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SUSTAINABILITY ACCOUNTING STANDARD  
TRANSPORTATION SECTOR

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# RAIL TRANSPORTATION Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #TR0401

Prepared by the  
Sustainability Accounting Standards Board®

September 2014  
Provisional Standard

# RAIL TRANSPORTATION

## Sustainability Accounting Standard

### About SASB

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

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# INTRODUCTION

## Purpose & Structure

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

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

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

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

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

## Industry Description

The 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.

# Guidance for Disclosure of Material Sustainability Topics in SEC Filings

## 1. Industry-Level Sustainability Disclosure Topics

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

- Environmental Footprint of Fuel Use
- Accidents & Safety Management
- Competitive Behavior

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

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

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

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

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

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

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

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<sup>1</sup> TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

<sup>2</sup> C.F.R. 229.303(Item 303)(a)(3)(ii).

### 3. Sustainability Accounting Standard Disclosures in Form 10-K

#### a. Management's Discussion and Analysis

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

#### b. Other Relevant Sections of Form 10-K

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

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

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

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

#### c. Rule 12b-20

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

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

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

# Guidance on Accounting of Material Sustainability Topics

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

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

As appropriate—and consistent with Rule 12b-20<sup>4</sup>—for each sustainability topic, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

## Users of the SASB Standards

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

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

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

# Scope of Disclosure

Unless otherwise specified, SASB recommends:

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

## Reporting Format

### Activity Metrics and Normalization

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

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

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

Activity metrics disclosed should:

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

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<sup>6</sup> See US GAAP consolidation rules (Section 810).



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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of carloads originated <sup>7</sup>	Quantitative	Number	TR0401-A
Number of intermodal units transported <sup>8</sup>	Quantitative	Number	TR0401-B
Track miles <sup>9</sup>	Quantitative	Miles	TR0401-C
Revenue ton miles <sup>10</sup>	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).

## Uncertainty

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

## Estimates

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

## Timing

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

## Limitations

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

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

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

<sup>7</sup> Note to **TR0401-A** – Carloads include shipment of freight that is not containerized.

<sup>8</sup> Note to **TR0401-B** – Intermodal units include both shipping containers and truck trailers that can be transported across modes of transportation.

<sup>9</sup> 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.

<sup>10</sup> 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.

# Forward-looking Statements

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

## Assurance

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

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

# Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
<b>Environmental Footprint of Fuel Use</b>	Gross global Scope 1 emissions	Quantitative	Metric tons CO <sub>2</sub> -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 <sub>x</sub> and particulate matter (PM)	Quantitative	Metric tons (t)	TR0401-04
<b>Competitive Behavior</b>	Amount of legal and regulatory fines and settlements associated with anti-competitive practices <sup>11</sup>	Quantitative	U.S. dollars (\$)	TR0401-05
<b>Accidents &amp; Safety Management</b>	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) <sup>12</sup>	Quantitative	Number	TR0401-08
	Number of Federal Rail Administration (FRA) Recommended Violation Defects	Quantitative	Number	TR0401-09
	Frequency of internal railway integrity inspections <sup>13</sup>	Quantitative	Inspections per week	TR0401-10

<sup>11</sup> Note to **TR0401-05** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

<sup>12</sup> Note to **TR0401-08** – Disclosure shall include a discussion of the registrant’s processes, procedures, and strategies to manage non-accident and accident releases.

<sup>13</sup> 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<sub>2</sub>-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”).<sup>14</sup>
- The approach detailed in Section 4.23, “Organizational boundary setting for GHG emissions reporting,” of the CDSB Climate Change Reporting Framework (CCRF).<sup>15</sup>

.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
- 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

<sup>14</sup> “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.

<sup>15</sup> 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*.

- 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”<sup>16</sup>
  - 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.
  - 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.

<sup>16</sup> “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.

- 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<sub>x</sub> 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<sub>2</sub> and excluding N<sub>2</sub>O), reported as NO<sub>2</sub>;
- Particulate matter (PM); reported as the sum of PM<sub>10</sub> and PM<sub>2.5</sub>, or all particulates less than 10 micrometers in diameter

.21 This scope does not include CO<sub>2</sub>, 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.

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