

El member £1,410.00 inc VAT Non-member £1,645.00 inc VAT\*  
\*includes complimentary Affiliate membership to the Energy Institute

LNG remains one of the fastest growing sectors of the energy industry with many new suppliers and buyers entering the market since the turn of the century. This diversification, coupled with technological developments that have facilitated economies of scale along the long and complex LNG supply chain, mean the economic criteria for establishing value for LNG buyers and sellers have changed in recent years.

The emergence of profitable short-term LNG trading opportunities has opened up a new dimension to the traditional long-term supply contracts. Variable energy drivers in the three main gas consuming markets (Asia, Europe and North America) result in different price indexation preferences in regional LNG sale and purchase agreements. The development of a global LNG reference price seems unlikely and the economics of LNG supply vary according to regional market specifics and volatility in those markets lead to fluctuating arbitrage opportunities.

Shipping, distance to market and economies of scale are important in determining the netback LNG price that a supplier can secure. The industry is capital intensive and cost inflation of key materials has placed upward pressure on the cost of new infrastructure. The sellers' market that has persisted since 2003 is expected to continue in the short-term as final investment decisions on new capacity are delayed. However, short-term oversupply in specific regional markets cannot be ruled out and the economics of both buyers' and sellers' markets are relevant. Break-even prices are critical for profitability and for securing equity and debt finance in the face of competition from pipeline gas.

This course is focused on the technical and commercial issues, but does not shy away from the key and, in some cases, complex technical and technological issues which hold the key to extracting value from LNG. Through a series of presentations, case studies and exercises delegates are provided with information with which to analyse the economics of LNG supply. This information should help them to identify the key commercial issues in buyer – seller commercial negotiations.

## Course content:

### Day one – The LNG supply chain, markets and upstream issues

#### Morning session – characteristics of LNG supply chains

- LNG supply chains spanning the globe
- Three distinct markets: Asia, Europe and North America
- Long-term versus short-term strategies for buyers and sellers
- Arbitrage and swap opportunities in LNG trading
- Contractual relationships along the supply chain
- Operating in both sellers' markets and buyers' markets

#### Afternoon session – Gas production, liquefaction and storage

- Economics of upstream gas supply to liquefaction Projects
- Production profiles, reserves and process losses
- Factors influencing capital and operating costs of liquefaction plants
- Flexibility of destination: FOB, ex-ship and CIF contracts
- Gas and LNG storage, hubs and cargo compositions
- Cost of supply and break-even prices
- Competitive issues: LNG versus pipeline gas

### Day two – Shipping, pricing, financing and contractual issues

#### Morning session – shipping and pricing

- LNG shipping vessels and containment systems
- Boil-off losses and their impact
- Evolution of LNG shipping markets
- Capital costs of LNG ships and economies of scale
- Ship ownership versus chartering
- LNG netback pricing, cost deductions and profitability
- Spark spreads and competing fuels for power generation
- Price indexation and term of sale

#### Afternoon Session – Regasification, finance and contracts

- LNG regasification alternatives and unit costs
- Sources of project finance and risk issues
- Key sale and purchase agreement (SPA) terms
- Mitigating and exploiting price volatility
- Minimising the impact of contract breaches
- Regional market drivers that prevent global LNG pricing

### Who should attend?

*This course is designed for a multi-disciplined audience with some prior basic knowledge of LNG and natural gas. It is focused on establishing value and cost components of the supply chain segments from gas producers through to gas consumers. The knowledge and industry insight provided by the course will be of value to economic and commercial analysts, risk managers, gas traders, gas portfolio managers, gas strategists, contract, finance and legal professionals.*

### Attendees should include:

*Commercial and technical analysts and managers working along the LNG supply chain; gas strategists; portfolio managers; gas traders and LNG shippers; finance, contract and legal professionals.*



# Registration form

To register, by post or fax, please complete this registration form in BLOCK CAPITALS and return it to the address below, together with payment of all fees.

Nick Wilkinson, EI Oil and Gas Training, Energy Institute, 61 New Cavendish Street, London W1G 7AR, UK  
 f: +44 (0)20 7255 1472

To register by email, please provide the same contact details (shown below), together with the relevant course details and send to: [nwilkinson@energyinst.org](mailto:nwilkinson@energyinst.org) To book online, visit: [www.energyinst.org](http://www.energyinst.org)

I am/my employer is a member of the EI and entitled to the EI member's rate. EI Membership Number: .....

Family name: ..... Mr/Mrs/Miss/Ms/Dr/Other: .....

Given name(s): ..... Name to be used on badge: .....

Job title or present position: .....

Company/Organisation: .....

Name and address against which an invoice should be raised: .....

.....

.....

t: ..... f: .....

e: .....

Mailing address for joining instructions (if different to invoice address above): .....

.....

Please indicate if you have any particular dietary requirements: .....

I confirm that I have read and agree to the conditions of registration as specified in the General Information section.

Signature: ..... Date: .....

**Under UK Excise Regulations, delegates from all countries are required to pay VAT on any course taking place in the UK.**

Course Title: .....

Course date: ..... Cost of course: £ .....

Course Title: .....

Course date: ..... Cost of course: £ .....

Less 10% discount for each **subsequent** delegate from the **same** company attending the **same** course on the **same** date £ .....

TOTAL PAYMENT £ .....

The total amount may be paid by Sterling Cheque or Draft drawn on a bank in the UK.

I enclose my remittance, made payable to the Energy Institute, for: £ .....inc VAT

To pay by Credit or Charge Card, circle appropriate card name and give card details below:



Card No: \_ \_ \_ \_ / \_ \_ \_ \_ / \_ \_ \_ \_ / \_ \_ \_ \_ Start Date \_ \_ / \_ \_ Expiry Date \_ \_ / \_ \_

Please enter your 3-digit\* security code above. This will be deleted upon authorisation. \*4-digits for Amex users.

Credit/Charge card holder's name and address: .....

.....

.....

Signature: ..... Date: .....

# General information

## Payment

Full payment must be received before a place can be guaranteed. Under UK Excise Regulations, delegates from all countries are required to pay VAT on any event taking place in the UK. Please note that VAT may be liable to amendment. All prices are correct at the time of going to press, but may be subject to change without prior notice.

## Acknowledgement of registration

Confirmation of registration and a VAT receipt will be sent to all delegates. Joining instructions will be sent out prior to the start date of the course. If you have not received your acknowledgement seven days prior to the start date of the course, please contact EI Oil and Gas Training at the Energy Institute to confirm your booking.

## Language and course materials

All presentations, course materials and supporting documentation will be presented in English.

## Cancellation

In the event of a delegate cancelling, a refund of the registration fee less a 20% administration charge will be made provided that notice is received in writing at least 28 days before the date of the course. No refunds will be paid after that date. However, course papers, as supplied to attendees, will be provided after the event.

## Substitution

If you are unable to attend, a substitute delegate may attend in your place, provided that EI Oil and Gas Training is notified in advance.

## Enquiries

EI Oil and Gas Training,  
Energy Institute, 61 New Cavendish Street,  
London W1G 7AR, UK  
t: +44 (0)20 7467 7100 f: +44 (0)20 7255 1472  
e: [nwilkinson@energyinst.org](mailto:nwilkinson@energyinst.org)  
[www.energyinst.org](http://www.energyinst.org)

## About the course provider

The Energy Institute (EI) is the leading professional body for the energy industries, representing almost 12,000 professionals both nationally and internationally.

A Royal Charter membership organisation, the Energy Institute serves society with independence, professionalism and a wealth of expertise in energy matters, creating a home for energy professionals and a scientific and technical reservoir for industry. It is licensed by the Engineering Council (UK) to offer Chartered, Incorporated and Engineering Technician status to engineers.

The Energy Institute (EI) cannot accept any liability for any loss, cost or expense suffered or incurred by

any person arising from reason of war, including threat of war, riots and civil strife, terrorism or threats thereof, natural disaster, weather, fire, flood, drought, technical, mechanical or electrical breakdown within any premises visited by delegates in connection with the course, non provision of services provided by hotel companies or transport operators, industrial disputes, governmental action, regulations, or technical problems which may affect the services provided in connection with the event. The right to exclude any delegate, guest or substitution and to reject any application for registration is reserved. The Institute reserves the right to make any changes to the courses as considered necessary.

## DATA PROTECTION ACT

The EI will hold your personal data on its computer database. This information may be accessed, retrieved and used by the EI and its associates for normal administrative purposes. If you are based outside the European Economic Area (the 'EEA'), information about you may be transferred outside the EEA. The EI may also periodically send you information on membership, training courses, events, conferences and publications in which you may be interested. If you do not wish to receive such information, please tick this box

The EI would also like to share your personal information with carefully selected third parties in order to provide you with information on other events and benefits that may be of interest to you. Your data may be managed by a third party in the capacity of a list processor only and the data owner will at all times be the EI. If you are happy for your details to be used in this way, please tick this box