

# **LNG Shipping Economics and Freight Calculations - G-52**

### **COURSE**

#### **About the Course**

Liquefied Natural Gas (LNG) has provided international mobility to natural gas, which now provides around 25% of the world's primary energy. Being the cleanest fossil fuel, natural gas/LNG consumption is forecasted to grow in all future scenarios. In the LNG value chain, LNG Shipping is a key element to manage the Supply and Demand sustainably and profitably. Understanding the dynamics of the LNG Shipping Industry in terms of its Economics and Chartering practice is vital to manage the shipping availability and costs in order to optimise the overall trading margin in the value chain.

Recent market disturbances caused by natural gas price instabilities and political challenges (Ukraine/Russia) make a deep understanding of LNG Shipping/Freight issues even more essential to ensure the security of energy supplies for all the actors – producer/sellers, traders, portfolio operators, shippers, and the buyers as well as the Regulators (Energy and Port Regulators) who oversee the commercial activities.

This course starts with a concise review of the LNG business. Thereafter, the elements of the LNG Shipping Industry (who are the owners, operators, how is the financing, chartering practices and agreements etc) are described and their individual economics analysed.

Types of LNG ships, the relevant industry trends in terms of Containment and Propulsion systems are discussed in depth, and the interplay between ship characteristics (size, type of propulsion, containment and insulation impacting the LNG and fuel balances) and shipping/charter costs and rates are analysed in depth. An excel spreadsheet model will be built to capture these elements to calculate the overall costs.

Leveraging on model hands-on exercises and case studies, this course will equip the participants with the opportunity to develop their skill in this area by tackling real-life cases. Excel model will be provided to the participants for their private use. Finally, the relevant management systems will be discussed (to see how to track shipping performance and compare with competitors through benchmarking). The course will end with an LNG and Shipping Outlook, discussing the future trends and challenges.

### **Target Audience**

Technical, Operational, Shipping, Commercial, Project and Governance professionals already active in a specific section of the LNG Value Chain will directly benefit in developing a wider and deeper perspective on how the LNG Shipping Business operates and can be managed to optimise the overall LNG margins in the value chain.

Managers (Shipping, Technical, Financial, Legal and Governance) less familiar with the specifics of the LNG Shipping Industry will also benefit from this course, as they will get the required background to be able to set

sharper targets, suitable performance indicators, and governance and performance assessment guidelines for units engaged in the chain.

#### You Will Learn

Participants will be able to:

- Understand how the LNG Shipping Industry operates within the LNG Value Chain, bound by the relevant Contracts and Agreements
- Learn the basic economic parameters relevant to LNG Shipping (capital costs, financing, operating costs, profitability, chartering)
- Appreciate the crucial role of LNG Shipping in terms of the availability and costs within the LNG Value Chain from different viewpoints (producer/seller, charterer, ship owner, terminal, buyer etc)
- Develop quantitative skills to work out the (unit) Freight Costs
- Explore shipping options to maximise profitability in a given situation in the LNG Value Chain
- · Discuss tools and best practices on how to manage, steer and govern these activities

### **Course Content**

# **LNG & LNG Shipping Review**

- LNG Basics
- LNG Value Chain
- · Exercise: Routes/Distances
- LNG Shipping
- · What determines Shipping Costs?

### LNG Economics & Freight Costing

- Freight Cost Elements & Modelling
- Ship capital cost recovery (DCF)
- Operating Costs Elements: Fixed & Variable costs
- How Charter fees develop
- Shipping Fuels
- Freight Cost Modelling & Exercise
- Optimisation
- · Business Models

# **Hands-on Exercises/Workshop**

- Exercises
- · Special Operations / Costs Workshop

- Exercise: Group Discussion
- Charter Party / Contracts

# Tools & Management Systems, Outlook

- Case Study
- Group Exercise
- Scheduling & Optimisation
- Develop LNG Annual Delivery Plan & Integrate with Shipping Plan
- LNG Storage vs Shipping Capacity optimisation
- · Performance Management Systems
- · Operational Performance Management
- Risk management, Disputes
- · Benchmarking
- Outlook
- · Course Review, Feedback

## **Product Details**

Categories: Midstream

Disciplines: Gas Processing Energy Business

Levels: <u>Intermediate</u>
Product Type: <u>Course</u>

Formats Available: In-Classroom

Instructors: Aydin Esener

### **In-Classroom Format**

14 Oct '24 17 Oct '24 - | Course | In-Classroom (in London)

\$5,015.00