



PHYSICAL NATURAL GAS TRADING

Presented by Energy Management Institute

Whether you're a trader focused on making money or a buyer whose priority is saving money, this course will give you the information you need to thoroughly understand how natural gas is traded physically.



WWW.EMI.ORG

COURSE DATES & LOCATIONS

- February 22-23, 2017: Houston, TX
- March 30-31, 2017: Calgary, Alberta
- April 11-12, 2017: Houston, TX
- June 7-8, 2017: Tulsa, OK

REGISTER TODAY!

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DETAILS INSIDE

What You Will Learn

During this course, we'll be covering the biggest topics impacting the physical natural gas market today, including:

- The reversal of pipeline flows due to the shale supply. Several pipelines are in the process of turning their physical flow direction in the opposite direction. Shale production is not only changing the valuation of the commodity but the actual physical dynamics of the infrastructure, skewing the traditional relationship of the supply demand model.
- Shale production and its implications on the underlying value (NYMEX futures), the effect on the basis markets, and the effects on the midstream infrastructure.
- The current development of gas-fired power generation and the displacement of coal.
- The changing supply/demand equation that is currently underway in the gas market, largely due to power generation needs.

EMI's unique program delves into the details of the physical markets, operations and logistics, and distinct difference between physical and financial markets. We'll focus on making money for traders and saving money for buyers. Course attendees will be exposed to arbitrage (spread) trading as well as outright (long/short) trading opportunities. EMI will present approaches that work for physical trading as well as valuing and relating natural gas back to the wellhead.

Finally the program will end with a very exciting, simulated trading exercise, showing the value of the New York Mercantile Exchange as a remarkable and powerful tool to manage and create transactions. You will:

- Learn about supply and demand for natural gas in various geographic areas of the U.S.
- Explore physical gas markets, pricing information, operations, and contracts.
- Gain knowledge about futures, swaps, options, and Over the Counter markets.
- Become familiar with trading techniques, terminology, hedging, and physical trades.
- Develop expertise in management of market exposure and price risk.
- Improve your negotiation skills.

Subjects covered include:

- Natural gas supply and demand.
- Cost of natural gas from the wellhead to the burner tip.
- Discussion of various pricing mechanisms.
- Physical gas markets and pricing.
- Operations and logistics.
- Comparison of physical and financial trading.
- Arbitrage/spread trading.
- Physical outright (long/short) trading.
- Approach to trading physicals.
- Simulated trading session.

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8am - 4:30pm both days
- **March 30-31, 2017 - Calgary, Alberta**
8:30am - 4:30pm both days
- **April 11-12, 2017 - Houston, TX**
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See last page for venue addresses.

REGISTER ONLINE

EMI CERTIFICATION CREDIT



This course earns 6 credits towards EMI Certification.

REGISTRATION FEES

1st delegate:	\$1,995
2nd delegate:	\$1,795
3rd delegate:	\$1,600

Course Syllabus DAY ONE: The Primer

Session 1: Overview of the U.S. Physical Natural Gas Market

Let's set the stage by addressing the topic. What is the production and distribution path and how is physical natural gas produced, transported, balanced, sold and purchased? Why trade natural gas and why trade physical natural gas?

We will delve into the trading characteristics of natural gas and structure of physical gas markets in the U.S., with supply by domestic, Canada and Mexico sources and others countries via liquefied natural gas. We will review the basics of natural gas and characteristics of physical gas markets. Let's look at the history of physical gas markets starting with the pre-futures markets and pre-deregulated markets, both the intrastate and interstate gas transactions. We will see significant differences and opportunities in today's physical gas market. Finally we will touch on who the major players are and what their objectives and strategies might be.

Session 2: Overview of Physical Natural Gas Fundamentals

This session will delve into the physical natural gas fundamentals of supply and demand. It will be a no-nonsense "primer" with detailed analysis of the supply, demand and volatility drivers such as weather, storage, economic conditions, manufacturing inventories, alternate fuel, and pipeline capacity.

Session 3: Differences, Pros and Cons of Trading Physicals and Financials

This session will delve into a detailed discussion of the pros and cons of trading physical and financial natural gas. We will look at each attribute and negative, and discuss why each of these is different with an eye toward profitability, liquidity and risk management. This session will also review the main trading procedures employed in both the physical and financial areas.

Session 4: Physical Natural Gas Price Mechanisms

This session will discuss all of the various pricing mechanisms used in both the physical and financial markets. The session will begin with an overview of all of the main, traditional pricing mechanisms in the U.S., Mexico and Canada and then move into commodity-related pricing basis. We will discuss how these mechanisms are applied and when and why to use the various pricing options.

Who Should Attend

This course is specifically designed for people working in: Gas Trading Risk Management, Supply, Transport and Operations, Sales and Marketing, Energy Purchasing, Management and Financial Accounting, Strategic Planning and Economics, and Analysis.

CPE CREDITS



This course earns 14 CPE credits.

Energy Management Institute 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 addressed to the National Registry of CPE Sponsors, 150 Fourth Avenue North, Suite 700, Nashville, TN, 37219-2417.

Web site: www.learningmarket.org.

Course Syllabus
DAY TWO: Let's Focus On The Economics And Making Money

Session 1: Operations and Logistics

This major element of physical trading is the need to move the commodity, including international, interstate and intrastate transportation, balancing, parking and storage. We look at the operations and logistics side of these area, as well as economics.

Session 2: Natural Gas Arbitrage Trading

Are market fundamentals leading the market or are futures leading the fundamentals? Yes to both. This session will discuss how fundamentals and futures are integrated. Let's look at various futures/physical trades and positions from both a trading and risk management perspective. One of the most common approaches to physical trading natural gas is from an arbitrage (spreads) viewpoint. We will set up a variety of arbitrage relationships and go through the analysis, economics, trade potential and the main market drivers.

Session 3: Physical Natural Gas Arbitrage Trading

We will continue where we left off in the previous session, only this time we will be focusing on the major physical product relationships domestically and internationally. We will set up a variety of arbitrage relationships and go through the analysis, economics, trade potential and the main market drivers.

Session 4: A few Approaches that Work for Physical Natural Gas Trading

This session will continue where the previous session left off and discuss some of the major techniques that work well for the physical gas market. Some trading tools and techniques work better than others for the various markets. The session will discuss some of the major approaches for both outright (long/short) and spread trading. We will take a techno-fundamental approach to the market. The fundamentalists use industry-specific information to determine why markets move while the Technical trader uses price and volume data to determine the direction and timing of the market. Do they contradict each other or can they be used synergistically? This session will use them synergistically in analyzing the main physical markets. Past and current data will be used to demonstrate the approach.

Session 5: Simulated Trading

This exercise will demonstrate the excitement, risk and reward of trading physical natural gas. We will conduct a simulated trading session that will demonstrate many of the principles discussed in the course.



Learn From the Experts that Experts Trust

EMI experts are frequent editorial contributors to petroleum magazines & are trusted by today's leading news sources.

Our experts have been featured in:

Futures Magazine • The Wall Street Journal • USA Today • The New York Times • The Washington Post • Journal of Commerce • CNN • NBC • CBS • ABC • Bloomberg • Reuters

EMI's leading industry experts have an average of over 30 years of knowledge and experience in:

**Energy • Commodity trading • Risk management
• Education • Consulting • Financial services**

Plus many years of managing marketing, international trading, manufacturing, consulting, start-up operations and project finance operations of well-known companies; integrated major oil companies as well as international trading companies.

EMI's industry experts have also provided risk and value management analysis, advice, information, and services to a variety of companies in the electric power industry. Clients have included power marketers, integrated utilities, retail power providers, hedge funds, and power plants.

Highlights of our instructors' experience include: • Developing a suite of models for a variety of power markets that quantify value and risk • Managing spark spread portfolios for hedge funds in the power markets • Operating in futures trading pits as a market observer in the power markets • Developing working papers for investigations and performing compliance audits in the power industry • Helping Texaco initiate its first use of futures exchanges as an integral part of hedging/trading strategy • Chief Operating Officer of Triwell Marketing and refining • Director of OPIS, Oil Price Information Service, a management-consulting and educational services group that solely focused on the downstream energy industry • Member of Board of Directors of Longview Refinery • Member of the New York Mercantile Exchange Petroleum Advisory Board • Expert witness for a hearing before the subcommittee on surface transportation for the Commerce, Science, and Transportation Committee of the US Senate • Supplied expert testimony to a US Senate sub-committee hearing on diesel petroleum product pricing • Supplied testimony to the Federal Highway Administration regarding fuel tax evasion • Expert witness in a MTBE litigation against the major oil companies • Publishers of The Daily Hedger, BTU's Daily Gas Wire and BTU's Daily Power Report, which advise thousands of petroleum professionals daily.

Our instructors are frequent expert speakers for numerous petroleum industry events and trade associations including: • DOE DESC World Energy Conference • OPIS Fleet Fueling • CME NYMEX • Fuel Management University • NATSO • ATA • AAA • Dairy Distribution • eyeforEnergy eCommerce • OPIS Supply Summit • CIOMA • American Society of Mechanical Engineers • American Society of Lubricating Engineers • Ambrust Aviation • NACHA.

Over the years EMI has developed a series of intensive courses covering all aspects of Energy from production all the way to managing the impact price and volatility on the margin of end-users, resellers, traders, marketers, shippers, retailers and refiners. Our instructors have had the privilege to instruct thousands of professionals representing all aspects of the energy industry, including every major oil company (i.e. Exxon Mobil, BP, Shell, Equilon, Motiva) major power utilities (i.e. Sempra, Edison Mission, Berkley, Toronto Hydro, Dominion, Conectiv) small marketers (i.e. Sprague, Getty, Southern Counties, Western Petroleum) trucking fleets from 50 to 10,000 (i.e. UPS, U.S. Postal Service, Yellow, Pepsi, Werner), gasoline-powered fleets hyper-markets (i.e. The Pantry, Wawa, BJs Wholesale) and many fortune 500 energy consumers.

REGISTER ONLINE

Registration Fees:

1st Attendee: \$1,995 for full program

2nd Attendee: \$1,795

3rd Attendee: \$1,600

1 CHOOSE YOUR COURSE DATE/LOCATION

February 22-23, 2017
Norris Conference Center
Houston/City Centre I/
10 Katy Freeway Area
803 Town & Country Blvd.
Houston, TX 77024
PH: 713.590.0950

March 30-31, 2017
Regus Bankers Hall
888 3rd Street, South West
10th Floor, West Tower
Calgary, Alberta T2P 5C5
PH: 403.668.6000

April 11-12, 2017
Regus Conference Center
Downtown Houston
Two Allen Center
1200 Smith Street, 16th Floor
Houston, TX 77002
PH: 713.353.4600

June 7-8, 2017
Regus Business Center
Kennedy Building
321 S. Boston
Suite 300
Tulsa, OK 74103
PH: 918.986.1600

Hotel recommendations for select course locations available online at www.energyinstitution.org/hotels

2 ENTER ENROLLMENT DETAILS

First Name: _____ Last Name: _____

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email Address: _____

3 MAKE PAYMENT CHOICE

Please make checks payable to: "PMA"

Please invoice my company (payment must be received prior to course date)

Pay by credit card (circle one): Mastercard Visa American Express

Card Number: _____ Expiration Date: / /

Card Holder Name: _____

Card Holder Signature: _____

4 SUBMIT REGISTRATION FORM

EMAIL: Send form to register@pmaconference.com.

TEL: Call PMA Conference Management at 201.871.0474

FAX: 253.663.7224

POST: PMA Conference Management
POB 2303
Falls Church, VA 22042

REFUND/CANCELLATION POLICY

Attendees may reschedule for a different date or course with no penalty. Attendees may substitute a colleague in place of themselves as long as prior notice is given to EMI.

Course fees are 100% refundable up to 14 days prior to course date, 80% refundable up to 5 days prior to course date and 50% refundable up to 2 days prior to course date. Cancellations are non-refundable thereafter.