

# 3 Day

## Economics of Production Sharing Agreements (PSAs)



Course Leader  
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Petroleum Engineering Consultant



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Enhancing Return on Investment in Oil & Gas Training

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# ACCREDITED

- Gain full insight into the latest advances in designing production sharing systems
  - What the deals involve
  - Who gets what and how much
  - Expectations of the parties involved
  - The bottom-line
  - How the contract should adjust to marginal discovery and a bonanza
- Appreciate the significance of various terms used in these contracts
- Master the technical and non-technical terms and jargon applicable to the production sharing agreements
- Gain benefits that are direct, immediate and measurable



This 3-Day course in Economics of Production Sharing Agreements is an extensive hands-on seminar. The seminar participants will gain familiarity with the general mechanics of the production sharing agreements (PSA/PSC) and be able to fully appreciate the effects of various terms and conditions on the Government Take and Investor's profitability. This hands-on seminar will enable the participants to design the terms of production sharing agreements on their own and be able to defend their approach to higher management and government entities. Excel will be extensively used in order to assess the impact of various terms and conditions on the government take and investor profitability. The objective of the course is to enable the participants design efficient fiscal systems in order to avoid renegotiation of these long-term contracts.

## What Will You Learn?

- Understand the effect of various factors on the contractor's profitability and host government's take
- Be able to appreciate the importance of fiscal terms
- The best global practices for PSA/PSC
- And finally, be able to craft efficient PSA/PSC
- Understand the legal relationship between host governments and companies
- Solving case study based examples

## Who Will Benefit?

- Planning, E&P, Asset & project managers
- Oil & gas engineers
- Commercial managers and Analysts
- Economists, business analysts & business development personnel
- Government officials, legal counsels & negotiators
- Geologists & Business advisors
- Finance & Business Development personnel



## DAY 1

### Fiscal Regimes/Fiscal Systems

- International agreements
- Parties to Production Sharing Agreement (PSA)
- Ideal fiscal system for government
- Ideal fiscal system for contractor
- Oil and gas resources ownership
- The need for collaboration

### Government Participation

- Crafting fiscal terms - what to look for?
- Government participation
- Key aspects of government participation
- Do contractors prefer government participation?
- Commerciality
- Types of Contracts/Agreement
- Contractual arrangements
- Main differences between PSA and Royalty/Tax system
- PSA cash-flow distribution
- PSA numerical example
- PSA sample cash-flow
- Effect of HG take on contractor economics

### Designing Production Sharing Agreements

- Key questions in designing PSA
- Efficient PSA?
- Protecting the foreign investment
- Contract duration and extensions
- Minimum work program commitment (MWPC)
- Each PSA is unique

### Contract Documents

- Upstream project agreement
- Other agreements
- Relinquishment

### Problems/Exercises

## DAY 2

### Forms of Government Take

- Government take
- Nature of government take
- Bonuses
- Signature bonus through bidding
- Signature bonus through negotiation
- Production bonuses
- Examples of production bonuses
- Rentals/surface fees
- Sliding scale tranches
- Royalties
- Royalties - two-dimensional link
- Royalties - other types of sliding scale
- S-curves for tax and royalties

### Profit Oil (PO) & Cost Oil Splits in PSAs

- Petroleum costs
- Fixed profit oil split
- Progressive profit oil split
- Some examples of profit oil splits
- Profit oil splits based on cumulative production
- Cost recovery (CR) - two-dimensional link
- S-curves for CR and PO

### Treatment of Various Costs

- Corporate income tax (CIT)
- Treatment of bonuses
- Operating expenditure (OPEX)
- Capital expenditure (CAPEX)
- Interest on Loan
- Loss carried forward
- Loss carried forward limits
- Depletion allowance
- Uplift or investment credit
- Tax credits

### Government Participation

- Back-in options
- Payments in back-in options
- Carried interest

### Problems/Exercises

## DAY 3

### Effect of Various Terms on Profitability

- Effect of Various Terms on Profitability
- Upfront bonuses and taxes (front end loading index)
- Ring fencing
- Effect of ring fencing on GT
- Effect of uplift on GT
- Effect of depreciation on GT
- Combined effect of depreciation & uplift on GT
- Effect of loss carried forward on GT

### Decommissioning

- Decommissioning plan
- Decommissioning costs
- Ownership and transfer of assets upon termination
- Liability and insurance

### Economic Assessment of International Contracts

- Effect of GT on contractor's economics
- Government take (NCF versus NPV)
- Contractor's IRR
- Schematic of net cash-flow

### Incremental Analysis

- Incremental analysis
- Investment scenarios
- Gold plating

### The Bidding Process

- Financial capability of company
- Technical capabilities
- Legal aspect of the company
- Setting up data rooms
- Sealed bids

### Bids' Evaluation

### Current Trends in Fiscal Systems

### Problems/Exercises

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IN OIL AND GAS INDUSTRY**



## ABOUT YOUR COURSE LEADER



### **M. A. Mian, P.E.**

B.Sc. in Mechanical Engineering  
M.Sc. in Petroleum Engineering  
M.Sc. in Mineral Economics

Mian is a Sr. Petroleum Engineering Consultant with Saudi Aramco in Dhahran, Saudi Arabia. He has previously worked with Qatar Petroleum (Doha, Qatar), ZADCO (Abu Dhabi, UAE), Euratex Corporation (Colorado, USA), Kiplinger & Associates (International Energy Consultants in Colorado, USA), and as Independent Consultant in Colorado, USA. He is a registered professional Engineer in the state of Colorado, USA.

Mian has 35 years of diversified experience in petroleum engineering, reservoir engineering, project economics and decision analysis. He had been involved in evaluating multi-billion-dollar oil and gas field development, LNG, GTL, Aluminum smelter, refinery, petrochemical, power and production sharing projects.

Mian is the author of six books:

- Petroleum Engineering Handbook for the Practicing Engineer, Vol. I and Vol. II", PennWell Publishing Co., Tulsa, OK, USA
- Project Economics and Decision Analysis, Vol. I and Vol. II, 2<sup>nd</sup> Edition, 2011, PennWell Publishing Co., Tulsa, OK, USA
- Tips & Tricks for Excel Based Financial Modeling, Business Expert Press, New York, USA

He has also authored several papers in the Oil & Gas Journal, The Log Analyst, World Oil, SPE Journals, and Oil & Gas Financial Journal.

Mian is one of the pioneers in working with unconventional gas resources. He has extensively dealt with reserves evaluation of tight gas and coalbed methane. Currently he is involved in applying his experience to shale gas resources. He has also served as an expert witness in US Federal court and Energy Commission hearings regarding tight gas pricing classification in the US.

He has delivered lectures in more than 25 countries around the globe. He has always received excellent feedback, as an expert presenter, from the participants of his courses.

### **PUBLICATIONS**

- Unnecessary and Avoidable Mistakes in Financial Calculations
- Comparison of Methods used to Calculate Netback Value
- Revisiting the Pitfalls and Misuse of WACC
- Custom Graphs Help Analyze Oil, Gas Operations
- Spreadsheet Programming Simplifies Drilling Calculations
- Program Quickly Solves Trial-and-Error Problems
- Creating Quality, Cost Effective Property Reports
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## COURSE MATERIAL

The course material includes hard copy of more than 200 slides. Each delegate will also receive a USB. The USB includes soft copies of the slides a detailed PSA model.



# Economics of Production Sharing Agreements (PSA)

Please complete the following Form and e-mail it to [mianma@OGKnowledgeShare.com](mailto:mianma@OGKnowledgeShare.com) OR Submit the same details via the **Event Registration** on the website [www.OGKnowledgeShare.com](http://www.OGKnowledgeShare.com). We will then send you additional course details along with a detailed course registration Form.

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## COURSE FEES & VENUE

**Middle East – US\$ 2,500**

**All Other Locations – US\$ 2,950**

Hotel accommodation and travel costs are not included in the fees. The Fees includes refreshments, lunch and course material. Course is held preferably in a 5-star hotel. The final venue selection will depend upon the number of delegates attending the course and availability of the venue. All delegates will be informed about the venue two weeks before the course start date.

The course is accredited by The CPD Standards Office (UK) and we are PMI's Registered Education Provider (R.E.P.) for this course. Each delegate will receive a successful course completion certificate and a certificate of applicable (18 hours) Professional Development Units (PDUs) for this course.



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Full payment is due within 14 days from date of invoice and before the course commences. Delegates will not be allowed entry to the course if any payments are outstanding. A confirmation letter and invoice will be sent to you on receipt of your booking.

You may substitute delegates at any time as long as reasonable advance notice is given to O&G Knowledge Sharing Platform. For any cancellation received in writing not less than twenty (20) working days prior to the date of the training course, you will receive a full refund less US\$ 150 administration fee and any related bank or credit card charges.

Delegates who cancel the registration less than twenty (20) working days of the date of training course, or who do not attend the course, are liable to pay the full course fee and no refunds will be granted.

In the event that KSP cancels or postpones the course for any reason, the delegates will be given choice to (a) request full refund less applicable credit card or bank charges, (b) attend the same course at the rescheduled date at the same or other venue or (c) receive credit note to be used by any employee of the same company for any other course offered by KSP, which must occur within one year from the date of postponement.

## COMPANY GAURANTEE

If Company Payment is selected as the Billing Method, an official letter from the company, signed by HR or responsible Management, stating names of the delegates who will attend the course and the total course fee payment guaranteed by the company to be paid within 30 days upon receipt of invoice from KSP shall be submitted ten (10) working days before the start date of the course.

## CHARGES AND FEES

1. For Payment by Direct Telegraphic Transfer, client has to bear both local and oversea bank charges.
2. For credit card payment, there is additional 4% credit card processing fee, which shall be added to the course fee.