# Energy Transition & World Fiscal Systems for Oil & Gas Masterclass 2024



**Course Director** Dr Pedro Van Meurs



Media Partner



Web: www.londonpetroacademy.co.uk | Tel: +44 (0) 1582 516247 | Email: info@londonpetroacademy.co.uk | 207 Regent Street, W1B 3HH, London, United Kingdom

#### What will this course cover?

Run over 40 years now, these courses provide participants with an intimate knowledge of petroleum upstream fiscal systems. At the same time the rapid current developments in energy transition requires significant attention to this issue. Therefore, the course consists of 2 days – Energy Transition and 2.5 days – Oil and Gas Fiscal Systems. Participations can take either Energy Transition or Oil and Gas Fiscal System or both topics.

#### What will you learn?

- Understand the fundamental concepts of energy transition and its importance in the context of climate change and sustainability.
- Explore the various sources of renewable energy, including solar, wind, hydropower, geothermal energy, biomass, and biofuels, and their contributions to the energy transition.
- Examine the current costs and anticipated developments in solar and wind energy, and their impact on the global energy landscape.
- Gain insights into different types of hydrogen (grey, blue, green) and their production methods, as well as the applications of green hydrogen.
- Explore the methods and economics of energy storage, with a focus on battery technology and its role in electricity production and transport.
- Learn about carbon capture and storage measures, including Bioenergy Carbon Capture and Storage (BECCS), biochar, and Direct Air Capture (DAC).
- Analyse the fiscal systems in the oil and gas industry, including royalties, bonuses, rentals, corporate income tax, deductions, depreciation methods, and tax credits.
- Understand the various fiscal agreements such as Production Sharing, Joint Ventures, Carried Interest, and Progressive Taxes in the oil and gas sector.
- Gain knowledge of flexible gross revenue splits, general taxes, and duties and their impact on the
  profitability of oil and gas ventures.
- Learn about service contracts, profit-sharing contracts, and abandonment practices in the oil and gas industry.
- Explore incremental and differential analysis methods used to assess fiscal systems in the energy sector.
- Review country-specific fiscal systems and their implications for government revenue and energy industry profitability.
- Understand the role of governments and industries in the energy transition and how they work together to achieve sustainability goals.
- Analyse the long-term fiscal trends and financial factors that influence energy policies and decision-making.
- Explore the forecasted developments in the global energy landscape, the petroleum industry, and the transition towards net-zero emissions by 2050.

#### Who should attend?

This course on "Energy Transition and Fiscal Systems" is designed for a diverse range of individuals, professionals, and stakeholders who can benefit from a comprehensive understanding of the energy transition and the fiscal systems in the energy industry. The course is suitable for:

- Energy Professionals: This course is highly relevant to individuals working in the energy sector, including
  engineers, project managers, and energy analysts, who wish to stay updated on industry trends, renewable
  energy developments, and fiscal systems.
- Environmentalists and Climate Activists: Those passionate about addressing climate change and promoting sustainable energy practices will find this course invaluable. It offers insights into the role of renewables and carbon capture in mitigating climate change.
- Government Officials: Policymakers, regulators, and government employees involved in energy policy formulation and fiscal decision-making can benefit from understanding the energy transition and its financial implications.
- Business Leaders and Investors: Entrepreneurs, executives, and investors interested in the energy industry, renewable energy projects, and potential investment opportunities can gain essential knowledge from this course.
- Students and Researchers: Students pursuing degrees in environmental science, energy management, economics, or related fields will find this course beneficial for their academic pursuits and research interests.
- Energy Consultants: Professionals providing consultancy services in the energy sector will find this course valuable for enhancing their expertise and advising clients on energy transition strategies.
- Non-Governmental Organisations (NGOs): Organisations dedicated to environmental conservation and sustainability can benefit from understanding the dynamics of the energy transition for advocacy and project development.
- Anyone Interested in Sustainable Energy: Individuals who are curious about the transition from fossil fuels to sustainable energy sources, including homeowners, consumers, and community leaders, can broaden their knowledge through this course.
- Financial Analysts: Professionals working in finance, investment, and banking industries may find this course valuable for understanding the financial aspects of energy transition and its impact on investments.

In summary, this course caters to a broad audience interested in the energy transition, renewable energy, hydrogen production, carbon capture, and the financial structures underpinning the energy industry. It is accessible to both beginners seeking foundational knowledge and industry experts looking to stay updated with the latest developments and trends.



# Energy ` Transition **Module**

DAY

1

DAY

#### **Morning session**

#### Introduction

· General course overview

#### **Energy Transition:**

- Renewable Energy Developments
- · Renewable energy economics.
- $\cdot$  Current costs of solar and wind
- · Anticipated solar energy developments
- · Future costs of solar energy
- · Concentrated Solar Power
- · Anticipated onshore and offshore wind developments
- · Future costs of wind energy
- Hydropower
- · Geothermal energy
- Biomass
- · Biofuels
- · Conclusions on renewable energy economics
- · Range of estimates of role of renewables in energy production.

#### **Energy Storage**

- · Energy storage economics
- · Large variety of energy storage methods
- · Current energy storage costs
- · Battery storage cost trends
- · Future utility scale energy storage costs
- · Estimates of future storage availability
- · Impact of storage costs on electricity production and transport sector

## Energy ) Transition

Module

#### **Morning session**

#### Worldwide Future Trends

- Anticipated world and petroleum industry developments
- Unconventional resources
- Long term fiscal trends

#### Climate Change

- Oil and gas demand under climate change scenarios - Net Zero by 2050 or 2060
- IEA roadmap 2050
- Forecasts of Energy, Oil and Gas Developments 2050
- IEA Scenarios: STEPS, APS, NZE
- Forecast of world energy production
- Forecast of world oil production
- Forecast of world natural gas production and consumption
- Forecast of the crude oil price
- Forecast of the level of government take

#### Energy Transition Process

- New structure of the petroleum industry
- Type of companies involved in energy transition
- Petroleum companies who are diversifying

#### Afternoon session

#### Hydrogen

- · Hydrogen basics
- · Grey, blue and green hydrogen
- · Costs of grey and blue hydrogen production
- · Green hydrogen production methods
- · Current costs of producing hydrogen
- · Hydrogen production economics
- Low-cost countries
- · Current projects
- · Estimates of future hydrogen production costs
- · Hydrogen storage
- · Transport of hydrogen
- · Hydrogen fuel cells
- · Green hydrogen for electricity production
- Green ammonia
- Green hydrogen for the transport sector
- Green hydrogen to produce fuels
- · Hydrogen to replace natural gas
- · Forecasts of future green hydrogen production

#### Carbon Capture and Storage

- · Variety of measures of carbon capture and underground storage
- BioEnergy Carbon Capture and storage (BECCS)
- · Biochar
- Direct Air Capture (DAC)
- Misconceptions about Future Energy
- . Misconceptions about future energy

#### Afternoon session

#### Energy Transition Process

-Petroleum industry restructuring -Power industry restructuring -Wind companies -Solar companies -Independent hydrogen producers -New competitive environment Role of Government in Energy Transition -Organisation of Ministries -Energy transition policies -Elimination of subsidies -Petroleum land management -CBAM -Natural gas development -R&D

#### Petroleum Energy Arrangements

-Narrow scope future petroleum energy arrangements -Wide scope future petroleum energy arrangements -Package deals on energy and petroleum

#### End of Energy Transition Module



### Petroleum Fiscal Systems Module



## Petroleum Fiscal Systems Module

#### **Morning session**

Oil and Gas Fiscal Systems: Introduction to Student Model -Introduction to Excel based spreadsheet for "stand alone" analysis -Review of profitability indicators, such as NPV, IRR, EMV and profitability ratios -Price sensitivity and Divisible Income analysis -Price sensitivity and Divisible Income analysis -Government take and government revenue analysis Royalties, Bonuses, Rentals -Fixed and sliding scale royalties, royalties in kind and cash Royalty concepts: Louisiana, Algeria, Nigeria, Colombia, US Gulf of Mexico, -Price sensitive royalties: Alberta, Mexico -Progressive, regressive and neutral royalty systems -Signature bonuses through bidding, negotiation and directly determined by government: Brazil. -Rentals and acreage management: Alberta and Cambodia

#### Afternoon session

#### **Corporate Income Tax**

-Consolidation and Ring-fencing: UK and Pakistan -Gross revenue determination -Deduction of other payments to government: -Deduction of operating costs and headquarter costs -Alternative capital depreciation methods and MACRS -Deduction of interest -Loss carry forward and carry backward: Hungary, Russia, Brazil, USA, Canada. -Refunds for tax value of exploration (Norway) -Tax rates and globalisation of corporate income tax -Tax credits: USA and Canada -Worldwide corporate income tax systems, tax credits, -Tax treaties: the Netherlands, Cyprus

#### Morning session Production Sharing

-The original Indonesian concept -Profit Oil and sliding scales: Philippines, Egypt, Vietnam, Nigeria, Malaysia -Price Sensitive Profit Oil: Trinidad and Tobago. Brazil Pre-Salt. Cost Oil, cost oil limits and sliding scales; Vietnam, Svria, Oman, Nigeria, Egypt, Angola and Yemen -Uplifts: Angola -Special terms for gas: Malaysia and Indonesia -Production sharing and royalties: Malaysia, Pakistan, Gabon, and Vietnam -Production sharing and corporation income tax: Bangladesh, Indonesia, China, Malaysia and Nigeria Joint Ventures and Carried Interest -Joint stock companies and joint operating agreements -Joint stock companies: Venezuela, Saudi Arabia -Participation from Day 1: Petoro - Norway -Fixed rate carried interest: Colombia, Malaysia and China -Special state company financing features: PNG and Gabon

-Carried interest and corporate income tax

-Carried interest and production sharing: China

#### Afternoon session

#### **Progressive and Special Taxes and Profit Shares**

-Gross Revenue Taxes: USA, Pakistan, Colombia -Surtaxes, Hydrocarbon Tax: Norway, Denmark, -Special Taxes: UK, Brazil, the Netherlands -IRR based taxes: PNG, Ghana and Australia -IRR based taxes

Section Session's of middlesian choss spin control
 General Taxes and Duties
 -Value added taxes, credits, refunds: Mexico
 -Value added tax problems: Russia, China, Brazil
 Import duties, Export duties: Russia, Argentina
 -Property taxes
 -Carbon Taxes

Service contracts

-Iraq 1996 single fee model -Iraq 2018 – 5th bidding round TSC

#### **Profit Sharing Contracts**

-Bolivia Abandonment, Booking of Reserves -Abandonment issues, Booking of Reserves



# Petroleum Fiscal Systems Module

#### **Morning session**

Incremental analysis -Incremental analysis: corporate income tax

#### Differential analysis

-Incremental analysis: production sharing and carried interest, IRR and R-factor based features

#### -Analysis of gold-plating: PNG and India

Classification of fiscal systems

-Legal and Economic classification -Concessions, PSCs, JOAs

#### Country review of fiscal systems

-Alberta, Norway, Egypt, China

#### Nature of Government Take

-Sharing of divisible income: progressive, neutral, regressive and hybrid systems

-Fiscal health: cost and price efficiency, maximum economic recovery

-Fiscal structure policies: Front end and back end loading, Geological risk and government take

#### Level of Government Take

-Determination of level of government take

-Fiscal Stability

- Government Policies
- -Risk sharing

-Resource policies

-Economic policies -Administrative policies

Future Petroleum Fiscal Terms

-Fiscal systems for energy transition

-Long term global tax developments

-Importance of price progressivity

-Importance of reducing front end loading

#### End of the course

# This course is available In-House and can be tailored to your specific requirements.

For more information, please contact us on: +44 (0) 1582 516247 Alternatively, you can email us at info@londonpetroacademy.co.uk

3 Easy ways to register Online: www.londonpetroacademy.co.uk Email: info@londonpetroacademy.co.uk Tel: +44 (0) 1582 516247



# Meet your trainer

During the last 40 years Pedro has worked on fiscal oil and gas issues with more than 80 governments around the world. Education: 1970 PhD (Cum Laude) Economic Geology State University, Utrecht, The Netherlands Languages:: English, French, Dutch, Spanish and some German and Russian Professional Associations: Royal Geological and Mining Society of the Netherlands Canadian Institute of Mining and Metallurgy, Petroleum Section Employment History: 1974 - to date, President of Van Meurs & Associates Limited and subsequently, Van Meurs Corporation 1970 - 1973, Chief, International Petroleum Developments Division, Department of Energy, Mines and Resources, Federal Government of Canada 1967 - 1970, Assistant Professor, State University, Utrecht The Netherlands Honorary Appointment: Honorary Lecturer with the University of Dundee Centre for Energy, Petroleum and Mineral Law and Policy Books: 1971, "Petroleum Economics and Offshore Mining Legislation" 1981, "Modern Petroleum Economics" Publications: Most recent publication: "World Fiscal Systems for Oil" - 2002 Training Courses: Provides yearly a course in London and Singapore for London Petro Academy in World Fiscal Systems for Oil and Gas. Also provides yearly in-house courses for Shell and Statoil. Conference Organization: Organized and co-authored publications for several conferences: "Natural Gas Clauses in Petroleum Arrangements", UNCTC 1985, Bangkok, Thailand "Fiscal and Administrative Strategies for Petroleum Exploration and Development", UNCTC,

1991, Kuala Lumpur, Malaysia Major Accomplishments: • Negotiated terms and conditions of the provincial offshore leases of Newfoundland (1974-80) and is currently assisting in developing new fiscal terms for gas • Negotiated Inuvialuit Final Agreement (1976 - 84), one of Canada's largest aboriginal land claims settlements • Was key advisor to the Chinese National Offshore Oil Corporation (CNOOC) (1980 - 84), in preparation of model contract and organization of bidding rounds. • Was main author of the first comprehensive Canadian energy policy document \*An Energy Policy for Canada\*, 1974 • Was main consultant in Thailand for the redrafting of the Thai petroleum law and fiscal system (1979 - 1987) • Was chief consultant on the reorganization of the petroleum sector in Guatemala (1975 - 80) • Was key contributor to the petroleum diagnostic study for Gabon (1991 - 1993) • Was advisor with respect to the drafting of the Law on Concessions and Production Sharing Contracts in Russia (1992 - 1993) • Was President of IPC, a small Alberta petroleum company, increasing production from 350 to 4000 barrel of oil per day equivalent between 1987 and 1993, entirely from cashflow. • Was main advisor with respect to the new petroleum law in Bolivia (1994 - 1996) and the related capitalization of YPFB • Is currently chief economic advisor to KOC with regard to determining fiscal terms for the North Kuwait oil fields • Was main economic consultant for PEMEX on the Multiple Services Contracts. • Was lead economic advisor on the Alaska Pipeline Project and PPT legislation. • Was senior economic advisor on the implementation of the PRT law in Algeria.

# **Get in touch**

## London Petro Academy Limited

3rd Floor, 207 Regent Street Mayfair, W1B 3HH London

United Kingdom

Tel: +44 (0) 1582 51 62 47 Email: info@londonpetroacademy.co.uk Web: www.londonpetroacademy.co.uk

© 2023 London Petro Academy LTD | All rights reserved

# **Course Formats**

Virtual Learning/Live sessions

Public/Open/Classroom sessions

☆ In-Company/In-House sessions

Linked in twitter ¥

1

16.00

Ň