A Course By
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International Petroleum Fiscal Systems & PSCs

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Course Description

Key Features and Benefits

One of the first things geologists, engineers, landmen, lawyers, and economists encounter in the international sector of the petroleum industry is the diversity of fiscal systems. Countries are vastly unique in the way they structure their taxes, and natural resource taxation can be complicated.

This course provides an in-depth study of the details and dynamics of petroleum fiscal system analysis and design in the context of an increasingly competitive global marketplace. The course provides all of the basics as well as new analytical techniques including both theory as well as established practices worldwide. All governments have their own particular boundary conditions, concerns and objectives and this course shows how to assess various situations in the context of a country's objectives.

Course materials consist of the book, **"International Petroleum Fiscal Systems and Production Sharing Contracts"** (Daniel Johnston, PennWell Books 1994) and a 360+ page "Workbook". These materials include over 100 tables, figures, illustrations and worksheets dealing with the philosophy, theory, arithmetic and mechanics as well as analytical methodology for various fiscal systems and fiscal elements found around the world.

The focus of the course is on the factors that drive exploration economics: risk/reward, capital requirements, terminology etc. This provides an excellent basis for understanding the unique aspects of development and production economics. Both industry and government points of view are addressed. A complete grasp of the subject requires an understanding of the dilemmas and concerns of both sides. However, there is also fertile ground in the philosophy of petroleum taxation. Legal and operational aspects of contract/fiscal terms are also examined to provide a foundation in the dynamics of international negotiations.

The course is designed for those interested in petroleum taxation, international negotiations, and the finer points of economic modeling in the international arena. Much of the subject has evolved within just the past 20 years, yet some aspects of taxation are timeless. The terminology has changed over the years and will continue to develop. The course is designed to clarify the language of negotiations and fiscal system design.

Key Issues Covered In This Course:

- What are the key concerns of most governments?
- What are the key concerns of most oil companies?
- Why does acreage have more of the characteristics of a commodity now than ever before? Is this a good thing or a bad thing?
- Why is the Standard Indonesian 85/15% split so famous? (Even thought most people know that the Government take is really greater than 85%).
- What are the standards worldwide regarding:

  - *Government Take*
  - *Effective Royalty Rate*
  - *Goldplating*
  - *Ringfencing*
  - *"Crypto" Taxes*
  - *Duration & Relinquishment*
  - *Royalty Rates*
  - *Stability and Stability Clauses*
  - *Entitlement & "Booking Barrels"*
  - *Sliding Scales*
  - *Savings Incentives/Index*
  - *Price-cap Formulas*
  - *Incentives*
  - *Access to Gross Revenues*
  - *Fiscal Marksmanship*
  - *Allocation Mechanisms*
  - *Dispute Resolution*
  - *Cost Recovery Limits*
  - *Bonuses*
  - *Gas Clauses*
  - *Domestic Market Obligations*
  - *"R" Factors & Rate of Return Systems*
  - *"Booking" Barrels*
  - *The "Approvals" Process*

- Why are there so many different terms and definitions for such terms as Government Take, Rent, Economic Profit, Cash Flow, and Risk?
- Is there such a thing as an "Ideal" Fiscal System and if so what characteristics would it have?
- Are there governments with poorly designed fiscal systems? Who? Why?
- How do the competitive bidding phenomena such as "Winner's Curse" and "Money Left on the Table" benefit Governments?
- What are some of the trends in Fiscal System Design?

  - *Buy-backs in Iran and Libya and others*
  - *Libya and Iraq PSCs*
  - *Kuwait OSA*
  - *Venezuelan Exploration Round (#3 1996) terms and Allocation tactics.*
  - *Malaysian R/C Contracts*
  - *Russian PSAs and PSA legislation—what happened there?*

- Is there a relationship between rate of extraction and ultimate hydrocarbon recovery? Implications on Fiscal Design and Alignment of Interests?
- Beyond Government Take — "Gross Benefits" and other such things.

Course Outline

I. Introduction

1) Course Objectives
2) Competition for Capital and Technology
   (i) Government Boundary Conditions, Concerns, Objectives
   (ii) Government Policy, Strategy and Tactics

II. Petroleum Fiscal Systems

1) Theory of Economic Rent – various definitions
2) Efficiency, Flexibility, Stability – Taxation Theory
3) Families of Petroleum Fiscal Systems - Taxonomy
4) Legal Aspects and Entitlement – Reserve Recognition and "Booking barrels"

III. Concessionary Systems

1) History, Trends, Examples
2) Arithmetic and Mechanics of Typical Systems – Analytical Techniques
3) Terminology, Theory and Practice

IV. Production Sharing Contracts

1) History, Trends, Examples
2) Indonesian Type Systems and Variations on this Theme
3) Peruvian Model (Advantages and Disadvantages)
4) Egyptian Type System – Implications
5) Unused Cost Oil
6) Rate of Return Systems and "R" Factors

V. Service Agreements and Hybrids

1) Kuwait OSA
2) Iran "Buybacks"

VI. Global Market for Exploration Acreage and Projects

1) Acreage is a commodity -- The differences between Oil and Gas
2) The Science vs. the Art of Economic Modeling
3) Country Risk

VII. Detailed Fiscal System Analysis

1) Economic vs. Accounting vs. Financial Profits
2) Worldwide Statistics, Yardsticks, Rules-of-Thumb
3) Government Take (and diversity of terminology)
4) Effective Royalty Rates (AKA "Minimum government take")
5) Alignment of Interests (Savings Index)
6) Four Main Means by which Governments get a piece of the pie:
   (a) Signature Bonuses
   (b) Royalties
   (c) Profits-based mechanisms
   (d) State Participation
7) Other mechanisms
   (a) "Crypto" taxes, incentives, sliding scales, and ringfencing