

**COURSE  
DESCRIPTION GUIDE**

**ECONOMICS & MANAGEMENT**

**Division**

- ***Your contacts***
- ***Professional training in petroleum economics***
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**2010 Edition**



## IFP TRAINING...

### **THE IFP ORGANIZATION FOR PROFESSIONAL TRAINING**

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formed by the **Institut Français du Pétrole** and the **IFP School** (École du Pétrole et des Moteurs) to meet the training needs of managerial, engineering and technical staff from the oil, gas, petrochemical, chemical and automobile industries.

### **SOME 1200 DIFFERENT TRAINING COURSES PER YEAR IN 4 DIVISIONS**

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- Upstream
- IC Engines-Lubricants
- Economics and Management
- Refining-Petrochemicals-Chemicals-Engineering

in France and worldwide, involving more than **14 000 participants per year** from **1 100 client companies** and **80 different countries**.

### **5 TRAINING CENTERS IN FRANCE equipped with modern teaching aids**

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- RUEIL-MALMAISON (Head Office)
- MARTIGUES
- PAU
- LILLEBONNE
- LYON-SOLAIZE

### **80 PERMANENT FULL-TIME INSTRUCTORS**

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with extensive industrial experience, plus more than 600 lecturers from the IFP Group and industry.

### **ACTIVITY GEARED TO MEET INDUSTRY NEEDS**

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- Public courses
- Private or in-house courses (designed to meet a client's specific needs)
- Specific training on new units and equipment
- Sandwich training, individual training, instructor training
- Assistance with recruitment, consultancy in training engineering
- Designing training manuals
- Distance learning, refresher courses, technical assessment tests
- Certification courses, degree courses (IFP School)
- Blended-Learning Solutions

### **A VARIETY OF TEACHING METHODS CUSTOMIZED TO MEET TRAINING OBJECTIVES**

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- Quality of the teaching and supporting documentation
- Numerous concrete industrial applications: group exercises, case studies, field exercises
- Practical work in mechanical engineering and instrumentation workshops
- Training on dynamic simulators for processes and equipment
- On-site training

**...AT THE SERVICE OF THE INDUSTRY**

## IFP TRAINING...

### YOUR CONTACTS AT IFP TRAINING

IFP Training is at your service to meet your technical and economic training requirements in the following sectors:

- upstream and downstream oil and gas
- petrochemicals and chemicals
- automobile

The following may be contacted according to your requirement:

#### ECONOMICS AND MANAGEMENT DIVISION

**Karim Faïd**

*Vice-President*

Tél.: +33 (1) 47 52 72 67 - Fax: +33 (1) 47 52 71 09

E-mail : karim.faid@ifptraining.com

In-house Courses

**Sylvie Saulnier**

*Deputy Vice-President*

Tél.: +33 (1) 47 52 69 81 - Fax: +33 (1) 47 52 71 09

E-mail : sylvie.saulnier@ifptraining.com

**Michèle Callu**

*Assistant*

Tél.: +33 (1) 47 52 72 31 - Fax: +33 (1) 47 52 71 09

E-mail: michele.callu@ifptraining.com

Public Courses

**Josée Foucault**

*Assistant*

Tél.: +33 (1) 47 52 72 93 - Fax: +33 (1) 47 52 71 09

E-mail: josee.foucault@ifptraining.com

#### EXPLORATION AND PRODUCTION DIVISION

**Bruno Darde**

*Vice-President*

Tél.: +33 (1) 47 52 60 73 - Fax: +33 (1) 47 52 74 27

E-mail: bruno.darde@ifptraining.com

**Geosciences - Reservoir Engineering****Bernard Michaut**

Tél.: +33 (1) 47 52 69 29 - Fax: +33 (1) 47 52 74 27

E-mail: bernard.michaut@ifptraining.com

**Projets transverses****Alexandre Chwetsoff**

Tél.: +33 (1) 47 52 73 37 - Fax: +33 (1) 47 52 74 27

E-mail: alexandre.chwetsoff@ifptraining.com

**Drilling-Completion-Well Control****Didier Brigant**

Tél.: +33 (5) 59 30 82 41 - Fax: +33 (5) 59 30 68 76

E-mail : didier.brigant@ifptraining.com

**Field Operations****Mohamed Skhiri**

Tél.: +33 (1) 47 52 71 15 Fax: +33 (1) 47 52 74 27

E-mail: mohamed.skhiri@ifptraining.com

#### REFINING - PETROCHEMICALS - CHEMICALS - ENGINEERING DIVISION

**Bertrand Mouchel**

*Vice-President*

Tél.: +33 (1) 47 52 64 55 - Fax: +33 (1) 47 08 92 83

E-mail: bertrand.mouchel@ifptraining.com

**Rueil-Malmaison Center****Jean-Pierre Limage**

Tél.: +33 (1) 47 52 69 14 - Fax: +33 (1) 47 08 92 83

E-mail: j-pierre.limage@ifptraining.com

#### IC ENGINES - LUBRICANTS DIVISION

**Marc Bonnin**

*Vice-President*

Tél.: +33 (1) 47 52 71 04 - Fax: +33 (1) 47 08 92 83

E-mail: marc.bonnin@ifptraining.com

**IC Engines****Laurent Crestois**

Tél.: +33 (1) 47 52 58 06 - Fax: +33 (1) 47 08 92 83

E-mail: laurent.crestois@ifptraining.com

#### MANAGEMENT

**Dominique Barthe**

*Chef Executive Officer*

Tél.: +33 (1) 47 52 53 55 - Fax: +33 (1) 47 52 70 41

E-mail: dominique.barthe@ifptraining.com

**Bernard Léry**

*Deputy Chief Executive Officer*

*Director, International Affairs*

Tél.: +33 (1) 47 52 71 06 - Fax: +33 (1) 47 52 70 41

E-mail: bernard.lery@ifptraining.com

*If you would like to know more about us and have an overview of our training courses,  
please visit our web site:*

**[www.ifptraining.com](http://www.ifptraining.com)**

**IFP Training**

**232, avenue Napoléon Bonaparte - 92852 RUEIL-MALMAISON Cedex, FRANCE**

**...AT THE SERVICE OF THE INDUSTRY**

## ECONOMICS AND MANAGEMENT DIVISION

### EXPERTISE: PETROLEUM ECONOMICS

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The Economics and Management Division of IFP Training offers each year to more than 2000 professionals the opportunity to acquire or develop an expertise in petroleum economics and financial management through a large choice of short or long courses covering all parts of the oil and gas chain.

This division presents to the industry complete training services through:

- public courses for technical staff and managers from oil and gas companies, banks and administrations;
- in-house, short as well as long courses, tailor-made to meet specific needs;
- and finally, international conferences which gather managers and leaders of the oil industry.

### OUR TEAM, OUR EXPERTISE

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A number of faculty members and associate professors (former managers in the industry) are lecturers for the Economics and Management Division, with the help of three administrative assistants and a library facility. Furthermore, a number of professionals in activity in the industry are called upon to contribute with their expertise in specific topics.

Details of the team's professional background and expertise are given below.

- **Jacques BARDET**, associate professor with a 30-year international experience in the downstream sector within Exxon.  
**Specialities:** Marketing, bitumen markets.
- **Vincent BLONDEAU**, a graduate of the IFP School, an experience as a consultant in business intelligence and as lecturer with IFP Training. He is now an oil trader.  
**Specialities:** Energy markets, futures tradings.
- **Pierre BOUILLON**, associate professor with a more than 25 years career within Elf Exploration & Production, Sanofi and Total, has held senior positions, notably in finance and audit.  
**Specialities:** Internal audit, joint-ventures audit, petroleum accounting.
- **Ezékiel BOYER**, associate professor, graduate of IFP School, presently working in the department in charge of natural gas supply contracts within Gaz de France.  
**Specialities:** Natural gas markets liberalisation, gas contracts, transport tariffs.
- **Nadine BRET-ROUZAUT**, graduated from IFP School and from IAE (Business Administration Institute) of Paris. She is the Director of the Economics and Management Centre of IFP School.  
**Specialities:** Strategy, upsteam economics.
- **Bernard BRUN** joined IFP School after 30 years as an engineer-economist specialized in market studies.  
**Specialities:** Refining economics, petrochemicals economics, natural gas economics.
- **Patrick CAYRADE**, associate professor with a 40-year experience in project management and technico-economic studies of oil and gas projects.  
**Specialities:** natural gas markets liberalisation, transport tariffs.

## PROFESSIONAL TRAINING IN PETROLEUM ECONOMICS

## ECONOMICS AND MANAGEMENT DIVISION

- **Guillaume CHARON**, graduate of the Leonard de Vinci School of Management in Paris, has experience as an equity analyst (covering European oil & service companies) and in financing.  
**Specialities:** Oil and gas economics, energy markets and finance.

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- **Jean-Philippe CUEILLE** is in charge of the Apprenticeship within IFP School, and former president of the International Association of Energy Economist (IAEE).  
**Specialities:** Economic geography of energy, hydrocarbon economics.

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- **Gilles DARMOIS**, associate professor, has held senior positions in Total, notably as vice-chairman in charge of financial activities in the exploration-production division.  
**Specialities:** Financial management, accounting and audit.

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- **Bruno DE CORBIERE**, associate professor with a 20-year international experience in petroleum products marketing within Texaco.  
**Specialities:** Marketing of petroleum products, transport.

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- **Mohamed Lyes DJENAOU**, graduate of the IFP School in Energy economics and from the University Paris II in Industrial economics, has an experience in upstream economic studies with IFP.  
**Specialities:** Upstream economics and accounting, investment project analysis.

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- **Bernard DUVAL** is associate professor since 1995 after 35 years with Total. He has held senior positions in France and abroad, notably as vice-chairman in charge of Exploration.  
**Specialities:** upstream economics, risk analysis.

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- **Karim FAÏD** Director of the Economics Division, holds a PhD in Physics and a Master in Petroleum Economics. He has a long experience in teaching and economic studies.  
**Specialities:** Upstream economics and contracts, investment projects analysis.

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- **Jean-Pierre FAVENNEC** is director expert and professor from IFP, with a long experience in economics and management of energy and especially oil.  
**Specialities:** Oil geopolitics, petroleum economics, refining economics and management.

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- **Thierry FERRER**, an engineer with a 25-year experience in the industry within Shell and as President of INFINEUM France (JV Shell / Exxon).  
**Specialities:** Economics and management of the refining and petrochemicals industries.

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- **Lucien GUEZ** a chemical engineer and a graduate of IFP School, has 28 years of experience with ExxonMobil in refining, supply and international trading.  
**Specialities:** Petroleum economics, supply, oil markets.

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- **Emmanuel HACHE** holds a PhD in Economics, specialist of energy markets within IFP School after an experience in the Chamber of Commerce of Paris.  
**Specialities:** Commodities markets, energy markets.

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- **Thierry HANNECART**, associate professor with a 30-year international experience in supply, logistics and trading of petroleum products within Total.  
**Specialities:** Markets, transport, supply chain management.

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- **Mike HOWARD** is an associate professor with a 35-year international career with Shell, followed by 10 years as a lecturer with IFP Training.  
**Specialities:** Strategy and petroleum economics, petroleum and speciality product marketing.

## PROFESSIONAL TRAINING IN PETROLEUM ECONOMICS

## ECONOMICS AND MANAGEMENT DIVISION

- **Thomas JABŒUF** is an associate professor, presently a market economist at Gaselys, the risk management subsidiary of Gaz de France and Société Générale.  
**Specialities:** Energy markets, risk management.

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- **Bernard JEHL** is associate professor. During a 30-year career with Elf, he held senior positions in the exploration-production sector.  
**Specialities:** Upstream economics, capital budgeting.

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- **Frédérique LANG** is associate professor with more than 20 years in economic evaluation of projects and negotiation of contracts in the exploration-production sector, with Elf and then Total.  
**Specialities:** Fiscal and contractual framework of exploration & production, risk analysis.

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- **Pierre-Luc LANTERI-MINET**, associate professor with some 15 years of experience in the management of natural gas infrastructures and technico-economic studies within Gaz de France.  
**Specialities:** Natural gas markets liberalisation, gas contracts, transport tariffs.

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- **Frédéric LANTZ** holds a Ph.D in Economics. Since 1984 he has supervised applied research projects related to linear programming and econometrics, first for Ifremer and then for IFP.  
**Specialities:** Quantitative methods.

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- **Christian LESNÉ** is an associate professor with a 25-year career in refinery management, audit and cost-control with Exxon.  
**Specialities:** Refining economics and management.

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- **Gérard PELONG** is an associate professor with a 30-year international experience in refinery management, audit and cost control within Shell.  
**Specialities:** Economics and optimisation of refinery operations.

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- **Sandra RAKI-RECHIGNAC** holds a Master in analysis of developing economics and is engaged in research on the international energy scene.  
**Specialities:** Petroleum economics.

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- **Marc ROCHÉ** is an associate professor who held senior positions with Arco Chemical in Europe. Notably as Vice President for marketing, and business development.  
**Specialities:** Petrochemicals economics and management.

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- **Sylvie SAULNIER** joined IFP Training after 14 years with Shell in marketing and credit management. She is Deputy Vice-President of the Economics and Management Division.  
**Specialities:** Downstream economics.

## PROFESSIONAL TRAINING IN PETROLEUM ECONOMICS

## ECONOMICS AND MANAGEMENT DIVISION

### **IN-HOUSE COURSES: DESIGNED TO MEET YOUR TRAINING NEEDS**

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*The Economics and Management Division of IFP Training also develops tailor-made courses to meet a company's specific needs.*

*A systematic approach:*

- Assessment of needs and definition of targets
- Definition of training course content
- Choice of methods and design of teaching aids
- Organization of the course
- Evaluation and assessment of results

*Some examples of training...*

- **Induction of new graduate personnel:**  
"Recent techniques and modern management in refining": 70-day training for a group of young engineers from YUKOS (Russia)
- **Combined training with other divisions of IFP Training:**  
"Economics & Management Downstream Module": 60-day training for NIORDC (Iran)
- **Training in meeting a company's specific need:**  
"Economics and management of exploration-production": 90-day training for SONATRACH (Algeria)  
"Issues facing an oil /gas shipping company in a deregulated market": 40-day training for SONATRACH (Algeria)
- **Seminars and business games** based on petroleum economics for all levels
- **Introduction** to economics and management, to financial statements, to profitability studies
- **Overview of economic issues** facing a company for the management of SAIPEM, LUKOIL,...
- **Individual training programs**

## PROFESSIONAL TRAINING IN PETROLEUM ECONOMICS

## ECONOMICS AND MANAGEMENT DIVISION

### INTERNATIONAL CONFERENCES

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*The Conferences organized by the Economics and Management division bring together professionals from different sectors with different backgrounds to examine the major challenges facing the oil, gas and energy sectors.*

These conferences are meant to be an opportunity for high-level meetings, gathering the major decision-makers on the energy scene, officials and experts from different sectors, who are anxious to debate the perspectives and constraints of the oil and gas industry in the light of the changes taking place worldwide.

The “**International Gas Summit**”, initiated in 1996, has met with great success in terms of both participation and media coverage and has gathered ministers and senior representatives of national and international institutions, in addition to senior executives of oil, gas and electricity companies.

The different sessions deal with a varied number of issues such as:

- the situation and perspectives of the international gas market, particularly in Europe;
- the supply security problem;
- the relations between producing and consuming countries;
- the conditions of the liberalization of the gas and electricity markets;
- the impact of the growing interdependence between gas and electricity;
- the perspectives of an LNG market globalization.

The “**International Oil Summit**”, initiated in 1999, has become one of the most important yearly events gathering the decision-makers of the energy scene, to exchange viewpoints and appreciate the international situation and future perspectives of the world oil market:

- the impact of the international tensions on energy supplies;
- the fluctuation of oil prices;
- the dialogue between producing and consuming countries;
- the relations between OPEC and non-OPEC countries;
- the role of competing energy sources and the environmental constraints;

are among the questions the eminent speakers are invited to address on the occasion of this conference.

*Conferences are both in French and in English.*

*For further information, please visit our web site*

***[www.oil-gas-energy-conferences.com](http://www.oil-gas-energy-conferences.com)***

## PROFESSIONAL TRAINING IN PETROLEUM ECONOMICS



## OUR REFERENCES

**A**BB Lummus Global *Netherlands*  
ADEME  
Aden Refinery *Yemen*  
ADMA/OPCO *U.A.E.*  
ADNOC *Abu Dhabi*  
AFTP  
AGIP  
Air Liquide  
AKZO Nobel Catalysts *Netherlands*  
Aramco  
ARL *Pakistan*  
ATIC  
Axens

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**B**ahrain National Oil Company  
BEICIP-FRANLAB  
BIP  
BNP Paribas  
BP  
Butagaz

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**C**AMPESA  
Capool  
Carfuel  
Carludif  
CCASI  
Charbonnages de France  
CEA  
Cedigaz  
CEPSA  
Ceska Rafinerska *Czech Republic*  
CFTP *Tunisia*  
CGG  
Chérifienne des Pétroles *Morocco*  
Chevron Texaco  
CIBC USA  
CIED *Venezuela*  
CNPC *China*  
Coflexip  
Combustibles de Normandie  
Commissariat Général du Plan  
Compagnie Rhénane de Raffinage  
CORAF *Congo*  
Cotco *Cameroun*  
CPC *Taiwan*  
CPDP  
Crédit Agricole  
CL (ex Crédit Lyonnais)  
CUPET *Cuba*

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**D**IMAH  
Direction des Hydrocarbures Guinée,  
Congo, Mali, Sénégal...  
Distrigaz  
Distriservice

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**E**copetrol *Columbia*  
Électricité de France  
Edison *Italy*  
Egyptian Petroleum Corporation  
ENAP *Chilli*  
ENI  
Erg Petroli *Italy*  
ETAP *Tunisia*  
Exxon-Mobil

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**F**oster Wheeler

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**G**alana *Madagascar*  
GALP *Portugal*  
Gasbetriebe *Germany*  
Gaselys  
Gaz de France  
Gazprom  
General Electric  
Gestoci *Ivory Coast*  
GNPC *Ghana*  
Global Gas Group *Belgium*

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**H**ellenic Aspropyrgos Refinery *Greece*  
Hungarian Oil & Gas company  
Hydrocongo

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**I**BM  
IEA  
Indian Institute of Petroleum  
Institut Algérien du Pétrole  
Institut Français du Pétrole  
Institut Français de l'Energie  
INTEVEP *Venezuela*  
Italgaz *Italy*

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**J**apan National Oil Company

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**K**PC *Koweït*

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**L**enpetekhim *Russia*  
Lukoil *Russia*  
Lundin Petroleum (ex Coparex) *Sweden*

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**M**araven *Venezuela*  
Mari Gas Company *Pakistan*  
MEPP *Mauritania*  
MEETI *South Africa*  
MGIMO *Russia*  
Michelin  
Ministries of Energy and Hydrocarbons  
(*more than 20 countries*)  
MOL *Hungary*  
Monteshell

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**N**aftec *Algeria*  
National Iranian Gas Co  
National Oil Company *Libya*  
Neste OY *Finland*  
NIOC *Iran*  
NIORDC *Iran*  
NNPC *Nigeria*  
Norsk Hydro *Norway*  
Norsolor  
NV Nederlandse Gasunie *Netherlands*  
Nynas NV *Belgium*

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**O**NAREP *Morocco*  
OPEC

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**P**DVSA *Venezuela*  
Pechiney  
Pemex *Mexico*  
Pertamina *Indonesia*

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Petrobras *Brazil*  
Petroci *Ivory Coast*  
Petroconsultant  
Petrofina  
Petroleum Finance Company  
Petronas *Malaysia*  
Petroperu *Peru*  
Petrosa *South Africa*  
Pétrosen *Senegal*  
Petrostratégies  
Petrovex  
Petrox *Chilli*  
Peugeot  
Philips Petroleum Company  
Picoty  
Portgas *Portugal*  
Primagaz  
Procatalyse  
Public Petroleum Corporation *Greece*

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**R**enault  
Repsol YPF *Spain*  
Rhône-Poulenc  
Rosneft *Russia*  
Rubis Terminal (ex CPA)

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**S**aipem  
Sanokr *Russia*  
SAR *Senegal*  
SARA *Antilles*  
Saudi Aramco  
SEERAT *Chad*  
Senelec *Senegal*  
Service Central des Essences des Armées  
Shell  
Sichuan *China*  
Sinopec *China*  
SIR *Ivory Coast*  
SITEC *Tunisia*  
SNAM *Italy*  
SNDP *Tunisia*  
SNPC *Congo*  
Société Générale  
Sogara *Gabon*  
Solvay  
Sonangol *Angola*  
Sonara *Cameroun*  
Sonatrach *Algeria*  
Speichim Processing  
Statoil *Norway*  
STIR *Tunisia*

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**T**echnip  
Technip Géoproduction  
Technolink *Libya*  
Teri *India*  
Tokyo Gas  
Total  
Trapil  
Tyumen Technology Institute *Russia*

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**U**FIP  
Uzbekneftegas

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**V**eba *Germany*

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**Y**ukos *Russia*



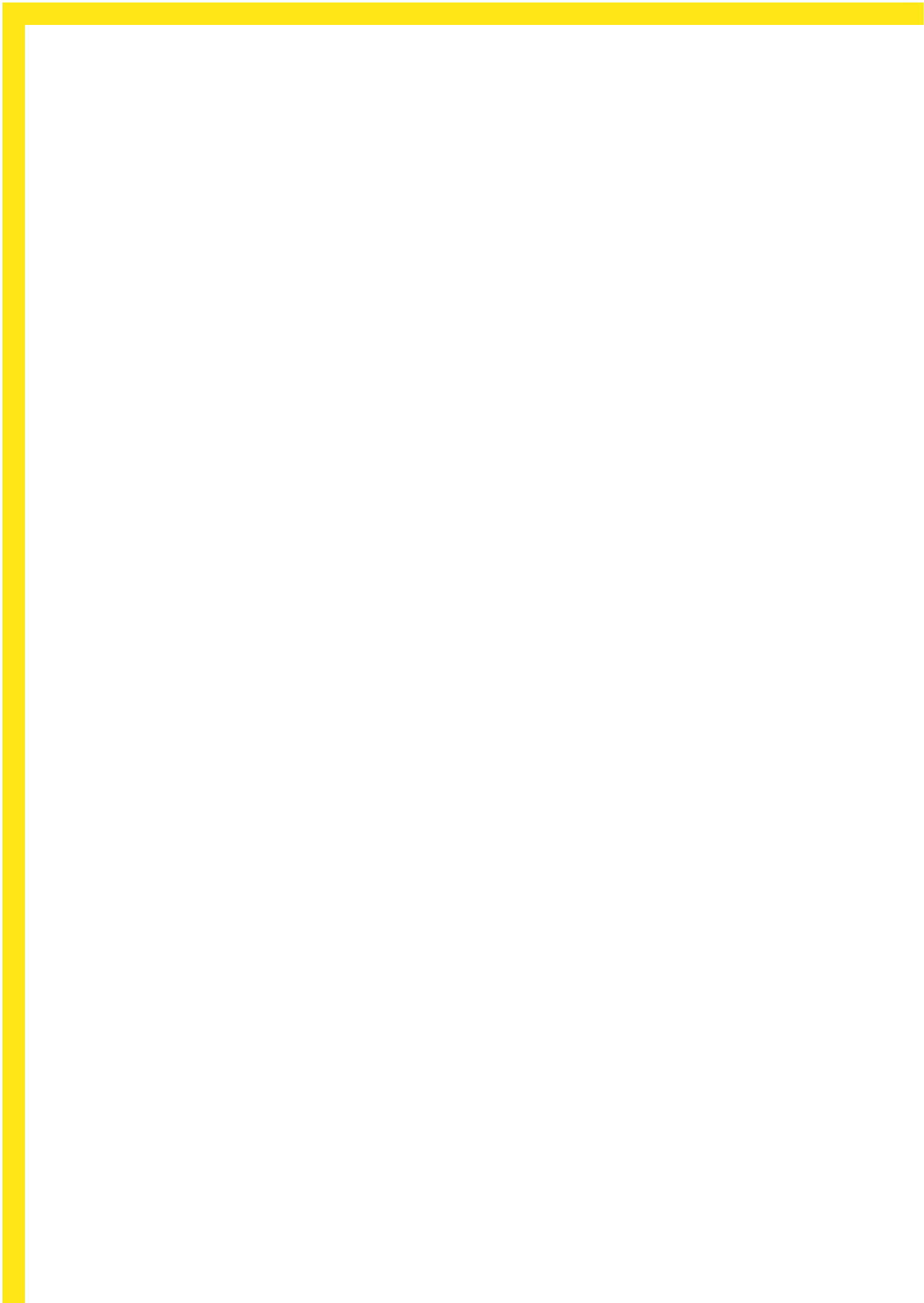
COURSE DESCRIPTION GUIDE  
2010 EDITION

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**COURSE INDEX**



## COURSE INDEX

Tuition fee includes instruction and documentation. The fee also includes meal and beverage breaks during training courses, charged at € 28 per day per participant.

	Duration (days)	Dates	Location	Tuition Fees € excl. tax	Course No.
<b>ENERGY SUMMITS</b>					
– International Oil Summit	1	• April 22	Paris	1 300	<b>1</b>
– International Gas and Electricity Summit	1,5	• October 4 & 5	Paris	1 600	<b>2</b>
<b>ENERGY ECONOMICS &amp; MARKETS</b>					
– Short MBA on Energy Management <i>(for senior managers and executives in the energy sector)</i>	10	• June 21 to July 2	Rueil	7 500	<b>3</b>
– Overview of Petroleum Economics	4	• December 20 to 23	Rueil	1 600	<b>4</b>
– Oil Markets and Trading	3	• April 7 to 9	Rueil	1 450	<b>5</b>
– Contractual Framework of Oil Trading	3	• September 1 to 3	Rueil	1 450	<b>6</b>
– Overview of Natural Gas Economics	4	• June 28 to July 1	Rueil	1 700	<b>7</b>
– Gas Markets and Trading	2	• November 9 & 10	Rueil	1 030	<b>8</b>
– Contractual Framework of Gas Trading	3	• March 3 to 5	Rueil	1 450	<b>9</b>
– Liquefied Natural Gas Economics	4	• September 21 to 24	Rueil	2 010	<b>10</b>
– Shipping : general features, chartering contracts and operations <span style="background-color: yellow;">new</span>	4	• April 19 to 22	Rueil	1 860	<b>11</b>
<b>UPSTREAM ECONOMICS</b>					
– Upstream Economics and Management	15	• April 19 to May 7	Rueil	6 200	<b>12</b>
– Contractual Framework of Exploration-Production	4	• September 7 to 10	Rueil	2 010	<b>13</b>
– Production Sharing and Joint Operating Agreements	4	• June 29 to July 2	Rueil	2 010	<b>14</b>
– Economic Framework of Exploration-Production	5	• February 22 to 26	Rueil	2 320	<b>15</b>
– Economics and Risk Analysis of Upstream Projets	5	• June 14 to 18	Rueil	2 320	<b>16</b>
– Upstream Module <i>(part of the Petroleum Economics and Management Master degree program run by IFP School)</i>	3 months	• January 5 to April 9	Rueil	10 250	<b>17</b>
– Introduction to Petroleum Engineering	5	• June 21 to 25 • October 18 to 22	Rueil	2 010	<b>18</b>
– Technical and economic evaluation of carbon capture, transport and storage projects <span style="background-color: yellow;">new</span>	2	• June 23 to 24	Rueil	1 300	<b>19</b>

## COURSE INDEX

Tuition fee includes instruction and documentation. The fee also includes meal and beverage breaks during training courses, charged at € 28 per day per participant.

	Duration (days)	Dates	Location	Tuition Fees € excl. tax	Course No.
<b>DOWNSTREAM ECONOMICS</b>					
– Downstream Economics and Management	15	• Nov. 29 to Dec. 17	Rueil	4 900	20
– Planning and Economics of Refinery Operations (London, in collaboration with The Energy Institute)	4	• October 19 to 22	London	£ 2 450	21
– Refinery Operations Management and Linear Programming	5	• November 22 to 26	Rueil	1 960	22
– Economic Framework of Refining	5	• April 26 to 30	Rueil	1 960	23
– Economic Framework of Petrochemicals	5	• September 13 to 17	Rueil	1 960	24
– Marketing in the Oil Industry	4	<i>Non-scheduled. Conditions to be agreed upon</i>			25
– Marketing and Sales of Lubricants	3	• June 29 to July 1	Rueil	1 350	26
– Marketing and Sales of Bitumen	3	• March 9 to 11	Rueil	1 350	27
– Marketing and Sales of Petrochemicals	2	<i>Non-scheduled. Conditions to be agreed upon</i>			28
– Fundamentals of Retail Marketing	3	<i>Non-scheduled. Conditions to be agreed upon</i>			29
– Site Facility Management	2	<i>Non-scheduled. Conditions to be agreed upon</i>			30
– Retail Site Management	2	<i>Non-scheduled. Conditions to be agreed upon</i>			31
– Downstream Module (part of the Petroleum Economics and Management Master degree program run by IFP School)	3 months	• April 19 to July 16	Rueil	10 250	32
– Refining Processes and Petroleum Products	5	• March 8 to 12 • September 6 to 10	Rueil Rueil	2 050	33
<b>FINANCE &amp; MANAGEMENT</b>					
– Financial Management of an International Oil Company	10	• March 8 to 26	Rueil	4 100	34
– Strategic Management and Planning	4	• April 13 to 16 • October 19 to 22	Rueil	2 270	35
– Price Risk Management in Energy Markets	3	• October 6 to 8	Rueil	1 450	36
– Practice of E&P Contracts Economic Modelling	4	• July 5 to 8	Rueil	2 010	37
– Economic Modelling and Analysis in the Petroleum Industry	5	• March 15 to 19	Rueil	2 220	38
– Econometrics and Forecasting	5	<i>Non-scheduled. Conditions to be agreed upon</i>			39
– Project Management: Contracts, Schedules, Procurement, Construction	5	• November 22 to 26	Rueil	2 250	40

**COURSE CALENDAR**



## COURSE CALENDAR

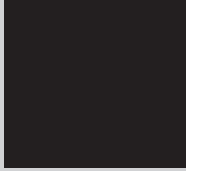
		1 day ◆	3 days ●	4.5 days ▼	January	February	March	April	May	June	July	August	September	October	November	December	
N°		1.5 days ◆	3.5 days ▲	5 days ■													
		2 days ○	4 days □	more than 5 day ■													
ENERGY SUMMITS	1	International Oil Summit							◆ 22								
	2	International Gas and Electricity Summit													4 ◆ 5		
ENERGY ECONOMICS & MARKETS	3	Short MBA on Energy Management (for senior managers and executives in the energy sector)									21 ■ 2						
	4	Overview of Petroleum Economics															20 □ 23
	5	Oil Markets and Trading							7 ● 9								
	6	Contractual Framework of Oil Trading												1 ● 3			
	7	Overview of Natural Gas Economics									28 □ 1						
	8	Gas Markets and Trading														9 ○ 10	
	9	Contractual Framework of Gas Trading							3 ● 5								
	10	Liquefied Natural Gas Economics												21 □ 24			
	11	Shipping : general features, chartering contracts and operations							19 □ 22								
	UPSTREAM ECONOMICS	12	Upstream Economics and Management							19 ■ 7							
13		Contractual Framework of Exploration-Production											7 □ 10				
14		Production Sharing and Joint Operating Agreements									29 □ 2						
15		Economic Framework of Exploration-Production						22 ■ 26									
16		Economics and Risk Analysis of Upstream Projets									14 ■ 18						
17		Upstream Module (part of the Petroleum Economics and Management Master degree program run by IFP School)				5	■ 9										
18		Introduction to Petroleum Engineering									21 ■ 25				18 ■ 22		
19		Technical and economic evaluation of carbon capture, transport and storage projects									23 ○ 24						



## COURSE CALENDAR

N°	1 day ◆		3 days ●		4.5 days ▼		January	February	March	April	May	June	July	August	September	October	November	December											
	1.5 days ◆		3.5 days ▲		5 days ■																								
	2 days ○		4 days □		more than 5 days ■																								
DOWNSTREAM ECONOMICS	20	Downstream Economics and Management																	29	■	17								
	21	Planning and Economics of Refinery Operations (London, in collaboration with The Energy Institute)																	19	□	22								
	22	Refinery Operations Management and Linear Programming																	22	■	26								
	23	Economic Framework of Refining																	26	■	30								
	24	Economic Framework of Petrochemicals																	13	■	17								
	25	Marketing in the Oil Industry																	<i>Non-scheduled.</i>										
	26	Marketing and Sales of Lubricants																	29	●	1								
	27	Marketing and Sales of Bitumen																	9	●	11								
	28	Marketing and Sales of Petrochemicals																	<i>Non-scheduled.</i>										
	29	Fundamentals of Retail Marketing																	<i>Non-scheduled.</i>										
	30	Site Facility Management																	<i>Non-scheduled.</i>										
	31	Retail Site Management																	<i>Non-scheduled.</i>										
	32	Downstream Module (part of the Petroleum Economics and Management Master degree program run by IFP School)																	19	■									
33	Refining Processes and Petroleum Products																	8	■	12	6	■	10						
FINANCE & MANAGEMENT	34	Financial Management of an International Oil Company																	8	■	26								
	35	Strategic Management and Planning																	13	□	16	19	□	22					
	36	Price Risk Management in Energy Markets																	6	●	8								
	37	Practice of E&P Contracts Economic Modelling																	5	□	8								
	38	Economic Modelling and Analysis in the Petroleum Industry																	15	■	19								
	39	Econometrics and Forecasting																	<i>Non-scheduled.</i>										
40	Project Management: Contracts, Schedules, Procurement, Construction																	22	■	26									





## ENERGY SUMMITS

Programmes 1 to 2



# INTERNATIONAL OIL SUMMIT

jointly organized with *IFP* and *Petrostrategies*

The *International Oil Summits*, held in Paris since 1999, have been recognized as large successes.

Each conference brings together more than 200 participants, including ministers, prominent corporate leaders and journalists.

The presentations of distinguished speakers open constructive discussions concerning a wide range of issues confronting the oil industry.

In 2010, as in the previous summits, oil ministers and CEOs of leading national and international oil companies are invited to take part.

## CONTENT

The topics covered in the *International Oil Summit* include the following:

### OIL SUPPLY AND DEMAND

The oil market. Competition between oil and other energy sources.

The impact of technological advances on production and processing costs.

Outlook for growth in oil supply in the current price climate.

Demand in the 21st century and the share of oil in the global energy market in the face of competition and environmental constraints.

### PRODUCING COUNTRIES

With the participation of ministers from the main oil producing countries.

### INTERNATIONAL OIL COMPANIES, NATIONAL OIL COMPANIES, OIL SERVICES COMPANIES

With the participation of CEOs and senior executives.

Oil industry developments (mergers and acquisitions) and their impact on costs.

How improved technological progress, organisation and management can contribute to the reduction of costs.

Possible cooperation strategies between producing countries and international companies.

OPEC/non-OPEC relations and producer-consumer dialogue.

Cooperation/competition between oil and oil services companies.

### CURRENT ISSUES

Oil prices, oil reserves, oil production.

A detailed brochure will be available a few months before the summit.  
For further information, have a look at the web site: [www.oil-gas-conferences.com](http://www.oil-gas-conferences.com)

*Economics and Management*

1

#### ▲ Who should attend?

Professionals in the oil business, consumers, government advisers, policy makers, academics, bankers, economists, lobbyists and consultants.

#### ▲ Duration

1 day

#### ▲ Dates & Location

April 22, 2010  
Paris

#### ▲ Tuition Fees

€ 1,300 excl. tax

#### ▲ Course Coordinator

Karim Faïd

Ref. EG/IOS

**IFP Training**

▲ **Who should attend?**

Professionals in the Gas Business, Consumers, Buyers, Power Generators, Regulators and Government Advisers/Policy Makers, Academics, Bankers, Economists, Lobbyists and Consultants.

▲ **Duration**

1.5 days

▲ **Dates & Location**

October 4 & 5, 2010  
Paris

▲ **Tuition Fees**

€ 1,600 excl. tax

▲ **Course Coordinator**

Karim Faïd

Ref. **EG/IGS**

# INTERNATIONAL GAS & ELECTRICITY SUMMIT

jointly organized with *IFP* and *Petrostrategies*

The *International Gas Summits*, held in Paris since 1996, have recorded large successes. Each conference brings together more than 200 participants, including ministers, prominent corporate leaders and journalists.

Wide issues facing the natural gas industry around the world are open for debate following presentations from distinguished speakers.

In 2010, as in the previous summits, CEOs of leading gas companies such as E.On, GDF Suez, Gazprom, Shell, Sonatrach, Statoil, Total, QP... are invited to take part.

## CONTENT

The topics covered in the *International Gas Summit* include the following:

### GAS KEY ISSUES

Where will new supplies come from?  
What shape will future ties with producing countries take?  
Europe-Russia : What kind of partnership does the future hold?  
Role of the Middle-East.

### GAS & ELECTRICITY MARKETS

Opportunities and constraints of the convergence of gas and electricity.  
Could the increasing role of gas in power generation affect electricity prices?  
The role of exchanges on deregulated markets: reliability, liquidity, risk management, etc.

### LNG

What role will the spot market play in Europe? Impact on prices  
World LNG supply and demand. Is LNG a factor in integrating markets?  
The Atlantic basin – Asian market interface. What role will Gulf States play?  
The impact of US demand on other LNG markets.  
Which LNG spot market for the Asia-Pacific area?  
What is the need for new capacities?  
Where will the investments come from?  
Competition between electricity sources : coal, gas, nuclear.  
Will nuclear come back?  
Can we continue to use coal?  
The role of hydro.  
Developments in the electricity industry.

A detailed brochure will be available a few months before the summit.

For further information, have a look at the web site: [www.oil-gas-energy-conferences.com](http://www.oil-gas-energy-conferences.com)



## ENERGY ECONOMICS & MARKETS

Course descriptions **3 to 11**



# SHORT MBA ON ENERGY MANAGEMENT

Economics and Management

3

## OBJECTIVES

Created in 1991, the *Oil and Gas Management Executive Session* has attracted more than 300 participants from the major oil and gas companies in the world.

Each session is the opportunity to:

- review and discuss major recent developments in the world economy and examine strategies for addressing these in the petroleum industry;
- explore key technical, economic and financial issues relevant to areas of the oil and gas industries, such as exploration, development, production, trading, supply and refining;
- expand knowledge of strategic planning, and organisational management and broaden perspectives on current economic and financial decision making tools;
- exchange experiences with prestigious lecturers and other participants.

## COURSE CONTENT

The programme is structured around three core disciplines.

### BUSINESS ENVIRONMENT, OIL AND GAS PERSPECTIVES

International business environment.  
Energy resources and competition.  
The oil market revolution.  
Environmental issues.  
Oil companies' strategies.  
OPEC and consuming countries' strategies.  
Major challenges in the energy industry.

### OIL, GAS AND OTHER ENERGIES MANAGEMENT

Technology, economics, current situation, perspectives, policies and strategies in the field of:  
Oil and gas exploration.  
Oil and gas production and development.  
Supply and trading.  
Refining and oil processing.  
Natural gas and Gas To Liquids.  
Electricity.  
Renewables.

### STRATEGIC MANAGEMENT, FINANCE AND ECONOMICS

Strategic planning.  
Management of human resources.  
Investment planning.  
Capital budgeting.  
Financial management.  
New regulations in the energy sector.

### ▲ Who should attend?

Senior managers and executives in the oil, gas and petrochemical industries and related activities.

The seminar is also designed for professionals in either the private or public sector.

### ▲ Duration

10 days

### ▲ Dates & Location

June 21 to July 2, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 7,500 excl. tax

### ▲ Course Coordinator

Thierry Ferrer

Ref. EG/ESS

A detailed brochure will be available a few months before the session.

**IFP** Training

▲ **Who should attend?**

- Professionals who need to get an overview of the petroleum industry with an understanding of the mechanisms involved all along the oil chain.
- Those who are concerned about petroleum economics and work in other sectors such as banking or government where they need an understanding of the industry.

▲ **Duration**

4 days

▲ **Dates & Location**

December 20 to 23, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 1,600 excl. tax

▲ **Course Coordinator**

Sandra Raki-Rechignac

Ref. EG/OPE

# OVERVIEW OF PETROLEUM ECONOMICS

## OBJECTIVES

To provide global understanding of the oil industry structure and economic mechanisms, from exploration-production, oil markets to refining and distribution.

On completion of the course, the participants will be able:

- to comprehend the importance and the potential of oil in the worldwide energy balance as well as the strategies of the main actors of the industry;
- to describe the basic mechanisms of physical and financial oil markets;
- to distinguish the main technical and economic aspects of the activities all along the oil chain, from upstream to downstream.

## COURSE CONTENT

### INTERNATIONAL ENERGY SCENE

1 day

Oil in the world energy balance, evolution and perspectives.

Energy reserves, oil production.

History of the oil industry and oil price evolution.

Strategy of actors: producing countries, consuming countries, national and international oil companies, international organisations (OPEC, IEA...).

Financial and political challenges.

### UPSTREAM

1 day

Various phases of the exploration-production business.

Main technical aspects and evolution of technology.

Costs and investments, economic and technological challenges.

Oil contracts and rent sharing.

Environmental constraints.

### MIDSTREAM

1 day

Oil transport and freight costs.

Main physical markets for crude oil and oil products around the world.

Factors determining crude and oil products prices.

Links between different markets.

Financial markets: principles of futures contracts, hedging, derivatives.

### DOWNSTREAM

1 day

Refining schemes and principles.

Refining capacities, projects, strategy and actors.

Economical aspects of refining: investments, costs and margins.

Environmental constraints.

Oil products demand and principles of marketing and distribution.

# OIL MARKETS AND TRADING

Economics and Management

5

## OBJECTIVES

To provide a better understanding of the structure, the methods of operation, the uses and the impacts of physical, financial and paper markets for crude oil and petroleum products.

On completion of the course, the participants will have:

- analyzed the parameters which influence prices of crude oil and petroleum products;
- reviewed the different oil trading markets by type of transaction;
- understood the importance of transport costs in oil supply economics;
- comprehended the hedging techniques available for protection against fluctuations in prices.

### ▲ Who should attend?

All personnel in the petroleum or associated industries needing to improve their knowledge and understanding of crude oil and petroleum products trading and pricing mechanisms.

## COURSE CONTENT

### OIL SUPPLY AND DEMAND FUNDAMENTALS

0.5 day

Oil vs other energy sources.

Demand fundamentals.

Oil producing countries, OPEC, consuming countries, international oil companies: constraints and strategies.

### CRUDE AND PETROLEUM PRODUCTS PHYSICAL TRADING

1 day

“What is the value of a crude oil?”: the refiner’s point of view.

Different types of contracts: Long term, spot and forward.

Main oil markets and their features.

Benchmark crudes. The role of reporting agencies.

Links between trading and shipping.

Products trading.

Main provisions of a sale/purchase contract.

### EXCHANGES AND FUTURES TRADING

1 day

The concept of volatility.

Definition of a contract: the cases of WTI and Brent.

Exchanges and their organisation: the cases of NYMEX and ICE.

Main futures markets.

Hedging principles.

Hedging imperfections. Basis risk.

Market structure (contango, backwardation)

Case study.

### DERIVATIVES

0.25 day

Options: principles, basics and characteristics.

Interests and limits of options.

Swaps: principles, basics and characteristics.

Interests and limits of swaps.

### HEDGING STRATEGIES

0.25 day

Hedging strategy for a consumer.

Hedging strategy for a marketer.

Hedging strategy for a refiner.

Hedging strategy for a producer.

### ▲ Duration

3 days

### ▲ Dates & Location

April 7 to 9, 2010

Rueil-Malmaison

### ▲ Tuition Fees

€ 1,450 excl. tax

### ▲ Course Coordinator

Lucien Guez

Ref. **EG/OMT**

**IFP Training**

▲ **Who should attend?**

Professionals in the oil industry, involved in the oil supply, sales, distribution, operational, financial and administrative follow-up related to transactions on crude oil or products

▲ **Duration**

3 days

▲ **Dates & Location**

September 1 to 3, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 1,450 excl. tax

▲ **Course Coordinator**

Lucien Guez

Ref. EG/COT

# CONTRACTUAL FRAMEWORK OF OIL TRADING

## OBJECTIVES

Explain the fundamental mechanisms of physical markets for crude and oil products, and review the drawing up of the main articles of a sale/purchase oil contract.

On completion of the course, the participants will have:

- gotten a deeper understanding of the main factors affecting oil prices;
- understood the meaning of the main articles that set the balance in oil contracts;
- measured the consequences of the contractual framework of oil trading from the operational, legal and financial perspectives for each party to the contract.

## COURSE CONTENT

### INTRODUCTION

0.25 day

Global overview of the oil market actors.  
Main streams of crude oil and finished products.

### OIL PRICE SETTING

1.25 day

Market balances (supply/demand) and prices consequences.  
Basics on arbitrage between geographical areas.  
Price setting.  
Methodologies and roles of reporting agencies such as Platt's and Argus.  
Main parameters affecting prices of crude oil, and oil products.  
Interface refining / markets.  
Benchmarks and a crude pricing with respect to a benchmark.  
Quality impact on a product pricing with respect to a quotation.  
Transportation component – Different means of transportation (sea, pipelines, ...).  
Freight cost assessment.  
Review of different types of chartering contracts and of main terms used.  
Vessel acceptability clause (screening, vetting processes).  
Roles and responsibilities of the independent inspection companies.

### OIL PRODUCTS SALE / PURCHASE CONTRACTS

1 day

Trading room organization.  
Roles and responsibilities of each office (front office, middle office, back-office).  
Functional review of the contracts (legal, credit, audit, ...).  
Negotiation and drawing up of a contract.  
Incoterms.  
Main contract provisions and their consequences.

- Operational.
- Financial (payment terms, credit terms, ...).
- Legal aspects, taxes, duties.

The GT&C's (General Terms & Conditions).  
Risks assessment.  
Contract follow-up (operational, financial...).  
Setting up control procedures.

### CASE STUDIES

0.5 day

# OVERVIEW OF NATURAL GAS ECONOMICS

## OBJECTIVES

To provide participants with an overview of the economic and contractual aspects of the natural gas chain, all the way from production and transport to marketing.

On completion of the course, the participants will have:

- understood the importance of natural gas in the world energy balance, and the strategies of the main actors of the industry;
- seen the main technical, economic and contractual features of the natural gas chain, from the production well to the final consumer;
- appreciated the framework of liberalization of natural gas markets and its impact on gas contracts and prices.

## COURSE CONTENT

### GLOBAL GAS SCENE

0.5 day

Importance of natural gas in the world energy balance.  
Reserves, production, consumption and trading around the world.

### STRUCTURE AND COSTS OF THE NATURAL GAS CHAIN

0.5 day

Description of the gas chain: from production to distribution.  
Costs of production, treatment and transport.  
Liquefied Natural Gas, Gas-To-Liquids.  
Storage costs and distribution costs.  
Examples of projects around the world.

### DIFFERENT GAS MARKETS

0.5 day

Main gas markets structures.  
The European Union and the liberalisation process.  
The US market, the Japanese market.  
Emerging markets: China and India.

### LONG-TERM NATURAL GAS AND LNG CONTRACTS

0.5 day

Structure and principles of a long-term contract.  
Principles of take-or-pay, netback, indexation and gas price formulas.  
Main articles of long-term contracts.

### GAS MARKETING IN A LIBERALISED MARKET

1 day

Drivers and concepts of liberalisation.  
Principles of the EU gas directive, progress in various countries, take-or-pay issues.  
Role of the regulator, network development, transport, tariffs, etc.  
Contractual aspects between suppliers, transporters and distributors.

### SPOT, FORWARD AND FINANCIAL MARKETS

0.5 day

Spot and forward natural gas markets.  
Why and how to access those markets?  
Prices in the different markets.  
Financial contracts, hedging strategies and examples.

### CORPORATE STRATEGIES

0.5 day

Organisation and constraints of gas companies in monopolistic markets.  
Stakes and opportunities in the framework of liberalisation.  
Role of oil and gas companies.  
Gas and power integration.

### ▲ Who should attend?

- Professionals with experience in the oil industry who now need to widen their understanding and knowledge of the natural gas business.
- Those who are concerned about natural gas and work in other sectors such as banking or government where they need an understanding of the industry.

### ▲ Duration

4 days

### ▲ Dates & Location

June 28 to July 1, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 1,700 excl. tax

### ▲ Course Coordinator

Guillaume Charon

Ref. EG/ONE

▲ **Who should attend?**

All personnel in the gas or associated industries needing to improve their knowledge and understanding of gas trading and pricing mechanisms.

▲ **Duration**

2 days

▲ **Dates & Location**

November 9 & 10, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 1,030 excl. tax

▲ **Course Coordinator**

Guillaume Charon

Ref. **EG/GMT**

# GAS MARKETS AND TRADING

## OBJECTIVES

To provide a better understanding of the structure, the methods of operation, the uses and the impacts of gas physical, financial and paper trading.

On completion of the course, the participants will have:

- analyzed the fundamentals of gas supply and regional demands;
- reviewed the different gas trading markets and types of transactions;
- understood the basic structure of long term contracts;
- comprehended the hedging techniques available for protection against fluctuations in prices.

## COURSE CONTENT

### GAS SUPPLY AND DEMAND

0.25 day

Evolution of gas demand. Projections.  
Gas reserves and production.  
Gas producing countries. International supply projects.  
Regional gas demands.  
International Trade. LNG trading.

### LONG TERM CONTRACTS

0.5 day

Types of contracts.  
Features of long term contracts.  
Contractual quantities, nominations and Take-or-Pay.  
Gas pricing: indexation principle.  
Concepts of Market value and Cost plus.

### SPOT AND FORWARD MARKETS

0.5 day

Spot markets.  
Forward contracts.  
North American Hubs.  
Spot markets in UK and continental Europe.  
Price References and the role of reporting agencies.

### FUTURES MARKETS

0.5 day

Features of gas Future contracts.  
Exchanges and their organization: NYMEX, IPE.  
Hedging using Future contracts.  
Basis risk and hedging imperfections.

### RISK MANAGEMENT

0.25 day

Swaps: principles, basics and characteristics.  
Options (call, puts): principles, basics and characteristics.  
OTC derivatives: caps, floors, collars.

# CONTRACTUAL FRAMEWORK OF GAS TRADING

## OBJECTIVES

To provide participants with the fundamental features and structures of natural gas long-term sales contracts and transportation agreements.

On completion of the course, the participants will be able:

- to identify the main articles of long-term natural gas agreements;
- to understand the keys points of the commercial clauses;
- to appreciate the principles of natural gas pricing and transportation.

## COURSE CONTENT

### LONG-TERM NATURAL GAS SALES CONTRACTS

2 days

Primary issues about long-term gas agreements.  
Main natural gas agreements.

Analysis of the main articles of long-term agreements:

Commercial:

Duration: depletion contract, supply contract, peak shaving, seller's nomination and interruption.

Quantity: ACQ, DCQ, MDQ, swing factor, excess gas and take-or-pay.

Quality: technical specifications, acceptable limits and non-conformity penalties

Price: indexation, market value and net-back value.

Delivery point: place, measure, frequency, precision and flexibility.

Responsibility:

Force Majeure, transfer of rights, expert, arbitration and applicable law.

Operational:

Installation, counting system and analysis, obligation of information, confidentiality, invoicing and payment.

Entitlement, risk and general disposals.

Recent evolution of natural gas long-term contracts.

### NATURAL GAS TRANSPORTATION AGREEMENTS

1 day

Main principles of natural gas transportation agreements.

Duration, force majeure, tie-in deposit and general dispositions.

Analysis of the main articles:

Delivery point / redelivery, specifications

Quantity and capacity booking (delivery commitment, booked capacities profile and transportation obligation)

Tariff structure (ship-or-pay, fix or variable pricing).

Quantities allocation and procedure, gas delivery procedures, quality settlement and removal schedule.

Recent evolution of gas transportation agreements.

### ▲ Who should attend?

Professionals, involved in natural gas trading, who need to negotiate or implement natural gas contracts.

### ▲ Duration

3 days

### ▲ Dates & Location

March 3 to 5, 2010  
Rueil-Malmaison

### ▲ Tuition Fee

€ 1,450 excl. tax

### ▲ Course Coordinator

Guillaume Charon

Ref. EG/CGT

▲ **Who should attend?**

Professionals from the oil, gas or power industries, or from the bank/insurance/consulting sectors who need to understand LNG activities and their economic stakes.

▲ **Duration**

4 days

▲ **Dates & Location**

September 21 to 24, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 2,010 excl. tax

▲ **Course Coordinator**

Guillaume Charon

Ref. **EG/LGE**

# LIQUEFIED NATURAL GAS ECONOMICS

## OBJECTIVES

To provide participants with an overview of the economic and contractual aspects of the LNG (Liquefied Natural Gas) chain.

On completion of the course, the participants will have:

- analyzed the economics of each part of the LNG chain;
- understood the basic structure of LNG contracts;
- described the main LNG markets and their evolution.

## COURSE CONTENT

### TECHNICAL ASPECTS OF THE LNG CHAIN

1 day

LNG : properties and specifications.  
Design of the different parts of the LNG Chain.  
Principles, standards, usual practice and size.  
Liquefaction plants, LNG tankers, regasification terminals.  
Risks, danger, impact on design.  
Main projects of regasification terminals in the world.  
Exploitation of regasification terminals.  
Capital expenditures and operating costs.  
Feed-back from some international projects.

### ECONOMICS OF THE LNG CHAIN

1 day

Costs and investments of the LNG Chain:  
- production,  
- liquefaction,  
- transport,  
- regasification.  
Comparison of costs between LNG and gas pipelines.  
Comparison between LNG and GTL (gas-to-liquid) economics.  
Natural gas reserves, production and consumption.  
International gas trades and the importance of the LNG.  
Evolution of LNG trading and pricing.  
Main LNG markets : Japan, South Korea, Atlantic basin, India, China.

### LNG CONTRATS

2 days

Main features of LNG contracts.  
Important articles in long-term LNG sales agreements.  
LNG pricing: price formulae, indexation and net-back value.  
Impact of gas markets liberalisation.  
Third-party access to regasification terminals.  
Example of terminals in France.  
Coexistence between long-term contracts and short-term contracts.  
Impact on LNG marketing.

# SHIPPING : GENERAL FEATURES, CHARTERING CONTRACTS AND OPERATIONS

## OBJECTIVES

At the end of training, participants will be able to :

- assess the nautical capabilities and technical criteria of a particular ship for transportation of hydrocarbons;
- assess and better manage all the risks associated with maritime activities : boating, environment, politics...;
- integrate their thinking in the strategic choices necessary to the ship-owner or the carrier;
- understand the charter market and enter into negotiations in the best conditions.

## COURSE CONTENT

### VESSEL SPECIFICATIONS

0,5 day

Physical characteristics : size, speed, propulsion, power generation...  
Transportation capacities : tonnage, subdivision, transfer capabilities...  
Usual Maritime Vocabulary.  
Goods transported (liquid bulk, dry bulk, containers, other...).  
The vessels offering (types, sizes, age...).

### THE SHIPPING CHAIN AND THE PORT COMMUNITY

0,5 day

Reminders on INCOTERMS  
The shipping agent and consignee of vessels : the representative of the owner / charterer and responsibilities.  
Its mission : organizing the call, cargo receiving and delivery.  
The ship in port : port authorities, pilotage, towing, mooring...  
Nautical Safety of the ship : protecting the dock, sailing delays.  
Pollution prevention.

### THE SHIPPING : EXPLOITATION AND OPERATIONS, BASIC CONCEPTS OF MARITIME LAW

0,75 day

Current state of the shipbuilding industry.  
The operating costs of vessels (crew, maintenance, insurance, financial charges...) variable costs related to travel (bunker calling costs...).  
The «bunkering» market.  
Taxation of ship operation : national flags, flags of convenience...  
Basic concepts of maritime laws : territorial waters, exclusive economic zone (EEZ), passage of the straits, transit in the channels.  
Sea routes : main stream, narrow waters and traffic separation.

### RISK CONTROL AND ENVIRONMENTAL PROTECTION

0,75 day

The impact of maritime transport on the environment : emissions, energy consumption, pollution.  
International conventions related to risk protection and the environment (IMO, MARPOL, SOLAS, STCW...): overview.  
International Code for the Security of Ships and Port Facilities : ISPS.  
The procedures related to transportation of petroleum products : SHIP vetting, TERMINAL vetting, fleet management (TMSA).

### THE PROFESSION OF MARITIME OPERATORS : STRATEGIC OPTIONS

0,75 day

The fundamental aspects of maritime transport : goods transported, sizes and packaging, logistics integration.  
Constraints and risks : investment returns, costs (raw material, freight, logistics, storage...), security of supply, quality, nautical and environmental risks.  
The various strategic options : integrated ship-owners, owners-operators, oil majors, line or tramp operators...  
Tradeoffs between carriage of cargo or «bunkers» fuels.  
The organization of the chartering market : the various stakeholders, their role and responsibility.  
Price fixing.  
The market tools : WORLDSCALE, FFA, BITR, PLATTS...

### CHARTERING CONTRACTS AND CHARTER PARTIES

0,75 day

The various chartering contracts : time charter, voyage charter, bare boat.  
The contract stakeholders and their respective responsibilities : financial, commercial, economic, nautical, political : The charter / The charterer / The broker.  
The conclusion of a charter contract : example.  
The «standard» or essential terms : lay time, NOR, demurrage, PFR, BCM...  
The specific clauses or rider clauses : the options for length, volume, the buy-back, profit / loss sharing, indexing.  
Freight and/or cost, bunker...  
Practice of using charter parties : Shellvoy, Astabank...  
Dispute resolution : Maritime Arbitration, analysis of law cases (arbitration).

### ▲ Who should attend?

Professionals in the oil industry, involved in the supply, shipping, distribution activities and who need to improve their knowledge in operational and contractual aspects of shipping.

### ▲ Duration

4 days

### ▲ Dates & Location

April 19 to 22, 2010  
Rueil-Malmaison

### ▲ Tuition Fee

€ 1,860 excl. tax

### ▲ Course Coordinator

Lucien Guez

Ref. EG/CFS





## **UPSTREAM ECONOMICS**

**Course descriptions 12 to 19**



# UPSTREAM ECONOMICS AND MANAGEMENT

## OBJECTIVES

To provide the participants with a clear view of the contractual and economic framework of exploration-production in order to apprehend the tools for decision making, financial management and audit.

On completion of the course, the participants will be able:

- to control all the aspects of taxation and contracts of the oil and gas upstream sector;
- to build advanced economic models for the evaluation of exploration-production projects;
- to understand the use of management and control tools.

## COURSE CONTENT

### UPSTREAM ECONOMIC AND FISCAL ENVIRONMENT

5 days

Main physical and financial oil markets and their features.

Definition of 1P, 2P and 3P reserves, different technical and economic criteria.

Investments and risks in EP, objectives of actors, role of national oil companies, stakes in EP.

Concession and Production-sharing contracts: principles, examples of tax regimes and case studies.

Risk-service contracts, and technical assistance contracts.

Objectives of a flexible and progressive tax system, flexible taxation terms.

General structure of patrimonial contracts.

Exploration phase: duration, commitments, surrender, data and information, etc.

Appraisal phase: work programme, gas provisions, commerciality, etc.

Development phase: financing, State participation, budgets and development plans, unitisation, etc.

Production phase : work conduct and supervision, audit and accounting, financing, taxation, transportation and marketing of production, hydrocarbon price determination, etc.

General terms & conditions: title transfer, force majeure, governing law and dispute resolution.

Main legal provisions in a Joint Operating Agreement, and Farm in / Farm out agreement.

### ECONOMIC ANALYSIS OF E&P PROJECTS

5 days

Financing of oil and gas projects, cost of capital and discount rate.

Economic criteria for investment project evaluations.

Global profitability analysis, value creation, impact of taxation and inflation.

Introduction to risk analysis, risk and discount rate, sensitivity analysis.

Probability of success, analysis of economic risk in oil exploration.

Decision tree analysis, value of information, Farm in/Farm out.

Asset aggregation and portfolio optimization.

### UPSTREAM ACCOUNTING AND FINANCIAL MANAGEMENT

5 days

Statements of accounts for an oil and gas company, upstream specificities.

Exploration : full cost, successful efforts, FAS 19.

Reserves accounting : rules, FAS 69, control.

Consolidation and Joint Venture accounting.

Contract accounting, social accounting, group accounting.

Accounting for concessions and PSCs : reserves, inventories, commitments, revenues.

Norms: asset amortization, asset retirement obligations, value impairment test, etc.

Reporting: purpose, obligations, financial communication.

Analytical accounting. Cost management and control.

Audit: general, fiscal, partners.

Tax audit : recoverable costs, common costs, sole costs.

### ▲ Who should attend?

Managers from the exploration-production sector who must acquire a complete picture of all the economic, financial and contractual aspects of the hydrocarbons exploration and production activities.

### ▲ Duration

15 days

### ▲ Dates & Location

April 19 to May 7, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 6,200 excl. tax

### ▲ Course Coordinator

Karim Faïd

Ref. EG/UEM

▲ **Who should attend?**

Professionals from the E&P sector and lawyers who need a practical understanding of all the concepts, principles and rules of oil and gas patrimonial contracts between host countries and international oil companies.

▲ **Duration**

4 days

▲ **Dates & Location**

September 7 to 10, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 2,010 excl. tax

▲ **Course Coordinator**

Karim Faïd

Ref. **EG/CFEP**

# CONTRACTUAL FRAMEWORK OF EXPLORATION-PRODUCTION

## OBJECTIVES

To provide participants with an in-depth understanding of the shape and dynamics of oil and gas exploration-production contracts.

On completion of the course, the participants will have:

- improved their knowledge of different tax systems and contractual frameworks;
- seen how partnerships are managed successfully in the upstream sector to find and produce hydrocarbons;
- identified the key issues and constraints in the relationships between host countries, NOCs and IOCs.

## COURSE CONTENT

### ECONOMIC ENVIRONMENT

0.25 day

World's oil and gas reserves, definition of 1P, 2P and 3P reserves.

Comparison of different technical and economic criteria in major petroleum areas.

Investments and risks in EP, process of project evaluation and trends in EP activities.

### LEGAL AND CONTRACTUAL FRAMEWORK

1.75 day

Objectives of actors, role of national oil companies, stakes in EP.

Principles of rent sharing, property of hydrocarbons and State sovereignty.

Procedure for contracts awarding, different regimes and petroleum laws in the world.

Concessions contracts: principles, State's revenues, examples of tax regimes and case studies.

Production-sharing contracts: principles, examples, of tax regimes and case studies.

Risk-service contracts, and technical assistance contracts.

Pseudo-tax and non-fiscal constraints.

Sensitive economics clauses, flexible oil policy: why and how to design it?

Objectives of a flexible and progressive tax system.

Flexible taxation terms and windfall tax approaches.

Economic model of an oil project.

### MAIN ARTICLES OF E&P CONTRACTS

1.5 day

General structure of patrimonial contracts

Exploration phase: duration, commitments, surrender, data and information, etc.

Appraisal phase: work programme, gas provisions, commerciality, etc.

Development phase: financing, State participation, budgets and development plans, unitisation, etc.

Production phase : work conduct and supervision, audit and accounting, financing, taxation, transportation and marketing of production, hydrocarbon price determination, etc.

General terms & conditions: title transfer, force majeure, governing law and dispute resolution.

Comparison of fundamental features of patrimonial contracts.

Major economic, financial and legal aspects for oil companies.

Evolution and trends in oil taxation and patrimonial contracts.

### JOINT OPERATING AGREEMENTS

0.5 day

Motivation for State participation and major types of participation.

Main legal provisions in a Joint Operating Agreement, and Farm in / Farm out agreement.

Obligations of State information.

# PRODUCTION SHARING AND JOINT-OPERATING AGREEMENTS

## OBJECTIVES

To provide a practical understanding of the main concepts, principles and rules of a Production Sharing Agreement which contractually binds petroleum companies with a ministry and/or a state oil company. The course will review all essential topics through the analysis of excerpts from several PSAs.

To provide a practical understanding of how Petroleum Exploration and Production partnerships are managed to successfully find and produce hydrocarbons. The course will review all essential topics through the analysis of a Joint-Operating Agreement.

The course focuses on the practical aspect of contracts: identifying key issues, understanding constraints and deadlines, getting familiar with the document.

## COURSE CONTENT

### PRODUCTION SHARING AGREEMENTS (PSA)

2 days

#### Introduction

Origins, concept and scope of the PSA.  
Comparison of PSA to other contracts.  
Contents and structure of a typical PSA.

#### PSA Mechanisms

Cost oil, profit oil split, "Government Take".  
Bonuses, first tranche petroleum, tax holiday, cost recovery ceilings, uplifts, investment credits, government "back-in".  
Typical PSA cash flow forecast chart.

#### Examples

Review of various clauses selected from different PSAs (Steering committees and Impact of voting, rights and duties, liabilities, sub-contracting...)

### JOINT-OPERATING AGREEMENTS (JOA)

2 days

#### Introduction

The purpose of the joint ventures and use of a JOA  
The relationship of the JOA to other oil industry contracts  
Structure of a JOA, definitions and terminologies.

#### The Operator

Appointment, Rights and Duties, Liabilities, Responsibilities, Resignation, Removal.

#### The Partners

Rights and Duties, Liabilities, Responsibilities.

#### The Operating Committee and Sub Committees

Establishment, Powers and Duties, Notices, Voting procedures, Impact of voting, Pass-Mark.

#### Work Programme & Budget

Exploration, Development and Production budgets, Service contracts tendering and awards, AFE procedure.

#### The Sole Risk/Non Consent Clause

Procedure, Responsibilities, Consequences, Penalties.

#### Disposal of Production

Rights and Obligations.

#### Permit/Concession/Block

Surrender, Extensions, Renewals, Abandonment of wells.

#### Legal Matters and Miscellaneous

Applicable laws, Pre-emption, Dispute resolution, Default, Transfer of rights, Insurances, Withdrawal, Confidentiality, Conflict of interests, Proprietary information.

#### Accounting Procedure

Principles, Budgets, Audits, Operator's Management & Administrative Overheads, Parent Company Overheads, Payments, Inventories.

#### AIPN Model Contract

Review of main topics.

### ▲ Who should attend?

Exploration and production professionals, legal personnel entering the E&P scene, service companies managers and government employees.

### ▲ Duration

4 days

### ▲ Dates & Location

June 29 to July 2, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 2,010 excl. tax

### ▲ Course Coordinator

Karim Faïd

Ref. EG/PSA

▲ **Who should attend?**

Engineering, technical and commercial staff who need to extend their understanding of the economic and business aspects of the upstream sector.

▲ **Duration**

5 days

▲ **Dates & Location**

February 22 to 26, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 2,320 excl. tax

▲ **Course Coordinator**

Mohamed Lyes Djenaoui

Ref. EG/EFEP

# ECONOMIC FRAMEWORK OF EXPLORATION-PRODUCTION

## OBJECTIVES

To provide a complete overview of the mechanisms of upstream projects and improve the understanding of the economics of exploration and production.

On completion of the course, the participants will:

- understand the impact of new developments in E&P technology;
- comprehend the different fiscal and contractual regimes;
- have gained experience in E&P decision evaluation techniques and management tools.

## COURSE CONTENT

### ECONOMIC ENVIRONMENT

0.25 day

Economic development of the upstream sector.  
Various actors in exploration-production and their strategies. Oil markets and prices.  
Current exploration and production activities.  
Levels of investment.  
Examples of finding, development and production costs.

### FISCAL ENVIRONMENT

0.75 day

General principles of oil tax systems.  
Laws, concessions agreements, production sharing contracts, service contracts.  
Impact of various contractual and technical parameters.  
Sharing of the economic rent between the State and Oil Companies. Economic flexibility.  
Legal aspects of joint ventures.  
Main legal provisions in a Joint Operating Agreement (JOA).  
Importance of voting procedures. Concept of sole risk and non-consent.  
Force majeure cases, role and responsibilities of the operator.  
Dispute resolution. Problems and procedures for arbitration.

### MANAGEMENT OF THE E&P BUSINESS

2 days

Financing of oil and gas projects. Basic aspects of Accounting and Financial Analysis.  
Special mandatory reporting for oil companies.  
Accounting of exploration expenditures, full cost, successful efforts.  
Amortization and depreciation methods, special provisions (depletion allowance,...), residual costs.  
Funds from operations, cash flows, financial equilibrium, working capital.  
Financial statement, return on capital employed, return on equity, financial leverage.  
Cost Analysis and Budgeting.  
Exploration costs, finding costs, development costs, replacement costs, production costs.  
Capital budgeting, authorizations for expenditure, planning and scheduling, budgeting exploration activities.  
Principles and methodology of cost control.  
Budget content and breakdown, selection of a cost control method.  
Standard costs, fixed and flexible budgets, analysis of variations.  
Management of joint ventures, role and responsibility of the operating committee.  
Budgets, principles of joint venture accounting, accounting procedures, cash calls, joint-venture audit.

### ECONOMIC EVALUATION OF E&P PROJECTS

2 days

Methodology and economic evaluation criteria.  
Net Present Value, Internal Rate of Return, Pay Out Time.  
Introduction to risk analysis, Analysis of sensitivity to prices, capex and opex.  
Case study: oil field development project (concession agreement and production sharing contract).

# ECONOMICS AND RISK ANALYSIS OF UPSTREAM PROJECTS

## OBJECTIVES

To provide participants with an in-depth understanding of the tools used in economic analysis and decision making tools within the upstream industry.

On completion of the course, the participants will be able to:

- carry out investment profitability studies including all aspects of complex fiscal terms, inflation, and financing;
- analyze the economic results and carry out sensitivity analysis;
- take into account the specific dimension of risk in exploration for oil and gas;
- develop advanced computer models for the study of oil and gas development projects.

## COURSE CONTENT

### ECONOMIC AND CONTRACTUAL FRAMEWORK OF E&P 0.5 day

Various phases of exploration-production.

Technical cost, evolution of the economic environment.

Petroleum exploration and production contracts.

Concessions, production sharing contracts, service contracts.

Sharing of the economic rent, economic flexibility in petroleum contracts.

Economic clauses.

### INVESTMENT PROFITABILITY STUDIES 1 day

Financing of oil and gas projects, cost of capital and discount rate.

Review of economic criteria for investment project evaluations.

Global profitability of invested capital.

Specific method for exploration-production: shadow interest.

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

Case study: Economic study of an oil field development project.

### RISK ANALYSIS OF E&P PROJECTS 2.5 days

Probability of success, analysis of economic risk in oil exploration.

Evaluation of exploration projects and decision trees.

Farm in/Farm out.

Risked and unrisks economics.

Case study: Economic study of an oil project including Min, Mode and Max scenarios.

Evaluation of development projects.

Economic risk associated with a marginal development.

Decision trees and subjective probabilities, decision theory.

### ASSET MANAGEMENT 1 day

Components and determinants of asset valuation at various stages of maturity: exploration and appraisal, development, production.

Review of methodologies and processes, probabilistic analysis.

Asset aggregation and portfolio optimization, tools of choice for comparing expected results and budget efficiencies.

Conclusions, what works and what doesn't.

Contribution of risk analysis and management to successful exploration.

### ▲ Who should attend?

Engineers, economists and project managers who need to extend their understanding of the specific methods used to evaluate exploration-production projects.

### ▲ Duration

5 days

### ▲ Dates & Location

June 14 to 18, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 2,320 excl. tax

### ▲ Course Coordinator

Mohamed Lyes Djenaoui

Ref. EG/ERA

### ▲ Who should attend?

- Recently hired professionals, preferably with an engineering background, about to take up a position in upstream petroleum activities.
- Staff from other petroleum sectors (refining, chemicals, etc.) taking up an upstream managerial position or from government agencies with responsibilities for petroleum matters will also benefit from this course.

### ▲ Duration

3 months

### ▲ Dates & Location

January 5 to April 9, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 10,250 excl. tax

### ▲ Course Coordinator

Karim Faïd

Ref. **EG/UPM**

## UPSTREAM MODULE\*

### OBJECTIVES

To gain an understanding of the upstream petroleum sector in its technical, economic and financial dimensions (main technical mechanisms, key economic data and characteristics, management tools, etc.).

### COURSE CONTENT

#### PRODUCTION AND RESERVOIR ENGINEERING

12 days

This part of the course covers the basic techniques used in exploration, development and production. This will enable the participants to communicate with specialists in this field, understand and estimate the validity of the technical data on which economic analyses are based.

#### ENERGY GEOPOLITICS

7 days

Energy geopolitics.  
Energy issues in the context of policy.  
Financial aspects of the petroleum industry.  
Evolution of the oil industry.

#### UPSTREAM PETROLEUM ECONOMICS

5 days

Economic aspects of oil and gas exploration-production.  
Legal and fiscal aspects.  
Field development case study.  
Portfolio management.

#### CAPITAL BUDGETING METHODS

5 days

Economic criteria: discounted cash flow, Internal Rate of Return, profitability index.  
Equivalent cost and long-term marginal cost.

#### BUSINESS ACCOUNTING

10 days

Principles of accounting: case of oil and gas companies.  
The balance sheet and the income statement and notes.  
Financial analysis.  
Market value, Price Earning Ratio.  
Statement of cash flow.  
Introduction to cost accounting and management control.

#### ORGANIZATIONAL BEHAVIOUR

10 days

Structure of organization.  
Managing cultural diversities.

#### EFFICIENCY ANALYSIS OF INDUSTRIAL FIRMS

5 days

Production frontier and economic performances of firms.  
Deterministic, stochastic parametric and non-parametric models.

#### INDEPENDENT STUDY

20 days

Personal research work.

\* This module is a part of a 16-month master degree program, Petroleum Economics and Management, run by IFP School.

# INTRODUCTION TO PETROLEUM ENGINEERING

## OBJECTIVES

To offer an overall information about drilling, reservoir, completion and surface facilities.

At the end of the session participants:

- have good information about techniques and problems related to field development from drilling to surface facilities;
- are able to fully communicate with the personnel involved with it.

## COURSE CONTENT

### RESERVOIR ENGINEERING

1 day

Geologic traps.  
Rock and fluids properties.  
Logging and well-test evaluation.  
Drainage mechanisms.  
Improved oil recovery.

### WELL

2.5 days

Drilling:  
Oil and gas exploration organization.  
Well design.  
Drilling rig: functions hoisting, rotations, pumping, safety...  
Drilling operations : casing, cement job, fishing, D.S.T.  
Visit of a drilling rig used for training.

Completion:  
Completion design.  
Global approach of flow capacity.  
Well bore treatment: sand control, stimulation (acidizing, fracturing, ...).  
Well equipment and servicing.

Offshore wells:  
Selection of the rig type: jack-up, semi.  
Design and specific equipment.

### OIL AND GAS PROCESSING FACILITIES

1.5 day

Different objectives of field processing plants.  
Gathering system, hydrate inhibition.  
Crude oil treatment: oil and gas separation, crude oil dehydration and desalting processes.  
Gas processing: dehydration, sweetening, NGL recovery processes.  
Offshore production: fixed or floating production system.

### ▲ Who should attend?

Anyone working in the oil and gas and related sectors:

- whose activity (either technical, commercial, legal, financial or human resources) is in some way connected with drilling, reservoir, completion or surface facilities,
- having a general "need to know" requirement on these subjects.

### ▲ Duration

5 days

### ▲ Dates & Location

June 21 to 25, 2010  
October 18 to 22, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 2,010 excl. tax

### ▲ Course Coordinator

Gérald Gachet

Ref. COM/INFPGE

### ▲ Who should attend?

Decision makers, managers, engineers and technicians involved in future CCS projects and studies

### ▲ Duration

2 days

### ▲ Dates & Location

June 23 to 24, 2010  
Rueil-Malmaison

### ▲ Tuition Fee

€ 1,300 excl. tax

### ▲ Course Coordinator

Alex Chwetzoff

Ref. GEN / CO2-2A

# TECHNICAL AND ECONOMIC EVALUATION OF CARBON CAPTURE, TRANSPORT AND STORAGE PROJECTS

## OBJECTIVES

Bring the tools and knowledge necessary for economical evaluation of CCS projects.

At the end of the session, attendees shall:

- Know the guiding principles to be applied for optimizing a CCS chain implementation, from both technical and economical standpoints,
- Know the major regulation constraints potentially applicable to CCS projects,
- Know the major financing mechanisms applicable to CCS projects,
- Know the key dimensioning factors of the economics on a CCS chain,
- Know major identifiable economic and financial risks related to the evaluation of a CCS chain,
- Know the issues of economic modelling a CCS chain project.

## COURSE CONTENT

### INTRODUCTION AND TECHNICAL DESIGN OF A CCS CHAIN 0,25 day

Main Capture, Transport and Storage technologies :

Efficiencies (costs and energy consumptions), risk management development perspectives.

Technical development options function of :

Surrounding storage capacities and captured CO<sub>2</sub> valuation options.

### INTERACTION BETWEEN ECONOMY / PROJECT DEVELOPMENT REGULATION FRAMEWORK / LIFE CYCLE ANALYSIS 0,25 day

Regulation : constraints and uncertainties.

LCA objectives and purpose.

Interaction between LCA and economical analysis.

### PROJECT ECONOMICAL ASSESSMENT 0,5 day

Investments and operating costs key parameters.

Comparison strategy between business as usual projects and CCS projects.

Sensitivity parameters identification.

Utilities (CO<sub>2</sub>, fossil fuel...) price modelling.

Identification of constraints due to existing business model of emitters.

### RISK AND KEY DEVELOPMENT FACTORS FOR CCS CHAIN 0,25 day

Matrix risk identification (SWOT analysis) in order to underline key CCS chain development factors.

### IDENTIFICATION OF DECISIONAL FACTORS THROUGH A CASE STUDY 0,5 day

Analysis of an industrial pool including a urea production unit, a steam boiler, a waste incinerator and a biodiesel refinery with potential storage in a nearby deep aquifer.

Identification of Project key points and risks, Study perimeter and analysis strategy,

Technical options to be explored, Best designs on an economical standpoint in function of different contexts through Excel analysis (Excel datasheet will be provided partly completed).

### SUMMARY AND CONCLUSIONS 0,25 day

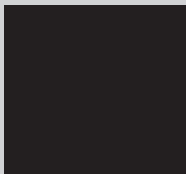
Feed back on key points to be studied during technico-economical analysis of CCS chain projects.

Position of the technico-economical analysis within global CCS chain project analysis and decision process.

CCS chain development perspectives: Who and When ?

**DOWNSTREAM ECONOMICS**

Course descriptions **20 to 33**





# DOWNSTREAM ECONOMICS AND MANAGEMENT

## OBJECTIVES

To allow the participants to acquire a complete view of the economic principles of the downstream sector as well as the methods necessary for the decision-making processes.

On completion of the course, the participants will be able:

- to analyze the economic fundamentals of the energy scene, with a particular attention to the importance of markets dynamics and its impact on the economics of refining, petrochemicals and distribution;
- to evaluate the economic values of various intermediate or semi-finished products from the prices of quoted products;
- to use linear programming models and management tools allowing to analyze margins, to evaluate profitability of projects and to optimize refining operations in order to improve profitability.

## COURSE CONTENT

### REFINING AND PETROCHEMICALS ECONOMICS

3 days

Main features of physical and financial oil markets.  
Prices and marketing of petrochemicals products.  
Refining schemes. Analysis of refining costs and margins.  
Exercises in refining margin computation.  
Computer simulation leading to fundamental decisions in the refinery.  
Capital investment requirements and strategic options.

### LINEAR PROGRAMMING

2 days

Simplex algorithm, graphic interpretation, optimum properties, analysis of marginal costs, sensitivity analysis.  
Introduction to refinery modeling: material balances, products specifications, utilities consumption, objective function.  
Case studies: team work on a cracking refinery: writing of an LP model.  
Optimization through the use of a computer software, analysis of the optimum solution, of validity limits.  
Impact of new market constraints or changes in the environmental regulations.

### REFINING OPERATIONS PLANNING - SCHEDULING

2 days

Principles of refining management: constraints, operations organization.  
Monthly program and its adaptation to daily operations, optimization of margins from different process units.  
Operational calculations: team work on supply planning problems, crude oil evaluation, process severity optimization, product quality cost.  
From the monthly program to operations scheduling: study of typical sequential constraints, scheduling problems, cost control.  
Practical application in a refinery.  
Overview of practical tools and of the different approaches within the refinery.

### INVESTMENT PROFITABILITY STUDIES

3 days

Computer modelling of investment projects in the downstream sector.  
Economic cost analysis: annual economic cost, unit economic cost.  
Project finance and equity profitability analysis.  
Various investment profitability studies for refineries and petrochemical plants.  
Also, drawing on the linear programming output studied in the preceding part, two large computer-based case studies on the profitability of implementation of octane or conversion units will be studied.

### MARKETING & SUPPLY CHAIN MANAGEMENT

5 days

The Retail Cycle: where does your market stand in the cycle?  
Overview of the drivers of the competitive environment in mature retail markets.  
Franchising in retail or the "clever landlord" approach.  
Modern network management techniques. Network planning.  
Skills and modern techniques in Network Management.  
Site Management. Managing HSE, with particular emphasis on the safety aspects on retail outlets.

### ▲ Who should attend?

Professionals from the refining, the petrochemicals and the distribution sectors in a management position where they need to deepen their understanding of all the essential economic aspects as well as the management tools used in the oil downstream sector.

### ▲ Duration

15 days

### ▲ Dates & Location

Nov. 29 to Dec. 17, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 4,900 excl. tax

### ▲ Course Coordinator

Sylvie Saulnier

Ref. EG/DEM

### ▲ Who should attend?

- Technical, operating and engineering personnel working in the refining industry.
- Trading and commercial specialists.
- Independent consultants.
- Process licensors.
- Catalyst manufacturers and refining subcontractors.

### ▲ Duration

4 days

### ▲ Dates & Location

October 19 to 22, 2010  
London

### ▲ Tuition Fees

£ 2,450 excl. tax

### ▲ Course Coordinator

Thierry Ferrer

Ref. **EG/PERO**

# PLANNING AND ECONOMICS OF REFINERY OPERATIONS

In collaboration with *The Energy Institute, London*

## OBJECTIVES

To enable delegates to understand the essential elements of refinery operations and investment economics, to review the various parameters which affect refinery profitability and to develop a working knowledge of the management tools used in the refining industry.

On completion of the course, the participants will know:

- how to assess the latest trends in product specifications, and refining schemes;
- how to calculate product value, refinery margins and process unit margins;
- how costs and margins compare;
- how to simulate refinery operations and product blending;
- how to optimise refinery operations, crude oil selection and product manufacturing;
- how to analyse marginal costs from the optimisation of an LP model;
- how to evaluate the profitability of a new process unit.

## COURSE CONTENT

### TECHNICAL OVERVIEW 0.5 day

Review of petroleum products applications, characteristics and specifications.  
Main refining process units. Refining schemes. Basic economics of the various process units.

### ECONOMIC OVERVIEW 0.5 day

Crude oils and products markets and prices. Analysis of refining costs.

Calculation of refining margins. Evolution of refining margins.

The development of refining capacities, of product demand, of different refining schemes and of conversions plants.

### REFINERY SIMULATION 0.5 day

Simulation of products manufacturing using spreadsheets.

Analysis of the main constraints affecting products manufacturing.

### OPTIMISATION OF REFINERY OPERATIONS 1 day

Linear programming.

Basics of LP. The "Simplex" method.

Simplified example of refinery modelling.

Analysis of an LP solution:

material balance, marginal costs, opportunity costs, incentives to construction.

Sensitivity analysis.

### HOW TO IMPROVE REFINERY PROFITABILITY 1 day

The key financial indicators.

Margin management.

Costs management.

Cash management.

Organization.

Technical management.

Human resources.

### ECONOMIC EVALUATION OF A NEW PROCESS UNIT 0.25 day

Basics of profitability analysis.

Case study: construction of a new isomerisation unit

- simulation of material balance,
- cash flow calculation,
- investment and cost,
- internal rate of return calculation.

### FUTURE OF THE REFINING INDUSTRY 0.25 day

Forecast development of oil consumption.

Environmental constraints.

Impact on refining economics.

# REFINERY OPERATIONS MANAGEMENT AND LINEAR PROGRAMMING

## OBJECTIVES

To provide an in-depth understanding of the techniques used for decision making operations concerning supply and refining.

On completion of the course, the participants will:

- have gained a working knowledge of planning techniques, from preparation of optimal monthly programmes up to daily operations scheduling;
- know the economic environment of the industry (market, prices, etc.);
- be able to evaluate the extent of the validity and limits of the different approaches.

## COURSE CONTENT

### INTRODUCTION

0.5 day

Physical markets and prices of crude oil and petroleum products.

Introduction to the need for hedging and to futures markets.

Refining costs.

Refinery margins and their volatility.

### LP AND THE MONTHLY PROGRAMME

3 days

Basics of Linear Programming:

- the Simplex algorithm,
- graphic interpretation,
- optimum properties,
- analysis of marginal costs,
- range, parametrisation,
- sensitivity analysis.

Introduction to refinery modelling:

- material balances (processes, product balances, blends),
- products specifications,
- utilities consumption,
- objective function: cost or profit.

Syndicate work on a cracking unit: work includes writing a model, the optimisation through the use of a computer software, and the analysis of the optimum solution. Impact of new market constraints or changes in the environmental regulations.

Syndicate work on transportation modelling: case study with a second refinery and the supply of several bulk plants.

Overview of other applications:

- multiperiodic model,
- refinery utilities balance,
- oil industry planning tools (matrix generator, LP optimiser, report writer).

### PRACTICAL MANAGEMENT OF OPERATIONS

1.5 day

Operational computation: syndicate work on supply planning problems, crude oil evaluation, process severity optimisation, and product quality cost.

From the monthly programme to the scheduling of operations: sequential constraints.

Review of scheduling problems.

Control of results: practical application in a refinery.

Overview of practical tools and of the different approaches within the refining industry.

*Syndicate work on case studies, derived from actual refinery situations, will enable non-experts to gain the necessary experience for immediate application.*

### ▲ Who should attend?

Managerial staff, supply planners, oil economists and personnel in charge of supply, planning, programmes, product blending.

### ▲ Duration

5 days

### ▲ Dates & Location

November 22 to 26, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 1,960 excl. tax

### ▲ Course Coordinator

Thierry Ferrer

Ref. EG/ROM

### ▲ Who should attend?

The course is designed for:  
 Technical, operating and engineering personnel working in the refining industry  
 Trading and commercial specialists  
 Independent consultants  
 Process licensors  
 Catalyst manufacturers and refining subcontractors

### ▲ Duration

5 days

### ▲ Dates & Location

April 26 to 30, 2010  
 Rueil-Malmaison

### ▲ Tuition Fees

€ 1,960 excl. tax

### ▲ Course Coordinator

Thierry Ferrer

Ref. **EG/EFR**

# ECONOMIC FRAMEWORK OF REFINING

## OBJECTIVES

To enable delegates to get a grasp of all the fundamental aspects and challenges of the economic framework in which the refining industry is evolving.

On completion of the course, the participants will have:

- reviewed parameters that affect profitability and developed a working knowledge of management tools used in the industry;
- evaluated ways to optimize refinery operations, crude oil selection and product manufacturing;
- understood how to analyze marginal costs from an LP model and to evaluate the profitability of a new process unit.

## COURSE CONTENT

### INTRODUCTION: PRODUCT SPECIFICATIONS AND REFINING SCHEMES 0.25 day

Main products characteristics;  
 Impact of environmental constraints; expected development of policies and regulations.  
 Crude oil supply and qualities.  
 Refining schemes, review of process units : gasoline manufacturing, FCC vs hydrocracking, options for deep conversion.

### OIL MARKETS AND TRADING 0.75 day

Physical markets and prices of crude oil and petroleum products.  
 Benchmarks and a crude pricing with respect to a benchmark.  
 Quality impact on a product pricing with respect to a quotation.  
 Main futures markets, options and swaps.  
 Hedging strategies for a refiner.

### PRESENT AND FUTURE OF THE REFINING INDUSTRY 0.5 day

Evolution of refining capacities, of product demand, of different refining schemes and of conversions plants.  
 Forecast for oil consumption, environmental constraints, impact on refining economics.

### REFINING MARGINS AND COSTS 1 day

Analysis of refining costs and margins.  
 Case studies and simulations in refining margin computation.  
 Recent trends in refining margins.

### REFINERY SIMULATION 1 day

Simulation of products manufacturing using spreadsheets.  
 Analysis of the main constraints affecting products manufacturing.

### OPTIMIZATION OF REFINERY OPERATIONS 1.25 day

Basics of Linear Programming, "Simplex" method, simple example of refinery modelling.  
 Analysis of the LP solution :  
 material balance, marginal costs, opportunity costs, incentives for expansion.  
 Sensitivity analysis.

### HOW TO IMPROVE REFINERY PROFITABILITY 0.25 day

Key financial indicators. Margin, costs and cash management.  
 Organization, technical management. Human resources.

# ECONOMIC FRAMEWORK OF PETROCHEMICALS

## OBJECTIVES

To provide an in-depth understanding of the petrochemicals industry

On completion of the course, the participants will have:

- analysed the environment, and the different interfaces between petrochemicals and refining;
- gotten a grasp of the fundamental market trends for the industry;
- have gained a better understanding of the economics involved in optimisation of production and investment decisions.

## COURSE CONTENT

### ENVIRONMENT AND UPSTREAM OF PETROCHEMICALS

1 day

Main petrochemical sectors; environment and economic trends.

Feedstock prices and petrochemicals products.

Strategies and economic factors for feedstock supply.

Integration with refining.

### OLEFINS AND C4 CUT

1.25 day

Markets, capacities and investments.

Balance demand/supply and worldwide flows.

Ethylene and polyethylene: process, integrated economics, cost analysis.

C4 products: composition, derivative products.

Economic optimisation of product lines.

Steam cracker economics.

### AROMATICS

0.5 day

Markets: benzene, toluene, xylenes, derivatives.

Economic aspects of benzene-styrene-polystyrene trends.

Factors influencing economic criteria.

### PRICING AND MARKETING OF PETROCHEMICAL PRODUCTS

0.5 day

Price mechanism and key elements to elaborate prices.

Markets structures.

Competition.

Distribution channels.

### MAIN POLYMERS

1 day

Thermoplastic industry.

Main thermoplastics, end uses and markets.

Main markets trends.

### INVESTMENT DECISION

0.75 day

Cash flow analysis and basics of profitability analysis.

Economic indicators.

Case study: Steam cracker investment.

### ▲ Who should attend?

Professionals in petrochemicals who want to develop a better understanding of the petrochemical industry and its economic aspects. Managerial staff involved in manufacturing, marketing, logistics, business development in the petrochemical industry.

### ▲ Duration

5 days

### ▲ Dates & Location

September 13 to 17, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 1,960 excl. tax

### ▲ Course Coordinator

Thierry Ferrer

Ref. **EG/EGP**

### ▲ Who should attend?

Junior marketing managers or potential managers, sales and technical staff needing to understand concepts of marketing strategy.

### ▲ Duration

4 days

### ▲ Dates & Location

*Non-scheduled*

*May be organized for a single company*

### ▲ Tuition Fees

*To be agreed upon*

### ▲ Course Coordinator

*Sylvie Saulnier*

Ref. **EG/MOI**

# MARKETING IN THE OIL INDUSTRY

## OBJECTIVES

To provide participants with an overview of marketing principles in general and their usefulness in the oil industry.

On completion of the course, the participants will be able:

- to undertake market and competitor analysis;
- to review strengths and weaknesses, opportunities and risks;
- to contribute to the development of market strategies and plans.

## COURSE CONTENT

### MARKETING

0.5 day

Nature and purpose of marketing.  
Marketing techniques used in the oil industry.  
Competition, development of marketing strategy and marketing plans.

### OIL PRODUCTS MARKETS

0.5 day

Products, price and margin setting mechanisms.  
Sales channels, government regulations.

### SALES CHANNELS

0.75 day

The retail channel, retail strategic questions.  
Development/investment in service stations.  
Direct and indirect sales channels, specialities marketing.

### SALES FORCE

0.25 day

Training, motivating, planning and monitoring results.

### ADVERTISING AND MARKET RESEARCH

0.5 day

Branding, advertising and sales promotion.  
Examples of oil company campaigns.  
Principles of undertaking market research.

### CASE STUDIES

1.5 day

Choice of strategies following:

- analysis of market,
- analysis of strategic options,
- preparation of marketing plans.

# MARKETING AND SALES OF LUBRICANTS

## OBJECTIVES

To provide an in-depth understanding of the lubricants business.

On completion of the course, the participants will:

- understand the commercial and marketing environment, covering base oils, additives, blending plants, automotive and industrial sectors, and consumer requirements;
- know the marketing and strategic options available.

## COURSE CONTENT

### LUBRICANTS MARKET

0.25 day

Overview of the lubricants market.

Evolution of demand and general characteristics.

### BASE OILS

0.5 day

Economics of base oil refining.

Costs and margins, capacity versus demand.

Specialities and by-products.

Strategic options, re-refining.

### ADDITIVES

0.25 day

Role of the additive manufacturers.

Ownership of technology, players involved.

### BLENDING PLANTS

0.25 day

Non-technical description of operations.

Economics and costs, logistics management, strategic options.

### AUTOMOTIVE LUBRICANTS

0.75 day

Crank case oils, demand, motor manufacturers' requirements.

Commercial aspects of the different sales channels used.

Consumers, market segmentation, branding, packaging, advertising.

Commercial consumer and agricultural markets.

Other automotive lubricants.

Retail market case study.

### INDUSTRIAL LUBRICANTS

0.75 day

Market and consumer requirements.

Opportunities to add value for the range of industrial lubricants and greases.

### MARINE

0.25 day

Market and consumer requirements.

Opportunities to add value.

### ▲ Who should attend?

- Managers new to the lubricants business.
- Commercial staff moving into the lubricants area or with responsibilities, e.g. in refining, research, planning etc., related to lubricants.
- Staff who already have lubricants experience but who require to extend their general, marketing and strategic knowledge.

### ▲ Duration

3 days

### ▲ Dates & Location

June 29 to July 1, 2010

Rueil-Malmaison

### ▲ Tuition Fees

€ 1,350 excl. tax

### ▲ Course Coordinator

Sylvie Saulnier

Ref. **EG/MSL**

▲ **Who should attend?**

Professionals taking up new positions in the manufacturing, marketing, utilization and technical assistance of bitumen and other bituminous binders, as well as those involved in road repairs, new roads, and industrial bitumen uses.

▲ **Duration**

3 days

▲ **Dates & Location**

March 9 to 11, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 1,350 excl. tax

▲ **Course Coordinator**

Sylvie Saulnier

Ref. **EG/MSB**

# MARKETING AND SALES OF BITUMEN

## OBJECTIVES

As a result of the course, participants will obtain a better understanding of the bitumen binders industry, for roads, highways, airports, roofing, with special attention for two products having a world-wide development, namely polymer modified bitumen and bitumen emulsions. Objectives of this seminar are to present European and international commercial aspects of bitumen, and to improve the technical knowledge of participants.

## COURSE CONTENT

### BITUMEN MARKETING

1.5 day

Commercial aspects of paving bitumen, polymer modified bitumen, bitumen emulsions

- Market characteristics, consumption of various products, market trends.
- Different types of customers, impact of technology development on the business.

Commercial aspects of industrial bitumen.  
Major European, American, African and Asian markets.  
International bitumen trading.  
Production and consumption areas, distribution.

### TECHNICAL & HSE ASPECTS

1.5 day

Properties and main uses of bitumen, polymer modified bitumen, bitumen emulsions.  
Manufacturing, tests, specifications, quality control.  
Road surfaces with hot mixes and cold mixes.  
Polymer modified paving bitumen and other modified bitumen.  
Road repairs and road maintenance techniques.  
Bitumen emulsions and polymer modified bitumen emulsions.  
Roof waterproofing techniques.  
Bitumen, polymer modified bitumen, oxidised bitumen, for waterproofing techniques:

- Recent specifications in Europe, USA, and other countries.

Health, safety, environment:

- During transportation, storage, application of bitumen binders.
- European and international rules.

# MARKETING AND SALES OF PETROCHEMICALS

## OBJECTIVES

To provide participants with the basic tools in marketing and sales for the petrochemical industry.

On completion of the course, the participants will:

- know how to conduct a successful commercial career;
- have been given the benefits of 25 years of operating experience in the sales, marketing and business management of petrochemicals.

## COURSE CONTENT

### MARKETING RESEARCH

0.25 day

Sources and use of data, statistics, consultants, reporting services...  
Cases studies.

### PETROCHEMICAL PRICING

0.5 day

The different pricing systems used by the petrochemical industry.  
Pricing mechanisms for contracts, elements influencing contract prices.

### KEY ELEMENTS OF A SUCCESSFUL SALE

0.25 day

Making a sale, volume and price definition.  
Delivery conditions, payment terms...

### MANAGING SALES

0.25 day

The various selling options, the selection and use of agents and distributors.  
The sales office, customer targeting, getting the edge in a commodity business.  
Trade marks, competition rules.

### ESTABLISHING A PETROCHEMICAL CONTRACT

0.5 day

The internal vs the external work, the role of a lawyer.  
Contract development, use of standard sales agreements.  
Review of the various contract clauses that may be included in a petrochemical contract, based on specific industry experiences.  
Examples of appropriate contract writing will be provided.

### PREPARING FOR A NEGOCIATION

0.25 day

Market analysis, definition of objectives.  
Design of the pricing strategy, implementation.  
Practical tips...

Lectures by Marc Roché, Former Vice-President of Arco Chemical.

### ▲ Who should attend?

- New-comers to the petrochemical industry.
- Employees who have been recently put in a new commercial position, or who need to manage commercial people, customers or suppliers, bankers, etc.

### ▲ Duration

2 days

### ▲ Dates & Location

Non-scheduled

May be organized for a single company

### ▲ Tuition Fees

To be agreed upon

### ▲ Course Coordinator

Thierry Ferrer

Ref. EG/MSP

### ▲ Who should attend?

Junior managers or potential managers in Retail who need to understand the concepts and techniques of Retail, and the competitive challenge from both traditional and non traditional fuels marketers.

### ▲ Duration

3 days

### ▲ Dates & Location

Non-scheduled

May be organized for a single company

### ▲ Tuition Fees

To be agreed upon

### ▲ Course Coordinator

Sylvie Saulnier

Ref. **EG/FRM**

# FUNDAMENTALS OF RETAIL MARKETING

## OBJECTIVES

To provide delegates with a broad understanding of the key components of Retail Marketing, placing these in a strategic and competitive context, using examples from Europe and other markets.

Participants will learn through presentations, videos, syndicate work and Case Studies. Pictorial illustrations about the changing nature of competition globally and in Europe, extending their knowledge and appreciation of the Retail challenges, not simply with regard to fuels, but importantly other facilities, such as C Stores and the essentials of category management.

## COURSE CONTENT

### INDUSTRY OVERVIEW

0.5 day

Retail in an oil industry context.

Competing calls on resources and the tools Retail needs to demonstrate value.

Understanding the markets we are in and different forces of competition.

The Retail Cycle - where does your market stand in the cycle?

The changing nature of competition and mistakes oil companies have made.

The scale, ambitions, influence and practices of hypermarket operators and how they grew their businesses.

Critical Success Factors for oil companies in this environment.

### MANAGING THE NETWORK

1 day

Skills and modern techniques in Network Management.

The latest management techniques in network management such as the power of GIS.

The importance of Network Planning to developing a successful network, and the development of a persuasive case for investment. This includes explaining the discrete steps in the process of preparing a network plan, the data required, and searching analysis to support proposals. In addition to Network Planning, Network Management explores not only the sequence of site ownership from acquisition to disposal, but also considerations surrounding site management including Company Management, Commission Agency and Franchising. A Case Study provides delegates with the opportunity to deploy their skills on a potential network acquisition.

### THE BRAND

0.25 day

Brand Management including brand positioning and emotional and rational responses to brands, and how to manage this process.

Examples of how opportunities for brand and customer segmentation have been developed by other (nonfuel) brands, and how to deploy the techniques.

This is extended to challenge how oil companies might respond to them. The increasingly important area of fuel and loyalty cards and customer knowledge marketing are examined, with examples of success and failure, together with lessons to be learned.

### INCOME STREAMS

1 day

Examination of the different streams on a retail forecourt — fuels, shop and car wash — and modern attitudes to managing them with examples. The fuels module examines different forms of marketing such as price, promotions and product differentiation; the shop module explores social and lifestyle changes which are giving rise to the development in C Stores, examines some competitors, and describes the importance of Category Management; while the Car Wash module describes profitability, proposals for managing car washes from an oil company perspective, including relationships with suppliers. The influence of these streams on site layouts, described, with good and bad examples, which is followed by a Case Study to reinforce the message of the importance of site and store design to maximise the profitability of sites.

### MANAGEMENT

0.25 day

These modules draw together the necessary support structures to the Retail business, and include sessions on retail automation.

Managing HSE, with particular emphasis on the safety aspects on retail outlets.

Addressing crime from the perspective of the individual outlet, with examples of how oil companies have cooperated to defeat crime in two different markets; the importance of project management disciplines for both managers and project managers, with a Retail emphasis; and considerations on how best to organise Retail for successful implementation of policies and practices described during the four days.

Lectures by J. Smeddle former Vice-President of Shell Retail Marketing Europe and S. Howell former Head BP Retail UK.

# SITE FACILITY MANAGEMENT

## OBJECTIVES

To expose managers in the retail business to policy formulation on a range of retail issues which are explored through syndicate work.

Delegates will learn about different markets and retail formats which may be applicable to their own situations.

## COURSE CONTENT

### COMPETITION IN RETAIL

1 day

Overview of the drivers of the competitive environment in mature retail markets, and the threats to emerging markets.

Review of non traditional fuels marketers, their strengths and weaknesses, their scale and professionalism.

Oil industry responses, convenience retailing, including "sweat the asset" and site layouts.

Understanding the devotion to Customer Orientation with examples of good practice.

Examining how customers differ and how they might be segmented.

How oil marketers should identify and then might respond to different segments.

The possible effect on site layouts.

Franchising in retail or the "clever landlord" approach.

Syndicate work based on SWOT analysis of retailing options discussed.

### EXAMINE THE NETWORK

1 day

Modern network management techniques including the use of GIS.

Network planning including process, data and analysis.

Segmenting the network.

Dry stock management.

Understanding profitability at site level.

Syndicate work on developing product and appropriate formats for three different types of sites.

Economics and Management

30

### ▲ Who should attend?

Managers concerned with policy formulation in retail, or middle managers embarking on a retail career.

### ▲ Duration

2 days

### ▲ Dates & Location

Non-scheduled

May be organized for a single company

### ▲ Tuition Fees

To be agreed upon

### ▲ Course Coordinator

Sylvie Saulnier

Ref. EG/SFM

Lectures by J. Smeddle former Vice-President of Shell Retail Marketing Europe and S. Howell former Head BP Retail UK.

IFP Training

### ▲ Who should attend?

- Managers or potential managers of Company Operated Networks.
- Site managers or others holding supervisory roles in the management of Company Operated Networks.

### ▲ Duration

2 days

### ▲ Dates & Location

Non-scheduled

May be organized for a single company

### ▲ Tuition Fees

To be agreed upon

### ▲ Course Coordinator

Sylvie Saulnier

Ref. EG/RSM

# RETAIL SITE MANAGEMENT

## OBJECTIVES

To demonstrate how to manage directly individual sites or a network of directly managed sites in the Retail Market.

On completion of the course, the participants will:

- be aware of the considerations surrounding Direct Management;
- know the key success factors of direct management such as recruitment and coaching of staff; managing customer relations on sites;
- have learned the essential ground rules for taking over sites, and handing them over to a third party.

## COURSE CONTENT

### ADDRESSING THE TASK

1 day

Industry and competitive considerations surrounding site management, including pros and cons with syndicate reviews.

The steps involved for the oil company and the future site management company for new developments and existing sites, wet and dry good stocks, staffing, etc.

Managing and motivating low paid staff in a service industry with examples of good practice. Recruitment.

On site HSE responsibilities, and building safety into design through co-operation.

Short role playing sessions will be used to emphasise points.

Good techniques for the management of fuels, shops and car wash.

Attention to category management at site level, and different options for sites in category management depending on the supplier relationships.

The importance of car wash management with examples of good practice in various markets, as well as attitudes to pricing and promotions.

### CONTROLLING THE ENVIRONMENT

1 day

Handing over a site to a third party:

- the essential steps,
- managing staff in the process,
- treatment of wet and dry stocks.

The steps in permanent closure, treatment of customers in this situation and how best to succeed while protecting the brand.

Customer relations management on site with examples and role playing.

Assessing the risks and taking steps to defeat on-site crime.

Good practices in the management of incidents, such as small or large fuel spills, injuries to staff or customers, fires, etc.

# DOWNSTREAM MODULE\*

## OBJECTIVES

To gain an understanding of the downstream petroleum sector in its technical, economic, commercial and environmental dimensions (main refining units, key economic data and characteristics, management tools, etc.).

## COURSE CONTENT

### REFINING

10 days

Crude oils and finished products.  
Refining processes.  
Deep upgrading.  
Environmental constraints.  
Consequences of the reduction of heavy fuel oil outlets.  
Short-term refinery management.  
Unit Margins.

### LINEAR PROGRAMMING

6 days

Linear Programming: simplex, duality, economic interpretation, etc.  
Refining supply and demand.  
Refinery investments, costs and margins.

### DOWNSTREAM ECONOMICS (Refining, Gas & Power)

10 days

Refining economics.  
Environmental Management.  
Natural Gas economics.  
Electricity Generation/Transportation/Distribution/Deregulation.

### CRUDE OIL AND PRODUCTS TRADING

5 days

Physical oil markets.  
OTC products.  
Future markets. Options.  
Risk management and hedging.

### STRATEGIC MARKETING

5 days

Role of marketing in the firm and in the economy.  
Marketing organization.  
Measuring the firm's competitiveness.  
Designing a development strategy.

### ECONOMETRICS

5 days

Applied probability and statistics.  
Applications of statistical and probabilistic concepts.

### INDEPENDENT STUDY

20 days

Personal research work.

\* This module is a part of a 16-month master degree program, Petroleum Economics and Management, run by IFP School.

### ▲ Who should attend?

- Recently hired professionals, preferably with an engineering background, about to take up a position in downstream petroleum activities.
- Staff from other petroleum sectors (upstream, chemicals, etc.) taking up a downstream managerial position or from government agencies with responsibilities for petroleum matters will also benefit from this course.

### ▲ Duration

3 months

### ▲ Dates & Location

April 19 to July 16, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 10,250 excl. tax

### ▲ Course Coordinator

Karim Faïd

Ref. EG/DOM

▲ **Who should attend?**

Anyone working in the oil and gas and related sectors whose activity, whether technical, commercial, legal, financial, or human resources, is in some way connected with oil refining.

▲ **Duration**

5 days

▲ **Dates & Location**

March 8 to 12, 2010  
September 6 to 10, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 2,050 excl. tax

▲ **Course Coordinator**

Jean-Pierre Limage

Ref. **RPC/RPPP**

# REFINING PROCESSES AND PETROLEUM PRODUCTS

## OBJECTIVES

To bring broad technical information on refining processes and schemes, and on petroleum products.

At the end of the session, the participants know:

- the composition, the main characteristics and new trends of petroleum products
- the roles of the different refining units and their process characteristics
- the main manufacturing schemes encountered in the oil refining field
- the economic context of this industry.

## COURSE CONTENT

### PETROLEUM PRODUCTS

1.25 days

Energy and non-energy products and their main uses.

**Principal components** of petroleum products; general hydrocarbon classification and main impurities.

Quality requirements imposed on petroleum products in view of their utilization: quality **specifications** measured by **standard tests**, characteristics related to the product composition, origin and processing routes.

New trends in market structure and product characteristics, biofuels.

### REFINING PROCESSES

2.75 days

#### Crude oil fractionation

Origin, overall characteristics and classification of **crude oils**.

Yields and properties of straight-run cuts obtained by distillation.

Industrial units: **atmospheric distillation, vacuum distillation, light-ends fractionation**.

Various process schemes, operating conditions, energy consumption.

#### Catalytic reforming and isomerization

Octane improvement of virgin naphthas.

Basics of processes, types of catalyst, product yields and hydrogen production.

Industrial units: process schemes, operating conditions, equipment, new trends.

#### Hydrorefining processes

Main features of impurities removal by catalytic hydrogen treatment.

Main refining applications.

Example of ULSD hydrotreatment unit: functioning, operating conditions.

#### Conversion units

Outline of conversion and various cracking processes.

Characteristics and origin of feeds to be cracked.

Conversion by means of **thermal cracking**: visbreaker, various cokers.

Conversion by means of **catalytic cracking**: FCC and related units gasoline sweetening and desulfurization, **alkylation**, production of MTBE, ETBE and propylene, **hydrocracker and related units**, hydrogen production (SMR, POX).

Recent developments in hydrotreatment and hydroconversion of heavy residues.

**Scrubbing treatments**: amine washing, **sulfur** production, treatment of residual gases from Claus units.

Other processes for production of petroleum products: GTL, synthetic crude oils.

### MANUFACTURING SCHEMES

0.5 day

Main routes to major products.

Base lube oil manufacturing.

### MAIN ECONOMIC FEATURES OF REFINERY OPERATIONS

0.5 day

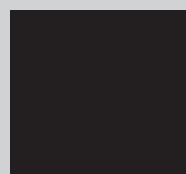
Prices of crude oils and products, operating costs, economic margin of a refinery.

Examples of flexibility in operation and its economic consequences.

*The lecture is backed up by a specific course manual, easy to consult after the course.  
A glossary of the main technical terms used in the refining industry is given to the participants.  
Also scheduled on 4 days at Energy Institute, London (UK) from May 12 to 15, 2009.*

FINANCE & MANAGEMENT

Course descriptions **34 to 40**





# FINANCIAL MANAGEMENT OF AN INTERNATIONAL OIL COMPANY

## OBJECTIVES

To deepen the knowledge of accounting in the oil industry and to introduce the tools of financial analysis and management.

On completion of the course, the participants will be able:

- to appreciate the specificities of the international petroleum accounting standards;
- to define fundamentals of cost analysis and control;
- to briefly analyze the financial situation of a company;
- to use the basic methodology and techniques of audit.

## COURSE CONTENT

### FINANCIAL REPORTING 1.5 day

Reporting obligations: quoted and non-quoted companies.  
Tax reporting. Balance sheet. Statement of income. Statement of cash flow.  
SEC requirements.  
Point of view of the company: shareholders, investors, analysts, rating agencies.  
Group accounting: consolidation, mergers, goodwill.  
Auditability and audit: general.

### ACCOUNTING NORMS 1.5 day

International and national norms. The actors. Conceptual framework.  
FAS, IAS: differences and similarities; criteria of choice.  
Inventories, depreciations, pluriannual contracts, retirement obligations: assets and personnel.  
Deferred tax, provisions, environmental costs.  
Foreign currencies.  
Hedging instruments and derivatives.

### SPECIFICITIES OF UPSTREAM ACCOUNTING AND REPORTING 2 days

Specificities of upstream.  
Exploration: full cost, successful efforts. FAS 19. IAS.  
Reserves: FAS 69. rules for reserves accounting. Control.  
Joint-venture accounting.  
Accounting for concessions and production sharing contracts: reserves, inventories, commitments, revenues.  
Fair value of assets.

### AUDIT 1.5 day

Joint-venture audit. At cost. Cash calls.  
Tax audit: recoverable costs.  
Common costs.  
Sole costs.  
Rates, internal transfers, billing.

### FINANCIAL ANALYSIS 1 day

Tools of financial analysis: differences and ratios.  
Value of a company: different approaches and definitions.  
Profitability. Leverage.  
Valuating a company using financial reporting.

### FINANCING 1 day

Financing investments and operations.  
Capital markets, financial markets, stock markets.  
Equity: increase and decrease.  
Debt: banks, bonds, etc.  
Project financing: overview.

### FINANCIAL MANAGEMENT 1.5 day

Analytical accounting.  
Cost control.  
Cost management.  
Audit.

#### ▲ Who should attend?

Professionals in charge of accounting who would like to understand the bases of financial analysis of oil and gas activities.

#### ▲ Duration

10 days

#### ▲ Dates & Location

March 8 to 26, 2010  
Rueil-Malmaison

#### ▲ Tuition Fees

€ 4,100 excl. tax

#### ▲ Course Coordinator

Karim Faïd

Ref. EG/FMC

▲ **Who should attend?**

Senior Managers and Executives from oil and gas companies

▲ **Duration**

4 days

▲ **Dates & Location**

April 13 to 16, 2010  
October 19 to 22, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 2,270 excl. tax

▲ **Course Coordinator**

Sylvie Saulnier

Ref. **EG/SMP**

# STRATEGIC MANAGEMENT AND PLANNING

## OBJECTIVES

To provide a good understanding of why and how to: (i) define a mission, (ii) implement a strategy; and (iii), achieve higher performances.

On completion of the course, the participants will have understood:

- why the elaboration of a strategy is important for improving performance;
- how strategy elaboration fits with the overall corporate process of building a Company's vision and goals;
- how to implement the tools needed to achieve the goals of a defined strategy;
- how to put in place a suitable and efficient follow-up (balanced scorecard).

## COURSE CONTENT

### STRATEGY FUNDAMENTALS

1 day

Public Sector: alignment with Government objectives, strategies and goals.  
How strategy adds value to shareholders and stakeholders.  
Definitions, principles, differences between strategy, objectives and planning.  
Partnerships and strategy, alignment with partners and common goals.  
Basic leadership approach to make strategy viable: leadership, HSE, corporate governance principles.  
Strategic thinking and analysis : Where We Are.  
Case studies from the oil industry: examples on competition approach to strategy.

### CORPORATE STRATEGY

1 day

Importance of Corporate Governance and leadership in the strategic thinking process.  
Role of staff and its commitment to deliver strategy.  
Role of education, development and training throughout all layers of the organization.  
Tools, to provide connectivity between layers.  
Board strategy understood and materialised by top-leadership layers.  
Strategy passed on to mid-level layers who shall materialise the strategy in a successful manner.  
Corporate Strategy vs. Business unit, different strategies and horizontal consolidation.  
Where We Want To Be.  
Case studies from the oil industry: examples on competition approach to strategy.

### DECISION PROCESS

1 day

Market evaluation: Michael Porter's model on competitiveness.  
The internal value chain and added value to support strategy.  
Swot analysis on current situation.  
Prospectives based on strategic direction.  
Decision making processes.  
Critical success factors.  
How To Get There. Who's, What's and When's of the strategic plan.  
Case studies from the oil industry: examples on competition approach to strategy.

### PLANNING

1 day

Tools for planning process.  
Operational planning, budgeting and scheduling as key items for the planning process.  
Balanced scorecard as a successful strategic tool.  
Case study: Balanced scorecard example, discussion.

# PRICE RISK MANAGEMENT IN ENERGY MARKETS

## OBJECTIVES

To provide a better understanding of the principles and techniques for oil and gas price risk management.

On completion of the course, the participants will have:

- reviewed the means of evaluating price risk;
- analyzed and manipulated the exchange traded products used for hedging;
- understood the different over the counter products used in hedging strategies for different oil and gas activities.

## COURSE CONTENT

### OIL & GAS MARKETS

0.25 day

Physical oil and gas markets.  
Markets structures and types of transactions.  
Price references and pricing mechanisms.

### PRICE EXPOSURE & HEDGING PRINCIPLES

0.75 day

Price risk: how to evaluate it?  
Definition of hedging.  
Hedging instruments.  
Mark to Market and Value-At-Risk.

### EXCHANGE TRADED PRODUCTS

0.5 day

Futures and options contracts.  
Exchanges and their organisation: NYMEX, ICE.  
Hedging using Futures.  
Market structure (contango, backwardation).  
Options: pricing and sensitivities.  
Basis risk and hedging imperfections.

### SIMULATION OF FUTURES AND OPTIONS TRADING

0.5 day

### OVER THE COUNTER PRODUCTS

0.5 day

Forward contracts.  
Swaps.  
OTC options: caps, floors, collars.  
Options strategies.  
Electronic trading.

### HEDGING STRATEGIES

0.5 day

Various examples and simulations.  
Case study.

### ▲ Who should attend?

Professionals in the oil and gas industries impacted by the volatility of oil or gas prices: producers, marketers, refiners.

Purchasing, planning and finance departments of energy consumers.

Professionals from the bank sector who need to understand the specificities of oil and gas price risk management.

### ▲ Duration

3 days

### ▲ Dates & Location

October 6 to 8, 2009  
Rueil-Malmaison

### ▲ Tuition Fees

€ 1,450 excl. tax

### ▲ Course Coordinator

Lucien Guez

Ref. EG/PRM

▲ **Who should attend?**

- Managers and executives involved in exploration-production activities who need to acquire a deep understanding of fiscal modelling for project evaluation.

▲ **Duration**

4 days

▲ **Dates & Location**

July 5 to 8, 2010  
Rueil-Malmaison

▲ **Tuition Fees**

€ 2,010 excl. tax

▲ **Course Coordinator**

Mohamed Lyes Djenaoui

Ref. **EG/PCM**

# PRACTICE OF E&P CONTRACTS ECONOMIC MODELLING

## OBJECTIVES

To provide a practical understanding of the economic modelling of oil and 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.

On completion of the course, the participants will have:

- improved their knowledge of different tax systems and contractual frameworks;
- understood and practised the use of all the tools of investment profitability analysis in EP projects;
- built complex computer models for cash flow analysis in EP projects.

## COURSE CONTENT

### CONTRACTUAL AND 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 MODELLING 3 days

Financial environment, capital cost and discount rate, value creation.  
Reviews of economic criteria for investment project evaluation.  
Global profitability analysis, impact of fiscal terms and inflation on economic criteria.  
Equity analysis, specific method for exploration-production: BTWACC method.  
Introduction to risk analysis, risk and discount rate.  
Sensitivity analysis, Spider and Tornado diagrams.

### RISK ANALYSIS OF EXPLORATION-PRODUCTION PROJECTS 0.5 day

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\*

Concession and production sharing contracts modelling with sliding scale royalties, tax linked to profitability, profit oil linked to R Ratio, etc.  
Pipeline projects modelling.  
Production acceleration and value creation.  
Decision-making process for delineation.

\*Excel modes are provided.

Participants need to be comfortable with the use of Microsoft Excel.

# ECONOMIC MODELLING AND ANALYSIS IN THE PETROLEUM INDUSTRY

## OBJECTIVES

To provide a better understanding of the concepts behind the theory of capital budgeting and thus improve the analysis in investment profitability studies.

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.

On completion of the course, the participants will be able to:

- understand and practise the use of all the tools of investment profitability analysis;
- incorporate terms of financing plans in equity profitability analysis;
- build complex computer models for cash flow analysis;
- carry out and present risk analysis of investment projects.

## COURSE CONTENT

### FINANCIAL ENVIRONMENT

0.5 day

Corporate, strategic and financial environment.

Value creation and management, Corporate finance and return on capital, ROCE and ROE.

Financial indicators, Accounting depreciation, Financial leverage.

Cost of debt capital, Cost of equity capital, Corporate finance and average cost of capital.

### ECONOMIC EVALUATION CRITERIA

0.5 day

Various dimensions of investment decisions, Investment and profit maximization.

Alternative projects, independent projects and dependent projects.

Concept of discounting, discounted cash flows, corporate finance and discount rate of a company.

Net Present Value, Internal Rate of Return, Pay-Out Time, Profitability Index.

### GLOBAL PROFITABILITY ANALYSIS

2 days

Analysis of operating cash flows, Return on capital employed.

Value creation, Income taxes associated with a project.

Impact of taxation and inflation in profitability investment studies.

Choosing an investment program with a limited budget, Scarcity cost of capital.

### ECONOMIC COST ANALYSIS

1 day

Accounting cost vs economic cost, After-tax cash outflows.

Total discounted cost, Annual economic cost.

Economic depreciation, Unit economic cost, Optimal economic lifetime.

### EQUITY PROFITABILITY ANALYSIS

0.5 day

Financing oil and gas projects, Project Finance and B.O.T. structures.

Various financing plans and debt repayment.

Analysis of equity cash flows, Return on equity capital, Financial leverage.

### RISK ANALYSIS

0.5 day

What is risk analysis? Methodology of risk analysis.

Sensitivity analysis in investment decision, Spider and Tornado charts.

Limitations of sensitivity analysis, Probabilistic approach, Scenarios approach.

### CASE STUDIES\*

Petrochemicals plant project, Assembly shop project, Choosing an equipment, Choosing a supply option.

Natural gas break-even price, Economics of natural gas transport by pipeline.

Natural gas liquefaction cost, Liquefied natural gas transport cost, Economic terms of a transport contract.

Investment profitability study for a gas pipeline (global and equity analysis, risk analysis).

Modernisation of a service station (global and equity analysis, risk analysis).

Refinery project (global and equity analysis, risk analysis).

Hydrocracker project, Polypropylene project.

\*Excel modes are provided.

Participants need to be comfortable with the use of Microsoft Excel.

### ▲ Who should attend?

Managers and staff concerned with decisions affecting medium and long term cash flows, such as investment, disinvestment, acquisitions or leasing, who need to improve their understanding of the theory and practice of investment analysis.

### ▲ Duration

5 days

### ▲ Dates & Location

March 15 to 19, 2010  
Rueil-Malmaison

### ▲ Tuition Fees

€ 2,220 excl. tax

### ▲ Course Coordinator

Mohamed Lyes Djenaoui

Ref. EG/EMA

▲ **Who should attend?**

Engineers and managerial staff from all industrial sectors who need to draw up statistical results and forecasts using regression techniques.

▲ **Duration**

5 days

▲ **Dates & Location**

Non-scheduled

May be organized for a single company

▲ **Tuition Fees**

To be agreed upon

▲ **Course Coordinator**

Sandra Raki-Rechignac

Ref. EG/ECF

# ECONOMETRICS AND FORECASTING

## OBJECTIVES

To provide a practical understanding of econometrics and forecasting, focused on demand modelling (household and industrial consumption) and on market analysis (market integration, leader price, etc.).

On completion of the course, the participants will:

- know regression methods and their applications;
- understand time series analysis and forecasting techniques;
- be able to solve case studies using micro-computers.

## COURSE CONTENT

### BASICS

1 day

Objective and limits of econometrics.  
Linear adjustment.  
Least square method.

### ECONOMETRIC TESTS

0.5 day

Detecting and correcting adjustment failures.

### APPLICATIONS WITH EXTENSIONS TO SPECIFIC PROBLEMS

1.5 day

Uses of micro-computer software.  
How to build an econometric equation (demand model).  
Economic analysis of the statistical results and forecast.

### TIME SERIES ANALYSIS

1 day

Time series decomposition.  
Smoothing techniques.

### ECONOMETRIC ANALYSIS OF MARKET BEHAVIOUR

1 day

Causality test.  
Market integration.  
Individual practice using computers.  
Use of data base management software and econometric modelling packages.

# PROJECT MANAGEMENT

## Contracts, schedules, procurement, construction

### OBJECTIVES

To provide a broader understanding of project management, its objectives, roles and techniques.

On completion of the course, the participants:

- know proven practices applicable to most kind of projects
- are able to determine the contracting strategy and project execution plan, adapted to their needs
- understand the relationship between the owner and the contractor
- can identify and manage the critical interferences between the various steps of project implementation
- know the key factors and conditions for a successful project.

### COURSE CONTENT

#### DIFFERENT PHASES IN PROJECT IMPLEMENTATION 0.5 day

Market survey and fixing the target.

Feasibility and the capital investment decision.

Phases in project execution: studies, procurement, construction, start-up and performance tests.

Factors determining success and failure.

#### CONTRACTS 0.5 day

Different types of contract in view of the target, type of service required and the degree of responsibility of the different parties involved (owner, engineering contractor, general contractor).

Advantages and disadvantages of the different types of contract.

#### PLANNING AND SCHEDULING 1 day

Planning methods: Gantt diagram, PERT, critical path method, precedence diagramming method. Process curves and histograms.

Implementing the schedule: organizing the project and the schedule, schedule hierarchy, supervising the execution, physical progress, rectification measures.

**Practical exercise: scheduling procurement and construction studies for a compression station.**

#### PROCUREMENT AND CONTRACTING 1 day

Definition of procurement.

Procurement organization and scheduling: purchasing, expediting, inspection, transportation, transit and reception.

Subcontracting construction works.

**Simulating negotiations on the choice of a supplier.**

#### CONSTRUCTION MANAGEMENT 0.75 day

Constructibility concepts.

Site organization, safety management.

Methods of monitoring progress of work.

Illustration: the work-site from beginning to end.

#### QUALITY ASSURANCE 0.5 day

Quality assurance fundamental principles.

Quality management system requirements.

Ensuring quality throughout project implementation.

#### PROJECT MANAGEMENT FROM OWNER'S STANDPOINT 0.75 day

Project execution plan and procedures.

Management of changes and deviations.

Safety, Health and Environment.

Typical pitfalls during execution: mind the risks.

*The teaching method is interactive and draws on participant's own experience; specialists from industry share general concepts as well as personal experience with participants. A comprehensive manual is provided for easy use during on-job situations.*

#### ▲ Who should attend?

Owner and contractor managers, engineers, purchasers and supervisory staff in charge of project definition, implementation and/or acceptance throughout the whole spectrum of project phases (management, engineering, planning and cost controls, procurement, contracting, construction, commissioning, start-up and tests runs).  
Anyone requiring a comprehensive understanding of the various project management techniques.

#### ▲ Duration

5 days

#### ▲ Dates & Location

November 22 to 26, 2010  
Rueil-Malmaison

#### ▲ Tuition Fees

€ 2,250 excl. tax

#### ▲ Course Coordinator

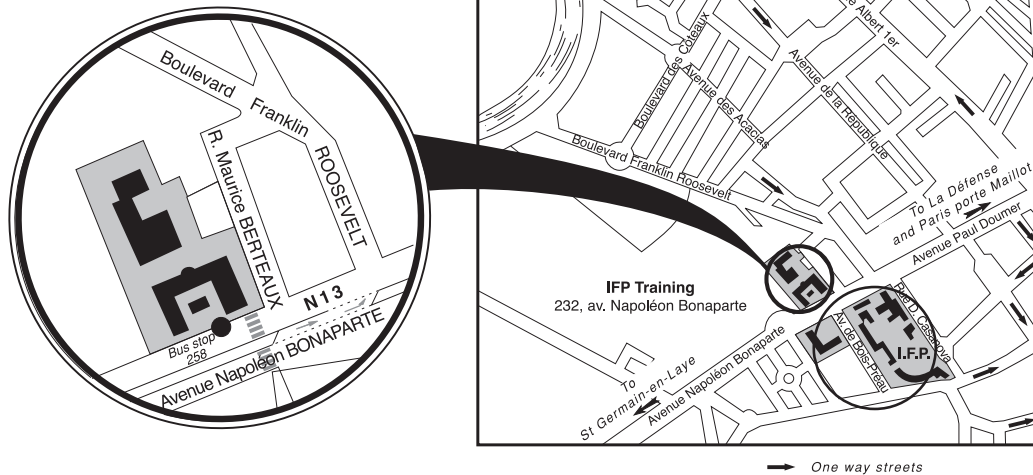
Jean-Pierre Limage

Ref. PGP/OCP-E

## PRACTICAL INFORMATION

- **Training centre address:**

232, avenue Napoléon Bonaparte  
92852 RUEIL-MALMAISON Cedex,  
FRANCE.  
Tél.: 33 (1) 47 52 70 85.



- **How to get there from Paris:**

By car:

From Paris, exit Porte Maillot, RN 13, Direction La Défense-Saint-Germain-en-Laye.

By public transport:

RER (Réseau Express Régional), **line A direction Saint-Germain-en-Laye**. Two possibilities:

- Get off at Rueil-Malmaison, exit Victor Hugo  
**Bus 27:** Get off at Bois-Préau  
or shuttle bus IFP (departures from the RER station: 8:05 - 8:40 - 9:05)
- Get off at Grande Arche de la Défense:  
**Bus 258** (La Défense-Saint-Germain-en-Laye): Get off at Bois-Préau.

- **Other information:**

The courses are held from 9.00 a.m. to 5.00 p.m. each day, with four 1h30 sessions. Participants lunch with the lecturer on the premises.

A list of hotels near our training centre is available on request.

- **For any further information on course content or logistics and registration, please contact**

**Mrs Josée FOUCAULT**  
Phone: 33 (1) 47 52 72 93  
E-mail: josee.foucault@ifptraining.com

or

**Mrs Michèle CALLU**  
Phone: 33 (1) 47 52 72 31  
E-mail: michele.callu@ifptraining.com

Fax: 33 (1) 47 52 71 09

*If you would like to know more about us and have an overview of our training courses, please visit our web site:  
[www.ifptraining.com](http://www.ifptraining.com)*

# GENERAL SALES CONDITIONS

## Public courses

### 1 – PURPOSE AND SCOPE

The purpose of these General Sales Conditions (GSC) is to define the general conditions for taking part in public training sessions organized by IFP Training.

All customer enrolments are considered as accepted orders as soon as the enrolment confirmation issued by IFP Training has been received and implies their full commitment to these conditions which prevail over all other Customer documents, including general purchasing conditions.

### 2 – ENROLMENT AND ORDER PROCEDURES

All inscriptions to training sessions shall be carried out 3 weeks prior to the session start date. IFP Training reserves the possibility of accepting late enrolment.

The number of participants per session is limited.

Enrolment will be confirmed once the organizing centre receives a filled in enrolment form via email, fax or mail. Incomplete enrolment forms will not be accepted.

Enrolment will be final once payment has been received in full, or once an acceptance certificate from a certified organization has been received.

### 3 – ENROLMENT CONFIRMATION – INVITATION OF PARTICIPANTS

If the entire cost of the session is not paid 2 weeks before the training begins, IFP Training reserves the right to free up the places booked by the Customer after informing them. IFP Training will, at least 2 weeks prior to the start of the session, send a letter to the Customer designated on the form, confirming their enrolment. A personal invitation for the Participant is attached to the letter and provides all practical information on the session (schedule, directions, etc.) and any other specifications.

### 4 – PRICE – INVOICING AND PAYMENT

**PRICE:** Enrolment fees cover training (teaching, practical activities, simulators and other IT tools, documentation, suppliers) as well as break-times (refreshments) and lunch and do not include transport or accommodation.

The price on the order form is given in Euros excluding tax. VAT at the current rate shall be added to this, plus any other tax deducted at source. All training sessions once started are to be paid in full.

On request, IFP Training may decide to apply reduced enrolment fees for job seekers.

**PAYMENT:** The training session will only be accessible once payment has been made in full:

- by check to: IFP Training – 232 avenue Napoléon Bonaparte F-92852 Rueil-Malmaison Cedex.

- via bank transfer to the IFP Training beneficiary:

NATIXIS account no. 30007 99999 04165583000 12

IBAN: FR76 3000 7999 9904 1655 8300 012 – BIC: CCBPFRPPAR.

**INVOICING:** The paid invoice is sent to the Customer at the end of the training session, in duplicate if specified on the enrolment form.

**LATE FEES:** If IFP Training exceptionally agrees on payment after the session, any amounts not paid in time will give rise to late fees set at three (3) times the legal interest rate. These late fees can be requested by right until full payment has been made.

### 5 – PAYMENT BY AN SPONSORING ORGANISM

If the Customer wishes to pay using an sponsoring organism (for example, OPCA as defined under French Law), the following procedure shall be followed:

- before the start of the session, a request for direct billing shall be issued and accepted;

- this shall be indicated explicitly on the enrolment form;

- the Customer ensures payment has been completed by the designated organization.

IFP Training will provide the Customer with all necessary documents for making sponsoring organism requests.

If the sponsoring organism only bears part of the cost of the training, the remaining sum will be invoiced to the Customer.

Only payment by sponsoring organism before the 1st day of training will ensure enrolment and access to the training.

If, for whatever reason, the sponsoring organism will not pay, the Customer will be invoiced for the total price of the training.

At the end of the session, IFP Training will send the sponsoring organism an invoice along with a copy of the certificate of attendance signed by the Participant.

### 6 – CANCELLATION AND POSTPONEMENT - SUBSTITUTION

**By the Customer:** Cancellations by the Customer shall be sent in writing to IFP Training.

In case of cancellation, even due to force majeure, less than 14 calendar days before the beginning of the session, 50% of the enrolment fees will be invoiced by IFP Training, except if a participant from the same business takes the place, which must be confirmed by sending a new enrolment form. In case of non-cancelled enrolments (including absenteeism or dropout), 100% of the enrolment fees will be invoiced by IFP Training.

In case of an unforeseen departure justified by the Customer, the Participant may be authorized to take part in a later session with the prior consent of IFP Training.

**By IFP Training:** IFP Training reserves the right to cancel or postpone a session, especially if there is an insufficient number of participants. The Customer will be informed by telephone, at least 2 weeks before the session was due to begin. The cancellation will be confirmed in writing. The payments received will be fully refunded. No compensation will be given to the Customer due to postponing or cancellation on behalf of IFP Training.

## **7 – DATA PROTECTION**

Personal information sent by the customer to IFP Training for the session may be given to IFP Training's contractual partners for the needs of the said Training session. In accordance with the provisions of law no. 78-17 dated 6 January 1978 on data protection, the Customer may at any time use their right of access, right to object and right to correction in the IFP Training file.

## **8 – CONFIDENTIALITY AND PROPERTY RIGHTS OF TRAINING DOCUMENTS**

The Customer is subjected to a confidentiality obligation concerning all documents and information specified as being confidential communicated during the session, irrespective of their medium. The Customer shall ensure that all their staff and more generally speaking all people in contact with IFP Training comply with this obligation.

More specifically, IFP Training may provide participants with training documents on all media (e.g. paper, audio, audiovisual, IT or multimedia).

Any direct or indirect reproduction, adaptation, alteration, representation or distribution by the Customer, irrespective of the form, of all or part of the training documents created by IFP Training and/or the information contained in them, for its staff not taking part in training sessions or for third parties, will be subjected to IFP Training's prior written agreement. The Customer must not to make any copies, in any shape or form, with the aim to sell, organize or conduct training sessions.

## **9 – CONCEALED WORK – SUBCONTRACTING**

Based on Law no. 91-1406 dated December 31 1991 supplemented by the Decree dated June 11 1992, IFP Training guarantees that all workers are employed legally in terms of the provisions stated in the French labor code. IFP Training guarantee compliance with all fiscal and social obligations in terms of training staff as well as legal and regulatory obligations in terms of concealed work and the employment of foreign labor.

IFP Training may consult qualified partners to carry out part of the service, who will be subjected to the same obligations as mentioned in this document, as well as the obligation of confidentiality. In no case does subcontracting relieve IFP Training of its obligations and responsibilities with regard to these General Sales Conditions.

## **10 - FORCE MAJEURE**

The Party prevented from carrying out its obligations due to Force Majeure as defined by the French Civil code, shall inform the other party in written form via registered post with acknowledgement of receipt providing all relevant justification, and will do its utmost to reduce any damage caused by this situation. This excludes exclusively internal strikes and payment capacities or methods of each Party.

The obligations of a Party affected by a Force Majeure are interrupted, without penalties, until the effects of this cause disappear. Each Party will bear the cost of all fees incumbent upon them resulting from the force majeure.

In case of a force majeure lasting over thirty (30) days in a row, the Party which the force majeure is opposed to may terminate the order immediately and by right without compensation.

## **11 - TERMINATION**

In case the Customer does not comply with the obligations stated in these General Sales Conditions, IFP Training will send a letter of formal notice via registered post with acknowledgement of receipt, demanding compliance within thirty (30) days. Once this deadline has been exceeded, if the Customer has not met the requests of the formal notice, IFP Training may terminate the order, and may request compensation.

## **12 – INSURANCE - RESPONSIBILITY**

The Customer will take out and maintain all insurance policies at his own cost and for the entire duration of the session, for covering risks, responsibilities, direct or indirect damage and any illness contracted by the Participant(s), with prime insurance companies. The Customer will compensate IFP Training for any loss, damage or harm caused by its Participants to IFP Training, its trainers or partners.

IFP Training will take out and maintain insurance required for covering risks which may arise during training sessions.

Each Party remains liable for damages made to its property and for personal injuries suffered by its employees, regardless of the cause or the reason of that damage, during the performance of the training session, except gross negligence or willful misconduct by this aforementioned Party, or one of its employees.

In any case, IFP Training shall not be liable for any indirect or consequential loss such as but not limited to financial, commercial or any other type of prejudice, caused directly or indirectly by the use of the information broadcast within the framework of its training sessions.

## **13 – MISCELLANEOUS PROVISIONS - DISPUTES**

The Customer is aware of all documents which constitute the order, including these General Sales Conditions.

After the training session and/or in case of termination, the provisions of articles 8, 11, 12 and 13 will remain valid.

These General Sales Conditions are subjected to French law. Any dispute which is not solved amicably within one (1) month and which concerns the validity, the execution or the interpretation of these General Sales Conditions will be subjected to the jurisdiction of the Commercial Court of Nanterre.

**REGISTRATION FORM**

**(to be sent to the training centre concerned)**

**Course title:** .....

**Course reference:** .....

**Date of session:** ..... **Location:** .....

**PARTICIPANT**

Mr  Mrs  Miss  Name: ..... Given name: .....

Position: ..... Nationality: .....

Company: .....

Address: .....

Postal code: ..... City: ..... Country: .....

Telephone: ..... Fax: ..... E-mail: .....

**CONFIRMATION OF REGISTRATION**

Mr  Mrs  Miss  Name: ..... Given name: .....

Position: .....

Company: .....

Address: .....

Postal code: ..... City: ..... Country: .....

Telephone: ..... Fax: ..... E-mail: .....

**INVOICE**

Mr  Mrs  Miss  Name: ..... Given name: .....

Position: .....

Company: .....

Address: .....

Postal code: ..... City: ..... Country: .....

References to be mentioned on the invoice: .....

I acknowledge receipt of the IFP-Training general sales conditions for public courses and I accept them.

**To be sent with the invoice:**

- Attendance sheet
- Course assessment by the participant
- Duplicate of the invoice
- Others (please state) .....

Stamp and signature

