

# Oil & Gas Technical Competence for Non-Technical Professionals

## INTRODUCTION

- In today's competitive and demanding market environment, non-technical professionals need to acquire and develop essential skills that will improve their technical competence in Oil & Gas while, at the same time, improve their overall knowledge that will enable them to relate it to better serve their organisation.
- The Oil & Gas Technical Competence for Non-Technical Professionals course is an excellent introduction to the highly complex industry that is pivotal to our modern way of living. This training course not only covers production fundamentals, but also includes the necessary upstream background, geology, origins of oil & gas, transportation and storage refining and petroleum product sales and marketing. The training course also includes ownership and land rights, surface operations, production strategy development and project economics.

Participants attending Oil & Gas Technical Competence for Non-Technical Professionals training course will develop the following competencies:

- Learn the basics of oil and gas formation
- Understand the importance of reserves location v's market location
- Update their knowledge on modern petroleum exploration
- Become aware of the latest developments in refining and storage
- Develop their skills in providing an improved service to their customers
- Appreciate the importance of geopolitics on oil transportation and pricing
- Improve the competitive position of their company/ department in the market
- Help their organization to optimise their daily operations and activities

## **PROGRAMME OBJECTIVES**

Oil & Gas Technical Competence for Non-Technical Professionals training course aims to help participants to achieve the following objectives:

- Get an overview of the Global Oil & Gas Industry, from discovery to production through to consumption
- Gain an overview of Refining processing
- Evaluate the primary uses of oil and gas and the significance of oil and gas within the global energy industry
- Appreciate the role of the various organisations involved in the oil and gas industry – governments, oil companies, service companies, regulators, external (i.e. non-oil) bodies and others
- Understand the objectives, functions and commercial relationships between companies and organisations in the upstream and downstream oil and gas supply chain.
- Comprehend the Geopolitics of Oil and Gas and the Major challenges facing the energy industry
- The future of the oil and gas business

## **WHO SHOULD ATTEND?**

The Oil & Gas Technical Competence for Non-Technical Professionals training course is suitable for a wide range of professionals employed in the petroleum industry, and it will be particularly beneficial to:

- New entrants to the Oil & Gas industry
- Petroleum engineers and geologists new to their careers
- Financial, marketing, legal, and other professionals and their staffs interested in the industry
- E&P service company personnel will find it particularly beneficial in understanding the roles played by their clients
- Graduates wanting to get a better overall understanding of the business
- Professional advisers and Business Consultants

## **TRAINING METHODOLOGY**

- The Oil & Gas Technical Competence for Non-Technical Professionals training course will combine presentations with instructor-guided interactive discussions between participants relating to their individual workplace. Practical exercises, video material and case studies aiming at stimulating these discussions and providing maximum benefit to the participants will support the training.

## PROGRAMME SUMMARY

- This unique training course on Oil & Gas Technical Competence for Non-Technical Professionals covers critical areas of oil and gas operations. Professionals from Oil & Gas Industry and other relevant sectors will be able to grasp clearly the critical upstream, middle stream and downstream activities of this Industry.

## PROGRAM OUTLINE

### The Oil and Gas Industry Overview

- Introduction and overview of the Oil & Gas Industry
- Global petroleum reserves, supply and demand
- The nature and formation of fossil fuels and oil reserves
- The Sedimentary theory for oil and gas formation
- Fossil fuel Characteristics
- Crude oil Assay & properties
- Product properties & specifications

### Hydrocarbon Location, Geology and Exploration

- Hydrocarbon Location, Geology and Exploration
- Hydrocarbon Traps and trapping mechanism
- Petroleum Exploration methods and Seismic Surveys
- Drilling the Well and Drilling Technology
- Casing and Logging the Well
- Reservoir production mechanisms
- The Technology of Offshore Drilling

### Fiscal regimes - Hydrocarbon Ownership

- Introduction to tax and royalty schemes
- Fiscal Regimes / PSA JV's,
- Concessions and licences
- Effect to fiscal take from oil price fluctuations
- Lifting and production costs
- Reserve estimates and location

### Crude Oil and Natural Gas Treatment & Storage

- Oil, Gas & water Separation Processes
- Produced Water Generation and Management Practices
- Crude oil stabilization
- Natural gas processing and commoditization
- Oil and gas transmission and pipeline specifications
- Petroleum and petroleum product storage

## Oil and Gas, Mid and Downstream Activities

- Crude Oil Refining Processes
- Refining complexity
- Refining profitability and netbacks
- Petrochemicals, adding value
- Time value of money
- Key Performance Indicators
- NPV, IRR, DPIR, UTC, Payback
- Discounting and non-discounting methods
- Course review and close

