

# Petrogenium.

## Introduction to Gas & LNG Processing.

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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 an overview of the full gas & LNG production chain and associated business. Understand how different parts and parties work together and interact to support large size and multi-year LNG projects with global reach. The focus is on large scale applications although we will also cover small scale LNG and LNG for transport.
- Gain an insight in the global LNG market, the key LNG producing and receiving countries, the business growth over time and recent developments.
- Become aware of the functioning of the key processing and transportation steps in the LNG production chain. Understand the objectives and functioning of processes, key product qualities and ways to influence these.
- Get an overview of custody transfer points in the production chain and the methods and techniques applied to determine product qualities and quantities.
- Get an awareness of the various business commercial frameworks that exist and the way that parties work together and agree on launching a project.
- Get an overview of the various processing steps employed in an LNG export plant, how they can be operated safely and reliably and how they are supported by utility, storage, loading and off-plot facilities. For each key processing step, become aware of the typical process line-up and most important equipment items.
- Understand the other operations in the LNG chain, such as upstream gas production, gas conditioning and transportation, LNG shipping and LNG regasification terminals.
- Decarbonisation of the LNG production chain and the changes due to 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 such as composition, heating value and Wobbe index
- the various production and 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 and liquids processing
- LNG Shipping
- Regasification terminals

### Day 4 **Business models and new developments**

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

The actual contents and coverage of the workshop are flexible and can be adjusted and fine-tuned to customer needs.

*Because Experience Matters*

## Contact

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