International Petroleum Business Program

This program provides managers in the worldwide petroleum industry with an indepth understanding of the key aspects of the upstream and downstream petroleum business. It explores the important functional management issues today, including technical, financial, marketing, and petroleum accounting. The instructional format is a compelling combination of formal presentations by industry experts and team participation in a challenging business workshop.

WHO SHOULD ATTEND
This program is intended for managers in the many functional areas of the international petroleum and natural gas industry, such as exploration, production, refining and petrochemical operations, marketing, law, human resources, accounting, and finance.

INSTRUCTORS
David A. T. Donohue, PhD, JD
Meg Arnasley, BS
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John B. (Jack) King, MBA
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Charles Brankman, PhD
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Laura Varela, MS
Eng

PROGRAM FEE
ONE UNIT: US$ 4,750
TWO UNITS: US$ 8,700

UNIT ONE
MAY 14 – 18, 2018
UPSTREAM SECTORS, PROJECT ECONOMICS, AND PETROLEUM ACCOUNTING

Overview of the Energy Industry
Oil and gas measurements and units, the value chain, market structures, worldwide oil and gas economics, major players, evolution of the integrated oil and gas business.

Crude Oil and Natural Gas Pipeline Systems
Introduction to crude oil and natural gas pipeline design, construction and operation of pipeline systems, estimating project costs, pipeline contracts and tariffs, new pipeline developments.

Host Government Agreements
Typical host country exploration agreements; summary of the history and key provisions, including bonus payments, royalties, taxes, production sharing, participation agreements.

Exploration Methods
The exploration process: petroleum geology, exploration geophysics, well logging, developing exploration prospects, preparing and interpreting geological maps, case studies.

Drilling and Well Completions
Planning the well, logistics, drilling functions, drilling procedures, formation evaluation methods, horizontal wells, improvements in drilling.

Field Development and Production Cycle
Onshore and offshore field development and long-term production subsurface design, reservoir fundamentals and reserves estimation; field development; inflow performance; integrated reservoir management; and enhanced recovery. Surface facilities design: design for both onshore and offshore operations; production operations and management, investment analysis and reporting of performance, case studies.

Gas Processing and Marketing of LPGs
Properties of gas and gas liquids; processing of associated gas; markets for LPGs; economics of natural gas plants.

Crude Oil Tanker Transportation
The tanker industry and market trends: an overview of the main characteristics of crude tankers, capital and operating costs, pollution at sea and the new regulations; calculating tanker transportation rates; Worldwide and charter arrangements.

Marketing of Crude Oil and Products
Development of the free market for oil; current international market structure; regional markets: sales, futures, forwards, derivatives, options, roles of participants, price formation, price volatility; price reporting, crude oil and product pricing, negotiating and pricing, petroleum sales contracts; introduction to hedging and price risk management.

Products Distribution
Distribution and retail marketing of petroleum products; structure of the downstream sector; current international market structure; international market structure; international market structure; current international market structure; current international market structure; Worldscale and charter arrangements.

Crude Oil Project Economics
Worldwide energy supply; demand, reserves, pricing, corporate strategy; recent history and prediction of future trends; how petroleum economics make predictions.

Markets for Associated Natural Gas
The natural gas chain: industry structure and regional markets, explored commissioned, gas distribution, regulation and deregulation, economics and markets for gas, including combined-cycle power plants, LNG, ammonia, methanol, and gas-to-liquids.

Refining and Petrochemicals
Refinery: capacity evolution; technology changes; capital and operating costs; profitability, net-back estimation and recent trends. Petrochemicals in perspective: links to refining, key product families, industry drivers: cost of production, supply and demand, profitability and price forecasting, prospects for the future: maturity, environmental concerns, global competition.

SYSTEMATIC INNOVATION

“Business Game: Sandland”

This business game is an integral part of the learning process. Participants, divided into teams, make real-life technical, financial, and market decisions that commonly confront managers in the international petroleum business today. Team performance is measured on a financial basis and is evaluated by healthy competition.

The international petroleum business game takes place in “Sandland,” a fictitious country on the west coast of Africa. Team objectives include developing oil and gas reserves and deciding on the optimal way to develop and market the production. During each workshop session, teams are provided with technical and economic background that serves as bases for decisions to be made during that session. Team decisions are made and require a commitment of both capital and operating funds and occur during the following intervals: three years of exploration, two years of development, and fifteen years of production.

WORKSHOP SESSIONS INCLUDE:

- Introduction to the workshop
- Negotiating the right to explore in Sandland
- The exploration survey stage
- Exploration and delineation drilling
- Reserves estimation and field development
- Gas processing
- Oil and gas pipelines and project finance
- Sandland operations accounting
- Combined-cycle power plants
- Oil tanker charter decisions
- Refinery development decisions
- Financing the post expansion
- Ammonia plants
- Gas export pipelines decisions
- Crude of marketing decisions
- Strategic planning and decision analysis
- Evaluation of performance and presentation of results

“…I loved the workshop simulator! It really helped me to see the practical side of things. I can definitely relate this knowledge to my job.”

–Participant

INTERNATIONAL PETROLEUM BUSINESS GAME: SANDLAND