

# International Trade, Refining, Transportation, and Oil Supply

Recognizing Opportunities and Risks and Optimizing Earnings

## Introduction

The goal of this training course on worldwide oil supply, transportation, refining, and trading is to provide learners with a thorough understanding of these areas. In addition, the dangers, legal, and regulatory concerns related to the worldwide trade of crude oil and refined products will be covered in this oil and gas training course.

The vast array of fundamental techniques of the petroleum industry, including exploration, extraction, and refining; as well as global oil supply, reserves, production, and trade flows, are covered in this training course on international oil supply, transportation, refining, and trade. Understanding the industry's downstream activities including the trade of crude oil and refined products, along with the risks and uncertainties that accompany it, is possible with a comprehensive understanding of these fundamental upstream and midstream procedures. Given the constant nature of price volatility, a detailed presentation of relevant strategies for price risk management follows. It's critical for managers to keep on top of the most significant and dynamic components of the value chain, which include sales, marketing, trading, and risk management.

### **Included in this Course N Carry training program will be:**

- Important success criteria for oil production, transportation, and exploration
- Key components of the economics of petroleum refining
- Increasing the economics of refineries and the oil industry's overall profitability
- Concentrating on methods and strategic strategy to lower business risk
- International oil supply, transportation, and storage logistics
- A practical look at selling, marketing, and trading of crude oil

## Objectives

### **After completing these training sessions, individuals will be capable of:**

- Recognize the fundamentals and procedures of upstream oil exploration, production, and supply.
- Recognize the refining process and calculate net and gross margins for refineries.
- Recognize LP models and create standards for choosing crude oil

- Prioritize projects, compute financial benchmarks, and use petroleum economics.
- Assist in drafting contracts for the sale of crude oil and refined products, as well as estimate expenses, negotiate, and compare actual transactions.
- When renting a ship, use the world scale reference to determine the profitability.
- Recognize the dangers associated with global markets and the formation and dissemination of pricing.
- Recognize the hedging instruments, ascertain the exposure to price risk, and control price risk
- Learn about the legal and regulatory concerns surrounding the global dimensions of oil trade.

## Training Methodology

In order to promote delegate participation, this highly interactive course on international oil supply, transportation, refining, and trade combines brief videos, group discussions, business case studies to reinforce newly acquired knowledge and skills, and a discussion of "real life" issues in the context of the delegate's organization.

It will be quite engaging, giving you the chance to share your thoughts and opinions. In an atmosphere of encouragement, participation is welcomed. A variety of teaching techniques will be used to reinforce the topics covered in the training course, including lecture-style presentations, simulations of oil fields and refineries, and demonstrations of real-time changes in the price of crude oil.

Technical films and PowerPoint slides will be used to provide this training session. To further engage the delegates and promote idea sharing, case studies and led discussions will be added. Short films, market buying and selling systems, and simulations will also be utilized to amplify key ideas and connect the course content to practical experience.

## Organizational impacts

**Teaching the principles of Interactive Economics to your employees can help drive organizational growth and seamless operations:**

- A short course that equips employees with skills for the real world
- Employees receive enhanced and economically driven decision-making skills
- Helps create better marketing strategies for higher sales
- Provides a competitive advantage by helping make calculated risks

## Personal Impact

**Enrolling in this course can benefit you in the following ways:**

- Gain a deep understanding of the relation between human behavior and finances
- Learn modern techniques to estimate market demand and prediction

- Attain leadership, adaptability, and decision-making skills
- Analyze and understand successful market strategies

## Who should attend?

**A wide range of professionals can benefit from this Course N Carry training course, but the following are particularly noteworthy:**

- Managers of Business Development
- Experts in Corporate Planning
- Lawyers and the Staff of Law Firms
- Engineers & Geoscientists
- Refiners
- Accountants and Bankers
- Examiners
- Board Members and Senior Petroleum Executives
- Media Representatives who deal with traders and transactions
- Authorities in Government
- Advisors in Tax and Finance
- Officers of Compliance
- Bankers and Equity & Financial Analysts
- Officers of Joint Ventures
- Contract Administrators

## Course Outline

### Day 1

#### Essential Upstream Processes

- Synopsis of the Course

#### An Overview of the Production of Oil

- The Origin, Amount, and Migration of Petroleum
- Essential Circumstances for the Hydrocarbon Buildup

#### Fundamentals of Oil and Gas Geology and Petroleum Engineering

- An Overview of Geology for Oil and Gas
- A Basic Trap for Structural Anticline
- Reservoir Traps, Barrier or Closure, and Reservoir Mapping
- Methods for Oil and Gas Drilling
- Drilling Types: Exploration, Developmental, Appraisal, Delineation, and Potential Well

---

#### Maintenance

- Drilling the Circulatory System: Environmental and Safety Risks
- **Tools and Methods for Assessing Oil and Gas Wells: Open and Cased Well Logs; Well Logging and Well Completion**
- Uses for Well Casing
- Advantages of Multilateral Well Completions with Horizontal Wells Over Vertical Wells

## **The Core of the World's Oil Supply: Production, Trade, and Reserves**

- Overview of the World's Oil Industry: Research, Production, Refinement, Distribution, and Transportation
- Global Oil Resources: Production of Oil and Gas, World Oil and Gas Reserves
- Industry Units: Conversion Factors for the USA, Europe, and Asia
- Classifications of Crude Oil
- Indices of Crude Oil Quality and Assays for Crude Oil Characterization
- Distillation of Crude Oil and Refined Products
- Units of the Oil Industry and Conversion Factors

## **Essentials of Petroleum Economics**

- Crude Oil Delivered Price: The Idea of GPW (Gross Product Worth)
- Computing Net Refining Margin
- Crude Oil's Value and the Factors That Determine It in Crude Selection

## **Day 2**

### **Trading of Crude Oil**

#### **The Overview of the Development of the Global Oil Price System Introduction**

- The Crude Oil Price System's Evolution
- The Times of Price Posting
- Independent Oil Challenges the Pricing System
- The OPEC-Administered Emergence and Consolidation Price System
- The Shifting Environment for IOCs and NOCs
- The Demise of Net Back Pricing, as Administered by OPEC
- Formulae Pricing and the Market-Related Oil Pricing System
- Long-Term Contracts, Formula Pricing, and Spot Markets
- Reference Points for Formulae Pricing
- Reporting Agencies for Oil Prices and the Price Discovery Process
- The Levels of the Brent Market
- The Benchmarks for the United States
- The Market in Dubai and Oman

### **Chap. 2: Trading Physical Crude Oil and its Logistics**

- Trading Terminology and Fundamentals
- **Production Sharing Contracts' Effects and Their Components**

- Financial Instruments
- Component of Cost Recovery
- Profitable Oil Substance
- Taxes and Royalties
- Tax Consequences for Ring Fencing
- The going rate
- Agreements for Joint Operation
- **Agreements for Transportation**
- Tariffs
- Mechanism for Value Adjustment
- Logistics of Terminals
- Storage Operations on Floating Platforms
- Lifting of Crude Oil Agreements
- Nomination of Marine Vessels
- Written Sales and Purchase Contracts
- **Contracts for freight**
- Costs of Freight
- Laytime
- Demurrage

## The Crude Oil Price: An Analysis

- First Elements: The Total Cost
- **How Do Benchmark Crudes Work?**
- Brent
- WTI
- ASCI
- Oman and Dubai
- TAPIS
- ESPO
- Requirements for Optimal Comparisons
- Controlling Benchmark Crudes

## Calculating the Crude Absolute Value

- Prospects and Future
- Chains, Brent
- Forward Market and Credit Security

## The Oil Futures Market and Its Absolute Worth

- Initial Margin
- Margin of Variation
- Delivery in Person
- Trade in Hard Copy Delivery

## Hedging the Crude Oil Absolute Value

- ~~Fundamental Theory of Hedging~~

- Brent Contract Hedged with Dated Brent Risk
- Adjustable-Priced Hedging
- Conjecture

## **The second part of the oil price formula is the time differential.**

- Contrary to expectations
- "Contract for Difference": Swap
- When is it appropriate to establish the price?
- What happens during a contract between two traders?
- CFD and the oil price's temporal value
- Fixation of Values
- Oil Hedging or Fixing Value Floating
- Hedging and the Forward Oil Curve's Slope
- The Oil Contract Price Term

## **Grade Differential is the third component in the oil price formula.**

- The Grade of Crude Oil
- The Quality of Crude Oil
- The Base Discount

## **The Analysis of Refinement**

- Paraffine
- Naphthenic
- Procedures for Refining
- The Value of the Gross Product
- Place and Package

## **Managing Price Risk: Protecting the Price of Crude Oil**

- The Different Kinds of Risks
- The Hedging Strategy
- Hedging in Operations

## **A Look at Risk Management**

- Relationships and Basis Hazard
- Risk of Tax Basis

## **Selecting Appropriate Equipment**

- The Risk Profile of the Company
- The Risk Appetite of the Company
- View of Market Price
- Know When to Cut a Hedge
- When Operationalizing a Strategic Hedge
- Swaps

## Options

- Superior
- Choice of Style
- Optimal Approach
- The Free Collar
- Valuing Options
- Summary

## Day 3

### Trading of Refined Products

- The Exchange of Selected Goods
- Diminished Distillation
- Intermediate Distillate
- Fuel Petroleum
- Additional Items
- Traders of Refined Products Participants
- Contrary to expectations
- The Market Round-the-Clock
- The Traders' Roll
- The Significance of Place
- Operations and Transportation
- The Netback War and Pricing
- Current Trends in Pricing Policies
- Fixing prices
- Keepsake
- Oil Product Types
- Equilibrium Supply and Demand
- Production, Utilization, and Capacity of Refineries
- Upcoming Patterns
- Environmental Goods

### Refining I: Foundations

- Paraffin
- Olefins
- Naphtine's
- Scented products
- Activators
- Sulphur and API
- Acid
- Salt
- Water
- Metals

---

- Other

- Divorce
- Handling
- Enhancing Conversion
- Value of Gross Product
- Refiner Margin and GPW
- Collaboration
- For Non-Chemists: Basic Chemistry
- Properties of Crude Oil
- The Test for Crude Oil
- Basic Methods of Refining
- Combining Economics of Refineries

## **Refining II: Upgrading Conventional Refineries**

- Cracking of the cat
- Hydrofracturing
- Visbreaking
- Coalescing

## **Oil Products and Their Characteristics**

- Methane
- Ethane
- Propane
- Butane
- Naphtha
- Gasoline
- Kerosene
- Gas oil
- Diesel
- Lubricants
- Waxes
- Bitumen
- Coke with Carbon Black
- Physical Oil Products and Crude Oil's Grade Value
- Superiority
- Gases from Petroleum
- Diminished Distillation
- Intermediate Distillate
- Fuel Petroleum
- Fuel for Straight Runs
- Fuel Oil Cracks
- LSWR
- Fuel Oil Bunker
- Unique Items

## **Logistics for Oil and the Art of Trading**

- Shipping

- Pipeline
- Train Vehicle
- Road Truck
- Divided Weekends
- Counterparties
- Classification/Quality
- Quantity
- Delivery
- Price
- Section on Payment
- Documentary Letter of Credit with No Revocation
- Letter of Credit Standby
- Parent Company Promise
- Accessible Credit
- Dispute Settlement
- Suggestions
- Inspection
- Supplying Petroleum Products
- Delivery Conditions
- Different Price Bases for Processed Goods
- Contracts for Oil
- Keepsake

## **How Much Refined Oil Products Cost**

- The Qualities of Reference Points
- Selecting the Appropriate Benchmark: Cost Reporting Organizations
- Bid-Offer Spread
- Regulatory Supervision
- The Examination of Regulations
- Bears and Bulls
- The Arbitrage of Contango
- The Evolution of the Benchmarks and the History of Oil Prices
- What Affects the Price of Oil?
- The Role of Benchmarks in Assessing the Absolute Value of Product Prices
- The Product Price Time Differential Value
- Trader of Time Spreads: Contango without Physical Exchange
- The Product Grade Differential's Value

## **Day 4**

### **The Management of Risks**

- Risk Management for Oil Product Prices

### **Assessing Risk**

- Hedging Strategically
- A Hedge: What Is It?
- Describe a hedge loss.
- A Comparison of Speculation and Hedging
- The Risk Manager's Role
- Hedging in Operations
- The Pros and Cons of It
- Hedges for Opening and Closing
- Foundational Risk
- The Market for Forwards
- The Market of the Future
- The Swaps Market

## The Options

- The Premium's Size
- The Style of Option
- The Free Collar
- Crack Spread

## Day 5

### Regulatory and Legal

- Concerns with Law and Regulation
- Contractual
- Regulatory

### Worldwide

- Global Aspects of Petroleum Dealing
- Particular Trade Conditions
- Terminology Standardization
- Global Sales of Products
- Trade laws in general
- International Trade Organization
- Money Problems
- The Function of Banks
- Laws governing shipping
- Maritime Liability
- Dispute Settlement
- National Laws' Effects
- US and UN Sanctions on Trade
- Sovereign
- **United States**
- Trading of Oil in the United States

---

#### • Overall Business

- Laws Against Trust
- Act of Sovereign Immunity
- The Foreign Corrupt Practices Act
- Law Governing Commodity Trading

## **Particular Agreements**

- Contracts for Futures and Options
- Futures for Physical Exchange (EFP)
- Swaps

## **United Kingdom**

- Trading of Oil in the United Kingdom
- Commercial Law in General
- Rivalry Law
- Law pertaining to Banking and Finance
- The Trading Interest Protection Act
- Law of Financial Services
- Global Petroleum Exchange

## **Singapore**

- Trading of Oil in Singapore
- Exchange Singapore
- Likeness to New York and London

## **Managing Monetary Risk**

- Trading Risk: What Is It?
- Other Possible Loss Sources
- What Qualities Do Energy Markets Have?
- Calculating the Risk
- Activities
- In conclusion