

# Training - Practice of Exploration-Production Contracts Economic Modeling



PMC-EN-P



Face-to-face only



3 days

To provide a practical understanding of the economic modeling of Oil & Gas field development project as well as exploration projects A number of computer case studies will be treated all along the course to apply the principles that are presented succinctly, which makes this course a very practical one

## Level

Skilled

## Public

Economists, engineers and executives involved in Exploration-Production activities who need to acquire a deep understanding of fiscal modeling for project evaluation

## Objectives

Attendees will be able to implement the following skills:

- Build economic models for the economic evaluation of Exploration-Production projects
- Analyze the economic results and carry out sensitivity analysis
- Incorporate the geological risk and uncertainty in the economic evaluation of E&P projects

## Pedagogical & technical resources

Case studies simulated on computers

## Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

## Prerequisites

No prerequisites are necessary to follow this course

## Responsible

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

## Program

### CONTRACTUAL & FISCAL FRAMEWORK OF EXPLORATION-PRODUCTION

0.5 day

Overview of E&P activities, exploration, development and production costs.  
General principles of oil taxation.  
Concession contracts, production sharing contracts and service contracts.  
Principles of rent sharing between States and oil companies.  
Case studies: examples of contracts.

## OIL CONTRACT MODELING

2 days

Cost of capital and discount rate, value creation.

Economic criteria for project evaluation: net present value (NPV), internal rate of return (IRR), payback period, etc.

Global profitability analysis, the impact of taxation and inflation on economic indicators.

Specific method to Exploration and Production: shadow interest.

Case studies: development of an oil field (under concession and production sharing agreements).

Equity profitability analysis.

Case studies: LNG project and gas pipeline project with specific financing.

## RISK ANALYSIS OF EXPLORATION-PRODUCTION PROJECTS

0.5 day

Introduction to risk analysis and risk discount rate: sensitivity analysis, Spider and Tornado diagrams.

Probability of success, methodology of decision tree analysis.

Analysis of economic risk in exploration.

Typical problems with uncertainties:

- Impact of ringfencing and State participation on the exploration decision process.
- Farm in/farm out, cost and value of information.
- Portfolio management for E&P projects.

## CASE STUDIES

Development of an oil field (under concession and production sharing agreements).

LNG plant project with specific financing.

Impact of “ringfencing” and the state participation in the decision-making process.

Valuation of a decision to acquire information (seismic or drilling).

Pricing of an exploration bloc.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.

Please contact our disabled persons referent to check the accessibility of this training program : [referent.handicap@ifptraining.com](mailto:referent.handicap@ifptraining.com)