



# LNG SERVICES

**GETTING ANSWERS FROM FIELD TO FUEL**

SOLUTIONS FOR INVESTORS, PRODUCERS, OPERATORS, CONTRACTORS, SUPPLIERS, TRADERS

[WWW.SGS.COM/LNG](http://WWW.SGS.COM/LNG)

**SGS**



## **INCREASE SAFETY AND QUALITY, REDUCE TECHNICAL AND COMMERCIAL RISKS**

LNG is one of the cleanest and safest of all energy sources with many applications in the domestic and industrial markets. New technologies to liquefy and transport natural gas have allowed producers to manufacture, store and transport LNG to world markets at a competitive cost and in a safe manner. Dealing in LNG has become a commercial business with great importance placed on effective inspection and control.

As LNG projects are increasing in size and complexity, quantifying and mitigating technical and commercial risks is necessary to control financing costs, project expenses and increase stakeholders return.

Be it during the planning and construction of new facilities or during operation, at SGS, we have the experts who combine experience and real understanding of every aspect of the LNG business.

Wherever you work in the LNG supply chain, you can be sure that when you ask critical questions you get the information you need to make the right decision.

Our teams of engineers and technicians provide independent inspection, testing, verification and specialised technical services helping to maintain our client's reputation for high quality products as well as effectively managing the various risks associated with the production and the transport of LNG.

We help to improve the integrity, quality and efficiency of products, systems and equipment, assure safe and healthy working conditions for employees, minimise the environmental impact, and thus, ensure that applicable requirements - whether they are regulatory, voluntary or client specific - are met.

This applies for technical investments and projects and could be with contractual as well as with technical aspects. In any case, we will add value to your project.

Backed by our experience gained through our involvement in various LNG projects and trade activities all over the world, SGS is a capable and reliable partner to identify and mitigate commercial and technical risks. SGS distinguishes itself through efficiency, innovation, flexibility and highly qualified personnel.

Our ability to support you throughout the value chain across the globe allows you to optimize processes from investment decisions to delivery.

Maximize your returns whilst demonstrating increased sustainability in new areas of production.



## RIGHT ANSWERS – RIGHT DECISIONS – MAXIMUM RETURN

### NEW BUILD PROJECTS

Every LNG project involves certain risks and challenges – it has to be technically feasible, stay on schedule, within the projected budget, and quality and safety have to be assured.

Often, standardisation is not possible, and a specific fit-for-purpose assessment is necessary, especially if new techniques and procedures are introduced.

SGS offers its clients assistance in dealing with this complex mix of concerns, and manage the whole range of verification, quality assurance and control, certification, inspection and QHSE services (Quality, Health Safety & Environmental) to verify that the installation will perform successfully throughout the intended lifetime.

### IN OPERATION

Your competitiveness depends upon your ability to deliver quality assured products into the market. Therefore, the fitness-for-purpose condition of your assets has to be maintained while extending the remaining life in the most reliable, safe and cost-effective manner.

SGS provides a full range of Asset Integrity Management Services to assist operators in achieving this objective.

Your competitiveness also depend upon your ability to test those products at a lower cost and to a tighter deadline. Given the large variety of standards in use around the world, the physical installations in use for sampling, the various models, columns, etc. that each standard calls for, SGS has addressed the need of stakeholders by offering a variety of calibration, validation and troubleshooting services for LNG analysis.

Training is an essential aspect of the development of your personnel. With the correct training, your staff will grow with your company. We offer a wide range of training courses and seminars for the LNG industry.

The courses are designed to be interesting as well as informative, and are available both on a public or in-house basis. We are also able to develop new courses on behalf of clients for a specific training requirement.

### QUALITY COUNTS

Typical project spend on equipment and systems for measurement of quality and quantity is less than 0.5%.

However, these systems and capabilities are critical to project profitability and compliance throughout project operations.

SGS has experience of design, build, commissioning and operation of LNG laboratories along with implementation of systems and controls for custody transfer.

By becoming involved in quality and quantity systems during project design, SGS can retain accountability for implementation of efficient equipment and systems of measurement to enable production optimisation, environmental compliance and custody transfer assurance.

# SGS SERVICES ALONG



**PRODUCTION**



**PIPELINE TRANSPORTATION**



**LIQUEFACTION, STORAGE & LOADING**

Environmental & Technical Due Diligence	X	X	X
Environmental Impact Assessment	X	X	X
Owner's Representative		X	X
Ship Owner's Representative			
Design Verification	X	X	X
Risk Assessment	X	X	X
Energy Audits			
Product Certification	X	X	X
Project Monitoring	X	X	X
Statutory Inspections		X	X
Third Party Inspection/Certification	X	X	X
Audit and Certification of Metering Systems		X	X
Non-Destructive Testing/Laboratory Material Testing	X	X	X
Health, Safety and Environment (HSE) Services	X	X	X
Construction Supervision	X	X	X
Tank Leak Detection			X
Installation/Commissioning Survey/Start-up Testing	X	X	X
Marine Warranty Survey	X		
Technical Staffing	X	X	X
Training Services	X	X	X
Integrity Management/Risk Based Inspection	X	X	X
Statutory Inspections		X	X
Non-Destructive Testing/Laboratory Material Testing	X	X	X
Health, Safety and Environment (HSE) Services	X	X	X
Production Accounting/Mass Balance Audits	X	X	X
Laboratory Testing/Outsourcing/Mobile Laboratory	X		X
In-line Sampling Verification			X
Instrument Calibration/Verification	X	X	X
Gas Meter Calibration			
Audit and Certification of Metering Systems		X	X
Metering Systems Recertification		X	X
Shore/Ship Tank Calibration			X
Tank Leak Detection			X
Leak Detection			
Custody Transfer Measurements and Validation			X
LNG Composition Change Database			X
Third Party Laboratory Audits (QA/QC)		X	X
In-line Analyzer Management	X	X	X
Check of domestic devices			
Energy Audits			
Sustainability Report Assurance			
Technical Staffing	X	X	X
Training Services	X	X	X





# GLOBAL & LOCAL



**SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY. SGS IS RECOGNISED AS THE GLOBAL BENCHMARK FOR QUALITY AND INTEGRITY. WITH MORE THAN 64'000 EMPLOYEES, SGS OPERATES A NETWORK OF OVER 1'250 OFFICES AND LABORATORIES AROUND THE WORLD.**

Founded in 1878, SGS offers experience and expertise as a global partner to operators in the fields of energy, trading and commodities.

SGS solutions assist clients throughout the value chain, from research and development, project verification,

extraction of commodities, production & manufacturing, processing, to distribution of energy to the end consumer.

A partnership with SGS guarantees access to an unparalleled global network of technical know-how and capabilities – eliminating uncertainty,

enhancing mutual confidence, and offering freedom to concentrate on core business.

**CONTACT US** [WWW.SGS.COM/LNG](http://WWW.SGS.COM/LNG) OR [INDUSTRIAL.GLOBAL@SGS.COM](mailto:INDUSTRIAL.GLOBAL@SGS.COM)

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