INTERNATIONAL OIL SUPPLY, TRANSPORTATION & TRADE

LPM103

Logistic

Purchasing

Management

COURSE TITLE

INTERNATIONAL OIL SUPPLY, TRANSPORTATION & TRADE

COURSE DATE/ VENUE

13 – 17 December 2019

Dubai, UAE

COURSE REFERENCE

LPM103

COURSE DURATION

05 Days

DISCIPLINE

Logistic Purchasing Management

COURSE INTRODUCTION

International Oil Supply, Transportation, Refining and Trade training is designed to give participants a comprehensive picture of the international oil supply, transportation, refining and trade. Further, this Oil & Gas training will include crude oil and refined markets, risks, legal and regulatory issues involved in the international trading of crude oil and refined products. It is presented with the wide range of essential practices of petroleum industry spanning, exploration, extraction, refining; and global oil supply, reserves, production & trade flows. With the overview of these essential upstream and midstream practices, the industry downstream operations dealing with crude oil and refined products trading and its associated risks and uncertainties can be fully understood. Since price volatility always exists, the Price Risk Management appropriate techniques are presented in detail. Sales, Marketing, Trading and Risk Management are crucial and also the most dynamic parts of the value chain, and extremely important for managers to stay on the top of these activities.

COURSE OBJECTIVE

Upon successful completion of this course, the delegates will be able to:

- ✓ Recognize upstream oil exploration, production & supply principles and practices
- ✓ Recognize refining process, compute refinery gross and net margins
- ✓ Recognize LP models, and develop crude oil selection criteria
- ✓ Apply petroleum economics, calculate financial benchmarks and prioritize projects
- ✓ Estimate costs, negotiate and compare physical deals and help write contracts for the sale of crude oil and refined products
- ✓ Use world scale reference to charter a ship and to calculate the profitability
- ✓ Discuss about the international markets, their risks and how prices are formed and disseminated
- ✓ Recognize the hedging instruments, determine the price risk exposure and manage price risk
- ✓ Acquire legal and regulatory issues relating to the International aspects of oil trading

COURSE AUDIENCE

- Business Development Managers
- Corporate Planning Professionals
- Lawyers & Law Firms' Personnel
- Geoscientists & Engineers
- Refiners
- Bankers, Accountants
- Auditors
- Members of Board and Senior Oil Executives
- Media Personnel who interface with traders and trading
- Government Regulators
- Tax & Finance Advisors
- Compliance Officers
- Equity & Financial Analysts and Bankers

- Joint Venture Officers
- Contract Negotiators

COURSE CONTENT

DAY 1

Essential Upstream Practices

- Introduction to the Course
- Introduction to How Oil was Formed
    - Origin, Accumulation and Migration of Petroleum
    - Essential Requirements for Hydrocarbon Accumulation
- Fundamentals of Oil & Gas Geology and Petroleum Engineering
    - Introduction To Oil & Gas Geology
    - Simple Anticline Structural Trap
    - Barrier or Closure – Reservoir Traps - Reservoir Mapping
    - Oil & Gas Drilling Techniques
    - Types Of Drilling – Exploration, Delineation, Appraisal, Developmental, Maintain Potential Wells
    - Drilling Circulatory System – Safety and Environmental Impact
- Well Logging and Well Completion
    - Tools and Techniques for Evaluating Oil & Gas Wells
    - Open and Cased Well Logs
    - Functions of Well Casing
    - Benefits of Horizontal Well over Vertical well - Multilateral Well Completions
- Essence of International Oil Supply – Global Reserves, Production & Trade
    - Introduction to Global Oil Business - Exploration, Extraction, Refining, Marketing, Transportation
    - Global Oil Resources – World Oil and Gas Reserves, Production of Oil and Gas
    - Industry Units – for the USA, Europe and Asia, Conversion Factors
    - Crude Oil Classifications

- Crude Oil Quality Indictors, Crude Oil Characterization by Assays
- Crude Oil Distillation – Refined Products
- Oil Industry Units and Conversion Factors

- Fundamentals of Oil Economics
  - Delivered Price of Crude Oil – The Concept GPW (Gross Product Worth)
  - Net Refining Margin Calculation
  - Value of Crude Oil and the Determining Factors in Crude Selection

DAY 2

Crude Oil Trading

- The Evolution of International Oil Pricing System – The Big Picture
  - Introduction
  - Evolution of Crude Oil Pricing System
  - The Era of the Posted Price
  - The Pricing System Challenged by Independent Oil
  - The Emergence & Consolidation OPEC Administered Pricing System
  - The Changing Landscape for IOC's / NOC's
  - The Collapse of the OPEC Administered Pricing – Net Back Pricing
  - The Market-Related Oil Pricing System and Formulae Pricing
  - Spot Markets, Long Term Contracts and Formula Pricing
  - Benchmarks in Formulae Pricing
  - Oil Price Reporting Agencies and Price Discovery Process
  - The Brent Market and its Layers
  - The US Benchmarks
  - The Dubai-Oman Market
- Trading Physical Crude Oil and its Logistics – Chap 2 CON
  - Trading Fundamentals and Trading Terminology
  - Impact of Production Sharing Contracts and its Components
    - ✓ Fiscal Tools
    - ✓ Cost Recovery Component
    - ✓ Profit Oil Component

        - ✓ Royalty and Tax
        - ✓ Tax Implications – Ring Fencing
        - ✓ Market Price
    - Joint Operating Agreements
    - Transportation Agreements
        - ✓ Tariffs
        - ✓ Value Adjustment Mechanism
        - ✓ Terminal Logistics
        - ✓ Floating Platform Storage Operations
    - Crude Oil Lifting Agreements
    - Marine Vessel Nomination
    - Physical Sales and Purchase Agreements
    - Freight Contracts
        - ✓ Freight Costs
        - ✓ Lay-time
        - ✓ Demurrage
- The Dissection of Crude Oil Price
    - First Component - the Absolute Price
    - What are Benchmark Crudes?
        - ✓ Brent
        - ✓ WTI
        - ✓ ASCI
        - ✓ Dubai / Oman
        - ✓ TAPIS
        - ✓ ESPO
    - Criteria for Ideal Benchmarks
    - The Regulation of Benchmark Crudes
    - Determination of Absolute Value of Crude
        - ✓ Forwards and Future
        - ✓ Brent Chains
        - ✓ Credit Security and Forward Market

- The Futures Market and Absolute Value of Oil
  - ✓ Initial Margin
  - ✓ Variation Margin
  - ✓ Physical Delivery
  - ✓ Exchange for Physical Delivery
- Hedging the Absolute Value of Crude Oil
  - ✓ Basic Hedging Theory
  - ✓ Practical Considerations
  - ✓ Dated Brent Risk Hedged with Forward Brent Contract
  - ✓ Floating Priced Hedging
- Speculation

- Oil Price Formula – The 2nd Component - Time Differential
  - Arbitrage
  - Swap - the “Contract for Difference”
  - What is the right time to set the price?
  - What goes on when two traders transact a deal?
  - CFD and the time value in Oil Price
  - Value Fixation
  - Floating Fixing or Hedging Value of Oil
  - Hedging and the Slope of the Forward Oil Curve
  - The Term Contract Pricing of Oil
- Oil Price Formula – The 3rd Component - Grade Differential
  - The Crude Oil Grade
  - The Crude Oil Quality
  - The Crude Discount
  - The Refining Assay
    - ✓ Paraffinic
    - ✓ Naphthenic
    - ✓ Refining Processes
  - The Gross Product Worth
  - Location and Freight

- Price Risk Management - Hedging the Crude Oil Price
    - The Types of Risks
    - The Strategic Hedging
    - Operational Hedging
    - Risk Management Considerations
        - ✓ Correlations and Basis Risk
        - ✓ Tax Basis Risk
    - Choosing The Right Tools
        - ✓ The Company Risk Profile
        - ✓ The Company Risk Appetite
        - ✓ Market Price View
    - When to Close a Hedge
    - When Strategic Hedge Go Operational
    - Swaps
    - Options
        - ✓ Premium
        - ✓ Option Style
        - ✓ Option Strategy
        - ✓ The Zero Cost Collar
    - Option Valuation
    - Summary

DAY 3

Refined Products Trading

- The Trading Refined Products
    - Light Distillate
    - Middle Distillate
    - Fuel Oil
    - Other Products
    - Participants in Refined Products Trading
    - Arbitrage
    - The 24/7 Market

- The Roll of Traders
- The Importance of Location
- Transportation and Operations
- Pricing and the Netback War
- Pricing Policies Latest Trends
- Price Fixing
- Storage
- Types of Oil Products
- Supply / Demand Balance
- Production, Consumption and Refinery Capacity
- Future Trends
- Environmental Products

- Refining I – Basics
  - Paraffin
  - Olefins
  - Napthenes
  - Aromatics
  - Catalysts
  - API and Sulphur
  - Acid
  - Salt
  - Water
  - Metals
  - Other
  - Separation
  - Treatment
  - Upgrading Conversion
  - Gross Product Worth
  - GPW and Refiner Margin
  - Team Work
  - Simple Chemistry for Non-Chemists

    - Crude Oil Properties
    - The Crude Oil Assay
    - Basic Refining Processes
    - Blending Refinery Economics
- Refining II – Conventional Refinery Upgrading
    - Cat Cracking
    - Hydrocracking
    - Visbreaking
    - Coking
- Oil Products and their Qualities
    - Methane
    - Ethane
    - Propane
    - Butane
    - Naphtha
    - Gasoline
    - Kerosene
    - Gas Oil
    - Diesel
    - Lubes
    - Waxes
    - Bitumen
    - Coke / Carbon Black
    - Physical Oil Products and the Grade Value of Crude
    - Quality
    - Petroleum Gases
    - Light Distillate
    - Middle Distillate
    - Fuel Oil
    - Straight Run Fuel
    - Cracked Fuel Oil

    - LSWR
    - Bunker Fuel Oil
    - Specialty Products
- Oil Logistics and the Art of Trade
    - Shipping
    - Pipeline
    - Rail Car
    - Road Truck
    - Split Weekends
    - Counterparties
    - Grade / Quality
    - Quantity
    - Delivery
    - Price
    - Payment Clause
    - Irrevocable Documentary Letter of Credit
    - Standby Letter of Credit
    - Parent Company Guarantee
    - Open Credit
    - Dispute Resolution
    - Nominations
    - Vetting
    - Delivering Oil Products
    - Delivery Term
    - Other Pricing Bases for Refined Products
    - Oil Contracts
    - Storage
- The Price of Refined Oil Products
    - The Characteristics of Bench Marks
    - Choosing the Right Benchmark: Price Reporting Agencies
    - The Bid-Offer Spread

- Regulatory Oversight
- The Regulatory Investigation
- Bulls and Bears
- The Contango Arbitrage
- History of Oil Prices and How the Benchmarks Evolved
- The Components of the Oil Price
- The Absolute Value of Products Price: The Role of Benchmark
- The Time Differential Value of Product Price
- Trading the Time Spread: Contango without Getting Physical
- The Value of Product Grade Differential

DAY 4

The Risk Management

- Oil Products Price Risk Management
- Measuring Risk
  - Strategic Hedging
  - What is a Hedge?
  - What is a Hedge Loss?
  - Hedging and Speculation Compared
  - The Role of Risk Manager
  - Operational Hedging
  - The Long and the Short of It
  - Opening and Closing Hedges
  - Basis Risk
- The Forward Market
- The Future Market
- The Swaps Market
- The Options
  - The Size of the Premium
  - The Option Style
  - The Zero Cost Collar
- Crack Spreads

DAY 5

Legal and Regulatory

- Legal and Regulatory Issues
  - Contractual
  - Regulatory
- International
  - International Aspects of Oil Trading
  - Special Trade Terms
  - Standardization of Terms
  - International Sales of Goods
  - General Trade Laws
  - World Trade Organization
  - Financial Issues
  - Banks's Role
  - Shipping Laws
  - Marine Insurance
  - Dispute Resolution
  - Impact of National Laws
  - US an UN Trade Sanctions
  - Sovereign Immunity
- United States
  - Oil Trading in the US
  - General Commercial
  - Anti-Trust Legislation
  - Sovereign Immunity Act
  - Foreign Corrupt Practices Act
  - Commodity Trading Law
  - Specific Contracts
    - ✓ Futures & Options Contracts
    - ✓ Exchange of Futures for Physical (EFP)
    - ✓ Swaps

- United Kingdom
  - ✓ Oil Trading in the UK
  - ✓ General Commercial Law
  - ✓ Competitive Law
  - ✓ Finance and Banking Law
  - ✓ Protection of Trading Interest Act
  - ✓ Financial Services Law
  - ✓ International Petroleum Exchange
- Singapore
  - ✓ Oil Trading in Singapore
  - ✓ Singapore Exchange
  - ✓ Comparison with London and New York
- Controlling Financial Risk
  - ✓ What is trading Risk?
  - ✓ Other Potential Sources of Loss
  - ✓ What are Characteristics of Energy Markets?
  - ✓ Determination of Risk
  - ✓ Operations
  - ✓ Conclusions

COURSE CERTIFICATE

TRAINIT ACADEMY will award an internationally recognized certificate(s) for each delegate on completion of training.

COURSE FEES

$4,150 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

COURSE METHODOLOGY

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation,

discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions