

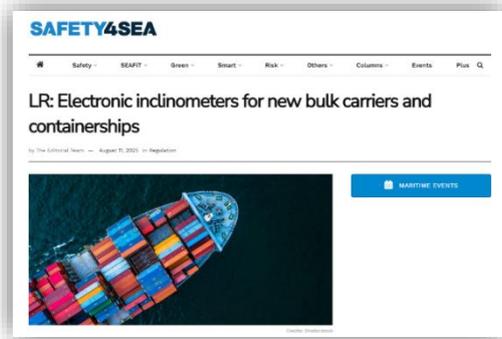
## Supplementary materials for September 2025

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## ➤ International Maritime News

### I. LR: Electronic inclinometers for new bulk carriers and containerships



Source: SAFTY4SEA.

by The Editorial Team from Safety4sea August 11, 2025 in Regulation. <https://safety4sea.com/lr-electronic-inclinometers-for-new-bulk-carriers-and-containerships/>

According to Lloyd’s Register (LR), the International Maritime Organization (IMO) has adopted the Resolution MSC.532(107) in June 2023, a new requirement (SOLAS Reg. V/19.2.12) that mandates the carriage of electronic inclinometers for new container ships and bulk carriers of 3,000 gross tonnage (GT) and upwards<sup>1</sup>.

This may enable the Voyage Data Recorder (VDR) to determine, display, and record the ship’s roll motion and provide critical information about operational stability. The new regulations will come into force on 1st January 2026.

#### ➤ The definitions of SOLAS

In SOLAS, the following definitions were added to Chapter V (Safety of Navigation):

- “*Bulk carrier*”: as defined in regulation XII/1.1, this means “a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers and combination carriers”.
- “*Container ship*”: this means a ship that is intended primarily to carry containers. (Referring to the term "container" as defined in article II of the International Convention for Safe Containers (CSC), 1972.)

#### ➤ Applicability for the New Regulation

1. The amendments apply to new container ships and bulk carriers of 3,000 GT and above constructed (keel laid) on or after 1 January 2026.
2. It does not apply to existing bulk carriers and container ships, nor to cargo ships occasionally carrying cargo in bulk and general cargo ships carrying containers on deck.

<sup>1</sup> The RESOLUTION MSC.532(107) has adopted in June, 2023, amendment for SOLAS Chap V Safety of Navigation. “*Regulation 19.2.12 Containerships and bulk carriers of 3,000 gross tonnage and upwards constructed on or after 1 January 2026 shall be fitted with an electronic inclinometer, or other means, to determine, display and record the ship's roll motion.*”

### ➤ **Vessel's Safety certificates and records**

According to Resolution MSC.534(107), there are amendments and supplements to the content and form of the SOLAS Cargo Ship Safety Equipment Certificate (SE):

- In the options of "Type of Ship," a new entry, "Containership," is added after "Gas carrier."
- The Record of Equipment for Cargo Ship Safety under the Table of "3. Details of navigational systems and equipment."

IMO amended and also simplified the section relating to Immersion Suit in the following safety equipment-related records:

1. Record of Equipment for **Cargo Ship Safety (Form E or C)**, in the table for "Details of life-saving appliances", entries 9 to 9.2 are amended.
2. Record of Equipment for **Passenger Ship Safety (Form P)**, in the table for "Details of life-saving appliances", entries 10 to 10.2 are amended.
3. Record of Equipment for the **Special Purpose Ship Safety Certificate (Form SPS)**, in the table for "Details of life-saving appliances", the Number of immersion suits from 8 to 8.2 is amended.
4. Amendments to the International Code of Safety for **High-Speed Craft (HSC Code)** Record of Equipment for High-Speed Craft Safety Certificate, in the table for "Details of life-saving appliances", entries 9 to 10.2 are amended as follows: Item 9 as **Number of immersion suits**, and item 10 as **Number of anti-exposure suits**.

Further details, see IMO the meeting document of MSC 107 Resolutions MSC.532(107), MSC.533(107), MSC.534(107), MSC.536(107), MSC.537(107), MSC.542(107), and MSC.543(107)<sup>2</sup>.

### ➤ **Recommendation for owners and operators**

**Since 1 January 2026, the new requirements will be applied to certain vessels. The shipowners, ship operators, masters, and officers of applicable ships should consult the surveyors before the date to make sure:**

- The vessel's certificate and record of safety equipment indicate the amendments where applicable.
- Electronic inclinometers are type approved to Resolution MSC.363(92) – Performance Standards of Electronic Inclinometers.

<sup>2</sup> Res. MSC.532(107): Amendments to SOLAS Ch.'s II-1, II-2, V, XIV, SOLAS 74' certificates and record of equipment (Form P, E and C);

Res. MSC.533(107) Amendment to SOLAS 78 Protocol certificate (CEC);

Res. MSC.534(107) Amendments to SOLAS 88 Protocol certificates (CEC and CSC);

Res. MSC.536(107) Amendments to the 1994 HSC Code, Ch. 7 and Record of equipment;

Res. MSC.537(107) Amendments to the 2000 HSC Code, Ch. 7 and Record of equipment;

Res. MSC.542(107) Amendments to the 1983 SPS Code.

## II. MMMCZCS: Countdown for the IMO Process Works for the NZF

From Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping (MMMCZCS) Countdown: How the IMO Process Works for the NZF. (Sep 3, 2025). <https://www.zerocarbonshipping.com/imo-net-zero-framework>



Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping (MMMCZCS) had reviewed the International Maritime Organization (IMO) Net-Zero Framework (NZF).

In the bigger picture, the IMO Net-Zero Framework (IMO NZF) will become a new chapter under MARPOL Annex VI if adopted at MEPC/ES.2 in October 2025. Next step, there may be a series of guidelines that need to be developed by 2028 for the effective implementation of the IMO NZF. Understanding these processes of IMO may help the industry prepare for the first year of reporting from 1 January 2028.

### ➤ The process for the IMO NZF

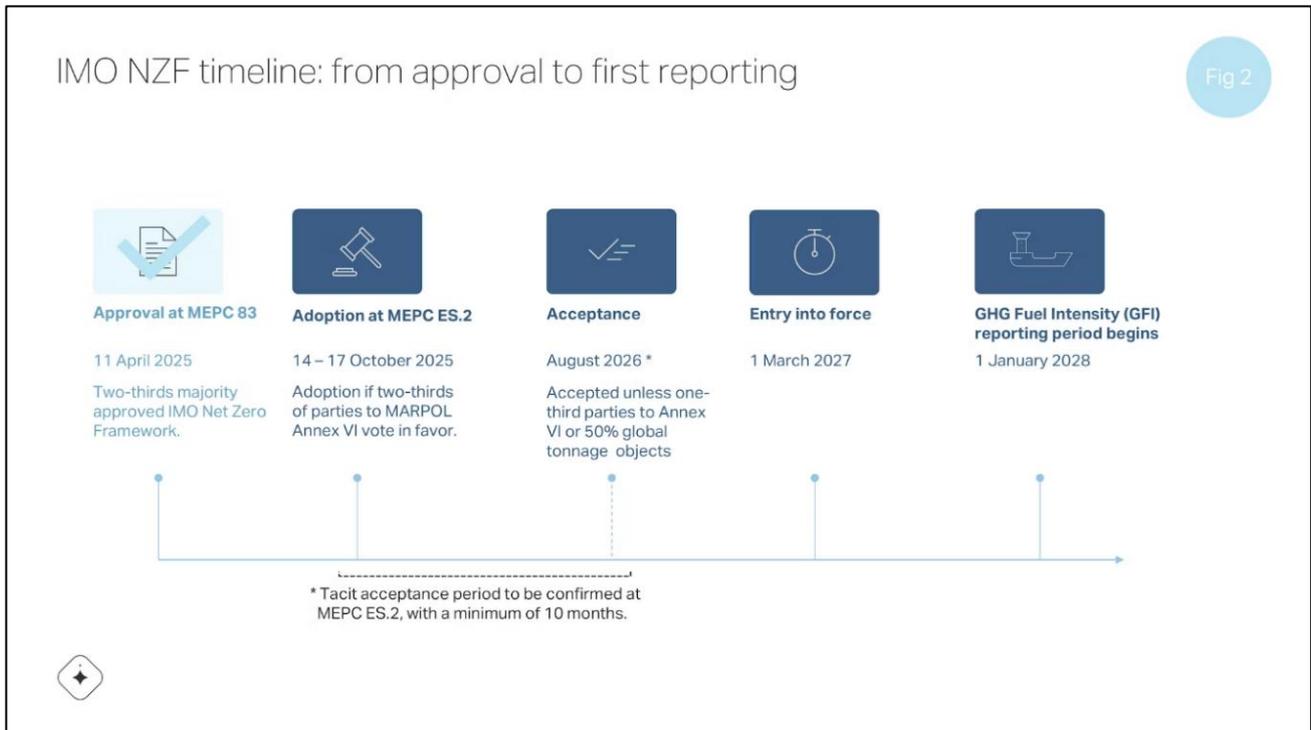


Figure 1 IMO NZF timeline (Source: MMMCZCS)

From Figure 1, the IMO Net Zero Framework, as draft amendments to *the International Convention on the Prevention of Pollution from Ships (MARPOL) Annex VI*, was approved at the Marine Environment Protection Committee 83<sup>rd</sup> session (MEPC 83) in April 2025. After approval and adoption of the first meeting report, the next step will be an adoption vote to be held in October.

Normally, the IMO makes decisions by consensus, so it was unusual for a vote to be called for on this occasion. In total, there were 103 states that voted, with 63 positive votes, 16 negative votes, and 24 abstentions. As the abstentions didn't count, this vote reached the requirement for a simple majority of 40. With 176 Member States in the IMO, these voting numbers may seem low at first glance. However, according to the credentials and voting rights, only 118 states were eligible to vote, and 15 of these were absent on the voting day.

This April (2025), the IMO Secretariat had circulated the IMO NZF as draft amendments to the IMO Member States for consideration. And this October, there will be an extraordinary session of MEPC (MEPC/ES.2) to mark the end of the 6-month consideration period, and to present the adoption of the amendments. While adoption is also typically done by consensus, with a vote taking place in April, another call for a vote is likely to take place at MEPC/ES.2. Only states party to MARPOL Annex VI are entitled to vote on adoption, and at least a two-thirds majority is required for the amendments to be passed.

Those draft guidelines are related to the IMO NZF and will go through a development and consideration phase before finalization and adoption at the IMO. This work is often done in between IMO meetings by written communication in so-called 'correspondence groups' which may be established by MEPC for a specific task and period. Correspondence group participation is open to all IMO Member States and observer organizations that have relevant expertise or a particular interest in the topic at hand. IMO observer organizations will support the working process of the IMO, providing technical assistance and expertise in the development of the guidelines.

There will be a "lead country/organization" or designated by the IMO Secretariat to coordinate the work of the correspondence group, and terms of reference are agreed on by the relevant Committee or Sub-committee. The output of a correspondence group is a consolidated

draft of the Guidelines reflecting the information received from participating members. Reports may be submitted to the relevant parent body in advance of meetings.

As per Convention amendments, only the Member States have the final right to approve or adopt Guidelines. Guidelines are either approved by a Committee and circulated as a Circular letter or adopted and issued as a Committee resolution.

For the IMO NZF, approximately sixteen guidelines are to be developed or revised (Figure 2). The IMO Secretariat has prepared a draft work plan (see Figure 3), which will be considered by the MEPC at its extraordinary session in October 2025. The guidelines work plan will be developed for the period from 2025 to 2027 across MEPC/ES.2, 84, 85, and 86. These guidelines can be grouped under 6 categories, shown in Figure 2.

Summary and scheduled adoption of IMO NZF guidelines		
Category	Guideline(s)	Expected Adoption
GHG Fuel Intensity (GFI) and GFI compliance approaches	<ul style="list-style-type: none"> <li>Calculation of the attained annual GFI</li> <li>Annual GFI compliance approaches</li> <li>Reporting and verification of the annual GFI</li> <li>(Submission of data for GFI of ships from a state not party to MARPOL Annex VI -- guidance rather than guideline)</li> </ul>	MEPC 85 (November 2026)
"Zero- or near-zero GHG emission technologies, fuels and/or energy sources" (ZNZs)	<ul style="list-style-type: none"> <li>Evaluation, approval, and monitoring of ZNZ uptake</li> <li>Definition of ZNZ rewards and methodology for rewards</li> </ul>	MEPC 85
GFI Registry	<ul style="list-style-type: none"> <li>Development, management, and operation of IMO GFI Registry</li> <li>Determination of the annual IMO GFI Registration administration fee</li> <li>Functioning and access to the IMO GFI Registry</li> </ul>	<ul style="list-style-type: none"> <li>MEPC 85</li> <li>MEPC 86 (Q2 2027)</li> <li>MEPC 85</li> </ul>
Further development of the GHG Lifecycle Analysis (LCA) Framework and emissions measurement	<ul style="list-style-type: none"> <li>Requirements and procedures for recognition of certification schemes and reporting of certification activities of the Organization</li> <li>Testbed and onboard measurements of methane (CH<sub>4</sub>) and/or nitrous oxide (N<sub>2</sub>O) emissions from marine diesel engines</li> <li>Certification and circulation of information in the fuel life cycle label.</li> <li>Amendments to the LCA Guidelines</li> </ul>	<ul style="list-style-type: none"> <li>MEPC 84 (May 2026)</li> <li>MEPC 84</li> <li>MEPC 85</li> <li>MEPC 86</li> </ul>
Amendments to existing guidelines and procedures	<ul style="list-style-type: none"> <li>2024 Ship Energy Efficiency Management Plan (SEEMP) Guidelines</li> <li>Guidelines for the verification and company audits by Administration of Part III of the SEEMP</li> <li>Harmonized System of Survey and Certification (HSSC)</li> </ul>	MEPC 85
Onboard Carbon Capture and Storage (OCCS)	<ul style="list-style-type: none"> <li>Testing, survey, and certification of OCCS</li> </ul>	MEPC 85

Figure 2: Summary and scheduled adoption of guidelines under development and revision as part of the IMO Net-Zero Framework. (Source: MMMCZCS)

➤ **The work plan for developing the IMO NZF**

In addition to guidelines, the IMO must complete work in several other areas of the IMO NZF. These include the development of the IMO Net-Zero Fund, procedures for Port State Control (PSC), and the mechanism for setting and reviewing the price of Remedial Units (RU).

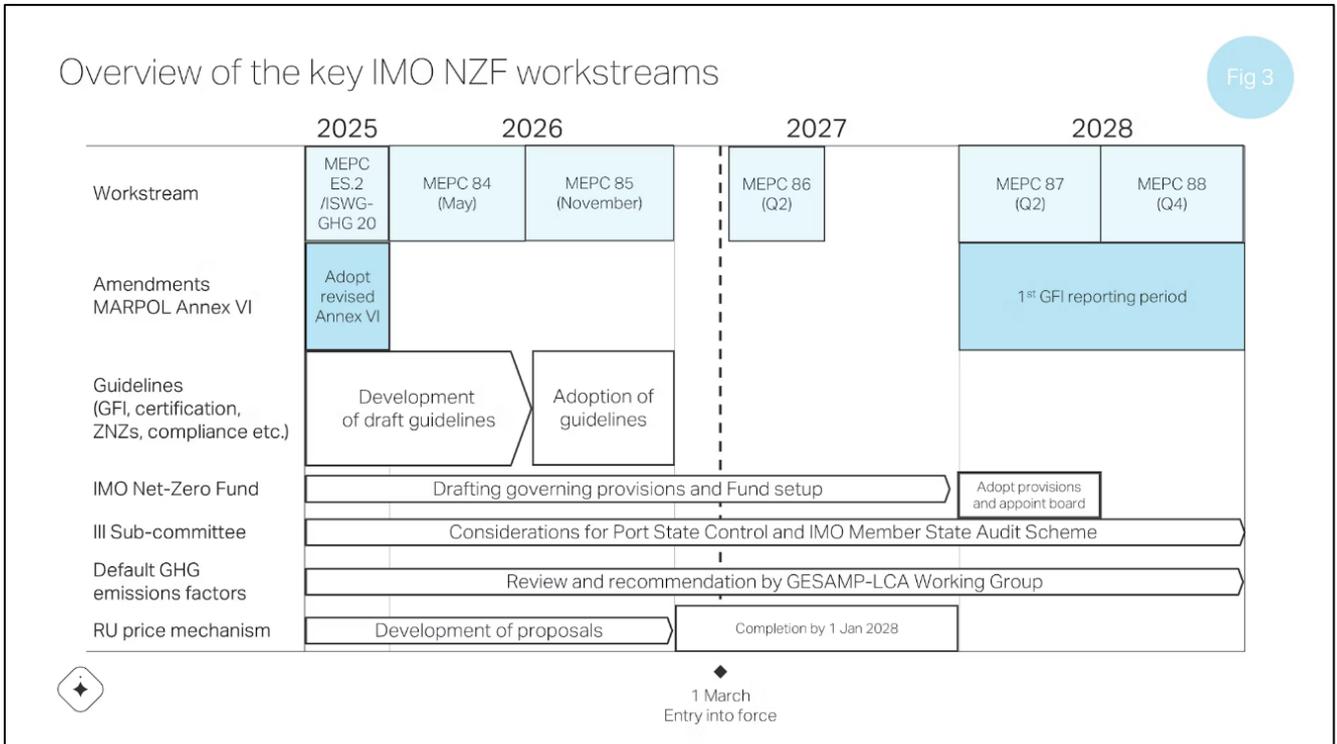


Figure 3 IMO NZF future work plan (Source: MMMCZCS)

Figure 3 shows the overview of the key workstreams for developing the IMO Net-Zero Framework over the coming years. The figure is adapted from the draft work plan in document MEPC/ES.2/3. Workstreams for energy efficiency and short-term measures have been excluded.

- GFI = GHG fuel intensity;
- ZNZs = zero or near-zero GHG emission technologies, fuels, and/or energy sources,
- III = Implementation of IMO Instruments, RU = Remedial Unit (the penalty for non-compliance);
- ISWG-GHG = Intersessional Working Group on Reduction of GHG Emissions from Ships;
- GESAMP = Group of Experts on the Scientific Aspects of Marine Environmental Protection; LCA = life-cycle analysis.

A draft work plan has been submitted by the IMO Secretariat and will be reviewed by Member States at MEPC/ES.2 in this October.

● **References**

1. Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping (MMMCZCS). Countdown: How the IMO Process Works for the NZF. (Sep 3, 2025). <https://www.zerocarbonshipping.com/news/countdown-how-the-imo-process-works-for-the-nzf>
2. SAFETY4SEA. LR: Electronic inclinometers for new bulk carriers and containerships. <https://safety4sea.com/lr-electronic-inclinometers-for-new-bulk-carriers-and-containerships/>
3. SAFETY4SEA, UNCTAD: Global trade endures policy changes and uncertainty. MMCZCS: What we know so far about the IMO Net-Zero Framework. (Sep 4, 2025). <https://safety4sea.com/mmmczcs-what-we-know-so-far-about-the-imo-net-zero-framework/>

## ➤ International Maritime Organization Meeting Highlights

### I. The Sub-Committee on Carriage of Cargoes and Containers 11th session, (CCC 11)

The CCC 11th session meeting is held from September 8th to 12th, 2025.

#### 1. About CCC<sup>3</sup>

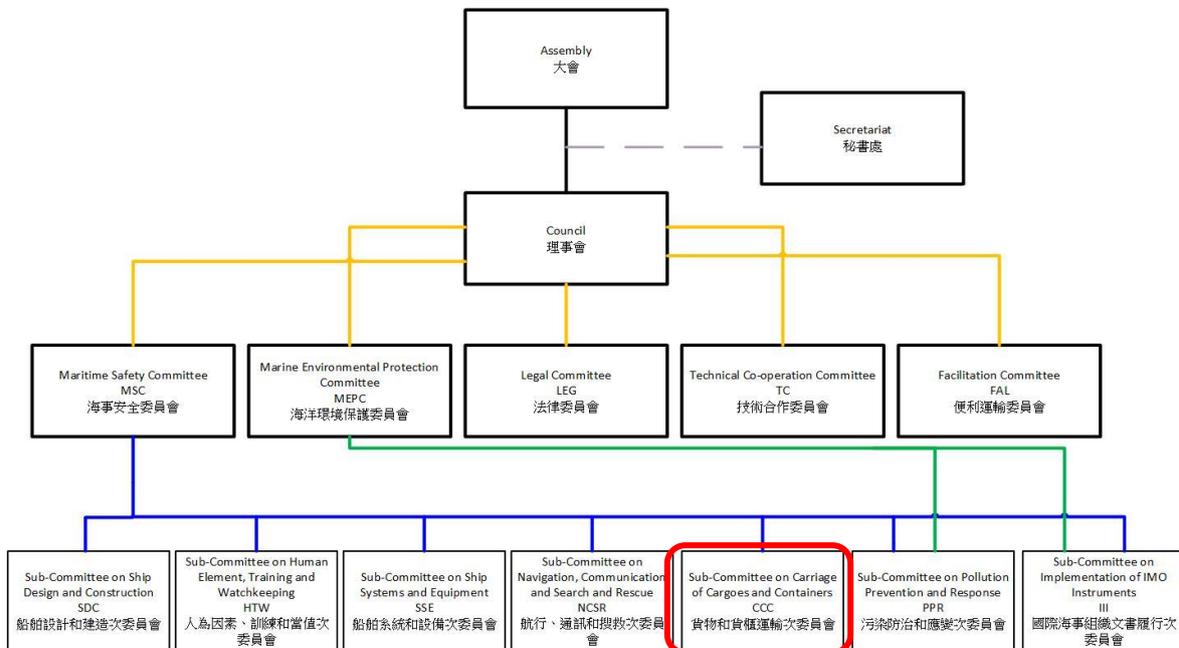


Figure 1 Organization Structure of IMO (CCC)

The CCC Sub-Committee mainly handles the carriage of packaged dangerous goods, solid bulk cargoes, bulk gas cargoes, and containers. CCC keeps the International Maritime Solid Bulk Cargoes Code (IMSBC Code) and the International Maritime Dangerous Goods (IMDG) Code updated.

It also keeps under review other Codes, including the International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code) and the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code). The Sub-Committee closely collaborates with other UN bodies dealing with the multimodal transport of goods.

#### 2. CCC 11 Highlights

- (1) Finalized the draft amendment for Interim Guidelines for the use of ammonia cargo

<sup>3</sup> IMO. Sub-Committee on Carriage of Cargoes and Containers (CCC).

<https://www.imo.org/en/mediacentre/meetingsummaries/pages/ccc-default.aspx>

as fuel;

- (2) Finalized the draft amendment for Interim Guidelines for the safety of ships using hydrogen as fuel;
- (3) Finalized the draft amendment for Interim Recommendations for the carriage of liquid hydrogen in bulk;
- (4) Set up the work plan and the priority for the amendments to the IGF Code and development of guidelines for alternative fuels and related technologies.
- (5) Finalized the amendments to the IGC Code;
- (6) Promoting the amendments work of the IMSBC Code and the IMDG Code supplements;
- (7) Reach a consensus on a work plan for addressing the issue of lost containers at sea.

### 3. CCC 11 Agenda

Table 1 CCC 11 Agenda

Item No.	Agenda
1	Adoption of the agenda
2	Decisions of other IMO bodies
3	Amendments to the IGF Code and development of guidelines for alternative fuels and related technologies
4	Development of guidelines for the use of ammonia cargo as fuel and provisions for the use of alternative fuels other than cargo on gas carriers
5	Amendments to the IMSBC Code and supplements
6	Amendments to the IMDG Code and supplements
7	Revision of the Revised guidelines for the preparation of the Cargo Securing Manual (MSC.1/Circ.1353/Rev.2) to include a harmonized performance standard for lashing software to permit lashing software as a supplement to the Cargo Securing Manual
8	Consideration of reports of incidents involving dangerous goods or marine pollutants in packaged form on board ships or in port areas
9	Unified interpretation of provisions of IMO safety, security, and environment-related conventions
10	Development of measures to prevent the loss of containers at sea

Item No.	Agenda
11	Revision of the Interim recommendations for carriage of liquefied hydrogen in bulk
12	Biennial status report and provisional agenda for CCC 12
13	Election of Chair and Vice-Chair for 2026
14	Any other business
15	Report to the Committees

(Source: IMO/ CCC 11/1/1)

#### 4. CCC 11 Meeting Summaries

The CCC 11th session was held from September 8th to 12th, 2025, at the IMO Headquarters in London. There are 3 Working Groups (WGs), a draft Group (DG), and an expert group (EG) formed at CCC 11.

Each group was tasked to deal with actions emanating from allotted agenda items, in a manner to best distribute the workload as follows:

- Working Group 1 (WG 1) to deal with Agenda Item 3, developing guidelines for alternative fuels and related technologies.
- Working Group 2 (WG 2) to deal with guidelines for the use of ammonia cargo as fuel and provisions for the use of alternative fuels other than cargo on gas carriers (Agenda Item 4);
- Working Group 3 (WG 3) to deal with the prevention of the loss of containers at sea, revision of MSC.1/Circ.1353/Rev.2, and development of performance standards and guidelines for lashing software (Agenda Items 7 and 10);
- The draft Group (DG) to deal with the revision of the interim recommendations for the carriage of liquefied hydrogen in bulk (Agenda Item 11);
- Expert Group (EG) to deal with the IGC Code Amendments (Agenda Item 15).

Group type	Main work
Working Group 1 (WG 1)	Development of guidelines for alternative fuels and related technologies
Working Group2 (WG2)	Development of guidelines for the use of ammonia cargo as fuel and provisions for the use of alternative fuels other than cargo on gas carriers
Working Group3 (WG 3)	Prevention of the loss of containers at sea, revision of MSC.1/Circ.1353/Rev.2, and development of performance standards and guidelines for lashing software

Group type	Main work
Draft Group (DG)	Revision of the interim recommendations for carriage of liquefied hydrogen in bulk
Expert Group (EG)	IGC Code Amendments

Key outcomes for CCC 11 are as follows:

**(1) Amendments to the IGF Code and development of guidelines for alternative fuels and related technologies**

To promote the decarbonization of the maritime industry and enhance safety considerations in the development of new fuels and technologies, the CCC sub-committee has been continuously working on the task of "establishing a safety regulatory framework to support the reduction of greenhouse gas (GHG) emissions by ships using new technologies and alternative fuels".

This guideline covers all the functional requirements and detailed regulations of the 20 chapters, including definitions; the supply of fuel to consuming equipment, power generation (including propulsion) and other fuel-consuming devices; fire safety and explosion prevention measures; ventilation and electrical installations; control, monitoring and safety systems; manufacturing, construction quality and testing; drills and emergency exercises, operation and personnel protection, etc. The guidelines are limited to liquefied hydrogen concepts, as well as portable compressed and fixed compressed hydrogen.

CCC 11 has finalized the draft amendments to *the Interim Guidelines for the Safety of Ships Using Hydrogen as Fuel*, and may further develop and describe the existing design principles and functional requirements more specifically. The interim guidelines will be submitted to MSC 111 (May 2026) for approval.

The updated IGF Code has established a new work plan for the development of alternative fuels, among which the following have been listed as high priorities:

- ①. Revision of the *Interim Guidelines for the safety of ships using methyl/ethyl alcohol as fuel* (approval expected in 2027);
- ②. Revision of the *Interim Guidelines for the safety of ships using fuel cell power*

installations (approval expected in 2028);

- ③. Development of the *Interim Guidelines for the safety of ships using onboard carbon capture and storage systems* (approval expected in 2029).

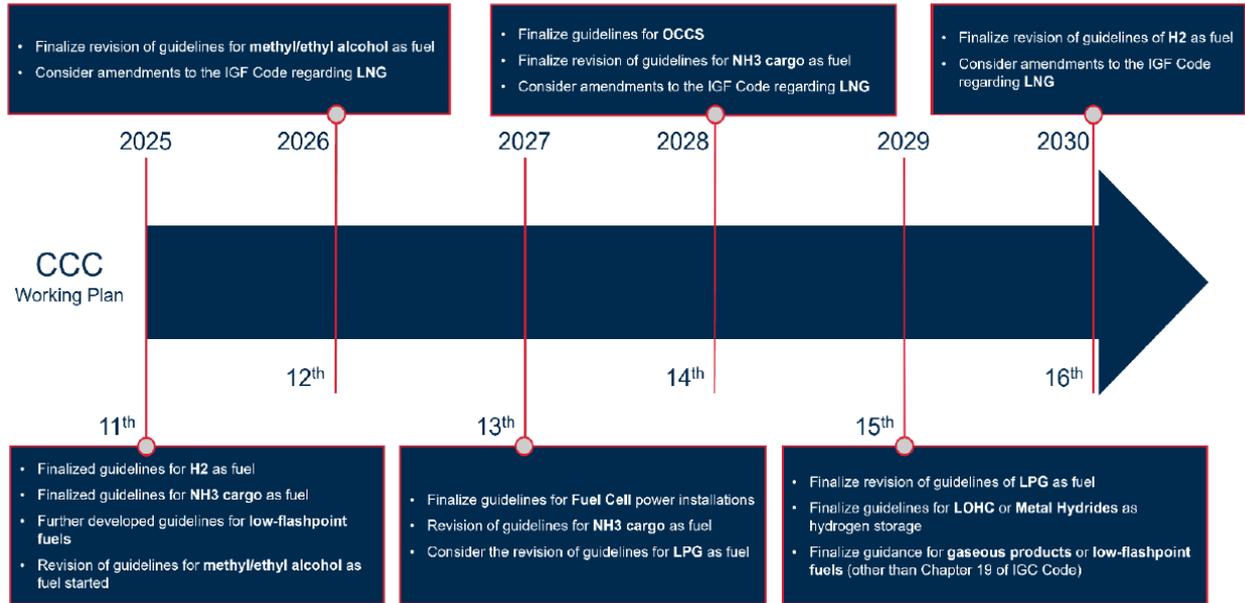


Figure 1: CCC Work Plan

Figure 4 CCC Sub-committee Working Plan

Source: ABS, 2025.NEWS BRIEF: CCC 11: P.4 Figure 1: CCC Work Plan.

## (2) Amendments to the IGC Code

MSC 110 reviewed the amendment to the IGC Code. However, in the related draft documents concerning fire protection, protective ventilation, and personnel safety, it was discovered that there were important amendments that required additional technical assessment. Therefore, the unfinished amendments were handed over to the CCC sub-committee for further review.

CCC11 had finalized the amendments identified as follows, related to:

- ①. Gas-tightness of closing devices for new ships
- ②. Weld design for type A and type B independent tanks, primarily constructed of plane surfaces
- ③. Cargo Manifold Connection emergency shut-down valves
- ④. Calculation of the maximum capacity of the emergency fire pump

- ⑤. High-level liquid alarm and automatic shut-off of cargo filling
- ⑥. Special consideration to density and lower flammability limit (LFL) for spaces outside the cargo space containing LPG or ethane fuel systems, and double block and bleed arrangements for fuel piping
- ⑦. Pressure relief systems for gas-fired internal combustion engines, and enclosure requirements for LPG gas turbines
- ⑧. Alternative fuels and technology – use of cargo gases not covered by 16.1.1 (LNG) as fuel

The draft amendments will be submitted to MSC 111 (May 2026) with a view to adoption by MSC 112 in December 2026, and may enter into force on 1 July 2028.

### **(3) The draft for *the Interim Guidelines for the use of ammonia cargo as fuel***

CCC 11 had finalized the draft of *the Interim Guidelines for the Use of Ammonia Cargo as Fuel*. The *Interim Guidelines* may provide guidance to ensure the safe handling of ammonia as fuel, with a main focus on issues outside cargo areas to ensure safety for the crew and ship. It will be further approved by MSC 111 in May 2026.

It may apply to gas carriers as defined in SOLAS regulation VII/11.2 using ammonia cargo as fuel and complying with the IGC Code. The *Interim guidelines* may be a supplement to the existing provisions of Chapter 16 of the IGC Code and are applicable outside the cargo area in accordance with 16.4.1.1 of the IGC Code.

As a goal-based document that will provide guidance on safe and reliable operation of fuel supply systems and consumers for the use of ammonia cargo as fuel. The overall design and configuration of the ammonia fuel system must demonstrate a safety level comparable to that of natural gas, and the system configuration requirements must be established.

Topics on the arrangements of spaces containing ammonia fuel consumers, ammonia fuel supply, fuel plant ventilation, liquid/gas detection, alarms and shutdowns, and combustion equipment, etc., more specific requirements will be given by the instruments

#### (4) Amendments to the IMSBC Code supplements

MSC 110 had adopted the latest amendments 08-25 as resolution MSC.575(110) in June 2025. Following the adoption, CCC 11 had considered the report of the 41st meeting of its Editorial and Technical Group (E&T 41), which met in September 2024.

The matters related to fumigated cargo holds were discussed, and it was agreed that a new output on the safe use of pesticides and fumigation practices in cargo holds is needed, considering key areas for improvement, such as continuous gas detection and enhanced risk controls during pre-loading inspections

CCC 11 had finished the discussion on the following shipping items, and the outcome had been forwarded to the E&T 44 in Spring 2026, which will be incorporated into the draft amendment to the IMSBC Code 09-27:

- ①. bituminous granulates coarse;
- ②. bituminous granulates fine;
- ③. calcium carbonate/lime mud;
- ④. mullite;
- ⑤. kaolinite.

The draft amendments to the IMSBC Code 9-27 are expected to be adopted in 2027, MSC 113. By the way, there were other issues that had been discussed and forwarded to E&T 44 for consideration and to provide advice to CCC 12:

- ①. Contaminated Soil PFAS in bulk;
- ②. International Maritime Solid Bulk Cargoes Code (IMSBC Code), but shipped based on provisional assessments in GISIS.

#### (5) Amendments to the IMDG Code and supplements

CCC 11 had reviewed the improvements of stowage provisions for vehicles and forwarded the topic to E&T 43, to be held directly after CCC 11, for discussion and incorporation into the draft amendment 43-26 of the IMDG Code, which is expected to be adopted at MSC 111 in May 2026.

The following issues were discussed and forwarded to E&T 43 for consideration

and to provide advice to CCC 12:

- ①. Amendments to table 7.1.4.5.18 of the IMDG Code (Class 7 – Radioactive material Segregation table for persons) - to clarify the requirements for segregation distances between radioactive material and passengers and crew;
- ②. Diesel Fuel- inconsistency in multimodal transport of diesel fuel, and whether it should follow the strictest classification standard across the whole route when part of a multimodal transport chain;
- ③. Container/vehicle packing certificate - certification for the filling of portable tanks and road tank vehicles
- ④. EMS Guide - draft consequential amendments to the Revised Emergency Response Procedures for Ships Carrying Dangerous Goods (EMS) Guide, to adapt from the draft amendment 43-26;
- ⑤. Control temperature of flammable liquids having a flashpoint below 23°C - proposal for indicating the control temperature in a non-explosion-proof refrigerating system in the transport document;
- ⑥. Review of the effectiveness of SOLAS regulation VII/3 (carriage of dangerous goods) – based on numerous findings related to the lack of effective implementation of SOLAS regulation VII/3 and provisions of the IMDG Code identified during IMSAS audits;
- ⑦. Safe transporting of the vehicles - state-of-charge (SOC) limits for electric vehicle (EV) batteries, prohibition of the charging of EVs on board the ship, inclusion of hybrid-powered vehicles and small electric vehicles (e.g., hoverboards and e-scooters).

## **(6) A Harmonized Performance Standard for Lashing Software**

CCC 11 had reviewed and noted the Correspondence Group (CG)'s discussion and the progress made in the draft revision of MSC.1/Circ.1353/Rev.2 and the development of draft performance standards for lashing software. In the deliberations, CCC 11 had considered whether lashing software should replace the Cargo Securing Manual (CSM) and whether it should be made mandatory.

CCC had agreed that while lashing software would provide automated real-time assessment of container securing, it should be used as a supplementary tool rather than to replace the CSM. It is a tool similar to how loading instruments supplements stability manuals. Furthermore, it was agreed that making lashing software compulsory was not

supported at the current stage due to reasons such as high cost, operational challenges, and insufficient evidence of safety benefits, especially for smaller or older vessels, and that lashing software could only become mandatory through an amendment to SOLAS.

CCC 11 agreed that the text on lashing software, considering the revision of *the Revised Guidelines for the Preparation of the Cargo Securing Manual* (MSC.1/Circ.1353/rev.2), should only be introduced in the new annex on the performance standards for lashing software, containing solely a reference to this annex. The annex on performance standards for lashing software will apply to new containerships after approval by MSC of the revised circular. The work will be carried out continuously by the Correspondence Group to prepare the final draft for review at the CCC 12 in 2026.

#### **(7) Unified Interpretation (UI) of the provisions of the IMO safety**

CCC 11 had agreed on the revised draft Unified Interpretation (UI) of paragraphs 4.4.1, 4.5, 4.6.2.1, and 4.6.2.4 of the IGC Code, paragraphs 4.7.1, 4.7.3, 4.7.4.1, and 4.7.7 of the IGC Code related to secondary barrier testing and effectiveness assessment for membrane containment systems on gas carriers. The UI will be submitted to the MSC 111 in May 2026 for approval.

CCC 11 had noted that the International Association of Classification Societies (IACS) has published the following UIs:

- ①. IACS UI GF 21 of paragraph 11.7.1 of *the Interim Guidelines for the safety of ships using methyl/ethyl alcohol as fuel* (MSC.1/Circ.1621);
- ②. IACS UI GF 22 of paragraph 9.6.1 of the IGF Code to clarify the use of gas fuel vent pipes of single-walled constructions in machinery spaces.

#### **(8) Measures to prevent the loss of containers at sea**

Due to the issues keep happening on container losses at sea and the danger they pose to shipping, the Marine Safety Committee 108 adopted amendments to SOLAS Chap V, which require reporting of freight containers lost at sea or observed adrift at sea by the shipmaster to the ships in the vicinity, the nearest coastal state and to report the loss of containers to the flag state. Also, SOLAS regulation V/31 requires that the

flag State reports incidents of lost containers to the IMO, and Member States are to submit their reports using an online template while the IMO develops an electronic reporting solution through the Global Integrated Shipping Information System (GISIS) platform.

CCC 11 had discussed the draft circular, which provides a reporting template in the event of loss of containers as per SOLAS regulations V/31 and 32. Furthermore, a template for the reporting of the observation of freight container(s) drifting at sea is provided. However, Member States and international organizations are welcome to consider the templates and to submit proposals in this respect to the next session of the MSC.

CCC 11 had prepared a working plan for progressing the measures to prevent the loss of containers at sea, which were grouped into five main topics:

- ①. Operational guidance and limitations
- ②. Conditions for operating at sea
- ③. Loading, stowage, validation, and planning
- ④. Calculation technical standards and container securing gear properties and related inspection programmes
- ⑤. Container properties and related inspection programmes

CCC 11 invited all interested parties to prepare new output proposals on the topics identified in the working plan.

**(9) Revision of the *Interim Recommendations for the carriage of liquefied hydrogen in bulk***

Vessels that engage in the bulk transportation of liquefied hydrogen shall comply with the relevant sections of the IGC Code. However, the Code requires gas carriers to comply with the minimum requirements for the cargo listed in Chapter 19. For hydrogen, the minimum requirements can be found in the Annex containing the *Interim Recommendations for carriage of liquified hydrogen in bulk*.

CCC 11 had finalized the draft revision of the Interim Recommendations. A new

Part D was added to include safety requirements specific to membrane-type<sup>4</sup> cargo containment systems (CCS) with insulation spaces under vacuum. The amendments included definitions for the primary insulation space and secondary insulation space, and structural integrity of components, vacuum control in the insulation space, and emergency control. It is expected that the MSC 111 will adopt the draft amendments.

Furthermore, CCC 11 also invited the member states to submit a new proposal for an output, aiming to establish regulations for the training requirements for the carriage of liquefied hydrogen in bulk.

## 5. Recommendations for CCC 11

CCC 11 has completed the draft amendments for “*Interim guidelines for the safety of ships using hydrogen as fuel*”, “*Interim Guidelines for the Use of Ammonia Cargo as Fuel on Gas Carrier*,” and “*Interim Recommendations for carriage of liquefied hydrogen in bulk*”, as well as setting the revision of “*Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel (MSC.1/Circ.1621)* ” and “*Interim Guidelines for safety of ships using fuel cell power installations*”, and developing of “*Interim guidelines for safety of ships using onboard carbon capture and storage systems*” as the subsequent high-priority work items. This indicates that with the development trend of maritime decarbonization and the expectation of achieving net-zero emissions by 2050, the emergence and gradual application of new technologies and alternative fuels in practice have made the need for establishing a relevant safety regulatory framework increasingly urgent.

IMO has formulated corresponding safety Interim Guidelines for different alternative fuels. It is recommended that the competent authorities continue to pay attention to the safety regulations for ships using various alternative fuels and the development of requirements for professional operation and training of crew members, formulate domestic safety regulatory guidelines or provisional guidelines, and assess the update of crew professional training courses to ensure that ships, crew members, and port safety all comply with international norms and reduce the risk of related maritime accidents.

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<sup>4</sup> Membrane-type cargo tank is a non-self-supporting containment system used for liquefied gases, especially for carrying Liquefied Natural Gas (LNG), and Liquefied Hydrogen (LH2) as the cargo, with a very thin metal membrane that acts as the primary barrier.

## 6. Next Meeting Schedule

CCC 12 is scheduled to be held from May 13th to 22<sup>nd</sup> in 2026.

## 7. References

- American Bureau of Shipping (ABS), News Brief: CCC 11. [https://absinfo.eagle.org/acton/ct/16130/s-10fc-2507:0/Bct/q-039a/l-0393:3d82d/ct1\\_0/1/lu?sid=TV2%3AAPNmI7lmX](https://absinfo.eagle.org/acton/ct/16130/s-10fc-2507:0/Bct/q-039a/l-0393:3d82d/ct1_0/1/lu?sid=TV2%3AAPNmI7lmX)
- Det Norske Veritas (DNV), IMO CCC 11: Interim guidelines for hydrogen as fuel completed. <https://www.dnv.com/news/2025/imo-ccc-11-interim-guidelines-for-hydrogen-as-fuel-completed/>
- InterManager, Summary Report on IMO Sub-Committee meeting CCC 11. <https://www.intermanager.org/2025/09/re-imo-sub-committee-meeting-ccc-11-8-12-september-2025-167827/>
- Lloyd's Register (LR), IMO Carriage of Cargoes & Containers (CCC 11) Summary Report. <https://maritime.lr.org/e/941163/CCC-11-Summary-Report/cn3r5/1062281578/h/Bt9wwmJJ5zeIDbgr9itNitpshh5vQb8tRyc5W37zYSc>
- SAFETRY4SEA. IMO CCC 11: Interim guidelines for hydrogen as fuel completed. September 18, 2025 in Fuels. <https://safety4sea.com/imo-ccc-11-interim-guidelines-for-hydrogen-as-fuel-completed/>