



Automobiles

SICST™ #TR0101

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Automobiles

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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards, please [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard


Automobiles (TR0101)

Industry Description

The Automobiles industry in the U.S. operates in two different areas: automobile manufacturing and provision of automotive financing products. Automobiles companies, also known as original equipment manufacturers (OEMs), buy parts from many suppliers in order to assemble the finished vehicle sold under their brand. Industry players design, assemble, and sell automobiles that run on a range of traditional and alternative fuels. Auto makers sell vehicles to dealerships for consumer retail sales and directly to fleet customers, including car rental and leasing companies, commercial fleet customers, and governments. Companies also provide automotive financing services to and through dealerships for new and used vehicles purchased by retail and fleet consumers. The financing function is key to maintaining vehicle sales, as the typical borrower is often unable to obtain financing through traditional sources. While companies in the industry do not sell cars directly to consumers, they are involved in marketing and advertising their products.

Table 1. Material Sustainability Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons CO ₂ -e	TR0101-01
Energy Management	Total energy consumed, percentage grid electricity, percentage renewable energy	Quantitative	Gigajoules, Percentage (%)	TR0101-02
Waste Management	Amount of total waste from manufacturing, percentage recycled, percentage hazardous	Quantitative	Tons, Percentage (%)	TR0101-03
Employee Health, Safety & Well-being	(1) Total Recordable Injury Rate and (2) Near Miss Frequency Rate for (a) full time employees and (b) contract employees	Quantitative	Rate	TR0101-04
Product Safety	Percentage of vehicles, by sales, with NHTSA's overall 5 star safety rating ¹	Quantitative	Percentage of rated vehicles	TR0101-05
	Number of (1) defect complaints and (2) safety-related defect complaints, percentage investigated	Quantitative	Number, Percentage (%)	TR0101-06
	Number of vehicles recalled ²	Quantitative	Number	TR0101-07
Fuel Economy & Use-phase Emissions	Sales weighted average passenger fleet fuel economy	Quantitative	Miles per gallon (mpg)	TR0101-08
	Number of (1) Zero Emission Vehicles (ZEV) sold and (2) Partial Zero Emission Vehicles (PZEV) sold	Quantitative	Vehicle units sold	TR0101-09

¹ Note to **TR0101-05** – The registrant shall disclose if any of its 5-star rated models include a  symbol to alert consumers to a safety concern the government has about the vehicle.

² Note to **TR0101-07** – 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.

Topic	Accounting Metric	Category	Unit of Measure	Code
Product End-of-Life Management	Average recyclability of vehicles sold, by weight ³	Quantitative	Percentage (%) by sales weighted weight (tons)	TR0101-10
Supply Chain Management	Percentage of products by revenue that contain critical materials	Quantitative	Percentage (%)	TR0101-11
	Percentage of tungsten, tin, tantalum, and gold smelters 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
Fair Lending	Median discretionary interest rate mark-up on automotive loans for: (1) all borrowers, (2) women, and (3) minorities	Quantitative	Basis points	TR0101-14

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Number of vehicles produced	Quantitative	Number	TR0101-A
Number of vehicle sold	Quantitative	Number	TR0101-B
Square footage of manufacturing plants	Quantitative	Square meters (m ²)	TR0101-C

³ Note to **TR0101-10** – Disclosure shall include a discussion of approach to optimizing vehicle recycling and recovery rates including participation in mandatory end of life of vehicle programs.

Greenhouse Gas Emissions

Description

The Automobiles industry's use of fossil fuels in their production processes results in direct (Scope 1) emissions of greenhouse gases. Approximately half of the industry's energy need is fulfilled by natural gas and other fuels while the rest is fulfilled by electricity. Consumption of fossil fuels directly contributes to significant environmental impacts, including climate change and pollution. Therefore, it is a source of risk for companies arising from current and potential future regulations in the U.S. and abroad. Financial impacts on companies will vary depending on the specific location of operations and the prevailing emissions regulations, and include higher operating or capital expenditures, and regulatory or legal penalties.

Accounting Metrics

TR0101-01. Gross global Scope 1 emissions

- .01 The registrant shall disclose gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the six greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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 (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, 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").⁴
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁵
- .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. 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 if the change were due to emission 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 another 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.

⁴ "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).

⁵ 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. *Climate Change Reporting Framework*, CDSB.

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

Notes

Definitions:

--

Additional References:

--

Energy Management

Description

The Automobiles industry's use of electricity in their production processes results in indirect (Scope 2) emissions of greenhouse gases. Major uses of electricity in the industry include painting systems, facility lighting and heating, ventilation and air conditioning, compressed air, and welding. Approximately half of the industry's energy need is fulfilled by electricity while the rest is fulfilled by natural gas and other fuels. Since electricity consumption indirectly contributes to climate change and air pollution, the cost of grid electricity may increase to offset carbon tax on utilities. With manufacturing and assembly plants located in several regions, the likelihood and impact of climate change regulations will vary depending on the exact location of facilities. Companies that proactively limit their exposure to volatile energy prices and carbon prices by fulfilling part of their energy needs from renewable sources are likely to be better able to manage long-term regulatory risks.

Accounting Metrics

TR0101-02. Total energy consumed, percentage grid electricity, percentage renewable energy

- .08 The registrant shall disclose total energy consumption from all sources as an aggregate figure in gigajoules or its 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, heating and cooling, and steam energy.
- .09 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).
- .10 When reporting self-generated energy consumption, the registrant shall not double-count fuel consumption. For example, if a registrant generates electricity from natural gas and then consumes the generated electricity, the energy consumption is counted once as energy from fuel consumption.
- .11 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- The scope of renewable energy includes the renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) which explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity. For all renewable energy consumed as electricity in this manner, RECs must be retired on behalf of the registrant to be claimed as renewable energy as part of this disclosure
 - 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 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 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.⁶
- .12 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.
- .13 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 that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.

⁶ SASB recognizes that RECs reflect the environmental attributes of renewable energy that has 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.

.14 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).

Notes

Definitions:

--

Additional References:

--

Waste Management

Description

While the amount of waste generated per vehicle produced varies by facility, the sheer volume of vehicles manufactured annually means that waste generated by the industry can create a significant impact on the environment and local communities. As a result, the industry is the focus of regulations and standards for disposal of hazardous and non-hazardous waste, including the U.S. EPA's regulations and European Union's Waste Framework Directive. Proper processing and disposal of hazardous waste materials is essential to limiting risk of penalties and lawsuits for environmental damages. In addition, companies that are able to limit the waste of input materials and recycle the waste generated may achieve significant cost savings and improve profitability.

Accounting Metrics

TR0101-03. Amount of total waste from manufacturing, percentage recycled, percentage hazardous

- .15 The amount of total waste from manufacturing should be calculated in metric tons, where waste is defined as anything for which the registrant has no further use and which is discarded or is released to the environment.
- .16 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 process and made into a final product or made into a component for incorporation into a product.
 - The scope of recycled and remanufactured products include primary recycled materials, co-products (outputs of equal value to primary recycled materials), and by-products (outputs of lesser value to 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 which are transferred to a third party for the expressed 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.
- .17 The registrant shall calculate the amount of waste (in metric tons) that meets the definition of hazardous waste under Subtitle C of the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) and disclose it as a percentage of total waste from manufacturing.
 - Hazardous waste includes wastes that display the following characteristics: ignitability, corrosivity, reactivity, or toxicity.

Notes

Definitions:

--

Additional References:

--

Employee Health, Safety & Well-being

Description

Employees working in automobile manufacturing facilities may be exposed to excessive heat, extreme or constant noise levels, and ergonomic, mechanical, and chemical hazards. Poor ventilation and the high temperature required for certain processes can create difficult working conditions. Ergonomic injuries can result from repeated movements. Mechanical hazards include risks to safety from moving parts and dangerous equipment. Workers are also at risk of inhaling toxic fumes or being in contact with harmful chemicals. By maintaining a safe work environment and promoting a culture of safety, companies can minimize risks to their employees and, in turn, avoid work disruptions and excessive medical costs.

Accounting Metrics

TR0101-04. (1) Total Recordable Injury Rate and (2) Near Miss Frequency Rate for (a) full time employees and (b) contract employees

- .18 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its total recordable injury rate (TRIR), as calculated and reported in the Occupational Safety and Health Administration's (OSHA) Form 300.
 - OSHA guidelines provide details on the 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.
- .19 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.
- .20 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident where no property or environmental damage or personal injury occurred, but where 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.
- .21 The registrant shall disclose its TRIR and NMFR 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.).
- .22 The scope includes all employees, domestic and foreign.
- .23 Rates shall be calculated as: $(\text{statistic count} / \text{total hours worked}) * 200,000$.

Notes

Definitions:

--

Additional References:

--

Product Safety

Description

Vehicle safety rating is a key factor in making purchase decisions, as such it is a key issue area that companies compete in. Vehicles sold in the U.S. must meet safety requirements or else they must be recalled, and the feature repaired or replaced at manufacturer's cost. In addition, manufacturers must provide warranties to insure customers against the risk of purchasing a defective vehicle. All U.S. states have some form of a "lemon law," which protects customers who purchase products that repeatedly fail to meet quality and performance standards. Recalls can be a significant expense for companies, but more importantly how companies handle recalls can effect brand value. Being proactive about ensuring the safety of vehicles produced can protect companies from reputational risk and risk of litigation and penalties.

Accounting Metrics

TR0101-05. Percentage of vehicles, by sales, with NHTSA's overall 5 star safety rating

- .24 The registrant shall calculate the percentage as: the total annual sales, in U.S. dollars, of vehicles with a 5 star Overall Vehicle Score in the National Highway Traffic Safety Administration's (NHTSA) New Car Assessment Program (NCAP)'s 5-Star Safety Ratings Program divided by total annual sales from vehicles with an NHTSA Overall Vehicle Score, where:
- The Overall Vehicle Score is the combination of the Overall Front Crash Rating, Overall Side Crash Rating, and Rollover Rating compared to the average risk of injury and potential for vehicle rollover of other vehicles.
 - NHTSA's 5-Star Safety Ratings are in a public database available [here](#).
 - The scope of calculation includes all vehicle's models rated by the NHTSA including Passenger cars (mini, light, compact, medium, and heavy), Sport utility vehicles, Pickup trucks, and Vans.
 - The scope of calculation excludes vehicle models not rated by the NHTSA.

Note to **TR0101-05**

- .25 The registrant shall disclose any safety-related concerns identified by the government but which are not covered in the NHTSA 5 star rating/Overall Vehicle Score.
- These safety concerns can include a structural failure or unintended performance of a vehicle component such as a fuel leakage or a door opening.
 - Vehicle models with these safety concerns are denoted by a "▲" symbol in the NHTSA database.

TR0101-06. Number of (1) defect complaints and (2) safety-related defect complaints, percentage investigated

- .26 The registrant shall disclose the total number of defect complaints and the total number of safety-related defect complaints, where
- A defect, as defined by the United States Code for Motor Vehicle Safety (Title 49, Chapter 301), includes any defect in performance, construction, a component, or material of a motor vehicle or motor vehicle equipment.
 - 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 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.
- .27 The registrant shall calculate the percentage of complaints investigated as the total number of complaints that were investigated by the NHTSA divided by the total number of defect and safety-related defect complaints received by the registrant and the NHTSA.
- .28 Investigated complaints include any complaint that was investigated by the NHTSA Office of Defects Investigation (ODI), 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 decide whether to open an investigation.
 - 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.
- .29 A database of safety-related complaints and investigation is available [here](#).

TR0101-07. Number of vehicles recalled

- .30 The registrant shall disclose the total number of vehicle units recalled where the scope includes voluntary recalls initiated by the registrant and involuntary recalls mandated by the NHTSA.
- .31 Involuntary recalls are those required by the National Highway Traffic Safety Administration, which are issued when a motor vehicle or item of motor vehicle 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](#).
- .32 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 TR0101-07

- .33 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.
- .34 A recall should be considered notable if it mentioned in the NHSTA's [monthly recall reports](#).
- .35 For such recalls the registrant should provide:
- description and cause of the recall issue
 - the total number of vehicles recalled
 - cost to remedy the issue (in U.S. dollars)
 - if the recall was voluntary or involuntary (mandated by NHTSA)
 - corrective actions
 - any other significant outcomes (e.g. legal proceedings, passenger fatalities)

Notes

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)).

Additional References:

--

Fuel Economy & Use-phase Emissions

Description

According to the International Energy Agency, transportation activities including movement of people and goods by cars, trucks, trains, ships, airplanes, and other vehicles emitted 6.8 million metric tons of carbon dioxide (CO₂) or 22 percent of all CO₂ emissions from fuel combustion in 2010. Road transport alone accounted for 74 percent of transport emissions. In order to reduce emissions from this significant contributor, several countries have set increasingly stringent emission and fuel efficiency targets for vehicles sold within their borders. Regulations also provide incentives to consumers to buy low-emission vehicles, often subsidizing the cost to purchase. Companies that are innovative in increasing fuel economy and use-phase emissions will be better positioned to expand market share and manage changing regulations around fuel economy.

Accounting Metrics

TR0101-08. Sales weighted average passenger fleet fuel economy

- .36 The registrant shall disclose the average fuel economy of its passenger and light duty fleet in miles per gallon (mpg), weighted for the footprint of vehicles sold during the fiscal year.
- .37 For vehicles sold in the United States, the registrant shall use the same weighting of city and highway fuel economy test results that are used in Corporate Average Fuel Economy (CAFE) in calculations.
 - Calculation methodologies are as defined by the Corporate Average Fuel Economy (CAFE) measures enacted by U.S. Congress in 1975 and issued and regulated by the National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (EPA).
- .38 For vehicles sold in non-U.S. markets including Europe, Japan, and China the registrant shall convert vehicle fuel economy testing results from the standard reporting measure (e.g., gCO₂/km, km/L, MJ/km, L/100km, etc.) to miles per gallons (mpg).
 - The registrant shall use accepted conversion factors such as those published by the International Council on Clean Transportation in its [Test Cycle Conversion Tool, rev. May 2013](#).
- .39 The registrant shall calculate its fleet fuel economy as the sales-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.
 - The scope of disclosure includes all vehicles in its fleet with a gross vehicle weight of 8,500 pounds or less and/or are regulated under U.S. CAFE standards for passenger vehicles and light trucks or under another country or regional vehicle fuel economy standard for passenger or light commercial vehicles (LCV).
- .40 The scope of disclosure shall exclude vehicles in the fleet weighing 8,500 pounds or more and which are covered under the Heavy Duty (HD) National Program in the U.S., including combination tractors (commonly known as semi-trucks), heavy-duty pick trucks and vans, and vocational vehicles.

TR0101-09. Number of (1) Zero Emission Vehicles (ZEV) sold and (2) Partial Zero Emission Vehicles (PZEV) sold

- .41 The registrant shall disclose the number of vehicles sold during the fiscal year that can be classified as (1) Zero Emission Vehicles (ZEV) and the number that can be classified as (2) Partial Zero Emission Vehicles (PZEV) according to the following definitions:
 - ZEVs are defined as 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. ZEVs include ultra-low emitting Plug-In Electric Hybrid Vehicles (PHEV) along with non-polluting fully electric cars and fuel cell vehicles
 - Plug-In Hybrid Electric Vehicles are vehicles that offer electric driving with an electric motor powered by a large battery pack charged by plugging into a source of electricity.
 - PZEVs defined as vehicles that meet the California Air Resources Board's Super Ultra-Low Emissions (SULEV II) standard of 0.03 grams per mile of non-methane organic gases and nitrogen oxides, have no evaporative emissions, and have a 15 year/150,000 mile warranty.
 - PZEVs include Enhanced AT PZEV/AT PZEVs or Advanced Technology Partial Zero Emission Vehicles which are compressed natural-gas or hybrid vehicles that meet PZEV requirements and include advanced technology components.
- .42 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 abovementioned requirements.

Notes

Definitions:

--

Additional References:

--

Product End-of-Life Management

Description

The total lifecycle impacts of a vehicle include the manufacturing process, the use-phase, and the end-of-life phase. According to the U.S. EPA, each year nearly 27 million cars reach the end of their useful life, of which about 95 percent are disassembled. Roughly 75 percent of a vehicle by weight is recovered and recycled. The remaining 25 percent, known as auto shredder residue (ASR), which includes plastics, rubber, wood, paper, fabric, glass, and metal parts, is landfilled. Management of environmental impacts at the end-of life of vehicles, including reuse or recycle scrapped vehicles, has a material effect on automakers, given the environmental lifecycle impacts of vehicles, and the emergence of several national regulations regarding end-of-life.

Accounting Metrics

TR0101-10. Average recyclability of vehicles sold, by weight

- .43 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 percentage recyclability is calculated as the total vehicle weight made of components and materials that are recyclable, reusable, or able to be remanufactured divided by the total weight of the vehicle.
 - Consistent with the EU 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, but 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.
- .44 The scope of disclosure excludes recoverable material which, consistent with the EU End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC), is defined as material that can be salvaged for further use, including the use as a fuel or other means to generate energy.
- .45 Materials that typically recyclable include ferrous and non-ferrous metals, glass, and certain plastics.
- .46 Materials and components that are typically reusable or able to be remanufactured include engines, transmissions, catalysts, tires, batteries, and CFCs.
- .47 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 TR0101-10

- .48 The registrant shall disclose processes, procedures, and technologies for optimizing vehicle recycling and recovery rates, including in regions where the registrant participate in mandatory end of life of vehicle programs (e.g., European Union, Japan, and Korea).
- .49 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 R&D focused on vehicle recycling technologies.

Notes

Definitions:

--

Additional References:

--

Supply Chain Management

Description

The Automobiles industry's reliance on critical and conflict minerals and metals has become a focus of attention due to associated supply constraints, resulting in price volatility, and a low potential for substitution. Furthermore, companies face regulations related to use of conflict minerals within their supply chain, which can lead to increased costs associated with new reporting requirements. Automobiles companies with supply chains that are well-monitored and able to adapt to increased resource scarcity will be better positioned to protect shareholder value.

Accounting Metrics

TR0101-11. Percentage of products by revenue that contain critical materials

- .50 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.
- .51 A critical material is defined as one that is both essential in use and subject to the risk of supply restriction.⁷
- .52 At a minimum, the scope of critical materials includes 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 within the supply chain that are verified conflict-free

- .53 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.
- .54 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 meets the conflict mineral provisions of Dodd-Frank Section 1502.
- .55 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.

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

- .56 The registrant shall discuss its strategic approach to managing its risks associated with usage of critical materials and conflict minerals in its products, including physical limits on the availability, access, price, and reputational risks.
- .57 The registrant should identify which materials and minerals present a risk to its operations, which risk they represent, and the strategies the registrant uses to mitigate the risk.
- .58 For critical materials, relevant strategies to discuss include the diversification of suppliers, stockpiling of materials, expenditures in R&D for alternative and substitute materials, and investments in recycling technology for critical materials.

⁷ National Research Council. *Minerals, Critical Minerals, and the U.S. Economy*. Washington, DC: The National Academies Press, 2008.

.59 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.

Notes

Definitions:

--

Additional References:

--

Fair Lending

Description

Automobile manufacturers have financial arms that provide loans for car purchases through dealerships. Auto financing providers, including auto manufacturers, allow independent automobile dealerships to add a discretionary markup to the objective, credit-based interest rates determined by the finance company. Often these markups are subjective and unrelated to creditworthiness. In order to prevent discriminatory lending practices and to ensure transparency, these financing arms will continue to face scrutiny from the Consumer Financial Protection Bureau. According to the Bureau, the fact that improper decisions may be made by auto dealers—who are exempt from consumer bureau oversight—does not absolve lenders of responsibility for resulting in racial disparities. Companies that are able to monitor discretionary markups and ensure fair lending will be able to better protect themselves from penalties and litigation.

Accounting Metrics

TR0101-14. Median discretionary interest rate mark-up on automotive loans for: (1) all borrowers, (2) women, and (3) minorities

- .60 The registrant shall disclose the median discretionary interest rate mark-up, in basis points, imposed on borrowers by intermediaries (e.g., dealerships) on indirect automotive loans that the registrant has acquired.
- .61 The registrant shall disclose the median discretionary interest rate mark-up for (1) all borrowers, (2) women, and (3) minorities, where the discretionary interest rate mark-up is defined as the annual percentage rate to a consumer in excess of buy rates used by a finance company to calculate the price paid to acquire an assignment of a retail installment sale contract.
- .62 Race and ethnicity categories shall be based upon Office of Management and Budget "[Standards for the Classification of Federal Data on Race and Ethnicity](#)," but classification shall be done by self-identification (e.g., during the loan application process).
 - Race categories include: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White.
 - Ethnicity categories include: "Hispanic or Latino" and "Not Hispanic or Latino."
- .63 Minority is defined here, using Office of Management and Budget [guidance](#), as including "Black or African American" or "All Other Races" borrowers while excluding "White" borrowers.
- .64 For joint borrowers of different genders and/or races or ethnicities, the registrant shall categorize the borrower according to the gender race or ethnicity of the primary or first person on the loan application.
- .65 For borrowers who have reported multiple races or ethnicities, the registrant shall, in line with Office of Management and Budget [guidance](#), categorize the borrower as a minority.

Notes

Definitions:

--

Additional References:

--



Auto Parts

SICST™ #TR0102

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Auto Parts

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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards, please [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Auto Parts (TR0102)

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 tires, air bags, air conditioners, catalytic converters, engine exhaust systems, mufflers and resonators, radiators, radiator cores, and wheels. The automotive business has a complex, highly fragmented supply chain that includes procuring raw materials (such as steel, aluminum, plastics, and glass), forming and producing parts, and assembling the parts into a finished product. The larger automotive industry includes several tiers of suppliers providing parts and raw materials that are used to assemble motor vehicles. The Auto Parts industry is comprised of Tier 1 suppliers are those that supply parts directly to OEMs. Tier 2 suppliers are those that provide inputs for tier 1 suppliers; tier 3 provides inputs usually to tier 2 and so on. Some of the largest independent tier 1 suppliers were previously 'captive plants', i.e. owned and operated by OEMs.

Table 1. Material Sustainability Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code
Energy Management	Total energy consumed, percentage grid electricity, percentage renewable energy	Quantitative	Gigajoules, Percentage (%)	TR0102-01
	Gross global Scope 1 emissions	Quantitative	Metric tons CO ₂ -e	TR0102-02
Waste Management	Amount of total waste from manufacturing, percentage recycled, percentage hazardous	Quantitative	Tons, Percentage (%)	TR0102-03
Employee Health, Safety & Well-being	(1) Total Recordable Injury Rate and (2) Near Miss Frequency Rate for (a) full time employees and (b) contract employees	Quantitative	Rate	TR0102-04
	Amount of legal and regulatory fines and settlements associated with employee health and safety violations ¹	Quantitative	U.S. Dollars (\$)	TR0102-05
Product Quality & Safety	Number of recalls and total units recalled ²	Quantitative	Number	TR0102-06
Product Stewardship	Total addressable market and share of market for products aimed at improved fuel efficiency and/or reduced emissions	Quantitative	U.S. Dollars (\$), Percentage (%)	TR0102-07
	Percentage of products sold that are recyclable	Quantitative	Percentage (%) by weight (t)	TR0102-08

¹ Note to **TR0102-05** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

² Note to **TR0102-06** – 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.

Topic	Accounting Metric	Category	Unit of Measure	Code
Product End-of-Life Management	Weight of products and materials recycled or remanufactured	Quantitative	Tons (t)	TR0102-09
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with anti-competitive practices ³	Quantitative	U.S. Dollars (\$)	TR0102-10
Supply Chain Management	Percentage of products by revenue that contain critical materials	Quantitative	Percentage (%) by revenue (\$)	TR0102-11
	Percentage of tungsten, tin, tantalum, and gold smelters within the supply chain that are verified conflict-free	Quantitative	Percentage (%)	TR0102-12
	Discussion of the management of risks associated with the use of critical materials and conflict minerals	Discussion and Analysis	n/a	TR0102-13

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Number of parts produced	Quantitative	Number	TR0102-A
Square footage of manufacturing plants	Quantitative	Square meters (m ²)	TR0102-B

³ Note to **TR0102-10** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Energy Management~~Error! No bookmark name given.~~

Description

Auto Parts manufacturers' use of electricity and fossil fuels in their production processes results in direct (scope 1) and indirect (scope 2) emissions of greenhouse gases. Major uses of electricity in the industry vary depending on the component being manufactured. From extruding rubber and metals, die cutting, melting lead, and flash drying, to cutting fabric, the various automated and manual processes all require energy. Consumption of fossil fuels directly contributes to significant environmental impacts, including climate change and pollution. Therefore, it is a source of risk for companies arising from current and potential future regulations in the U.S. and abroad. With manufacturing plants located in several regions, the likelihood and impact of climate change regulations will vary depending on the location of facilities. Companies that proactively limit their exposure to volatile energy prices and carbon prices by fulfilling part of their energy needs from renewable sources are likely to be better able to manage long-term regulatory risks.

Accounting Metrics

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

- .01 The registrant shall disclose total energy consumption from all sources as an aggregate figure in gigajoules or its 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 When reporting self-generated energy consumption, the registrant shall not double-count fuel consumption. For example, if a registrant generates electricity from natural gas and then consumes the generated electricity, the energy consumption is counted once as energy from fuel consumption.
- .04 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
 - The scope of renewable energy includes the renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) which explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity. For all renewable energy consumed as electricity in this manner, RECs must be retired on behalf of the registrant to be claimed as renewable energy as part of this disclosure
 - 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 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 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.⁴
- .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 that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.

⁴ SASB recognizes that RECs reflect the environmental attributes of renewable energy that has 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.

- .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).

TR0102-02. Gross global Scope 1 emissions

- .07 The registrant shall disclose gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the six greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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).
- .08 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (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, rail).
- .09 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").⁵
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁶
- .10 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. Any updates made year-on-year shall be considered updates to this guidance.
- .11 The registrant should discuss any change in its emissions from the previous fiscal year, such as if the change were due to emission reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- .12 In the case that current reporting of GHG emissions to the CDP or another 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.
- .13 The registrant should discuss the calculation methodology for its emission disclosure, such as if data are from continuous emissions-monitoring systems (CEMS), engineering calculations, mass-balance calculations, etc.

⁵ "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).

⁶ 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. *Climate Change Reporting Framework*, CDSB.

Notes

Definitions:

--

Additional References:

--

Waste Management~~Error! No bookmark name given.~~

Description

The Auto Parts industry generates hazardous and non-hazardous waste from the use of machine lubricants and coolants, aqueous and solvent cleaning systems, paint, and scrap metals and plastics from trimming and off-cuts. Improvement of waste management can reduce the cost of raw materials by decreasing overall waste, lower costs of waste treatment and disposal, reduce environmental impacts and the risk of litigation, and strengthen brand value.

Accounting Metrics

TR0102-03. Amount of total waste from manufacturing, percentage recycled, percentage hazardous

- .14 Amount of total waste from manufacturing should be calculated in metric tons, where waste is defined as anything for which the registrant has no further use and which is discarded or is released to the environment.
- .15 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 hazardous 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 process and made into a final product or made into a component for incorporation into a product.
 - The scope of recycled and remanufactured products include primary recycled materials, co-products (outputs of equal value to primary recycled materials), and by-products (outputs of lesser value to 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 which are transferred to a third party for the expressed 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.
- .16 The registrant shall calculate the amount of waste (in metric tons) that meets the definition of hazardous waste under Subtitle C of the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) and disclose it as a percentage of total waste from manufacturing.
- Hazardous waste includes wastes that display the following characteristics: ignitability, corrosivity, reactivity, or toxicity.

Notes

Definitions:

--

Additional References:

--

Employee Health, Safety & Well-being

Description

Employees working in Auto Parts manufacturing facilities may be exposed to excessive heat, extreme or constant noise levels, and ergonomic, mechanical, and chemical hazards. Poor ventilation and the high temperatures required for certain processes can create difficult working conditions. Ergonomic injuries can result from repeated movements. Mechanical hazards include risks to safety from moving parts and dangerous equipment. Workers are also at risk of inhaling toxic fumes or being in contact with harmful chemicals. By maintaining a safe work environment and promoting a culture of safety, companies can minimize risks to their employees and, in turn, avoid work disruptions and excessive medical costs.

Accounting Metrics

TR0102-04. (1) Total Recordable Injury Rate and (2) Near Miss Frequency Rate for (a) full time employees and (b) contract employees

- .17 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its total recordable injury rate (TRIR), as calculated and reported in the Occupational Safety and Health Administration's (OSHA) Form 300.
 - OSHA guidelines provide details on the 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.
- .18 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.
- .19 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident where no property or environmental damage or personal injury occurred, but where 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.
- .20 The registrant shall disclose its TRIR and NMFR 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.).
- .21 The scope includes all employees, domestic and foreign.
- .22 Rates shall be calculated as: $(\text{statistic count} / \text{total hours worked}) * 200,000$.

TR0102-05. Amount of legal and regulatory fines and settlements associated with employee health and safety violations

- .23 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with employee health and safety violations, including Occupational Health and Safety Administration (OSHA) violations.
- .24 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 TR0102-05

- .25 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, anti-trust, etc.) of fines and settlements.
- .26 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.

Notes

Definitions:

--

Additional References:

--

Product Quality & Safety

Description

Vehicles sold in the U.S. must meet safety requirements or else they must be recalled, and the feature repaired or replaced at manufacturer's cost. Vehicles are recalled when any component does not meet the safety standards, so while auto manufacturers are directly impacted by recalls, Auto Parts manufacturers responsible for the faulty component face significant indirect impacts. Recalls can be a significant expense for companies, but more importantly can jeopardize contracts and future business with auto manufacturers. Being proactive about ensuring quality and safety of auto parts produced can protect companies from reputational risk and risk of litigation and penalties.

Accounting Metrics

TR0102-06. Number of recalls and total units recalled

- .27 The registrant shall disclose the total number of units recalled where the scope includes voluntary recalls initiated by the registrant and involuntary recalls mandated by the NHTSA.
- .28 Involuntary recalls are those required by the National Highway Traffic Safety Administration, which are issued when a motor vehicle or item of motor vehicle 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](#).
- .29 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 **TR0101-06**

- .30 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.
- .31 A recall should be considered notable if it mentioned in the NHSTA's [monthly recall reports](#).
- .32 For such recalls the registrant should provide:
 - description and cause of the recall issue
 - the total number of units (or vehicles) recalled
 - cost to remedy the issue (in U.S. dollars)
 - if the recall was voluntary or involuntary (mandated by NHTSA)
 - corrective actions
 - any other significant outcomes (e.g. legal proceedings, passenger fatalities)

Notes

Definitions:

--

Additional References:

--

Product Stewardship

Description

Road transport, including passenger vehicles and freight trucks, alone accounted for 74 percent of global transport emissions in 2010. In order to reduce emissions from this significant contributor, several countries have set increasingly stringent emission and fuel efficiency targets for vehicles sold within their borders. Regulations also provide incentives to consumers to buy low-emission vehicles, often subsidizing the cost to purchase. Auto Parts companies play a key role in improving fuel economy and reducing use-phase emissions of vehicles through innovations that reduce weight of vehicles, improve energy efficiency, or lower emissions of greenhouse gases and other harmful pollutants. Companies that are able to offer innovative products to address these issues will be better positioned to expand business opportunities.

Accounting Metrics

TR0102-07. Total addressable market and share of market for products aimed at improved fuel efficiency and/or reduced emissions

- .33 The registrant shall provide an estimation of the total addressable market for automotive parts that improved fuel efficiency of vehicles and/or reduced vehicle emissions.
 - Total addressable market is defined as potential revenue (in billions of U.S. dollars) should the registrant capture 100 percent of the market share of the product category (e.g., the global market for smart-grid specific processors).
- .34 If there is a significant difference between the total available market and the market which the registrant can serve through its existing or planned capabilities, sales channels, or products then the registrant should disclose this information.
- .35 The registrant shall disclose the share of the total addressable market for automotive parts aimed at improved fuel efficiency and/or reduced 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 those specifically designed to improve fuel efficiency and/or reduce vehicle emissions.
 - 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).
- .36 The registrant may provide a projection of 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 3-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.
- .37 Products aimed at improved fuel efficiency and/or reduced emissions include, but are not limited 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, reduced rolling resistance tires, alternative cooling systems, electric power steering, hybrid-enabled braking technologies, and engine management systems/products.
- .38

Notes

Definitions:

--

Additional References:

--

Product End-of-Life Management

Description

The total lifecycle impacts of auto components include the manufacturing, use, and end-of-life phases. The design of an auto part directly impacts end-of-life impacts of both the component and the vehicle of which it is a part. Management of environmental impacts at the end-of life of auto parts, including take back programs, remanufacturing, and recycling have a material effect on Auto Parts manufacturers, given the environmental lifecycle impacts of vehicles, and the emergence of several national regulations regarding end-of-life of vehicles.

Accounting Metrics

TR0102-08. Percentage of products sold that are recyclable

- .39 The registrant shall calculate the percentage as the sales-weighted weight of products and materials that are recyclable, reusable, or able to be remanufactured divided by the weight of total products and materials sold.
- .40 Consistent with the EU End of Life Vehicle Directive (Annex IIB to Directive 75/442/EEC) a material is recyclable if it is 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.
- .41 The scope of disclosure excludes recoverable material which, consistent with the EU 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.
- .42 Materials that typically recyclable include ferrous and non-ferrous metals, and certain plastics.
- .43 Materials and components that are typically reusable or able to be remanufactured include engines, transmissions, catalysts, tires, batteries, CFCs, and tires.
- .44 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.

TR0102-09. Weight of products and materials recycled or remanufactured

- .45 The registrant shall disclose the weight, in 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 registrant and 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 products and parts that are in-warranty and have been collected for repairs.
- .46 The weight of products recycled or remanufactured 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.
- .47 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 third parties through direct contract with the registrant.
- .48 Recycled and remanufactured materials are defined as waste materials that have been reprocessed or treated by means of 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).

- The scope of disclosure includes recycling conducted by the registrant or 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.
- .49 The scope of disclosure excludes recoverable material which, consistent with the EU 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.

Notes

Definitions:

--

Additional References:

--

Competitive Behavior

Description

Competitive business practices are an important governance issue for the Auto Parts industry. The contract bidding process can provide opportunities for cooperative behavior that can restrict competition. Companies that are not in compliance with anti-trust laws may jeopardize future revenue growth due to reputational risks and will incur significant costs from government action. Anti-trust concerns have provided the impetus for recent and ongoing investigations into the industry that have already resulted in fines and penalties.

Accounting Metrics

TR0102-10. Amount of legal and regulatory fines and settlements associated with anti-competitive practices

- .50 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, anti-trust behavior (e.g., exclusivity contracts), patent misuse, or network effects and bundling of services and products to limit competition including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.
- .51 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 TR0102-10

- .52 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, anti-trust, etc.) of fines and settlements.
- .53 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.

Notes

Definitions:

--

Additional References:

--

Supply Chain Management

Description

With automobiles become increasingly computerized, auto parts are more likely to include critical materials and conflict minerals. The use of these materials in the automotive industry has become a focus of attention due to associated supply constraints, resulting in price volatility, and a low potential for substitution. Furthermore, companies face regulations related to use of conflict minerals within their supply chain, which can lead to increased costs associated with new reporting requirements. Auto Parts suppliers that report to the Securities and Exchange Commission or supply to companies that are required to monitor and report on this issue. Auto Parts companies with strong supply chain standards and the ability to adapt to increased resource scarcity will be better positioned to protect shareholder value. Innovations at the product-design phase to reduce dependence on some of these materials may also reduce risk.

Accounting Metrics

TR0102-11. Percentage of products by revenue that contain critical materials

- .54 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.
- .55 A critical material is defined as one that is both essential in use and subject to the risk of supply restriction.⁷
- .56 At a minimum, the scope of critical materials includes 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).

TR0102-12. Percentage of tungsten, tin, tantalum, and gold smelters within the supply chain that are verified conflict-free

- .57 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.
- .58 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 meets the conflict mineral provisions of Dodd-Frank Section 1502.
- .59 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.

TR0102-13. Discussion of the management of risks associated with the use of critical materials and conflict minerals

- .60 The registrant shall discuss its strategic approach to managing its risks associated with usage of critical materials and conflict minerals in its products, including physical limits on the availability, access, price, and reputational risks.
- .61 The registrant should identify which materials and minerals present a risk to its operations, the type of risk represented, and the strategies the registrant uses to mitigate the risk.

⁷ National Research Council. *Minerals, Critical Minerals, and the U.S. Economy*. Washington, DC: The National Academies Press, 2008.

- .62 For critical materials, relevant strategies to discuss include diversification of suppliers, stockpiling of materials, expenditures in R&D for alternative and substitute materials, and investments in recycling technology for critical materials.
- .63 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.

Definitions:

--

Additional References:

--



Car Rental & Leasing

SICST[™] #TR0103

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Car Rental & Leasing

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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders. The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards, please [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Car Rental & Leasing (TR0103)

Industry Description

Car Rental and 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 does not include rentals that include a driver, but does include 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 serve repair-shop and weekend rentals. The industry is concentrated with three dominant market players. Some industry players operate globally and use a franchise model. Rental car 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 over a specified time.

Table 1. Material Sustainability Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code
Passenger Safety	Percentage of vehicles with NHTSA's overall 5 star safety rating ¹	Quantitative	Percentage (%)	TR0103-01
	Number of vehicles recalled	Quantitative	Number	TR0103-02
Integration of Environmental Factors into Service Offerings	Weighted average rental fleet fuel economy	Quantitative	Rental-day weighted miles per gallon (mpg)	TR0103-03
	Rental days of (1) Zero Emission Vehicles (ZEV) and (2) Partial Zero Emission Vehicles (PZEV)	Quantitative	Rental days	TR0103-04
	Vehicles in car sharing fleet and utilization rate	Quantitative	Number and rate in rental days per vehicle	TR0103-05

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Total vehicle fleet size ²	Quantitative	Number	TR0103-A
Rental days ³	Quantitative	Number	TR0103-B

¹ Note to **TR0103-01** – The registrant shall disclose if any of the 5-star rated models in its fleet include a “▲” symbol to alert consumers to a safety concern the government has about the vehicle and/or if a significant percentage of its fleet does not have an NHTSA safety-rating.

² Note to **TR0103-A** – Total fleet size includes the sum of risk vehicles, leased vehicles, and vehicles subject to repurchase.

³ Note to **TR0103-B** – Total number of 24-hour days, or portion thereof, vehicles were rented.

Passenger Safety

Description

Passenger safety is of utmost importance to the industry as accidents attributed to mechanical failures can impact brand reputation. Since rental vehicles put on 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 fleet availability, give rise to customer service issues, and reduce the residual value of cars.

Accounting Metrics

TR0103-01. Percentage of vehicles with NHTSA's overall 5 star safety rating

- .01 The registrant shall calculate the percentage as: the total vehicles in rental fleet with a 5 star Overall Vehicle Score in the National Highway Traffic Safety Administration's (NHTSA) New Car Assessment Program (NCAP)'s 5-Star Safety Ratings Program divided by total number of vehicles in the rental fleet with an NHTSA Overall Vehicle Score, where:
- The Overall Vehicle Score is the combination of the Overall Front Crash Rating, Overall Side Crash Rating, and Rollover Rating compared to the average risk of injury and potential for vehicle rollover of other vehicles.
 - NHTSA's 5-Star Safety Ratings are in a public database available [here](#).
 - The scope of calculation includes all vehicles models rated by the NHTSA including Passenger cars (mini, light, compact, medium, and heavy), Sport utility vehicles, Pickup trucks, and Vans.
 - The scope of calculation excludes vehicle models not rated by the NHTSA.

Note to TR0103-01

- .02 The registrant shall disclose any safety-related concerns identified by the government but which not covered in the NHTSA 5 star rating/Overall Vehicle Score.
- These safety concerns can include a structural failure or some unintended performance of a vehicle component such as a fuel leakage or a door opening.
 - Vehicle models with these safety concerns are denoted by a "▲" symbol in the NHTSA database.
- .03 The registrant shall disclose if a significant percentage of its fleet (i.e., greater than 10% of its vehicles) does not have an NHTSA safety-rating, including the make and model of these vehicles and the percentage of its fleet they constitute.

TR0103-02. Number of vehicles recalled

- .04 The registrant shall disclose the total number of vehicles in its rental fleet that were recalled where the scope includes voluntary recalls initiated by the vehicle manufacturer and involuntary recalls mandated by the NHTSA.
- .05 Involuntary recalls are those required by the National Highway Traffic Safety Administration, which are issued when a motor vehicle or item of motor vehicle 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 registrant may choose, in addition to total vehicles in its fleet that were recalled, to disclose the percentage of recalls that were (1) voluntarily and (2) involuntarily issued.

Notes

Definitions:

--

Integration of Environmental Factors into Service Offerings

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 also adapting to changing vehicle needs by providing car-sharing services. In urban settings, car-sharing is an attractive alternative to owning vehicles which reduces the congestion and environmental costs associated with private-ownership of vehicles.

Accounting Metrics

TR0103-03. Weighted average rental fleet fuel economy

- .07 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 during the fiscal year.
- .08 For vehicles rented in the United States, the registrant shall use the same weighting of city and highway fuel economy test results that are used in Corporate Average Fuel Economy (CAFE) in calculations.
 - Calculation methodologies are as defined by the Corporate Average Fuel Economy (CAFE) measures enacted by U.S. Congress in 1975 and issued and regulated by the National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (EPA).
- .09 For vehicles rented in non-U.S. markets including Europe, Japan, and China the registrant shall convert vehicle fuel economy testing results from the standard reporting measure (e.g., gCO₂/km, km/L, MJ/km, L/100km, etc.) to miles per gallons (mpg).
 - The registrant shall use accepted conversion factors such as those published by the International Council on Clean Transportation in its [Test Cycle Conversion Tool, rev. May 2013](#).
- .10 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.
- .11 The scope of disclosure includes all vehicles in its fleet with a gross vehicle weight of 8,500 pounds or less and/or are regulated under U.S. CAFE standards for passenger vehicles and light trucks or under another country or regional vehicle fuel economy standard for passenger or light commercial vehicles (LCV).
- .12 The scope of disclosure shall exclude vehicles that are covered under the Heavy Duty (HD) National Program in the U.S. (i.e., semi-trucks, heavy-duty pick trucks and vans, and vocational vehicles) and equipment and machinery rentals.

TR0103-04. Rental days of (1) Zero Emission Vehicles (ZEV) and (2) Partial Zero Emission Vehicles (PZEV)

- .13 The registrant shall disclose the number of rental days for vehicles that can be classified as (1) Zero Emission Vehicles (ZEV) and the number of rental days for vehicles that can be classified as (2) Partial Zero Emission Vehicles (PZEV) according to the following definitions:
 - ZEVs are defined as 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. ZEVs include ultra-low emitting Plug-In Electric Hybrid Vehicles (PHEV) along with non-polluting fully electric cars and fuel cell vehicles
 - Plug-In Hybrid Electric Vehicles are vehicles that offer electric driving with an electric motor powered by a large battery pack charged by plugging into a source of electricity.
 - PZEVs defined as vehicles that meet the California Air Resources Board's Super Ultra-Low Emissions (SULEV II) standard of 0.03 grams per mile of non-methane organic gases and nitrogen oxides, have no evaporative emissions, and have a 15 year/150,000 mile warranty.
 - PZEVs include Enhanced AT PZEV/AT PZEVs or Advanced Technology Partial Zero Emission Vehicles which are compressed natural-gas or hybrid vehicles that meet PZEV requirements and include advanced technology components.

TR0103-05. Vehicles in car sharing fleet and utilization rate

- .14 The registrant shall disclose the total number of vehicles in its car sharing fleet and the aggregate utilization rate, where:
- Utilization rate is the number of the total number of rental days divided by the total number of vehicles in the car sharing fleet.
 - Total rental days are defined as the total number of 24-hour days – or portions thereof – a vehicle was rented.
- .15 Car sharing services are defined as membership-based, short-term (i.e., hourly) vehicle rental services.

Notes

Definitions:

--

Additional References:

--



Airlines

SICST™ #TR0201

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Airlines

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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards, please [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Airlines (TR0201)

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 internationally. Low-cost carriers fly from smaller domestic airports. Regional carriers typically operate under contract to full-service carriers, expanding the network of the larger carriers. It is common within the industry to form partnerships with other airlines or join alliances to increase network size. The three leading alliances are Star Alliance, Oneworld, and SkyTeam, with twenty-eight, fifteen, and nineteen worldwide members, respectively. Operating as an alliance allows 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.

Table 1. Material Sustainability 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	TR0201-01
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and analysis of performance against those targets	Discussion and Analysis	n/a	TR0201-02
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules, Percentage (%)	TR0201-03
Passenger Safety	Number of safety risks and hazardous situations, percentage attributable to: (1) aircraft issues, (2) human factors, (3) other	Quantitative	Number, Percentage (%)	TR0201-04
	Number of exceedances identified through Flight Operations Quality Assurance (FOQA) or Flight Data Monitoring (FDM)	Quantitative	Number	TR0201-05
	Number of accidents and incidents	Quantitative	Number	TR0201-06
	Number of safety and security complaints	Quantitative	Number	TR0201-07
	Number of governmental enforcement actions of aviation safety regulations	Quantitative	Number	TR0201-08
Passenger Rights & Regulatory Compliance	Number of airline service complaints	Quantitative	Number	TR0201-09
	Number of governmental enforcement orders of passenger rights regulations	Quantitative	Number	TR0201-10

Topic	Accounting Metric	Category	Unit of Measure	Code
Talent & Diversity	Annual target for new pilot hiring ¹	Quantitative	Number	TR0201-11
	New pilots hired, percentage women, percentage minorities	Quantitative	Number, Percentage (%)	TR0201-12
	Percentage of gender and racial/ethnic group representation for: (1) pilots and (2) all others	Quantitative	Percentage (%)	TR0201-13
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with anti-competitive practices ²	Quantitative	U.S. Dollars (\$)	TR0201-14

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Available seat miles (ASM) ³	Quantitative	Miles	TR0201-A
Load factor ⁴	Quantitative	Miles	TR0201-B
Revenue passenger miles (RPM) ⁵	Quantitative	Miles	TR0201-C
Revenue ton miles (RTM) ⁶	Quantitative	Ton-Miles	TR0201-D
Number of departures	Quantitative	Number	TR0201-E
Number of employees	Quantitative	Number	TR0201-F

¹Note to **TR0201-11** – Disclosure shall include a discussion of hiring constraints and the registrant’s strategy to attract and retain pilots.

²Note to **TR0201-14** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

³Note to **TR0201-A** – Available seat miles (ASM) is defined a measure of the maximum potential cumulative miles traveled by passengers (i.e. miles traveled by occupied and unoccupied seats).

⁴Note to **TR0201-B** – Load factor is a measure of capacity utilization and is calculated as passenger miles travelled divided by seat miles available.

⁵Note to **TR0201-C** – Revenue passenger miles (RPM) is defined as a measure of cumulative total miles traveled by passengers. A revenue passenger means a passenger for whose transportation an air carrier receives commercial remuneration.

⁶Note to **TR0201-D** – Revenue ton-mile (RTM) is defined as one ton of revenue traffic transported one mile. Revenue ton-miles are computed by multiplying the aircraft-miles flown on each flight stage by the number of pounds of revenue traffic carried on that flight stage and converted to ton-miles by dividing total revenue pound-miles by 2,000 pounds.

Environmental Footprint of Fuel Use

Description

The Airlines industry generates significant direct greenhouse gas emissions that contribute to climate change through jet fuel combustion. International Panel on Climate Change (IPCC) data indicates that around six percent of greenhouse gas emissions come from aviation, which includes both passenger airlines and air freight. Over 99 percent of airline emissions are in the form of carbon dioxide. The main sources of greenhouse gas emissions for airlines are aircraft emissions, ground equipment, and facility electricity. Aircraft emissions are the largest contributor and fuel management is a critical part of reducing emissions. The managing of environmental impacts from fuel usage includes both fuel efficiency and the use of alternative fuels. These areas offer an effective way for airlines to increase profits through reduced fuel costs, while also limiting exposure to volatile fuel pricing, future regulatory costs, and other consequences of greenhouse gas emissions. While newer aircrafts are more fuel-efficient, existing planes can be retrofitted for efficiency. Drivers of fuel efficiency include aircraft design, route selection, and load factor.

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 greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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 (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, 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").⁷
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁸
- .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. 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 if the change were due to emission reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.

⁷ "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).

⁸ 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. *Climate Change Reporting Framework*, CDSB.

- .06 In the case that current reporting of GHG emissions to the CDP or another 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 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 analysis of performance against those targets

- .08 The registrant shall discuss the following where relevant:
 - The scope, such as 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., EU ETS, RGGI, WCI, etc.), including regional, national, international, or sectoral programs; and
 - The activities and investments required to achieve the plans and any risks or limiting factors that might affect achievement 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 base year
 - The base year is the first or starting year against which emissions are evaluated towards the achievement of the target.
 - If 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;
 - 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 where the target base year has been reset.
- .11 Disclosure corresponds with:
 - CDSB Section 4, “Management actions”⁹
 - 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 its 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), 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 are limited to the following:
 - Energy from hydro sources that are certified by the Low Impact Hydropower Institute.

⁹ “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).

Notes

Definitions:

--

Additional References:

Passenger Safety

Description

Passenger safety is a paramount issue in the Airlines industry. It is highly regulated and the subject of regulatory and media scrutiny. Air travel is one of the safest modes of transport and the global rate of fatal accidents has decreased over the last few decades to about one fatal accident per 1.3 million flights in 2011. Over three-quarters of fatal airline accidents can be attributed to pilot error and mechanical failure, and can be effectively addressed through training and policies around safe operations and aircraft maintenance. Therefore, it is critical that airlines maintain rigorous employee training, fleet maintenance, operational measurements, and ensure the pilot and crew are well rested and alert. The Federal Aviation Administration's standards on both aircraft maintenance and pilot scheduling and training are quite stringent; however, as a global industry, airlines that operate under the highest safety standards throughout their operations will experience fewer safety incidents and reduce reputational and litigation risks.

Accounting Metrics

TR0201-04. Number of safety risks and hazardous situations, percentage attributable to: (1) aircraft issues, (2) human factors, (3) other

- .19 The registrant shall disclose the number of safety risks and hazardous situations, where are broadly defined as any existing or potential condition that can lead to an accident or incident.
- .20 The scope of disclosure includes risks and situations that were identified by registrant's Safety Management System (SMS), reported through the Aviation Safety Action Program or Aviation Safety Reporting System, and recorded through other voluntary programs.
- .21 The registrant shall disclose the percentage of risks and situations that were primarily attributable to aircraft issues, such as malfunction or failure of aircraft equipment or issues with aircraft design and engineering.
- .22 The registrant shall disclose the percentage of risks and situations that were primarily attributable to human factors, which include, as adapted from Aviation Safety Reporting System: communication breakdown, confusion, distraction, fatigue, human-machine interface, physiological (other), situational awareness, time pressure, training/qualification, troubleshooting, workload, or other/unknown.
- .23 The registrant shall disclose the percentage of risks and situations that were primarily attributable to other factors which, as adapted from Aviation Safety Reporting System categories, include: airport, airspace structure, air traffic control equipment, charts, company policy, non-weather environmental, equipment or tooling, incorrect/not installed/unavailable parts, logbook entry, manual, procedures, staffing, weather, minimum equipment list (MEL), or ambiguous/unknown.

TR0202-05. Number of exceedances identified through Flight Operations Quality Assurance (FOQA) or Flight Data Monitoring (FDM)

- .24 The registrant shall disclose the number of instances when Flight Operations Quality Assurance (FOQA) or Flight Data Monitoring (FDM) systems identified an exceedance of parameters, threshold values, and/or routine operational measurements that have been specified by the registrant though operational standards or established by the aircraft manufacturer's operating limitations.
- .25 The registrant may choose to additionally disclose the percentage of exceedances by event category, level of risk posed, those receiving investigation and remediation, or some other breakdown.

TR0201-06. Number of accidents and incidents

- .26 The registrant shall disclose the total number of accidents and incidents, where each is defined according to Federal Rule 49 Code of Federal Regulations [830.5, Section 830.2](#):
 - An aircraft accident is defined 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 and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.
 - An incident is defined as an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

- .27 At a minimum, the scope of disclosure includes accidents and incidents reported to the U.S. Federal Aviation Administration and/or National Transportation Safety Board or equivalent national authority.

TR0201-07. Number of safety and security complaints

- .28 The registrant shall disclose the total number of complaints relating to aviation safety and security made about the registrant.
- .29 Aviation safety complaints include those made by customers or whistleblowers to the U.S. Federal Aviation Administration (or equivalent national authority), those made to the Occupational Safety and Health Administration (OSHA), and those made directly to the registrant.
- .30 Aviation security complaints include those made to the U.S. Transportation Security Administration (TSA) or equivalent national authority by customers, employees, or others.

TR0201-08. Number of governmental enforcement actions of aviation safety regulations

- .31 The registrant shall disclose the number of enforcements from the U.S. Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA) or 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.
- .32 The scope of disclosure includes the following enforcement actions: civil penalties, consent order, certificate suspension, and certificate revocation.

Notes

Definitions:

--

Additional References:

U.S. Federal Aviation Administration [Advisory Circular on Flight Operational Quality Assurance](#)

Passenger Rights & Regulatory Compliance

Description

National airline passenger rights regimes have proliferated in recent years. For example, the U.S. Department of Transportation rule on *Enhancing Airline Passenger Protections* covers tarmac delays, full-fare advertising, baggage fee refunds, and flight delays. The new rules govern the actions of airlines toward passengers in certain situations, for example, with fines for violations. Due to the new fine structure, fines can add up to few million dollars for just one poorly managed flight. Airlines that are able to effectively navigate the various passenger rights rules will be better positioned to avoid fines and increase customer satisfaction and loyalty.

Accounting Metrics

TR0201-09. Number of airline service complaints

- .33 The registrant shall disclose the number of customer complaints about the registrant relating to topics other than security or safety made to the U.S. Department of Transportation's Office of Aviation Enforcement and Proceedings Aviation Consumer Protection Division (ACPD).
- .34 The registrant may choose to additionally disclose a breakdown of complaints by category (e.g., flight problems, reservations/ticketing/boarding, baggage, customer service, refunds, over-sales, fare, disability, discrimination, advertising, animals, other), where complaint categories are defined by the ACPD.

TR0201-10. Number of governmental enforcement orders of passenger rights regulations

- .35 The registrant shall disclose the number of enforcement orders received by the registrant from the U.S. Department of Transportation (DOT) Office of the Assistant General Counsel for Aviation Enforcement and Proceedings (OAEP), relating to consumer protection and passenger rights.
 - Enforcement actions includes civil penalties and consent orders.
- .36 The scope of disclosure includes violations of "Enhancing Airline Passenger Protections" rules including, but not limited to those, addressing tarmac delays, fee transparency, the ability to cancel tickets within 24 hours, and prompt notification of delays.

Notes

Definitions:

--

Additional References:

--

Talent & Diversity

Description

Skilled pilots are important for safety, customer service, efficiency, and innovation in this industry. Airlines are facing two important trends that are reducing the population of qualified pilots: more stringent federal requirements for pilot training and working hours, and higher-than-normal retirement rates driven by an aging population of pilots. These two issues have a compounding effect on access to talent for companies in this industry. As the industry is characterized by relatively low representation from women and minorities, efforts to recruit from and develop diverse talent pools can address the talent shortage. While improving diversity alone may not enhance company performance, it is important to ensure that the company's policies and processes are aligned to integrate and leverage the most diverse workforce in order to increase employee productivity and performance.

Accounting Metrics

TR0201-11. Annual target for new pilot hiring

- .37 The registrant shall disclose a projection of future hiring needs measured by the number of pilot it intends to hire by the close of the next fiscal year.
- .38 At a minimum, the projection should account for the establishment of new routes, impacts of pilot shift limitation regulations, mandatory age-related retirement, and company growth.
- .39 The registrant may choose to additionally disclose hiring targets for pilots over a longer term, such as over the following three to five years.

Note to TR0201-11

- .40 The registrant shall discuss constraints it faces with regards to hiring pilots such as difficulty in finding qualified personnel with appropriate air transport pilot (ATP) certification, trends in number and quality of applicants, or competition for talent against rapidly growing foreign carriers.
- .41 The registrant should discuss its efforts to attract and retain pilots which may include increasing recruiting efforts, on the job training, reduction of minimum qualifications, and financial incentives (e.g., bonuses, improved wages).

TR0201-12. New pilots hired, percentage women, percentage minorities

- .42 The registrant shall disclose the number of pilots it hired during the fiscal year, including those that have been recalled from furlough.
- .43 The registrant shall calculate and disclose the percentage of pilot who are women and the percentage who are minorities, according to year-end headcount.
- .44 Race and ethnicity categories shall be based upon Office of Management and Budget "[Standards for the Classification of Federal Data on Race and Ethnicity](#)," but classification shall be done by self-identification (e.g., during the loan application process).
 - Race categories include: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White.
 - Ethnicity categories include: "Hispanic or Latino" and "Not Hispanic or Latino."
- .45 Minority is defined here, using Office of Management and Budget [guidance](#), as including "Black or African American" or "All Other Races" borrowers while excluding "White" borrowers.
- .46 For pilots who have reported multiple races or ethnicities, the registrant shall, in line with Office of Management and Budget [guidance](#), categorize the individual as a minority.

TR0201-13. Percentage of gender and racial/ethnic group representation for: (1) pilots and (2) all others

- .47 The registrant should summarize and disclose employee representation by employee category in the following table format:

Employee Category	Gender (%)			Race and Ethnicity (%)					
	Male	Female	NA*	White	Black or African American	Hispanic or Latino	Asian	Other^	NA*
Pilots									
All others									

*NA = not available/not disclosed

^Other includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and "two or more races" classification

- .48 Pilots include airline pilots, airline co-pilots, flight engineers, and commercial pilots categorized according to the 50-2010 subgroup of the Air Transportation Workers group of the Standard Occupation Classification (SOC) system from U.S. Bureau of Labor Statistics (BLS).
- .49 The registrant shall categorize the gender of its employees as: male, female, not disclosed/available.
- .50 The registrant shall classify the racial/ethnic group of its employees in the following categories, using the same definitions employed for the registrant's EEO-1 Report: White, Black or African American, Hispanic or Latino, Asian, and Other (includes: American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races), not disclosed/available.
- .51 Where racial/ethnic group and/or gender representation percentages are significantly influenced by the country or region where the workforce is located, the registrant shall provide contextual disclosure to ensure proper interpretation of results.
 - Where relevant the registrant may provide supplemental breakdown of gender and racial/ethnic group representation by country or region.

Notes

Definitions:

--

Additional References:

--

Competitive Behavior

Description

In the context of recent consolidation and reorganizations through bankruptcy, airline mergers and acquisitions have been dissected by anti-trust authorities in order to limit market concentration and ensure competition and pricing transparency. While there are several regional and low-cost carriers, the number of national carriers has shrunk considerably. Competitive business practices are an important governance issue for the industry. Companies face potential material impacts from the erosion of consumer confidence and government action. These risks present challenges to future revenue growth and may limit the ability to grow by acquisitions.

Accounting Metrics

TR0201-14. Amount of legal and regulatory fines and settlements associated with anti- competitive practices

- .52 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, anti-trust behavior (e.g., exclusivity contracts), patent misuse, or network effects and bundling of services and products to limit competition including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.
- .53 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 TR0201-14

- .54 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, anti-trust, etc.) of fines and settlements.
- .55 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.



Air Freight & Logistics

SICST™ #TR0202

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Air Freight & Logistics 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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards, please [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Air Freight & Logistics (TR0202)

Industry Description

The Air Freight & Logistics industry provides freight and transportation logistics services. Companies in this industry can be broken down into air freight transportation, post and courier services, and transportation logistics services. Air freight transportation is the smallest segment of the industry, which includes a few specialized air cargo shipping companies and many major international airlines. About a third of industry revenue is generated by transportation logistics service providers, who are also known as freight forwarders or third-party logistics. Transportation logistics services include contracting with rail, road, 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. The majority of the industry revenue comes from post and courier services.

Table 1. Material Sustainability 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
	Total fuel consumed, percentage renewable for (1) road transport and (2) aviation	Quantitative	Gigajoules, Percentage (%)	TR0202-02
	Air emissions for the following pollutants: NO _x , SO _x , and particulate matter	Quantitative	Tons (t)	TR0202-03
	Average fleet fuel economy	Quantitative	Gallons fuel per 1,000 ton-mile	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 ¹	Quantitative	U.S. Dollars (\$)	TR0202-06
Accident & Safety Management	Number of accidents and incidents for (1) road transport and (2) aviation	Quantitative	Number	TR0202-07
	(1) Total Recordable Injury Rate, (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full time employees and (b) contract employees	Quantitative	Rate	TR0202-08
	Number of Federal Motor Carrier Safety Administration (FMCSA) Compliance, Safety, and Accountability (1) warning letters, (2) cooperative safety plans, (3) notice of violations, (4) notice of claims, (5) operations out-of-service orders	Quantitative	Number	TR0202-09

¹ Note to **TR0202-06**— Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Topic	Accounting Metric	Category	Unit of Measure	Code
	Number of aviation safety risks and hazardous situations and percentage attributable to: (1) aircraft issues, (2) human factors, (3) other	Quantitative	Number, Percentage (%)	TR0202-10
	Number of exceedances identified through Flight Operations Quality Assurance (FOQA) or Flight Data Monitoring (FDM)	Quantitative	Number	TR0202-11
	Number of governmental enforcements of aviation safety regulations	Quantitative	Number	TR0202-12

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Revenue-ton-miles for (1) road transport and (2) air transport ²	Quantitative	Ton-Miles	TR0202-A
Load factor for (1) road transport and (2) air transport ³	Quantitative	Miles	TR0202-B
Number of employees, number of truck drivers	Quantitative	Number	TR0202-C

²Note to **TR0202-A** – Revenue ton-mile (RTM) is defined as one ton of revenue traffic transported one mile. Revenue ton-miles are computed by multiplying the aircraft-miles flown on each flight stage by the number of pounds of revenue traffic carried on that flight stage and converted to ton-miles by dividing total revenue pound-miles by 2,000 pounds.

³Note to **TR0202-B** – Load factor is a measure of capacity utilization and is calculated as cargo miles travelled divided by total miles traveled.

Environmental Footprint of Fuel Use

Description

The primary greenhouse gas generating activities of the Air Freight and Logistics industry include the combustion of jet fuel in aircrafts and diesel in trucks. International Panel on Climate Change (IPCC) data indicates that around six percent of greenhouse gases come from aviation, which includes both passenger airlines and air freight. Over 99 percent of airline emissions are in the form of carbon dioxide. On a relative basis, the trucking industry's GHG emissions are the highest overall for the transportation sector, comprising 22.1 percent of total transportation emissions in 2012. Emissions comprise of carbon dioxide, sulphur dioxide, nitrogen oxides, and particulate matters. Managing 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 through reduced fuel costs, while also limiting exposure to volatile fuel pricing, future regulatory costs, and other consequences of greenhouse gas emissions. While newer aircraft and trucks are more fuel-efficient, existing ones may be retrofitted for efficiency and reducing 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 greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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 (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, 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").⁴
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁵
- .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 if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.

⁴ "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).

⁵ 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. *Climate Change Reporting Framework*, CDSB.

- .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 if data are from continuous emissions-monitoring systems (CEMS), engineering calculations, mass-balance calculations, etc.

TR0202-02. Total fuel consumed, percentage renewable for (1) road transport and (2) air transport

- .08 The registrant shall disclose total fuel consumption from all sources as an aggregate figure in gigajoules or its multiples, broken down for (1) road transportation related operations and (2) air transport related operations.
- 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.
- .09 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).
- .10 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.
- .11 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.
- .12 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 that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.
- .13 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).

TR0202-03. Air emissions for the following pollutants: NO_x, SO_x, and particulate matter

- .14 The registrant shall disclose its emissions released in the atmosphere of air pollutants associated with air freight and logistics operations, including direct air emissions from stationary or mobile sources
- .15 The registrant shall disclose emissions released to the atmosphere from oil and natural gas operations by types of emissions. Substances include:
- Oxides of nitrogen (including NO and NO₂ and excluding N₂O), reported as NO₂;
 - Oxides of sulphur (SO₂ and SO₃) reported as SO₂;
 - Particulate matter (PM); reported as the sum of PM₁₀ and PM_{2.5}, or all particulates less than 10 micrometers in diameter
- .16 This scope does not include CO₂, methane, and nitrous oxide, which are disclosed in TR0401-01, as Scope 1 GHG emissions.
- .17 Air emissions data shall be consolidated, according to the approach with which the registrant consolidates its financial reporting data; this is aligned with the consolidation approach used for TR0202-01.
- .18 The registrant should discuss the calculation methodology for its emission disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.

TR0202-04. Average fleet fuel economy

- .19 The registrant shall disclose the fuel economy of its fleet in gallons per 1,000 ton-miles, as an average of all active vehicles in its fleet.
- .20 The scope of disclosure includes vehicles in the fleet weighing 8,500 pounds or more and which are covered under the Heavy Duty (HD) National Program in the U.S., including combination tractors (commonly known as semi-trucks), heavy-duty pick-up trucks and vans, and vocational vehicles.
- .21 The scope of disclosure shall exclude all vehicles in its fleet with a gross vehicle weight of 8,500 pounds or less and/or are regulated under U.S. CAFE standards for passenger vehicles and light trucks or under another country or regional vehicle fuel economy standard for passenger or light commercial vehicles (LCV).

- .22 The registrant shall calculate its fleet fuel economy as the harmonic mean of fuel efficiency (gallons / 1,000 ton-miles), where:
- The harmonic mean is calculated as the reciprocal of the average of the reciprocals.

Notes

Additional References:

Definitions:

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 "regular" employees. Here companies may face legal actions for misclassifying independent contractors. Changing state laws that require companies to treat certain contractors like employees have the potential impact labor costs in terms of additional wages and benefits.

Accounting Metrics

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

- .23 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.
- .24 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.
- .25 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 HRIS system of record 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).
 - Full time equivalent (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

- .26 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).
- .27 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

- .28 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.
- .29 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.

Notes

Additional References:

Society of Human Resources Management (SHRM) [Guidelines for Reporting on Human Capital to Investors](#), Draft American National Standard, October 5, 2012

Accident & Safety Management

Description

Transportation has inherent dangers related to accidents resulting from mechanical failure or human error. Companies in this industry take measures to train vehicle operators and maintenance staff to minimize accidents. Additionally, the moving of 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 industry.

Accounting Metrics

TR0202-07. Number of accidents and incidents for (1) road transport and (2) aviation

- .30 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](#) 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 which results in an 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.
- .31 The registrant shall disclose the total number of aviation accidents and incidents, where each is defined according to Federal Rule 49 Code of Federal Regulations [830.5, Section 830.2](#):
- An aircraft accident is defined as an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.
 - An incident is defined as an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.
- .32 At a minimum, the scope of disclosure includes accidents and incidents reported to the U.S. Federal Aviation Administration and/or National Transportation Safety Board or equivalent national authority.

TR0202-08. (1) Total Recordable Injury Rate, (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full time employees and (b) contract employees

- .33 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.
- .34 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.
- .35 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident where no property or environmental damage or personal injury occurred, but where 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.
- .36 The registrant shall disclose its TRIR and NMFR 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.).

- .37 The scope includes all employees, domestic and foreign.
- .38 Rates shall be calculated as: (statistic count / total hours worked)*200,000.

TR0202-09. Number of Federal Motor Carrier Safety Administration (FMCSA) Compliance, Safety, and Accountability (1) warning letters, (2) cooperative safety plans, (3) notice of violations, (4) notice of claims, (5) operations out-of-service orders

- .39 The registrant shall disclose the number of FMCSA Compliance, Safety, and Accountability (CSA) interventions in the following categories:
- Warning Letters, which are defined as correspondence sent to a carrier's place of business that specifically identifies an alerted Behavior Analysis and Safety Improvement Category (BASIC) and outlines possible consequences of continued safety problems.
 - Cooperative Safety Plans, which are defined as safety improvement plans that are voluntarily implemented by the carrier where the carrier and FMCSA collaboratively create a plan based on a standard template to address the underlying problems resulting from the carrier's substandard safety performance.
 - Notice of violations (NOV), which are defined as formal notices of safety alerts that requires a response from the carrier. NOVs are used when the regulatory violations discovered are severe enough to warrant formal action but not a civil penalty (i.e., a fine) and in cases where the violation is immediately correctable and the level of, or desire for, cooperation is high.
 - Notice of Claims (NOC), which are issued in cases where the regulatory violations are severe enough to warrant assessment and issuance of civil penalties.
 - Operations out-of-service orders (OOS), which are defined as orders requiring the carrier to cease all motor vehicle operations.

TR0202-10. Number of aviation safety risks and hazardous situations and percentage attributable to: (1) aircraft issues, (2) human factors, (3) other

- .40 The registrant shall disclose the number of safety risks and hazardous situations, where are broadly defined as any existing or potential condition that can lead to an accident or incident.
- .41 The scope of disclosure includes risks and situations that were identified by the registrant's Safety Management System (SMS), reported through the Aviation Safety Action Program or Aviation Safety Reporting System, and recorded through other voluntary programs.
- .42 The registrant shall disclose the percentage of risks and situations that were primarily attributable to aircraft issues, such as malfunction or failure of aircraft equipment or issues with aircraft design and engineering.
- .43 The registrant shall disclose the percentage of risks and situations that were primarily attributable to human factors, which include, as adapted from Aviation Safety Reporting System: communication breakdown, confusion, distraction, fatigue, human-machine interface, physiological (other), situational awareness, time pressure, training/qualification, troubleshooting, workload, or other/unknown.
- .44 The registrant shall disclose the percentage of risks and situations that were primarily attributable to other factors which, as adapted from Aviation Safety Reporting System categories, include: airport, airspace structure, air traffic control equipment, charts, company policy, non-weather environmental, equipment or tooling, incorrect/not installed/unavailable parts, logbook entry, manual, procedures, staffing, weather, minimum equipment list (MEL), or ambiguous/unknown.

TR0202-11. Number of exceedances identified through Flight Operations Quality Assurance (FOQA) or Flight Data Monitoring (FDM)

- .45 The registrant shall disclose the number of instances when Flight Operations Quality Assurance (FOQA) or Flight Data Monitoring (FDM) systems identified an exceedance of parameters, threshold values, and/or routine operational measurements that have been specified by the registrant though operational standards or established by an aircraft manufacturer's operating limitations.
- .46 The registrant may choose to additionally disclose the percentage of exceedances by event category, level of risk posed, those receiving investigation and remediation, or some other breakdown

TR0202-12. Number of governmental enforcements of aviation safety regulations

- .47 The registrant shall disclose the number of enforcements from the U.S. Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA) or 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.
- .48 The scope of disclosure includes the following enforcement actions: civil penalties, consent order, certificate suspension, and certificate revocation.

Notes

Notes:

Additional References:

[Total Motor Vehicle Incident Rate](#), American Petroleum Institute, Rev. 11/2010



Marine Transportation

SICST™ #TR0301

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Marine Transportation Sustainability Accounting Standard

About SASB

The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards for use by publicly-listed corporations in the U.S. in disclosing material sustainability issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards please, [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Marine Transportation (TR0301)

Industry Description

The Marine Transportation industry consists of companies that provide deep-sea, coastal, and river-way freight shipping services. Companies in the industry use dry cargo ships, tankers, and specialized ships to transport containerized and bulk freight, including consumer goods and a wide range of commodities. 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 have to navigate many legal and regulatory frameworks.

Table 1. Material Sustainability 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
	Median fleet World Port Climate Initiative (WPCI) Environmental Ship Index (ESI) score	Quantitative	Number	TR0301-02
	Total fuel consumed, percentage from heavy fuel oil, and percentage from renewables	Quantitative	Gigajoules, Percentage (%)	TR0301-03
	Fleet Energy Efficiency Design Index (EEDI)	Quantitative	Grams of CO ₂ per ton-nautical mile	TR0301-04
Ecological Impacts	Percentage of fleet in compliance with International Convention for the Control and Management of Ships' Ballast Water and Sediments	Quantitative	Percentage	TR0301-05
	Number and aggregate volume of spills or releases to the environment	Quantitative	Number, volume (m ³)	TR0301-06
	Description of policies and procedures to maintain compliance with Annexes I-VI of the International Convention for the Prevention of Pollution from Ships (MARPOL)	Discussion and Analysis	n/a	TR0301-07
Business Ethics	Percentage of Time Charter Equivalent (TCE) from voyages originating or terminating in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Percentage in U.S. Dollars (\$)	TR0301-08
	Amount of legal and regulatory fines and settlements associated with bribery or corruption ¹	Quantitative	U.S. Dollars (\$)	TR0301-09
	Number of accidents and incidents ²	Quantitative	Number	TR0301-10

¹ Note to **TR0301-09**— Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

² Note to **TR0301-10**— Disclosure shall include a description of serious marine accidents, outcomes, and corrective actions implemented in response.

Topic	Accounting Metric	Category	Unit of Measure	Code
Accident & Safety Management	(1) Total Recordable Injury Rate and (2) Near Miss Frequency Rate for (a) full time employees and (b) contract employees	Quantitative	Rate	TR0301-11
	Number of Conditions of Class or Recommendations	Quantitative	Number	TR0301-12
	Number of port state control (1) deficiencies and (2) detentions	Quantitative	Number	TR0301-13
	Description of Safety Management System (SMS) to maintain compliance with the International Convention for the Safety of Life at Sea (SOLAS)	Discussion and Analysis	n/a	TR0301-14

Table 2. Activity Metrics

Activity Level

Accounting Metric	Category	Unit of Measure	Code
Seagoing personnel ³	Quantitative	Number	TR0301-A
Nautical miles	Quantitative	Nautical miles (nm)	TR0301-B
Operating Days ⁴	Quantitative	Number of days	TR0301-C
Deadweight tonnage ⁵	Quantitative	Thousands of deadweight tons	TR0301-D
Total shipping fleet	Quantitative	Number	TR0301-E

³ Note to **TR0301-A**– Seagoing personnel is the number of employees working aboard the registrant’s vessels.

⁴ Note to **TR0301-C**– 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 days in a period during which vessels actually generate revenue).

⁵ Note to **TR0301-D**– 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.

Environmental Footprint of Fuel Use

Description

On a relative basis, the marine shipping industry is the most efficient of the major transportation modes in terms of fuel use per ton shipped. However, the industry still generates about three percent of global greenhouse gas emissions. Marine Transportation companies generate emissions primarily from the combustion of diesel fuel in ship engines. This impacts the air quality in port areas and other populated regions around water ways. The industry's reliance on heavy bunker fuel is of material concern due to intensifying greenhouse gas regulation and rising fuel costs. Biofuels can also substantially reduce the harmful emissions in the air, like criteria air pollutants when compared to fossil fuels. Fuel outlays represent approximately 50 percent of costs. In an industry with inherently low margins, costly equipment upgrades, combined with variable fuel prices, can severely impact profitability.

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 greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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 (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, 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").⁶
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁷
- .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 if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.

⁶ "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).

⁷ 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. *Climate Change Reporting Framework*, CDSB.

- .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 if data is from continuous emissions-monitoring systems (CEMS), engineering calculations, mass-balance calculations, etc.

TR0301-02. Median fleet World Port Climate Initiative (WPCI) Environmental Ship Index (ESI) score

- .08 The registrant shall calculate the Environmental Ship Index (ESI) score for its vessel fleet and disclose the median score, where:
 - ESI is a calculation developed by the World Port Climate Initiative (WPCI) to evaluate the amount of nitrogen oxide (NO_x) and sulphur oxide (SO_x), and carbon dioxide (CO₂) that is released by a ship and account for the use of an onboard power supply (OPS).
- .09 ESI shall be calculated according to WPCI methodologies as: $([ESI\ NO_x * 2] + ESI\ SO_x + ESI\ CO_2 + OPS)$ divided by (3.1), where:
 - $ESI\ NO_x = (100 / \text{rate power } \Sigma \text{ of all engines}) * ([NO_x \text{ limit value}] - [NO_x \text{ rating}] * [\text{rated power}] / [NO_x \text{ limit value}] \Sigma \text{ of all engines})$.
 - $ESI = ESI\ SO_x = x * 30 + y * 35 + z * 35$, where x = the relative reduction of the average sulphur content of HFO, y = the relative reduction of the average sulphur content of HFO LS and/or MDO/Gasoil, and z = the relative reduction of the average sulphur content of MDO/Gasoil LS.
 - ESI CO₂ is equal to 10 ESI sub-points if the registrant performs voluntary reporting on two of the EEOI data sets for fuel consumption and distance sailed according to Guidelines for Voluntary Use of the Ship Energy Efficiency Operational Indicator (MEPC.1/Circ.684).
 - OPS is equal to 35 sub-points if the ship is fitted with an installation that would allow power supply from the shore and capable of taking the vessel's full load when carrying out cargo operations. The installation is in addition to a standard shore power breaker for use during repair periods. Classification Societies typically include such an installation in the ship's electrical plan/manual and/or issue a separate OPS certificate. Where such an installation is fitted, the ship board power generators can - and in some ports will - be switched off when the ship is at berth in a port.
- .10 The registrants shall disclose scores for its vessels as they are reported in the WPCI List of Participating ships.
 - For vessels not listed by the WPCI the registrant shall calculate the ESI according to WPCI guidelines and formulae.

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

- .11 The registrant shall disclose total fuel consumption from all sources as an aggregate figure in gigajoules or its 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.
- .12 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).
- .13 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.
- .14 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.
- .02 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 that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.
- .15 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).
- .16 The registrant shall calculate the percentage of fuel 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 per U.S. Energy Information Administration as heavier oils that remain after distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and 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.

TR0301-04. Median Fleet Energy Efficiency Design Index (EEDI)

- .18 The registrant shall calculate the EEDI for each vessel in its fleet and report the median EEDI value in grams CO₂ per ton-nautical mile.
- .19 EEDI is calculated as: $(\text{power installed} * \text{specific fuel consumption} * \text{carbon conversion}) / (\text{available capacity} * \text{design speed})$, reported in grams of carbon dioxide per tons-nautical miles.
- .20 The registrant shall follow calculation methodologies outline in IMO MEPC.1/Circ. 681 [Interim Guidelines on the Method of Calculation of the Energy Efficiency Design Index for New Ships](#).
- .21 SASB recognizes that the International Maritime Organization (IMO) has adopted EEDI as a metric for ships built after 2013, however, for the purposes of this disclosure EEDI shall apply to the registrant’s entire vehicle fleet.

Notes

Definitions:

--

Additional References:

--

Ecological Impacts

Description

Marine Transportation operations, spills, and waste disposal can create substantial environmental externalities such as water pollution and the disturbance of marine ecosystem. Seagoing vessels generate significant water and waste pollution in the normal course of operations. Vessels routinely discharge ballast water, bilge water, and untreated sewage. The spread of invasive species from ballast water exchange is considered one of the world's greatest ecological and economic threats, according to the International Maritime Organization. Non-organic waste, like metals and plastics, can persist on the sea surface for long periods of time and are hazardous to birds and marine life. Discharging untreated waste and accidental spills can result in fines and legal actions against companies. Compliance with international regulations around managing ecological impacts of operation can require significant capital expenditures to upgrade or install waste management systems.

Accounting Metrics

TR0301-05. Percentage of fleet in compliance with International Convention for the Control and Management of Ships' Ballast Water and Sediments

- .22 The registrant shall calculate the percentage as the number of ships in its fleet that are in full compliance with International Maritime Organization International's Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) divided by the total number of ships in its fleet.
- .23 A ship is considered in full compliance with the BWM Convention if, at a minimum, it has:
 - A ballast water management system approved by the Flag Administration taking into account the Guidelines for approval of ballast water management systems per IMO Regulation D-3;
 - A ship-specific Ballast Water Management Plan approved by the applicable Flag Administration;
 - A Ballast Water Record Book;
 - Ballast water exchange conforming with IMO Regulation D-1;
 - An approved ballast water treatment system per IMO Regulation D-2; and
 - An International Ballast Water Management Certificate.
- .24 Alternatively, for the purposes of this disclosure, a ship may demonstrate compliance with the BWM Convention if has a U.S. Coast Guard (USCG) approved ballast water treatment system (BWTS).
- .25 In a ship demonstrates that is uses of water from public water supply as ballast, discharges ballast water to a reception facility, or conduct no ballast water discharge then for the purposes of this disclosure it is considered in compliance with the BWM Contention.

TR0301-06. Number and aggregate volume of spills and releases to the environment

- .26 The registrant shall disclose the total number of spills and releases to the environment and the aggregate volume of these releases in cubic meters.
- .27 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:
 - 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;
 - 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.
- .28 Spills and releases include releases overboard to the environment that are intentional or accidental include:
 - 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)

- .29 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.
- .30 Where relevant, the registrant should provide a breakdown of spills and releases of by type, such as: (1) hydrocarbons, (3) hazardous substances, and (3) MARPOL Annex II noxious liquid substances.
- .31 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 great than 24 nautical miles from shore).

TR0301-07. Description of policies and procedures to maintain compliance with Annexes I-VI of the International Convention for the Prevention of Pollution from Ships (MARPOL)

- .32 The registrant shall provide a description of its policies and practices to maintain compliance with Annexes I-VI of MARPOL including, where relevant: employee training and awareness programs, internal mechanisms for reporting and following up on suspected violations, implementation of equipment and technology, inspections and audits, third-party certification and verification of systems.
- .33 It may be relevant for the registrant to discuss participation in MARPOL compliance audits and/or certification programs and the U.S. Coast Guard's Environmental Crimes Voluntary Disclosure Programs (including the use of a compliance management system).

Notes

Definitions:

--

Additional References:

--

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. These 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 willful or unintentional participation in illegal or unethical payments to government officials or in unfairly influencing them through gifts or other means. Operating in corruption-prone countries can exacerbate risk.

Accounting Metrics

TR0301-08. Percentage of Time Charter Equivalent (TCE) from voyages originating or terminating in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index

- .34 The registrant shall calculate the TCE from voyages originating or terminating 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 via Transparency International's publicly accessible [website](#).
- .35 Time charter equivalent (TCE) shall be calculated as total voyage revenues less total voyage expenses divided by total round trip duration (in days).
- .36 The percentage shall be calculated as TCE from the identified voyages divided by the total TCE for the registrant's vessel fleet.

TR0301-09. Amount of legal and regulatory fines and settlements associated with bribery or corruption.

- .37 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 Department of Justice or the Securities and Exchange Commission.
- .38 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 TR0301-09

- .39 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.
- .40 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.
- .41 All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself would not compromise the registrant's ability to maintain data privacy and security.

Notes

Definitions:

--

Accident & Safety Management

Description

Marine Transportation employees face dangers including hazardous weather at sea and exposure to large machinery and heavy cargo. The greatest risks to their health and safety stem from unloading and loading cargo at ports. Ships must be loaded and unloaded quickly and on schedule, increasing injury risk, fatigue, and stress. Costs in life, environment, and property can be significant when there are accidents involving large vessels. 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 and class renewal surveys conducted by classification societies (nongovernmental organizations who establish technical and operational standards for ships). Ship's officers are responsible for the safe maneuvering of vessels and delivery of cargo. In addition to mechanical failures, human factors have also resulted in ship grounding, sinking, and release of hazardous cargo. Negative media attention and massive cleanup costs can severely damage a company's finances.

Accounting Metrics

TR0301-10. Number of accidents and incidents

- .42 The registrant shall disclose the total number marine incidents and accidents in which it fleet was involved.
- .43 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 which includes:
 - Any accidental grounding, or any occurrence involving a vessel which results in damage by or to the vessel, its apparel, gear, or cargo, or injury or loss of life of any person; and includes among other things, collisions, strandings, groundings, founderings, heavy weather damage, fires, explosions, failure of gear and equipment and any other damage which might affect or impair the seaworthiness, efficiency, or fitness of the vessel, or any incident involving significant harm to the environment (as defined in 46 CFR 4.03-65).

Note to TR0301-10

- .44 The registrant shall describe serious marine accidents, including their root causes, outcomes, and any corrective actions implemented in response.
- .45 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 which results in:
 - A marine casualty or accident which results in any of the following:
 - One or more deaths;
 - An injury to a crewmember, passenger, or other person which 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.

TR0301-11. (1) Total Recordable Injury Rate and (2) Near Miss Frequency Rate for (a) full time employees and (b) contract employees

- .46 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its total recordable injury rate (TRIR), 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.

- .47 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.
- .48 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident where no property or environmental damage or personal injury occurred, but where 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.
- .49 The registrant shall disclose its TRIR and NMFR 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.).
- .50 The scope includes all employees, domestic and foreign.
- .51 Rates shall be calculated as: (statistic count / total hours worked)*200,000.

TR0301-12. Number of Conditions of Class or Recommendations

- .52 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.
- .53 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 and include:
 - 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
- .54 The registrant shall disclose conditions of class regardless of whether they resulted in withdrawal, suspension, or invalidation of a vessel's Class certificate.

TR0301-13. Number of port state control (1) deficiencies and (2) detentions

- .55 The registrant shall disclose the number of deficiencies it has received from regional port state control (PSC) organizations, where:
 - A deficiency 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); and
 - International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS),
- .56 The registrant shall disclose the number of detentions it has received from regional port state control (PSC) organizations, where:
 - A detention is defined as an intervention action taken by the port State when the condition of the ship or its crew does not correspond substantially with the applicable conventions to ensure 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 will affect the normal schedule of the departure of the ship.
- .57 The scope of disclosure includes deficiencies and detentions issued by PSC organizations that are signatories to memoranda of understanding (MoU) of regional port state control (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.

TR0301-14. Description of Safety Management System (SMS) to maintain compliance with the International Convention for the Safety of Life at Sea (SOLAS)

- .58 The registrant shall describe the implementation of a Safety Management System (SMS) that, at a minimum, allows the registrant to maintain compliance with the provisions of the SOLAS Convention.
- .59 An SMS refers to a structured and documented system enabling the registrant's personnel to implement effectively the registrant's safety and environmental protection policy and, at a minimum, ensures compliance with mandatory rules and regulations and that applicable codes, guidelines and standards recommended by the registrant, Flag Administrations, classification societies, and maritime industry organizations are taken into account. SMSs should include the following functional requirements:
- A safety and environmental-protection policy;
 - Instructions and procedures to ensure safe operation of ships and protection of the environment in compliance with relevant international and flag State legislation;
 - Defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;
 - Procedures for reporting accidents and non-conformities with the provisions of this IMO codes;
 - Procedures to prepare for and respond to emergency situations; and
 - Procedures for internal audits and management reviews.
- .60 The registrant may choose to disclose how its SMS maintains standards for the safe construction, equipment, and operations of ships beyond the minimum requirements in the SOLAS Convention.

Notes

Definitions:

--

Additional References:

--



Rail Transportation

SICST™ #TR0401

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment



SASB

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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards please, [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Rail Transportation (TR0401)

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 own, maintain, and operate their rail networks. Contractual agreements allow government entities and rail companies to share tracks. As air emissions and fuel efficiency become greater concerns, the Rail Transportation industry is playing an increasingly important role in North American freight transportation. This is because it is among the most efficient and least polluting forms of land transportation.

Table 1. Material Sustainability 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
	Air emissions for the following pollutants: NO _x , SO _x , and particulate matter	Quantitative	Metric tons	TR0401-02
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules, Percentage (%)	TR0401-03
Competitive Behavior	Amount of legal and regulatory fines and settlements associated with anti-competitive practices ¹	Quantitative	U.S. dollars (\$)	TR0401-04
Accident & Safety Management	Number of accidents and incidents	Quantitative	Number	TR0401-05
	(1) Total Recordable Injury Rate, (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full time employees and (b) contract employees	Quantitative	Rate	TR0401-06
	Number of (1) accident releases and (2) non-accident releases (NARs) ²	Quantitative	Number	TR0401-07
	Number of Federal Rail Administration (FRA) recommended violation defects	Quantitative	Number	TR0401-08
	Frequency of internal railway integrity inspections ³	Quantitative	Inspections per week	TR0401-09

¹ Note to **TR0401-04** – Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

² Note to **TR0401-07** – Disclosure shall include a discussion.

³ Note to **TR0401-09** – Disclosure shall include, where relevant, a discussion of rail maintenance practices and operating precautions additional to inspections.

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Number of carloads originated ⁴	Quantitative	Number	TR0401-A
Number of intermodal units transported ⁵	Quantitative	Number	TR0401-B
Track miles ⁶	Quantitative	Miles	TR0401-C
Revenue ton-miles ⁷	Quantitative	RTM	TR0401-D

⁴ Note to **TR0401-A** – Carloads include shipment of freight that is not containerized.

⁵ Note to **TR0401-B** – Intermodal units include both shipping containers and truck trailers that can be transported across modes of transportation.

⁶ 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.

⁷ Note to **TR0401-D** – Revenue ton-miles are calculated by multiplying the weight of shipment by the number of miles transported, for paid tonnage only.

Environmental Footprint of Fuel Use

Description

While rail is a fuel-efficient and lower-emission transportation option, combustion of diesel generates greenhouse gases and impacts local air quality through emissions of criteria air pollutants such as, nitrogen oxides, sulphur oxides, and particulate matter. Fuel has been the fastest-growing industry cost. The industry's reliance on diesel is of material concern due to intensifying greenhouse gas regulations and rising fuel costs.

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 greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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 (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, 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").⁸
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁹
- .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 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.

⁸ "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).

⁹ 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. *Climate Change Reporting Framework*, CDSB.

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

TR0401-02. Air emissions for the following pollutants: NO_x, SO_x, and particulate matter

- .08 The registrant shall disclose its emissions released in 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).
- .09 The registrant shall disclose emissions released to the atmosphere from oil and natural gas operations by types of emissions, such as:
- Oxides of nitrogen (including NO and NO₂ and excluding N₂O), reported as NO₂;
 - Oxides of sulphur (SO₂ and SO₃) reported as SO₂;
 - Particulate matter (PM); reported as the sum of PM₁₀ and PM_{2.5}, or all particulates less than 10 micrometers in diameter
- .10 This scope does not include CO₂, methane, and nitrous oxide, which are disclosed in TR0401-01, as Scope 1 GHG emissions.
- .11 Air emissions data shall be consolidated, according to the approach with which the registrant consolidates its financial reporting data; this is aligned with the consolidation approach used for TR0401-01.
- .12 The registrant should discuss the calculation methodology for its emission disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.

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 its 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 are 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).

Notes

Definitions:

--

Additional References:

--

Competitive Behavior

Description

Barriers to entry, like high capital expenditures associated with building rail networks, make the industry a candidate for natural monopolies. As a result, the industry is highly concentrated with few dominant market players. Rail companies face heightened risks from anti-trust laws and customer and regulatory concerns over practices affecting pricing and access to services. Competitive business practices are an important governance issue for the industry. Companies face potential material impacts from government action, which can present challenges to future revenue growth and may limit the ability to grow by acquisitions.

Accounting Metrics

TR0401-04. Amount of legal and regulatory fines and settlements associated with anti-competitive practices

- .19 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, anti-trust behavior (e.g., exclusivity contracts), patent misuse, or network effects and bundling of services and products to limit competition including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.
- .20 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 TR0401-04

- .21 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, anti-trust, etc.) of fines and settlements.
- .22 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.

Notes

Definitions:

--

Additional References:

--

Accident & Safety Management

Description

Accident & Safety Management includes policies and checks designed to minimize safety risks to employees, local communities, and the environment. Costs in life, environment, and property can be significant when there are rail accidents, particularly those involving spills of hazardous materials. Analysis of the causes of major accidents often point to a failure of organizational structures to flag, communicate, and take actions on risks, lack of a safety culture in the organization, inadequate learning from prior events, and lack of internal communication due to operational siloes. A strong safety culture and a thorough and systematic approach to safety, risk management, and operational integrity are essential to avoiding costly rail accidents.

Accounting Metrics

TR0401-05. Number of accidents and incidents

- .23 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 and causing reportable damage above an established threshold; impacts between railroad on-track equipment and highway users at crossings; and all other incidents or exposures that cause a fatality or injury to any person, or an occupational illness to a railroad employee.
- .24 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 and include 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 a rail and highway user (both motor vehicles and other users of the crossing as a designated crossing site, including 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 incident grade crossing incident.

TR0401-06. (1) Total Recordable Injury Rate, (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full time employees and (b) contract employees

- .25 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.
- .26 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.
- .27 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident where no property or environmental damage or personal injury occurred, but where 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.
- .28 The registrant shall disclose its TRIR and NMFR 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.).
- .29 The scope includes all employees, domestic and foreign.
- .30 Rates shall be calculated as: (statistic count / total hours worked)*200,000.

TR0401-07. Number of (1) accident releases and (2) non-accident releases (NARs)

- .31 The registrant shall disclose the total number of accident releases of hazardous material and the total number of non-accident releases (NARs) of hazardous materials, 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 DOT 5800.1 report form that occurred during an accident or incident disclosed according to TR0401-05.
 - 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 a derailment, collision or other rail related accident. 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.)
- .32 Where relevant, the registrant should provide a breakdown of spills and releases of by type, such as: (1) hydrocarbons, (3) hazardous substances.

Note to TR0401-07

- .33 The registrant shall discuss its processes, procedures, and strategies to manage non-accident and accident releases.
- .34 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, use of safety technologies, employee training, implementation of work shift limits, and safe-arrival pay incentives.

TR0401-08. Number of Federal Rail Administration (FRA) recommended violation defects

- .35 The registrant shall disclose the number recommendation violation defects resulting from the FRA or State inspections or audits, and summarized in the FRA's Annual Enforcement Report.
- .36 The scope of disclosure includes violations defects for any safety related issue including those related to accident reporting, grade crossing signal safety, hazardous materials 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.
- .37 The scope of disclosure includes violation defects that both did and did not result in civil penalties.

TR0401-09. Frequency of internal railway integrity inspections

- .38 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.
 - The scope of disclosure excludes track other than main track.
- .39 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: $(\text{the sum for all track of weekly inspections} * \text{miles of track on which they took place}) / (\text{total main track miles})$
- .40 The registrant should to discuss the frequency of its inspections in relation to the following FRA requirements:
- If the track carries 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 three calendar day's interval between inspections, or before use.

Note to **TR0401-09**

- .41 The registrant, where relevant, shall discuss rail maintenance practices and operating precautions that it implements additional to inspections.
- .42 Relevant topics of discussion include, but are not limited to, the use of management systems, use of safety technologies, employee training.
- .43 Relevant measures to discuss include optimization of tank car design, increased frequency of inspections, additional monitoring equipment, strengthening emergency response capabilities through sharing of relevant information with communities, training support, and mutual aid intervention protocols.
- .44 Relevant technologies to discuss may include: Positive Train Control (PTC) technology, wayside detectors, wheel profile monitors, acoustic detectors, track geometry cars, advanced track grinding-reduce rail fatigue, improved track lubrication techniques, and electronically controlled pneumatic brakes.

Notes

Definitions:

--

Additional References:

--



Road Transportation

SICST™ #TR0402

Prepared by the
Sustainability Accounting Standards Board ®

April 2014
Exposure Draft for Public Comment

SASB

Road 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 issues 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 and is accredited to set standards by the American National Standards Institute (ANSI).

SASB is developing standards for more than 80 industries in 10 sectors. SASB's standards-setting process includes evidence-based analysis with in-depth industry research and engagement with a broad range of stakeholders.

The end result of this process is the creation of a complete, industry-specific accounting standard which accurately reflects the material issues for each industry.

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 Friday, April 18, 2014, and ending on Wednesday, July 17, 2014. This Standard is subject to change thereafter.

For instructions on providing comments to SASB, please [click here](#).

For an introduction to SASB Standards, please [click here](#).

Sustainability Accounting Standards Board

75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

SASB Legal Publications Disclaimer: The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent and to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.

SASB Sustainability Accounting Standard

Road Transportation (TR0402)

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. The truckload market is highly fragmented, while a few less-than-truckload companies control high market share. 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.

Table 1. Material Sustainability 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
	Air emissions for the following pollutants: NO _x , SO _x , and particulate matter	Quantitative	Metric tons	TR0402-02
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules, Percentage (%)	TR0402-03
	Average fleet fuel economy	Quantitative	Gallons fuel per 1,000 ton-mile	TR0402-04
Working Conditions & Driver Retention	New drivers hired and annual target for new pilot hiring ¹	Quantitative	Number	TR0402-05
	Employee turnover by (1) voluntary and (2) involuntary for all employees	Quantitative	Rate	TR0402-06
	Percentage of drivers who are classified as independent contractors	Quantitative	Percentage (%)	TR0402-07
	Amount of legal and regulatory fines and settlements associated with labor law violations ²	Quantitative	U.S. Dollars (\$)	TR0402-08
	Description of management approach to both short-term (acute) and long-term (chronic) health risks	Discussion and Analysis	n/a	TR0402-09

¹ Note to **TR0402-05** – Disclosure shall include a discussion of hiring constraints and the registrant’s strategy to attract and retain drivers.

² Note to **TR0402-08**– Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Accident & Safety Management	Number of accidents and incidents ³	Quantitative	Number	TR0402-10
	(1) Total Recordable Injury Rate, (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full time employees and (b) contract employees	Quantitative	Rate	TR0402-11
	Number of Federal Motor Carrier Safety Administration (FMCSA) Compliance, Safety, and Accountability (1) warning letters, (2) cooperative safety plans, (3) notice of violations, (4) notice of claims, (5) operations out-of-service orders	Quantitative	Number	TR0402-12
	Number and aggregate volume of spills and releases to the environment	Quantitative	Number, Volume (m ³)	TR0402-13

Table 2. Activity Metrics

Accounting Metric	Category	Unit of Measure	Code
Revenue-ton-miles ⁴	Quantitative	Revenue-ton miles (RTM)	TR0402-A
Load factor ⁵	Quantitative	Miles	TR0402-B
Number of employees, number of drivers	Quantitative	Number	TR0402-C
Number of vehicles in fleet	Quantitative	Number	TR0402-D

³ Note to **TR0402-10** – Disclosure shall include a description of events, outcomes, and corrective actions implemented in response.

⁴ 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 driven on each trip segment by the number of pounds of revenue traffic carried on that trip segment and converted to ton-miles by dividing total revenue pound-miles by 2,000 pounds.

⁵ Note to **TR0402-B** – Load factor is a measure of capacity utilization and is calculated as cargo miles travelled divided by total miles traveled.

Environmental Footprint of Fuel Use

Description

The Road Transportation industry's contribution to transportation greenhouse gas emissions are the highest, comprising 22.1 percent of total transportation emissions in 2012. Emissions from the combustion of diesel comprise of carbon dioxide, sulphur dioxide, nitrogen oxides, and particulate matters. Fuel is the industry's largest cost, representing approximately 37 percent of revenue. Managing the environmental impacts of fuel usage includes both fuel efficiency and the use of alternative fuels. This also offers an effective way for companies to increase profits through reduced fuel costs, while also limiting exposure to volatile fuel pricing, future regulatory costs, and other consequences of greenhouse gas emissions. While newer trucks are more fuel-efficient, existing ones may be retrofitted for efficiency and reducing emissions.

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 greenhouse gases covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur 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 global warming potential 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 (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, 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").⁶
 - The approach detailed in Section 4.23 "Organizational boundary setting for GHG emissions reporting" of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF).⁷
- .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 if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.

⁶ "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).

⁷ 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. *Climate Change Reporting Framework*, CDSB.

- .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 if data are from continuous emissions-monitoring systems (CEMS), engineering calculations, mass-balance calculations, etc.

TR0402-02. Air emissions, in metric tons, for the following pollutants: NO_x, SO_x, and particulate matter

- .08 The registrant shall disclose its emissions released to the atmosphere of air pollutants associated with its activities (e.g., refining through primary production):
- Direct air emissions from stationary or mobiles sources that include, but are not limited to, truck fleets, office buildings, and moveable equipment
- .09 The registrant shall disclose emissions released to the atmosphere by emissions type. Substances include:
- Oxides of nitrogen (including NO and NO₂ and excluding N₂O) reported as NO_x;
 - Oxides of sulfur (SO₂ and SO₃) reported as SO_x;
 - Particulate matter (PM); reported as the sum of PM₁₀ and PM_{2.5}, or all particulates less than 10 micrometers in diameter;
- .10 This scope does not include CO₂, methane, and nitrous oxide, which are disclosed in NR0302-01, as Scope 1 GHG emissions.
- .11 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.
- .12 The registrant should discuss the calculation methodology for its emission disclosure, such as if data are from continuous emissions-monitoring systems (CEMS), engineering calculations, mass-balance calculations, etc.

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 its 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), 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.
- .02 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 that are Green-e Energy certified or eligible for a state Renewable Portfolio Standard.
- .17 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. Average fleet fuel economy

- .18 The registrant shall disclose the fuel economy of its fleet in gallons per 1,000 ton-miles, as an average of all active vehicles in its fleet.
- .19 The scope of disclosure includes vehicles in the fleet weighing 8,500 pounds or more and which are covered under the Heavy Duty (HD) National Program in the U.S., including combination tractors (commonly known as semi-trucks), heavy-duty pick trucks and vans, and vocational vehicles.
- .20 The scope of disclosure shall exclude all vehicles in its fleet with a gross vehicle weight of 8,500 pounds or less, and/or are regulated under U.S. CAFE standards for passenger vehicles and light trucks or under another country or regional vehicle fuel economy standards for passenger or light commercial vehicles (LCV).
- .21 The registrant shall calculate its fleet fuel economy as the harmonic mean of fuel efficiency (gallons / 1,000 ton-miles), where:

- The harmonic mean is calculated as the reciprocal of the average of the reciprocals.

Notes

Definitions:

--

Additional References:

--

Working Conditions & Driver Retention

Description

Protecting the health and safety of the approximately four million U.S. truck drivers is of material concern to their employers. Pressing schedules demand long and often odd hours behind the wheel, lengthy stays away from home, lack of sleep, and isolation. The high turnover rates and growing shortage of skilled drivers are in part fueled by these issues. Additionally, 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. Changing state laws are requiring companies to treat contractors like employees, and have the potential to impact labor costs in terms of additional wages and benefits.

Accounting Metrics

TR0402-05. New drivers hired and annual target for new pilot hiring

- .22 The registrant shall disclose the number of drivers it hired during the past fiscal year including both direct, regular driver and third-party drivers.
 - Regular, direct drivers include all full-time and part-time employees whose status group in the Human Resources Information System (HRIS) of record 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).
- .23 The registrant shall disclose a projection of future hiring needs measured by the number of drivers it intends to hire by the close of the next fiscal year.
- .24 At a minimum the projection should account for the establishment of new routes, typical employee turnover, impacts of shift limitations, and company growth.
- .25 The registrant may choose to additionally disclose hiring targets for drivers over a longer term, such as over the following three to five years.

Note to TR0402-05

- .26 The registrant shall discuss constraints it faces with regards to hiring drivers, such as, but not limited to, difficulty in finding qualified personnel, trends in number and quality of applicants, or competition for talent against competitors.
- .27 The registrant should discuss its efforts to attract and retain drivers which may include increasing recruiting efforts, improvements to comfort of driving, increasing internal feedback mechanisms to address driver concerns, wellness programs to promote physical and mental health, reduction of minimum qualifications, and financial incentives (e.g., bonuses, improved wages).

TR0402-06. Employee turnover by (1) voluntary and (2) involuntary for all employees

- .28 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).
- .29 The registrant shall disclose its annual involuntary turnover rate which is 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).

TR0402-07. Percentage of drivers who are classified as independent contractors

- .30 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.
- .31 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.
- .32 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 HRIS system of record 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).
 - Full time equivalent (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).

TR0402-08. Amount of legal and regulatory fines and settlements associated with labor law violations

- .01 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).
- .02 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 TR0402-08

- .33 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.
- .34 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.

TR0402-09. Description of management approach to both short-term (acute) and long-term (chronic) health risks

- .35 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.
- .36 The registrant shall describe management approach in the context of short term (i.e., acute risks) and long term (i.e., chronic) risks.
- .37 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).
- .38 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.
- .39 The scope of employees shall focus on truck drivers but should discuss other employees as relevant.

Notes

Additional References:

Society of Human Resources Management (SHRM) [Guidelines for Reporting on Human Capital to Investors](#), Draft American National Standard, October 5, 2012

Accident & Safety Management

Description

The Road Transportation industry has inherent dangers related to accidents, either due to human error or mechanical failure. Of the various modes of transportation, a vast majority of accidents involving hazardous material can be attributed to road transportation. Statistics from the Bureau of Labor Statistics indicate that the fatal occupational injury rate for workers in the truck transportation industry is high. Companies in this industry take measures to train vehicle operators and maintenance staff of proper procedures to minimize accidents. Evidence of accident rates, costs, and safety technologies supports the material significance of safety management for the industry.

Accounting Metrics

TR0402-10 Number of accidents and incidents

- .40 The registrant shall disclose the total number of road transportation-related accidents and incidents, where:
- 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.
 - Incident is defined as any event involving a licensed motor vehicle while on business use which results in an 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.⁸

Note to TR0402-10

- .41 The registrant shall describe significant accidents, including their root cause, outcomes, and corrective actions implemented in response (e.g., technology improvements, driver training, etc.).

TR0402-11. (1) Total Recordable Injury Rate, (2) Fatality Rate, and (3) Near Miss Frequency 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 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.
- .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 near miss frequency rate (NMFR), where a near miss is defined as an incident where no property or environmental damage or personal injury occurred, but where 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.
- .45 The registrant shall disclose its TRIR and NMFR 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.).
- .46 The scope includes all employees, domestic and foreign.

⁸ Definitions based on guidance provided by ANSI D15.1-1976. Available on-line 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>

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

TR0402-12. Number of Federal Motor Carrier Safety Administration (FMCSA) Compliance, Safety, and Accountability (1) warning letters, (2) cooperative safety plans, (3) notice of violations, (4) notice of claims, (5) operations out-of-service orders

.48 The registrant shall disclose the number of FMCSA Compliance, Safety, and Accountability (CSA) interventions in the following categories:

- Warning Letters, which are defined as correspondence sent to a carrier's place of business that specifically identifies an alerted Behavior Analysis and Safety Improvement Category (BASIC) and outlines possible consequences of continued safety problems.
- Cooperative Safety Plans, which are defined as safety improvement plans that are voluntarily implemented by the carrier where the carrier and FMCSA collaboratively create a plan based on a standard template to address the underlying problems resulting from the carrier's substandard safety performance.
- Notice of Violations (NOV), which are defined as formal notices of safety alerts that requires a response from the carrier. NOVs are used when the regulatory violations discovered are severe enough to warrant formal action but not a civil penalty (i.e., a fine) and in cases where the violation is immediately correctable and the level of, or desire for, cooperation is high.
- Notice of Claims (NOC), which are issued in cases where the regulatory violations are severe enough to warrant assessment and issuance of civil penalties.
- Operations out-of-service orders (OOS), which are defined as orders requiring the carrier to cease all motor vehicle operations.

TR0402-13. Number and aggregate volume of spills and releases to the environment

.49 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 DOT 5800.1 report form that occurred during an accident or incident disclosed according to TR0402-10.
- The scope of disclosure includes releases to the environment.

.50 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.

.51 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.

.52 Where relevant, the registrant should provide a breakdown of spills and releases of by type, such as: (1) hydrocarbons, (3) hazardous substances.

Notes

Additional References:

[Total Motor Vehicle Incident Rate](#), American Petroleum Institute, Rev. 11/2010