of gas supply, and thus price formation for not just Henry Hub, but other regional markers.

- Morris J. Greenberg
- John Ell
- Teri Viswanath
- Shuya Li

Will LNG Be Able to Capture Enough Demand From Coal to Absorb New Supply?

The pace of LNG supply growth and slowdown in global gas demand growth has raised the possibility that LNG will need to capture significant volumes from coal outside of traditional coal-to-gas switching markets to balance. This session will focus on the location and potential volumes of global coal-to-gas switching, and the impact on global coal and gas markets.

- Daniel J. Klein
- Joshua Zwass
- Giuliano Bordignon
- Chris Durman

Environmental and Regulatory Risks in the Age of Trump

The Trump Administration has called into question the American energy and environmental policy framework. This session will explore the policy changes that President Trump is attempting, the regulatory tools at his disposal, and implications across the energy spectrum. It will also discuss the heightened focus on regional/state-level policies and markets, and the implications for global initiatives.

- Roman Kramarchuk
- Jennifer McIsaac
- Paul Sheldon
- Dominic Watson

Crude Oil Trade Flows: Impacts of U.S. Exports on the Global Market

With the growth in North American shale and restraint in OPEC, global crude trade flows are changing, and refiner's incentives are shifting. Further changes will come from the change in global bunker specifications. This session will focus on changes in global crude quality, inter-regional trade flows, and refinery economics.

- Richard L. Joswick
- Jenna Delaney
- Sammy Six
- David Xu

Emergent Role of the US in the Global NGL Market

Rapidly growing US NGL production continues to have a profound impact on NGL trade flows around the world. This session will focus first on PIRA's US NGL supply outlook and how domestic demand and infrastructure is responding to growing supply. Next, with the US now the largest source of NGLs globally, the panel will offer an outlook for global supply and demand, including how global trade flows and prices are realigning based on the US supply outlook.

- Jennifer Van Dinter
- Daniel Vagasky
- Nancy H. Lin

North American Gas Trade and its Expanding Role in the Global LNG Market

The U.S. is on the precipice of shifting from its longstanding role as net gas importer to a net as LNG exports rise along with pipeline exports to Mexico as pipeline imports from Canada founder. With LNG export capacity set to swell in the coming years, the importance of trade - within North American and beyond - will assume heightened importance with Henry Hub price risks at the fore.

- Richard M. Redash
- Madeline Jowdy
- Jeff Moore
- Ross Wyeno

Macroeconomic Outlook and the Energy Balances

The global economic expansion has been underway for nine years but there are no signs of an end in sight. This session will address the nature and characteristics of the recovery to date and assess the likelihood of recession, slowdown, or an acceleration in growth. We will further examine the implications back on oil and power markets and pricing.

- Gary Eisen
- Alan Struth
- Nobuo Tarui
- Dr. Lin Fan

North American Power: Policy and Technology Scenario Analysis

Recognizing the uncertainty surrounding policy and technology assumptions incorporated in the reference case for North American electric power markets, this session will present alternative scenarios for key inputs (including energy efficiency, carbon, renewable and storage costs, transmission) in an attempt to bound the range of outcomes for investments in the power sector.

- Morris Greenberg
- Manan Ahuja
- Dana Lazarus

Regional Oil Product Refinery Output, Demand, and Trade Flows

Oil product refinery output and local demand are changing product balances and trade between regions/countries. This session will focus on key areas of product import growth (Latin America, Africa), export growth (U.S., Russia) and areas of dynamic change in the Middle East and Asia.

- Lenny Rodriguez
- Richard M. Joswick

The Evolution of Natural Gas/ LNG Price Benchmarks

The relationship among the world's gas benchmarks - Henry Hub, NBP/TTF, and JKM - continues to evolve, as spot LNG trade blossoms in the age of surplus production. The role these benchmarks plays is both spot and contract LNG pricing offers a significant departure from traditional ties to crude oil. This session addresses how these benchmarks are changing the pricing of gas.

- Ira M. Joseph
- Joshua Zwass
- Melanie Sawaryn

Beyond China and India: Global Growth Shifts to Southeast Asia

Although often overlooked in favor of China and India, the ASEAN region is set to emerge as a key component of global energy demand in the coming years. This cross commodity session will examine the outlooks for oil, gas, coal and power in Southeast Asia.

- Daniel J. Klein
- Madeline Jowdy
- Jeff Berman
- Naing Oo

PIRA's New World Refinery Database and Platts cFlow Case Studies and Product Demonstrations

Join us for two case studies that will highlight the depth and breadth of PIRA's World Refinery Database and Platts cFlow products. We will discuss how the data in these tools can help answer key questions impacting the global refining sector as well as bringing transparency to global oil trade flows.

- David A. Zinamon
- Joseph Pezzino
- David Xu

SECOND FLOOR



THIRD FLOOR

