Liquefied Natural Gas Economics

Overview

LEVEL
Knowledge

PURPOSE
This training provides an overview of the economic and contractual aspects of the LNG (Liquefied Natural Gas) value chain.

LEARNING OBJECTIVES
Upon completion of the course, participants will be able to:
evaluate the economics of each part of the LNG value chain,
analyze the basic structure of LNG contracts,
identify the main LNG markets and their evolution,
evaluate the profitability of investments in the LNG industry.

WAYS AND MEANS
Quizzes.
Videos.
Examples of contracts.
Exercises on LNG contracts.

LEARNING ASSESSMENT
Participants will be evaluated during the training through quizzes and case studies.

PREREQUISITES
No prerequisites for this course.

Agenda

GLOBAL GAS SCENE & LNG MARKETS
Natural Gas uses, reserves, supply and demand.
New outlets for LNG (retail LNG).
International gas trades and importance of the LNG.
Evolution of the LNG trading and pricing.
Main LNG markets: America, Europe and Asia (mature markets: Japan and South Korea and emerging markets: China, India…).
Risks for the different LNG actors: liquefaction, shipping, portfolio players, buyers…
Unconventional gas and its impact on LNG markets.

TECHNICAL ASPECTS OF THE LNG CHAIN
LNG: properties and specifications.
Design of the different parts of the LNG chain.
Liquefaction plants, LNG tankers, regasification terminals.
Main projects of LNG terminals in the world and their exploitation.
Capital expenditures and operating costs.
Economic evaluation of a LNG project.
Business structures of LNG projects:
Classical “Buy/Sell” model.
Processing model.
New trends in the LNG industry:
Floating concepts: FLNG, FSRU.
Small scale LNG.
LNG as a retail product:
Retail LNG.
LNG as a transportation fuel: land transportation (road and rail); LNG bunkering (infrastructures, opportunities and challenges).

**LNG CONTRACTS**

Main features and important articles in LNG contracts.
LNG pricing: price formulae, indexation and net-back value.
Tolling agreements.
Impact of gas markets liberalization and third-party access to regasification terminals.
Coexistence between long-term contracts and short-term contracts.