

SIGTTO NEWSLETTER

Issue 52

Spring Newsletter

Message from the General Manager



Many years ago, when I first stepped aboard a gas carrier under construction in Japan, I came across SIGTTO publications in the ship's library. I vividly remember how the master and senior officers regularly referred to these guidelines—sharing knowledge, promoting best practices, and helping me and many others build a solid foundation in liquefied gas handling.

That early exposure shaped my understanding of the industry and, over time, my engagement with SIGTTO deepened. I participated in the LNG ship-to-ship (STS) working groups, where collaboration and information-sharing led to safer, more standardised operations. These efforts have helped promote of safe LNG STS transfers globally and laid important groundwork for the growth of liquefied gas bunkering which is vital as the industry supports the broader energy transition.

I also had the privilege of serving on the General Purposes Committee (GPC) and other working groups, gaining deeper insight into the challenges and opportunities our sector faces.

It is a great honour to now serve as SIGTTO's General Manager. I am stepping into this role at a critical moment. Our industry is evolving—welcoming new cargoes, adopting innovative technologies, and responding to increasing expectations around safety, flexibility, and environmental performance.

SIGTTO's newly revised strategy sets a clear direction for the work ahead. It reinforces our commitment to technical excellence, broadens participation from emerging sectors like large-scale ammonia and liquefied CO₂, and strengthens collaboration with regulators, NGOs, academia, and industry partners, to enhance our collective impact.

SIGTTO's strength lies in its engaged and diverse membership. I look forward to working with you by listening, learning, and leading as we move this strategy into action. Your insight and support are essential to our continued success.

I hope to connect with many of you in person at the upcoming Regional Panels in London and Houston.

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Upcoming Meetings in 2025

7th October, London

General Purposes Committee

8th October, London

Regional Panel

12th November, Houston

Board Meeting

13th November, Houston

Regional Panel

19th November, Virtual

AGM, Board Meeting

SIGTTO

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Board Meeting

The SIGTTO Spring Board Meeting was held in Singapore on the 21 May 2025 kindly hosted by Seapeak Maritime. The Board concluded the strategy refresh work and approved the key principles of the new strategic plan. This is the outcome of years of discussions and consultations with members and is aimed at ensuring the Society is fit for purpose and relevant for the future. The detailed strategy implementation plan will be discussed at the Board meeting in Houston on the 12th of November 2025.

The plan and budget for 2026 were also approved by the Board. This included items such as staff, events and membership fees for 2026. The Board noted that the current finances of the Society are in a healthy state with over one year's operating costs held in reserve. The projected budget for 2025 now indicates a small surplus compared to a loss, which is due to lower than projected staff costs and higher than expected publication revenues.

To improve outreach with members, the Board decided to move the Annual General Meeting (AGM) for members online. This would enable increased attendance and provides a good opportunity to communicate with the Board on the activities and direction of the Society. The AGM meeting is planned to be held online on the 19th of November 2025 and all members are encouraged to participate.



Spring Board meeting in Singapore

Regional Panels

Singapore Regional Panel

The Singapore Regional Panel was held on 2 April 2025, chaired by Giovanni Giorgi (OLT Offshore) and Eleni Lazaratou (Maran Gas Maritime Inc.) Over 100 participants attended, with presentations from representatives of shipping companies, classification societies, manufacturers, and industry bodies on safe and environmentally friendly gas carrier and terminal operations.

Topics included ammonia as fuel, carbon capture, CO₂ carriage, cargo tank filling limits, retrofits, and decarbonization strategies. Notable presentations covered decarbonization plans, safety solutions for ammonia handling, LNGC reliquefaction retrofits, IGC Code amendments, carbon accounting, and operational risks in CO₂ shipping. The session concluded with insights on the future of clean ammonia procurement and shipping. The next panel will be in London on 8 October 2025 followed by a panel in Houston on 13 November 2025. SIGTTO members and industry partners are cordially invited to participate.



GPC and Working Groups Update

The General Purposes Committee (GPC) is a key committee of the Society and is chaired by Giovanni Giorgi (OLT Toscana). The 90th GPC meeting took place in Singapore on 1 April 2025. Discussions included the use of ammonia as a fuel, reliquefaction systems, cargo quality, design of CO₂ relief valves, and emergency release systems. The committee also discussed the activities at IMO including the revision of the IGC code and the development of guidelines for the use of Ammonia as fuel.

GPC members discussed various incidents and considered what lessons learnt could be incorporated into industry best practice. The committee approved the draft Ship-to-Ship Transfer guide, which is a joint publication in collaboration with OCIMF, ICS and CDI. The committee also noted and supported the publication of Best Management Practices to Deter Piracy – BMP 5, which was produced by OCIMF and other supporting industry bodies. The committee approved the terms of reference for a new working group to revise the existing publication on Competency Standards for Engineers on Gas Carriers. The next GPC meeting will be held in London on the 7th of October 2025. A brief update on selected working groups is provided in the next section.

Emergency Release Systems

The working group consists of SIGTTO members with experience of loading arm design and operations and loading arm and ERS equipment manufacturers. The working group was formed to address

incidents related to spurious activation of ERS. The committee approved the concept draft which concludes the technical work carried out by the working group.

The document has received positive feedback and is expected to provide useful guidance to terminal operators, equipment manufacturers and terminal designers with the aim of reducing the risk of incidents. The document will now go through editing, formatting and review stages to prepare it for final approval at GPC 91 in October 2025.

Reliquefaction Systems on Gas Carriers

This working group consists of ship owners, system designers and classification societies. The purpose of the working group is to provide additional guidance on safety aspects related to IGC Code Chapter 7 - Cargo pressure/temperature control. The topics include, cargo machinery room design, cargo quality and dangers of sub-cooled cargoes. Environmental concerns are also considered for the systems covered in this WG.



GPC in Singapore

Suggested Minimum Content for LNG Carriers Training Courses

This working group consists of training providers and ship owners. The WG have suggested the minimum content that should be covered for a management level course for LNG carrier officers. The working group completed its work and the GPC 90 approved the concept draft in April 2025. The document will now go through editing, formatting and review stages to prepare it for final approval at GPC 91 in October 2025. This document aims to further enhance the quality of the training provided for LNG carrier officers.

Auxiliary Systems on Gas Carriers

This working group is formed of the system designers, ship operators and classification societies. The aim of the publication is to provide useful guidance for gas carriers using of LNG, ethane, LPG and ammonia as fuel. The group is taking into consideration the ongoing work carried out at the IMO on ammonia as fuel on gas carriers, developments in engine technology, and SIGTTO member experience with liquefied gas fuels and cargo. The working group expects to complete its work in 2026.

Critical Equipment, Spare Parts and Special Tools in Gas Carriers

The working group on critical equipment covers topics that are related to the Auxiliary systems WG, and it aims to provide guidance to help identify critical equipment on a gas carrier.

This will help identify the spare parts and special tools required to maintain critical equipment. The guidance plans to supplement existing regulations and recommendations where necessary. The document will use a risk based approach and aims to provide guidance on considerations for carrying out a risk assessment in this area.

CO₂ pressure relief systems

This working group is formed of ship owners, classification societies, cargo system designers and pressure relief valve manufacturers. The working group was set up to provide guidance on the design and operation of CO₂ relief valves. The unique physical properties of CO₂ and the expected cargo carriage conditions raise technical issues that need to be addressed in design and operation.

The working group is considering issues related to solid, liquid and vapour phases at the PRV discharge, PRV outlet location and the prevention of uncontrolled pressure loss in the cargo system. This guidance will supplement the requirements of IGC code chapter 8 and help the industry to adopt a standardised approach.



Critical Equipment Working Group in Athens



Auxiliary Systems Working Group in Athens



Shipping of CO₂ Working Group in London

IMO Activities

Safety

Review of the IGC Code

The review of the IGC Code is nearly complete. SIGTTO has contributed with fifteen papers submitted during the last three years. The Subcommittee on the Carriage of Cargoes and Containers (CCC) finalised the technical aspects during its last meeting in September 2024, and the Maritime Safety Committee (MSC) approved the revision in December at MSC 109. It was anticipated adoption would occur at MSC 110 in June 2025, however due to several technical issues being raised it was decided to refer the text back to CCC 11 for technical review in September. As a result, the final text is due for approval at MSC 111 and adoption at MSC 112, both in 2026; the revised code will then enter into force in July 2028. There are over 80 amendments, including clarifications and substantive changes including areas such as ESD requirements, CO₂ carriage, PRV isolation, use of LPG as fuel, and filling limits.

Unified Interpretations (UI)

IACS and SIGTTO submitted a document proposing numerous amendments to the IGC Code to incorporate previously agreed and published unified interpretations. The majority of the twenty-seven proposals have been incorporated into the revised text.

ESD Requirements

A proposal from SIGTTO to amend elements of the IGC Code relating to Emergency Shutdown Systems (ESD) in line with SIGTTO's ESD Systems: Recommendations for Emergency Shutdown and Related Safety Systems was extensively discussed and revised text agreed to clarify ESD requirements. Modifications include reorganising the text for clarity, highlighting the need for safety systems to be independent from gauging systems, and the revision of the cause-and-effect table reducing the number of potentially confusing notes, facilitated by using clearer text within the body of the Code itself.

Carriage of CO₂

SIGTTO submitted a proposal to amend the CO₂ Triple Point (paragraph 17.21.1) and CO₂ Classification (chapter 19). It noted CO₂ is widely classified as toxic in national codes and proposed to re-classify CO₂ as both an asphyxiant and toxic. It was noted during discussion that this would require careful consideration of the requirements normally applied to toxic cargoes. Following additional submissions and further work, amendments were agreed, listing CO₂ as toxic in Chapter 19 and clarifying the associated requirements that are, and are not, applicable to its carriage. The amendments reflect the work of the SIGTTO working group on the carriage of CO₂ and its publication Carbon Dioxide Cargo on Gas Carriers.

Isolation of pressure relief valves in (Ch. 8)

The SIGTTO working group that developed SIGTTO Recommendations for Valves on Liquefied Gas Carriers identified several areas for improving the clarity of the IGC Code. It was identified that in implementing paragraph 8.2.9 of the Code, there may be a risk of installing isolation valves which can affect the safe operation of the PRVs.

This mainly relates to: inadvertent isolation of one or more PRVs by human intervention; potential introduction of obstructions to the flow affecting the relieving capacity and stability of the PRV; and the potential for locked in cargo between the isolation valve and the PRV. SIGTTO's proposed amendments to make the requirements clearer and mitigate the potential risks identified were incorporated into the revised text.

LPG cargo as a fuel

Alongside the revision of the IGC Code, CCC initially developed draft guidelines for the use of LPG cargo as a fuel, approved by MSC 108 and published as MSC.1/Circ.1679 Interim guidelines for use of LPG cargo as fuel. Using the guidelines as a basis, amendments were agreed to incorporate requirements for LPG (and Ethane) as a fuel within chapter 16.

Ammonia Cargo as Fuel

During the review of the IGC Code, to permit the use of ammonia cargo as fuel, the prohibition of the use of toxic cargo as fuel was amended in chapter 16. This change was fast-tracked through the approval process with MSC 108 approving the amendments and subsequently MSC 109 adopting them. These specific amendments will enter into force on 1 July 2026. In addition the Committee approved an MSC Circular on Voluntary Early Implementation of the Amendments to Chapter 16 of the IGC Code, inviting member states to implement the amendments prior to the entry-into-force date.

To support this change, it was agreed to develop guidelines for the use of ammonia as fuel through a correspondence group that will report to CCC 11 in September 2025, when they are expected to be finalised. They will then be approved at MSC 111, in Spring 2026. SIGTTO's work in this area is guided by the principles laid out in our information paper Gas as Fuel on Gas Carriers.

Application of the IGF Code to IGC Code Vessels

Over the last few sessions of MSC and CCC it has been proposed to apply the IGF Code to IGC Code vessels. This is an issue that has been

raised several times over the last decade, and the IMO has always maintained a 'one, ship, one code' policy.

SIGTTO's view is that the 'one ship, one code' policy agreed at MSC 95 should stand. And that to allow application of the IGF Code would be a major policy reversal with a significant impact on the safety philosophy of gas carriers - noting there are concepts in the IGF Code that should not be applied to gas carriers and many standards that differ, such as the location of tanks, piping systems and vents. However, SIGTTO acknowledges there are anomalies, such as the use of low flash point liquid fuels on gas carriers and work is needed to ensure the risk of using alternative fuels on gas carriers can be suitably regulated under the IGC Code. The issue was referred to the next session, MSC 110. SIGTTO, working with members states, co-sponsored a submission to MSC 110 proposing a way forward; and co-sponsored a submission proposing a way forward; and submitted a second paper summarising the history of the policy and technical reasons behind it.

Following discussion, MSC 110 agreed that the use of alternative fuels on gas carriers should be dealt with utilising guidelines under the IGC Code. For products listed in Chapter 19 (i.e. LPG, ammonia etc) being used as fuel the IGC Code applies, supported by fuel specific guidelines. For non-chapter 19 products (i.e. methanol) IGC



Code specific guidelines will be developed that will apply pertinent aspects of the IGF Code guidelines.

GHG Reduction

The Marine Environment Protection Committee (MEPC) continues its work towards 'net zero' GHG emissions by 2050, in support of the IMO 2023 GHG Strategy. MEPC 83, meeting in April this year, further progressed this work focusing on the review of the short-term measures and development of mid-term measures.

Mid-term Measures

During MEPC 83, regulatory text was approved for a new regulatory measure known as the IMO Net Zero Framework. It consists of a technical and economic measure, based on a GHG Fuel Intensity metric (GFI) – measuring well to wake GHG emissions per unit of energy used onboard a ship. The framework establishes ambitious objectives to align maritime transport with climate targets set out in the 2023 IMO GHG Strategy.

The regulation has a two-tier system, a base target and more stringent direct compliance target, both becoming more onerous over time. A ship is required to meet both. A ship surpassing the target requirements can receive surplus units, which can be transferred to other ships that have

a deficit, essentially creating a pooling mechanism. Non-compliant ships can purchase remedial units at a cost that varies depending on if tier one or two non-compliant.

Rather than approving through the usual consensus, a vote was called. The simple majority criteria (50%) was easily met with 79% voting in favour. The next stage is adoption at an extraordinary session of MEPC in October. If it goes to vote again the bar will be higher with a qualified majority being required (66%). The amendments, if adopted will enter force on 1 March 2027 although the first year of data collect for compliance will be 2028. Numerous supporting guidelines will have to be developed, and others amended to implement the Net Zero Framework, there remains a lot of detail to be finalised.

Short-term Measures

At MEPC 82 in Autumn 2024, it was agreed to split the review of the CII (and EEXI) into two phases to facilitate the consideration of c. 80 papers submitted on this topic (CII). Phase one was concluded at MEPC 83 (Spring 2025) deciding CII reduction factors for 2027-2030 (at 2.625% per year). A workplan was agreed to consider other issues raised with the CII over the coming years. SIGTTO has submitted two papers on the CII and its application to LNG carriers, which will be considered in phase two.



Membership

Since our last newsletter, we have welcomed the following companies as SIGTTO members and look forward to collaborating with them to enhance industry safety:



To become a full member of SIGTTO, a company must have an equity interest in, or operate, a gas tanker or terminal. Associate membership is available to companies that have entered into a contract to build a gas tanker or terminal, moving to full membership once operational. Associate membership is also open to harbour authorities, tug vessel providers for liquefied gas terminals, classification societies, and specialist training providers. Our Membership Manager, Susan Humphrey, would be happy to assist with any membership enquiries. She can be reached at membership@sigtto.org