



TRANSPORTATION SECTOR

MARINE TRANSPORTATION

Sustainability Accounting Standard

Sustainable Industry Classification System® (SICS®) TR-MT

Prepared by the
Sustainability Accounting Standards Board

October 2018

INDUSTRY STANDARD | VERSION 2018-10

MARINE TRANSPORTATION

Sustainability Accounting Standard

About SASB

The SASB Foundation was founded in 2011 as a not-for-profit, independent standards-setting organization. The SASB Foundation's mission is to establish and maintain industry-specific standards that assist companies in disclosing financially material, decision-useful sustainability information to investors.

The SASB Foundation operates in a governance structure similar to the structure adopted by other internationally recognized bodies that set standards for disclosure to investors, including the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). This structure includes a board of directors ("the Foundation Board") and a standards-setting board ("the Standards Board" or "the SASB"). The Standards Board develops, issues, and maintains the SASB standards. The Foundation Board oversees the strategy, finances and operations of the entire organization, and appoints the members of the Standards Board.

The Foundation Board is not involved in setting standards, but is responsible for overseeing the Standards Board's compliance with the organization's due process requirements. As set out in the *SASB Rules of Procedure*, the SASB's standards-setting activities are transparent and follow careful due process, including extensive consultation with companies, investors, and relevant experts.

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SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450

San Francisco, CA 94111

415.830.9220

info@sasb.org

sasb.org

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INTRODUCTION

Purpose of SASB Standards

The SASB’s use of the term “sustainability” refers to corporate activities that maintain or enhance the ability of the company to create value over the long term. Sustainability accounting reflects the governance and management of a company’s environmental and social impacts arising from production of goods and services, as well as its governance and management of the environmental and social capitals necessary to create long-term value. The SASB also refers to sustainability as “ESG” (environmental, social, and governance), though traditional corporate governance issues such as board composition are not included within the scope of the SASB’s standards-setting activities.

SASB standards are designed to identify a minimum set of sustainability issues most likely to impact the operating performance or financial condition of the typical company in an industry, regardless of location. SASB standards are designed to enable communications on corporate performance on industry-level sustainability issues in a cost-effective and decision-useful manner using existing disclosure and reporting mechanisms.

Businesses can use the SASB standards to better identify, manage, and communicate to investors sustainability information that is financially material. Use of the standards can benefit businesses by improving transparency, risk management, and performance. SASB standards can help investors by encouraging reporting that is comparable, consistent, and financially material, thereby enabling investors to make better investment and voting decisions.

Overview of SASB Standards

The SASB has developed a set of 77 industry-specific sustainability accounting standards (“SASB standards” or “industry standards”), categorized pursuant to SASB’s [Sustainable Industry Classification System® \(SICS®\)](#). Each SASB standard describes the industry that is the subject of the standard, including any assumptions about the predominant business model and industry segments that are included. SASB standards include:

1. **Disclosure topics** – A minimum set of industry-specific disclosure topics reasonably likely to constitute material information, and a brief description of how management or mismanagement of each topic may affect value creation.
2. **Accounting metrics** – A set of quantitative and/or qualitative accounting metrics intended to measure performance on each topic.
3. **Technical protocols** – Each accounting metric is accompanied by a technical protocol that provides guidance on definitions, scope, implementation, compilation, and presentation, all of which are intended to constitute suitable criteria for third-party assurance.
4. **Activity metrics** – A set of metrics that quantify the scale of a company’s business and are intended for use in conjunction with accounting metrics to normalize data and facilitate comparison.

Furthermore, the *SASB Standards Application Guidance* establishes guidance applicable to the use of all industry standards and is considered part of the standards. Unless otherwise specified in the technical protocols contained in the industry standards, the guidance in the SASB Standards Application Guidance applies to the definitions, scope, implementation, compilation, and presentation of the metrics in the industry standards.

The *SASB Conceptual Framework* sets out the basic concepts, principles, definitions, and objectives that guide the Standards Board in its approach to setting standards for sustainability accounting. The *SASB Rules of Procedure* is focused on the governance processes and practices for standards setting.

Use of the Standards

SASB standards are intended for use in communications to investors regarding sustainability issues that are likely to impact corporate ability to create value over the long term. Use of SASB standards is voluntary. A company determines which standard(s) is relevant to the company, which disclosure topics are financially material to its business, and which associated metrics to report, taking relevant legal requirements into account¹. In general, a company would use the SASB standard specific to its primary industry as identified in *SICS*[®]. However, companies with substantial business in multiple *SICS*[®] industries can consider reporting on these additional SASB industry standards.

It is up to a company to determine the means by which it reports SASB information to investors. One benefit of using SASB standards may be achieving regulatory compliance in some markets. Other investor communications using SASB information could be sustainability reports, integrated reports, websites, or annual reports to shareholders. There is no guarantee that SASB standards address all financially material sustainability risks or opportunities unique to a company's business model.

Industry Description

The Marine Transportation industry consists of companies that provide deep-sea, coastal, and/or river-way freight shipping services. It is of strategic importance to international trade and its revenues are tied to macroeconomic cycles. Key activities include transportation of containerized and bulk freight, including consumer goods and a wide range of commodities, and transportation of chemicals and petroleum products in tankers. Due to the global scope of the industry, companies operate in many countries and under diverse legal and regulatory frameworks.

¹ **Legal Note:** SASB standards are not intended to, and indeed cannot, replace any legal or regulatory requirements that may be applicable to a reporting entity's operations.

SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-MT-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TR-MT-110a.2
	(1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-MT-110a.3
	Average Energy Efficiency Design Index (EEDI) for new ships	Quantitative	Grams of CO ₂ per ton-nautical mile	TR-MT-110a.4
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , and (3) particulate matter (PM ₁₀)	Quantitative	Metric tons (t)	TR-MT-120a.1
Ecological Impacts	Shipping duration in marine protected areas or areas of protected conservation status	Quantitative	Number of travel days	TR-MT-160a.1
	Percentage of fleet implementing ballast water (1) exchange and (2) treatment	Quantitative	Percentage (%)	TR-MT-160a.2
	(1) Number and (2) aggregate volume of spills and releases to the environment	Quantitative	Number, Cubic meters (m ³)	TR-MT-160a.3
Employee Health & Safety	Lost time incident rate (LTIR)	Quantitative	Rate	TR-MT-320a.1
Business Ethics	Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Number	TR-MT-510a.1
	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption ²	Quantitative	Reporting currency	TR-MT-510a.2
Accident & Safety Management	Number of marine casualties, percentage classified as very serious ³	Quantitative	Number, Percentage (%)	TR-MT-540a.1
	Number of Conditions of Class or Recommendations	Quantitative	Number	TR-MT-540a.2
	Number of port state control (1) deficiencies and (2) detentions	Quantitative	Number	TR-MT-540a.3

² Note to **TR-MT-510a.2**– The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

³ Note to **TR-MT-540a.1**– Disclosure shall include a description of marine casualties and very serious marine casualties, outcomes, and corrective actions implemented in response.

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of shipboard employees ⁴	Quantitative	Number	TR-MT-000.A
Total distance traveled by vessels	Quantitative	Nautical miles (nm)	TR-MT-000.B
Operating days ⁵	Quantitative	Days	TR-MT-000.C
Deadweight tonnage ⁶	Quantitative	Thousand deadweight tons	TR-MT-000.D
Number of vessels in total shipping fleet	Quantitative	Number	TR-MT-000.E
Number of vessel port calls	Quantitative	Number	TR-MT-000.F
Twenty-foot equivalent unit (TEU) capacity	Quantitative	TEU	TR-MT-000.G

⁴ Note to **TR-MT-000.A** – Shipboard employees are those employees who work aboard the entity's vessels (including direct and contract employees) during the reporting period.

⁵ Note to **TR-MT-000.C** – Operating days are calculated as the number of available days in a reporting period minus the aggregate number of days that the vessels are off-hire due to unforeseen circumstances (i.e., a measure of days in a reporting period during which vessels actually generate revenue).

⁶ Note to **TR-MT-000.D** – Deadweight tonnage is the sum, for all of the entity's vessels, of the difference in displacement in deadweight tons between the light displacement and the actual loaded displacement.

Greenhouse Gas Emissions

Topic Summary

Marine transportation companies generate emissions mainly from the combustion of diesel in ship engines. The industry's reliance on heavy fuel oil ("bunker fuel") is of material concern due to rising fuel costs and intensifying greenhouse gas (GHG) regulations. The industry is among the most fuel efficient of the major transportation modes in terms of fuel use per ton shipped. However, due to the size of the industry, its contribution to the global GHG inventory is still significant. Recent environmental regulations are driving the adoption of more fuel-efficient engines and the use of cleaner-burning fuels. Fuel constitutes a major expense for industry players, providing a further incentive for investing in upgrades or retrofits to boost fuel efficiency.

Accounting Metrics

TR-MT-110a.1. Gross global Scope 1 emissions

- 1 The entity shall disclose its gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the seven GHGs covered under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).
 - 1.1 Emissions of all GHGs shall be consolidated and disclosed in metric tons of carbon dioxide equivalents (CO₂-e), and calculated in accordance with published 100-year time horizon global warming potential (GWP) values. To date, the preferred source for GWP values is the [Intergovernmental Panel on Climate Change \(IPCC\) Fifth Assessment Report \(2014\)](#).
 - 1.2 Gross emissions are GHGs emitted into the atmosphere before accounting for offsets, credits, or other similar mechanisms that have reduced or compensated for emissions.
- 2 Scope 1 emissions are defined and shall be calculated according to the methodology contained in [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#) (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).
 - 2.1 Acceptable calculation methodologies include those that conform to the GHG Protocol as the base reference, but provide additional guidance, such as industry- or region-specific guidance. Examples include, but are not limited to:
 - 2.1.1 *GHG Reporting Guidance for the Aerospace Industry* published by International Aerospace Environmental Group (IAEG)

- 2.1.2 Greenhouse Gas Inventory Guidance: Direct Emissions from Stationary Combustion Sources published by the U.S. Environmental Protection Agency (EPA)
- 2.1.3 India GHG Inventory Program
- 2.1.4 ISO 14064-1
- 2.1.5 Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011, published by IPIECA
- 2.1.6 Protocol for the quantification of greenhouse gas emissions from waste management activities published by Entreprises pour l'Environnement (EpE)
- 2.2 GHG emissions data shall be consolidated and disclosed according to the approach with which the entity consolidates its financial reporting data, which is generally aligned with the "financial control" approach defined by the GHG Protocol, and the approach published by the Climate Disclosure Standards Board (CDSB) described in REQ-07, "Organisational boundary," of the *CDSB Framework for reporting environmental information, natural capital and associated business impacts* (April 2018).
- 3 The entity may discuss any change in its emissions from the previous reporting period, including whether the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- 4 In the case that current reporting of GHG emissions to the CDP or other entity (e.g., a national regulatory disclosure program) differs in terms of the scope and consolidation approach used, the entity may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.
- 5 The entity may discuss the calculation methodology for its emissions disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, or mass balance calculations.

TR-MT-110a.2. Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets

- 1 The entity shall discuss its long-term and short-term strategy or plan to manage its Scope 1 greenhouse gas (GHG) emissions.
 - 1.1 Scope 1 emissions are defined according to *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).
 - 1.2 The scope of GHG emissions includes the seven GHGs covered under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).

- 2 The entity shall discuss its emission reduction target(s) and analyze its performance against the target(s), including the following, where relevant:
 - 2.1 The scope of the emission reduction target (e.g., the percentage of total emissions to which the target is applicable);
 - 2.2 Whether the target is absolute- or intensity-based, and the metric denominator, if it is an intensity-based target;
 - 2.3 The percentage reduction against the base year, with the base year representing the first year against which emissions are evaluated toward the achievement of the target;
 - 2.4 The timelines for the reduction activity, including the start year, the target year, and the base year;
 - 2.5 The mechanism(s) for achieving the target; and
 - 2.6 Any circumstances in which the target or base year emissions have been, or may be, recalculated retrospectively or the target or base year has been reset.
- 3 The entity shall discuss the activities and investments required to achieve the plans and/or targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.
 - 3.1 Relevant activities and investments may include, but are not limited to, route optimization, use of alternative fuels and energy sources, system improvements, optimization of ship operation, improving efficiency through ship design and propulsion systems (including hull and propeller improvements), and upgrading the fleet with new ships.
- 4 The entity shall discuss the scope of its strategies, plans, and/or reduction targets, such as how they relate to different business units, geographies, or emissions sources.
- 5 The entity shall discuss whether its strategies, plans, and/or reduction targets are related to, or associated with, emissions limiting and/or emissions reporting-based programs or regulations (e.g., the EU Emissions Trading Scheme, Quebec Cap-and-Trade System, California Cap-and-Trade Program), including regional, national, international, or sectoral programs.
- 6 Disclosure of strategies, plans, and/or reduction targets shall be limited to activities that were ongoing (active) or reached completion during the reporting period.

TR-MT-110a.3. (1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage renewable

- 1 The entity shall disclose (1) the total amount of energy it consumed as an aggregate figure, in gigajoules (GJ).

- 1.1 The scope of energy consumption includes energy from all sources, including energy purchased from sources external to the entity and energy produced by the entity itself (self-generated). For example, direct fuel usage, purchased electricity, and heating, cooling, and steam energy are all included within the scope of energy consumption.
 - 1.2 The scope of energy consumption includes only energy directly consumed by the entity during the reporting period.
 - 1.3 In calculating energy consumption from fuels and biofuels, the entity shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- 2 The entity shall disclose (2) the percentage of energy it consumed that was supplied from heavy fuel oil.
 - 2.1 Heavy fuel oils are defined per the U.S. Energy Information Administration as heavier oils that remain after distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations, and which conform to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C, including:
 - 2.1.1 No. 5 Residual fuel oil, a residual fuel oil of medium viscosity, also known as “Navy Special” and defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770)
 - 2.1.2 No. 6 Residual fuel oil, which includes Bunker C fuel oil
 - 2.2 The percentage shall be calculated as heavy fuel oil consumption divided by total energy consumption.
- 3 The entity shall disclose (3) the percentage of energy it consumed that is renewable energy.
 - 3.1 Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, such as geothermal, wind, solar, hydro, and biomass.
 - 3.2 The percentage shall be calculated as renewable energy consumption divided by total energy consumption.
 - 3.3 The scope of renewable energy includes renewable fuel the entity consumed, renewable energy the entity directly produced, and renewable energy the entity purchased, if purchased through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs) or Guarantees of Origin (GOs), a Green-e Energy Certified utility or supplier program, or other green power products that explicitly include RECs or GOs, or for which Green-e Energy Certified RECs are paired with grid electricity.
 - 3.3.1 For any renewable electricity generated on-site, any RECs and GOs must be retained (i.e., not sold) and retired or cancelled on behalf of the entity in order for the entity to claim them as renewable energy.

- 3.3.2 For renewable PPAs and green power products, the agreement must explicitly include and convey that RECs and GOs be retained or replaced and retired or cancelled on behalf of the entity in order for the entity to claim them as renewable energy.
- 3.3.3 The renewable portion of the electricity grid mix that is outside of the control or influence of the entity is excluded from the scope of renewable energy.
- 3.4 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:
 - 3.4.1 Energy from hydro sources is limited to those that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard;
 - 3.4.2 Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered eligible sources of supply according to the [Green-e Framework for Renewable Energy Certification, Version 1.0](#) (2017) or Green-e regional standards, and/or materials that are eligible for an applicable state renewable portfolio standard.
- 4 The entity shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kilowatt hours (kWh) to GJ (for energy data including electricity from solar or wind energy).

TR-MT-110a.4. Average Energy Efficiency Design Index (EEDI) for new ships

- 1 The entity shall disclose the average Energy Efficiency Design Index (EEDI) for new ships in grams of carbon dioxide per ton-nautical mile.
 - 1.1 An EEDI value is the product of power installed, specific fuel consumption, and carbon conversion, divided by the product of available capacity and vessel speed at design load.
 - 1.2 The entity shall calculate the average EEDI as a simple average of the EEDI value of all new ships added to the entity's fleet during the reporting period
 - 1.2.1 New ships are limited to those built after 2013 and for which the International Maritime Organization (IMO) has adopted EEDI as a metric.
 - 1.3 The entity shall follow calculation methodologies outlined in IMO MEPC 66/21/Add.1, Annex 5, [2014 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index \(EEDI\) For New Ships](#).

Air Quality

Topic Summary

Air pollutants such as sulfur oxides (SO_x), nitrogen oxides (NO_x), and particulate matter (PM₁₀) are significant environmental externalities from the use of fuel by marine shipping companies. These pollutants tend to have localized environmental and health impacts and are especially a concern at port cities. Air pollution regulations are driving the adoption of more fuel-efficient engines and the use of cleaner-burning fuels as companies seek to reduce exposure to fines and environmental remediation costs. A further incentive for fuel efficiency is that fuel constitutes a major expense for industry players, so capital expenditures to upgrade vessels may be offset over the long term from fuel costs savings.

Accounting Metrics

TR-MT-120a.1. Air emissions of the following pollutants: (1) NO_x (excluding N₂O), (2) SO_x, and (3) particulate matter (PM₁₀)

- 1 The entity shall disclose its emissions of air pollutants, in metric tons per pollutant, that are released into the atmosphere.
 - 1.1 The scope of disclosure includes air pollutants associated with the entity's direct air emissions resulting from all of the entity's activities and sources of emissions, including, but not limited to, stationary and mobile sources, production facilities, office buildings, and transportation fleets.
- 2 The entity shall disclose its emissions of (1) oxides of nitrogen (NO_x), reported as NO_x.
 - 2.1 The scope of NO_x includes NO and NO₂, but excludes N₂O.
- 3 The entity shall disclose its emissions of (2) oxides of sulfur (SO_x), reported as SO_x.
 - 3.1 The scope of SO_x includes SO₂ and SO₃.
- 4 The entity shall disclose its emissions of (3) particulate matter 10 micrometers or less in diameter (PM₁₀), reported as PM₁₀.
 - 4.1 PM₁₀ is defined, according to U.S. 40 CFR Part 51.100, as any airborne finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers.
- 5 The entity may discuss the calculation methodology for its emissions disclosure, such as whether data are from continuous emissions monitoring systems (CEMS), engineering calculations, or mass balance calculations.

Ecological Impacts

Topic Summary

The operations and waste disposal practices of marine transportation companies can create substantial environmental externalities, such as water pollution and damage to marine life. Seagoing vessels routinely discharge ballast water, bilge water, and untreated sewage. Compliance with international regulations intended to manage the ecological impacts of operation can require significant capital expenditures to upgrade or install waste management systems. Illegal dumping of bilge water and other unregulated discharges can lead to hefty fines, negatively affecting a company's risk profile. Operating in areas of protected conservation status, such as Emission Control Areas (ECAs) and Particularly Sensitive Sea Areas (PSSAs), can increase the risk of ecological impact as well as the risk of violating environmental regulations.

Accounting Metrics

TR-MT-160a.1. Shipping duration in marine protected areas or areas of protected conservation status

- 1 The entity shall disclose the shipping duration spent in marine protected areas or areas of protected conservation status.
 - 1.1 Shipping duration is the sum of the travel days (24-hour periods or fractions thereof), including time spent docked at ports.
 - 1.2 A marine protected area is defined according to the International Union for Conservation of Nature (IUCN) as any area of the intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, and historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment. Marine protected areas include areas internationally established and regulated in International Marine Organization (IMO) Conventions and areas established nationally by member states, such as:
 - 1.2.1 Areas to be Avoided established by IMO Safety of Life at Sea Convention (SOLAS), Chapter V, regulation 10
 - 1.2.2 Areas with Mandatory Ship Reporting Systems established by IMO SOLAS, Chapter V, regulation 11
 - 1.2.3 Emission Control Areas under MARPOL Annex VI
 - 1.2.4 No Anchoring Areas established by IMO SOLAS Chapter V, regulation 10
 - 1.2.5 Particularly Sensitive Sea Areas (PSSAs) designated by the Marine Environment Protection Committee of the IMO in accordance with IMO Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (resolution A.982(24))

- 1.2.6 Special Areas designated under the International Convention for the Prevention of Pollution from Ships (MARPOL) Annexes I, II, and IV
- 1.3 An area of protected conservation status, which may be listed in the World Database of Protected Areas (WDPA) and mapped on [Protected Planet](#), is defined as an area located within one or more of the following:
 - 1.3.1 Biosphere Reserves recognized within the framework of the United Nations Educational, Scientific and Cultural Organization's (UNESCO's) Man and the Biosphere (MAB) Programme
 - 1.3.2 International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI)
 - 1.3.3 Marine sanctuaries
 - 1.3.4 National parks
 - 1.3.5 Marine Natura 2000 sites
 - 1.3.6 Ramsar Wetlands of International Importance
 - 1.3.7 Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values"⁷
 - 1.3.8 UNESCO marine World Heritage sites
 - 1.3.9 Other areas where discharges are restricted or subject to local agreements
- 2 The entity may separately identify shipping duration in areas with additional ecological, biodiversity, or conservation designations such as those listed by the [A-Z Guide of Areas of Biodiversity Importance](#), prepared by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC).
- 3 The entity may discuss its shipping activities in marine protected areas and areas of protected conservation status that present low risk to biodiversity or ecosystem services.
- 4 The entity may discuss its shipping activities in areas that have no official designation but that present high biodiversity or ecosystem services risks.

TR-MT-160a.2. Percentage of fleet implementing ballast water (1) exchange and (2) treatment

- 1 The entity shall disclose the percentage of its fleet that has (1) implemented ballast water exchange.

⁷ N. Dudley (ed.), *Guidelines for Applying Protected Areas Management Categories*, (Gland, Switzerland: IUCN, 2008), pp. 8-9.

- 1.1 Ballast water exchange is defined by Regulation D1 of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) and requires that ships performing ballast water exchange do so with an efficiency of at least 95 percent volumetric exchange of ballast water. The three accepted methods of ballast water exchange are the sequential method, the flow-through method, and the dilution method.
- 1.2 The percentage shall be calculated as the number of ships in the entity's fleet that have implemented ballast water exchange that meets the Regulation D1 performance standard divided by the total number of ships in the fleet.
- 2 The entity shall disclose the percentage of its fleet that has (2) implemented ballast water treatment.
 - 2.1 Ballast water treatment includes implementation of an integrated system of ballast water treatment equipment that is approved by the U.S. Coast Guard or by another governmental administration to meet the performance criteria in Regulation D2 of the BWM.
 - 2.1.1 Approved systems must discharge (a) less than 10 viable organisms per cubic meter that are greater than or equal to 50 micrometers in minimum dimension and (b) less than 10 viable organisms per milliliter that are less than 50 micrometers in minimum dimension and greater than or equal to 10 micrometers in minimum dimension.
 - 2.2 The percentage shall be calculated as the number of ships in the entity's fleet that have implemented ballast water treatment systems that meet the Regulation D2 performance standard divided by the total number of ships in the fleet.

TR-MT-160a.3. (1) Number and (2) aggregate volume of spills and releases to the environment

- 1 The entity shall disclose (1) the total number of spills and releases to the environment.
 - 1.1 Spills and releases include releases overboard that are intentional or accidental, including:
 - 1.1.1 Those resulting from sabotage, earthquakes, or other events outside of the entity's operational control
 - 1.1.2 Those resulting from leakage over time (which shall be counted once at the time the leak is identified)
 - 1.2 The scope of disclosure includes spills and releases that, based on U.S. Code of Federal Regulations 46 CFR 4.03-65 definitions, result in "significant harm to the environment," including spills or releases of:
 - 1.2.1 Hazardous substances in quantities equal to or exceeding, in any 24-hour period, the reportable quantity determined in U.S. 40 CFR part 117

- 1.2.2 Noxious liquid substances presenting major hazard (Category X) or minor hazard (Category Y) according to the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex II
 - 1.2.3 Oils, excluding those that are: (a) from a properly functioning vessel engine and any discharges of such oil accumulated in the bilges of a vessel discharged in compliance with MARPOL 73/78, Annex I; or (b) permitted under MARPOL 73/78, Annex I, as provided in U.S. 33 CFR part 151, subpart A
- 2 The entity shall disclose (2) the aggregate volume of spills and releases to the environment in cubic meters.
 - 2.1 The volume shall be calculated as the total estimated amount spilled that reached the environment, without netting the amount of such material that was subsequently recovered, evaporated, or otherwise lost.
 - 3 Where relevant, the entity may provide a breakdown of spills and releases by type, such as: (1) hydrocarbons, (2) hazardous substances, and (3) MARPOL Annex II noxious liquid substances.
 - 4 The entity may provide a breakdown of spills and releases by their proximity to land, such as: (1) those 24 nautical miles or closer to shore and (2) those greater than 24 nautical miles from shore.

Employee Health & Safety

Topic Summary

Marine transportation workers face dangers such as hazardous weather and exposure to large machinery and heavy cargo. The greatest health and safety risks stem from loading and unloading cargo at ports. Ships must be loaded and unloaded quickly and on schedule, increasing injury risk, fatigue, and stress. The health and well-being of workers in the industry is also inextricably linked to the safety performance of the company, as a healthy crew is necessary for safe voyages. Companies with inadequate safety management systems that fail to ensure the health and safety of workers may face higher turnover and higher worker-related expenses, including medical expenses such as insurance premiums and worker payouts.

Accounting Metrics

TR-MT-320a.1. Lost time incident rate (LTIR)

- 1 The entity shall disclose its lost time incident rate (LTIR) for work-related injuries and illnesses.
 - 1.1 A lost time incident is an incident that results in absence from work beyond the date or shift when it occurred.
 - 1.2 The rate shall be calculated as: $(\text{lost time incidents}) / (1,000,000 \text{ hours worked})$
- 2 The entity may disclose its process for classifying, identifying, and reporting lost time incidents.
 - 2.1 The International Chamber of Shipping and the International Maritime Organization (IMO) International Safety Management Code (ISM Code) provide additional guidance in implementing lost time incident reporting.
- 3 The scope of disclosure includes all employees regardless of employee location.

Business Ethics

Topic Summary

Facilitation payments at ports are considered standard business practice in some countries to obtain permits, cargo clearance, and port berths. However, anti-bribery laws place pressure on marine transportation companies to alter this practice. Enforcement of these laws could lead to significant one-time costs, higher ongoing compliance costs, or affect a company's social license to operate, affecting its cost of capital. Companies are under increasing pressure to ensure that their governance structures and practices can address corruption and participation—whether willful or unintentional—in illegal or unethical payments or exertion of unfair influence. Operating in corruption-prone countries can exacerbate these risks.

Accounting Metrics

TR-MT-510a.1. Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index

- 1 The entity shall disclose the number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index (CPI).
 - 1.1 In the event that two or more countries share the 20th lowest ranking, all shall be included in the scope of disclosure.
 - 1.2 The entity shall use the most current version of the CPI available from Transparency International.

TR-MT-510a.2. Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption

- 1 The entity shall disclose the total amount of monetary losses it incurred during the reporting period as a result of legal proceedings associated with bribery, corruption, or other unethical business practices.
- 2 The legal proceedings shall include any adjudicative proceeding in which the entity was involved, whether before a court, a regulator, an arbitrator, or otherwise.
- 3 The losses shall include all monetary liabilities to the opposing party or to others (whether as the result of settlement or verdict after trial or otherwise), including fines and other monetary liabilities incurred during the reporting period as a result of civil actions (e.g., civil judgments or settlements), regulatory proceedings (e.g., penalties, disgorgement, or restitution), and criminal actions (e.g., criminal judgment, penalties, or restitution) brought by any entity (e.g., governmental, business, or individual).
- 4 The scope of monetary losses shall exclude legal and other fees and expenses incurred by the entity in its defense.

5 The scope of disclosure shall include, but is not limited to, legal proceedings associated with the enforcement of relevant industry regulations, such as:

5.1 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions

5.2 U.K. Bribery Act 2010

5.3 U.S. Foreign Corrupt Practices Act

6 The scope of disclosure shall include, but is not limited to, legal proceedings associated with the enforcement of relevant industry regulations promulgated by regional, national, state, and local regulatory authorities, such as:

6.1 U.K. Serious Fraud Office

6.2 U.S. Department of Justice

6.3 U.S. Securities and Exchange Commission

Note to **TR-MT-510a.2**

1 The entity shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., bribery or facilitation payment) of all monetary losses as a result of legal proceedings.

2 The entity shall describe any corrective actions it has implemented as a result of the legal proceedings. This may include, but is not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.

Accident & Safety Management

Topic Summary

Accidents or leaks involving large vessels can have significant costs to life, property, and the environment. Negative media attention and massive cleanup costs can severely damage a company's finances. In order to reduce the risk of accidents, companies put extensive safety measures into place, such as employee training programs, periodic dry-docking maintenance periods, and annual class-renewal surveys conducted by classification societies. The reliance of the global marketplace on the shipping industry means that voyages need to be made within precise timeframes, providing further incentive for preventing accidents.

Accounting Metrics

TR-MT-540a.1. Number of marine casualties, percentage classified as very serious

- 1 The entity shall disclose the total number of marine casualties in which its fleet was involved.
 - 1.1 A marine casualty is defined, based on the United Nations International Maritime Organization (IMO)'s [Code of International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident](#) Resolution MSC 255(84), paragraph 2.9, chapter 2 of the General provisions, as an event, or sequence of events, that occurs directly in connection with the operations of a ship and results in one or more of the following:
 - 1.1.1 The death of, or serious injury to, a person
 - 1.1.2 The loss of a person from a ship
 - 1.1.3 The loss, presumed loss, or abandonment of a ship
 - 1.1.4 Material damage to a ship
 - 1.1.5 The stranding or disabling of a ship, or the involvement of a ship in a collision
 - 1.1.6 Material damage to marine infrastructure external to a ship, that could seriously endanger the safety of the ship, another ship or an individual
 - 1.1.7 Severe damage to the environment, or the potential for severe damage to the environment, brought about by the damage of a ship or ships
- 2 The entity shall disclose the percentage of marine casualties classified as very serious marine casualties.

- 2.1 A very serious marine casualty is defined as a marine casualty involving the total loss of the ship, a death, or severe damage to the environment.
- 2.2 The percentage shall be calculated as the number of very serious marine casualties divided by the total number of marine casualties.

Note to **TR-MT-540a.1**

- 1 The entity shall describe marine casualties and very serious marine casualties, including their root causes, outcomes, and any corrective actions implemented in response.

TR-MT-540a.2. Number of Conditions of Class or Recommendations

- 1 The entity shall disclose the number of Conditions of Class or Recommendations it has received from a Flag Administration or a Recognized Organization (RO) that has been delegated the authority to issue such findings.
 - 1.1 Conditions of Class or Recommendations are understood to be interchangeable terms, defined as requirements imposed by an Administration (or its delegate, such as a Classification Society) that are to be carried out within a specific time limit in order to retain vessel Class, including, but not limited to:
 - 1.1.1 Repairs and/or renewals related to damages that affect Classification (e.g., grounding, structural damages, machinery damages, and wastage over the allowable limits)
 - 1.1.2 Supplementary survey requirements
 - 1.1.3 Temporary repairs
 - 1.2 The scope of disclosure includes all Conditions of Class regardless of whether they resulted in withdrawal, suspension, or invalidation of a vessel's Class certificate.

TR-MT-540a.3. Number of port state control (1) deficiencies and (2) detentions

- 1 The entity shall disclose the number of deficiencies it received from regional port state control (PSC) organizations.
 - 1.1 A deficiency is defined as a condition found not to be in compliance with the requirements of one or more of the following conventions:
 - 1.1.1 International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocols of 1978 and 1997 relating thereto, as amended (MARPOL)
 - 1.1.2 International Convention for the Safety of Life at Sea (SOLAS)
 - 1.1.3 International Convention on Load Lines

- 1.1.4 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)
 - 1.1.5 International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS)
 - 1.1.6 International Convention on Tonnage Measurement of Ships, 1969 (Tonnage)
 - 1.1.7 International Labour Organization (ILO) Maritime Labour Convention, 2006
- 2 The entity shall disclose (2) the number of detentions it received from regional PSC organizations.
- 2.1 A detention is defined as an intervention action by the port state, taken when the condition of a ship or its crew does not correspond substantially with the applicable conventions. A detention ensures that the ship will not sail until it can proceed to sea without presenting a danger to the ship or persons onboard or without presenting an unreasonable threat of harm to the marine environment, whether or not such action affects the normal schedule of the ship's departure.
- 3 The scope of disclosure includes deficiencies and detentions issued by PSC organizations that are signatories to memoranda of understanding (MoU) of regional PSC (e.g., Paris MoU, Tokyo MoU, Acuerdo de Viña del Mar, Caribbean MoU, Abuja MoU, Black Sea MoU, Mediterranean MoU, Indian Ocean MoU, or Riyadh MoU) or by the U.S. Coast Guard (USCG).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450

San Francisco, CA 94111

415.830.9220

info@sasb.org

sasb.org
