ISO Form 4
NEW WORK ITEM PROPOSAL (NP)

Circulation date: 2026-10-04 **Closing date for voting:** 2026-12-27	**Reference number:** ISO/NP TS 27178 ISO/TC 8/SC 25
Proposer DS	**N 103**
Secretariat ANSI	

A proposal for a new work item within the scope of an existing committee shall be submitted to the secretariat of that committee.
A proposal for a new project committee shall be submitted to the Central Secretariat, which will process the proposal in accordance with ISO/IEC Directives, Part 1, Clause 2.3.
Guidelines for proposing and justifying new work items or new fields of technical activity (Project Committee) are given in ISO/IEC Directives, Part 1, Annex C.
IMPORTANT NOTE: Proposals without adequate justification and supporting information risk rejection or referral to the originator.

☒ The proposer confirms that this proposal has been drafted in compliance with Annex C of ISO/IEC Directives, Part 1.

PROPOSAL

(to be completed by the proposer, following discussion with committee leadership if appropriate)

TITLE

English title:

Greenhouse gases -- Quantification of GHG emissions from ship building and major ship conversions

French title:

(In the case of an amendment, revision or a new part of an existing document, show the reference number and current title)

SCOPE

This standard establishes a common methodology for the quantification and reporting of GHG emissions arising from ship building.
It covers cradle-to-gate GHG emissions arising from:
• Raw material extraction and upstream processing of such materials (e.g. steel, composites, plastics, coatings)
• Use of recycled material (e.g. steel)
• Manufacturing of components and systems (e.g. propulsion systems, bridge equipment and systems)
• Transportation of materials to and within the shipyard
• Coating activities
• On-site assembly and construction at the shipyard
• Energy consumption during the building of the ship
• Waste handling
• Launching
• Testing and sea trial.
This standard can also be used when quantifying GHG emissions arising from major conversions, major repairs and installation of new equipment, which may occur during the ship's operational lifetime, i.e. from gate-to-gate.

It does not cover GHG emissions arising from the operations and day-to-day maintenance of the ship after it has left the shipyard. It also does not cover GHG emissions after the ship arrives for recycling

PURPOSE AND JUSTIFICATION

The maritime industry faces increasing pressure to address its environmental impact as international regulations, corporate sustainability commitments, and financial institutions demand heightened transparency on greenhouse gas (GHG) emissions. While the sector has historically prioritized operational GHG emissions, such as fuel consumption during ship operation, critical gaps persist in accounting for upstream GHG emissions linked to ship construction. These cradle-to-gate GHG emissions, which span raw material extraction and processing, equipment manufacturing and assembling, transportation, and shipyard assembly, represent a significant yet often overlooked portion of a ship's lifecycle GHG footprint.
Major ship repairs and conversions produce GHG emissions comparable to the building of a ship and the accounting of gate-to-gate GHG emissions therefore can be based on the same calculations. A major ship repair will typically take place when the ship is taken out of normal operation and possibly docked. GHG emissions for major repairs may include raw material extraction, equipment manufacturing and assembling etc.
Current methodologies for assessing GHG emissions lack a standardized approach for quantifying the impact preceding, and during the ship construction phase. At present, industry-specific standards do not exist. The standard will enable shipowners, shipyards, and other relevant stakeholders to evaluate and disclose the GHG emissions footprint of ship building and ship repairs.
The proposed standard would establish a unified approach for selecting the appropriate method for quantifying and accounting cradle-to-gate GHG emissions in shipbuilding. The draft standard aims to supplement other ISO lifecycle assessments (LCAs) that include GHG emissions arising from transport operations.

Sustainable Development Goals (SDGs)

Goal 9: Industry, Innovation, and Infrastructure
One of the targets under SDG 9 (Target 9.4) is, by 2030, to upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes. Progress against this target is measured by Indicator 9.4.1, which considers CO (or in this case GHG) emissions per unit of value added.

Goal 13: Climate Action
One of the targets under SDG 13 (Target 13.2) is to integrate climate change measures into national policies, strategies, and planning. Progress against this target is measured by Indicator 13.2.2, which considers total GHG emissions per year.

The proposed TS contributes to both of these objectives by establishing a harmonized, sector specific methodology for quantifying GHG emissions from shipbuilding. Robust and consistent quantification methodologies are essential to support credible emissions reporting, inform policy development, and enable the integration of climate related considerations into decision making at both industry and policy levels.

Preparatory work

☒ A draft is attached ☐ An outline is attached ☐ An existing document serving as the initial basis is attached

The proposer is prepared to undertake the preparatory workrequired:

☒ Yes ☐ No

If a draft is attached to this proposal:

Please select from one of the following options:

☒ The draft document can be registered at Preparatory stage (WD – stage 20.00)
☐ The draft document can be registered at Committee stage (CD – stage 30.00)
☐ The draft document can be registered at enquiry stage (DIS – stage 40.00)

If the attached document is copyrighted or includes copyrighted content:

☒ The proposer confirms that copyright permission has been granted for ISO to use this content in compliance with the ISO/IEC Directives, Part 1 (see also the Declaration on copyright).

Is this proposal for an ISO management System Standard (MSS)?

☐ Yes ☒ No

Note: If yes, this proposal must have an accompanying justification study. Please see the Consolidated Supplement to the ISO/IEC Directives, Part 1, Annex SL or Annex JG

Indication of the preferred type to be developed

☐ International Standard ☒ Technical Specification

☐ Publicly Available Specification *

* While a formal NP ballot is not required to start developing a PAS (no eForm04), the NP form may provide useful information for the committee P-members to consider when deciding to initiate a Publicly Available Specification.

Proposed Standard Development Track (SDT – to be discussed by the proposer with the committee manager or ISO/CS)

☐ 18 months ☒ 24 months ☐ 36 months

Draft project plan (as discussed with committee leadership)

Proposed date for first meeting: 2027-01-27

Dates for key milestones: Circulation of 1st Working Draft (if any) to experts: 2027-02-05

Committee Draft consultation (if any): 2027-06-15

DIS submission*:

Publication*: 2028-12-29

* Target Dates for DIS submission and Publication should be set a few weeks ahead of the limit dates automatically determined when selecting the SDT.

NOTE: ISO/Meetings and ISO/Projects allow you to register and continuously update the meeting dates and project target dates during the development of the project.

Known patented items (see ISO/IEC Directives, Part 1 for important guidance)

☐ Yes ☒ No

If "Yes", provide full information as annex

Co-ordination of work: To the best of your knowledge, has this or a similar proposal been submitted to another standards development organization?

☐ Yes ☒ No

If “Yes”, please specify which one(s):

Listing of relevant documents (such as standards and regulations) at international, regional and national level

Identification and description of relevant affected stakeholder categories (Please see ISO CONNECT)

	Benefits/Impacts/Examples
Industry and commerce - large industry	Industry organisations, particularly shipowners, shipyards, equipment manufacturers, banks and other financial institutions, can use the proposed technical specification to quantify, mitigate and report GHG emissions from shipbuilding and major ship conversions using a harmonised and transparent approach
Industry and commerce - SMEs	Also ship designers and GHG accounting and/or life-cycle assessment consultants, can use the proposed technical specification to quantify, mitigate and report GHG emissions from shipbuilding and major ship conversions using a harmonised and transparent approach.
Government	Regulatory bodies can use the proposed technical specification to quantify and/or report total GHG emissions from the shipbuilding industry.
Consumers	

Labour	Workers may benefit because GHG accounting drives cleaner, safer production processes reducing energyintensive operations identified.
Academic and research bodies	The proposed technical specification can be used by researchers in naval architecture, ship design and life-cycle assessment (LCA).
Standards application businesses	Classification societies and certification bodies can use the proposed technical specification to harmonise the quantification and verification of GHG emissions from shipbuilding and major ship conversions.
Non-governmental organizations	The proposed technical specification can be used by NGOs such as BIMCO to develop standard clauses for the quantification and disclosure of GHG emissions from shipbuilding and major ship conversions between contractual parties.
Other (please specify)	GHG protocol as an element in the strategic partnership to deliver unified global standards for greenhouse gas emissions accounting

Liaisons:	**Joint/parallel work:**
A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable.	**Possible joint/parallel work with:** ☐ IEC (please specify committee ID) ☐ CEN (please specify committee ID) ☐ Other (please specify)

A listing of relevant countries which are not already P-members of the committee.

Note: The Committee Manager shall distribute this NP to the ISO members of the countries listed above to ask if they wish to participate in this work

Proposed Project Leader (name and e-mail address)	**Name of the Proposer** (include contact information)
Edith Buhl, Everllence edith.buhl@everllence.com	Asker Juul Aagren asa@ds.dk

This proposal will be developed by:

☒ An existing Working Group: ISO/TC 8/SC 25/WG 3 Maritime GHG assessment and documentation

☐ A new Working Group:

(Note: establishment of a new Working Group requires approval by the parent committee)

☐ The TC/SC directly

☐ To be determined:

Supplementary information relating to the proposal

☒ This proposal relates to a new ISO document

☐ This proposal relates to the adoption as an active project of an item currently registered as a Preliminary Work Item

☐ This proposal relates to the re-establishment of a cancelled project as an active project

Other:

Maintenance agencies (MA) and registration authorities (RA)

☐ This proposal requires the designation of a maintenance agency. If so, please identify the potential candidate:

☐ This proposal requires the designation of a registration authority. If so, please identify the potential candidate:

NOTE: Selection and appointment of the MA or RA are subject to the procedure outlined in ISO/IEC Directives, Part 1, Annex G and Annex H.

☐ Annex(es) are included with this proposal (provide details)

Additional information/question(s)