



Introduction to Gas & LNG Processing

Workshop Facilitator:

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Abstract

This **Petrogenium** introductory course is aimed at professional staff working in the Gas & LNG business who want to increase their knowledge and understanding. The course will deal with all elements of the LNG production chain with a focus on Gas & LNG production facilities. It will help professionals supporting or managing parts of the business to get an insight in the various gas production and transportation steps. They will gain a much-improved understanding of the key production steps and their objectives which should make them more independent in their daily functioning and increase the quality of their work. We will also deal with the various commercial business models that have developed over time.

Participants

The course is designed for both newcomers and more experienced staff. Both will gain a good insight in the LNG industry and an overview of a rather specialized and diversified environment of companies, facilities and staff all working together to make the full LNG production chain work. It will give those staff working for years in a certain discipline an appreciation of the wider activities in the company and prepare them as such for a broadening assignment in the organization.

Participants may come from a wide variety of backgrounds, although participants with a technical background will have an advantage over others to get to grips with the technical contents of the course.

Participants may include staff and contractors of gas and LNG processing facilities; financial, tax or legal advisors to the LNG industry; investors, buyers, sellers, shippers and service providers to LNG chain, business developers and marketeers etc. In case of participants from a focused background, the course can be tuned to your specific requirements and interests.

Learning Objectives

- Gain a comprehensive understanding of the gas & LNG production chain, including collaboration among stakeholders to support large-scale LNG projects globally, covering both large & small scale applications, including LNG for transportation.
- Develop insights into the global LNG market dynamics, including key producing & receiving countries, historical growth patterns, & recent industry developments.
- Understand key processing & transportation steps in the LNG production chain, focusing on objectives, processes, product qualities, & methods to influence them.
- Explore custody transfer points in the production chain & methods for determining product qualities & quantities & learn about various commercial frameworks & collaborative project launch processes.
- Gain an overview of processing steps in a plant, emphasizing safe operation & support infrastructure.
- Explore other operations in the LNG chain, including upstream gas production, conditioning, transportation, shipping, & regasification terminals.
- Examine decarbonization efforts in the LNG production chain & their implications in the Energy Transition.

Programme

Day 1: LNG Business Overview

- What is LNG and why LNG?
- Introduction to the LNG supply chain
- LNG demand and supply
- The growth of the LNG industry

Day 2: LNG Liquefaction Processes and Equipment

- Key technical properties of LNG : composition, heating value & Wobbe index
- the various production & utility processes in more detail
- key equipment items used in LNG processing
- safety in LNG design and operation

Day 3 : The Wider LNG Production Chain

- Upstream operations & Pipelines
- Gas conditioning & liquids processing
- LNG Shipping
- Regasification terminals

Day 4 : Business models and new developments

- Commercial frameworks & contracts
- Product qualities & contractual requirements
- Development stages of new LNG projects
- Small scale LNG, bio-LNG
- Decarbonisation of the LNG industry