# Global Gas Industry

The Global Gas Business's Dynamics in the Adapting Energy Sector

## Introduction

The most energy-efficient fossil fuel is natural gas, which may save a significant amount of energy when utilized in place of coal or oil. It is also a significant source of elemental sulphur and hydrocarbons for petrochemical feedstock. Natural gas can assist in achieving two key energy goals for the twenty-first century: supplying the sustainable energy supplies and services required for social and economic development and minimizing negative effects on the global climate and the environment in general. As a result, its popularity as an energy source is anticipated to increase significantly in the future.

The extra value that Global Gas Industry can provide a professional with the required technical, commercial, and business management training will be highlighted in this engaging, application-driven five-day Course N Carry Global Gas Industry training course.

**Included in this Course N Carry training program will be:**

- The foundations of market dynamics, price, transportation, natural gas purification, and business economics
- A comprehensive viewpoint of the natural gas sector from wellheads to markets
- Numerous contractual, economic, and technical business dealings
- Technical and financial success aspects in company that help to manage risk, support strategic goals, and guide operational decision-making

## Objectives

**Participants in this Course N Carry training course will be capable of the following by the end:**

- Recognize the sources of natural gas in the environment and the construction of gas wells.
- Learn more about the dynamics of the whole natural gas value chain, from the burner tip to the wellhead.
- Know the main and typical procedures used in natural gas facilities, and be able to interpret technical process drawings.
- Identify the different purification techniques for natural gas.
- Recognize the jargon used in oil and gas facilities

- Determine the main concerns at the facilities and how gas processing fits into the hydrocarbon product value chain.
- Determine which approach to utilize based on the process by differentiating between different gas conditioning and processing technologies.

## Training Methodology

A range of tried-and-true adult learning strategies will be employed in this Course N Carry training event to guarantee that the material is understood, comprehended, and retained to the greatest extent possible. There will be a lot of interaction and participation in the daily workshops. Using training seminar materials, case study exercises, quizzes, training films, and discussions about business case challenges in their firms, participants will actively participate in the training to learn.

## Organizational impacts

Recognize the fundamentals of gas measurement and the various measurement tools. Talk about the demands of the market for butane, propane, ethane, LPG, and NGL.

- Recognize the handover of the pipeline
- Discover how to calculate return on investments and use economic assessment standards.

## Personal Imapct

**A wide range of professionals can benefit from this Course N Carry training course, but the following are particularly noteworthy:**

- Managers of Business Development
- Experts in Corporate Planning
- Professionals in Geosciences and Engineering

## Who should attend?

- Experts in Supply Planning and Scheduling
- Authorities in Government
- Legal Experts
- Advisors in Tax and Finance
- Personnel Auditing
- Officers of Compliance
- Bankers and Equity Analysts
- Officers of Joint Ventures
- Professionals in Contracting and Negotiation

- Professionals in Trading

# Course Outline

# Day 1

### Introducing Natural Gas to the Energy Sector

- Basics of Natural Gas
- Overview
- Past Events
- Origin and Sources of Natural Gas
- Composition and Classification of Natural Gas
- Resources for Natural Gas
- Natural Gas from the Market to the Wellhead
- Investigating and Manufacturing
- Production and Processing
- Gas Transmission Sales
- Subterranean Storage
- Distribution
- Basics of Natural Gas
- Features of Natural Gas
- Gas and Oil Chemistry
- Contaminants in raw gas
- Product Specifications and Sales Gas
- Principles of Vapor and Liquid Separation
- Terminology
- Conventional Gas Processes
- Removal of Extra Water
- Elimination of Acid Gas
- Lack of water
- Elimination of Mercury
- Removal of Nitrogen
- NGL Disturbance
- Sweetening Gas and Recovering Sulphur
- Acid Gas Reinjection
- Liquid Natural Gas and Control of Dew Point

# Day 2

### Crucial Logistics for the Natural Gas Industry

- Procedures for Rejecting Nitrogen
- The Cryogenic Method

- Procedure for Absorption (using solvent or lean oil) Membrane Dissociation
- Activated carbon adsorption process and storage system
- Tanks for Storage
- LACT Unit of the Vapour Recovery System
- Taking Samples
- Transportation Using Natural Gas
- Pipeline Parts
- Stations for Compressors
- Stations for Metering
- Openers
- Stations of Control
- Liquefied Natural Gas (LNG)
- Why the LNG Industry Is Growing
- Refrigeration and Compression
- LNG transportation
- Principal LNG Exporting Countries
- Principal importing countries
- Pipeline Functions
- Fundamentals of Gas Pipelines
- Measurement of Gas Flow

# Day 3

### Overview of the LNG Sector

- LNG Trade, Marketing, and Sales
- Disparities in Prices Across Regions
- LNG Comparisons
- Significant Shifts in the LNG Industry
- Business Domain
- Market Structure and Industry
- Demand for Natural Gas
- Natural Gas Provision
- The Natural Gas Plants' Economics
- International Markets
- Who Uses LNG and Where Do They Do It?
- Projects in Progress
- Important Project Risk and Value Determination
- Recognizing the Essential Business Drivers for Project Success
- Identification of the Main Project Risks and Their Mitigation Techniques (from a Business Point of View)
- Definitions of Reserves and Certification of Reserves
- Risks of Completion and Cost Overruns
- Cost Relationships with Gas and Oil Prices

# Day 4

## Dispute Prevention and Risk Management

- Managing Risks
- Techniques for Risk Management
- The Matrix of Risks
- Disputes
- Reasons for Conflicts
- Dispute Settlement
- Expert Determination and Arbitration
- LNG Project Funding Requirements
- LNG's Financial Structures
- Making Investment Decisions
- The Principal Factors Influencing LNG Financing
- An Overview of Financing Options for LNG
- Maintain Equilibrium Funding
- Funding from Multilateral Agencies and ECAs
- Capital Markets
- Finance based on assets
- Funding for Projects and Organized Post-seminar Funding

# Day 5

## Regulations, Future Trends, and License Agreements

- Fiscal and Licensing Upstream Agreements
- Global Legal and Fiscal Systems
- Arrangements for Production Sharing
- Regulations
- The Evolution of Regulations
- The Regulated Market
- The Effect on the Environment
- The Natural Gas Trends of the Future
- LNG Market Trends
- Recent Developments and Shifts in LNG Trading
- Shale Gas's Effect
- Oil vs. Hubs in Price Setting
- Changes in the Liquefaction and Importation Markets
- Small- and Medium-Scale LNG
- Concepts for Floating and Niche LNG
- Conclusion and Synopsis