Sustainability Accounting Standards

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFTS

REDLINE OF STANDARDS FOR PUBLIC COMMENT

TRANSPORTATION SECTOR

Automobiles
Auto Parts
Car Rental & Leasing
Airlines
Air Freight & Logistics
Marine Transportation
Cruise Lines
Rail Transportation
Road Transportation

Prepared by the
Sustainability Accounting Standards Board®

TRANSPORTATION SECTOR

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TRANSPORTATION SECTOR

AUTOMOBILES*

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PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0101

AUTOMOBILES

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Automobiles industry.

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter

[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide.

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf.

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx.

Industry Description

The Automobiles industry includes companies that manufacture passenger vehicles, light trucks, and motorcycles. Industry players design, build, and sell vehicles that run on a range of traditional and alternative fuels and powertains. Auto makers sell vehicles to dealers for consumer retail sales as well as selling directly to fleet customers, including car rental and leasing companies, commercial fleet customers, and governments. Due to the global nature of this industry, nearly all market players have manufacturing facilities, assembly plants, and service locations in several countries around the world. The Automobiles industry is highly concentrated, with a few large manufacturers and a large number of auto parts manufacturers feeding the supply chain.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

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

- Materials Efficiency & Recycling
- Product Safety
- Labor Relations
- Fuel Economy & Use-phase Emissions
- Materials Sourcing

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. 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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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.

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[7] *TSC Industries v. Northway, Inc*., 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

- 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

[12] http://using.sasb.org/mock-10-k-library/

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

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[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

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[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed “activity metrics”—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of vehicles produced	Quantitative	Number	TR0101-A
Number of vehicles sold	Quantitative	Number	TR0101-B

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[19]

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.
[19] The AICPA’s Guide (see supra note 1) provides guidance related to measurement uncertainty.

discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Materials Efficiency & Recycling	Amount of total waste from manufacturing, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TR0101-01
	Weight of end-of-life material recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TR0101-02
	Average recyclability of vehicles sold, by weight[20]	Quantitative	Percentage (%) by sales-weighted weight (metric tons)	TR0101-03
Product Safety	Percentage of models rated by NCAP programs with overall 5-star safety rating, by region	Quantitative	Percentage (%) of rated vehicles	TR0101-04
	Number of safety-related defect complaints, percentage investigated	Quantitative	Number, Percentage (%)	TR0101-05
	Number of vehicles recalled[21]	Quantitative	Number	TR0101-06
Labor Relations	Percentage of active workforce covered under collective-bargaining agreements, broken down by U.S. and foreign employees	Quantitative	Percentage (%)	TR0101-07
	Number and duration of strikes and lockouts[22]	Quantitative	Number, Days	TR0101-08
Fuel Economy & Use-phase Emissions	Sales-weighted average passenger fleet fuel economy, consumption, or emissions, by region	Quantitative	Mpg, L/km, gCO_2/km, km/L	TR0101-09
	Number of (1) zero emission vehicles (ZEV) sold, (2) hybrid vehicles sold, and (3) plug-in hybrid vehicles sold	Quantitative	Vehicle units sold	TR0101-10
	Discussion of strategies and approach to managing fleet fuel economy and emissions risks and opportunities	Discussion and Analysis	n/a	TA05-02-01
Materials Sourcing	Percentage of materials costs for items containing critical materials	Quantitative	Percentage (%)	~~TR0101-11~~TA05-04-01

[20] Note to **TR0101-03** - Disclosure shall include a discussion of the registrant's approach to optimizing vehicle recycling and recovery rates, including participation in mandatory end-of-life of vehicle programs.

[21] Note to **TR0101-06** - Disclosure shall include a discussion of notable recalls, such as those that affected a significant number of vehicles of one model or those related to a serious injury or fatality.

[22] Note to **TR0101-08** - Disclosure shall include a description of the root cause of the stoppage, impact on production, and corrective actions taken.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	~~Percentage of tungsten, tin, tantalum, and gold smelters and refiners within the supply chain that are verified conflict-free~~	~~Quantitative~~	~~Percentage (%)~~	~~TR0101-12~~
	Discussion of the management of risks associated with the use of critical materials~~ and conflict minerals~~	Discussion and Analysis	n/a	~~TR0101-13~~TA05-04-02

Materials Efficiency & Recycling

Description

The lifecycle environmental impacts of automobiles include impacts during the manufacturing process, the use-phase, and the end-of-life phase. The automobile manufacturing process involves the use of significant amounts of materials (including steel, iron, aluminum, and plastics, among others) and can generate substantial amounts of solid waste (including scrap metal, paint sludge, and shipping materials). In addition, millions of vehicles worldwide reach the end of their useful lives every year. At the same time, the rate of vehicle ownership is expanding globally, which is leading to higher numbers of end-of-life vehicles. Automobile companies can use design innovation as well as process and technological improvements to mitigate these impacts, and achieve material financial benefits. Companies that are innovating and continuing to improve materials efficiency, including reducing waste and reusing or recycling waste and scrapped vehicles in their production processes through vehicle take-back and recycling programs, can contribute to lowering the lifecycle environmental impacts of vehicles and the strain on natural resources from the production of new materials. At the same time, companies can achieve cost savings, generate additional revenues, and protect themselves from regulatory risk and materials supply risks.

Accounting Metrics

TR0101-01. Amount of total waste from manufacturing, percentage recycled

.01 The amount of total waste from manufacturing shall be calculated in metric tons, where waste is defined as anything for which the registrant has no further use and which is discarded or released to the environment.

.02 The percentage recycled shall be calculated as the weight of manufacturing waste material that was reused, plus the weight recycled or remanufactured (through treatment or processing) by the registrant, plus the amount sent externally for further recycling, divided by the total weight of waste material, where:

- Reused materials are defined as those recovered products or components of products that are used for the same purpose for which they were conceived.
- Recycled and remanufactured materials are defined as waste materials that have been reprocessed or treated by means of production or manufacturing processes and made into a final product or a component for incorporation into a product.
- The scope of recycled and remanufactured products includes primary recycled materials, co-products (outputs of equal value to primary recycled materials), and by-products (outputs of lesser value than primary recycled materials).
- Portions of products and materials that are disposed of in landfills are not considered recycled; only the portions of products that are directly incorporated into new products, co-products, or by-products shall be included in the percentage recycled.
- Materials sent for further recycling include those materials that are transferred to a third party for the express purpose of reuse, recycling, or refurbishment.

- Materials incinerated, including for energy recovery, are not considered reused or recycled. Energy recovery is defined as the use of combustible waste as a means to generate energy through direct incineration, with or without other waste, but with recovery of the heat.

.03 The scope of disclosure excludes materials accounted for in TR0101-02.

TR0101-02. Weight of end-of-life material recovered, percentage recycled

.04 The registrant shall disclose the weight, in metric tons, of materials recovered including through mandatory end-of-life vehicle programs, recycling services, voluntary product take-back programs, and refurbishment services.

- The scope of disclosure shall include products, materials, and parts that are at the end of their useful life and would have otherwise been disposed of as waste or used for energy recovery, but have instead been collected.

- The scope of disclosure shall include materials physically handled by the registrant.

- The scope of disclose shall exclude materials of which the registrant does not take physical possession, but for which it has contracted with a third party the task of collection for the expressed purpose of reuse, recycling, or refurbishment.

- The scope of disclosure excludes vehicles and parts that are in-warranty and subject to recall and that have been collected for repairs.

.05 The percentage recycled shall be calculated as the weight of incoming recovered material that was reused plus the weight of material recycled or remanufactured (through treatment or processing) by the registrant plus the weight of material sent externally for further recycling divided by the total weight of incoming recovered material.

.06 Reused materials are defined as those recovered products or components of products that are used for the same purpose for which they were conceived.

- The scope of reused materials includes products donated and/or refurbished by the registrant or third parties.

.07 Recycled and remanufactured materials are defined as waste materials that have been reprocessed or treated by means of a production or manufacturing process and made into a final product or made into a component for incorporation into a product.

- The scope of recycled and remanufactured products includes primary recycled materials, co-products (outputs of equal value to primary recycled materials), and by-products (outputs of lesser value to primary recycled materials).

.08 The scope of disclosure excludes materials accounted for in TR0101-01.

TR0101-03. Average recyclability of vehicles sold, by weight

.09 The registrant shall disclose the average recyclability of its passenger and light-duty fleet by weight, weighted by the ratio of annual sales of each model to the total sales of all passenger and light-duty models, where:

- The average recyclability percentage is calculated as the total weight of vehicle components and materials that are recyclable, reusable, or able to be remanufactured divided by the total weight of the vehicles.

- Consistent with the E.U. End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC), a material is recyclable if it can be reprocessed for the original purpose or other purposes, excluding energy recovery. Energy recovery means the use of combustible waste as a means to generate energy through direct incineration, with or without other waste, but with recovery of the heat.

- Vehicle components and materials are recyclable if they can be recycled at a reasonable cost with technology widely available in the markets in which the vehicles are sold.

.10 The scope of disclosure excludes recoverable material which, consistent with the E.U. End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC), is defined as material that can be salvaged for further use, including use as a fuel or other means to generate energy.

.11 Materials that are typically recyclable include ferrous and non-ferrous metals, glass, and certain plastics.

.12 Materials and components that are typically reusable or able to be remanufactured include engines, transmissions, catalysts, tires, batteries, and CFCs.

.13 Materials that are typically disposed of as waste or used for energy recovery include fluids, hazardous materials, automotive shredder residue, automotive safety glass, and certain plastics.

Note to **TR0101-03**

.14 Disclosure shall include a discussion of the registrant's approach to optimizing vehicle recycling and recovery rates, including participation in mandatory vehicle end-of-life programs.

.15 The registrant shall disclose processes, procedures, and technologies for optimizing vehicle recycling and recovery rates, including in regions where the registrant participates in mandatory vehicle end-of-life programs (e.g., the European Union, Japan, and Korea).

.16 Relevant measures include, but are not limited to, design-phase efforts (i.e., design for dismantlability and recyclability), partnerships with dismantling and recycling companies, and research and development focused on vehicle recycling technologies.

Product Safety

Description

Driving is a risky activity, as distracted driving, speeding, drunk driving, and dangerous weather conditions, among other factors, can lead to accidents, exposing drivers, passengers, and bystanders to possible injuries and deaths. Accidents can also be caused by defective vehicles, and failure to detect these defects before the vehicles are sold can have significant financial repercussions for auto manufacturers. For example, defective vehicles sold in the U.S. must meet safety requirements or else they must be recalled, and the features that failed to meet requirements must be repaired or replaced at the manufacturer's cost. In addition, manufacturers must provide warranties to insure customers against the risk of purchasing a defective vehicle. Ensuring vehicle safety and responding in a timely manner when defects are identified can protect companies from regulatory action or customer lawsuits, which can affect company profitability through one-time costs and contingent liabilities. Through effective management of the issue, companies can enhance reputation and brand value and drive higher sales over the long term.

Accounting Metrics

TR0101-04. Percentage of models rated by NCAP programs with overall 5-star safety rating, by region

.17 The registrant shall calculate the percentage as: the number of vehicle models with an overall 5-star New Car Assessment Program (NCAP) rating divided by the total number of vehicle models with an NCAP score.

.18 The registrant shall disclose this percentage for each geographic region for which it conducts segment financial reporting[23] and which is subject to one of the following NCAPs:

- U.S. National Highway Traffic Safety Administration's (NHTSA) New Car Assessment Program (NCAP) 5-Star Safety Ratings Program
- European New Car Assessment Programme (Euro NCAP)
- Japan New Car Assessment Program (JNCAP)
- Latin New Car Assessment Program (Latin NCAP)
- The New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP)
- China New Car Assessment ~~Programe~~Program (C-NCAP)
- Korean New Car Assessment Program (KNCAP)
- Australia and New Zealand New Car Assessment Program (ANCAP)

.19 The scope of disclosure excludes vehicle models not rated by the NHTSA or equivalent national authority.

[23] As determined by FASB Accounting Standards Codification Topic 280, *Segment Reporting*

.20 If few of the registrant's vehicle models (i.e., one or two) are rated in a region, it should disclose this information in order to provide necessary context for the percentage.

.21 The registrant may choose to discuss its vehicles' use of advanced crash avoidance technologies and features that are not considered as part of NCAP program ratings.

- These technologies and features include, but are not limited to, electronic stability control, lane departure warning, and forward collision warning.

TR0101-05. Number of safety-related defect complaints, percentage investigated

.22 The registrant shall disclose the total number of safety-related defect complaints, where:

- A safety-related defect, as defined by the United States Code for Motor Vehicle Safety (Title 49, Chapter 301), is a problem that exists in a motor vehicle or an item of motor vehicle equipment that (a) poses a risk to motor vehicle safety, and (b) may exist in a group of vehicles of the same design or manufacture or items of equipment of the same type and manufacture.

- The scope of disclosure includes safety-related defect complaints received by the registrant, the NHTSA, or another governmental authority

.23 The registrant shall calculate the percentage of safety-related defect complaints investigated as the total number of safety-related defect complaints that were investigated by the NHTSA or other governmental authority divided by the total number of safety-related defect complaints.

.24 Investigated complaints include any complaint that was investigated by the NHTSA Office of Defects Investigation (ODI) or other governmental authority, including any of the following stages of the investigative process:

- Screening, which is a preliminary review of consumer complaints and other information related to alleged defects to determine whether an investigation should be opened

- Petition Analysis, which is an analysis of any petitions calling for defect investigations and/or reviews of safety-related recalls

- Investigation, which is the investigation of alleged safety defects

- Recall Management, which is the investigation of the effectiveness of safety recalls

.25 A database of safety-related defect complaints received by the NHTSA and investigations initiated is available here.

TR0101-06. Number of vehicles recalled

.26 The registrant shall disclose the total number of vehicle units recalled, the scope of which includes voluntary recalls initiated by the registrant and involuntary recalls mandated by the NHTSA or other relevant government agency.

.27 Involuntary recalls are those required by the NHTSA or other relevant government agency, which are issued when a motor vehicle or an item of motor vehicle equipment does not comply with a Federal Motor Vehicle Safety Standard, or when there is a safety-related defect in the vehicle or equipment.

- A database of NHTSA-initiated recalls is available here.

.28 The registrant may choose, in addition to total vehicle units recalled, to disclose the percentage of recalls that were (1) voluntarily and (2) involuntarily issued.

Note to **TR0101-06**

.29 The registrant shall discuss notable recalls such as those that affected a significant number of vehicles of one model or those related to serious injury or fatality.

.30 A recall should be considered notable if it mentioned in the NHSTA's monthly recall reports.

.31 For such recalls the registrant should provide:

- Description and cause of the recall issue
- The total number of vehicles recalled
- The cost to remedy the issue (in U.S. dollars)
- Whether the recall was voluntary or involuntary (mandated by NHTSA)
- Corrective actions
- Any other significant outcomes (e.g. legal proceedings, passenger fatalities)

Definitions:

The National Highway Traffic Safety Administration's New Car Assessment Program (NCAP)'s 5-Star Safety Ratings Program rates rollover resistance in addition to frontal and side crashworthiness beyond what is required by federal law under the Federal Motor Vehicle Safety Standards (FMVSS).

Labor Relations

Description

Organized labor plays an important role in the Automobiles industry. Many workers are covered under collective bargaining agreements that protect worker rights and negotiate wages. Unionization of assembly line workers leaves automobile companies vulnerable to shut downs and delays due to worker strike. Due to the global nature of the industry, auto companies may also operate in countries where worker rights are not adequately protected. The nuances of both domestic and international worker concerns make management of labor relations critical for automobile companies. Proper management of, and communication around, issues such as worker pay and working conditions can prevent conflicts with workers that could lead to extended periods of strikes, which can slow or shut down operations and create reputational risk. Automakers need a long-term perspective on managing workers, including their pay and benefits, in a way that protects worker rights and enhances their productivity while ensuring the financial sustainability of a company's operations.

Accounting Metrics

TR0101-07. Percentage of active workforce covered under collective-bargaining agreements, broken down by U.S. and foreign employees

.32 The registrant shall indicate the percentage of U.S. employees and the percentage of foreign employees in the active workforce who were covered under collective-bargaining agreements during any part of the fiscal year, where:

- Active workforce is defined as the maximum number of unique employees employed at any time during the fiscal year.
- U.S. employees are defined as employees that do not need a visa to work in the U.S.
- Foreign employees are defined as employees that need or would need a visa to work in the U.S.

TR0101-08. Number and duration of strikes and lockouts

.33 The registrant shall disclose the number of work stoppages and total duration, in worker days idle, of work stoppages involving 1,000 or more workers lasting one full shift or longer.

- Worker days idle is calculated as the product of days idle and number of workers involved.

.34 The scope of disclosure includes work stoppage due to disputes between labor and management, including strikes and lockouts.

Note to **TR0101-08**

.35 The registrant shall describe the reason for each work stoppage (as stated by labor), the impact on production, and any corrective actions taken as a result.

Fuel Economy & Use-phase Emissions

Description

Transportation accounts for a significant share of global greenhouse gas (GHG) emissions. Motor vehicles' combustion of petroleum-based fuels cumulatively generates significant direct GHG emissions and contributes to global climate change. Automobile usage is also associated with local air pollutants that threaten human health and the environment. In this context, vehicle emissions of GHGs, nitrogen oxides, volatile organic compounds, and particulate matter are increasingly of concern to consumers and regulators. While these impacts are further downstream from auto companies (resulting from the use of vehicles rather than their manufacture), regulations are focusing on auto manufacturers to address some of these issues; for example, by imposing fuel economy standards. More stringent emissions standards around the world are driving the expansion of markets for electric vehicles and hybrids, as well as conventional vehicles with high fuel efficiency. Moreover, manufacturers are innovating by designing vehicles made with lightweight materials to improve fuel efficiency by reducing overall vehicle weight. Companies that are able to meet current fuel-efficiency and emissions standards and continue to innovate to meet or exceed future regulatory standards in different markets are likely to strengthen their competitive position and expand market share, while mitigating the risk of reduced demand for conventional products.

Accounting Metrics

TR0101-09. Sales-weighted average passenger fleet fuel economy, consumption, or emissions, by region

.36 The registrant shall disclose the average fuel economy, fuel consumption, or emissions of its passenger and light-duty fleet, weighted for the footprint of vehicles sold.

- Where fleet averages are calculated by model year for regulatory purposes, the registrant shall use these performance data.
- In the absence of regulatory guidance on calculating a fleet average, the registrant shall calculate performance based on the fuel economy of vehicles sold during the fiscal year, weighted by sales volume.

.37 For vehicles sold in the United States, the registrant shall disclose performance based on Corporate Average Fuel Economy (CAFE) calculations and disclose fuel economy for the following vehicle categories:

- Domestic Passenger Cars
- Imported Passenger Cars
- Light Trucks

.38 The registrant shall additionally disclose fleet performance for vehicles sold in geographic regions for which the registrant conducts segment financial reporting[24] and which are subject to fleet fuel economy, fuel consumption, or emissions standards, including:

[24] As determined by FASB Accounting Standards Codification Topic 280, *Segment Reporting*

- In grams of CO_2 / kilometer (gCO_2 / km) for (1) passenger cars and (2) light commercial vehicles sold in the European Union.

- In liters of petrol per kilometer (L/km) for passenger vehicles sold in Japan.

.39 Disclosure shall be made on a fleet-average basis regardless of whether regulations are based on vehicle weight.

.40 The scope of disclosure shall include all vehicles subject to national passenger vehicle standards.

.41 The registrant may choose to disclose performance in other vehicle segments such as:

- E.U. light commercial vehicles sold in the European Union

- Heavy-duty vehicles in the U.S.

- Cargo vehicles in Japan

TR0101-10. Number of (1) zero emission vehicles (ZEV) sold, (2) hybrid vehicles sold, and (3) plug-in hybrid vehicles sold

.42 The registrant shall disclose the number of vehicles sold during the fiscal year that can be classified as: (1) Zero Emission Vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles according to the following definitions:

- Zero emission vehicles (ZEVs) are vehicles driven only by an electric motor that are powered by advanced-technology batteries or hydrogen fuel cell, and have no tailpipe emissions over their entire lifetime under any and all possible operational modes and conditions.

- Hybrid vehicles (hybrid electric vehicle or HEVs) are vehicles that can draw propulsion energy from both of the following on-vehicle sources of stored energy: 1) a consumable fuel and 2) an energy storage device such as a battery, capacitor, or flywheel.

- Plug-In Hybrid Electric Vehicles are vehicles that offer electric driving with an electric motor powered by a large battery pack that is charged by plugging into a source of electricity.

.43 The scope of disclosure includes vehicles sold in all U.S. and foreign markets (i.e., it is not restricted to the California market) such that vehicles meet the above-mentioned requirements.

TA05-02-01. Discussion of strategies and approach to managing fleet fuel economy and emissions risks and opportunities

.44 The registrant shall discuss its strategies and approach to improving the fuel economy and reducing the use-phase emissions of its fleet.

- Use-phase emissions include greenhouse gasses and air pollutants such as carbon dioxide, nitrogen oxides, volatile organic compounds, and particulate matter.

.45 Relevant aspects of the approach and strategy to discuss include improvements to existing vehicles and technologies, the introduction of new technologies, research and development efforts into advanced technologies, and partnerships with peers, academic institutions, and/or customers.

.46 Relevant technologies to discuss include, but are not limited to, those related to materials design and engineering, advanced powertrains, renewable fuels, energy storage and batteries, aerodynamic design, fuel injection systems, particulate filters, and products and fuels that otherwise result in reduced emissions, where:

- Advanced powertrain technologies include vehicles and vehicle components that are electric, hybrid electric, plug-in hybrid, dual-fuel, and zero-emissions (e.g., fuel cell)
- Renewable fuels and energy technologies are those that operate on sources that are capable of being replenished in a short time through ecological cycles, including biomass (including ethanol, first-generation biofuels, and advanced biofuels)
- Products that result in reduced emissions include any vehicle or technology that achieves a significant reduction in fuel consumption
- Fuels that result in reduced emissions further include biodiesel, ethanol, natural gas, propane, and hydrogen, as described in the U.S. Energy Policy Act (EPAct) of 2005
- Internal combustion engines include those equipped with technology (e.g., selective catalytic reduction) to reduce nitrogen oxide emissions
- Particulate filters (e.g., wall-flow filter, partial flow filter) include those that reduce emissions (including carbon monoxide, hydrocarbons, particulate matter)
  - Where relevant, the registrant shall discuss the technologies it is prioritizing to improve the fuel economy and reduce emissions of its vehicles, such as the specific type of fuel systems it is developing (e.g., hybrid, electric, or fuel cell)

.47 The registrant shall discuss the factors influencing fuel economy and emissions efforts, such as meeting customer demand, and/or meeting regulatory requirements of the markets it operates in, or plans to operate in, where:

- Relevant programs and initiatives to discuss include, but are not limited to, U.S. Corporate Average Fuel Economy (CAFE) standards, U.S. Clean Air Act, California Low-Emission Vehicle Program – LEV III, Euro 6 standards for light duty vehicles, China VI emission standard, and their equivalent in other jurisdictions.

.48 The registrant shall discuss whether it is meeting fuel economy and use-phase regulatory obligations, whether such existing regulations require future improvements, progress toward meeting such regulations, and strategies to maintain compliance with emerging regulations.

.49 The registrant should discuss the benchmarks it uses to measure improvements in fuel economy and emissions reductions including a discussion of targets for fuel economy improvements and emissions reductions.

.50 The scope of disclosure shall include all vehicles subject to national and local vehicle standards.

Definitions

Definitions for ZEVs, HEVs, and plug-in hybrid electric vehicles are based on the California Environmental Protection Agency Air Resources Board's California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, adopted March 22, 2012, and Facts about California Clean Vehicle Incentives, revised February 24, 2014.

Materials Sourcing

Description

Rare earth metals, also known as rare earth elements (REEs), and other critical materials play a crucial role in clean energy technologies. Electric and hybrid vehicles use substantial amounts of critical materials. With global regulations aiming to reduce emissions and increase fuel efficiency of vehicles, the share of hybrids and ZEVs produced by the Automobiles industry is likely to continue to increase in the future. Companies are exposed to the risk of supply chain disruptions, volatility of input prices, and damage to brand reputation, particularly when rare earth ~~or "conflict" minerals~~ and ~~metals~~other critical materials are used in their products. ~~The use of minerals that originate in certain zones of conflict also exposes automobile companies to regulatory risks associated with the Dodd-Frank Act.~~ Automobile companies that are able to limit the use of critical ~~and conflict~~ materials, as well as secure their supply, will not only minimize environmental and social externalities related to extraction but also protect themselves from supply disruptions and volatile input prices.

Accounting Metrics

~~TR0101-11~~TA05-04-01. Percentage of materials costs for items containing critical materials

~~.44~~.51 The registrant shall calculate the percentage as~~:~~ the materials costs of goods sold, in U.S. dollars, of ~~products~~items that contain critical materials divided by total materials cost of goods sold.

- ~~Materials~~The scope of disclosure includes materials costs ~~include those~~ for parts, components, ~~and~~ commodities, and associated freight and storage, and ~~exclude~~excludes those for overhead, labor, recalls, warrantees, or other costs of goods sold.

~~.45~~.52 A critical material is defined, consistent with the National Research Council's "Minerals, Critical Minerals, and the U.S. Economy," as ~~one~~a material that is both essential in use and subject to the risk of supply restriction.~~[25]~~

~~.46~~.53 ~~At a minimum, the scope~~Examples of critical materials ~~includes~~include, but are not limited to, the following minerals and metals:

- Antimony, cobalt, fluorspar, gallium, germanium, graphite, indium, magnesium, niobium, tantalum, and tungsten;
- Platinum group metals (platinum, palladium, iridium, rhodium, ruthenium, and osmium); and
- Rare earth elements, which include yttrium, scandium, lanthanum, and the lanthanides (cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium).

~~TR0101-12. Percentage of tungsten, tin, tantalum, and gold smelters and refiners within the supply chain that are verified conflict-free~~

~~[25] National Research Council. *Minerals, Critical Minerals, and the U.S. Economy.* Washington, DC: The National Academies Press, 2008.~~

~~.47 The registrant shall calculate the percentage as: the number of tungsten, tin, tantalum, and gold smelters and/or refineries within its supply chain that are verified to be conflict-free divided by the total number of tungsten, tin, tantalum, and gold smelters and/or refineries within its supply chain.~~

~~.48 A smelter or refiner is considered to be conflict-free if it can demonstrate compliance with:~~

- ~~The Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiatives (GeSI) Conflict-Free Smelter Program (CFSP) assessment protocols~~
- ~~The Responsible Jewellery Council's (RJC) Chain-of-Custody (CoC) Standard~~
- ~~Any other due diligence certification, audit, or program that is endorsed by the Automotive Industry Action Group (AIAG), including, but not limited to, the iPoint Conflict Minerals Platform~~

~~.49 A smelter or refinery is considered to be within the registrant's supply chain if it supplies tungsten, tin, tantalum, or gold that is contained in any products the registrant manufactures or contracts to be manufactured.~~

- ~~The scope includes smelters or refineries that supply material directly to the registrant as well as those that supply material to any of its suppliers of raw materials, components, or subassemblies.~~

~~TR0101-13.~~ TA05-04-02. Discussion of the management of risks associated with the use of critical materials ~~and conflict minerals~~

~~.50~~.54 The registrant shall discuss its strategic approach to managing its risks associated with the ~~usage~~ use of critical materials ~~and conflict minerals~~ in its products, including physical limits on ~~their~~ availability~~,~~ and access, ~~and~~ price, and ~~as well as associated~~ reputational risks~~.~~, where:

- A critical material is defined, consistent with the National Research Council's "Minerals, Critical Minerals, and the U.S. Economy," as a material that is both essential in use and subject to the risk of supply restriction. Examples of critical materials include, but are not limited to, the following minerals and metals defined by the National Research Council:
  - Antimony, cobalt, fluorspar, gallium, germanium, graphite, indium, magnesium, niobium, tantalum, and tungsten;
  - Platinum group metals (platinum, palladium, iridium, rhodium, ruthenium, and osmium);
  - Rare earth elements, which include yttrium, scandium, lanthanum, and the lanthanides (cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium).

~~.51~~.55 The registrant ~~should~~may identify which materials and minerals present a risk to its operations, ~~which~~the type of risk they represent, and the strategies the registrant uses to mitigate ~~that~~the risk.

- ~~For critical materials, relevant~~Relevant strategies ~~to discuss~~may include ~~the~~ diversification of suppliers, stockpiling of materials, ~~expenditures in R&D for~~development or procurement of alternative and substitute materials, and investments in recycling technology for critical materials.~~For conflict minerals,~~

~~relevant strategies to discuss include due diligence practices, supply chain auditing, supply chain engagement, and partnerships with industry groups or non-governmental development organizations (e.g., participation in the AIAG Conflict Minerals Work Group).~~

TRANSPORTATION SECTOR

AUTO PARTS *

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0102

AUTO PARTS

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Auto Parts industry.

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

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[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide.

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf.

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

The Auto Parts industry mostly supplies parts to companies in the Automobiles industry, also known as original equipment manufacturers (OEM). The Auto Parts industry includes companies that manufacture and assemble a wide variety of motor vehicle parts and accessories, including engine exhaust, alternative drivetrain, and hybrid systems as well as catalytic converters, aluminum wheels (rims), tires, rearview mirrors, and onboard electrical and electronic equipment. The larger automotive industry includes several tiers of suppliers that provide parts and raw materials that are used to assemble motor vehicles. Tier 1 suppliers are those that supply parts directly to OEMs and are the only suppliers included in SASB's Auto Parts industry. Tier 2 suppliers are those that provide inputs for Tier 1 suppliers; Tier 3 usually provides inputs to Tier 2; and so on. A number of Tier 1 suppliers, such as engine and stamping facilities, are owned and operated by OEMs, and are also known as captive suppliers.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

For the Auto Parts industry, the SASB has identified the following sustainability disclosure topics:

- Energy Management
- Materials Efficiency & Waste Management
- Materials Sourcing
- Product Safety
- Product Lifecycle Management
- Competitive Behavior

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. 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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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.

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

8 https://library.sasb.org/materiality_bulletin/

9 https://library.sasb.org/implementation-guide

10 C.F.R. 229.303(Item 303)(a)(3)(ii).

11 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."

- 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

[12] http://using.sasb.org/mock-10-k-library/

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

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[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

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[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of parts produced	Quantitative	Number	TR0102-A
Weight of parts produced	Quantitative	Metric tons (t)	TR0102-B
Square footage of manufacturing plants	Quantitative	Square meters (m2)	TR0102-C

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[19]

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	Total energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR0102-01
Materials Efficiency & Waste Management	Amount of total waste from manufacturing, percentage hazardous, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TR0102-02
Product Safety	Number of recalls and total units recalled[20]	Quantitative	Number	TR0102-03
Product Lifecycle Management	~~Total addressable market and share of market for~~Revenue from products ~~aimed at improved~~designed to increase fuel efficiency and/or ~~reduced~~reduce emissions	Quantitative	U.S. Dollars ($)~~, Percentage (%)~~	~~TR0102-04~~TA05-05-01
	Percentage of products sold that are recyclable or reusable	Quantitative	Percentage (%) of units sold	TR0102-05
	~~Weight~~Percentage of ~~products and~~input materials from recycled or remanufactured content	Quantitative	~~Metric tons (t)~~Percentage (%)	~~TR0102-06~~TA05-06-01
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with anti-competitive practices[21]	Quantitative	U.S. Dollars ($)	TR0102-07
Materials Sourcing	Percentage of products, by revenue, that contain critical materials	Quantitative	Percentage (%) by revenue ($)	~~TR0102-08~~TA05-08-01
	~~Percentage of tungsten, tin, tantalum, and gold smelters and refiners within the supply chain that are verified conflict-free~~	~~Quantitative~~	~~Percentage (%)~~	~~TR0102-09~~
	Discussion of the management of risks associated with the use of critical materials~~ and conflict minerals~~	Discussion and Analysis	n/a	~~TR0102-10~~TA05-08-02

[20] Note to **TR0102-03** - Disclosure shall include a discussion of notable recalls, such as those that affected a significant number of vehicles, multiple vehicle models, or those related to a serious injury or fatality.

[21] Note to **TR0102-07** - Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Energy Management

Description

Most of the energy consumption in the vehicle manufacturing process happens in the supply chain of auto manufacturers. Auto parts manufacturers' use of electricity and fossil fuels in their production processes results in direct and indirect emissions of greenhouse gases (GHG). Purchased electricity represents a major share of the energy used in the Auto Parts industry. Sustainability factors, such as GHG emissions pricing and incentives for energy efficiency and renewable energy, are leading to an increase in the cost of conventional energy sources while making alternative sources cost-competitive. Therefore, it is becoming increasingly material for companies in energy-intensive industries to manage their overall energy efficiency, their reliance on different types of energy and the associated risks, and their access to alternative energy sources.

Accounting Metrics

TR0102-01. Total energy consumed, percentage grid electricity, percentage renewable

.01 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.

.02 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).

.03 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.

.04 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.

- 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.[22]

.05 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.

.06 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).

[22] SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid, and that a premium has been paid by the purchaser of the REC to enable generation of renewable energy beyond any renewable energy already in the grid mix, absent the market for RECs.

Materials Efficiency & Waste Management

Description

The auto parts manufacturing process involves the use of significant amounts of materials (including steel, iron, aluminum, and plastics, among others). Types of waste generated by the industry include machine lubricants and coolants, aqueous and solvent cleaning systems, paint, and scrap metals and plastics. A significant portion of auto parts manufacturers' revenue is spent on the cost of materials. Due to constrained resources, material prices are likely to increase in the future. Therefore, companies that are able to manage their inputs through reducing and recycling manufacturing waste are likely to be better protected from price volatility. Moreover, auto parts manufacturers can achieve substantial savings and improve operational efficiency by increasing the amount of waste that is recycled. Auto parts manufacturers that fail to prevent a negative environmental impact through their waste management practices, however, are likely to face regulatory oversight. Violation of environmental regulations is likely to generate extraordinary expenses as well as capital expenditures for pollution-control facilities and occupational safety and health projects.

Accounting Metrics

TR0102-02. Amount of total waste from manufacturing, percentage hazardous, percentage recycled

.07 The amount of total waste from manufacturing shall be calculated in metric tons, where waste is defined as anything for which the registrant has no further use and which is discarded or released to the environment.

.08 The percentage hazardous shall be calculated as the weight of waste that meets the definition of hazardous waste under national legislation at the point of generation divided by the total weight of waste material.

- In the absence of national legislation, the registrant shall categorize waste as hazardous if it meets the definition under Subtitle C of the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) and displays one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity.

.09 The percentage recycled shall be calculated as the weight of waste material that was reused, plus the weight recycled or remanufactured (through treatment or processing) by the registrant, plus the amount sent externally for further recycling, divided by the total weight of waste material, where:

- Reused materials are defined as those recovered products or components of products that are used for the same purpose for which they were conceived.
- Recycled and remanufactured materials are defined as waste materials that have been reprocessed or treated by means of production or manufacturing processes and made into a final product or a component for incorporation into a product.
- The scope of recycled and remanufactured products includes primary recycled materials, co-products (outputs of equal value to primary recycled materials), and by-products (outputs of lesser value than primary recycled materials).

- Portions of products and materials that are disposed of in landfills are not considered recycled; only the portions of products that are directly incorporated into new products, co-products, or by-products shall be included in the percentage recycled.

- Materials sent for further recycling include those materials that are transferred to a third party for the express purpose of reuse, recycling, or refurbishment.

- Materials incinerated, including for energy recovery, are not considered reused or recycled. Energy recovery is defined as the use of combustible waste as a means to generate energy through direct incineration, with or without other waste, but with recovery of the heat.

Product Safety

Description

Driving is a risky activity, as distracted driving, speeding, drunk driving, and dangerous weather conditions, among other factors, can lead to accidents, exposing drivers, passengers, and bystanders to possible injuries and deaths. Accidents can also be caused by defective parts in vehicles, and failure to detect these defects before the vehicles are sold can have significant financial repercussions for automobile and auto parts manufacturers. Ensuring vehicle safety and responding in a timely manner when defects are identified can protect companies from regulatory action or customer lawsuits, which can affect company profitability through one-time costs and contingent liabilities. Through effective management of the issue, companies can enhance reputation and brand value and drive higher sales over the long term.

Accounting Metrics

TR0102-03. Number of recalls and total units recalled

.10 The registrant shall disclose the total number of units recalled, the scope of which includes voluntary recalls initiated by the registrant and involuntary recalls mandated by the National Highway Traffic Safety Administration (NHTSA).

.11 Involuntary recalls are those required by the NHTSA, which are issued when a motor vehicle or an item of motor vehicle equipment does not comply with Federal Motor Vehicle Safety Standards, or when there is a safety-related defect in the vehicle or equipment.

- A database of NHTSA-initiated recalls is available here.

.12 The registrant may choose, in addition to total units recalled, to disclose the percentage of recalls that were (1) voluntarily and (2) involuntarily issued.

Note to **TR0102-03**

.13 The registrant shall discuss notable recalls such as those that affected a significant number of vehicles, vehicle models, or those related to serious injury or fatality.

.14 A recall should be considered notable if it mentioned in the NHSTA's monthly recall reports.

.15 For such recalls the registrant should provide:

- Description and cause of the recall issue
- The total number of units (or vehicles) recalled
- The cost to remedy the issue (in U.S. dollars)
- Whether the recall was voluntary or involuntary (mandated by NHTSA)

- Corrective actions
- Any other significant outcomes (e.g. legal proceedings, passenger fatalities)

Product Lifecycle Management

Description

The topic of product lifecycle management, for the purposes of this standard, focuses on innovations in the Auto Parts industry that drive fuel efficiency and improve end-of-life management of vehicles. Automotive components and parts play a vital role in improving fuel efficiency and reducing tailpipe emissions of automobiles through energy efficiency gains and contributions to weight reductions, among other factors. The Auto Parts industry also plays a part in reducing environmental externalities associated with product end-of-life management and in addressing resource constraints through recovery and recycling of disposed parts. Companies that are able to improve vehicle fuel efficiency and reduce use-phase emissions through product innovation will be able to satisfy growing demand from OEMs that are increasingly pressured by stricter environmental regulations and customer preferences.

Accounting Metrics

~~TR0102-04~~TA05-05-01. ~~Total addressable market and share of market for~~ Revenue from products ~~aimed at improved~~designed to increase fuel efficiency and/or ~~reduced~~reduce emissions

.16 The registrant shall disclose its total revenue, in U.S. dollars, from products that are designed to increase fuel efficiency and/or reduce emissions during their use phase, where:~~provide an estimation of the total addressable market for automotive parts that are aimed at improved fuel efficiency of vehicles and/or reduced vehicle emissions. Total addressable market is defined as the potential revenue earned (in billions of U.S. dollars) if the registrant captured 100 percent of the market share of the product category (e.g., the global market for smart-grid specific processors). If there is a significant difference between the total available market and the market that the registrant can serve through its existing or planned capabilities, sales channels, or products, then the registrant should disclose this information.~~

- ~~The registrant shall disclose the share of the total addressable market for automotive parts aimed at improved~~Products designed to increase fuel efficiency and/or ~~reduced~~reduce emissions ~~that it currently captures with its products.~~
- ~~Market share shall be calculated as revenues from these products divided by the size of the total addressable market.~~
- ~~The scope of products shall include~~ are defined as those ~~specifically designed to~~ that—through their use—can be shown to improve ~~fuel~~energy efficiency, and~~/~~ eliminate or ~~reduce vehicle~~lower emissions of greenhouse gases (GHG), nitrogen oxide (NOx), particulate matter (PM), sulfur oxide (SOx), and other air pollutants.
- The use phase is defined as the course over which the registrant's product is used by a customer or consumer as a final product and/or the course over which the registrant's product is used by a customer or consumer to generate a final product (e.g., in a manufacturing or production process).

.17 A product shall be considered to have been designed to increase fuel efficiency and/or reduce emissions if documentation shows that the registrant has tested, modeled, or otherwise established the increase in fuel efficiency and/or reduction in emissions its product delivers during its use phase.

- The scope of disclosure includes products that eliminate emissions during the use phase or the need for fuel.

- The scope of disclosure includes products that impart an incremental improvement to fuel efficiency and/or emission reduction, insofar as the registrant can demonstrate that the improvement is meaningful, such as through alignment with the milestones set forth in Section 5, "Key Sectors / Ensuring efficient mobility" of the European Commission's Road Map to a Resource Efficient Europe and/or with EU Directive 2012/27/EU.

- The scope of disclosure excludes products that offer improved fuel efficiency and/or reduced emissions in an ancillary or indirect way (e.g., a conventional product that is slightly lighter than the previous generation of the product ~~or a component that is reduced in size as a result of design changes~~).

~~.17 The registrant may provide a projection of the growth of this market, where the projected addressable market is represented—based on a reasonable set of assumptions about changes in market conditions—as a percentage of year-on-year growth or as an estimate of the market size after a defined period (i.e., the market size in 10 years).~~

- ~~The registrant may disclose its target three-year market share as a measurement of targeted growth, where the target is the percentage of the total addressable market that the registrant plans to address over a three-year time horizon.~~

.18 ~~Products aimed at improved fuel efficiency and/or reduced~~Examples of products that increase fuel efficiency and/or reduce emissions include, but are not limited to, those relating to: electrification of auxiliary systems such as oil and water pumps, waste heat recovery, improved aerodynamics, hybrid and advanced fuel technologies, improvements to combustion efficiency, idle reduction, alternative cooling systems, electric power steering, hybrid-enabled braking technologies, and engine management systems/products.

.19 For products designed to increase fuel efficiency and reduce emissions, the registrant shall not account for the products' revenue more than once.

TR0102-05. Percentage of products sold that are recyclable or reusable

~~.19~~.20 The registrant shall calculate the percentage as the revenue from products, components, parts, and materials that are recyclable, reusable, or able to be remanufactured divided by total product revenue.

~~.20~~.21 Consistent with the E.U. End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC) a material is recyclable if it as able to be reprocessed for the original purpose or other purposes, excluding energy recovery. Energy recovery means the use of combustible waste as a means to generate energy through direct incineration, with or without other waste, but with recovery of the heat.

- Automotive parts, components, and materials are recyclable if they can be recycled at a reasonable cost with technology widely available in the markets in which they are sold.

~~.21~~.22 The scope of disclosure excludes recoverable material which, consistent with the E.U. End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC), is defined as material that can be salvaged for further use, including use as a fuel or other means to generate energy.

~~.22~~.23 Materials that are typically recyclable include ferrous and non-ferrous metals, metals, glass, and certain plastics.

~~.23~~.24 Materials and components that are typically reusable or able to be remanufactured include engines, transmissions, catalysts, tires, batteries, CFCs, and tires.

~~.24~~.25 Materials that are typically disposed of as waste or used for energy recovery include fluids, hazardous materials, automotive shredder residue (including glass, foam, fabric, etc.), and certain plastics.

~~TR0102-06~~TA05-06-01. ~~. Weight~~ Percentage of ~~products and~~input materials from recycled or remanufactured content

~~.25 The registrant shall disclose the weight, in percentage of input materials consumed (by metric tons, of materials recovered, including through product take-back programs and recycling services.~~

- ~~The scope of disclosure shall include products, materials, and parts) that are at the end of their useful life and would have otherwise been disposed of as waste or used for energy recovery, but have instead been collected.~~
- ~~The scope of disclosure shall include both materials physically handled by the registrant and materials of which the registrant does not take physical possession, but for which it has contracted with a third party to collect the materials for the express purpose of reuse, recycling, or refurbishment.~~
- ~~The scope of disclosure excludes products and parts that are in-warranty and have been collected for repairs.~~

.26 The registrant shall disclose the percentage of input materials consumed (by metric tons) that are derived from recycled or remanufactured content. ~~The weight of products shall be calculated as the weight of incoming material that was reused plus the weight of material recycled or remanufactured (through treatment or processing) by the registrant plus the weight of material sent externally for further recycling.~~

~~.27 Reused materials are defined as those recovered products or components of products that are used for the same purpose for which they were conceived.~~

- ~~The scope of disclosure includes reuse by the registrant or by third parties through direct contract with the registrant.~~

.27 Recycled content is defined, consistent with definitions in ISO 14021:2016 , *Environmental labels and* ~~remanufactured~~*declarations—Self-declared environmental claims (Type II environmental labelling)*, as the portion, by mass, of recycled or recovered material in a product or packaging, where only pre-consumer and post-consumer materials ~~are~~shall be considered as recycled content, and where:

- Recycled material is defined as ~~waste materials~~material that ~~have~~has been reprocessed ~~or treated~~from recovered (or reclaimed) material by means of ~~production or~~ a manufacturing ~~processes~~process and made into a final product or a component for incorporation into a product.

- ~~The scope of recycled and remanufactured products includes primary recycled materials, co-products (outputs of equal value to primary recycled materials), and by-products (outputs of lesser value than primary recycled materials).~~

- ~~The scope of disclosure includes recycling conducted by the registrant or by third parties through direct contract with the registrant.~~

- ~~Portions of products and materials that are disposed of in landfills are not considered recycled; only the portions of products that are directly incorporated into new products, co-products, or by-products shall be included in the percentage recycled.~~

- ~~The scope of disclosure excludes recoverable~~Recovered material ~~which, consistent with the E.U. End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC),~~ is defined as material that ~~can be salvaged~~would have otherwise been disposed of as waste or used for ~~further use, including use~~energy recovery, but has instead been collected and recovered (or reclaimed) as a ~~fuel~~ material input, in lieu of new primary material, for a recycling or ~~other means~~manufacturing process.

- Pre-consumer material is defined as material that has been diverted from the waste stream during a manufacturing process. Excluded are materials such as rework, regrind, or scrap that is generated in a process and is capable of being reclaimed within the same process in which it was generated.

- Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

.28 Remanufactured content is defined, consistent with definitions in 16 CFR Part 20 Rebuilt, Reconditioned and Other Used Automobile Parts, as an end-of-life product or component (i.e., one that was previously sold, worn, or non-functional) that undergoes an industrial process to be returned to original working condition (i.e., is considered "like new").

.29 The percentage shall be calculated as the total weight (in metric tons) of input materials from recycled or remanufactured content divided by the total weight (in metric tons) of all input materials for products, where:

- The scope of input materials in the denominator of the percentage calculation includes all inputs that are processed to ~~generate energy.~~ be sold as a finished good, including but not limited to, recycled, remanufactured, and virgin input materials.

  - Virgin input materials is defined as material which has never been processed into any form of end-use product.

- The weight of input materials should be calculated using the amount of materials in inventory at the beginning of the reporting period, plus any purchase of materials made during the reporting period, less any materials in input materials inventory on hand at the end of the reporting period.

Note to **TA05-06-01**

.30 The registrant shall discuss its initiatives employed to obtain end-of-life products and parts for remanufacturing, including product take-back programs.

~~.28~~.31 Relevant disclosures include customer and supplier engagement efforts, equipment servicing or exchange programs, and other incentives to encourage end-of-life parts remanufacturing.

Competitive Behavior

Description

Competitive business practices are an important governance issue for the Auto Parts industry. While industry concentration is low, there is a wide range of auto parts, and competition for business within each category of parts may not be as robust. Thus, leading producers of any specific auto part may have a lot of market power in that segment, creating antitrust concerns. Collusion and price-fixing by auto parts manufacturers ultimately leads to the costs being passed on to consumers through higher prices on vehicles. If involvement in such activities is discovered and proved, the imposed penalties may have acute impacts on a company's valuation.

Accounting Metrics

TR0102-07. Amount of legal and regulatory fines and settlements associated with anti-competitive practices

~~.29~~.32 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with anti-competitive behavior, such as those related to enforcement of U.S. laws and regulations on price-fixing, antitrust behavior (e.g., exclusivity contracts), patent misuse, or network effects as well as bundling of services and products to limit competition, including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.

~~.30~~.33 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 **TR0102-07**

~~.31~~.34 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., price-fixing, patent misuse, antitrust, etc.) of fines and settlements.

~~.32~~.35 The registrant shall describe any corrective actions it has implemented as a result of each incident. These actions may include, but are not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.

Materials Sourcing

Description

Supply chain management for auto parts manufacturers involves sourcing and efficient use of critical ~~and conflict-free metals.~~materials. Rare earth metals, also known as rare earth elements (REEs), and other critical materials play a crucial role in clean energy technologies. Electric and hybrid vehicles use substantial amounts of critical materials. With global regulations aiming to reduce emissions and increase fuel efficiency of vehicles, the share of hybrids and ZEVs produced by the Automobiles industry is likely to continue to increase in the future. Therefore, demand for auto parts that may include critical materials is also likely to increase. Auto parts companies that are able to limit the use of critical ~~and conflict~~ materials, as well as securing their supply, would not only minimize environmental and social externalities related to extraction, but also protect themselves from supply disruptions and volatile input prices.

Accounting Metrics

~~TR0102-08~~TA05-08-01. Percentage of products, by revenue, that contain critical materials

~~.33~~.36 The registrant shall calculate the percentage as: the revenue, in U.S. dollars, from products that contain critical materials divided by total revenues from products.

~~.34~~.37 A critical material is defined, consistent with the National Research Council's "Minerals, Critical Minerals, and the U.S. Economy," as ~~one~~a material that is both essential in use and subject to the risk of supply restriction.~~[23]~~

~~.35~~.38 ~~At a minimum, the scope~~Examples of critical materials ~~includes~~include, but are not limited to, the following minerals and metals:

- Antimony, cobalt, fluorspar, gallium, germanium, graphite, indium, magnesium, niobium, tantalum, and tungsten;
- Platinum group metals (platinum, palladium, iridium, rhodium, ruthenium, and osmium); and
- Rare earth elements, which include yttrium, scandium, lanthanum, and the lanthanides (cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium).

~~TR0102-09. Percentage of tungsten, tin, tantalum, and gold smelters and refiners within the supply chain that are verified conflict-free~~

~~.36 The registrant shall calculate the percentage as: the number of tungsten, tin, tantalum, and gold smelters and/or refineries within its supply chain that are verified to be conflict-free divided by the total number of tungsten, tin, tantalum, and gold smelters and/or refineries within its supply chain.~~

~~.37 A smelter or refiner is considered to be conflict-free if it can demonstrate compliance with:~~

~~[23] National Research Council. *Minerals, Critical Minerals, and the U.S. Economy*. Washington, DC: The National Academies Press, 2008.~~

- ~~The Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiatives (GeSI) Conflict-Free Smelter Program (CFSP) assessment protocols~~

- ~~The Responsible Jewellery Council's (RJC) Chain-of-Custody (CoC) Standard~~

- ~~Any other due diligence certification, audit, or program that is endorsed by the Automotive Industry Action Group (AIAG), including, but not limited to, the iPoint Conflict Minerals Platform.~~

~~.38 A smelter or refinery is considered to be within the registrant's supply chain if it supplies or is approved to supply tungsten, tin, tantalum, or gold that is contained in any products the registrant manufactures or contracts to be manufactured.~~

- ~~The scope includes smelters or refineries that supply material directly to the registrant as well as those that supply material to any of its suppliers of raw materials, components, or subassemblies.~~

~~TR0102-10.~~ TA05-08-02. Discussion of the management of risks associated with the use of critical materials ~~and conflict minerals~~

.39 The registrant shall discuss its strategic approach to managing its risks associated with the use of critical materials in its products, including physical limits on availability and access, price, and reputational risks, where:

- A critical material is defined, consistent with the National Research Council's "Minerals, Critical Minerals, and the U.S. Economy," as a material that is both essential in use and subject to the risk of supply restriction. Examples of critical materials include, but are not limited to, the following minerals and metals defined by the National Research Council:
  - Antimony, cobalt, fluorspar, gallium, germanium, graphite, indium, magnesium, niobium, tantalum, and tungsten;
  - Platinum group metals (platinum, palladium, iridium, rhodium, ruthenium, and osmium); and
  - Rare earth elements, which include yttrium, scandium, lanthanum, and the lanthanides (cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium).

~~.39 The registrant shall discuss its strategic approach to managing its risks associated with the usage of critical materials and conflict minerals in its products, including physical limits on their availability, access, and price, as well as associated reputational risks.~~

.40 The registrant ~~should~~may identify which materials and minerals present a risk to its operations, the type of risk ~~represented~~they represent, and the strategies the registrant uses to mitigate ~~that~~the risk.

- ~~For critical materials, relevant~~Relevant strategies ~~to discuss~~may include diversification of suppliers, stockpiling of materials, ~~expenditures in R&D for~~development or procurement of alternative and substitute materials, and investments in recycling technology for critical materials. ~~For conflict minerals, relevant strategies to discuss include due diligence practices, supply chain auditing, supply chain engagement, and partnerships with industry groups or non-governmental development organizations (e.g., participation in the AIAG Conflict Minerals Work Group).~~

TRANSPORTATION SECTOR

CAR RENTAL & LEASING*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0103

CAR RENTAL & LEASING

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Car Rental & Leasing industry.

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

Car Rental & Leasing companies rent or lease passenger vehicles to customers. Car rentals are typically for periods of less than a month, while leases are for a year or more. The industry includes car-sharing business models where rentals are measured hourly and typically include subscription fees. Car rental companies operate out of airport and neighborhood locations. Airport locations serve both business and leisure travelers. Neighborhood locations mostly provide repair-shop and weekend rentals. The industry is concentrated, with three dominant market players. Industry players operate globally and use a franchise model. Car rental companies use contracts with automobile manufacturers to manage their fleets. In some cases, these contracts have repurchase agreements requiring the manufacturer to repurchase the vehicle at a guaranteed depreciation rate during a specified time.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

For the Car Rental & Leasing industry, the SASB has identified the following sustainability disclosure topics:

- Customer Safety
- Fleet Fuel Economy & Utilization

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. 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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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.

[7] *TSC Industries v. Northway, Inc*., 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

- 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

[12] http://using.sasb.org/mock-10-k-library/

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Average vehicle age	Quantitative	Months	TR0103-A
Total available rental days[19]	Quantitative	Days	TR0103-B
Average rental fleet size[20]	Quantitative	Number of vehicles	TR0103-C

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[21]

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] The total number of available rental days are defined as the number of 24-hour periods—or portions thereof—that vehicles were offered for rental during the fiscal year.

[20] The average rental fleet size is defined as the simple average of the maximum number of vehicles available for rental each month for the fiscal year.

[21] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Customer Safety	Percentage of rental fleet vehicles with overall 5-star safety rating	Quantitative	Percentage (%)	TR0103-01
	Number of vehicles recalled[22]	Quantitative	Number	TR0103-02
Fleet Fuel Economy & Utilization	Weighted average rental fleet fuel economy	Quantitative	Miles per gallon (mpg), gCO_2/km	TR0103-03
	Fleet utilization rate	Quantitative	Rate	TR0103-04

[22] Note to **TR0103-02** - Disclosure shall include a discussion of the registrant's policy for renting vehicles for which a recall has been issued.

Customer Safety

Description

Meeting customer satisfaction standards for the Car Rental & Leasing industry means ensuring that vehicles are in proper working condition and that customers understand how to safely operate the vehicles. Since rental vehicles accumulate significant mileage compared to private vehicles, frequent maintenance and repair is required. Vehicle recalls are of material significance to the industry, since associated repairs can temporarily reduce the available fleet, give rise to customer service issues, and reduce the residual value of cars. For companies in this industry, managing safety can mean balancing the conflict between saving on costs and ensuring safety. Adding to the complexity of the issue is the franchise model under which car rental companies operate because franchisees separately own and manage their own fleets.

Accounting Metrics

TR0103-01. Percentage of rental fleet vehicles with overall 5-star safety rating

.01 The registrant shall calculate the percentage as: the number of vehicles in its rental fleet with an overall 5-star rating from a New Car Assessment Program (NCAP) divided by the maximum total number of vehicles in its rental fleet.

.02 The calculation shall be based on the maximum number of vehicles available for rent during the fiscal year and shall include vehicles available through the registrant's franchises.

.03 The registrant shall disclose this percentage for each geographic region for which it conducts segment financial reporting[23] and which is subject to one of the following NCAPs:

- U.S. National Highway Traffic Safety Administration's (NHTSA) New Car Assessment Program (NCAP) 5-Star Safety Ratings Program
- European New Car Assessment Programme (Euro NCAP)
- Japan New Car Assessment Program (JNCAP)
- Latin New Car Assessment Program (Latin NCAP)
- The New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP)
- China New Car Assessment Programe (C-NCAP)
- Korean New Car Assessment Program (KNCAP)
- Australia and New Zealand New Car Assessment Program (ANCAP)

[23] As determined by FASB Accounting Standards Codification Topic 280, *Segment Reporting*

TR0103-02. Number of vehicles recalled

.04 The registrant shall disclose the total number of vehicles in its rental fleet that were subject to recall, where the scope includes voluntary recalls initiated by the vehicle manufacturer and involuntary recalls mandated by the NHTSA or equivalent national authority or agency.

.05 Involuntary recalls are those required by the NHTSA or other relevant government agency, which are issued when a motor vehicle or item of motor vehicle equipment does not comply with a Federal Motor Vehicle Safety Standard, or when there is a safety-related defect in the vehicle or equipment.

- A database of NHTSA-initiated recalls is available here.

.06 The scope of disclosure shall include vehicles available for rent through the registrant's franchises.

Note to **TR0103-02**

.07 The registrant shall disclose its policy for renting vehicles for which a recall has been issued, including how this policy extends to international and franchise operations.

Fleet Fuel Economy & Utilization

Description

By providing fuel-efficient and alternative fuel vehicles, car rental and leasing companies are in a position to enhance the environmental sustainability of their operations. This opportunity is compounded by growing consumer demand for more efficient vehicles motivated by both environmental stewardship and lower operating costs associated with fuel efficiency. In addition to providing fuel-efficient and low-emission fleets, companies in the industry are adapting to changing vehicle needs by providing car-sharing services. In urban settings, car sharing is an attractive alternative to vehicle ownership that reduces congestion and environmental costs associated with private ownership of vehicles. Additionally, by maximizing fleet utilization rates, car rental and leasing companies can enhance business efficiency and potentially contribute to reduced environmental lifecycle impacts.

Accounting Metrics

TR0103-03. Weighted average rental fleet fuel economy

.08 The registrant shall disclose the fuel economy of its passenger rental fleet in miles per gallon (mpg), weighted for the rental days of each vehicle model during the fiscal year.

.09 For vehicles rented in the U.S., the registrant shall calculate its rental fleet fuel economy as the rental day-weighted harmonic mean of vehicle fuel efficiency (in miles per gallon), where:

- The harmonic mean is calculated as the reciprocal of the average of the reciprocals.
- Rental day weighting is performed by incorporating into calculations a factor for the fraction of total rental days for which each vehicle model accounted.

.10 The registrant shall use the combined fuel economy value published by the U.S. Environmental Protection Agency (EPA) and U.S. Department of Transportation (DOT) for each vehicle's model year.

.11 The registrant shall additionally disclose its rental fleet's performance for vehicles rented in geographic regions for which the registrant conducts segment financial reporting[24] and which are subject to fleet fuel economy, fuel consumption, or emissions standards. For example:

- As a rental day-weighted average of grams of CO_2 / kilometer (gCO_2 / km) for vehicles rented in the European Union.

TR0103-04. Fleet utilization rate

.12 The registrant shall disclose its fleet utilization rate, calculated as the total number of rental days divided by the total number of available rental days.

.13 Total rental days are defined as the total number of 24-hour periods—or portions thereof—that vehicles were rented.

[24] As determined by FASB Accounting Standards Codification Topic 280, *Segment Reporting.*

.14 The total number of available rental days are defined as the number 24-hour periods—or portions thereof—that vehicles were offered for rental during the fiscal year.

- This figure shall exclude the time when vehicles were undergoing inspection, cleaning, or maintenance, and any time when they were subject to recall.

.15 The scope of disclosure includes vehicles at all of the registrant's rental locations, including airport locations, off-airport locations, and vehicles in the registrant's car-sharing fleet.

TRANSPORTATION SECTOR

AIRLINES*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0201

AIRLINES

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Airlines industry.

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

The Airlines industry is comprised of companies that provide air transportation to passengers for both leisure and business purposes. This includes commercial full-service, low-cost, and regional airlines that operate in the U.S. and internationally. Full-service carriers typically use a hub-and-spoke model to design their routes within the U.S. and abroad. Low-cost carriers usually offer a smaller number of routes as well as no-frills service to their customers. Regional carriers typically operate under contract to full-service carriers, expanding the network of the larger carriers. Most airline companies also have a cargo segment in their operations from which they generate ~~two to three percent~~a small portion of ~~revenues for the U.S.-domiciled airlines and nine to 12 percent of revenues for European, Asian, and Latin American airlines.~~revenue. It is common within the industry to form partnerships with other airlines or join alliances in order to increase network size. ~~The three leading~~Leading alliances ~~are Star Alliance, Oneworld, and SkyTeam, with 27, 15, and 20 worldwide~~have global members~~, respectively~~. Operating as an alliance allows airlines to offer customers access to international or otherwise underserved itineraries on multiple airlines~~, all~~ under one ticket. At the same time, airlines share some overhead costs and increase their competitive position in the international market without having to open foreign operations.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

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

- Environmental Footprint of Fuel Use
- Customer Welfare

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

- Labor Relations
- Competitive Behavior
- Accidents & Safety Management

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. 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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

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[7] *TSC Industries v. Northway, Inc.*, 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

- 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the

[12] http://using.sasb.org/mock-10-k-library/

company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

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[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Available seat kilometers (ASK)[19]	Quantitative	Kilometers (km)	TR0201-A
Passenger load factor[20]	Quantitative	Kilometers (km)	TR0201-B
Revenue passenger kilometers (RPK)[21]	Quantitative	Kilometers (km)	TR0201-C
Revenue ton kilometers (RTK)[22]	Quantitative	Ton-kilometers	TR0201-D
Number of departures	Quantitative	Number	TR0201-E
Average age of fleet	Quantitative	Years	TR0201-F

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[23]

Estimates

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

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[19]Note to **TR0201-A** – Available seat kilometers (ASK) is defined a measure of the maximum potential cumulative kilometers traveled by passengers (i.e., kilometers traveled by occupied and unoccupied seats).

[20]Note to **TR0201-B** – Load factor is a measure of capacity utilization and is calculated as passenger kilometers traveled divided by seat kilometers available.

[21]Note to **TR0201-C** – Revenue passenger kilometers (RPK) is defined as a measure of cumulative total kilometers traveled by passengers. A revenue passenger means a passenger for whose transportation an air carrier receives commercial remuneration.

[22]Note to **TR0201-D** – Revenue ton kilometers (RTK) is defined as one metric ton of revenue traffic transported one kilometer. Revenue ton kilometers are computed by multiplying the aircraft kilometers flown on each flight stage by the number of tons of revenue traffic carried on that flight stage, which includes passengers, baggage, freight, mail, etc.

[23] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

Timing

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

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. 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 CO2-e	TR0201-01
	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	TR0201-02
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules, Percentage (%)	TR0201-03
	~~Notional amount of fuel hedged, by maturity date~~	~~Quantitative~~	~~Millions of gallons, Year~~	~~TR0201-04~~
Customer Welfare	Note there is no proposed metric at this time. The SASB invites feedback on appropriate metric	n/a	n/a	TA05-11-01
Labor Relations	Percentage of active workforce covered under collective-bargaining agreements, broken down by U.S. and foreign employees	Quantitative	Percentage (%)	TR0201-05
	Number and duration of strikes and lockouts[24]	Quantitative	Number, Days	TR0201-06
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with anti-competitive practices[25]	Quantitative	U.S. Dollars ($)	TR0201-07
Accidents & Safety Management	Description of implementation and outcomes of Safety Management System	Discussion and Analysis	n/a	TR0201-08
	Number of accidents	Quantitative	Number	TR0201-09
	Number of governmental enforcement actions of aviation safety regulations	Quantitative	Number	TR0201-10

[24] Note to **TR0201-06** - Disclosure shall include a description of the root cause of the stoppage, impact on operations, and corrective actions taken.

[25] Note to **TR0201-07** - Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Environmental Footprint of Fuel Use

Description

As a result of heavy reliance on oil, the Airlines industry generates a significant amount of direct greenhouse gas (GHG) emissions and is subject to potential compliance costs and risks associated with climate change mitigation policies. Over 99 percent of airline emissions are in the form of carbon dioxide. The main sources of GHG emissions for airlines companies are aircraft fuel use and emissions, ground equipment, and facility electricity. Aircraft emissions are the largest contributor to total emissions from the industry, and fuel management is a critical part of reducing emissions. The management of the environmental impacts of fuel usage includes both fuel efficiency and the use of alternative fuels, which are effective ways for airlines to increase profits through reduced fuel costs while also limiting exposure to volatile fuel pricing, future regulatory costs, and other consequences of GHG emissions.

Accounting Metrics

TR0201-01. 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 (CO_2-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 (i.e., marine, road, or rail).

.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").[26]

- The approach detailed in Section 4.23, "Organizational boundary setting for GHG emissions reporting," of the CDSB Climate Change Reporting Framework (CCRF).[27]

.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.

TR0201-02. 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:

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[26] "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.

[27] 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 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
- 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"[28]
- CDP questionnaire "CC3, Targets and Initiatives"

.12 Relevant initiatives to discuss may include, but are not limited to, fuel optimization efforts such as the use of ground power and pre-conditioned air rather than Auxiliary Power Units (APU) when parked at gate, adjusting flight speed to optimize fuel efficiency, and route design (NextGen). Aircraft-related efforts can include the use of winglets, reduction in weight, and upgrading of the fleet to new aircraft.

TR0201-03. Total fuel consumed, percentage renewable

.13 The registrant shall disclose total fuel consumption from all sources as an aggregate figure in gigajoules or their multiples.

- The scope includes only fuel consumed by entities owned or controlled by the organization.
- The scope excludes non-fuel energy sources such as purchased electricity and purchased steam.

.14 In calculating the energy content of fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel

[28] "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.

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 fuel from renewables as the energy content of renewable fuel consumed divided by the energy content of all fuel consumed.

.16 Renewable fuel 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.

.17 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute.
- Energy from biomass sources that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.

.18 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).

~~**TR0201-04. Notional amount of fuel hedged, by maturity date**~~

~~.19 The registrant shall disclose the amount of fuel, in millions of gallons, for which it has entered into fuel derivative contracts (fuel hedges), where:~~

- ~~The scope includes aircraft (jet) fuel and other related fuel commodities such as crude oil, diesel fuel, and heating oil.~~
- ~~The scope includes, but is not limited to, the following derivative instruments: purchased call options, collar structures, call spreads, and swaps.~~

~~.20 The registrant shall disclose the maturity or settlement date of its fuel hedges as the year in which contracts reach maturity.~~

- ~~The registrant may choose to disclose the amount of the underlying fuel for contracts that reach settlement each subsequent year or it may choose to disclose the maximum settlement year for all of its fuel hedges.~~

~~.21 The scope of disclosure includes all fuel derivative contracts, regardless of how they are accounted for by the registrant.~~

~~The registrant may choose to additionally disclose the percentage of projected future fuel consumption, by year, for which fuel hedges account.~~

Customer Welfare

Description

Customer Welfare pertains to an airline's ability to provide services that are aligned with societal expectations of fairness, equitability, and responsibility. As with all consumer-facing industries, customer welfare and satisfaction are key drivers for the Airlines industry,[29] which ranks low (below car rental companies and hotels) in level of satisfaction among the service industries tracked by J.D. Power. Positive consumer experience can potentially increase revenue either via increased market share on existing routes or via the addition of new customers or new routes. Passenger loyalty and word-of-mouth are of importance for the industry, as they increase revenue, brand reputation, and thus intangible assets.

Accounting Metrics

TA05-11-01.

Note there is no proposed metric at this time. The SASB invites feedback on appropriate metric.

[29] Passenger safety as related to the safe operation of flights is separately addressed under Accidents & Safety Management topic.

Labor Relations

Description

Organized labor plays an important role in the Airlines industry. Many workers are covered under collective bargaining agreements that protect worker rights and negotiate wages. Unionization of key personnel leaves airlines vulnerable to service shutdowns resulting from strikes if management is unable to address worker demands, which reduces industry revenue and disrupts operations. Additionally, collective bargaining may result in higher labor costs via wage or benefits increases. This makes the management of labor relations critical to prevent loss of revenue and reputational damage due to strikes. Continued labor stresses can impact the long-term profitability of the business.

Accounting Metrics

TR0201-05. Percentage of active workforce covered under collective-bargaining agreements, broken down by U.S. and foreign employees

~~.22~~.19 The registrant shall indicate the percentage of U.S. employees and the percentage of foreign employees in the active workforce who were covered under collective-bargaining agreements during any part of the fiscal year, where:

- Active workforce is defined as the maximum number of unique employees employed at any time during the fiscal year.
- U.S. employees are defined as employees that do not need a visa to work in the U.S.
- Foreign employees are defined as employees that need or would need a visa to work in the U.S.

~~.23~~.20 The registrant may choose to provide a breakdown of employees covered under collective-bargaining agreements by employee position, such as pilots, flight attendants, or customer service representatives.

TR0201-06. Number and duration of strikes and lockouts

~~.24~~.21 The registrant shall disclose the number of work stoppages and total duration, in worker days idle, of work stoppages involving 1,000 or more workers lasting one full shift or longer.

- Worker days idle is calculated as the product of days idle and number of employees involved.

~~.25~~.22 The scope of disclosure includes work stoppage due to disputes between labor and management, including strikes and lockouts.

Note to **TR0201-06**

~~.26~~.23 The registrant shall describe the reason for each work stoppage (as stated by labor), the impact on operations, and any corrective actions taken as a result.

Competitive Behavior

Description

The Airlines industry is characterized by low profitability due to high fixed capital and labor costs and competition with subsidized national carriers in foreign markets. This pushes airlines to find economies of scale through alliances or consolidation, which ~~results~~has resulted in a highly concentrated market~~, with four players capturing 75 percent of the U.S. market~~. The industry is also characterized by high barriers to entry due to limited landing rights and increasing airport congestion. Together, these factors can result in anti-competitive practices that lead to higher prices for consumers. As a result, antitrust authorities have scrutinized certain airline industry practices, including market concentration, airport slot management, predatory pricing, and the anti-competitive effects of airline alliances and mergers. Any time a business action is held up in legal limbo, there is a material risk to investors stemming from legal fees, reputational risk, costs associated with a delayed transaction, and limits on growth by acquisition. Moreover, companies may be pressed to declare bankruptcy if mergers are not approved.

Accounting Metrics

TR0201-07. Amount of legal and regulatory fines and settlements associated with anti-competitive practices

~~.27~~.24 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with anti-competitive behavior, such as those related to enforcement of U.S. laws and regulations on price-fixing, antitrust behavior (e.g., exclusivity contracts), patent misuse, or network effects, as well as bundling of services and products to limit competition, including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.

~~.28~~.25 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 **TR0201-07**

~~.29~~.26 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., price-fixing, patent misuse, antitrust, etc.) of fines and settlements.

~~.30~~.27 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.

Accidents & Safety Management

Description

Passenger safety is paramount in the Airlines industry, given the nature of air travel and the extreme situations in which incidents can occur. Although air travel is one of the safest modes of transport, airlines are held to very high safety standards, with consumers expecting completely safe and accident-free operations. Furthermore, as products transported by air tend to be high-value or perishable goods, delivering them safely and in a timely manner is a priority for any carrier. Moreover, airline accidents may result in significant environmental and social externalities and require companies to pay for remediation and compensation of victims. Safety incidents or violations of safety regulations can have a chronic impact on reputation and can lead to lower demand from passengers as well as cargo shippers. Larger accidents, even if they happen rarely, can lead to significant and long-term impacts on reputation and revenue growth. Providing proper personnel training and ensuring the health and well-being of crew members is critical to ensuring safety. Equally important is timely and adequate maintenance of aircraft, which can help operators minimize the chances of technical failure and avoid severe regulatory penalties for non-compliance.

Accounting Metrics

TR0201-08. Description of implementation and outcomes of Safety Management System

~~.31~~.28 The registrant shall describe its implementation of a Safety Management System (SMS) across its aviation operations, where an SMS is defined according to the Federal Aviation Administration (FAA)[30] and/or International Civil Aviation Organization (ICAO) rule-making and guidelines[31] and, at a minimum, includes:

- Safety policy
- Safety risk management
- Safety assurance
- Safety promotion

~~.32~~.29 Disclosure shall specifically discuss implementation of an SMS as it aligns with FAA guidelines and ICAO Standards and Recommended Practices, but it may also focus broadly on processes and procedures to avoid and manage emergencies, accidents, and incidents that could have catastrophic impacts on human health, the local community, and the environment.

~~.33~~.30 Description shall include a discussion of the implementation level the registrant has achieved as well as the registrant's plan for achieving complete implementation within the ICAO-recommended period of five years, where SMS implementation levels are:

- Level 0: Orientation & Commitment

[30] FAA Safety Management System Framework, Revision 3, June 1, 2010.

[31] ICAO Safety Management Manual (SMM) Doc 9859, Third Edition, 2012

- Level 1: Planning & Organization
- Level 2: Reactive Processes
- Level 3: Proactive Processes
- Level 4: Continuous Improvement

~~.34~~.31 The registrant shall disclose whether the SMS has been audited by IATA's Operational Safety Audit (IOSA), and if so, the registrant should discuss relevant findings from the audit.

~~.35~~.32 The registrant shall disclose the outcomes of its SMS, including:

- The number of safety risks and hazardous situations that it identified, where risks and hazardous situations are broadly defined as any existing or potential condition that could lead to an accident or incident.
- The percentage of safety risks and situations identified that were mitigated.

~~.36~~.33 The registrant may choose to describe any actions or measures it has implemented to mitigate safety risks and hazardous situations it identified, including, but not limited to, specific changes in controls, operations, management, processes, products, business partners, training, or technology.

TR0201-09. Number of accidents

~~.37~~.34 The registrant shall disclose the total number of accidents, where an accident is defined according to Annex 13 to the International Civil Aviation Organization (ICAO) Convention on International Civil Aviation as:

- An occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:
  - A person is fatally or seriously injured as a result of:
    - Being in the aircraft;
    - Direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or
    - Direct exposure to jet blast;

    Except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
  - The aircraft sustains damage or structural failure, which:

- Adversely affects the structural strength, performance, or flight characteristics of the aircraft; and
- Would normally require major repair or replacement of the affected component;

Except for engine failure or damage when the damage is limited to the engine, its cowlings, or accessories, or for damage that is limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

- The aircraft is missing or is completely inaccessible.

Note 1. For statistical uniformity only, an injury resulting in death within 30 days of the date of the accident is classified as a fatal injury by ICAO.

Note 2. An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

TR0201-10. Number of governmental enforcement actions of aviation safety regulations

~~.38~~.35 The registrant shall disclose the number of enforcements from the U.S. Federal Aviation Administration (FAA), the European Aviation Safety Agency (EASA), or the equivalent national authority relating to aviation safety, including, but not limited to, maintenance, transportation of hazardous materials, drug testing, records and reports, training, or noise.

~~.39~~.36 The scope of disclosure includes the following enforcement actions: civil penalties, consent order, certificate suspension, and certificate revocation.

Additional References

U.S. Federal Aviation Administration Advisory Circular on Flight Operational Quality Assurance

TRANSPORTATION SECTOR

AIR FREIGHT & LOGISTICS*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0202

AIR FREIGHT & LOGISTICS

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Air Freight & Logistics industry.

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

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[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

Air Freight & Logistics (AFL) companies provide freight services and transportation logistics. There are three main industry segments: air freight transportation, post and courier services, and transportation logistics services. Companies in the industry earn revenue from one or more of the segments and range from non-asset-based to asset-heavy. Transportation logistics services include contracting with road, rail, marine, and air freight companies to select and hire appropriate transportation. Services can also include customs brokerage, distribution management, vendor consolidation, cargo insurance, purchase-order management, and customized logistics information.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

For the Air Freight & Logistics industry, the SASB has identified the following sustainability disclosure topics:

- Environmental Footprint of Fuel Use
- ~~Fair~~ Labor Practices
- Accidents & Safety Management
- Supply Chain Management

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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."

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[7] *TSC Industries v. Northway, Inc*., 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via

[12] http://using.sasb.org/mock-10-k-library/

http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

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[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

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[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Revenue ton kilometers (RTK) for (1) road transport and (2) air transport[19]	Quantitative	Ton-kilometers	TR0202-A
Load factor for (1) road transport and (2) air transport[20]	Quantitative	Kilometers	TR0202-B
Number of employees, number of truck drivers	Quantitative	Number	TR0202-C

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] Note to **TR0202-A**–Revenue ton kilometers (RTK) is defined as one metric ton of revenue traffic transported one kilometer. Revenue ton kilometers are computed by multiplying the vehicle-kilometers traveled on each leg by the number of tons of revenue traffic carried on that leg.

[20] Note to **TR0202-B**–Load factor is a measure of capacity utilization and is calculated as cargo kilometers traveled divided by total kilometers traveled.

systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[21]

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

[21] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. 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	TR0202-01
	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	TR0202-02
	Total fuel consumed, percentage renewable for (1) road transport and (2) air transport	Quantitative	Gigajoules (GJ), Percentage (%)	TR0202-03
	Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)	Quantitative	Metric tons (t)	TR0202-04
~~Fair~~ Labor Practices	Percentage of drivers who are classified as independent contractors	Quantitative	Percentage (%)	TR0202-05
	Amount of legal and regulatory fines and settlements associated with labor law violations[22]	Quantitative	U.S. Dollars ($)	TR0202-06
Accidents & Safety Management	Description of implementation and outcomes of Safety Management System	Discussion and Analysis	n/a	TR0202-07
	Number of aviation accidents	Quantitative	Number	TR0202-08
	Number of road accidents and incidents	Quantitative	Number	TR0202-09
	(1) Total recordable injury rate and (2) fatality rate for (a) full-time employees and (b) contract employees	Quantitative	Rate	TR0202-10
	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance	Quantitative	Percentile (%)	TR0202-11
Supply Chain Management	Percentage of carriers with BASIC percentiles above the FMCSA intervention threshold	Quantitative	Percentage (%)	TR0202-12
	Complete greenhouse gas footprint across transport modes	Quantitative	Metric tons CO_2-e per ton-kilometer	TR0202-13

[22] Note to **TR0202-06**– Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Environmental Footprint of Fuel Use

Description

Major air emissions generated by the AFL industry comprise carbon dioxide, sulfur dioxide, nitrogen oxides, and particulate matter. The primary greenhouse gas (GHG)-generating activities include the combustion of jet fuel in aircrafts and diesel in trucks. Management of the environmental impacts of fuel use includes both fuel efficiency and the use of alternative fuels, and offers an effective way for companies to increase profits by reducing fuel costs while also limiting exposure to volatile fuel pricing, future regulatory costs, and other consequences of GHG emissions. While newer aircraft and trucks are more fuel-efficient, existing ones may be retrofitted for efficiency and reduced emissions.

Accounting Metrics

TR0202-01. 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 (CO_2-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 (i.e., marine, road, or rail).

.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").[23]

- The approach detailed in Section 4.23, "Organizational boundary setting for GHG emissions reporting," of the CDSB Climate Change Reporting Framework (CCRF).[24]

.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.

TR0202-02. 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.

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[23] "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.

[24] 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*.

.10 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
- The mechanism(s) for achieving the target, such as energy efficiency efforts, energy source diversification, carbon capture and storage, etc.

.11 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.

.12 Disclosure corresponds with:

- CDSB Section 4, "Management actions"[25]
- CDP questionnaire "CC3, Targets and Initiatives"

.13 Relevant aviation-related initiatives to discuss may include, but are not limited to, fuel optimization efforts such as the use of ground power and pre-conditioned air rather than Auxiliary Power Units (APU) when parked at gate, adjusting flight speed to optimize fuel efficiency, and route design (NextGen). Aircraft-related efforts can include the use of winglets, reduction in weight, and upgrading of the fleet to new aircraft.

.14 Relevant road transportation-related initiatives to discuss may include, but are not limited to, fuel optimization efforts such as route and load optimization. Truck-related efforts include adoption of technology such as engine and powertrain efficiency and aerodynamic improvements, weight reduction, improved tire rolling resistance, hybridization, and automatic engine shutdown.

TR0202-03. Total fuel consumed, percentage renewable for (1) road transport and (2) air transport

.15 The registrant shall disclose total fuel consumption from all sources as an aggregate figure in gigajoules or their multiples, broken down for (1) road transport-related operations and (2) air transport-related operations.

[25] "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 includes only fuel consumed by entities owned or controlled by the organization.
- The scope excludes non-fuel energy sources such as purchased electricity and purchased steam.

.16 In calculating the energy content of fuels and biofuels, the registrant 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).

.17 The registrant shall calculate the percentage of fuel from renewables as the energy content of renewable fuel consumed divided by the energy content of all fuel consumed.

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

.19 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute.
- Energy from biomass sources that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.

.20 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).

TR0202-04. Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)

.21 The registrant shall disclose its emissions released to the atmosphere of air pollutants associated with air freight and logistics operations, including direct air emissions from stationary or mobile sources.

.22 The registrant shall disclose emissions released to the atmosphere from air freight and logistics operations by types of emissions. Substances include:

- Oxides of nitrogen (including NO and NO_2 and excluding N_2O), reported as NO_2
- Oxides of sulfur (SO_2 and SO_3) reported as SO_2
- Particulate matter (PM); reported as the sum of PM_{10} and $PM_{2.5}$, or all particulates less than 10 micrometers in diameter

.23 This scope does not include CO_2, methane, and nitrous oxide, which are disclosed in TR0202-01 as Scope 1 GHG emissions.

.24 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 TR0202-01.

.25 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.

~~Fair~~ Labor Practices

Description

The industry's reliance on independent contractors has been under increasing regulatory scrutiny. Independent contractors are not covered under the same laws that protect employees, and companies may face legal actions for misclassifying independent contractors. AFL companies can face costly legal actions from employee and contractor claims regarding wage payments, worker classifications, and working conditions. Changing state laws that require companies to treat certain contractors like employees have the potential to impact labor costs in terms of additional wages and benefits.

Accounting Metrics

TR0202-05. Percentage of drivers who are classified as independent contractors

.26 The registrant shall disclose the percentage of its drivers who are classified by the registrant as independent contractors, where:

- Independent contractors shall be defined according to U.S. Internal Revenue Service (IRS) guidance on determining if an individual is an employee or an independent contractor, or according to local laws, such as "ABC laws," in states where the registrant conducts business with the individual.

.27 The registrant shall calculate the percentage as the full-time equivalent (FTE) of drivers who are independent contractors divided by the FTE of total drivers.

.28 Total drivers shall be calculated as is the sum of the FTE for drivers who are regular, direct employees and the FTE of those who are third-party employees, where:

- Regular, direct drivers include all full-time and part-time employees whose status group in the Human Resources Information System (HRIS) is "active" and includes Active, Paid Leave, and Unpaid Leave employees.
- Third-party drivers include independent contractors, leased employees, temp (agency) workers, consultants, and outsourced workers (provided that the consultants or outsourced workers are spending most of their time on the registrant's work).
- FTE is defined as the total hours reported divided by the maximum number of compensable hours in a full-time schedule (usually 40 hours per week).

TR0202-06. Amount of legal and regulatory fines and settlements associated with labor law violations

.29 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with labor law violations, including violations of the Fair Labor Standards Act (FLSA).

.30 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 **TR0202-06**

.31 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., wages, working hours, employee classification, etc.) of fines and settlements.

.32 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.

Accidents & Safety Management

Description

Transportation has inherent dangers related to accidents resulting from mechanical failure or human error. Additionally, moving packages manually is a physical process that requires special training in order to minimize injury. Statistics from the Bureau of Labor Statistics indicate that the fatal occupational injury rate for workers in the truck transportation industry is higher than normal. Safety issues in aviation are highly regulated. Companies in this industry take measures to train vehicle operators and maintenance staff to minimize accidents. Evidence of accident rates, costs, and safety technologies supports the material significance of the issue to the industry.

Accounting Metrics

TR0202-07. Description of implementation and outcomes of Safety Management System

.33 The registrant shall describe its implementation of a Safety Management System (SMS) across its aviation operations, where an SMS is defined according to Federal Aviation Administration (FAA)[26] and/or International Civil Aviation Organization (ICAO) rule-making and guidelines[27] and, at a minimum, includes:

- Safety policy
- Safety risk management
- Safety assurance
- Safety promotion

.34 Disclosure shall specifically discuss implementation of an SMS as it aligns with FAA guidelines and ICAO Standards and Recommended Practices, but it may also focus broadly on processes and procedures to avoid and manage emergencies, accidents, and incidents that could have catastrophic impacts on human health, the local community, and the environment.

.35 Description shall include a discussion of the implementation level the registrant has achieved as well as the registrant's plan for achieving complete implementation within the ICAO-recommended period of five years, where SMS implementation levels are:

- Level 0: Orientation & Commitment
- Level 1: Planning & Organization
- Level 2: Reactive Processes
- Level 3: Proactive Processes

[26] FAA Safety Management System Framework, Revision 3, June 1, 2010.
[27] ICAO Safety Management Manual (SMM) Doc 9859, Third Edition, 2012.

- Level 4: Continuous Improvement

.36 The registrant shall disclose whether the SMS has been audited by IATA's Operational Safety Audit (IOSA), and if so, the registrant should discuss relevant findings from the audit.

.37 The registrant shall disclose the outcomes of its SMS, including:

- The number of safety risks and hazardous situations that it identified, where risks and hazardous situations are broadly defined as any existing or potential condition that could lead to an accident or incident.

- The percentage of safety risks and situations identified that were mitigated.

.38 The registrant may choose to describe any actions or measures it has implemented to mitigate safety risks and hazardous situations it identified, including, but not limited to, specific changes in controls, operations, management, processes, products, business partners, training, or technology.

TR0202-08. Number of aviation accidents

.39 The registrant shall disclose the total number of aviation accidents, where accident is defined according to Annex 13 to the International Civil Aviation Organization (ICAO) Convention on International Civil Aviation as:

- An occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

    - A person is fatally or seriously injured as a result of:

        - Being in the aircraft;

        - Direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or

        - Direct exposure to jet blast;

        Except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

    - The aircraft sustains damage or structural failure, which:

        - Adversely affects the structural strength, performance, or flight characteristics of the aircraft; and

        - Would normally require major repair or replacement of the affected component;

Except for engine failure or damage when the damage is limited to the engine, its cowlings, or accessories, or for damage that is limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

- The aircraft is missing or is completely inaccessible.

Note 1. For statistical uniformity only, an injury resulting in death within 30 days of the date of the accident is classified as a fatal injury by ICAO.

Note 2. An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

TR0202-09. Number of road accidents and incidents

.40 The registrant shall disclose the total number of road transport-related accidents and incidents, where:

- An accident is defined according to Federal Rule 49 Code of Federal Regulations 390.50 as an occurrence involving a commercial motor vehicle operating on a highway in interstate or intrastate commerce which results in (i) a fatality; (ii) bodily injury to a person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or (iii) one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicle(s) to be transported away from the scene by a tow truck or other motor vehicle.

- An incident is defined as any event involving a licensed motor vehicle while on business use that results in an Occupational Safety and Health Administration (OSHA)-recordable injury, vehicle damage, or other property damage, where any vehicle or property damage shall be considered in determining a vehicle incident, regardless of the amount of damage, cost of the repair, or whether the repair is actually made.

.41 At a minimum, the scope of disclosure includes accidents and incidents reported to the National Transportation Safety Board or equivalent national authority.

TR0202-10. (1) Total recordable injury rate and (2) fatality rate for (a) full-time employees and (b) contract employees

.42 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its total recordable injury rate (TRIR) and fatality rate, as calculated and reported in OSHA Form 300.

- OSHA guidelines provide details on determination of whether an event is a recordable occupational incident, and definitions for exemptions for incidents that occurred in the work environment but are not occupational.

.43 For registrants whose workforce includes non-U.S.-based employees, the registrant shall calculate its total recordable injury rate according to the U.S. Bureau of Labor Statistics guidance and/or using the U.S. Bureau of Labor Statistics calculator.

.44 The registrant shall disclose its TRIR separately for its full-time employees and for contract employees, including independent contractors and those employed by third parties (e.g., temp agencies, labor brokers, etc.).

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

.46 Rates shall be calculated as: (statistic count / total hours worked)*200,000.

TR0202-11. Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance

.47 The registrant shall disclose the percentile score calculated by the FMCSA Safety Measurement System (SMS) for the following Behavior Analysis and Safety Improvement Categories (BASICs):

- Unsafe Driving
- Hours-of-Service (HOS) Compliance
- Driver Fitness
- Controlled Substances/Alcohol
- Vehicle Maintenance
- Hazardous Materials (HM) Compliance

.48 The registrant shall disclose its percentile in each BASIC for the month ending the most recent fiscal year.

.49 The registrant may choose to discuss its percentile in relation to FMCSA's Intervention Thresholds, which are as follows:

BASIC CATEGORY	INTERVENTION THRESHOLDS		
	Passenger	**HM**	**General**
Unsafe Driving, HOS Compliance	≥50%	≥60%	≥65%
Driver Fitness, Controlled Substances/Alcohol, Vehicle Maintenance	≥65%	≥75%	≥80%
HM Compliance	≥80%	≥80%	≥80%

Additional References

Total Motor Vehicle Incident Rate, American Petroleum Institute, Rev. 11/2010

Supply Chain Management

Description

Many companies in the industry, particularly those providing freight forwarding, logistics, brokerage, and intermodal services, contract with large, complex networks of asset-based third-party providers to provide freight transportation services to their customers. These contractors range across all modes of transport such as motor carriers, railroads, air freight, and ocean carriers. Because most of the material sustainability issues likely to affect companies in the AFL industry are related to the transportation of goods, AFL companies need to manage relationships with their contractors in order to ensure that contractor actions that may lead to environmental or social impacts do not result in material adverse effects on their own operations. Additionally, AFL companies that are able to offer low-carbon logistics solutions can better service customers who are trying to reduce the carbon footprint of their shipments.

Accounting Metrics

TR0202-12. Percentage of carriers with BASIC percentiles above the FMCSA intervention threshold

.50 The registrant shall calculate the percentage by dividing the number of carriers with which it contracts that have one or more FMCSA Behavior Analysis and Safety Improvement Category (BASIC) percentile over the Intervention Threshold by the total number of carriers with which it contracts.

.51 Intervention Thresholds are as follows:

BASIC CATEGORY	INTERVENTION THRESHOLDS		
	Passenger	HM	General
Unsafe Driving, HOS Compliance	≥50%	≥60%	≥65%
Driver Fitness, Controlled Substances/Alcohol, Vehicle Maintenance	≥65%	≥75%	≥80%
HM Compliance	≥80%	≥80%	≥80%

.52 The scope of disclosure includes carriers with which the registrant has contracted for transportation services during the fiscal year.

TR0202-13. Complete greenhouse gas footprint across transport modes

.53 The registrant shall disclose its complete tank-to-wheels greenhouse gas footprint, in metric tons of CO_2-e per metric ton-kilometer, where:

- Tank-to-wheels emissions relate to vehicle processes and exclude upstream emissions associated with primary energy production (i.e., well-to-tank emissions).

.54 The scope of disclosure includes emissions from all freight transportation and logistics activities, including those from the registrant's own assets and those from contract carriers and outsourced freight forwarding services.

.55 The scope of disclosure includes emissions from all modes of transportation, such as road freight, air freight, barge transport, marine transport, and rail transport.

.56 The registrant shall calculate its disclosure according to EN 16258:2012, *Methodology for calculation and declaration of energy consumption and GHG emissions of transport services (freight and passengers)*.

- Calculations shall be consistent with the methodology used to calculate the "tank-to-wheels GHG emissions (G_t)" result that is described in EN 16258:2012.

- Determination of transportation system scope, boundaries, and any necessary allocations shall be consistent with methodology that is described in EN 16258:2012.

.57 Consistent with EN 16258:2012, disclosure may be a result of calculations from a mix of categories of emissions values (i.e., specific measured values, transport operator vehicle-type or route-type specific values, transport operator fleet values, and default values).

.58 Where relevant and necessary for interpretation of disclosure, the registrant shall describe the allocation methods, emissions values, boundaries, mix of transport services used, and other information.

TRANSPORTATION SECTOR

MARINE TRANSPORTATION*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0301

MARINE TRANSPORTATION

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

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Purpose & Structure

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

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

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[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

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.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

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

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

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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."

[7] *TSC Industries v. Northway, Inc.*, 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via

[12] http://using.sasb.org/mock-10-k-library/

http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed “activity metrics”—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Seagoing personnel[19]	Quantitative	Number	TR0301-A
Nautical miles	Quantitative	Nautical miles (nm)	TR0301-B
Operating days[20]	Quantitative	Number of days	TR0301-C
Deadweight tonnage[21]	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

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] 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).

[20] 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).

[21] 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.

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[22]

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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

[22] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

steps. These include, 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."

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. 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[23]	Quantitative	U.S. Dollars ($)	TR0301-10
Accidents & Safety Management	Number of serious marine incidents[24]	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

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

[24] 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 (CO_2-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").[25]

- The approach detailed in Section 4.23, "Organizational boundary setting for GHG emissions reporting," of the CDSB Climate Change Reporting Framework (CCRF).[26]

.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.

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[25] "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.

[26] 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*.

.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
- 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"[27]
- 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.

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[27] "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 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.

- 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 NO_2 and excluding N_2O), reported as NO_2
- Oxides of sulfur (SO_2 and SO_3), reported as SO_2
- Particulate matter (PM); reported as the sum of PM_{10} 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 CO_2 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."[28]
    - 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:

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

- System treats ballast water to an efficacy of not more than 10 viable organisms per m^3 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.

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.

TRANSPORTATION SECTOR

CRUISE LINES*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0302

CRUISE LINES

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Cruise Lines industry.

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

The Cruise Lines industry comprises companies that provide passenger transportation and leisure entertainment, including deep sea cruises and river cruises. Cruises aim to provide a luxury resort experience for thousands of passengers at a time, typically in an exotic location. North America is the dominant market for the industry, with the most popular destinations being the Caribbean and Europe. The Cruise Lines industry has been the fastest-growing segment of the travel industry.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

For the Cruise Lines industry, the SASB has identified the following sustainability disclosure topics:

- Fuel Use & Air Emissions
- Discharge Management & Ecological Impacts
- Shipboard Health & Safety Management
- ~~Fair~~ Labor Practices
- Accident Management

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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."

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[7] *TSC Industries v. Northway, Inc.*, 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via

[12] http://using.sasb.org/mock-10-k-library/

http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

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[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Available Lower Berth kilometers (ALB-KM)[19]	Quantitative	ALB-KM	~~SV0205~~ TR0302-A
Average Passenger Cruise Day (APCD)[20]	Quantitative	Passenger days	~~SV0205~~ TR0302-B
Shipboard employees[21]	Quantitative	Number	~~SV0205~~ TR0302-C
Cruise guests[22]	Quantitative	Number	~~SV0205~~ TR0302-D
Number of vessel port calls	Quantitative	Number	~~SV0205~~ TR0302-E

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] **Note to ~~SV0205~~TR0302-A:** Available Lower Berth (ALB) is a measure of the standard capacity of a cruise ship, usually assuming two people per available cabin. It takes into account changes in fleet size, itineraries, and passenger capacity.

[20] **Note to ~~SV0205~~TR0302-B:** Average Passenger Cruise Day (APCD) is the number of available lower berths on a ship times the number of days that those berths are available to passengers per year.

[21] **Note to ~~SV0205~~TR0302-C**: Shipboard employees is the number of employees working aboard the registrant's vessels (including contract employees).

[22] **Note to ~~SV0205~~TR0302-D**: Cruise guests is the number of guests aboard the registrant's vessels, excluding employees.

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[23]

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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

[23] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

steps. These include, 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."

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term "shall" is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms "should" and "may" are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Fuel Use & Air Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons CO_2-e	~~SV0205~~TR0302-01
	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 & Analysis	n/a	~~SV0205~~TR0302-02
	Total energy consumed, percentage from (1) heavy fuel oil, (2) onshore power supply (OPS), and (3) renewables	Quantitative	Gigajoules, Percentage (%)	~~SV0205~~TR0302-03
	Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)	Quantitative	Metric tons (t)	~~SV0205~~TR0302-04
	Average Energy Efficiency Design Index (EEDI) for new ships	Quantitative	Grams of CO_2 per ton-nautical mile	~~SV0205~~TR0302-05
Discharge Management & Ecological Impacts	Amount of ship waste discharged to the environment, percentage treated prior to discharge	Quantitative	Metric tons, Percentage (%)	~~SV0205~~TR0302-06
	Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment	Quantitative	Percentage (%)	~~SV0205~~TR0302-07
	Cruise duration in marine protected areas and areas of protected conservation status	Quantitative	Number of travel days	~~SV0205~~TR0302-08
	Number of notices of violations received for dumping[24]	Quantitative	Number	~~SV0205~~TR0302-09
Shipboard Health & Safety Management	Number of alleged crime incidents involving passengers or employees	Quantitative	Number	~~SV0205~~TR0302-10
	Fleet average CDC Vessel Sanitation Program inspection score, percentage of inspections failed	Quantitative	Number, Percentage (%)	~~SV0205~~TR0302-11
	Number of (1) serious injuries per million customers and (2) voyages with a gastrointestinal illness count exceeding 2%	Quantitative	Rate, Number	~~SV0205~~TR0302-12
	Seafarer lost time injury rate	Quantitative	Rate	~~SV0205~~TR0302-13
~~Fair~~ Labor Practices	Average hourly wage for seafarers, by region	Quantitative	U.S. Dollars ($) per hour	~~SV0205~~TR0302-14
	Percentage of seafarers working maximum hours	Quantitative	Percentage (%)	~~SV0205~~TR0302-15

[24] Note to **SV0204-09**—Disclosure shall include a description of significant penalties and corrective actions implemented in response to events.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Percentage of seafarers paid for overtime	Quantitative	Percentage (%)	~~SV0205~~TR 0302-16
	Amount of legal and regulatory fines and settlements associated with labor law violations[25]	Quantitative	U.S. Dollars ($)	~~SV0205~~TR 0302-17
Accident Management	Number of Conditions of Class or Recommendations	Quantitative	Number	~~SV0205~~TR 0302-18
	Number of port state control (1) deficiencies and (2) detentions	Quantitative	Number	~~SV0205~~TR 0302-19
	Number of accidents and incidents[26]	Quantitative	Number	~~SV0205~~TR 0302-20

[25] Note to **~~SV0205~~TR0302-15**–Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

[26] Note to **~~SV0205~~TR0302-18**–Disclosure shall include a description of serious marine accidents, outcomes, and corrective actions implemented in response.

Fuel Use & Air Emissions

Description

Cruise Lines companies generate emissions mainly from the combustion of diesel in ship engines. The industry's reliance on heavy bunker fuel—a relatively "dirty" fuel source—is important to manage due to intensifying emissions regulations and rising fuel costs. Recent environmental regulations on greenhouse gas (GHG) reporting and limits on emissions of sulfur oxide (SOx~~,~~), nitrogen oxide (NOx~~,~~), and particulate matter (PM) are driving adoption of more fuel-efficient engines, use of cleaner burning fuels, and engine retrofits. Furthermore, fuel constitutes a major expense for industry players, providing another significant incentive for fuel efficiency. Companies may be penalized for exceeding emissions limits at ports and other restricted areas. Companies are managing these risks by commissioning more energy efficient vessels, retrofitting existing fleets, and using onshore power when it is available at ports.

Accounting Metrics

~~SV0205~~TR0302-01. Gross global Scope 1 emissions

.01 The registrant shall disclose gross global Scope 1 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).[27]

.02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in *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 (i.e., marine, road, or rail).

.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:

[27] An update to the responses for CDP Questionnaire section 4.25 of the CDSB CCRF shall be updated to the response to ~~SV0205~~TR0302-01.

- 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").[28]

- The approach detailed in Section 4.23, "Organizational boundary setting for GHG emissions reporting," of the CDSB *Climate Change Reporting Framework (CCRF)*.[29]

.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 is from continuous emissions-monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.

~~SV0205~~TR0302-02. 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.

[28] "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.

[29] This is based on the requirements of International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) for 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*.

.10 For emissions-reduction targets, the registrant shall disclose:

- The percentage of emissions within the scope of the reduction plan;
- The percentage reduction from the base year, where:
  - 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
- The mechanism(s) for achieving the target, such as energy efficiency efforts, energy source diversification, carbon capture and storage, etc.

.11 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.

.12 Disclosure corresponds with:

- CDSB Section 4, "Management actions"30
- CDP questionnaire CC3, "Targets and Initiatives"

.13 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 the fleet to new ships.

~~SV0205~~TR0302-03. Total energy consumed, percentage from (1) heavy fuel oil, (2) onshore power supply (OPS), and (3) renewables

.14 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.

[30] "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 includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.

.15 In calculating energy consumption from fuels and biofuels, the registrant 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).

.16 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.

.17 Heavy fuel oil is defined as heavier residual fuel oils that remain after distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations, and which conform to residual fuel categories in ISO 8217:2012, Petroleum products – Fuels (class F) – Specifications of marine fuels, and include all six categories of residual fuel.

.18 The registrant shall disclose OPS electricity consumption as a percentage of its total energy consumption.

- OPS includes the shoreside electrical power consumed by a ship at berth while its main and auxiliary engines are turned off.

.19 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.

- 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.

.20 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 is limited to the following:
  - Energy from hydro sources that are certified by the Low Impact Hydropower Institute.
  - Energy from biomass sources is limited to sources that are considered “eligible renewables” according to the Green-e Energy National Standard Version 2.4 or that are eligible for a state Renewable Portfolio Standard.

.21 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).

~~SV0205~~TR0302-04. Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)

.22 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, ships, equipment at port sites, office buildings, truck fleets, and moveable equipment.

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

- Oxides of nitrogen (including NO and NO_2 and excluding N_2O), reported as NO_2;
- Oxides of sulfur (SO_2 and SO_3), reported as SO_2;
- Particulate matter (PM); reported as the sum of PM_{10} and $PM_{2.5}$, or all particulates less than 10 micrometers in diameter.

.24 This scope does not include CO_2, methane, and nitrous oxide, which are disclosed in ~~SV0205~~TR0302-01 as Scope 1 GHG emissions.

.25 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 ~~SV0205~~TR0302-01.

.26 The registrant should discuss the calculation methodology for its emissions disclosure, such as whether data are from CEMS, engineering calculations, mass balance calculations, etc.

~~SV0205~~TR0302-05. Average Energy Efficiency Design Index (EEDI) for new ships

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

.28 The registrant shall calculate the EEDI for each new vessel in its fleet and report the average EEDI value in grams of CO_2 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.

.29 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.

.30 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.

Discharge Management & Ecological Impacts

Description

Cruise vacations offer unique access to pristine ocean waters and destinations with delicate ecosystems. However, these sensitive ecosystems can be threatened by the size of the ships, the influx of foreign tourists, and the scale of the resources consumed and waste generated on board. Cruise ships discharge many types of treated and untreated wastewater at sea and non-degradable solid wastes on land. Careful management of ship discharge and mitigation of the ecological impacts of Cruise Lines companies' operations will ensure continued access to key ports and will help preserve the natural beauty that their guests wish to see.

Accounting Metrics

~~SV0205~~TR0302-06. Amount of ship waste discharged to the environment, percentage treated prior to discharge

.31 The amount of ship waste discharged to the environment shall be calculated in metric tons and defined as anything used on board the ship (or intended for use on the ship) for which the registrant has no further use and which is discarded or released to the environment.

- The scope includes sewage, bilge water, ballast water, graywater, hazardous waste, used oil, food, packaging, other solid waste, etc.
- This disclosure excludes any portions of waste that are reused or recycled by vendors or partners, as well as any waste disposed of on shore.
- Portions of products and materials that are disposed of at sea or in landfills are included in the scope. Only the portions of reused and recycled products that are directly incorporated into new products, co-products, or by-products shall be excluded from the scope.
- The scope excludes gaseous wastes.

.32 The percentage treated prior to discharge shall be calculated as the weight of waste material that was treated by the registrant to at least minimum legal requirements set by MARPOL and other relevant regulation, divided by the total weight of waste material, where:

- For the purposes of this disclosure, incineration is not considered a treatment of solid waste, even if the incinerated waste may be legally discharged at sea.
- Materials incinerated, including for energy recovery, shall be counted in the total amount of ship waste discharged to the environment, but not in the percentage treated. Energy recovery is defined as the use of combustible waste as a means to generate energy through direct incineration with or without other waste but with recovery of the heat.

~~SV0205~~TR0302-07. Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment

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

.34 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.

.35 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 that meets the Regulation D1 performance standard divided by the total number of ships in the fleet.

.36 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:

- The system treats ballast water to an efficacy of not more than 10 viable organisms per m^3 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.

.37 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 that meet the Regulation D2 performance standard divided by the total number of ships in the fleet.

~~SV0205~~TR0302-08. Cruise duration in marine protected areas and areas of protected conservation status

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

- Cruise duration is the sum of the travel days (24-hour periods or fractions thereof) spent in either type of area.
- Duration includes time spent docked at ports.

.39 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.

.40 Marine protected areas include areas internationally established and regulated in IMO Conventions as well as 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

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

- Marine sanctuaries
- National parks
- 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
- Other areas where discharges are restricted or subject to local agreements
- 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"[31]
  - These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on ProtectedPlanet.net

.42 The registrant may choose to separately identify cruise 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).

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

.43 The registrant may choose to provide discussion around its cruise activities in marine protected areas and areas of protected conservation status that present low risk to biodiversity or ecosystem services.

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

~~SV0205~~TR0302-09. Number of notices of violations received for dumping

.45 The registrant shall disclose the total number of notices of violations received for dumping, where:

- Notices of violations include those issued by the registrant's flag state and any government enforcement agency at ports where the registrant's vessels visit.
- Notices include those for violations of MARPOL Annexes I through V, or other relevant national or regional environmental legislation (including Alaska Department of Environmental Quality Notices of Violations)
- The scope of notices of violation excludes those received for excessive emissions and air quality violations.
- Dumping means any deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms, or other man-made structures at sea; "Dumping" does not include the disposal at sea of wastes or other matter incidental to, or derived from, the normal operations of vessels, aircraft, platforms, or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms, or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or structures; nor does it include the placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of the London Dumping Convention[32]
- Notices include but are not limited to those for wastewater pollution, illegal dumping of oil, untreated sewage, hazardous waste, other pollutants including nickel, copper, zinc and ammonia, or the falsifying of Oil Record Books

.46 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).

Note to **~~SV0205~~TR0302-09**~~.~~

.47 The registrant shall discuss any significant violations, outcomes, and corrective actions implemented in response to events.

.48 Significant violations can include those that resulted in a significant fine, penalty, or harm to the environment.

[32] MARPOL Prevention of Pollution From Ships Subpart 15(A), Article 15.1 Definitions

.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.

Shipboard Health & Safety Management

Description

Companies in the Cruise Lines industry offer a variety of luxury experiences and activities to their customers, including elaborate shows, casinos, fine dining, indoor skydiving, spa treatments, swimming, and fitness facilities. Each activity comes with its own set of health risks and safety challenges and liabilities that cruise companies must navigate. A commitment to providing a clean and sanitary environment on board is important for mitigating passenger and crew health risks. Additionally, cruise companies operate a uniquely transitory service that requires them to provide all the safety oversight of a small city, including addressing all medical and security needs. Consumer expectation of safety and comfort is high, so issues such as health risks and physical safety risks are especially important to avoid. Highly publicized cases of crimes, injuries, and illnesses onboard cruise ships can have serious impacts of brand value and ticket sales.

Accounting Metrics

~~SV0205~~TR0302-10. Number of alleged crime incidents involving passengers or employees

.50 The registrant shall disclose the total number of alleged crime incidents involving passengers or employees, where:

- "Alleged crimes" include homicide, suspicious death, a missing U.S. national, kidnapping, assault resulting in serious bodily injury, sexual assault, firing or tampering with a vessel, or theft of money and property in excess of $10,000, consistent with the Cruise Vessel Security and Safety Act of 2010 (CVSSA), Pub. L. No. 111-207.

.51 The scope of disclosure includes incidents on cruise ships that do not embark and disembark in the United States, and are therefore outside of the scope of the CVSSA.

- In this case, the registrant shall use data from the appropriate oversight authority for cruise ship criminal activity in the jurisdiction where the crimes occurred.

~~SV0205~~TR0302-11 Fleet average CDC Vessel Sanitation Program inspection score, percentage of inspections failed

.52 The registrant shall disclose the Center for Disease Control Vessel Sanitation Program (VSP) inspection score as a fleet average, where:

- The fleet average is calculated as the sum of inspection scores for all inspected ships divided by the number of ships that were inspected. For ships that were inspected multiple times during the fiscal year, the average annual inspection score for that ship shall be included in the calculation of the fleet average score (i.e., the average of averages when multiple inspections occurred during the fiscal year).

.53 The registrant shall disclose the percentage of inspections conducted by a relevant regulatory oversight authority that received a failing sanitation inspection score, where:

- A failing score for the CDC VSP is 85 or less.

- The percentage is calculated as the total number of inspections that received a failing score, divided by the total number of inspections that were conducted. For ships that were inspected multiple times during the fiscal year, the lowest inspection score shall be included for that ship in the calculation.

- The scope of disclosure includes any ship that was inspected for public health, food safety, and/or environmental sanitation during the fiscal year. Examples of agencies that may have conducted such inspections include, but are not limited to, the U.S. CDC VSP, the Health Canada Cruise Ship Inspection program, the Brazilian ANVISA program, or the European SHIPSAN program.

~~SV0205~~TR0302-12. Number of (1) serious injuries per million customers and (2) voyages with a gastrointestinal illness count exceeding 2%

.54 The registrant shall disclose the total number of serious injuries per million customers, where:

- Serious injuries are defined as injuries resulting in incapacitation for more than 72 hours commencing within seven days from the date of injury, consistent with the IMO Safety Code.

- The scope includes serious injuries to guests that are caused by, or in connection with, the operations of a ship.

.55 The registrant shall disclose the total number of voyages on which the gastrointestinal illness count exceeded two percent of the total number of passengers and crew on board.

- The CDC VSP defines gastrointestinal illness (GI) cases as those evaluated by the medical staff before the ship arrives at a U.S. port when sailing from a foreign port.

- The number of GI cases used in the calculation shall be the total for the entire voyage and not the number of active (symptomatic) GI cases at any given port of call or at disembarkation.

- Two percent of the total number of passengers and crew on board represents the threshold for which a separate notification is required by the cruise ship.

~~SV0205~~TR0302-13. Seafarer lost time injury rate

.56 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).

.57 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.

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

.59 The scope includes all shipboard employees, domestic and foreign.

Definitions

The VSP applies to ships with more than 13 passengers that are either flagged in the U.S. or are foreign ships that have U.S. ports on their itineraries. Under the program, ships must follow guidelines for public health practices, submit to both scheduled and unannounced inspections, and report GI outbreaks.

Additional References

IMO Safety Code: RESOLUTION A.849(20) Code for the Investigation of Marine Casualties and Incidents, adopted on 27 November 1997

Cruise Vessel Security and Safety Act of 2010 (CVSSA): Pub. L. No. 111-207 (July 27, 2010) (codified at 46 U.S.C. Sections 3507, 3508)

~~Fair~~ Labor Practices

Description

Cruise Lines employ thousands of workers for onboard operations. Most ships are registered abroad in countries where labor laws allow flexibility in many dimensions including pay, hours, fair treatment, and termination. Shipboard crews are truly multi-national, and many are hired on a contract basis. Workers often work long hours for months at a stretch and stay in shared quarters, which can make it difficult to recuperate. Some companies employ a gratuity-based wage structure, which reduces payroll costs. Language barriers and the complexity of flag-state laws and the laws in workers' home countries can make it difficult for workers to file charges in the case of labor law violations.

Accounting Metrics

~~SV0205~~TR0302-14. Average hourly wage for seafarers, by region

.60 The registrant shall disclose the average hourly wage, in U.S. dollars, for seafarers for each geographic region for which it conducts segment financial reporting, where:

- Seafarers are defined as non-manager or director-level shipboard employees
- The scope of disclosure excludes shoreside and corporate employees

.61 The average hourly wage is calculated as the total seafarer wages for the fiscal year, including gratuities, divided by the number of hours worked by seafarers during the fiscal year.

~~SV0205~~TR0302-15. Percentage of seafarers working maximum hours

.62 The registrant shall disclose the percentage of seafarers that worked maximum allowable hours at least once during the fiscal year, where:

- The maximum allowable hours of work for seafarers are 14 hours of work per 24-hour period and 72 hours of work per 7-day period, consistent with the Maritime Labour Convention, Standard A2.3, Paragraph 5(a), "Hours of work and hours of rest."[33]
- The scope includes all shipboard employees.

~~SV0205~~TR0302-16. Percentage of seafarers paid for overtime

.63 The registrant shall disclose the percentage of seafarers who have been paid for overtime at least once during the fiscal year, where:

- Overtime means time worked in excess of the normal hours of work.
- Overtime shall be calculated in accordance with Maritime Labour Convention Guideline B2.2.2, "Calculation and payment."

[33] http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:91:0::::P91_SECTION:MLC_A2

- The scope includes all shipboard employees.

~~SV0205~~TR0302-17. Amount of legal and regulatory fines and settlements associated with labor law violations

.64 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with labor law violations, including, but not limited to, violations of the Fair Labor Standards Act, U.S. Seaman's Wage Act, ILO Maritime Labour Convention, and any other relevant regulation such as those relating to wages, work hours, overtime, and meal and rest breaks.

.65 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 **~~SV0205~~TR0302-17**

.66 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., improper working conditions, unfair compensation, etc.) of fines and settlements.

.67 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.

Accident Management

Description

Statistically, cruising is one of the safest forms of travel for vacationing and is even perceived by anxious flyers as a safer way to see exotic locations. However, the industry competes largely on customer experience and satisfaction, and given the scale of the ships and the vulnerability of passengers at sea, it may only take one mismanaged accident to shake consumer confidence in a company. The Cruise Lines industry places safety management as a top priority and while major accidents are rare, they have the potential to affect not only a company's revenues and reputation, but those of the industry as a whole. Proper equipment maintenance, staff training, and use of the latest safety technologies and methods across the entire fleet can improve a cruise lines company's safety record and enhance the customer experience.

Accounting Metrics

~~SV0205~~TR0302-18. Number of Conditions of Class or Recommendations

.68 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.

.69 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

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

~~SV0205~~TR0302-19. Number of port state control (1) deficiencies and (2) detentions

.71 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)
- ILO Maritime Labour Convention, 2006

.72 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 on board, 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.

.73 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 U.S. Coast Guard (USCG) in the United States.

~~SV0205~~TR0302-20. Number of accidents and incidents

.74 The registrant shall disclose the total number of accidents and incidents in which its fleet was involved.

.75 An accident or incident is defined, based on the U.S. Code of Federal Regulations 46 CFR 4.03-1 definition, as any event involving the registrant's vessels that includes:

- Any accidental grounding, or any occurrence involving a vessel that results in damage by or to the vessel, its apparel, gear, or cargo, or injury or loss of life of any person, including, among other things, collisions, strandings, groundings, founderings, heavy weather damage, fires, explosions, failure of gear and equipment, and any other damage that might affect or impair the seaworthiness, efficiency, or fitness of the vessel. The definition also includes any incident involving significant harm to the environment (as defined in 46 CFR 4.03-65).

Note to **~~SV0205~~TR0302-20**

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

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

- A marine casualty or an 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, that 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 it results 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 it results from a marine casualty.

TRANSPORTATION SECTOR

RAIL TRANSPORTATION*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0401

RAIL TRANSPORTATION

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

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

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

The Rail Transportation industry consists of companies that provide rail freight shipping and support services. Key activities include shipping containerized and bulk freight, including consumer goods and commodities. Rail companies typically own, maintain, and operate their rail networks. The Rail Transportation industry is characterized by a low level of globalization, with companies listed on U.S. exchanges operating mostly in the U.S., Canada, and Mexico. As such, domestic industry and regulatory drivers are relevant.

Note: The scope of this standard does not include passenger rail transportation, which is mainly operated by publicly funded or owned entities in the U.S.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

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

- Environmental Footprint of Fuel Use
- Competitive Behavior
- Accidents & Safety Management

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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."

[7] *TSC Industries v. Northway, Inc.*, 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via

[12] http://using.sasb.org/mock-10-k-library/

http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of carloads originated[19]	Quantitative	Number	TR0401-A
Number of intermodal units transported[20]	Quantitative	Number	TR0401-B
Track miles[21]	Quantitative	Miles	TR0401-C
Revenue ton miles[22]	Quantitative	RTM	TR0401-D
Number of employees	Quantitative	Number	TR0401-E

Units of Measure

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

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] Note to **TR0401-A** – Carloads include shipment of freight that is not containerized.

[20] Note to **TR0401-B** – Intermodal units include both shipping containers and truck trailers that can be transported across modes of transportation.

[21] Note to **TR0401-C** – Route miles is the total extent of routes available for trains to operate. Track miles include route miles and take into account multiple track routes such that each route mile with double track is considered two track miles.

[22] Note to **TR0401-D** – Revenue ton miles are calculated by multiplying the weight of the shipment by the number of miles transported, for paid tonnage only.

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[23]

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

[23] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term “shall” is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms “should” and “may” are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. 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	TR0401-01
	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	TR0401-02
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules, Percentage (%)	TR0401-03
	Air emissions for the following pollutants: NO_X and particulate matter (PM)	Quantitative	Metric tons (t)	TR0401-04
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with anti-competitive practices[24]	Quantitative	U.S. dollars ($)	TR0401-05
Accidents & Safety Management	Number of accidents and incidents	Quantitative	Number	TR0401-06
	(1) Total recordable injury rate, (2) fatality rate, and (3) near miss frequency rate	Quantitative	Rate	TR0401-07
	Number of (1) accident releases and (2) non-accident releases (NARs)[25]	Quantitative	Number	TR0401-08
	Number of Federal Rail Administration (FRA) Recommended Violation Defects	Quantitative	Number	TR0401-09
	Frequency of internal railway integrity inspections[26]	Quantitative	Inspections per week	TR0401-10

[24] Note to **TR0401-05** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

[25] Note to **TR0401-08** – Disclosure shall include a discussion of the registrant's processes, procedures, and strategies to manage non-accident and accident releases.

[26] Note to **TR0401-10** – Disclosure shall include, where relevant, a discussion of rail maintenance practices and operating precautions additional to inspections.

Environmental Footprint of Fuel Use

Description

The rail industry generates air emissions mainly through the combustion of diesel in locomotive engines. Despite low relative emissions compared to other transportation industries, fuel management has implications for companies in the industry in terms of operating costs and regulatory compliance. Greenhouse gases (GHGs), including carbon dioxide and nitrogen oxides, are of particular importance to government regulators concerned about climate change. Moreover, nitrogen oxide emissions (NOx) from diesel-powered locomotives have significant health and environmental impacts, as they are a major component of smog and acid rain. In addition to GHGs, rail operations can emit several types of air pollutants that are regulated under the Clean Air Act, including Hazardous Air Pollutants (HAPs), Criteria Air Pollutants (CAPs), and Volatile Organic Compounds (VOCs). These pollutants tend to have localized environmental and health impacts. At the same time, fuel has been the fastest-growing industry cost. Rail companies' reliance on diesel is likely to affect value due to intensifying regulations of locomotive exhaust emissions and high fuel costs. These factors provide incentives for rail companies to implement fuel efficiency enhancements and manage emissions. This can lead to operational efficiency and impact the cost structure of rail companies, with chronic and acute impacts on value. This in turn improves companies' competitive position both within the industry and compared to other modes of transport.

Accounting Metrics

TR0401-01. 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 (CO_2-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 activities.

.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").[27]

- The approach detailed in Section 4.23, "Organizational boundary setting for GHG emissions reporting," of the CDSB Climate Change Reporting Framework (CCRF).[28]

.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.

TR0401-02. 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

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[27] "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.

[28] 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 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
- 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"[29]
- CDP questionnaire "CC3, Targets and Initiatives"

.12 Relevant initiatives to discuss may include, but are not limited to, operational improvements such as decreased idling, trip optimization, and maximizing loads. Locomotive-related efforts can include fleet enhancements such as new engines, fuel optimization technology and aerodynamic fleet modifications, and upgrading the fleet to new locomotives.

TR0401-03. Total fuel consumed, percentage renewable

.13 The registrant shall disclose total fuel consumption from all sources as an aggregate figure in gigajoules or their multiples.

- The scope includes only fuel consumed by entities owned or controlled by the organization.

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[29] "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 shall be aligned with diesel fuel consumption currently reported to the Surface Transportation Board via Form R-1.

- The scope excludes non-fuel energy sources such as purchased electricity and purchased steam.

.14 In calculating the energy content of 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 fuel from renewables as the energy content of renewable fuel consumed divided by the energy content of all fuel consumed.

.16 Renewable fuel 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.

.17 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute.

- Energy from biomass sources that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.

.18 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).

TR0401-04. Air emissions for the following pollutants: NO_X and particulate matter (PM)

.19 The registrant shall disclose its emissions released to the atmosphere of air pollutants associated with rail operations, such as:

- Direct air emissions from stationary or mobile sources that include, but are not limited to, equipment and rail locomotive fleet (line-haul and switching operations).

.20 The registrant shall disclose emissions released to the atmosphere from rail operations by types of emissions, such as:

- Oxides of nitrogen (including NO and NO_2 and excluding N_2O), reported as $NO_{2;}$

- Particulate matter (PM); reported as the sum of PM_{10} and $PM_{2.5}$, or all particulates less than 10 micrometers in diameter

.21 This scope does not include CO_2, methane, and nitrous oxide, which are disclosed in TR0401-01 as Scope 1 GHG emissions.

.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 TR0401-01.

.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, and/or are equivalent to data reported as part of the U.S. EPA Smart Way Rail Partners Transport Partnership.

Competitive Behavior

Description

The rail industry exhibits economies of density due to its network effects, lending itself to natural monopoly conditions. Together with large sunk costs of rail infrastructure, this provides a competitive advantage to incumbent firms in the Rail Transportation industry and creates significant barriers to entry for new firms. Despite the long-term decline in freight rates since the industry was deregulated, in the face of higher prices more recently, rail industry customers are pressuring policy makers to introduce rules to improve competition in pricing. In particular, there are concerns that the largest Class I railroads may have negotiating power over captive shippers, leading to unfair pricing. Higher rates charged to shippers may be passed on to end-users. Consolidation in the railroad industry and alleged anti-competitive practices in relation to captive shippers, among other reasons, are creating political pressure to remove the antitrust immunity granted to railroads. Some of the proposed policy changes could lead to significant costs or impede investment in the rail industry. Rail companies operating at the limits of allowable charges in areas where they could be found to have market dominance, or those not complying with regulatory rules regarding reasonable rates are likely to face increased regulatory scrutiny. Market manipulation has the potential to provoke government action, in particular via fines and penalties that increase extraordinary expenses and negatively affect a company's valuation. In an environment of increased concerns about the market power and pricing practices of rail companies, it is in their interest to continue to ensure competitive pricing and transparency in rate-setting while achieving adequate returns on their significant investments.

Accounting Metrics

TR0401-05. Amount of legal and regulatory fines and settlements associated with anti-competitive practices

.24 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with anti-competitive behavior, such as those related to enforcement of U.S. laws and regulations on price-fixing, antitrust behavior (e.g., exclusivity contracts), patent misuse, or network effects, as well as bundling of services and products to limit competition, including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.

.25 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 **TR0401-05**

.26 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., price-fixing, patent misuse, antitrust, etc.) of fines and settlements.

.27 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.

Accidents & Safety Management

Description

Moving freight by rail, as with other modes of transport, creates risks of accidents and unintended releases of hazardous materials, either due to mechanical failure or human error. This can have wide-ranging repercussions for a company's employees, the environment, and valuable property, as well as financial impacts on companies themselves. Increasingly stringent safety regulations, potential for significant costs following major accidents, and lost consumer confidence resulting in lower revenues after such events, provide incentives for rail companies to manage their safety performance effectively. A healthy workforce, strong safety culture, a thorough and systematic approach to safety, risk management (including emergency preparedness and response), and operational integrity at all levels of the organization can help lower the probability and magnitude of rail accidents. This can ultimately enhance a company's social license to operate.

Accounting Metrics

TR0401-06. Number of accidents and incidents

.28 The registrant shall disclose the total number of accidents and incidents in which it was involved, where:

- Accidents and incidents are defined according to U.S. Federal Railroad Administration (FRA) definitions as including collisions, derailments, and other events involving the operation of on-track equipment reportable damage above an established threshold; impacts between railroad on-track equipment and highway users at crossings; and all other incidents or exposures that result in fatality, injury to any person, or occupational illness of a railroad employee.

.29 The scope of disclosure includes events that, per Title 49, Part 225 of the Code of Federal Regulations, are required to be reported to the FRA, including the following categories of event:

- Train accidents, which are safety-related events involving on-track rail equipment (both standing and moving), causing monetary damage to the rail equipment and track above a prescribed amount.

- Highway-rail grade crossing incidents, which are any impacts between on-track rail equipment and highway users (both motor vehicles and other users of the crossing as a designated crossing site, including via walkways, sidewalks, etc., associated with the crossing).

- Other incidents, which include any death, injury, or occupational illness of a railroad employee that is not the result of a train accident or highway-rail grade crossing incident.

TR0401-07. (1) Total recordable injury rate, (2) fatality rate, and (3) near miss frequency rate

.30 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its total recordable injury rate (TRIR) and fatality rate, as calculated and reported in the Occupational Safety and Health Administration's (OSHA) Form 300.

- OSHA guidelines provide details on determination of whether an event is a recordable occupational incident, and definitions for exemptions for incidents that occurred in the work environment but are not occupational.

.31 For registrants whose workforce includes non-U.S.-based employees, the registrant shall calculate its total recordable injury rate according to the U.S. Bureau of Labor Statistics guidance and/or using the U.S. Bureau of Labor Statistics calculator.

.32 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident in which no property or environmental damage or personal injury occurred, but in which damage or personal injury easily could have occurred but for a slight circumstantial shift.

- The registrant should refer to organizations such as the National Safety Council (NSC) for guidance on implementing near miss reporting.

- The registrant should disclose its process for classifying, identifying, and reporting near miss incidents.

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

.34 Rates shall be calculated as: (statistic count / total hours worked)*200,000.

TR0401-08. Number of (1) accident releases and (2) non-accident releases (NARs)

.35 The registrant shall disclose the total number of accident releases of hazardous material and the total number of non-accident releases (NARs) of hazardous material, where:

- Hazardous material is defined according to Code of Federal Regulations 49 CFR as a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce and has designated as hazardous under section 5103 of federal hazardous materials transportation law (49 U.S.C. 5103).

- An accident release is defined as a release of hazardous material, reportable to the Pipeline and Hazardous Materials Safety Administration (PHMSA) via a DOT 5800.1 report form, that occurred during an accident or incident disclosed according to TR0401-06.

- A non-accident release is defined according to the Association of American Railroads (AAR) as the unintentional release of a hazardous material while in transportation, including loading and unloading while in railroad possession, that is not caused by derailment, collision, or other rail-related accidents. NARs consist of leaks, splashes, and other releases from improperly secured or defective valves, fittings, and tank shells, and also include venting of non-atmospheric gases from safety relief devices. (Normal safety venting of atmospheric gases such as carbon dioxide and nitrogen is not considered a NAR.)

.36 Where relevant, the registrant should provide a breakdown of spills and releases of by type, such as: (1) hydrocarbons and (2) hazardous substances.

Note to **TR0401-08**

.37 The registrant shall discuss its processes, procedures, and strategies to manage non-accident and accident releases.

.38 Relevant topics of discussion include, but are not limited to, the use of management systems such as the American Chemistry Council's Responsible Care Management System, the use of safety technologies, employee training, implementation of work shift limits, and safe-arrival pay incentives.

TR0401-09. Number of Federal Rail Administration (FRA) Recommended Violation Defects

.39 The registrant shall disclose the number of Recommended Violation Defects resulting from the FRA or state inspections or audits, and summarized in the FRA's Annual Enforcement Report.

.40 The scope of disclosure includes violation defects for any safety-related issue including those related to accident reporting, grade-crossing signal safety, hazardous material regulations, industrial hygiene (occupational noise), motive power and equipment (e.g., freight car safety, locomotive safety, passenger equipment safety, etc.), railroad operating practices (e.g., alcohol and drug use, hours of services laws, communications, operating practices, etc.), signal system safety, and track safety.

.41 The scope of disclosure includes violation defects that both did and did not result in civil penalties.

TR0401-10. Frequency of internal railway integrity inspections

.42 The registrant shall disclose the frequency with which it conducts inspections of its tracks.

- The scope of disclosure includes excepted main track; Class 1, 2, and 3 main track; and Class 4 and 5 main track inspections.
- The scope of disclosure excludes track other than main track.

.43 The frequency of inspection shall be expressed as number of inspections per week, weighted for the number of track miles on which those inspections took place.

- The frequency shall be calculated as: (the sum for all track of: weekly inspections * miles of track on which they took place) / (total main track miles)

.44 The registrant should discuss the frequency of its inspections in relation to the following FRA requirements:

- If the track has carried passenger trains or more than 10 million gross tons of traffic during the preceding calendar year, the FRA requires twice-weekly inspections, with at least one calendar-day interval between inspections.
- If the track is used less than once a week, the FRA requires weekly inspections with at least a three calendar-day interval between inspections, or an inspection before every use.

Note to **TR0401-10**

.45 Where relevant, the registrant shall discuss rail-maintenance practices and operating precautions that it implements in addition to inspections.

.46 Relevant topics of discussion include, but are not limited to, the use of management systems, use of safety technologies, and employee training.

.47 Relevant measures to discuss include optimization of tank car design, adding monitoring equipment, strengthening emergency-response capabilities by sharing relevant information with communities, providing training support, and implementing mutual aid intervention protocols.

.48 Relevant technologies to discuss may include: Positive Train Control (PTC) technology, wayside detectors, wheel profile monitors, acoustic detectors, track geometry cars, advanced track grinding to reduce rail fatigue, improved track lubrication techniques, and electronically controlled pneumatic brakes.

TRANSPORTATION SECTOR

ROAD TRANSPORTATION*

Sustainability Accounting Standard

PROPOSED CHANGES TO PROVISIONAL STANDARDS

EXPOSURE DRAFT

REDLINE OF STANDARD FOR PUBLIC COMMENT

Prepared by the
Sustainability Accounting Standards Board®

October 2017

* Sustainable Industry Classification System™ (SICS™) #TR0402

ROAD TRANSPORTATION

Sustainability Accounting Standard

About the SASB

The Sustainability Accounting Standards Board (SASB) was founded in 2011 as an independent standard-setting organization. The SASB issues and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material financial impacts on companies within that industry. Companies can use the standards to disclose material information to investors in SEC filings, including Forms 10-K, 20-F, and 8-K, as well as S-1 and S-3, in a cost-effective and decision-useful manner. The standards are designed to help companies better comply with existing disclosure obligations, working within the framework of existing U.S. securities laws.

The SASB Standards Board is responsible for developing and issuing the standards, maintaining technical agendas, proposing updates to the standards, and executing the standard-setting process. The SASB staff is responsible for performing research and engaging in consultation on the standards, supporting the work of the Standards Board.

The SASB Foundation, an independent 501(c)3 non-profit, is responsible for the funding and oversight of the SASB, including safeguarding the SASB's independence and integrity through due process oversight and inquiry resolution. The SASB Foundation Board of Directors appoints members of the SASB.

About this Standard

This Standard is an exposure draft presented for public review and comment. **This version is not intended for implementation.**

The public comment period lasts for 90 days, beginning on October 2, 2017, and ending on December 31, 2017. The Standard is subject to change thereafter. SASB Standards are scheduled to be ratified by the SASB in early 2018.

For instructions on providing comments to SASB, please click here (https://www.sasb.org/public-comment).

SUSTAINABILITY ACCOUNTING STANDARDS BOARD

1045 Sansome Street, Suite 450
San Francisco, CA 94111

www.sasb.org

Purpose & Structure

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

SASB Sustainability Accounting Standards comprise **(1) disclosure guidance and (2) accounting standards or metrics** for use by U.S. and foreign public companies in their disclosures to investors, such as in annual reports and filings with the U.S. Securities and Exchange Commission (SEC), including Forms 10-K, 20-F, 40-F, 10-Q, 8-K and S-1 and S-3. The Standards facilitate the meaningful disclosure of sustainability information that is useful to investors in making decisions on investments and corporate suffrage.[1] The Standards reflect the fact that certain sustainability information is important for assessing the future financial performance of an issuer, particularly over the long term.

SASB Standards identify sustainability topics that are reasonably likely to constitute material information for a company within a particular industry. Company management is responsible for determining whether those identified topics reflect information that is material to investors and should be disclosed in filings, based on that company's specific circumstances. For further details regarding the use of the SASB Standards, in particular guidance on determinations of materiality, please see SASB's Implementation Guide.[2]

SASB Standards provide companies with sustainability metrics designed to communicate performance on industry-level sustainability topics in a concise, comparable format using existing reporting mechanisms. Companies can use the Standards to help ensure that disclosure is reliable, decision-useful for investors, and cost-effective for issuers.

SASB Standards are intended to constitute "suitable criteria" for purposes of an attestation engagement as defined by Paragraph .A42 of AT-C section 105[3] and referenced in AT-C section 395.[4] "Suitable criteria" have the following attributes:

- *Relevance*—Criteria are relevant to the subject matter.
- *Objectivity*—Criteria are free from bias.
- *Measurability*—Criteria permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria are complete when subject matter prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter.

[1] The AICPA defines sustainability information in its Guide, Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (Issued July 2017), as follows: "information about sustainability matters (such as economic, environmental, social and governance performance)." It further explains that "sustainability metrics and sustainability indicators are components of sustainability information. Sustainability information may be nonquantitative (narrative), historical, or forward-looking."

[2] https://library.sasb.org/implementation-guide

[3] https://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AT-C-00105.pdf

[4] http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx

Industry Description

The Road Transportation industry consists of companies that provide long- and short-haul freight trucking services. Key activities include the shipment of containerized and bulk freight, including consumer goods and a wide variety of commodities. The industry is commonly broken down into two categories: truckload and less-than-truckload. Truckload is defined as a vehicle carrying the goods of only one customer, while less-than-truckload vehicles transport goods of multiple shippers. Owner-operators comprise the vast majority of the industry due to the relative ease of entry, while a few large operators maintain market share through contracts with major shippers. Large companies often subcontract with owner-operators to supplement their owned fleet.

Users of the SASB Standards

The SASB Standards are intended for use by public companies and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

The SASB Standards are designed for integration into existing reporting mechanisms, such as SEC filings. This keeps the administrative and cost burden to a minimum. SEC filings include Form 10-K for U.S. companies, Form 20-F for foreign issuers, Form 40-F for Canadian issuers, quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. The SASB Standards are also recognized by the European Commission as a suitable framework for companies to provide information to investors pursuant to EU Directive 2014/95/EU. See "Guidelines on non-financial reporting (methodology for reporting non-financial information)."[5] Thus, SASB standards are a cost-effective way to satisfy both U.S. and European reporting requirements.

SASB evaluates the materiality of sustainability-related topics by using the high threshold of financial materiality that is established under the U.S. securities laws.[6] Although designed to meet the rigorous disclosure requirements of the U.S. capital markets (thereby producing a high-quality set of evidence-based standards focused on material investor-focused topics), the standards represent a best practice that can be used by companies of all types (public and private) to describe their material sustainability-related risks and opportunities.

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

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

- Environmental Footprint of Fuel Use
- Driver Working Conditions
- Accidents & Safety Management

2. Determination of Materiality

In the U.S., sustainability disclosures are governed by the same laws and regulations that generally govern disclosures by securities issuers. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a

[5] https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

[6] https://library.sasb.org/materiality_bulletin/

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.[7]

Through a rigorous process of research, review of evidence, and public input, the SASB has identified sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each Sustainable Industry Classification System™ (SICS™) industry.[8] **However, the issuer must determine what information is (or is reasonably likely to be) material to the reasonable investor.** For further information regarding a process that corporations can use to assess the financial materiality of the sustainability-related topics in SASB standards, please see SASB's Implementation Guide.[9]

3. SEC Requirements Relating to Disclosure of Material Sustainability Information

If a public company determines that certain sustainability information is reasonably likely to be material, it must then determine whether disclosure of some or all of the information under applicable SASB Standards is required under the U.S. federal securities laws. Several provisions of those laws are relevant to sustainability disclosures.

Regulation S-K sets forth certain disclosure requirements associated with Form 10-K and other SEC filings. Item 303 of Regulation S-K requires companies to, among other things, 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."[10]

Furthermore, the 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."[11]

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC can be applied to the topics included within this Standard:

- 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."

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[7] *TSC Industries v. Northway, Inc*., 426 U.S. 438 (1976).

[8] https://library.sasb.org/materiality_bulletin/

[9] https://library.sasb.org/implementation-guide

[10] C.F.R. 229.303(Item 303)(a)(3)(ii).

[11] 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."

Companies should also consider the applicability of other Regulation S-K requirements. Specifically, Item 101 ("Description of Business") requires a company to provide a description of its business and its subsidiaries. Item 103 ("Legal Proceedings") requires a company 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. Item 503(c) ("Risk Factors") requires a company to provide discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how it affects the company.

Finally, as a general matter, 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."

4. Where Disclosures Should Be Made in SEC Filings

In using the definition of materiality established under the U.S. federal securities laws, the SASB has identified and developed industry-specific sustainability topics and metrics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within a particular industry. As a general matter, the SASB believes that investors are best served when disclosure of such information is made in SEC filings. An issuer might, for example, make the disclosure in a sub-section of MD&A with a caption, "**Sustainability-Related Information**," with a section that includes the material topics, performance metrics, and management's view with respect to corporate positioning. See SASB's "Mock 10-Ks" for examples of preparing an MD&A using the SASB Standards.[12] Issuers are not precluded from using the Standards elsewhere, such as in stand-alone communications to investors or in sustainability reports (sometimes referred to as corporate social responsibility reports or environmental, social, and governance reports), company websites, or elsewhere. Corporate communication on material topics, including sustainability-related material topics, should be consistent across communication channels. As discussed above, SEC regulations may compel inclusion of material sustainability information in an SEC filing where it is deemed financially material.

The SASB recognizes that sustainability topics are relatively new areas of investor interest, and it may be difficult to determine whether particular sustainability information is material in certain situations. Accordingly, issuers might also consider using the SASB Standards in filings using Form 8-K, Item 8.01 ("Other Events"). This provision states that "The registrant may, at its option, disclose under this Item 8.01 any events, with respect to which information is not otherwise called for by this form, that the registrant deems of importance to security holders." Making a disclosure under Item 8.01 would not require the issuer to make a decision regarding materiality, and might also provide the company with more time to make the disclosure than is permitted under filing rules applicable to Form 10-K, thereby facilitating the completeness and accuracy of the disclosed information.

When using the Standards, issuers should cite or refer to the relevant SASB Standard.

More detailed guidance on preparing disclosures of material information related to sustainability topics and making topic-level materiality determinations can be found in the **SASB Conceptual Framework**, available for download via

[12] http://using.sasb.org/mock-10-k-library/

http://www.sasb.org/approach/conceptual-framework/, and the **SASB Implementation Guide for Companies**, available for download via https://library.sasb.org/implementation-guide/.

Guidance on Accounting for Sustainability Topics

The SASB has identified accounting metrics for each sustainability topic included in this Standard. The SASB recommends that companies within this industry consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein.

When disclosing information related to a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, as appropriate. Such a description might in certain circumstances include a discussion of the following:[13]

- The registrant's **governance** around the risks and opportunities related to the topic, including board oversight of and management's role in assessing and managing such risks and opportunities.
- The registrant's **strategic approach** regarding actual and potential impacts of topic-related risks and opportunities on the organization's **businesses, strategy, and financial planning**, over the **short, medium, and long term**.
- The registrant's process to **identify, assess, and manage** topic-related risks, and how these risks are integrated into the registrant's overall risk management process.
- The registrant's **use of metrics or targets** to assess and manage topic-related risks and opportunities.
- Data for the registrant's **last three completed fiscal years** (when available).

The SASB recommends that registrants use SASB Standards specific to their primary industry as identified in SICS™. If a registrant generates significant revenue from multiple industries, the SASB recommends that it also consider sustainability topics that the SASB has identified for those industries, and disclose the associated SASB accounting metrics.

Further, the SASB recommends that companies design, implement, and maintain adequate systems of internal control over sustainability performance information to provide reasonable confidence regarding the achievement of related reporting objectives, such as those relating to the reliability of disclosed information.[14]

[13] These areas for possible additional narrative description are generally aligned with the Recommendations of the Task Force on Climate-related Financial Disclosures, which contains a more extensive discussion of such disclosure matters.

[14] In this regard, companies are referred to the report of a group of experts in this area. Robert H. Herz, Brad J. Monterio, Jeffrey C. Thomson, Leveraging the COSO Internal Control – Integrated Framework to Improve confidence in Sustainability Performance Data (August 2017).

The SASB takes no position as to whether third-party attestation is necessary to enhance the credibility of the disclosed sustainability information, but as a matter of good governance, the SASB suggests that such assurance be considered.[15]

Scope of Disclosure

Unless otherwise specified, the SASB recommends:

- That a registrant disclose information on sustainability topics and metrics for itself and for entities that are consolidated for financial reporting purposes, as defined by accounting principles generally accepted in the United States ("US GAAP"), for consistency with other accompanying information within SEC filings;[16]

- 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. However, the registrant should disclose information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance. (Typically, this disclosure would be limited to risks and opportunities associated with these entities.)

Reporting Format

Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this Standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with US GAAP, and be consistent with the corresponding financial data reported in the registrant's SEC filings. Should accounting metrics, activity metrics, and technical protocols in this Standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with SEC Regulation G.[17]

Activity Metrics and Normalization

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

The 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 Form 10-K (e.g., revenue, EBITDA, etc.).

[15] The AICPA's Guide (see supra note 1) provides guidance to assist accounting practitioners in performing attestation engagements on sustainability information.

[16] See US GAAP consolidation rules (Section 810).

[17] https://www.sec.gov/rules/final/33-8176.htm

Such data—termed "activity metrics"—may include high-level business data, including 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 investors relying on SASB accounting metrics to perform their own calculations and create their own ratios.
- Be explained and consistently disclosed from period to period to the extent that 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.[18]

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

Table 1. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Revenue ton miles[19]	Quantitative	Ton-miles	TR0402-A
Load factor[20]	Quantitative	Number~~n/a~~	TR0402-B
Number of employees, number of truck drivers	Quantitative	Number	TR0402-C

Units of Measure

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

Uncertainty

The SASB recognizes that there may be inherent uncertainty when measuring or disclosing certain sustainability data and information. This uncertainty may be related to variables such as the reliance on data from third-party reporting

[18] Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, FASB Business Reporting Research Project, January 29, 2001.

[19] Note to **TR0402-A** – Revenue ton mile (RTM) is defined as one ton of revenue traffic transported one mile. Revenue ton-miles are computed by multiplying the miles traveled on each leg by the number of pounds of revenue traffic carried on that leg and converted to ton-miles by dividing total revenue pound-miles by 2,000 pounds.

[20] Note to **TR0402-B** – Load factor is a measure of capacity utilization and is calculated as cargo miles traveled divided by total miles traveled.

systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, the SASB recommends that the registrant should consider discussing its nature and likelihood.[21]

Estimates

The SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, the SASB does not discourage the use of estimates or ranges. When using an estimate for a particular disclosure, the 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.

Limitations

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

Use of the SASB Standards is voluntary. The Standards are not intended to replace any legal or regulatory requirements that may be applicable to a company's operations. When such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements.

Use of the SASB Standards is not required or endorsed by the SEC or various entities governing financial reporting, including the Financial Accounting Standards Board, the Government Accounting Standards Board, or the International Accounting Standards Board.

Forward-Looking Statements

Disclosures on sustainability topics can, in some circumstances, 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 these disclosures in SEC filings 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. These include, 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."

[21] The AICPA's Guide (see supra note 1) provides guidance related to measurement uncertainty.

Notes on the Sustainability Accounting Standards

The following sections contain the disclosure guidance associated with each accounting metric, including guidance on definitions, scope, accounting, compilation, and presentation.

The term “shall” is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms “should” and “may” are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 2. 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	TR0402-01
	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	TR0402-02
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules, Percentage (%)	TR0402-03
	Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)	Quantitative	Metric tons (t)	TR0402-04
Driver Working Conditions	Employee turnover by (1) voluntary and (2) involuntary for all employees	Quantitative	Rate	TR0402-05
	Description of approach to managing short-term and long-term driver health risks	Discussion and Analysis	n/a	TR0402-06
Accidents & Safety Management	Number of accidents and incidents	Quantitative	Number	TR0402-07
	(1) Total recordable injury rate and (2) fatality rate for (a) full-time employees and (b) contract employees	Quantitative	Rate	TR0402-08
	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance	Quantitative	Percentile (%)	TR0402-09
	Number and aggregate volume of spills and releases to the environment	Quantitative	Number, Cubic meters (m^3)	TR0402-10

Environmental Footprint of Fuel Use

Description

The primary greenhouse gas (GHG)-generating activity of the Road Transportation industry is the combustion of diesel and other fuels in trucks. In addition to GHGs, emissions comprise sulfur oxides, nitrogen oxides, and particulate matter. Management of the environmental impacts of fuel use includes both fuel efficiency and the use of alternative fuels, and offers an effective way for companies to increase profits by reducing fuel costs while also limiting exposure to volatile fuel pricing, future regulatory costs, and other consequences of GHG emissions. While newer trucks are more fuel-efficient, measures can be taken to improve efficiency and reduce emissions in existing fleets.

Accounting Metrics

TR0402-01. 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 (CO_2-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 (i.e., marine, road, or rail).

.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").[22]

- The approach detailed in Section 4.23, "Organizational boundary setting for GHG emissions reporting," of the CDSB Climate Change Reporting Framework (CCRF).[23]

.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.

TR0402-02. 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.

[22] "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.

[23] 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*.

.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
- 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"[24]
- CDP questionnaire "CC3, Targets and Initiatives"

.12 Relevant initiatives to discuss may include, but are not limited to, fuel optimization efforts such as route and load optimization. Truck-related efforts include adoption of technology such as engine and powertrain efficiency and aerodynamic improvements, weight reduction, improved tire rolling resistance, hybridization, and automatic engine shutdown.

TR0402-03. Total fuel consumed, percentage renewable

.13 The registrant shall disclose total fuel consumption from all sources as an aggregate figure in gigajoules or their multiples.

- The scope includes only fuel consumed by entities owned or controlled by the organization.
- The scope excludes non-fuel energy sources such as purchased electricity and purchased steam.

.14 In calculating the energy content of fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel

[24] "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.

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 fuel from renewables as the energy content of renewable fuel consumed divided by the energy content of all fuel consumed.

.16 Renewable fuel 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.

.17 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute.
- Energy from biomass sources that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.

.18 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).

TR0402-04. Air emissions for the following pollutants: NO_x, SO_x, and particulate matter (PM)

.19 The registrant shall disclose its emissions released to the atmosphere of air pollutants associated with its activities (e.g., long- and short-haul freight trucking services), including:

- Direct air emissions from stationary or mobile sources that include, but are not limited to, truck fleets, office buildings, and moveable equipment

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

- Oxides of nitrogen (including NO and NO_2 and excluding N_2O) reported as NO_2;
- Oxides of sulfur (SO_2 and SO_3) reported as SO_2;
- Particulate matter (PM); reported as the sum of PM_{10} and $PM_{2.5}$, or all particulates less than 10 micrometers in diameter

.21 This scope does not include CO_2, methane, and nitrous oxide, which are disclosed in TR0402-01 as Scope 1 GHG emissions.

.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 TR0402-01.

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

Driver Working Conditions

Description

The Road Transportation industry faces challenges with driver recruitment and retention. A growing labor shortage, fueled in part by the unattractive and tough labor conditions of the industry as well as new regulations that limit working hours, may raise labor costs and lower industry revenue. Time-critical deliveries are demanding on drivers, with long and often odd hours behind the wheel, lengthy stays away from home, lack of sleep, and feelings of isolation. These factors, in combination with the high rate of injury and illness in the industry, largely due to accidents, make it difficult to recruit new drivers and retain existing staff. Companies that are able to enhance driver experience may benefit from lower turnover rates, higher productivity, and the ability to hire more drivers in order to expand operations.

Accounting Metrics

TR0402-05. Employee turnover by (1) voluntary and (2) involuntary for all employees

.24 The registrant shall disclose its annual voluntary turnover rate, calculated by adding monthly turnover figures together and multiplying by 100 to arrive at a percentage, where monthly voluntary turnover is calculated as:

- The total number of employee-initiated voluntary separations (such as resignation, retirement, etc.) for each month divided by the average number of employees for the month (the sum of the employees on the registrant's payroll at each pay period / number of pay periods).

.25 The registrant shall disclose its annual involuntary turnover rate, calculated by adding monthly turnover figures together and multiplying by 100 to arrive at a percentage, where monthly involuntary turnover is calculated as:

- The total number of registrant-initiated separations (such as dismissal, downsizing, redundancy, expiry of contract, etc.) for each month divided by the average number of employees for the month (the sum of the employees on the registrant's payroll at each pay period / number of pay periods).

TR0402-06. Description of approach to managing short-term and long-term driver health risks

.26 The registrant shall discuss efforts to assess, monitor, and reduce exposure of employees to human health hazards including, but not limited to, fatigue and sleep deprivation, obesity and associated diseases, hypertension, and mental and emotional health.

.27 The registrant shall describe management approach in the context of short-term (i.e., acute) risks and long-term (i.e., chronic) risks.

.28 Relevant efforts to discuss include, but are not limited to, risk assessments, participation in long-term health studies, health and wellness monitoring programs, and use of electronic on-board recorders (EOBRs).

.29 The registrant may discuss compliance with National Transportation Safety Board (NTSB) and Federal Motor Carrier Safety Administration (FMCSA) regulations and recommendations for hours of service, scheduling, sleep apnea, and fatigue management.

.30 The scope of employees shall focus on truck drivers but should discuss other employees as relevant.

Accidents & Safety Management

Description

Road transportation has inherent dangers related to accidents resulting from mechanical failure or human error. Companies in this industry take measures to train drivers and maintenance staff to minimize accidents. Statistics from the Bureau of Labor Statistics indicate that the fatal occupational injury rate for workers in the Road Transportation industry is higher than normal. Evidence of accident rates, costs, and safety technologies supports the significance of the issue for the industry. Companies with better safety management can improve efficiency of operations, retain drivers, reduce delays, and avoid costs associated with serious accidents.

Accounting Metrics

TR0402-07 Number of accidents and incidents

.31 The registrant shall disclose the total number of road transportation-related accidents and incidents, where:

- An accident is defined according to Federal Rule 49 Code of Federal Regulations [390.50](390.50) as an occurrence involving a commercial motor vehicle operating on a highway in interstate or intrastate commerce which results in: (i) a fatality; (ii) bodily injury to a person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or (iii) one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicle(s) to be transported away from the scene by a tow truck or other motor vehicle.

- An incident is defined as any event involving a licensed motor vehicle while on business use that results in an Occupational Safety and Health Administration (OSHA)-recordable injury, vehicle damage, or other property damage. Any vehicle or property damage shall be considered in determining a vehicle incident, regardless of the amount of damage, cost of the repair, or whether the repair is actually made.[25]

TR0402-08. (1) Total recordable injury rate and (2) fatality rate for (a) full-time employees and (b) contract employees

.32 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its total recordable injury rate (TRIR) and fatality rate, as calculated and reported in OSHA Form 300.

- OSHA guidelines provide details on determination of whether an event is a recordable occupational incident, and definitions for exemptions for incidents that occurred in the work environment but are not occupational.

.33 For registrants whose workforce includes non-U.S.-based employees, the registrant shall calculate its total recordable injury rate according to the U.S. Bureau of Labor Statistics guidance and/or using the U.S. Bureau of Labor Statistics calculator.

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[25] Definitions based on guidance provided by ANSI D15.1-1976. Available online at: http://www.api.org/oil-and-natural-gas-overview/transporting-oil-and-natural-gas/pipeline/~/media/Files/Oil-and-Natural-Gas/pipeline/Awards/Total-Motor-Vehicle-Incident-Metric.pdf.

.34 The registrant shall disclose its TRIR separately for its full-time employees and for contract employees, including independent contractors and those employed by third parties (e.g., temp agencies, labor brokers, etc.).

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

.36 Rates shall be calculated as: (statistic count / total hours worked)*200,000.

TR0402-09. Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance

.37 The registrant shall disclose the percentile score calculated by the FMCSA Safety Measurement System (SMS) for the following Behavior Analysis and Safety Improvement Categories (BASICs):

- Unsafe Driving
- Hours-of-Service (HOS) Compliance
- Driver Fitness
- Controlled Substances/Alcohol
- Vehicle Maintenance
- Hazardous Materials (HM) Compliance

.38 The registrant shall disclose its percentile in each BASIC for the month ending the most recent fiscal year.

.39 The registrant may choose to discuss its percentile in relation to FMCSA's Intervention Thresholds, which are as follows:

BASIC CATEGORY	INTERVENTION THRESHOLDS		
	Passenger	HM	General
Unsafe Driving, HOS Compliance	≥50%	≥60%	≥65%
Driver Fitness, Controlled Substances/Alcohol, Vehicle Maintenance	≥65%	≥75%	≥80%
HM Compliance	≥80%	≥80%	≥80%

TR0402-10. Number and aggregate volume of spills and releases to the environment

.40 The registrant shall disclose the total number of releases of hazardous material and the aggregate volume of these releases in cubic meters, where:

- Hazardous material is defined according to Code of Federal Regulations 49 CFR as a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of federal hazardous materials transportation law (49 U.S.C. 5103).

- An accident release is defined as a release of hazardous materials, reportable to the Pipeline and Hazardous Materials Safety Administration (PHMSA) via a DOT 5800.1 report form, that occurred during an accident or incident disclosed according to TR0402-07.

- The scope of disclosure includes releases to the environment.

.41 The registrant shall calculate the volume of spills or releases as the total estimated amount spilled that reached the environment and not be reduced by the amount of such material that was subsequently recovered, evaporated, or otherwise lost.

.42 The registrant may choose to disclose spills to soil and water separately. A spill that qualifies as a spill to both soil and water should be reported as a single spill to water, with the volume properly apportioned to soil and water.

.43 Where relevant, the registrant should provide a breakdown of spills and releases by type, such as: (1) hydrocarbons, (2) hazardous substances.

Additional References

Total Motor Vehicle Incident Rate, American Petroleum Institute, Rev. 11/2010