

The Society of International Gas Tanker and Terminal Operators (SIGTTO) is a non-profit making organisation dedicated to protecting and promoting the mutual interests of its members in matters related to the safe and reliable operation of gas tankers and terminals within a sound environment.

The Society was founded in 1979 and was granted consultative status at the International Maritime Organization in November 1983.

www.sigtto.org

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# President's Report



As we look ahead to 2025, it is worth recognising the significant progress made by SIGTTO throughout 2024 in promoting safety, supporting decarbonisation, and engaging actively across regulatory forums. Against the backdrop of increasing attention on alternative fuels and emissions reduction, SIGTTO has remained focused on ensuring the safe transport of liquefied gases and delivering meaningful technical leadership to the sector.

At the International Maritime Organization (IMO), SIGTTO's technical and strategic input was particularly notable. Working closely with IACS, we submitted twenty seven proposals to align the IGC Code, the majority of which were accepted. Our contributions throughout the year strengthened our standing as a trusted voice in shaping safe and pragmatic regulation.

Beyond regulatory influence, we convened Regional Panels in Shenzhen, Houston and London, providing vital opportunities for knowledge exchange and member engagement. The General Purposes Committee (GPC) also delivered several key publications and advanced longstanding projects, reflecting the value of member-driven technical collaboration.

As the industry continues to evolve, so too must SIGTTO's long-term strategy. In 2024, the Board invested considerable time in reviewing our future direction with outcomes to be shared with members in 2025.

I extend my thanks to the Secretariat, our committees, and the wider membership. It is through your continued support and shared commitment that SIGTTO remains an authoritative voice in gas shipping, advancing safety, environmental leadership, and operational excellence.

## General Manager's Report



Many years ago, when I first stepped onto a gas carrier under construction in Japan, I was introduced to the SIGTTO publications in the ship's library. I vividly remember how the master and senior officers regularly referred to these guidelines. They shared knowledge, promoted best practices, and helped myself and many others grow in understanding liquefied gas handling.

As I moved ashore, my engagement with SIGTTO deepened, beginning with the LNG ship-to-ship (STS) working group. The knowledge sharing within that group was a great example of industry-wide cooperation, leading to safer and more standardized STS operations.

These practices have helped promote safe LNG STS transfers, enhancing flexibility and efficiency while maintaining a strong safety record. They also laid the foundation for liquefied gas bunkering, which will grow in importance through the energy transition. I also served on the General Purposes Committee (GPC) and other working groups.

I am honoured to have been selected by the Board of Directors to lead SIGTTO at such an important time. Our industry is evolving, with new cargoes, technologies, and heightened expectations around safety, flexibility, and environmental performance.

The projected strategy for SIGTTO in 2025 reflects this evolution. We aim to reinforce our commitment to high-quality, technically robust guidance across liquefied gas operations. This will be aided by welcoming active members in emerging sectors such as large-scale ammonia and liquefied CO<sub>2</sub>, while supporting core operational best practices.

I look forward to listening, learning, and leading with you as we implement this strategy in the months ahead. Your continued engagement will be key.

I hope to meet many of you at the upcoming SIGTTO Regional Panels in London, Houston and Singapore.

# **SIGTTO Membership**

### Full Members (as of 31 December 2024)

**AES** Andres Alphagas SA

Angola LNG Limited

Angola LNG Marketing Limited Anthony Veder Rederijzaken B.V.

Atlantic LNG Company of Trinidad & Flex LNG

Tobago

Avance Gas Holding Ltd

Benhard Schulte Shipmanagement

Botas Trading IC Merkezi Jersey

Ankara Merkez Subesi

BP Berau Ltd

BP Shipping Limited

Brunei LNG SDN BHD

Bumi Armada Berhad

BW Epic Kosan BW LNG AS

Byzantine Maritime Gas Pte Ltd

Calor Gas Limited Cameron LNG

Capital Gas Ship Management Corp INPEX Japa, Ltd

Centrica LNG Company Limited

Chandris (Hellas) Inc

Cheniere LNG Inc

Chevron Shipping Company LLC

China LNG Shipping (International)

Company Ltd

Conocophillips Global Marine

Cool Company Management AS

CPC Corporation, Taiwan

DESFA Hellenic Gas Transmission

System Operation

Dorian LPG Management Corp.

Dragon LNG Limited Dunkerque LNG

Dynagas LTD

EGE Gaz Anonim Sirketi

Egyptian Operating Company for

Natural Gas Liquefaction Projects

Elengy

Empressa Naviera Elcano S.A.

Enagas Transporte S.A.U.

**Eneos Corporation** 

Energy Transfer Partners

Engie Energy Marketing Singapore

Enterprise Products Partners L.P.

Equinor ASA

Etki Liman Isletmeleru Dogalgaz

Ithalat VE Ticaret A.S.

Excelerate Energy LP

Exmar N.V.

ExxonMobil - Seariver Maritime

Fluxys LNG

Freeport LNG Development, L.P.

Gaslog LNG Services Ltd

Gate Terminal B.V.

Gazocean

Geogas Maritime SAS

Global Meridian Holdings Limited

GNL Qunitero S.A. Golar Mangement AS

Golden Pass LNG

Hoegh EVI

Hyproc Shipping Company

lino Kaiun Kaisha, Ltd

IndianOil LNG Private Limited

Ineos

International Gas Transportation Co.

Jadroplov

Japan Petroleum Exploration Co., Ltd. Shipping Corporation of India

Jera Co., Incorporated

Kawasaki Kisen Kaisha Ltd

Kinder Morgan Inc Knutsen OAS Shipping

Koch Shipping PTE Ltd

Kuwait Oil Tanker Co S.A.K.

Latsco LNG Marine Mangement Inc

Latsco Marine Management Inc

LNG HRVATSKA d.o.o.

LNG Japan Corporation

Malaysia LNG SDN BHD

Maran Gas Maritime Inc

Meiji Shipping Co. Ltd.

Minerva Gas Inc

MISC BHD

Mitsubishi Corporation

Mitsui & Co., Ltd

Mitsui OSK Lines Ltd

Naftomar Shipping & Trading Co

National Gas Shipping Company Ltd YPF S.A.

National Grid Grain LNG

Nigeria LNG Limited

Northern Marine Mangement Ltd

NYK Line (Nippon Yusen Kaisha) OLT Offshore LNG Toscana S.P.A

Oman LNG LLC

Orion Global Transport France

Osaka Gas Co Ltd Pertamina LNG - JMG

Petrobras – Petroleo Brasileiro S/A

Petronet LNG Limited

PG Shipmanagement PTE. Ltd.

Posco Energy Co. Ltd,

Prime Gas Management Inc.

Pronav Ship Management

PT Donggi Senoro LNG

PTT LNG Company Limited

Qatar Gas Transport Company Ltd

Qatarenergy

Qatarenergy LNG QCLNG Operation Company Pty Ltd

Ren Atlantico Terminal GNL, S.A.

Saint John LNG Limited L.P.

Santos GLNG

Seapeak Maritime (Canada) Inc

Sempra Infrastructure

Shell International Trading & Shipping

Singapore LNG Corporation PTE Ltd.

SNAM FSRU Italia SRL

Sonangol Marine Services Inc

South Hook LNG Terminal Co Ltd

Stena LNG Holding Sweden AB

STS Marine Solutions (UK) Ltd Synergy Maritime PVT. Ltd

Thenamaris LNG

TMS Cardiff Gas Ltd

Toho Gas Co Ltd

Tohoku Electric Power Co Inc

Tokyo Gas Co Ltd

TotalEnergies SE Tsakos Energy Navigation Ltd

Uniper Global Commodities SE

Wilhelmsen Ship Management SDN

Woodside Energy Ltd

### Associate Members (as of 31 December 2024)

ABS

Abu Dhabi Marine Services Co.

Safeen LLC

Babcock Integrated Technology

**GMBH** 

Boluda Towage Spain, S.L.

Bureau Veritas Marine & Offshore

Celsius Tech Limited

China Classification Society

China Energy Ship Managment Co.,

Ltd.

ClassNK

Combined Marine Terminal Operations Worldwide N.V.

Commonwealth LNG

**DNV AS** 

Ecolog Ltd

ExxonMobil PNG Limited

Fratelli Neri S.P.A Gastrade S.A.

GTT Training Ltd

Guandong Dapeng LNG Co Ltd

Hazira Port Private Limited

Hongkong Salvage & Towage

Ibaizabal Tankers, S.L.U Indian Register of Shipping

Korean Register Kotug International

Kuwait Integrated Petroleum Industries 1, Limitada

Company Lloyd's Register

LNG Canada Development Inc.

Maritime Safety Queensland

Milford Haven Port Authority

Moran Towing Corporation NextDecade LNG, LLC

Polish Oil and Gas Company Port of Rotterdam Authority

Purus Marine Tech Pte Ltd. Rimorchiatori Riuniti Spezzini -

Imprese Marittime E Salvataggi S.R.L.

RINA Services S.P.A.

SAAM S.A.

SEFE Marketing & Trading Singapore

Pte Limited

Signet Maritime Corporation

Single Buoy Moorings Inc

Smit Lamnalco Svitzer A/S

TotalEnergies EP Mozambique Area

VENTURE GLOBAL LNG, INC

Vital Services Ltd

Warsash Maritime Academy (Solent

University)

Western Concessions Private Limited

Western LNG LLC

Wison (Nantong) Heavy Industry

Woodfibre LNG Limited

### **Member Eligibility**

To become a full member of SIGTTO it is necessary for a company to have equity interest in, or to operate, a gas tanker or terminal.

Associate membership is available to applicants as above, who have entered into a contract to build a gas tanker or a terminal.

Directors may also admit to associate membership the following organisations:

- Harbour authorities
- Tug vessel providers for liquefied gas terminals
- Classification societies
- Training providers for liquefied gas carrier sea staff or terminal personnel

Associate members have all the rights of a full member except for voting rights at the Annual General Meeting.

# **SIGTTO Activity**

#### SIGTTO at the IMO

The revision of the IGC Code is nearly complete, with over 80 amendments approved by MSC 109 and adoption expected at MSC 110 in June 2025. SIGTTO has contributed 15 papers covering key areas including ESD systems, CO2 carriage, PRV isolation, LPG/ammonia as fuel, and filling limits.

#### **Unified Interpretations**

Twenty-seven proposals to align the Code with existing unified interpretations were submitted by SIGTTO and IACS; most were accepted.

ESD Systems, where clarifications were made to improve safety and consistency. CO<sub>2</sub> Carriages reclassified as both toxic and asphyxiant, with updated requirements. To avoid risks with PRV Isolation the incorrect valve installation was amended.

Formal provisions for LPG and Ammonia as Fuel are now incorporated in Chapter 16, with ammonia changes entering into force July 2026. A proposal to apply the IGF Code to IGC vessels was rejected.

MEPC 83 approved the IMO Net Zero Framework, introducing a two-tier compliance system based on GHG Fuel Intensity. Adoption is scheduled for October 2025, with entry into force in March 2027.

The review of the CII has been split into two phases. MEPC 83 confirmed a 2.625% annual reduction for 2027-2030. SIGTTO submissions on CII's impact on LNG carriers will be considered in phase two.

### **General Purposes Committee**

The 88th and 89th GPC meetings were held in April and October 2024 in Houston and London, respectively. The discussions focused on technical developments, SIGTTO's IMO engagement, as well as progress of multiple working groups.

There was an update on ongoing work with Emergency Release Systems, prompted by incidents of unintentional activation. Revised guidance will expand beyond LNG to cover LPG, ammonia, CO<sub>2</sub>, and high-pressure systems, offering design and operational recommendations for safe use.

Reliquefaction systems are also under review, with a focus on safety, cargo specification, emissions, and system integration. Emergency preparation remains a focus, highlighting planning, drills, and crew. SIGTTO is developing a model LNG training course guidance and minimum content standards, while a complementary publication addresses shorebased competency frameworks.

The Ship-to-Ship Transfer Guide, written alongside OCIMF, CDI, and ICS, is due for release in 2025. Updates will reflect feedback, expanded guidance on STS operations, and enhanced safety checklists aligned with ISGOTT 6th edition. New working groups launched in 2024 are addressing auxiliary systems for alternative fuels, spare parts and tools for safetycritical equipment, and CO2 pressure relief systems, with each aiming to provide practical system-specific guidance rooted in safety and reliability.

### **Regional Panel**

In 2024, SIGTTO hosted three Regional Panels across Houston, London, and Shenzhen, with a strong turnout from from members globally.

The Houston Panel in April was chaired by Eleni Lazaratou of Maran Gas, covering a wide subject range. Just some of these included GHG emission reduction, ALARP implementation, and multiple insights from the US Coast Guard.

The London Panel, again chaired by Eleni Lazaratou and Hans Weverbergh featured updates on ammonia combustion trials, LH2 tank design, and LCO<sub>2</sub> transport. Shell and BP shared strategies on ERS integrity and methane emission reduction.

The Shenzhen Panel, chaired by Andrew Johnston of CLSICO, opened with China Merchants Energy Shipping. Presentations focused on LNG vessel safety and emerging Chinese shipyard technologies. Afternoon highlights included CCS analysis, tank valve design and carbon capture.

Each panel reaffirmed SIGTTO's commitment to sharing technical insight, supporting innovation, advancing safe operations and updating members o environmental performance in the liquefied gas sector.



GPC 89 in London, October 2024

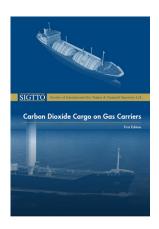


Yoshiyuki Moriyama (Fukui) presenting at the Regional Panel in Houston, April 2024



Andrew Johnston (CLSICO) and Technical Adviser Yunzhe He at the Shenzhen Panel November 2024

## **SIGTTO Publications List**



Guidelines on the Ship-Board Odourisation of LPG (SIGTTO)

A Guide to Contingency Planning for Marine Terminals Handling Liquefied Gases in Bulk (SIGTTO)

Fire Prevention in the Cargo Containment Systems of **Liquefied Gas Carriers in Shipyards** (SIGTTO)

Liquefied Gas Fire Hazard Management (SIGTTO)

Gas Concentrations in the Insulation Spaces of Membrane LNG Carriers (SIGTTO)

Hydrates in LPG Cargoes - A Technological Review (SIGTTO)

Report on the effects of Fire on LNG Carrier Containment Systems (SIGTTO)

LNG Steamship - Suggested Competency Standards for Engineers (SIGTTO)

Liquefied Petroleum Gas Sampling Procedures (SIGTTO)

Thermowells in LNG Carrier Liquid Lines (SIGTTO)

Application of Amendments to Gas Carriers Codes Concerning Type C Tank Loading Limits (SIGTTO)

Liquefied Gas Carriers: Your Personal Safety Guide (SIGTTO)

Guidance for the Prevention of Rollover in LNG Ships (SIGTTO)

Ship to Ship Transfer Guide for Petroleum, Chemicals and Liquefied Gases (CDI/ICS/OCIMF/SIGTTO)

A Justification into the Use of Insulation Flanges (and Electrically Discontinuous Hoses) at the Ship/Shore and Ship/Ship Interface (SIGTTO)

Suggested Quality Standards for LNG Training Providers (SIGTTO)



Support Craft at Liquefied Gas Facilities - Principles of **Emergency Response and Protection - Offshore (SIGTTO)** 

Liquefied Gas Handling Principles on Ships and in Terminals, (LGHP4) (SIGTTO)

LNG and LPG Experience Matrix (SIGTTO)

LNG Emergency Release Systems - Recommendations, Guidelines and Best Practices (SIGTTO)

LNG Marine Loading Arms and Manifold Draining, Purging and Disconnection Procedure (SIGTTO)





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Recommendations for Liquefied Gas Carrier Manifolds (SIGTTO/OCIMF)

Guidelines for the Alleviation of Excessive Surge Pressures on **ESD** for Liquefied Gas Transfer Systems (SIGTTO)

Best Management Practices to Deter Piracy – BMP 5

**Recommendations for Management of Cargo Alarm Systems** (SIGTTO)

Recommendations for Relief Valves on Gas Carriers (SIGTTO) Recommendations for Designing Cargo Control Rooms on Gas Carriers (SIGTTO)

LNG Shipping Suggested Competency Standards (SIGTTO) Guidance on Gas Carrier and Terminal Gangway Interface (SIGTTO)

Floating LNG Installations (SIGTTO)



## 2024 Accounts

## STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2024

	2024 £	As restated 2023 £
Assets		
Non-current Assets		
Property, plant and equipment	<u>479,250</u> 479,250	615,148
Current Assets		
Trade & other receivables Cash & cash equivalents	314,349 2,248,927 2,563,276	192,406 2,123,342 2,315,748
Total Assets	3,042,526	2,930,896
Liabilities		
Non-current Liabilities		
Lease liabilities	397,048	588,085
Current Liabilities	397,048	588,085
Trade and other payables Lease liabilities	238,279 191,036 429,315	213,783 167,996 381,779
Total Liabilities	826,363	969,864
Net Assets	2,216,163	1,961,032
Issued capital and reserves		
Share capital Retain earnings	24,815 2,191,348	27,060 1,933,972
TOTAL EQUITY	2,216,163	1,961,032



The Society of International Gas Tanker and Terminal Operators

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