

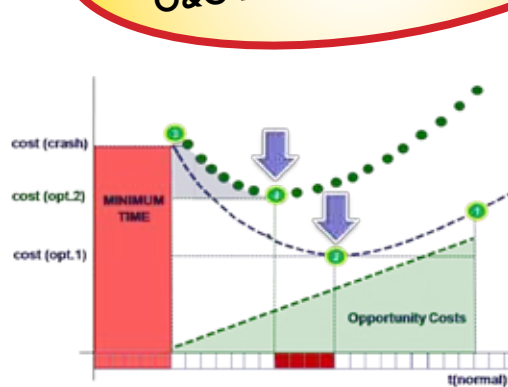
Learn Through Real Life
Projects & Case Studies

Economic Assessment Techniques used in Oil & Gas Industry

- Mastering essential investment and asset
management skills amid turbulent markets

Traders Hotel Singapore | 7-10 July 2009

An Advanced Course following
on from the extremely popular
O&G Fundamentals Course!



Jointly Led by Two Expert
Practitioners & Trainers from

THE
ENERGY CONTRACT
COMPANY



Anthony Way

Director & Managing Partner
The Energy Contract Company, UK

Prof. Yvonne Barton MBE

Senior Associate,
The Energy Contract Company, UK
Chairman, **BG Asia Pacific** (former)
President, **BG Italia** (former)

About Past Delegates & Feedbacks

Companies that have participated recently in Anthony and Yvonne's jointly led courses include leading players such as: *Petronas, PTT, PetroVietnam, Pertamina, Premier Oil, BG Group, RWE Dea, ENI Pakistan, Cairn Energy, Shell, BP, GS Caltex, SK Energy, Daewoo E&P, Santos, PetroBangla, Maersk Oil, PNOG, Zakum Dev Ltd, Saudi Arabian Oil, Petropars Ltd, ENOC, Department of Mineral Fuels Thailand* and etc.

ABOUT 95% OF THESE PAST DELEGATES RATED THE COURSES IN OVERALL AS EITHER "EXCELLENT" OR "VERY GOOD".

Another Premier Product of

 **neoedge**
COMMUNICATE NETWORK INNOVATE



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Overview & Why You Should Attend

Projects in the Oil & Gas Industry are massive undertakings involving huge capital expenditure and the management of vast resources. Given the high contract value, complex commercial terms, uncertain risk exposure and fast-changing market conditions, **ensuring sound investment decisions and strategic asset management has never been more critical.**

This 4 day course will first discuss the fundamental risks, uncertainties and issues associated with new investment and management of existing assets within the upstream oil and gas industry. **From the commercial fundamentals and market pricing through to economic modelling and portfolio management, this course covers the essential advanced skills required to be truly effective in the upstream oil and gas industry.**

Training focuses on the skills to use economic evaluation techniques to calculate the economic and financial viability of projects; to quantify the impact of risk and uncertainty; to compute various measures of project viability including net present value, internal rate of return, profitability index and payback; the understanding of the appropriate choice of method for various situations.

This course will be jointly led by two industry experts Anthony Way and Yvonne Barton with combined 55 years track record in the market, ensuring your learning results are best achieved.

Testimonials

"Anthony Way showed extensive experience in the industry and promoted highly interactive discussions with participants."

"The way of conducting by Yvonne Barton was very good, covering the depth of the key topics. A good workshop conducted by Neoedge!"

"This workshop covers a wide range of topics in an orderly, professional and comprehensive manner, and hence very helpful."

PROGRAM SCHEDULE DAY 1 - 4

08:30	- Registration & Tea
09:00	- Morning Session Begins
10:40-11:00	- Refreshments & Networking
12:30	- Lunch
13:45	- Afternoon Session Begins
15:10-15:30	- Refreshments & Networking
17:00	- Finish of Day/Course

Who Should Attend

The course is designed for professionals from a large range of either technical, commercial or legal backgrounds looking to gain an insight into the broad range of economic valuation and management techniques required across throughout industry. Specialists directly involved in the economic evaluation of projects and investment will find this course particularly valuable. All those involved in oil & gas/LNG production, purchase, transportation, sales, business development and investment, include but are not limited to:

- Government Officials
- Negotiators
- Investors
- Project Owners
- Project Managers
- Economist
- Economic Analysts
- Project Engineers/Planning Engineers
- Operation Managers
- Contract/Agreements Managers/Specialists
- Finance Controllers/Managers
- Business Development Managers
- E&P Professionals/Managers
- Corporate & Administration Professionals
- Buyers, Sellers & Distributors
- Traders
- Lawyers /Advisors
- Accountants/Auditors

Course Format

This course will be held in a highly interactive workshop format with Real Life Projects & Case Study for a small class.

Pre-course Questionnaires

Anthony and Yvonne would like to customize the training based on your specific needs. Pre-Course Questionnaire will be sent to you prior to the workshop to complete and for the trainers to analyse in advance and address during the course.

Certificate of Attendance

Upon the successful completion of this course, you will receive a Certificate of Attendance bearing the signatures from both the Expert Trainers and the Course Organizer. This Certificate will testify your endeavour and serve towards your professional advancement.

Course Material

- All delegates will receive hard copy course material as well as a CD-Rom containing all the presentation material.
- Color printing of charts in Course Material for your easy reading!

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About your two Expert Trainers & Practitioners



Anthony Way is a Director and Managing Partner of The Energy Contract Company, an international consultancy to the deregulated energy industry. In this role, he has worked extensively as advisor to several major oil and gas companies and on a large number of energy projects, worldwide. In his **30 years experience in the industry**, he has led the **negotiation** team of more than fifteen **oil and gas projects in Asia, Africa and Europe**, and been involved in a senior role in many **project financings**.

Recently he has advised on several international oil and gas projects under development, including **LNG export to China and Japan**; commercial advice on **a Central Asian oil pipeline**; advisor to two of the **new LNG terminals** planned in the **Europe** and one in the **USA**. His work has also included: advising on the renegotiation of the commercial terms for **one of the largest oil export projects in Europe**; and advice on **a gas import project into Europe**, including detailed negotiation of the main contractual agreements leading to project success.

He has worked on several gas projects for **a major Asian oil and gas company**, including detailed advice on a pipeline gas contract in Terengganu, **Malaysia**. Recently, he has been appointed as Expert to the Arbitration Institute of the Stockholm Chamber of Commerce in the **resolution of a major contractual dispute** in the oil and gas industry.

With a Masters in Chemical Engineering from Cambridge University and in Business Administration from DUBS Business School in the UK, he has extensive global experience in the commercial aspects the upstream energy sector, and has been responsible for the creation of a number of high value assets.

Before becoming a Partner in The Energy Contract Company in 2000, he held a number of very senior positions in the industry. He was a Senior Vice President of **Enron International**, responsible for one of its international regions. Prior to that he had a successful 16-year career with **Amoco Production Co**, working in Europe, the USA and in international operations. In this role, he instigated and completed several oil and gas field developments based upon extensive contractual negotiation, the largest of which was the **\$2.1 billion development** of the Everest & Lomond gas fields in the North Sea.



Prof. Yvonne Barton is a Senior Associate of The Energy Contract Company and is also **Visiting Professor** at one of Italy's top universities in Rome where she lectures on energy market regulation and international political economy. She has worked on a large number of energy projects worldwide. In her **25 years experience in the industry**, she has led the commercial development of projects in **Asia, Europe and Africa** and has managed several corporate acquisitions and divestments in oil and gas.

She is **an expert in LNG import terminals**, having led the commercial development of five re-gas projects in Europe and has advised the European Regulators Group on third party access to LNG terminals. She is also an expert of the Italian gas market and **has advised several new entrants on business development**.

Yvonne started her career as a geotechnical engineer with BP. She held the positions of Head of Mergers & Acquisitions and Head of International Commercial with BG Group before becoming **Chairman of BG Asia Pacific** and then **President of BG Italia**. She holds a Doctorate and Masters in Geotechnical Engineering from Trinity College Cambridge and a Bachelors degree in Civil Engineering from the University of Birmingham. Yvonne was honoured with the **MBE** for services to engineering.

Please contact us if you are interested in the following upcoming workshops:

1. Negotiating Successful Gas & LNG Contracts Workshop

Johannesburg, 13-16 July 2009

2. IFRS for O&G Industry Workshop

Johannesburg, 14-16 July 2009

Kuala Lumpur, 22-24 July 2009

3. Asia Gas & LNG Markets Summit

Singapore, 5-9 Oct 2009

IN-HOUSE TRAINING (Save 40%)

Anthony and Yvonne's jointly-led courses can be presented exclusively for your organisation on an in-house basis, tailored to meet your specific needs, at a place and time of your convenience. We have conducted their courses through in-house training successfully for **BG India** in 2008 and **RWE Dea AG** in 2009.

To discuss how we can work with you to meet your training requirements please contact:

Daniel Lau

Senior Corporate Learning Specialist

DID: +65 6557 9169

Email: Daniel.lau@neo-edge.com



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COURSE OUTLINE (4-DAY)

The course is structured in 12 Modules:

- Module 1** Economic Analysis and Evaluation: Global and Corporate Setting
- Module 2** The Opportunity Cost of Capital in the Oil & Gas Industry
- Module 3** Fiscal Aspects of Oil & Gas Investments
- Module 4** **Case study 1 - Production Sharing Contract**
- Module 5** Data collection and assessment
- Module 6** Economic Analysis - Techniques and Key Elements
- Module 7** Evaluating and Applying the Results in the Upstream Industry
- Module 8** Probabilistic Techniques
- Module 9** Economic Analysis of Project Development
- Module 10** **Case study 2 - Assessment of an Oil & Gas project**
- Module 11** Assessment of Mergers and Acquisitions
- Module 12** **Case study 3 - Competitive Bid for an O&G business opportunity**

Throughout the whole course numerous examples of real life projects, case histories and situations from oil and gas developments, worldwide, will be used for effective learning.

Module 1: **Economic Analysis and Evaluation: Global and Corporate Setting**

- 1. Overview & Updates of the Oil & Gas Industry**
 - Location of the Industry (highest reserves vs biggest consumers)
 - Various uses of Oil & Gas and economics
 - The Value Chain from wellhead to burner tip
 - Exploring for Oil & Gas (searching and evaluating reservoir)
 - Definition of Proved Reserves
 - Updates of Oil and Gas production (onshore, offshore, processing etc)
 - Updates of Oil and Gas transportation (shipping, pipelines, LNG)
- 2. Introduction to Economic Analysis and Evaluation**
 - Purpose of evaluation
 - Risk and uncertainty
 - Forces influencing the evaluation
 - Project costs and investments
 - Tools of the evaluation; the Economic Model; Discounted Cash Flow.
 - Need for Holistic Evaluation of the entire business system
 - Causes of errors in the evaluation
 - Comparing the Economic Model to the Financial Model
- 3. The Management Setting: Goals and Problems**
 - General structure of oil & gas companies
 - Management goals and objectives

- Accounting practice and measures of success
- Management issues in project evaluation
- Establishing the project return standard & inflation
- Predicting the business environment & shareholder expectations
- Capital requirements
- Political considerations

4. Value of Money: International Trade and Exchange

- Value of money – apparent vs intrinsic
- International monetary system – relevance to oil & gas investments
- International trade – Comparative Advantage, accounting, balance of payments
- Exchange systems – exchange rate changes, International Monetary Fund
- Exchange rates – correcting problems and protecting against changes

Module 2: **The Opportunity Cost of Capital in the Oil & Gas Industry**

5. What Discount Rate to Apply

- Why the risk-weighted Opportunity Cost of Capital to a company should be used
- Company capital priorities and options
- Alternatives to investment in assets versus returning money to Shareholders
- Cost of equity versus cost of debt
- Risk-weighted opportunity cost of capital

Module 3: **Fiscal Aspects of Oil & Gas Investments**

6. Upstream Fiscal & Licence Agreements

- Fiscal & Legal Regimes worldwide
- Production Sharing arrangements
- Licence agreements
- Risk Sharing

Module 4: **Case Study 1**

7. Production Sharing Contract for an Upstream Oil & Gas Production Licence

By practicing through a real life project, participants will understand and model all key terms of PSC for O&G Production Licence.

Module 5: **Data Collection and Assessment**

8. Technical Aspects of Upstream Oil & Gas

- About oil & gas reservoirs; basic rock and fluid properties
- How oil and gas are found and produced; the cost of finding
- Reservoir evaluation; the cost of development
- Field production / processing; the cost of production
- Definition of reserves



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COURSE OUTLINE (4-DAY)

9. Assessing the Technical Components in Upstream Oil & Gas Investments

- Risk and uncertainty
- Sampling and statistics, types of distributions
- Probability
- Simulation applications
- Analysis of data

10. Technical Aspects of Midstream Oil & Gas

- Midstream infrastructure - pipelines, terminals
- The cost of carry
- The LNG business

11. Market Components

- Project timeline and execution
- Midstream investments – pipelines, terminals
- Midstream access and costs
- Product sales – oil, gas liquids, gas / LNG
- Market evaluation - Where and who is the market for oil, gas (incl. LNG) and condensates/NGLs
- Market opportunity: identification and evaluation; Growth and changes in Markets
- and Market Components

12. Additional Sources of Information & Data

- Sources of fiscal information
- Supply demand information
- Government agencies
- Benchmarking

Module 6: Economic Analysis Techniques and Key Elements

13. Estimating the Flow of Money

- Net Cash Flow concept
- Revenue, tax, depreciation
- Royalties, Government participation
- Unincorporated joint ventures versus joint stock companies
- Long life projects – terminal value
- Abandonment

14. Forecasting Profitability: Models, Assumptions and Limitations

- Basic value equations – nominal and effective interest rates
- Time value of money – rate of return, Net Present Value
- Problems and pitfalls of DCF modeling
- Time varying measures – best alternatives investment decisions

Module 7: Evaluating and Applying the Results in the Upstream Industry

15. Financing Options in Oil & Gas Investments

- An overview of financing options: from the Balance Sheet to Project Financing
- Exploration finance
- Bonds

- Asset based finance
- Non-recourse finance
- Project finance
- Accounting for financing in the evaluation

Module 8: Probabilistic Techniques

16. Assessing, Presenting and Managing Project Risk

- Sensitivity analysis; decision trees; and spider diagrams
- Simulation of project economics
- Presenting the results for risk management
- Monte Carlo simulation

17. Portfolio Management

- Compiling an asset portfolio
- Apportioning risk and value
- Where is the cut off?
- Rationalisation of the portfolio

Module 9: Economic Analysis of Project Development

18. Application of Investment Principles: Oil & Gas Project Analysis

- Pre-feasibility
- Feasibility
- Building the Economic Model for Project base economics
- Incremental economics

Module 10: Case Study 2

19. Assessment of an Oil & Gas Project

Through this Case Study, participants will gain hands-on experience of the assessment of an upstream oil & gas project with a full spreadsheet model of all the economic parameters.

Module 11: Assessment of Mergers and Acquisitions

20. Application of Investment Principles: Bidding, Mergers and Acquisitions

- Capital versus operating cost trade offs
- Stock versus asset sales
- Asset sales and acquisitions
- Stock purchases
- Bidding and licence acquisitions
- Farm-out and carry arrangements
- Sole risk
- Constrained investments

Module 12: Case Study 3

21. Competitive Bid for an Oil & Gas Business Opportunity

At this Case Study, candidates will have the chance to make a competitive bid for an oil & gas business opportunity involving the assessment of the investment using a full economic spreadsheet model.



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Sales Contract

To confirm your position kindly complete this form and fax back to:

Nelson Zhu: +65 62235186

Delegate Details

Delegate 1

Name

Position

E-mail

Delegate 2

Name

Position

E-mail

Delegate 3

Name

Position

E-mail

Organisation Details

Company Name

Address

Telephone Fax

Authorization

This contract is not valid without a signature

Name

Position

Signature

Payment

Visa Mastercard AMEX

Name on card

Card number

Security Code

Expiry Date Today's Date

Signature

Billing Address

Postal Code Country

REGISTRATION & ENQUIRIES

NeoEdge Pte Ltd

133 Cecil Street
#13-01B Keck Seng Tower
Singapore 069535

Contact: Nelson Zhu

DID: +65 65579168

Main: +65 65579166

Fax: +65 62235186

Email: nelson.zhu@neo-edge.com

YOUR INVESTMENT

- SGD 6,495 per delegate
- SGD 6,095 per delegate if you register and pay by 29 May 2009

The investment includes:

Course documentation, lunches, refreshments and 15% service charge

VENUE INFORMATION

The course fee does not include accommodation or travel costs. It is recommended to book the hotel rooms early as there are only limited rooms available at discounted corporate rate. Kindly contact the following for reservation:

Traders Hotel Singapore

1A Cuscaden Road
Singapore 249716
Tel: (65) 6738 2222
Fax: (65) 6831 4314
Than Than Win (Ms)
Senior Sales Manager
DID: (65) 6831 4312
Fax: (65) 6831 4314
E-mail: Thanthan.win@shangri-la.com

Event Code: T0907EA

Please contact Than Than Win (Ms) and quote O&G Commercial Fundamentals Workshop Organised by Neoedge to enjoy Corporate Rate.

Booking Conditions

Should you be unable to attend a substitute is always welcomed anytime before the event at no additional charge. Alternatively, a credit voucher equivalent to the full amount will be issued for you to attend any Neoedge events for up to 18 months.

No refund for cancellation within 4 weeks prior to the event.

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