

School of Energy

HAS GONE
VIRTUAL!

RBN's Latest
U.S. Curriculum

PLUS

New Content
and Models

Oil, Gas and a Special Focus on **NGLs**

With the safety of our students and faculty being our top priority, and the recent COVID-19 outbreak, we've made the decision to GO VIRTUAL! We will webcast the entire School in real-time, during the same two days as the originally scheduled dates.

We will have updated content to reflect the recent tectonic shifts in the industry, with additional faculty and updated same models. Only now you'll participate in the comfort of your home or office, rather than at a conference center. We'll do everything we can to make the experience just like the in-person conference, including live Q&A, real-time access to presentation materials, and downloadable models.

Global energy markets were already shifting due to slowing production growth, relief of pipeline takeaway constraints, the tightening of capital markets, and long-delayed LNG terminals and NGL-consuming petrochemical plants coming online. Now COVID-19, an international crude oil pricing war, and plummeting stock prices have sent markets into a free-fall.

How do we even think through the wrenching transformations that are working through energy markets? At RBN, we have a structured approach to market analysis supported by comprehensive spreadsheet models that are the core of our now VIRTUAL School of Energy.

April 14–15, 2020

Tuesday, April 14
8AM – 5PM

Wednesday, April 15
8AM – 5PM

 **RBN Energy** LLC

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.
- The webcast will be hosted on the RBN Energy website. You will need to be logged in under an profile with an active School of Energy License to access the videos and material.
- 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 and 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 and Altra



Sheetal Nasta, Managing Editor, RBN Energy
Previously with Bentek Energy and Platts



Rick Smead, Managing Director, Advisory Services, RBN Energy
Previously with Navigant, El Paso Pipeline Group and 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 RigData



John Hall, Senior NGL and Natural Gas Advisor
Previously with Tenaska Capital Management and Northern Natural Gas



Bob Tippee, RBN Senior Advisor
Previously Oil and Gas Journal Editor



Amy Kalt, Consultant, Manager of Analytical Services, Baker & O'Brien



Simon Hill, Chief Operating Officer of Energy Trading Analytics, Inc. (ETAI)
Previously with Petredec, Texaco (Chevron) and BNOC

REGISTER NOW!

www.rbnenergy.com/school-of-energy

REGISTRATION FEES

Event

\$1,250

Phone: **888-612-9488**

Email: school@rbnenergy.com

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

Welcome and Introduction

Module #1: Fundamentals

- 1.1 Market Realities 2020: Prices, Production and Demand
- 1.2 International Developments: COVID-19 and OPEC+ Tensions
- 1.3 Fundamentals of Fundamentals Conventional/Unconventional
- 1.4 North America NGL Fundamentals and Export Dynamics

Morning Break

- 1.5 Understanding Energy Fundamentals Models
LAB Model 1.6 – NGLs to Crude: Price Behavior and Relationships

Module #2: Production

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

LAB Model 2.2 – Production Economics

Lunch

- 2.3 Forecasting Production: Concepts and Methodologies
- 2.4 LAB Model – Production Forecasting
- 2.5 Oil, Gas and NGL Production Forecasts

Module #3 – Crude Oil Markets

- 3.1 Crude Oil Market Overview, Export Drivers and Constraints
- 3.2 Infrastructure Projects: Pipelines and Export Terminals

LAB Model 3.3 – Crude Oil Transportation Rates and Netbacks

Afternoon Break

- 3.4 Permian Crude Infrastructure, Flows, and Constraints
- 3.5 Crude Quality: Implications for Prices, Pipelines, and Refining
- 3.6 Fundamentals of Refining: Units, Processes, Products
- 3.7 Crude Oil Slates, Collapse in Petroleum Product Demand and IMO 2020

LAB Model 3.8 – Petroleum Product Prices and Crack Spreads

LAB Model 3.9 – Refinery Yields and Representative Margins

Module #4: Natural Gas Markets

- 4.1 North America Gas Market Overview
LAB Model 4.2 – Gas Market Analytics Using Pipeline Flow Data
- 4.3 Natural Gas Transportation, Rates and Regulation
LAB Model 4.4 – Estimating Rates for Natural Gas Pipelines

Morning Break

- 4.5 Natural Gas Prices and Demand Factors
- 4.6 LNG Exports, Feedgas and Projects
- 4.7 Permian Gas: Flow, Capacity and Pricing Developments
LAB Model 4.8 – Key Driver of Demand: Coal to Gas Switching

Module #5: Natural Gas Liquids Markets

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

Lunch

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

Afternoon Break

- LAB Model 5.7 – Ethane Recovery and Rejection Economics
- 5.8 Permian NGL Production and Flows
LAB Model 5.9 – Petrochemical (Steam Cracker) Feedstock Margins
- 5.10 NGL Price Forecasts
- 5.11 What Does it All Mean?

Adjourn

All Modules Subject to Change

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

