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SUSTAINABILITY ACCOUNTING STANDARD
TRANSPORTATION SECTOR

MARINE TRANSPORTATION

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #TR0301

Prepared by the
Sustainability Accounting Standards Board®

September 2014
Provisional Standard

MARINE TRANSPORTATION

Sustainability Accounting Standard

About SASB

The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards for use by publicly listed corporations in the U.S. in disclosing material sustainability information for the benefit of investors and the public. SASB standards are designed for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. SASB is an independent 501(c)3 non-profit organization. Through 2016, SASB is developing standards for more than 80 industries in 10 sectors.

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INTRODUCTION

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for Marine Transportation.

SASB Standards are comprised of **(1) disclosure guidance and (2) accounting standards on sustainability topics** for use by U.S. and foreign public companies in their annual filings (Form 10-K or 20-F) with the U.S. Securities and Exchange Commission (SEC). To the extent relevant, SASB Standards may also be applicable to other periodic mandatory filings with the SEC, such as the Form 10-Q, Form S-1, and Form 8-K.

SASB's disclosure guidance identifies sustainability topics at an industry level, which may be material— depending on a company's specific operating context— to a company within that industry.

Each company is ultimately responsible for determining which information is material and is therefore required to be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB's accounting standards provide companies with standardized accounting metrics to account for performance on industry-level sustainability topics. When making disclosure on sustainability topics, companies adopting SASB's accounting standards will help to ensure that disclosure is standardized and therefore useful, relevant, comparable, and auditable.

Industry Description

The Marine Transportation industry consists of companies that provide deep-sea, coastal, and river-way freight shipping services. 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. The vast majority of global shipping freight is carried by companies based outside of the U.S. Due to the international scope of the industry, companies operate in many countries and under diverse legal and regulatory frameworks.

Guidance for Disclosure of Material Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Disclosure Topics

For the Marine Transportation industry, SASB has identified the following sustainability disclosure topics:

- Environmental Footprint of Fuel Use
- Ecological Impacts
- Business Ethics
- Accidents & Safety Management

2. Company-Level Determination and Disclosure of Material Sustainability Topics

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{1,2}

SASB has attempted to identify those sustainability topics that it believes may be material for all companies within each SICS industry. SASB recognizes, however, that each company is ultimately responsible for determining what is material to it.

Regulation S-K, which sets forth certain disclosure requirements associated with Form 10-K and other SEC filings, requires companies, among other things, to describe in the Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A) section of Form 10-K “any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed.”²

Furthermore, Instructions to Item 303 state that the MD&A “shall focus specifically on material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition.”²

In determining whether a trend or uncertainty should be disclosed, the SEC has stated that management should use a two-part assessment based on probability and magnitude:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.
- Second, if a company’s management cannot make a reasonable determination of the likelihood of an event or uncertainty, then disclosure is required unless management determines that a material effect on the registrant’s financial condition or results of operation is not reasonably likely to occur.

¹ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

² C.F.R. 229.303(Item 303)(a)(3)(ii).

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

Companies should consider making disclosure on sustainability topics as a complete set in the MD&A, in a sub-section titled "**Sustainability Accounting Standards Disclosures.**"³

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, companies should consider disclosing sustainability information in other sections of Form 10-K, as relevant, including:

- **Description of business**—Item 101 of Regulation S-K requires a company to provide a description of its business and its subsidiaries. Item 101(c)(1)(xii) expressly requires disclosure regarding certain costs of complying with environmental laws:

Appropriate disclosure also shall be made as to the material effects that compliance with Federal, State and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, may have upon the capital expenditures, earnings and competitive position of the registrant and its subsidiaries.

- **Legal proceedings**—Item 103 of Regulation S-K requires companies to describe briefly any material pending or contemplated legal proceedings. Instructions to Item 103 provide specific disclosure requirements for administrative or judicial proceedings arising from laws and regulations that target discharge of materials into the environment or that are primarily for the purpose of protecting the environment.
- **Risk factors**—Item 503(c) of Regulation S-K requires filing companies to provide a discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how a particular risk affects the particular filing company.

c. Rule 12b-20

Securities Act Rule 408 and Exchange Act Rule 12b-20 require a registrant to disclose, in addition to the information expressly required by law or regulation, "such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading."

More detailed guidance on disclosure of material sustainability topics can be found in the **SASB Conceptual Framework**, available for download via <http://www.sasb.org/approach/conceptual-framework/>.

³ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting of Material Sustainability Topics

For sustainability disclosure topics in the Marine Transportation industry, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when disclosing its performance with respect to each of the sustainability topics it has identified as material.

As appropriate—and consistent with Rule 12b-20⁴—for each sustainability topic, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

- The registrant’s **strategic approach** to managing performance on material sustainability issues;
- The registrant’s competitive positioning;
- The **degree of control** the registrant has;
- Any measures the registrant has undertaken or plans to undertake to improve performance; and
- Data for the registrant’s **last three completed fiscal years** (when available).

SASB recommends that registrants use SASB Standards specific to their primary industry as identified in the [Sustainable Industry Classification System \(SICSTM\)](#). If a registrant generates significant revenue from multiple industries, SASB recommends that it consider the materiality of the sustainability issues that SASB has identified for those industries and disclose the associated SASB accounting metrics.

Users of the SASB Standards

The SASB Standards are intended for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁵ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Nevertheless, disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁴ SEC Rule 12b-20: “In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading.”

⁵ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities in which the registrant has a controlling interest and therefore are consolidated for financial reporting purposes (controlling interest is generally defined as ownership of 50% or more of voting shares);⁶
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand its performance with respect to sustainability issues (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Activity Metrics and Normalization

SASB recognizes that normalizing accounting metrics is important for the analysis of SASB disclosures.

SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K (e.g., revenue, EBITDA, etc.).

Such data—termed “activity metrics”—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions (e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for users of SASB accounting metrics (e.g., investors) in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.

⁶ See US GAAP consolidation rules (Section 810).

Where relevant, SASB recommends specific activity metrics that—at a minimum—should accompany SASB accounting metric disclosures.

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Seagoing personnel ⁷	Quantitative	Number	TR0301-A
Nautical miles	Quantitative	Nautical miles (nm)	TR0301-B
Operating days ⁸	Quantitative	Number of days	TR0301-C
Deadweight tonnage ⁹	Quantitative	Thousands of deadweight tons	TR0301-D
Total shipping fleet	Quantitative	Number	TR0301-E
Number of vessel port calls	Quantitative	Number	TR0301-F
Twenty-foot equivalent unit capacity	Quantitative	TEU	TR0301-G

Units of Measure

Unless specified, disclosures should be reported in International System of Units (SI units).

Uncertainty

SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the imperfectness of third-party reporting systems or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.

Estimates

SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may be necessary for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.

Timing

Unless otherwise specified, disclosure shall be for the registrant's fiscal year.

⁷ Note to **TR0301-A**– Seagoing personnel is defined as the number of employees working aboard the registrant's vessels (including direct employees and contract employees).

⁸ Note to **TR0301-C**– Operating days are defined as the number of available days in a period less the aggregate number of days that the vessels are off-hire due to unforeseen circumstances (i.e., a measure of days in a period during which vessels actually generate revenue).

⁹ Note to **TR0301-D**– Deadweight tonnage is the sum, for all of the registrant's vessels, of the difference in displacement in deadweight tons between the light displacement and the actual loaded displacement.

Limitations

There is no guarantee that SASB Standards address all sustainability impacts or opportunities associated with a sector, industry, or company, and therefore, a company must determine for itself the topics—sustainability-related or otherwise—that warrant discussion in its SEC filings.

Disclosure under SASB Standards is voluntary. It is not intended to replace any legal or regulatory requirements that may be applicable to user operations. Where such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements. Disclosure according to SASB Standards shall not be construed as demonstration of compliance with any law, regulation, or other requirement.

SASB Standards are intended to be aligned with the principles of materiality enforced by the SEC. However, SASB is not affiliated with or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

Forward-looking Statements

Disclosures on sustainability topics can involve discussion of future trends and uncertainties related to the registrant's operations and financial condition, including those influenced by external variables (e.g., environmental, social, regulatory, and political). Companies making such disclosures should familiarize themselves with the safe harbor provisions of Section 27A of the Securities Act and Section 21E of the Exchange Act, which preclude civil liability for material misstatements or omissions in such statements if the registrant takes certain steps, including, among other things, identifying the disclosure as "forward-looking" and accompanying such disclosure with "meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statements."

Assurance

In disclosing to SASB Standards, it is expected that registrants disclose with the same level of rigor, accuracy, and responsibility as they apply to all other information contained in their SEC filings.

SASB encourages registrants to use independent assurance (attestation); for example, an Examination Engagement to AT Section 101.

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Environmental Footprint of Fuel Use	Gross global Scope 1 emissions	Quantitative	Metric tons CO ₂ -e	TR0301-01
	Description 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	TR0301-02
	Total energy consumed, percentage from heavy fuel oil, percentage from renewables	Quantitative	Gigajoules, Percentage (%)	TR0301-03
	Air emissions for the following pollutants: NO _x , SO _x , and particulate matter (PM)	Quantitative	Metric tons (t)	TR0301-04
	Energy Efficiency Design Index (EEDI) for new ships	Quantitative	Grams of CO ₂ per ton-nautical mile	TR0301-05
Ecological Impacts	Shipping duration in marine protected areas and areas of protected conservation status	Quantitative	Number of travel days	TR0301-06
	Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment	Quantitative	Percentage (%)	TR0301-07
	Number and aggregate volume of spills and releases to the environment	Quantitative	Number, Cubic meters (m ³)	TR0301-08
Business Ethics	Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Number	TR0301-09
	Amount of legal and regulatory fines and settlements associated with bribery or corruption ¹⁰	Quantitative	U.S. Dollars (\$)	TR0301-10
Accidents & Safety Management	Number of serious marine incidents ¹¹	Quantitative	Number	TR0301-11
	Lost time injury rate	Quantitative	Rate	TR0301-12
	Number of Conditions of Class or Recommendations	Quantitative	Number	TR0301-13
	Number of port state control (1) deficiencies and (2) detentions	Quantitative	Number	TR0301-14

¹⁰ Note to **TR0301-10** - Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

¹¹ Note to **TR0301-11** - Disclosure shall include a description of serious marine incidents, outcomes, and corrective actions implemented in response.

Environmental Footprint of Fuel Use

Description

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) and air pollution regulations. GHGs and air pollutants, including carbon dioxide, nitrogen oxides, sulfur oxides, and particulate matter, are the main environmental externalities of fuel use. 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 fuel efficiency.

Accounting Metrics

TR0301-01. Gross global Scope 1 emissions

- .01 The registrant shall disclose gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the six GHGs covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).
- Emissions of all gases shall be disclosed in metric tons of carbon dioxide equivalents (CO₂-e) calculated in accordance with published global warming potential (GWP) factors. To date, the preferred source for GWP factors is the IPCC's Second Assessment Report (1995).
 - Gross emissions are GHGs emitted to the atmosphere before accounting for any GHG reduction activities, offsets, or other adjustments for activities in the reporting period that have reduced or compensated for emissions.
 - Disclosure corresponds to section CC8.2 of the Carbon Disclosure Project (CDP) Questionnaire and section 4.25 of the Climate Disclosure Standards Board (CDSB) *Climate Change Reporting Framework* (CCRF).
- .02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development in (WRI/WBCSD) [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#), Revised Edition, March, 2004 (hereafter, the "GHG Protocol").
- These emissions include direct emissions of GHGs from stationary or mobile sources that include, but are not limited to, equipment, production facilities, office buildings, and transportation.
- .03 GHG emission data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is generally aligned with:
- The Financial Control approach defined by the GHG Protocol and referenced by the [CDP Guidance for companies reporting on climate change on behalf of investors & supply chain members 2013](#) (hereafter, the "CDP Guidance").¹²

¹² "An organization has financial control over an operation if it has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities. Generally an organization has financial control over an operation for GHG accounting purposes if the operation is treated as a group company or subsidiary for the purposes of financial consolidation." *Guidance for companies reporting on climate change on behalf of investors & supply chain members 2013*, p. 95.

- The approach detailed in Section 4.23, “Organizational boundary setting for GHG emissions reporting,” of the CDSB Climate Change Reporting Framework (CCRF).¹³
- .04 The underlying technical approach to data collection, analysis, and disclosure shall be consistent with the CDP Guidance.
- The registrant shall consider the CDP Guidance as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.
- .05 The registrant should discuss any change in its emissions from the previous fiscal year, such as explaining if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- .06 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 registrant may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.
- .07 The registrant should discuss the calculation methodology for its emission disclosure, such as noting if data are from continuous emissions-monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.

TR0301-02. Description 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

- .08 The registrant shall discuss the following, where relevant:
- The scope of its activities, particularly if strategies, plans, and/or reduction targets pertain differently to different business units, geographies, or emissions sources;
 - If strategies, plans, and/or reduction targets are related to or associated with an emissions disclosure (reporting) or reduction program (e.g., E.U. ETS, RGGI, WCI, etc.), including regional, national, international, or sectoral programs; and
 - The activities and investments required to fulfill the plans and any risks or limiting factors that might affect fulfillment of the plans and/or targets.
- .09 For emission-reduction targets, the registrants shall disclose:
- The percentage of emissions within the scope of the reduction plan;
 - The percentage reduction from the base year,
 - The base year is the first or starting year against which emissions are evaluated toward the achievement of the target
 - Whether the target is absolute or intensity-based, and the metric denominator if it is an intensity-based target;
 - The timelines for the reduction activity, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year; and

¹³ This is based on the requirements of International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) on consolidation and equity accounting and is consistent with how information relating to entities within a group or interest in joint ventures/associates would be included on consolidated financial statements, as per the CDSB *Climate Change Reporting Framework*.

- The mechanism(s) for achieving the target, such as energy efficiency efforts, energy source diversification, carbon capture and storage, etc.
- .10 Where necessary, the registrant shall discuss any circumstances in which the target base year emissions have been or may be recalculated retrospectively or in which the target base year has been reset.
- .11 Disclosure corresponds with:
- CDSB Section 4, “Management actions”¹⁴
 - CDP questionnaire “CC3, Targets and Initiatives”
- .12 Relevant initiatives to discuss may include, but are not limited to, route optimization, use of alternative fuels and energy sources, system improvements, and optimization of ship operation. Ship-related efforts can include improving efficiency through ship design and propulsion systems (including hull and propeller improvements) and upgrading of the fleet to new ships.

TR0301-03. Total energy consumed, percentage from heavy fuel oil, percentage from renewables

- .13 The registrant shall disclose total energy consumption from all sources as an aggregate figure in gigajoules or their multiples.
- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
 - The scope includes only energy consumed by entities owned or controlled by the organization.
 - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
- .14 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), and 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).
- .15 The registrant shall calculate the percentage of energy from heavy fuel oil as the energy content of heavy fuel oil consumed divided by the energy content of all fuel consumed.
- .16 Heavy fuel oil is 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:
- 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).
 - No. 6 Residual fuel oil, which includes Bunker C fuel oil.
- .17 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.

¹⁴ “Disclosure shall include a description of the organization’s long-term and short-term strategy or plan to address climate change-related risks, opportunities, and impacts, including targets to reduce GHG emissions and an analysis of performance against those targets.” *Climate Change Reporting Framework – Edition 1.1*, October 2012, CDSB.

- The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.
 - For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
 - For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.

.18 Renewable energy is defined as energy from sources that are capable of being replenished in a short time through ecological cycles, such as geothermal, wind, solar, hydro, and biomass.

- For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources are limited to the following:
 - Energy from hydro sources that are certified by the Low Impact Hydropower Institute.
 - Energy from biomass sources biomass sources are limited to those that are considered “eligible renewables” according to the Green-e Energy National Standard Version 2.4 or eligible for a state Renewable Portfolio Standard.

.19 The registrant 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 kWh to gigajoules (including for electricity from solar or wind energy).

TR0301-04. Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)

.20 The registrant shall disclose its emissions released to the atmosphere of air pollutants associated with its activities, including:

- Direct air emissions from stationary or mobile sources that include, but are not limited to, office buildings, marine vessels that transport products, truck fleets, and moveable equipment at facilities.

.21 The registrant shall disclose emissions released to the atmosphere by emissions type. Substances include:

- Oxides of nitrogen (including NO and NO₂ and excluding N₂O), reported as NO₂
- Oxides of sulfur (SO₂ and SO₃), reported as SO₂
- Particulate matter (PM); reported as the sum of PM₁₀ and PM_{2.5}, or all particulates less than 10 micrometers in diameter

.22 Air emissions data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is aligned with the consolidation approach used for TR0301-01.

.23 The registrant should discuss the calculation methodology for its emissions disclosure, such as whether data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.

TR0301-05. Energy Efficiency Design Index (EEDI) for new ships

.24 The registrant shall calculate the EEDI for each new vessel in its fleet and report the average EEDI value in grams of CO₂ per ton-nautical mile, where:

- New vessels are those built after 2013 and for which the International Maritime Organization (IMO) has adopted EEDI as a metric.

.25 EEDI is calculated as: (power installed * specific fuel consumption * carbon conversion) / (available capacity * vessel speed at design load), reported in grams of carbon dioxide per ton-nautical mile.

.26 The registrant shall follow calculation methodologies outlined in IMO MEPC.1/Circ. 681 [Interim Guidelines on the Method of Calculation of the Energy Efficiency Design Index for New Ships](#).

.27 The registrant shall disclose EEDI as a simple average of the EEDI value of all new vessels.

Ecological Impacts

Description

Marine transportation operations and waste disposal can create substantial environmental externalities, such as water pollution and impacts on marine life. Seagoing vessels routinely discharge ballast water, bilge water, and untreated sewage. Compliance with international regulations around managing 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 have been prosecuted with hefty fines. Operating in areas of protected conservation status, such as Emission Control Areas and Particularly Sensitive Sea Areas (PSSAs), can increase the risk of ecological impact as well as the risk of violating stringent environmental regulations.

Accounting Metrics

TR0301-06. Shipping duration in marine protected areas and areas of protected conservation status

.28 The registrant shall disclose the shipping duration spent in marine protected areas and areas of protected conservation status, where:

- Shipping duration is the sum of the travel days (24-hour periods or fractions thereof) spent in either type of area

.29 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.

.30 Marine protected areas include areas internationally established and regulated in IMO Conventions and areas established nationally by member states, such as:

- 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))
- Special Areas designated under the International Convention for the Prevention of Pollution from Ships (MARPOL) Annexes I, II, and IV
- Emission Control Areas under MARPOL Annex VI
- Areas to be Avoided established by IMO Safety of Life at Sea Convention (SOLAS), Chapter V, regulation 10
- No Anchoring Areas established by IMO SOLAS Chapter V, regulation 10
- Areas with Mandatory Ship Reporting Systems established by IMO SOLAS, Chapter V, regulation 11

.31 An area is considered to be of protected conservation status if it is located within:

- IUCN Protected Areas (categories I-VI)
- Ramsar Wetlands of International Importance
- UNESCO marine World Heritage sites

- Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme
- Marine Natura 2000 sites
- 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."¹⁵
 - These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net

.32 The registrant may choose to 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).

.33 The registrant may choose to provide discussion around its shipping activities in areas that have no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.

TR0301-07. Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment

.34 The registrant shall disclose the percentage of its fleet that has (1) implemented ballast water exchange and the percentage of its fleet that has (2) implemented ballast water treatment in accordance with the IMO Ballast Water Management Convention (BWMC).

.35 Ballast water exchange is defined by Regulation D1 of the BWMC 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.

.36 The percentage of the fleet implementing ballast water exchange is calculated as the number of ships in the registrant's fleet that have implemented ballast water exchange meeting the Regulation D1 performance standard divided by the total number of ships in the fleet.

.37 Ballast water treatment is defined as any integrated system of ballast water treatment equipment that is type-approved by the U.S. Coast Guard or foreign administration to meet the performance criteria in Regulation D2 of the BWMC, which are:

- System treats ballast water to an efficacy of not more than 10 viable organisms per m³ that are greater than or equal to 50 micrometers in minimum dimension, and
- Not more 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.

.38 The percentage of the fleet implementing ballast water treatment is calculated as the number of ships in the registrant's fleet that have implemented ballast water treatment systems meeting the Regulation D2 performance standard divided by the total number of ships in the fleet.

¹⁵ Dudley, N. (ed.) (2008) *Guidelines for Applying Protected Areas Management Categories*. IUCN: Gland, Switzerland. pp. 8-9.

TR0301-08. Number and aggregate volume of spills and releases to the environment

- .39 The registrant shall disclose the total number of spills and releases to the environment and the aggregate volume of these releases in cubic meters.
- .40 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:
- Oil, excluding those that are:
 - 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
 - Permitted under MARPOL 73/78, Annex I, as provided in 33 CFR part 151, subpart A
 - Hazardous substances in quantities equal to or exceeding, in any 24-hour period, the reportable quantity determined in 40 CFR part 117
 - Noxious liquid substances presenting major hazard (Category X) or minor hazard (Category Y) according to MARPOL Annex II
- .41 Spills and releases include releases overboard to the environment that are intentional or accidental, including:
- Those resulting from sabotage, earthquakes, or other events outside of the registrant's operational control
 - Those resulting from leakage over time (which shall be counted once at the time the leak is identified)
- .42 The registrant shall calculate the volume of spills or releases 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.
- .43 Where relevant, the registrant should provide a breakdown of spills and releases by type, such as: (1) hydrocarbons, (2) hazardous substances, and (3) MARPOL Annex II noxious liquid substances.
- .44 The registrant may choose to provide a breakdown of spills and releases by their proximity to land (e.g., those 24 nautical miles or closer to shore and those greater than 24 nautical miles from shore).

Business Ethics

Description

Facilitation payments at ports, which are considered standard business practice in some countries, are often necessary to obtain permits, cargo clearance, and port berths. New anti-bribery laws, including the U.K.'s 2010 Bribery Act, place pressure on operators to alter this practice. Enforcement of these laws could lead to significant one-time costs or higher ongoing compliance costs, and could even affect a company's social license to operate. 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 to government officials or exertion of unfair influence through gifts or other means. Operating in corruption-prone countries can exacerbate these risks.

Accounting Metrics

TR0301-09. Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index

- .45 The registrant shall calculate the number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index (CPI).
- In the event that two or more countries share the 20th lowest ranking, all shall be included in the scope of disclosure.
 - The registrant shall use the most current version of the CPI on Transparency International's publicly accessible [website](#).

TR0301-10. Amount of legal and regulatory fines and settlements associated with bribery or corruption

- .46 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with bribery, corruption, or other unethical business practices (e.g., facilitation payment, indirect enticements such as kick-backs, etc.) including violations of the Foreign Corrupt Practices Act related to its anti-bribery or accounting provisions and enforced by the U.S. Department of Justice or the SEC.
- .47 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to **TR0301-10**

- .48 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., bribery, facilitation payment, etc.) of fines and settlements.
- .49 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.
- .50 All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself will not compromise the registrant's ability to maintain data privacy and security.

Accidents & Safety Management

Description

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 unloading and loading 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 inextricably linked to the safety performance of the company, as a healthy crew is necessary for safe voyages. The health and safety of workers can also affect the probability and magnitude of accidents or leaks. The reliance of the global marketplace on the shipping industry means that voyages need to be made within precise timeframes. Therefore, safety and efficiency are closely related, and performance on safety issues is an indication of efficiency. Accidents 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 have extensive safety measures in place, such as employee training programs, periodic dry-docking maintenance periods, and annual class-renewal surveys conducted by classification societies.

Accounting Metrics

TR0301-11. Number of serious marine incidents

.51 The registrant shall disclose the total number of serious marine incidents in which its fleet was involved.

.52 A serious marine incident is defined, based on the U.S. Code of Federal Regulations 46 CFR 4.03-2, as any event involving the registrant's vessels that results in:

- A marine casualty or accident that results in any of the following:
 - One or more deaths;
 - An injury to a crewmember, passenger, or other person that requires professional medical treatment beyond first aid, and, in the case of a person employed on board a vessel in commercial service, which renders the individual unfit to perform routine vessel duties;
 - Damage to property in excess of \$100,000;
 - Actual or constructive total loss of any self-propelled vessel of 100 gross tons or more.
- A discharge of oil of 10,000 gallons or more, whether or not resulting from a marine casualty.
- A discharge of a reportable quantity of a hazardous substance (per U.S. regulation) or a release of a reportable quantity of a hazardous substance into the environment (per U.S. regulation), whether or not resulting from a marine casualty.

Note to TR0301-11

.53 The registrant shall describe serious marine incidents, including their root causes, outcomes, and any corrective actions implemented in response.

TR0301-12. Lost time injury rate

.54 The registrant shall disclose its lost time injury rate (LTIR), as the number of lost time incidents per one million working hours, where a lost time incident is an incident that results in absence from work beyond the date or shift when it occurred.

- The rate shall be calculated as: (lost time incidents) / (1,000,000 hours worked).

.55 The registrant should refer to organizations such as the International Chamber of Shipping and the IMO International Safety Management Code (ISM Code) for guidance on implementing lost time incident reporting.

.56 The registrant should disclose its process for classifying, identifying, and reporting lost time incidents.

.57 The scope includes all employees, domestic and foreign.

TR0301-13. Number of Conditions of Class or Recommendations

.58 The registrant shall disclose the number of Conditions of Class or Recommendations it has received from a Flag Administration or a Recognized Organization (RO), such as a Classification Society, that has been delegated the authority to issue such findings.

.59 Conditions of Class and Recommendations are understood to be interchangeable terms, defined as requirements imposed by an Administration (or its delegate) that are to be carried out within a specific time limit in order to retain vessel Class, including:

- Repairs and/or renewals related to damages that affect Classification (e.g., grounding, structural damages, machinery damages, wastage over the allowable limits, etc.)
- Supplementary survey requirements
- Temporary repairs

.60 The registrant shall disclose Conditions of Class regardless of whether they resulted in withdrawal, suspension, or invalidation of a vessel's Class certificate.

TR0301-14. Number of port state control (1) deficiencies and (2) detentions

.61 The registrant shall disclose the number of deficiencies it has received from regional port state control (PSC) organizations, where:

- A deficiency is defined as a condition found not to be in compliance with the requirements of one or more of the following conventions:
 - International Convention for the Safety of Life at Sea (SOLAS)
 - International Convention on Load Lines (Load Lines)
 - International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocols of 1978 and 1997 relating thereto, as amended (MARPOL)
 - International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)
 - International Convention on Tonnage Measurement of Ships, 1969 (Tonnage)
 - International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS)

.62 The registrant shall disclose the number of detentions it has received from regional PSC organizations, where:

- 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, that 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.

- .63 The scope of disclosure includes deficiencies and detentions issued by PSC organizations that are signatories to memoranda of understanding (MoU) of regional PSC (i.e., 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 the United States Coast Guard (USCG) in the United States.

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