

Crude Oil and Petroleum Products Sales and Marketing

OSC002

Course Description

The trading, sales, and marketing of crude oil and refined petroleum products form the backbone of global energy commerce. As one of the most strategically important commodities, crude oil is traded through complex supply chains involving upstream producers, national oil companies, international oil companies, trading houses, refiners, marketers, and end-users. The pricing is influenced by multiple market benchmarks (Brent, WTI, Dubai), geopolitical events, OPEC+ policies, shipping logistics, and derivatives trading.

With increasing market volatility, decarbonization pressures, regulatory requirements, and digital transformation in trading, professionals involved in petroleum sales and marketing must possess deep technical knowledge of market structures, trading instruments, logistics, contractual frameworks, risk management, and price mechanisms.

This intensive five-day course is designed to provide high-level insight and hands-on knowledge to professionals seeking to master the technical, legal, and commercial aspects of selling and marketing crude oil and petroleum products in today's complex market.

Course Goal

To provide participants with the essential knowledge and practical skills required to manage the commercial, technical, and regulatory aspects of crude oil and petroleum product sales and marketing in today's global energy market.

Course Objectives

By the end of this course, participants will be able to:

- Gain a deep understanding of the global crude oil and refined products markets.
- Analyze key pricing benchmarks and mechanisms (e.g., Platts, Argus, Brent, WTI, OSP).
- Understand petroleum product specifications, quality standards, and marketability.
- Explore sales contract structures, INCOTERMS, and trade documentation.
- Learn technical aspects of shipping, logistics, and storage strategies.
- Develop proficiency in hedging, price risk management, and derivatives use (futures, swaps).
- Examine the legal and regulatory framework governing sales and marketing operations.
- Apply strategic marketing, market intelligence, and negotiation tactics.
- Troubleshoot key operational and commercial challenges in petroleum trading.

Who Can Benefit

This course is designed for mid- to senior-level professionals involved in:

- Crude oil and product marketing and sales
- Oil trading and risk management
- Supply and distribution operations
- Refinery economics and scheduling
- Commercial, legal, and contract management
- Market analysis and business development
- It is highly relevant for professionals from:
 - NOCs (National Oil Companies)
 - IOCs (International Oil Companies)
 - Trading companies
 - Refineries and marketers
 - Regulatory and policy institutions

Course Duration

5 Working Days

Course Outlines

1. Petroleum Industry Landscape, Crude Quality, and Product Specifications

- Global Energy Market Dynamics
 - Global upstream and downstream oil industry overview
 - Key producing regions (Middle East, West Africa, North America)
 - Supply-demand equilibrium, refinery runs, and trade flow patterns
 - Role of Organization of the Petroleum Exporting Countries (OPEC) and OPEC+
- Classification and Characteristics of Crude Oil
 - Measurement of American Petroleum Institute (API) gravity and its impact on pricing
 - Sweet vs. sour crudes based on sulfur content and refining complexity
 - Viscosity, Total Acid Number (TAN), and pour point relevance
 - Understanding Assay Reports and Yield Patterns for refiners
- Crude and Refined Products Categorization
 - Crude Oil Categories: Light, Medium, Heavy; Sweet vs Sour
 - Key refined products: Gasoline (RON/MON ratings), Diesel (Cetane number), Jet A-1 (Freezing point), Fuel oil (Viscosity grades), Liquefied Petroleum Gas (LPG)
 - Environmental and emission compliance: Euro 5/6, MARPOL IMO 2020 sulfur limits

- Product Quality Standards and Testing Parameters
 - ASTM International standards (e.g., ASTM D86, D445, D4294)
 - EN standards for European markets
 - Impact of blending, adulteration, and interface contamination
- Market Fundamentals and Participant Roles
 - National Oil Companies (NOCs), International Oil Companies (IOCs), Independent traders, and commodity houses
 - Buyers' categories: Refiners, utilities, government agencies
 - Spot vs. term contracts: Operational and commercial implications

2. Technical Pricing Mechanisms, Trade Structures, and Contractual Frameworks

- Price Formation and Market Pricing Mechanisms
 - Platts and Argus Media price reporting methodologies
 - Understanding Brent (North Sea), West Texas Intermediate (WTI), and Dubai/Oman price benchmarks
 - Market-on-Close (MoC) mechanism and cargo assessment techniques
- Official Selling Price (OSP) Formulations
 - NOC pricing models (e.g., Saudi Aramco's OSP)
 - Pricing formula structures: Differential to benchmark, freight-adjusted netbacks
 - Freight netback vs product yield value models
- Sales and Marketing Contract Structures
 - Contract of Affreightment (CoA) vs. Free on Board (FOB) and Cost, Insurance, and Freight (CIF)
 - Delivered at Terminal (DAT), Delivered Ex Ship (DES), Ex Works (EXW) explained
 - Quality, quantity, title transfer, and delivery risk allocation clauses
- Documentation and Trade Execution
 - Commercial Invoice, Certificate of Quantity (CoQ), Certificate of Quality (CoA)
 - Bills of Lading (B/L), Letter of Credit (L/C), UCP 600 (Uniform Customs and Practice for Documentary Credits)
 - Title transfer and Incoterms 2020 overview
- Product Differentials and Pricing Adjustments
 - Cargo quality de-escalators/escalators
 - Delivery window and laycan clauses impact on price
 - Location and freight differential modeling

3. Physical Trading Logistics, Marine Transport, and Operational Challenges

- Shipping and Freight Economics
 - Tanker classifications: Very Large Crude Carrier (VLCC), Suezmax, Aframax
 - Freight calculation using the Worldscale system
 - Freight rate determinants: Deadweight tonnage (DWT), demurrage, bunker fuel costs
- Marine Logistics Operations
 - Vessel nomination, vetting (OCIMF-SIRE), and laytime calculation
 - Maritime loading/unloading procedures and sampling protocols
 - Port congestion, berth availability, and weather implications
- Petroleum Storage and Inventory Strategies
 - Terminal operations: shore tank farm design, volume loss mitigation (e.g., vapor recovery)
 - Floating storage arbitrage strategies
 - Inventory management: First-in-First-Out (FIFO), Just-in-Time (JIT) logistics
- Blending and Interface Management
 - On-spec/off-spec blending ratios and techniques
 - In-line blending vs. tank blending: Cost-benefit and quality risks
 - Interface generation in pipelines and quality segregation
- Troubleshooting Delivery and Operational Risks
 - Contamination events: causes, testing, and claim management
 - Volume loss due to evaporation, shrinkage, or temperature differential
 - Mitigation of piracy risk, sanctions compliance, and vessel tracking

4. Price Risk Management, Derivatives Trading, and Financial Safeguards

- Crude and Product Price Volatility Fundamentals
 - Impact of macroeconomic indicators (inflation, GDP, interest rates)
 - Political risk, strategic reserves, and inventory report effects (EIA, IEA)
- Hedging Tools and Derivative Instruments
 - Futures contracts (ICE Brent, NYMEX WTI): structure and margining
 - Swaps and Contracts for Differences (CFDs) in physical hedging
 - Options strategies: calls, puts, collars, straddles in fuel price protection
- Managing Exposure with Financial Risk Models
 - Value at Risk (VaR) models in crude price exposure
 - Sensitivity analysis and delta hedging for product portfolios
 - Basis risk between physical and financial instruments

- Integrated Risk Management Strategies
 - Back-to-back hedging for structured product sales
 - Crack spread and arbitrage hedges (e.g., Brent-Dubai, Gasoline-Diesel)
 - Credit risk mitigation: Use of performance bonds, parent guarantees
- Regulatory and Compliance Frameworks
 - Dodd-Frank Act, European Market Infrastructure Regulation (EMIR)
 - Know Your Customer (KYC), Anti-Money Laundering (AML), sanctions screening
 - Documentation of hedging rationale and hedge accounting

5. Strategic Sales Execution, Digital Transformation, and Sustainable Marketing

- Strategic Petroleum Marketing Planning
 - Market segmentation (B2B, B2G, bulk vs. retail)
 - Geographic targeting and product positioning
 - Brand equity in refined product lines (e.g., lubricants, premium fuels)
- Advanced Negotiation Techniques
 - High-stakes sales deal structuring: Multi-cargo, long-term, optionality
 - Cross-cultural deal-making in energy negotiations
 - Use of anchor pricing, price floors, and escalator clauses
- Customer Relationship Management (CRM) and Market Intelligence
 - CRM platforms for client interaction and retention
 - Use of Artificial Intelligence (AI) and predictive analytics in demand forecasting
 - Competitive intelligence and market trend modeling
- Digital Transformation in Oil Sales and Trading
 - Blockchain in supply chain traceability and smart contracts
 - Use of Electronic Bills of Lading (eB/L) and eDocs in trade execution
 - Trade automation platforms: VAKT, Komgo, EnHelix
- ESG, Green Marketing, and Future Outlook
 - Environmental, Social, and Governance (ESG) compliance in petroleum marketing
 - Greenhouse gas (GHG) emission disclosures and sustainability-linked sales
 - Biofuels integration, carbon credit markets, and future fuels marketing
- Capstone Simulation Exercise
 - Negotiating a multi-product petroleum sales deal including delivery, pricing, and hedging strategy
 - Debrief with commercial performance metrics and peer feedback