

# Oil and Gas Financial Modelling A Practical Approach

## INTRODUCTION

- This Oil & Gas training course on "A Practical Approach in Oil and Gas Financial Modelling" is aimed to senior and middle managers to enhance the understanding of appropriate use of Excel. It is critical in a growing and yet competitive environment to have the ability to use Excel to its fullest. This is designed to provide in-depth knowledge of using Excel in financial modelling. Upon completing this training course, the participants will have the requisite tools to utilise Excel effectively and be better equipped to challenge decisions and also learn how to deal with several important issues related to financial modelling, performance measurements, setting targets and to be able to explain the effects on the overall results of the company.
- In addition, working in the upstream or downstream and the career progression is being restricted by outdated knowledge of modelling techniques, measuring performance, and limitations, then this will help you move your career forward.

This training course will highlight:

- Applications of Excel from the basics to the most advanced use of Excel
- A real-world approach to the discipline
- Numerous examples based around the oil and gas industry
- A dual approach that develops not only modelling skills but also financial management skills
- In-depth analysis of the performance using statistical techniques

## OBJECTIVES

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

- Improve the quality of the quantitative analysis of corporate presentations
- Apply financial modelling in the oil and gas industry
- Effectively assess the appropriate discount rate
- Use the model investment appraisal techniques
- Use business statistics to enhance operations and target setting for the organization

## **TRAINING METHODOLOGY**

- Each of the sessions will involve formal lectures, demonstration of modelling techniques, and the opportunity for practical application. Screen recordings of essential techniques, examples, and mini case studies will be made available to the participants to assist in the practical applications and to facilitate the application of the techniques used when they approach the workplace.

## **ORGANISATIONAL IMPACT**

The organisation will benefit the following upon participating this Oil and Gas Financial Modelling is profound:

- Providing opportunities to develop high-level financial management techniques
- Appropriate application of the financial modelling to the Oil and Gas industry
- Updating their quantitative techniques to enable them to make a better-informed decision
- Transforming Excel skills to advanced knowledge of Excel for financial modelling
- Enhancing the ability to apply business statistics
- Effective data analysis to improve day-to-day operation activities

## **PERSONAL IMPACT**

The impact of this training course to the participants are manifold and includes:

- Advanced ability in financial modelling using Excel
- Gain larger skills set when contributing to corporate decisions
- Ability to question important decisions formed using financial modelling
- Ability to use statistics in the operation and performance measurements
- Setting consistent targets using statistical analysis
- A clear understanding of performance measurements

## **WHO SHOULD ATTEND?**

- Decision Makers and Performance Monitoring Specialists
- Budgeting and Financial Modelling Specialists
- Accountant and Analysts
- Financial Analysis Specialists
- Junior Managers in Data Analyst

## Course Outline

### Introduction to the Excel Environment with Oil and Gas

- A Quick-start Tutorial for Excel
- Describing Data Sets Using Statistics
- Representing Data sets Graphically
- Understanding the Concept of Normal Distribution
- Trend Analysis Using Excel
- Time Series Analysis

### Statistical Analysis (Applied to the Oil and Gas Industry) Using Excel

- Use of Excel Functions for Statistical Analysis
- Descriptive Statistics:
  - Mean
  - Median
  - Standard Deviation
  - Skewness
  - Kurtosis
- Use of Scatter Diagrams, Frequency and Histogram Distribution
- Regression Techniques to Calculate the Cost of Equity Financing
- Analysis of Equity Returns of Oil and Gas Industry and Companies

### Oil Product Spreads

- Examining the Relationship between Energy Products
- Differences between Data Sets
- Correlation Analysis
- Confidence Intervals
- Analysis of Variance (ANOVA)

### Investment Appraisal Using Excel

- Investment Appraisal using NPV, IRR, and Payback as Applied to the Oil and Gas Industry
- Use of Excel Functions for Investment Appraisal: IRR, PV and NPV
- Modified Internal Rate of Return (MIRR)
- Use of Scenario Analysis and Stress Testing
- Predicting Financial Distress

### Financial Analysis in the Up and Down Stream Oil and Gas Industry

- Introduction to Financial Statements
- Ratio Analysis Applied to the Oil and Gas Industry
- Ratios as a System – Pyramids of Ratios
- Financial Modelling