

I. IMO Sub-Committee on Ship Design and Construction 12th session (SDC 12)

IMO held the 12th session of the SDC from 19th January to 23rd 2026 at IMO Headquarters in London. SDC 12 meeting highlights are as follows:

1. To promote the consistent implementation of safe return to port (SRtP) requirements and related circulars, SDC 12 had agreed to the revision of the explanatory notes for passenger ships' SRtP concept and incorporate existing practical experience,.

SDC 12 had agreed to the new draft of the revision of the Explanatory Notes for “safe return to port (SRtP)” and “Orderly Evacuation and Abandonment (OEA) and related circulars, and be submitted to the Maritime Safety Committee (MSC) 111th session (May 2026) for approval.

Since the SOLAS SRtP regulations entered into force in 2010, which have profoundly impacted the design, testing, and operation of passenger ships. However, the industry has widely encountered difficulties in practical implementation.

The original Explanatory Notes (circular MSC.1/Circ.1369), issued in 2010, aimed to assist flag State Administrations in uniformly applying the SRtP requirements, providing operational guidance specifically for compliance verification and approval procedures. Nevertheless, following 16 years of practical application, inconsistencies in enforcement persist. The interpretation of various provisions and specific applicability details necessitates further clarification, which has consequently prompted the current revision process.

The scope of application of the draft amendment to this explanatory note has been further expanded by Circular MSC.1/Circ.1369, which covers the entire life cycle of passenger ships, including design, verification, testing, and operational aspects. Including the following:

- (1) aspects to be addressed in the pre-contract/early project phase;
- (2) design requirements and acceptance criteria for all SRtP and OEA systems
- (3) SRtP assessment process;
- (4) tests and trials;
- (5) documentation, verification and approval;
- (6) on-board documentation for SRtP and OEA;
- (7) high-level operational aspects.

The new draft of the revised guidance will apply to ships:

- (1) for which the building contract is placed on or after 1st January 2028, or
- (2) in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1st July 2028, or
- (3) the delivery of which is on or after 1st January 2032.

The draft revision of the Explanatory Notes will be submitted to MSC 111 (May 2026) for approval.

SDC 12 had also agreed to make the draft amendments to the explanatory note available to the 13th session of the Sub-Committee on Human Factors, Training and Duty (HTW 13) and the 12th session of the Sub-Committee on the Implementation of Instruments of the International Maritime Organization (III 12) for review on whether existing instruments within their respective mandates need to be revised accordingly. To support the implementation of the new explanatory notes.

2. Finalized the draft Guidelines on the Use of Remote Inspection Techniques (RIT) for 2011 ESP Code Surveys.

Remote inspection techniques (RIT) refer to real-time sensing devices carried by drones, remote-operated vehicles, unmanned robotic arms, divers, and climbers – they are increasingly useful tools for supporting an attending surveyor on-site when conducting inspections.

In June 2025, MSC 110 approved draft amendments to *the International Code on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code)* that permit the use of RIT during close-up surveys of existing oil tankers and bulk carriers. Subsequently, SDC 12 agreed to the draft *Guidelines on the Use of Remote Inspection Techniques*, which were submitted to MSC 111 for approval.

These guidelines will be adopted in conjunction with the relevant draft amendments to *2011 ESP Code*, to facilitate the deployment of RIT within ESP Code surveys.

The guidelines provide instructions for the safe use of remote inspection tools, such as drones or robotic devices, to assist surveyors during statutory surveys in examining hull structures that are inaccessible or present a high risk of entry; such surveys are executed in accordance with ESP Code requirements. Furthermore, they elaborate on the application of RIT in ESP Code surveys, including requirements for thickness measurement capabilities, as well as operational guidance for surveyors, shipboard personnel, RIT service suppliers, and RIT equipment manufacturers. Concurrently, the

guidelines encompass the onshore and onboard verification of RIT equipment capabilities, equipment certification, and the training requirements for RIT companies and surveyors.

3. Started the Development of Engine Control Room Alert Management (ECRAM) performance standards

SDC 12 had agreed to develop a work plan roadmap for the Performance Standards for Engine Control Room Alert Management, establishing it as a standalone instrument separate from the Bridge Alert Management standards (Resolution MSC.302(87)). These performance standards will define the design and maintenance requirements for various alert systems in a ship's Engine Control Room (ECR) to ensure safe operations under both normal and emergency conditions.

This work plan roadmap projects the finalization of the draft at SDC 14, with subsequent submission to MSC 114 for consideration and adoption in 2028. Furthermore, a correspondence group has been established to continuously advance the relevant technical and drafting work between the two sessions of meetings, with the finalization of the report by 2028.

4. Finalized the Revision of the Interim guidelines for the use of fibre-reinforced plastics (FRP) within ship structures (circular MSC.1/Circ.1574)

SDC 12 had agreed the draft amendments to the *Guidelines for the use of fibre-reinforced plastics (FRP) within ship structures: Fire Safety Issues* (circular MSC.1/Circ.1574), and will be submitted to MSC 111 for approval.

The FRP Guidelines provide technical guidance to ship designers and builders on the safe application of Fibre Reinforced Plastic (FRP) in ship structures, with particular emphasis on managing fire safety risks associated with FRP materials. Furthermore, these guidelines assist Flag State Administrations in consistently conducting fire safety testing and evaluations related to FRP materials under the "Alternative Design and Arrangements" framework, in accordance with the requirements of the SOLAS Convention.

The current draft amendments incorporate practical experience gained from fire safety evaluations in alternative design scenarios and systematically encompass the primary fire safety elements of FRP materials. These include the ignition potential of

FRP materials, fire growth potential, fire-extinguishing strategies and equipment arrangements, and the thermal insulation required to protect FRP materials and the subsequent maintenance and management.

5. A safety regulatory framework development work plan has been established in order to support the reduction of GHG emissions from ships using new technologies and alternative fuels

MSC has reviewed, from a safety regulatory perspective, potential alternative fuels and emerging technologies available for reducing ship GHG emissions, and has identified safety barriers, institutional disparities, and regulatory gaps within existing IMO instruments that may hinder their application. The Committee has assigned recommendations aimed at facilitating their safe application to the relevant sub-committees for further advancement.

In accordance with the recommendations of MSC 110, SDC 12 conducted deliberations and finalized a work plan (Figure 1) to develop a safety regulatory framework supporting the adoption of emerging technologies and alternative fuels by ships for GHG emission reduction, work which falls under the purview of the SDC Sub-Committee. This work plan will be submitted to MSC 111 for consideration and approval.

Figure 1- MSC Work Plan for the Development of a Safety Regulatory Framework to support the Reduction of GHG emissions from Ships Using New Technologies and Alternative Fuels.

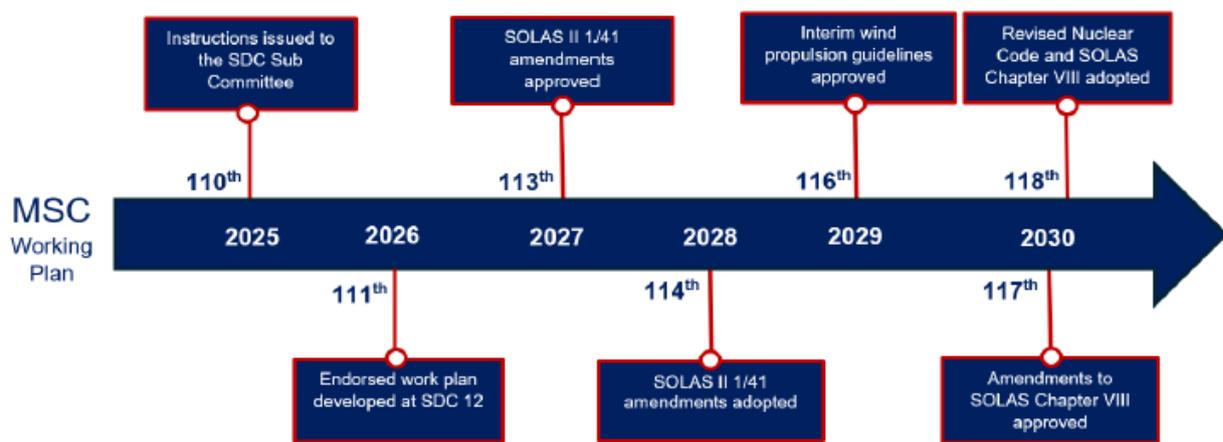


Figure 1: MSC Work Plan for the Development of a Safety Regulatory Framework to support the Reduction of GHG emissions from Ships Using New Technologies and Alternative Fuels.

(Source: ABS. *News Brief: SDC 12*, P. 5)

SDC 12 finalized a work plan roadmap timeline from 2026 to 2030 ([Table 1](#)) and added key milestones, including developing safety regulatory frameworks for nuclear, Wind-Propulsion, and wind-assisted power; lithium-ion batteries; and swappable traction battery containers on ships.

Table 1: Work plan timeline table for IMO developing regulations for Safety Framework on selected GHG-reducing technologies

Technology type	2026	2027	2028	2029	2030
Nuclear Power (revision of the Nuclear Code and amendments to SOLAS chapter VIII)					SDC 16 Finalization MSC 117 Approval MSC 118 Adoption
Wind-propulsion (interim guidelines)	MSC 111 approve the work plan			SDC 15 Finalization MSC 116 Approval	
Li-ion batteries (amendments to SOLAS II-1/41)		SDC 13 Draft finalization MSC 113 Approval	MSC 114 Adoption		
Swappable traction batteries (containerized swappable batteries)			SDC 14 Decision: Unified interpretation, or guidelines, on design and installation		

The work plan had included some key milestones:

- I. 2026: MSC 111 may endorse the workplan developed at SDC 12.
- II. 2027:
 - ①. Finalization of amendments to SOLAS Chap II-1 (construction-fire protection, fire detection and fire extinction) regulation 41 ([Note 1](#)) to allow for batteries to be used as the main source of electrical power and lighting systems.
 - ②. Approval of amendments to SOLAS Chap II-1/regulation 41 to allow for batteries to be used as the main source of electrical power.

III. 2028:

- ①. SDC 14 to decide on whether to develop a unified interpretation, or guidelines, on installation requirements for a safety approval plate in battery containers, and, referring to SP389 ([Note 2](#)), storage and safety requirements for lithium-ion batteries in a swappable container.
- ②. MSC 114 to adopt the amendment to SOLAS Chapter II-1 regulation 41: to allow batteries to be used as the main power source and power source for lighting systems.

IV. 2029:

- ①. SDC 15 will finalize the Interim Guidelines for the safety of ships using wind propulsion and wind assisted power;
- ②. MSC 116 to approve of Interim Guidelines for the safety of ships using wind propulsion and wind-assisted power.

V. 2030 年：

- ①. SDC 16 will finalize the revised Code of Safety for Nuclear Merchant Ships, (Nuclear Code) and amendments to SOLAS chapter VIII;
- ②. MSC 117 to approve the amendments to SOLAS chapter VIII;
- ③. MSC 118 to adopt the revised Nuclear Code and amendments to SOLAS chapter VIII.

A Correspondence Group (SDC Correspondence Group on GHG Safety) was established to further develop regulations for the GHG Safety framework at SDC 12. It will be responsible for compiling and analyzing information on nuclear and wind power, as well as developing draft amendments to SOLAS regulation II-1/41 to allow batteries to be used as the main source of electrical power and lighting systems. The Correspondence Group will need to submit a written report to the next meeting, SDC 13.

Note 1: Regulation 41 regulates the "Main Source of Electrical Power Lighting Systems" applicable to ships such as passenger ships and cargo ships.

Note 2: SP389 refers to Special Provision 389 of the International Maritime Dangerous Goods (IMDG) Code. It is applicable to large-scale Battery Energy Storage Systems (BESS) transported under the designation UN 3536 (Lithium Ion Batteries Installed in Cargo Transport Unit). The primary regulatory requirement stipulates that lithium batteries or lithium battery modules must be securely fastened to racks or within cabinets to prevent any movement during transport. (Derived from UNECE, 2025, *UN Model Regulations Rev. 24*. <https://unece.org/transport/dangerous-goods/un-model-regulations-rev-24>)

References:

1. American Bureau of Shipping (ABS), News Brief: SDC 12.
https://media.licdn.com/dms/document/media/v2/D561FAQEmh8R-mr_WpQ/feedshare-document-pdf-analyzed/B56Zv8855OIsAY-/0/1769475384451?e=1771459200&v=beta&t=SspMQzpEk3WWgMcfPYsP-McL6CV5tQTFryHKqFiVMPA
2. Det Norske Veritas (DNV), IMO Sub-Committee on ship design and construction (SDC 12). <https://www.dnv.com/news/2026/imo-sub-committee-on-ship-design-and-construction-sdc-12/>
3. IMO, Sub-Committee on Ship Design and Construction (SDC 12), 19-23 February 2026. <https://www.imo.org/en/mediacentre/meetingsummaries/pages/sdc-12.aspx>
4. InterManager, Summary report on IMO Sub-Committee meeting SDC 12. <https://www.intermanager.org/2026/01/fw-imo-meeting-sdc-12-19-23-january-2026-168502/>
5. Lloyd's Register (LR), SDC 12 Summary Report. <https://www.lr.org/en/knowledge/regulatory-updates/imo-meetings-and-future-legislation/sdc-12-summary-report/>

II. IMO Sub-Committee on Pollution Prevention and Response, 13th session (PPR 13) Meeting Highlights

The Sub-Committee on Pollution Prevention and Response (PPR) mainly deals with all matters relating to pollution prevention and response that fall within IMO's remit. This included the issues of all annexes of the International Convention for the Prevention of Pollution from Ship (MARPOL Convention) through to the control and management of harmful aquatic organisms in ships' ballast water and sediments; biofouling; anti-fouling system; pollution preparedness, response, and cooperation for oil and hazardous and noxious substances; and the safe and environmentally sound recycling of ships.

The 13th session of the IMO PPR (PPR 13) was held from 9th to 13th February 2026. The highlights of the meetings are as follows:

1. Incorporating the relevant requirements of the Integrated Bilge Water Treatment System (IBTS) into MARPOL Annex I:

PPR 13 agreed to the draft amendments to MARPOL Annex I (new regulation 12B), amendments to appendix II (Form of the IOPP certificate and Supplements) and amendments to appendix III (Form of the Oil Record Book), with a view to approval by MEPC 84 and subsequent adoption.

These amendments introduce regulations that allow the disposal of oily bilge water through 'forced evaporation' on ships of 400 gross tonnage and above that are fitted with an integrated bilge water treatment system (IBTS). This process involves heating oily bilge water so that the water evaporates, leaving oil behind for proper disposal.

The regulations include standardized guidelines and recording requirements to ensure the process is conducted consistently and safely without causing marine pollution.

2. Finalized the Amendments to the NOx Code concerning the conduction for ship main engines that are allowed to use "non-carbonaceous fuels,"

PPR 13 agreed on the draft amendments to the 2008 NOx Technical Code ([Note 3](#)) concerning "non-carbonaceous fuels," with a view to submission to MEPC 84 for approval and subsequent formal adoption at MEPC 85, scheduled to be held in November 2026.

These amendments update the testing methods for air pollution from marine

engines to reflect the practical application of low-carbon or zero-carbon fuels, such as hydrogen and ammonia. Because the current testing methods utilize the carbon content in the exhaust gas as the basis for calculation, they are no longer applicable to engines operating on non-carbonaceous fuels. Therefore, it is necessary to establish new measurement standards and procedures to ensure that the relevant engines comply with the applicable requirements of MARPOL Annex VI and obtain appropriate certification.

The draft amendments encompass relevant sections of the NOx Technical Code, including adjustments to definitions, test bed measurement procedures, provisions for onboard compliance verification, and various appendices.

3. Agreed the Amendments to MARPOL Annex I on disposing oily bilge water, which is intended for the controlled dewatering of oily bilge water, including removal of water by forced evaporation.

PPR 13 had agreed to the draft amendments to MARPOL Annex I (new regulation 12B), amendments to appendix II (Form of the International Oil Pollution Prevention Certificate (IOPP) certificate and Supplements) and amendments to appendix III (Form of the Oil Record Book), with a view to approval by MEPC 84 and subsequent adoption.

These draft amendments introduce new provisions allowing ships of 400 gross tonnage and above fitted with an integrated bilge water treatment system (IBTS) to dispose of oily bilge water through "forced evaporation." This process involves heating the oily bilge water to evaporate the water content, after which the remaining oil residues are properly disposed of in accordance with the regulations.

The amendments also incorporate standardized operational guidelines and recording requirements to ensure the process is conducted consistently and safely without causing marine pollution.

4. Continued to work on developing the amendments to MARPOL Annex IV:

PPR 13 continued its work on the revision of MARPOL Annex IV, which regulates the prevention of pollution by sewage from ships. The policy objective of this revision

is to enhance the lifetime operational performance and practical compliance of sewage treatment plants.

The Working Group from PPR 13 had agreed following two draft amendments in principle:

- (1) Draft amendments to MARPOL Annex IV introducing the Sewage Record Book (SRB) (proposed amendments to regulation 11A and appendix III), along with the development of associated guidelines for recording operations, to regulate the recording procedures for sewage treatment and discharge operations;
- (2) Draft amendments to MARPOL Annex IV incorporating a Sewage Management Plan (SMP) (proposed regulation 11B), along with the development of draft guidelines for the development of the Sewage Management Plan;

The above two draft amendments and their supporting guidelines will be subject to a holistic review and harmonization once the revision of other relevant provisions of Annex IV is nearing completion. Furthermore, the Sub-Committee decided to re-establish the Correspondence Group on the revision of MARPOL Annex IV and associated guidelines to continue refining the text between meeting sessions, develop operable implementation guidelines, and submit a report to PPR 14, expected in 2027.

5. Agreed the draft Amendments to MARPOL Annex VI, introducing a requirement for new tankers carrying crude oil to be fitted with p/v valves with a minimum opening pressure of 0.20 bar.

PPR 13 had reach an agreement on draft amendments to Regulation 15 and Appendix I of MARPOL Annex VI, with a view to approval by MEPC 84 and subsequent adoption.

These draft amendments stipulate that newly built oil tankers carrying crude oil shall be fitted with pressure-vacuum devices with a minimum opening pressure of not less than 0.20 bar, in order to control the release of volatile organic compounds (VOCs) and reduce air pollution. Concurrently, the International Air Pollution

Prevention (IAPP) Certificate is amended to record the compliance status of the ship. The aforementioned requirements will become applicable upon the entry into force of the amendments.

6. Agreed that in future the scrubber discharge restrictions may be included in Particularly Sensitive Sea Areas (PSSAs)

PPR 13 had a discussions on dealing with discharge water from Exhaust Gas Cleaning Systems (EGCS)(註 4), which also mention whether to allow coastal States to request Associated Protective Measures (APMs) to restrict EGCS discharge water in Particularly Sensitive Sea Areas (PSSAs).

The Sub-Committee recommended that MEPC invites Member States to develop PSSA designation proposals to consider EGCS-related APMs, for any future PSSA designations, proposing member states should first undertake a risk assessment in accordance with the methodology set out in MEPC.1/Circ.899, and subsequently determine whether discharge restrictions are reasonable based on the assessment's findings.

PPR 13 also invited interested Member States and international organizations to consult between the session meeting, with a view to submitting new concrete proposals on appropriate measures to control discharges of EGCS discharge water to PPR 14.

7. Initiate the relevant work for formulating a legally binding framework on biofouling which is expected to be completed by 2029

Following the decision of MEPC 83 to develop a legally binding framework for biofouling management to prevent the spread of invasive aquatic species, the Sub-Committee agreed on fundamental elements to guide this work. They also had agreed that a new convention would be the most suitable way forward and recommended this approach for consideration at MEPC 86 in 2027.

These include, inter alia, the recommendation that the framework take the form of a “standalone instrument” and the finalization of the terms of reference for this output, both to be agreed and approved by MEPC 84.

A correspondence group (CG) has also been established to carry out substantive

research and development work (Figure 2), with key points including as follows:

- (1) Define the objectives of this legal binding framework;
- (2) Draft the overall structure of the document;
- (3) Take stock of the relevant guidelines that need to be formulated to support implementation;
- (4) Draft the overall work plan.

This CG will also incorporate the relevant policies and technical considerations revealed in the documents submitted for this session. The overall schedule target is to complete the draft legal framework by 2029 and submit it for further review at MEPC 89.

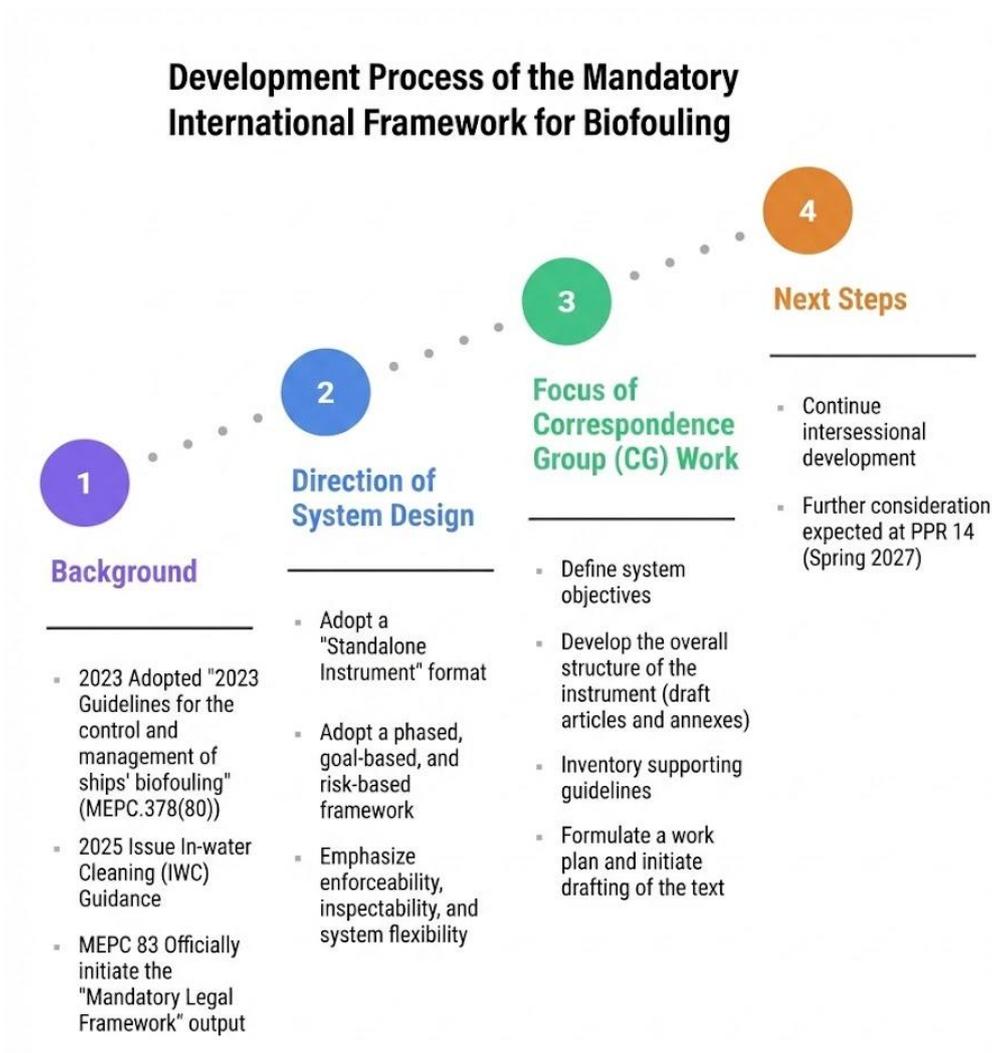


Figure 2: Development Process of the Mandatory International Framework for Biofouling

Note 3: The Technical Regulations for the Control of Nitrogen Oxide Emissions from Marine Diesel Engines adopted by the IMO. This document regulates the testing, certification and on-board conformity verification procedures of the main engine to demonstrate its continuous compliance with the applicable nitrogen oxide (NOx) emission limits. (Derived from <https://www.wartsila.com/encyclopedia/term/nox-technical-code>)

Note 4: Exhaust gas cleaning systems (EGCS or “scrubbers”) are installed on ships to remove harmful pollutants (especially sulfur oxides) from engine exhaust before the exhaust is released into the atmosphere.

References:

1. American Bureau of Shipping (ABS), News Brief: PPR 13. <https://ww2.eagle.org/content/dam/eagle/regulatory-news/2026/PPR%2013%20Brief.pdf>
2. Bureau Veritas Marine & Offshore (BV), Pollution Prevention and Response Sub-Committee 13th Session (PPR 13) Summary Report. Class & Statutory. <https://marine-offshore.bureauveritas.com/newsroom/pollution-prevention-and-response-sub-committee-13th-session-ppr-13-summary-report>
3. Clean Arctic Alliance. Category: PPR 13. https://cleanarctic.org/category/publications_en/imo-papers/ppr/ppr-13/
4. Det Norske Veritas (DNV), IMO Sub-committee on pollution prevention and response (PPR 13). News from DNV. <https://www.dnv.com/news/2026/03-statutory-imo-sub-committee-on-pollution-prevention-and-response-ppr13/>
5. IMO, Sub-Committee on Pollution Prevention and Response (PPR 13), 9-13 February 2026. <https://www.imo.org/en/mediacentre/meetingsummaries/pages/ppr-13th-session.aspx>
6. IMO, Council, 136th session (C 136), 3 December 2025. <https://www.imo.org/en/mediacentre/meetingsummaries/pages/council-136th-session.aspx>
7. Lloyd's Register (LR), PPR 13 Summary Report. <https://maritime.lr.org/PPR-13-Summary-Report>
8. SAFETY4SEA. IMO adopts plan to help reduce plastic pollution in the oceans. <https://safety4sea.com/imo-adopts-plan-to-help-reduce-plastic-pollution-in-the-oceans/>

Other Short film link:

1. Clean Arctic Alliance. The Arctic and Black Carbon. <https://youtu.be/F1fpvH1jjpg>