RBN's Latest U.S. Curriculum **PLUS**

New Content and Models

Oil, Gas and a Special Focus on NGLS

Energy markets are undergoing another tectonic shift, with production growth slowing at the same time pipeline takeaway constraints are being relieved and the reality of tight capital markets is sinking in. Long-delayed LNG terminals and NGL-consuming petrochemical

plants are coming online. Essentially all growth in

crude, gas and NGL production volumes is being exported to global markets, and those markets are starting to push back. All this has huge implications for commodity flows, infrastructure utilization and price relationships for oil, natural gas and NGLs.

Buffeted by oil and gas, petrochemicals and their own unique value chain, NGLs are particularly vulnerable to these turbulent shifts in flow patterns and price differentials and that is just what is on the horizon.

School of Energy Spring 2020 will build on our oil and gas curriculum to do a Special Focus on NGLs. We've updated and expanded all our NGL models to fit the new realities of today's NGL markets.

This is nothing like other natural gas, crude oil or NGL conferences!

April 14-15, 2020

The Houstonian 111 North Post Oak Lane Houston, Texas 77024

Tuesday, April 14 8AM – 5PM (HAPPY HOUR)

Wednesday, April 15 8AM – 5PM



Making Connections Across Energy Markets

In RBN's highly respected blog, industry conference presentations and consulting practice, we explain the how and why of the most important developments in the markets for crude oil, natural gas and NGLs.

At the School of Energy, we bring this perspective to an intense two day curriculum of energy market fundamentals. Your instructors will apply down-to-earth, understandable concepts, real world examples and usable economic models toward the goal of understanding energy markets.

There will be no industry luminaries waxing eloquent about the hottest infrastructure project or game changing developments. Instead, RBN instructors will lead you through a tightly scheduled curriculum designed for maximum learning.

This is not a course for complete newbies. We assume you have some working knowledge of at least one of the three energy markets we are targeting: crude oil, natural gas or NGLs.

- You will need a laptop computer with internet access and Microsoft Office 2010 or higher. Yes that means you will be downloading several RBN energy economic models and working with them in class. That's what hands-on means.
- This is not about networking. The breaks are short, and the work is demanding. You can hang out at the Happy Hour on Tuesday evening.
- You will have access to both the Power Point slides and spreadsheet models used in the coursework in real-time.
 At the end of the course you will walk away with all of these materials.
- There will be math. But nothing beyond your basic spreadsheet formulas and functions.

School of Energy Faculty



Rusty Braziel, CEO, RBN Energy Previously with Bentek Energy, Texaco (Chevron), Williams, Altra



David Braziel, President, RBN Energy Previously with Direct Energy and Apache Corporation



Scott Potter, Managing Director, Business Development, RBN Energy Previously with Aquila, Texaco, Altra



Sheetal Nasta, Fundamental Energy Analyst, RBN Energy Previously with Bentek Energy and Platts



Rick Smead, Managing Director, Advisory Services, RBN Energy Previously with Navigant, El Paso Pipeline Group, Colorado Interstate Gas Company



Jason Ferguson, Manager, Energy Fundamental Analysis, RBN Energy Previously with Koch Energy Services, Shell and ExxonMobil



Manfred Jeske, Analyst, Energy Intelligence, RBN Energy Previously with capSpire, Anadarko, Northville Industries and ARB Midstream.



TJ Braziel, Director of Client Services, RBN Energy Previously with Bentek Energy, Genscape, and RioData

REGISTER NOW!

www.rbnenergy.com/school-of-energy

DISCOUNTED LODGING:

RBN Energy has reserved a limited number of rooms at The Houstonian for a discounted rate of **\$229** per night, not including taxes. This rate will be honored through **March 23, 2020** depending on availability.

Hotel reservations must be made directly through The Houstonian.

Book using this link to receive our group rate, or mention

Group Code: 8174959 when booking.

REGISTRATION FEES

	Early Bird	Full
Event	\$2,495	\$2,995

Early Bird rate ends on March 23, 2020

Phone: 888-612-9488

Email: school@rbnenergy.com

RBN School of Energy Class Schedule: April 14–15, 2020

Tuesday, April 14 – School of Energy – Day 1

8:00 Welcome and Introduction

Module #1: Fundamentals

Market Realities 2020: Prices, Production and Demand Fundamentals of Fundamentals

Understanding Energy Fundamentals Models

LAB Model 1.1 – NGLs to Crude: Price Behavior and Relationships

9:45 - 10:00 Morning Break

North America NGL Fundamentals and Export Dynamics

Module #2: Production

Production Economics – The Basics
Unconventional and Conventional Production
Price Scenarios, Type Curves, and Investment Returns
Well Cost, Production Rates, Decline Curves
and Other Variables

LAB Model 2.1 – Production Economics

12:00 - 1:00 Lunch (RBN VIP subscribers join Rusty for Market Breakout Session)

Production Forecast Concepts and Methodologies

LAB Model 2.2 – Production Forecasting

Module #3 - Crude Oil Markets

Crude Oil Market Overview, Export Drivers and Constraints Production Forecasts

Infrastructure Projects: Pipelines and Export Terminals

LAB Model 3.1 – Crude Oil Transportation Rates and Netbacks

2:45 – 3:15 Afternoon Break and Book Signing: The Domino Effect

Permian Crude Infrastructure, Flows, Constraints
Fundamentals of Refining: Units, Processes, Products
Crude Quality: Implications for Prices, Pipelines, Refining
IMO 2020: What Happened and What Happens Next?

Representative Margins

LAB Model 3.2 – Petroleum Product Prices and Crack Spreads LAB Model 3.3 – Refinery Yields and

5:00 Happy Hour

Wednesday, April 15 – School of Energy – Day 2

8:00 Agenda

Module #4: Natural Gas Markets

North America Gas Market Overview

LAB Model 4.1 – Gas Market Analytics Using Pipeline Flow Data

Natural Gas Transportation, Rates and Regulation

LAB Model 4.2 – Estimating Rates for Natural Gas Pipelines

9:45 - 10:00 Morning Break

Natural Gas Prices and Demand Factors

LAB – Model 4.3 – Natural Gas Netback Analysis

Permian Gas, Flow/Capacity and Pricing Developments

LAB – Model 4.4 – Key Driver of Demand: Coal to Gas Switching

Module #5: Natural Gas Liquids Markets

The Tectonic Shift in NGL Markets: Surpluses, Exports, Price Volatility

12:00 - 1:00 Lunch

LAB Model 5.1 – The NGL Frac Spread

LAB Model 5.2 – Natural Gas Processing Model

LAB Model 5.3 – The Economics of Natural Gas Processing

NGL Supply and Demand by Product International LPG Markets: Destinations, Terminaling, Shipping, Arbitrage

2:45 - 3:15 Afternoon Break

LAB Model 5.4 – Ethane Recovery and Rejection Economics

LAB Model 5.5 – Petrochemical (Steam Cracker) Feedstock Margins

Permian NGL Production and Flows

What Does it All Mean?

5:00 Adjourn

All Modules Subject to Change

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Reviews

Some of the comments from School of Energy



"I had an incredible experience at RBN SOE. I read the blog every day and have found the information from the conference very helpful"

Claire Behar, Freepoint Commodities

"What a phenomenal course! Enjoyed every minute of it and am thankful for the opportunity. Look forward to more classes in the future!."

Alan Hoover II, Rangeland Energy

RBN School of Energy

"The conference was terrific. Very thorough. Food was great, facility is terrific. We will be back."

John Waggoner, StratGas Energy Solutions

"Excellent course! Content for individual commodities was concise but practical. More importantly the course took an integrated approach showing inter-relationships, key fundamental drivers, and likely direction for the energy market moving forward."

James R. Randall, ONEOK

"Very good school/seminar. At times it was like drinking from a fire hose. Excellent job by all!"

Bob Haydock, Protégé Energy





Earn CPE credits at School of Energy!

Program Level: Intermediate

Delivery Method: Group -Live, External Participation only



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Conference participants can earn up to 12 CPE credits of specialized knowledge.

Prerequisites: Previous experience in Energy Industry. No advance preparation is required.

Objectives:

The goal of this conference is to educate and inform participants on the important aspects of the energy markets. At the end of the conference, participants will be able to:

- · Identify at least three energy market fundamentals (supply and demand, market infrastructure, pricing)
- Describe how market fundamentals affect natural gas, crude oil and natural gas liquids markets
- models to enter market data and interpret the results

• Apply skills learned in labs to cases that will test the participants knowledge of how market models work

Conference Policies:

Refunds and Cancellations: Requests for refunds must be received in writing by March 23, 2020

> and will be subject to a \$195 cancellation fee. No refunds will be granted after March 23, 2020.

RBN Energy, LLC is registered with the **National Association of State Boards** of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the

acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: www.learningmarket.org

• Demonstrate excel skills by using the excel spreadsheet

This program has been approved by GARP and qualifies for 12 GARP CPD credit hours. If you are a Certified ERP or FRM, please record this activity in your credit tracker at www.garp.org/cpd



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