

# International Oil & Gas Business Management

## INTRODUCTION

- Oil and Gas are considered among the world's most important resources. The Oil and Gas industry plays a critical role in driving the global economy. Petroleum itself is used for numerous products, in addition to serving as the world's primary fuel source.
- The processes and systems involved in producing and distributing Oil and Gas are highly complex, capital-intensive and require state-of-the-art technology.
- Crude oil is almost never used as produced. It is refined to make “white” products—liquefied petroleum gas (cooking gas), gasoline, kerosene, and diesel—and residual fuel oil. Worldwide, demand for white products is growing much more rapidly than that for residual fuel oil (used to generate electricity or heat).
- As the oil industry faces challenges related to climate change, alternative energies, energy substitutions and adverse changes in the quality of available downstream feedstocks, it recognizes the need for managers who have a comprehensive and broad understanding of the industry, including economics, evaluation and decision-making skills and who understand the issues that face the Oil and Gas industries in the future.
- , The 10-Day International Oil & Gas Business Management training seminar will provide a basis for functional managers and those whose experience has been limited to a particular area of the industry, to prepare for additional responsibilities by providing a broad base of knowledge covering the total spectrum of the Oil and Gas business and specific skills related to the evaluation of opportunities and enhanced decision-making.

## OBJECTIVES

- Understand all of the value-added steps from the well to the consumer
- Gain an understanding of the ways the Oil and Gas industries have organized to operate effectively and efficiently
- Learn the details of gas processing
- Learn how crude oil is processed into transportation fuels
- Understand the fundamental economic calculus of both the upstream and downstream Oil and Gas industries
- Develop the skills necessary to evaluate opportunities and make effective decisions related to Oil and Gas operations

## TRAINING METHODOLOGY

- The 10-Day International Oil & Gas Business Management training seminar is a hands on, stimulating learning experience. It will be highly interactive, with opportunities to advance your opinions and ideas. Participation is encouraged in a supportive environment. To ensure the concepts introduced during the course are understood, they will be reinforced through a mix of learning methods, including lecture style presentation, and open discussion.
- This training seminar will be presented with the use of PowerPoint slides and videos. This will be augmented by case studies and facilitated discussions, to engage the delegates and to encourage the exchange of ideas. Short videos will also be used to reinforce specific points and to relate the material to real-world experience.

## ORGANISATIONAL IMPACT

- Recognized and respected certification for the delegates attending
- Assurance that the course is delivered by a quality training organization using a very experienced instructor
- Managers who have a broad overview and understanding of the structure and operations of the Oil and Gas industries
- Employees who understand the details of Oil and Gas operations at all levels of the value chain
- Delegates who understand the fundamental economics of the Oil and Gas industries
- Delegates with the skills to make better decisions and contribute to the evaluation of project opportunities

## PERSONAL IMPACT

- Better understanding of the total spectrum of our industry and the challenges we face
- Ability to contribute to corporate decision-making
- Develop skills to assist in the evaluation of corporate opportunities
- Understanding of the structure of the Oil and Gas business
- Understanding of key process operations related to the production of downstream products

## WHO SHOULD ATTEND?

This training seminar will be of interest to:

- Engineers
- Managers
- Employees working in the areas of Planning, Marketing or Finance
- Anyone requiring a broad understanding of the structure, operations and economics of the Oil and Gas industries

## Course Outline

### Sources, Origin and Nature of Petroleum

- Fundamentals of Organic Chemistry
- Definition of Petroleum
- The Oil and Gas Industry
- Basic Petroleum Geology
- Origins of Hydrocarbon Deposits
- Exploration Activities
- Exploration Methods
- Drilling Proposal
- Types of Well

### Sources, Origin and Nature of Petroleum

- Oil and Gas field Development
- Production
- Well Fluids and Surface Production Operations
- Transportation

### Oil Companies, Corporate Relationships and Structures

- Operating Companies and Service Companies
- Local, National and Multi-national Oil and Gas Companies
- Major International Oil Companies
- National Oil and Gas Companies
- Integrated and Non-integrated Companies
- Integrated Companies
- Non-integrated Companies

### Oil Companies, Corporate Relationships and Structures

- Organization of Petroleum Exporting Companies (OPEC)
- Other International and Multi-national Organizations
- International Energy Agency (IEA)
- Production Sharing Agreements

### Processing Operations and Economics

- Oil Refining Operations
- Distillation
- Product Improvement Processes
- Product Conversion Processes
- Other Operations

## Processing Operations and Economics

- Gas Processing Operations
- Inlet Separation
- Sulfur Removal and Sulfur Recovery
- Dehydration
- Dewpoint Control and Byproduct Recovery
- Gas Compression
- Basic Economics of the Oil and Gas Industries

## Evaluation of Oil and Gas Opportunities

- Estimating the Cost of Oil and Gas Facilities
- Using Historical Costs
- Cost Curves
- Adjusting for Different Sizes
- Adjusting for Different Time Periods

## Evaluation of Oil and Gas Opportunities

- Building Cashflow Models
- What is Financial Modeling?
- Who does Financial Modeling?
- What are the steps in building a financial model?
- Using Cashflow Models to Evaluate Projects
- Internal Rate of Return
- Net Present Value
- Benchmark Indicators



## Making Decisions Under Conditions of Certainty and Uncertainty

- Certainty
- Risk
- Crisis Problem
- Uncertainty
- The Role of Probability in Decisions
- Mathematical Modeling of Business Processes

## Making Decisions Under Conditions of Certainty and Uncertainty

- Making Management Decisions under Conditions of Certainty
- Optimization of the Model and Interpretation of Results
- Making Management Decisions under Conditions of Uncertainty