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Introduction

The International Sustainability Standards Board (ISSB) is developing the global baseline for sustainability disclosures focused on the needs of investors and the financial markets. For this, the ISSB is building on the work of market-led investor-focused reporting initiatives, including the Climate Disclosure Standards Board, the Task Force for Climate-related Financial Disclosures, the Value Reporting Foundation's Integrated Reporting Framework and industry-based SASB Standards.

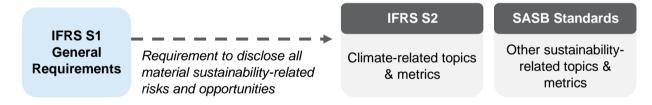
The ISSB's work is backed by the G7, the G20, the International Organization of Securities Commission (IOSCO), the Financial Stability Board, African Finance Ministers and by Finance Ministers and Central Bank Governors from over 40 jurisdictions.

In 2022, ISSB issued exposure drafts of initial two IFRS Sustainability Disclosure Standards (IFRS S1, General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2, Climate-related Disclosures). ISSB has, now finalized IFRS S1 and IFRS S2, and expects to issue finalized standards by the end of June 2023. These standards will be effective from January 2024.

IOSCO, which is an association of organizations that regulate the world's securities and futures markets, will review the ISSB issued Standards for endorsement. The endorsement of IOSCO will encourage adoption of ISSB issued Standards by the regulators of jurisdictions. SECP is a member of IOSCO. In Pakistan, ISSB-issued Standards will become effective after their implementation by a regulator.

Role of SASB Standards in IFRS Sustainability Disclosure Standards

IFRS S1 will require entities to disclose all material sustainability-related risks and opportunities. For this reporting, the SASB Standards will serve as a primary source of guidance. Entities will be required to consider and apply SASB Standards in order to meet IFRS S1 requirements. These Standards will help entities produce relevant and comparable disclosures about their environmental, social, and governance risks and opportunities.



SASB Standards are industry-based standards

The SASB Standards were developed and published by the Sustainability Accounting Standards Board, in 2018. The SASB Standards consist of 77 industry-based standards containing disclosure requirements for sustainability-related financial information in each industry.

The SASB Standards have been developed with the understanding that all sustainability issues do not matter equally to each industry. The environmental, social and governance issues that impact the financial performance vary for the industry.

Each SASB Standard contains disclosure topics focused on specific sustainability-related risks or opportunities likely to be relevant to preparers within a given industry, as well as metrics associated with each disclosure topic providing specific information requirements.

Entities can use the SASB Standards to better identify, manage, and communicate to investors sustainability information that is financially material. The SASB Standards also help investors as they require sustainability reporting that is comparable, consistent, and financially material, thereby enabling investors to make better investment and voting decisions.

Overview of SASB Standards

Organized by individual industries, each SASB Standard comprises of:

- a) an industry description describing the scope of business activities covered;
- b) a set of disclosure topics and related summaries describing likely sustainability-related risks or opportunities that industry entities manage;
- c) one or more metrics associated with each disclosure topic measuring entity performance relating to the disclosure topic; and
- d) a set technical protocols for each metric containing definitions, guidance and other details regarding how entities should develop and disclose material, decision-useful information.

Sustainability-related risks and opportunities may manifest differently depending on each entity's business model. Therefore, each industry standard contains a unique set of disclosure topics. It is also pertinent to mention that many disclosure topics involve sustainability-related risks and opportunities broadly relevant to multiple industries (for example, hazardous waste management). Resultantly, metrics for similar disclosure topics may be similar or even identical across multiple industry standards to improve comparability.

ISSB stewardship

As mentioned earlier, SASB Standards serve important roles in the initial set of IFRS Sustainability Disclosure Standards expected to be issued in June 2023. The SASB Standards are now under the oversight of the ISSB.

Certain metrics and disclosures of extant SASB Standards contain references and requirements applicable and relevant to the United States only. As ISSB is developing the global baseline for sustainability reporting, it has initiated the project to ensure the international applicability of the SASB Standards. The objective of the project is to establish that the SASB Standards can be used by preparers internationally. ISSB has started this project in a manner that avoids changing the substance of the disclosures required. It is expected that 80% of the existing SASB Standards disclosure would remain the same. 20% of the of the extant disclosures are expected to be revised to make SASB Standards more internationally applicable and GAAP-agnostic without altering the intent or underlying concepts of any specific disclosure topic or metric.

Purpose of this publication

The purpose of publishing 'Sustainability Disclosures – SASB Industry Standards' is to provide stakeholders with a complete and comprehensive disclosure guide of SASB Standards. This guide is based on the SASB Standards, covering all 77 industries with their descriptions, sustainability disclosure topics and accounting metric tables. It is expected that the publication will help stakeholders in understanding and focusing on the sustainability disclosures relevant to a specific industry.

The link to official SASB website has also been provided for reference and further reading of SASB Standards.

Note: The Column "Code" in the metric table provides a reference of detailed paragraphs published for further clarification of the user.

Farrukh Rehman

Chairman Accounting Standards Board Sohail Malik Senior Director Technical Department

1. SASB Standards for Consumer Goods

- a. Apparel, Accessories and Footwear
- b. Appliance Manufacturing
- c. Building Products & Furnishings
- d. E-Commerce
- e. Household & Personal Products
- f. Multiline and Specialty Retailers & Distributors
- g. Toys & Sporting Goods

a. Apparel, Accessories & Footwear

Industry Description

The Apparel, Accessories & Footwear industry includes companies involved in the design, manufacturing, wholesaling, and retailing of various products, including men's, women's, and children's clothing, handbags, jewelry, watches, and footwear. Products are largely manufactured by vendors in emerging markets, thereby allowing companies in the industry to primarily focus on design, wholesaling, marketing, supply chain management, and retail activities.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Management of Chemicals in	Discussion of processes to maintain compliance with restricted substances regulations	Discussion and Analysis	n/a	CG-AA-250a.1
Products	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Discussion and Analysis	n/a	CG-AA-250a.2
Environmental	Percentage of (1) Tier 1 supplier facilities and (2) supplier facilities beyond Tier 1 in compliance with wastewater discharge permits and/or contractual agreement ²	Quantitative	Percentage (%)	CG-AA-430a.1
Impacts in the Supply Chain	Percentage of (1) Tier 1 supplier facilities and (2) supplier facilities beyond Tier 1 that have completed the Sustainable Apparel Coalition's Higg Facility Environmental Module (Higg FEM) assessment or an equivalent environmental data assessment	Quantitative	Percentage (%)	CG-AA-430a.2
Labor	Percentage of (1) Tier 1 supplier facilities and (2) supplier facilities beyond Tier 1 that have been audited to a labor code of conduct, (3) percentage of total audits conducted by a third-party auditor	Quantitative	Percentage (%)	CG-AA-430b.1
Conditions in the Supply Chain	Priority non-conformance rate and associated corrective action rate for suppliers' labor code of conduct audits ³	Quantitative	Rate	CG-AA-430b.2
	Description of the greatest (1) labor and (2) environmental, health, and safety risks in the supply chain	Discussion and Analysis	n/a	CG-AA-430b.3
Raw Materials Sourcing	(1) List of priority raw materials; for each priority raw materials (2) environmental and/or social factor(s) most likely to threaten sourcing, (3) discussion on business risks and/or opportunities associated with environmental and/or social factors, and (4) management strategy for addressing business risks and opportunities	Discussion and Analysis	n/a	CG-AA-440a.3
	(1) Amount of priority raw materials purchased, by material, and (2) amount of each priority raw material that is certified to a third-party environmental and/or social standard, by standard	Quantitative	Metric tons (t)	CG-AA-440a.4

Note to CG-AA-430a.1 – The entity shall discuss its supply chain risks associated with discharge of water from supplier facilities and describe how it manages these risks.
Note to CG-AA-430b.2 – Disclosure shall include a discussion of additional context around supply chain auditing, such as audit

For more information, visit:

https://www.sasb.org/wp-

content/uploads/2018/11/Apparel Accessories Footwear Standard 2022.pdf

Note to CG-AA-430b.2 — Disclosure shall include a discussion of additional context around supply chain auditing, such as audit methodologies and supply chain transparency.

b. Appliance Manufacturing

Industry Description

The Appliance Manufacturing industry includes companies involved in the design and manufacturing of household appliances and hand tools. The industry sells and manufactures products around the world, primarily selling products to consumers through retail locations.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Number of (1) recalls issued and (2) total units recalled ²	Quantitative	Number	CG-AM-250a.1
Product Safety	Discussion of process to identify and manage safety risks associated with the use of its products	Discussion and Analysis	n/a	CG-AM-250a.2
	Total amount of monetary losses as a result of legal proceedings associated with product safety ^a	Quantitative	Reporting currency	CG-AM-250a.3
	Percentage of eligible products by revenue certified to the ENERGY STAR® program	Quantitative	Percentage (%) by revenue	CG-AM-410a.1
Product Lifecycle Environmental Impacts	Percentage of eligible products certified to an Association of Home Appliance Manufacturers (AHAM) sustainability standard	Quantitative	Percentage (%) by revenue	CG-AM-410a.2
	Description of efforts to manage products' end-of-life impacts	Discussion and Analysis	n/a	CG-AM-410a.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Appliance_Manufacturing_Standard_2018.pdf

c. Building Products & Furnishings

Industry Description

The Building Products & Furnishings industry comprises companies involved in the design and manufacturing of home improvement products, home and office furnishings, and structural wood building materials. The industry's products include flooring, ceiling tiles, home and office furniture and fixtures, wood trusses, plywood, paneling, and lumber. Companies typically sell their products through distribution channels to retail stores or through independent or company owned dealerships.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management in Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CG-BF-130a.1
Management of	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Discussion and Analysis	n/a	CG-BF-250a.1
Chemicals in Products	Percentage of eligible products meeting volatile organic compound (VOC) emissions and content standards	Quantitative	Percentage (%) by revenue	CG-8F-250a.2
Product Lifecycle	Description of efforts to manage product lifecycle impacts and meet demand for sustainable products	Discussion and Analysis	r/a	CG-BF-410a.1
Environmental Impacts	(1) Weight of end-of-life material recovered, (2) percentage of recovered materials recycled	Quantitative	Metric tons (t), Percentage (%) by weight	CG-BF-410a.2
Wood Supply Chain Management	(1) Total weight of wood fiber materials purchased, (2) percentage from third-party certified forestlands, (3) percentage by standard, and (4) percentage certified to other wood fiber standards, (5) percentage by standard	Quantitative	Metric tons (t), Percentage (%) by weight	CG-8F-430a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Building Products Furnishings Standard 2018.pdf

d. E-Commerce

Industry Description

The E-Commerce industry is composed of firms that provide an online marketplace for other firms or individuals to sell their goods and services, as well as retailers and wholesalers that provide an exclusively web-based platform for consumers to buy goods and services. Firms in this industry sell to consumers as well as to other businesses. Because of the accessibility of e-commerce sites, the industry is a global marketplace for buyers and sellers. Note: The industry scope exclusively applies to "pure-play" e-commerce operations and does not address the manufacturing or brick-and-mortar retail operations of companies. Many consumer goods manufacturers and retailers have incorporated, or are in the process of incorporating, an e-commerce component to their business. SASB has separate standards for the Multiline and Specialty Retailers & Distributors (CG-MR); Apparel, Accessories & Footwear (CG-AA); and Toys & Sporting Goods (CG-TS) industries. Depending on the specific activities and operations of firms in the aforementioned industries, disclosure topics and accounting metrics associated with the E-Commerce industry standard may also be relevant.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CG-EC-130a.1
Hardware Infrastructure Energy & Water	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	CG-EC-130a.2
Management	Discussion of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	n/a	CG-EC-130a.3
Data Privacy &	Number of users whose information is used for secondary purposes	Quantitative	Number	CG-EC-220a.1
Advertising Standards	Description of policies and practices relating to behavioral advertising and user privacy	Discussion and Analysis	n/a	CG-EC-220a.2
	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	CG-EC-230a.1
Data Security	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected ²	Quantitative	Number, Percentage (%)	CG-EC-230a.2
	Employee engagement as a percentage ³	Quantitative	Percentage (%)	CG-EC-330a.1
Employee	(1) Voluntary and (2) involuntary turnover rate for all employees	Quantitative	Rate	CG-EC-330a.2
Recruitment, Inclusion & Performance	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees ⁴	Quantitative	Percentage (%)	CG-EC-330a.3
	Percentage of technical employees who are H- 1B visa holders	Quantitative	Percentage (%)	CG-EC-330a.4
Product	Total greenhouse gas (GHG) footprint of product shipments	Quantitative	Metric tons (t) CO ₂ -e	CG-EC-410a.1
Packaging & Distribution	Discussion of strategies to reduce the environmental impact of product delivery	Discussion and Analysis	n/a	CG-EC-410a.2

² Note to CG-EC-230a.2- Disclosures shall include a description of corrective actions implemented in response to data breaches.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/E_Commerce_Standard_2018.pdf

Note to CG-EC-330a.1— Disclosure shall include a description of the methodology employed.

⁴ Note to CG-EC-330a.3— The entity shall discuss its policies and programs for fostering equitable employee representation across its global operations.

e. Household & Personal Products

Industry Description

The Household & Personal Products industry comprises companies that manufacture a wide range of goods for personal and commercial consumption, including cosmetics, household and industrial cleaning supplies, soaps and detergents, sanitary paper products, household batteries, razors, and kitchen utensils. Household and personal products companies operate globally and typically sell their products to mass merchants, grocery stores, membership club stores, drug stores, high-frequency stores, distributors, and e-commerce retailers. Some companies sell products through independent representatives rather than third-party retail establishments.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Water	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	CG-HP-140a.1
Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	CG-HP-140a.2
	Revenue from products that contain REACH substances of very high concern (SVHC)	Quantitative	Reporting currency	CG-HP-250a.1
Product Environmental, Health, and	Revenue from products that contain substances on the California DTSC Candidate Chemicals List	Quantitative	Reporting currency	CG-HP-250a.2
Safety Performance	Discussion of process to identify and manage emerging materials and chemicals of concern	Discussion and Analysis	n/a	CG-HP-250a.3
	Revenue from products designed with green chemistry principles	Quantitative	Reporting currency	CG-HP-250a.4
Packaging Lifecycle	(1) Total weight of packaging, (2) percentage made from recycled and/or renewable materials, and (3) percentage that is recyclable, reusable, and/or compostable	Quantitative	Metric tons (t), Percentage (%)	CG-HP-410a.1
Management	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	CG-HP-410a.2
Environmental & Social Impacts of Palm Oil Supply Chain	Amount of palm oil sourced, percentage certified through the Roundtable on Sustainable Palm Oil (RSPO) supply chains as (a) Identity Preserved, (b) Segregated, (c) Mass Balance, or (d) Book & Claim	Quantitative	Metric tons (t), Percentage (%)	CG-HP-430a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Household Personal Products Standard 2018.pdf

f. Multiline and Specialty Retailers & Distributors

Industry Description

The Multiline and Specialty Retailers & Distributors industry encompasses a variety of retailing categories such as department stores, mass merchants, home products stores, and warehouse clubs, as well as a smaller segment of distributors like electronics wholesalers and automotive wholesalers. Common to these companies (except for the distribution segment) is that they manage global supply chains to anticipate consumer demands, keep costs low, and keep products stocked in their brick-and-mortar storefronts. This is a highly competitive industry, in which each company category generally has a small number of key players, characterized by generally low margins. The relatively substitutable nature of retail makes companies in this industry especially susceptible to reputational risks.

Note: SASB has separate standards for the Food Retailers & Distributors (FB-FR), Drug Retailers (HC-DR), E-Commerce (CG-EC), and Apparel, Accessories & Footwear (CG-AA) industries. Retail companies involved in food or drug retail, ecommerce, or apparel, accessories, and footwear manufacturing should also consider the disclosure topics and metrics outlined in these other standards.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management in Retail & Distribution	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CG-MR-130a.1
	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	CG-MR-230a.1
Data Security	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected	Quantitative	Number, Percentage (%)	CG-MR-230a.2
	(1) Average hourly wage and (2) percentage of in-store employees earning minimum wage, by region	Quantitative	Reporting currency, Percentage (%)	CG-MR-310a.1
Labor Practices	(1) Voluntary and (2) involuntary turnover rate for in-store employees	Quantitative	Rate	CG-MR-310a.2
	Total amount of monetary losses as a result of legal proceedings associated with labor law violations ³	Quantitative	Reporting currency	CG-MR-310a.3
Workforce	Percentage of gender and racial/ethnic group representation for (1) management and (2) all other employees ⁴	Quantitative	Percentage (%)	CG-MR-330a.1
Diversity & Inclusion	Total amount of monetary losses as a result of legal proceedings associated with employment discrimination ⁵	Quantitative	Reporting currency	CG-MR-330a.2
Product Sourcing, Packaging & Marketing	Revenue from products third-party certified to environmental and/or social sustainability standards	Quantitative	Reporting currency	CG-MR-410a.1
	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Discussion and Analysis	n/a	CG-MR-410a.2
	Discussion of strategies to reduce the environmental impact of packaging	Discussion and Analysis	n/a	CG-MR-410a.3

Note to CG-MR-230a.2—Disclosure shall include a description of corrective actions implemented in response to data breaches.

Note to CG-MR-310a.3—The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

For more information, visit:

https://www.sasb.org/wp-

content/uploads/2018/11/Multiline and Specialty Retailers Distributors Standard 2018.pdf

monetary losses.

Note to CG-MR-330a.1—The entity shall describe its policies and programs for fostering equitable employee representation across its

global operations.

Note to CG-MR-330a.2— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

g. Toys & Sporting Goods

Industry Description

The Toys & Sporting Goods industry comprises two distinct segments that produce leisure products: companies that manufacture toys and games, and companies that manufacture sporting and athletic goods, such as bicycles, golf clubs, fitness equipment, and other similar products. Companies in this industry primarily sell their products to consumers through retail stores. The level of manufacturing integration varies among and within segments of the industry; manufacturing is based primarily in Asia, with China accounting for a majority of production.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Number of (1) recalls and (2) total units recalled ²	Quantitative	Number	CG-TS-250a.1
	Number of Letters of Advice (LOA) received	Quantitative	Number	CG-TS-250a.2
Chemical & Safety Hazards of Products	Total amount of monetary losses as a result of legal proceedings associated with product safety ³	Quantitative	Reporting currency	CG-TS-250a.3
	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Discussion and Analysis	n/a	CG-TS-250a.4
Fabrus	Number of facilities audited to a social responsibility code of conduct	Quantitative	Number	CG-TS-430a.1
Labor Conditions in the Supply Chain	Direct suppliers' social responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances'	Quantitative	Rate	CG-TS-430a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Toys_Sporting_Goods_Standard_2018.pdf

2. SASB Standards for Extractives & Minerals Processing

- a. Coal Operations
- b. Construction Minerals
- c. Iron & Steel Producers
- d. Metals & Mining
- e. Oil & Gas Exploration & Production
- f. Oil & Gas Midstream
- g. Oil & Gas Refining & Marketing
- h. Oil & Gas Services

a. Coal Operations

Industry Description

The Coal Operations industry includes companies that mine coal and those that manufacture coal products. Mining activity covers both underground and surface mining, and thermal and metallurgical coal.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-CO-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-CO-110a.2
Water	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-CO-140a.1
Management	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	EM-CO-140a.2
	Total weight of non-mineral waste generated	Quantitative	Metric tons (t)	EM-CO-150a.2
	Total weight of tailings produced	Quantitative	Metric tons (t)	EM-CO-150a.3
	Total weight of waste rock generated	Quantitative	Metric tons (t)	EM-CO-150a.4
Waste	Total weight of hazardous waste generated	Quantitative	Metric tons (t)	EM-CO-150a.5
Management	Total weight of hazardous waste recycled	Quantitative	Metric tons (t)	EM-CO-150a.6
	Number of significant incidents associated with hazardous waste management	Quantitative	Number	EM-CO-150a.7
	Description of waste management policies and procedures for active and inactive operations	Discussion and Analysis	n/a	EM-CO-150a.8
	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	EM-CO-160a.1
Biodiversity Impacts	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	Quantitative	Percentage (%)	EM-CO-160a.2
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Percentage (%)	EM-CO-160a.3
Rights of	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Quantitative	Percentage (%)	EM-CO-210a.1
Indigenous Peoples	Discussion of engagement processes and due diligence practices with respect to the management of indigenous rights	Discussion and Analysis	n/a	EM-CO-210a.2

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	n/a	EM-CO-210b.1
	Number and duration of non-technical delays	Quantitative	Number, Days	EM-CO-210b.2
Labor Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	Quantitative	Percentage (%)	EM-CO-310a.1
	Number and duration of strikes and lockouts ²	Quantitative	Number, Days	EM-CO-310a.2
Workforce	(1) MSHA All-Incidence rate, (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	Rate	EM-CO-320a.1
Health & Safety	Discussion of management of accident and safety risks and long-term health and safety risks	Discussion and Analysis	n/a	EM-CO-320a.2
	Sensitivity of coal reserve levels to future price projection scenarios that account for a price on carbon emissions	Quantitative	Million metric tons (Mt)	EM-CO-420a.1
Reserves Valuation & Capital	Estimated carbon dioxide emissions embedded in proven coal reserves	Quantitative	Metric tons (t) CO ₂ -e	EM-CO-420a.2
Expenditures	Discussion of how price and demand for coal and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	Discussion and Analysis	n/a	EM-CO-420a.3
Tailings Storage Facilities Management	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	Quantitative	Various	EM-CO-540a.1
	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Discussion and Analysis	n/a	EM-CO-540a.2
	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Discussion and Analysis	n/a	EM-CO-540a.3

For more information, visit: https://www.sasb.org/wp-content/uploads/2018/11/Coal_Operations_Standard_2021.pdf

b. Construction Minerals

Industry Description

Construction materials companies have global operations and produce construction materials for sale to construction firms or wholesale distributors. These primarily include cement and aggregates, but also glass, plastic materials, insulation, bricks, and roofing material. Materials producers operate their own quarries, mining crushed stone or sand and gravel. They may also purchase raw materials from the mining and petroleum industries.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-CM-110a.1
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-CM-110a.2
Air Quality	Air emissions of the following pollutants: (1) NO _s (excluding N ₂ O), (2) SO _s , (3) particulate matter (PM ₁₀), (4) dioxins/furans, (5) volatile organic compounds (VOCs), (6) polycyclic aromatic hydrocarbons (PAHs), and (7) heavy metals	Quantitative	Metric tons (t)	EM-CM-120a.1
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage alternative, (4) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	EM-CM-130a.1
Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-CM-140a.1
Waste Management	Amount of waste generated, percentage hazardous, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	EM-CM-150a.1
Biodiversity	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	EM-CM-160a.1
Impacts	Terrestrial acreage disturbed, percentage of impacted area restored	Quantitative	Acres (ac), Percentage (%)	EM-CM-160a.2
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	Quantitative	Rate	EM-CM-320a.1
	Number of reported cases of silicosis ²	Quantitative	Number	EM-CM-320a.2
#01/04/07/2-	Percentage of products that qualify for credits in sustainable building design and construction certifications	Quantitative	Percentage (%) by annual sales revenue	EM-CM-410a.1
Product Innovation	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Quantitative	Reporting currency, Percentage (%)	EM-CM-410a.2

Note: Companies producing wood-building products are included the Building Products & Furnishings (CG-BF) industry, Forestry Management industry (RR-FM), and Pulp & Paper Products industry (RR-PP) under the Sustainable Industry Classification System (SICS) and are not included in the Construction Materials standard.

Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities ³	Quantitative	Reporting currency	EM-CM-520a.1
	activities, price tixing, and anti-trust activities		100000-000-000	

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Construction_Materials_Standard_2018.pdf

c. Iron & Steel Producers

Industry Description

The Iron & Steel Producers industry consists of steel producers with iron and steel mills and companies with iron and steel foundries. The steel producers segment consists of companies that produce iron and steel products from their own mills. These products include flat-rolled sheets, tin plates, pipes, tubes, and products made of stainless steel, titanium, and high alloy steels. Iron and steel foundries, which cast various products, typically purchase iron and steel from other firms. The industry also includes metal service centers and other metal merchant wholesalers, which distribute, import, or export ferrous products. Steel production occurs via two primary methods: the Basic Oxygen Furnace (BOF), which uses iron ore as an input, and the Electric Arc Furnace (EAF), which uses scrap steel. Many companies in the industry operate on an international scale. Note: With a few exceptions, most companies do not mine their own ore to manufacture steel and iron products. There are separate SASB standards for the Metals & Mining (EM-MM) industry.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-IS-110a.1
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-IS-110a.2
Air Emissions	Air emissions of the following pollutants: (1) CO, (2) NO $_x$ (excluding N $_2$ O), (3) SO $_x$, (4) particulate matter (PM $_{10}$), (5) manganese (MnO), (6) lead (Pb), (7) volatile organic compounds (VOCs), and (8) polycyclic aromatic hydrocarbons (PAHs)	Quantitative	Metric tons (t)	EM-IS-120a.1
24.111	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	EM-IS-130a.1
Energy Management	(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	EM-IS-130a.2
Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-IS-140a.1
Waste Management	Amount of waste generated, percentage hazardous, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	EM-IS-150a.1
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	Quantitative	Rate	EM-IS-320a.1
Supply Chain Management	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	Discussion and Analysis	n/a	EM-IS-430a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Iron_Steel_Producers_Standard_2018.pdf

d. Metals & Mining

Industry Description

The Metals & Mining industry is involved in extracting metals and minerals, producing ores, quarrying stones, smelting and manufacturing metals, refining metals, and providing mining support activities. It also produces iron ores, rare earth metals, and precious metals and stones. Larger companies in this industry are vertically integrated – from mining across global operations to wholesaling metals to customers.

Note: SASB has separate standards for the Iron & Steel Producers industry (EM-IS).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-MM-110a.1
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-MM-110a.2
Air Quality	Air emissions of the following pollutants: (1) CO, (2) NO _x (excluding N ₂ O), (3) SO _x , (4) particulate matter (PM ₁₀), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	Quantitative	Metric tons (t)	EM-MM-120a.1
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	EM-MM-130a.1
Water	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-MM-140a.1
Management	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	EM-MM-140a.2
	Total weight of non-mineral waste generated	Quantitative	Metric tons (t)	EM-MM-150a.4
	Total weight of tailings produced	Quantitative	Metric tons (t)	EM-MM-150a.5
	Total weight of waste rock generated	Quantitative	Metric tons (t)	EM-MM-150a.6
Waste &	Total weight of hazardous waste generated	Quantitative	Metric tons (t)	EM-MM-150a.7
Hazardous Materials	Total weight of hazardous waste recycled	Quantitative	Metric tons (t)	EM-MM-150a.8
Management	Number of significant incidents associated with hazardous materials and waste management	Quantitative	Number	EM-MM-150a.9
	Description of waste and hazardous materials management policies and procedures for active and inactive operations	Discussion and Analysis	n/a	EM-MM- 150a.10
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	EM-MM-160a.1
	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	Quantitative	Percentage (%)	EM-MM-160a.2

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Percentage (%)	EM-MM-160a.3
	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Quantitative	Percentage (%)	EM-MM-210a.1
Security, Human Rights & Rights	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Quantitative	Percentage (%)	EM-MM-210a.2
of Indigenous Peoples	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Discussion and Analysis	n/a	EM-MM-210a.3
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	n/a	EM-MM-210b.1
	Number and duration of non-technical delays	Quantitative	Number, Days	EM-MM-210b.2
Labor Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	Quantitative	Percentage (%)	EM-MM-310a.1
	Number and duration of strikes and lockouts ²	Quantitative	Number, Days	EM-MM-310a.2
Workforce Health & Safety	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	Quantitative	Rate	EM-MM-320a.1
Business Ethics	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	n/a	EM-MM-510a.1
& Transparency	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Metric tons (t) saleable	EM-MM-510a.2
Tailings Storage Facilities Management	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	Quantitative	Various	EM-MM-540a.1
	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Discussion and Analysis	n/a	EM-MM-540a.2

Note to EM-MM-310a.2 – Disclosure shall include a description of the root cause for each work stoppage.

	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Discussion and Analysis	n/a	EM-MM-540a.3
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For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Metals_Mining_Standard_2021.pdf

e. Oil & Gas - Exploration & Production

Industry Description

Oil & Gas - Exploration & Production (E&P) companies explore for, extract, or produce energy products such as crude oil and natural gas, which comprise the upstream operations of the oil and gas value chain. Companies in the industry develop conventional and unconventional oil and gas reserves; these include, but are not limited to, shale oil and/or gas reserves, oil sands, and gas hydrates. Activities covered by this standard include the development of both onshore and off-shore reserves. The E&P industry creates contracts with the Oil and Gas Services industry to conduct several E&P activities and to obtain equipment and oilfield services.

Note: The Standards discussed below are for "pure-play" E&P activities, or independent E&P companies. Integrated oil and gas companies conduct upstream operations but are also involved in the distribution and/or refining or marketing of products. SASB has separate standards for the Oil and Gas Midstream (EM-MD) and Refining & Marketing industries (EMRM). As such, integrated companies should also consider the disclosure topics and metrics from these standards. SASB also has separate standards for Oil and Gas Services (EM-SV).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Quantitative	Metric tons CO ₂ -e (t), Percentage (%)	EM-EP-110a.1
	Amount of gross global Scope 1 emissions from: (1) flared hydrocarbons, (2) other combustion, (3) process emissions, (4) other vented emissions, and (5) fugitive emissions	Quantitative	Metric tons CO ₂ -e	EM-EP-110a.2
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-EP-110a.3
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM ₁₀)	Quantitative	Metric tons (t)	EM-EP-120a.1
	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-EP-140a.1
Water Management	Volume of produced water and flowback generated; percentage (1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water	Quantitative	Thousand cubic meters (m³), Percentage (%), Metric tons (t)	EM-EP-140a.2
	Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used	Quantitative	Percentage (%)	EM-EP-140a.3
	Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline ²	Quantitative	Percentage (%)	EM-EP-140a.4
	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	EM-EP-160a.1
Biodiversity Impacts	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume impacting shorelines with ESI rankings 8-10, and volume recovered	Quantitative	Number, Barrels (bbls)	EM-EP-160a.2
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Percentage (%)	EM-EP-160a.3

Note to EM-EP-140a.4 - The entity shall disclose its policies and practices related to ground and surface water quality management.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Quantitative	Percentage (%)	EM-EP-210a.1
Security, Human Rights & Rights	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Quantitative	Percentage (%)	EM-EP-210a.2
of Indigenous Peoples	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Discussion and Analysis	n/a	EM-EP-210a.3
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	n/a	EM-EP-210b.1
	Number and duration of non-technical delays	Quantitative	Number, Days	EM-EP-210b.2
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), and (4) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees, and (c) short-service employees	Quantitative	Rate, Hours (h)	EM-EP-320a.1
	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle	Discussion and Analysis	n/a	EM-EP-320a.2
	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Quantitative	Million barrels (MMbbls), Million standard cubic feet (MMscf)	EM-EP-420a.1
Reserves Valuation &	Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves	Quantitative	Metric tons (t) CO ₂ -e	EM-EP-420a.2
Capital Expenditures	Amount invested in renewable energy, revenue generated by renewable energy sales	Quantitative	Reporting currency	EM-EP-420a.3
	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	Discussion and Analysis	n/a	EM-EP-420a.4
Business Ethics	Percentage of (1) proved and (2) probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Percentage (%)	EM-EP-510a.1
& Transparency	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	n/a	EM-EP-510a.2
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	EM-EP-530a.1
Critical Incident	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1)	Quantitative	Rate	EM-EP-540a.1
Management	Description of management systems used to identify and mitigate catastrophic and tail-end risks	Discussion and Analysis	n/a	EM-EP-540a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Oil_Gas_Exploration_Production_Standard_2018.pdf

f. Oil & Gas - Midstream

Industry Description

The Oil and Gas - Midstream industry consists of companies involved in the transportation or storage of natural gas, crude oil, and refined petroleum products. Midstream natural gas activities involve gathering, transport, and processing of natural gas from the wellhead, as well as the removal of impurities, production of natural gas liquids, storage, pipeline transport, and shipping, liquefaction, or regasification of liquefied natural gas. Midstream oil activities mainly involve transport of crude oil and refined products over land, using a network of pipes and pumping stations, as well as trucks and rail cars, and over seas and rivers via tanker ships or barges. Companies that operate bulk stations and terminals, as well as those that manufacture and install storage tanks and pipelines, are also part of this industry.

Note: The standards discussed below are for "pure-play" midstream activities or independent midstream companies. Integrated oil and gas companies may own or operate midstream operations, but are also involved in the upstream operations of the oil and gas value chain and in the refining or marketing of products. SASB has separate standards for the Oil and Gas Exploration & Production (EM-EP) and Refining & Marketing industries (EM-MD). As such, integrated companies should also consider the disclosure topics and metrics from these standards.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-MD-110a.1
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-MD-110a.2
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM ₁₀)	Quantitative	Metric tons (t)	EM-MD-120a.1
	Description of environmental management policies and practices for active operations	Discussion and Analysis	n/a	EM-MD-160a.1
Ecological	Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat	Quantitative	Percentage (%) by acreage	EM-MD-160a.2
Impacts	Terrestrial acreage disturbed, percentage of impacted area restored	Quantitative	Acres (ac), Percentage (%)	EM-MD-160a.3
	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume in Unusually Sensitive Areas (USAs), and volume recovered	Quantitative	Number, Barrels (bbls)	EM-MD-160a.4
Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations ²	Quantitative	Reporting currency	EM-MD-520a.1
	Number of reportable pipeline incidents, percentage significant	Quantitative	Number, Percentage (%)	EM-MD-540a.1
Operational	Percentage of (1) natural gas and (2) hazardous liquid pipelines inspected	Quantitative	Percentage (%)	EM-MD-540a.2
Safety, Emergency Preparedness & Response	Number of (1) accident releases and (2) non- accident releases (NARs) from rail transportation ³	Quantitative	Number	EM-MD-540a.3
	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles	Discussion and Analysis	n/a	EM-MD-540a.4

Note to EM-MD-520a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Oil_Gas_Midstream_Standard_2018.pdf

³ Note to EM-MD-540a.3 – Disclosure shall include a discussion of processes, procedures, and strategies to manage non-accident and accident releases.

g. Oil & Gas - Refining & Marketing

Industry Description

Oil & Gas - Refining & Marketing (R&M) companies refine petroleum products, market oil and gas products, and/ or operate gas stations and convenience stores, all of which comprise the downstream operations of the oil and gas value chain. The types of refinery products and crude oil inputs influence the complexity of the refining process used, with different expenditure needs and intensity of environmental and social impacts.

Note: The standards discussed below are for "pure-play" R&M activities, or independent R&M companies. Integrated oil and gas companies conduct upstream operations and are also involved in the distribution and/or refining or marketing of products. SASB has separate standards for the Oil and Gas Exploration & Production (EM-EP), and Midstream (EM-MD) industries. As such, integrated companies should also consider the disclosure topics and metrics from these standards.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-RM-110a.1
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-RM-110a.2
Air Quality	Air emissions of the following pollutants: (1) NO, (excluding N ₂ O), (2) SO ₃ , (3) particulate matter (PM ₁₀), (4) H ₂ S, and (5) volatile organic compounds (VOCs)	Quantitative	Metric tons (t)	EM-RM-120a.1
	Number of refineries in or near areas of dense population	Quantitative	Number	EM-RM-120a.2
Water	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m²), Percentage (%)	EM-RM-140a.1
Management	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	EM-RM-140a.2
	Amount of hazardous waste generated, percentage recycled ²	Quantitative	Metric tons (t), Percentage (%)	EM-RM-150a.1
Hazardous Materials Management	(1) Number of underground storage tanks (USTs), (2) number of UST releases requiring cleanup, and (3) percentage in states with UST financial assurance funds	Quantitative	Number, Percentage (%)	EM-RM-150a.2
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	Quantitative	Rate	EM-RM-320a.1
	Discussion of management systems used to integrate a culture of safety	Discussion and Analysis	n/a	EM-RM-320a.2
Product Specifications &	Percentage of Renewable Volume Obligation (RVO) met through: (1) production of renewable fuels; (2) purchase of "separated" renewable identification numbers (RIN)	Quantitative	Percentage (%)	EM-RM-410a.1
Clean Fuel Blends	Total addressable market and share of market for advanced biofuels and associated infrastructure	Quantitative	Reporting currency, Percentage (%)	EM-RM-410a.2

Note to EM-RM-150a.1 – The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with price fixing or price manipulation ³	Quantitative	Reporting currency	EM-RM-520a.1
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	EM-RM-530a.1
Critical Incident Risk Management	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1) and lesser consequence (Tier 2)	Quantitative	Rate	EM-RM-540a.1
	Challenges to Safety Systems indicator rate (Tier 3)	Quantitative	Rate	EM-RM-540a.2
	Discussion of measurement of Operating Discipline and Management System Performance through Tier 4 Indicators	Discussion and Analysis	n/a	EM-RM-540a.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Oil_Gas_Refining_Marketing_Standard_2018.pdf

h. Oil & Gas - Services

Industry Description

Oil and gas services companies provide support services, manufacture equipment, or are contract drillers for oil and natural gas exploration and production (E&P) companies. The drilling and drilling-support segment comprises companies that drill for oil and natural gas onshore and off-shore on a contract basis. Companies in this segment may also manufacture jack-up rigs, semisubmersible rigs, and drill ships. Companies in the oilfield services segment manufacture equipment that is used in the extraction, storage, and transportation of oil and natural gas. They also provide support services such as seismic surveying, equipment rental, well cementing, and well monitoring. These services are commonly provided on a contractual basis, and the customer will purchase or lease the materials and equipment from the service provider. Service companies may also provide personnel or subject matter expertise as part of their scope of service. The contractual relationship between oil and gas services companies and their customers plays a significant role in determining the material impacts of their sustainability performance. Besides the rates charged, companies compete on the basis of their operational and safety performance, technology and process offerings, and reputation.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Emissions Reduction Services & Fuels Management	Total fuel consumed, percentage renewable, percentage used in: (1) on-road equipment and vehicles and (2) off-road equipment	Quantitative	Gigajoules (GJ), Percentage (%)	EM-SV-110a.1
	Discussion of strategy or plans to address air emissions-related risks, opportunities, and impacts	Discussion and Analysis	n/a	EM-SV-110a.2
7	Percentage of engines in service that meet Tier 4 compliance for non-road diesel engine emissions	Quantitative	Percentage (%)	EM-SV-110a.3
Water	(1) Total volume of fresh water handled in operations, (2) percentage recycled	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-SV-140a.1
Management Services	Discussion of strategy or plans to address water consumption and disposal-related risks, opportunities, and impacts	Discussion and Analysis	n/a	EM-SV-140a.2
Chemicals	Volume of hydraulic fracturing fluid used, percentage hazardous	Quantitative	Thousand cubic meters (m³), Percentage (%)	EM-SV-150a.1
Management	Discussion of strategy or plans to address chemical-related risks, opportunities, and impacts	Discussion and Analysis	n/a	EM-SV-150a.2
Ecological	Average disturbed acreage per (1) oil and (2) gas well site	Quantitative	Acres (ac)	EM-SV-160a.1
Impact Management	Discussion of strategy or plan to address risks and opportunities related to ecological impacts from core activities	Discussion and Analysis	n/a	EM-SV-160a.2
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), (4) total vehicle incident rate (TVIR), and (5) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees, and (c) short-service employees	Quantitative	Rate	EM-SV-320a.1
	Description of management systems used to integrate a culture of safety throughout the value chain and project lifecycle	Discussion and Analysis	n/a	EM-SV-320a.2
Business Ethics & Payments Transparency	Amount of net revenue in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Reporting currency	EM-SV-510a.1

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	n/a	EM-SV-510a.2
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	EM-SV-530a.1
Critical Incident Risk Management	Description of management systems used to identify and mitigate catastrophic and tail-end risks	Discussion and Analysis	n/a	EM-SV-540a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Oil_Gas_Services_Standard_2018.pdf

3. SASB Standards for Financials

- a. Asset Management & Custody Activities
- b. Commercial Banks
- c. Consumer Finance
- d. Insurance
- e. Investment Banking & Brokerage
- f. Mortgage Finance
- g. Security & Commodity Exchanges

a. Asset Management & Custody Activities

Industry Description

The Asset Management & Custody Activities industry is comprised of companies that manage investment portfolios on a commission or fee basis for institutional, retail, and high net-worth investors. In addition, firms in this industry provide wealth management, private banking, financial planning, and investment advisory and retail securities brokerage services. Investment portfolios and strategies may be diversified across multiple asset classes, which include, but are not limited to, equities, fixed income, and hedge fund investments. Specific companies are engaged in venture capital and private equity investments. The industry provides an essential service in assisting a range of customers from individual retail investors to large, institutional asset owners to meet specified investment goals. Companies in the industry range from large multinational asset managers with a wide range of investable products, strategies, and asset classes to small boutique firms providing services to a very specific market niche. While large firms generally compete on the basis of management fees charged for their services as well as their potential to generate superior investment performance, the smaller firms generally compete on their ability to provide products and services geared towards individual clients to satisfy their diversification needs. The 2008 financial crisis and subsequent regulatory developments highlight the social impact of the industry in terms of providing fair advice to customers and managing risks at the entity, portfolio, and economy-wide levels. In addition, the collective impact of the industry on the allocation of capital creates a responsibility to integrate sustainability factors in investment decisions and management.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Transparent Information & Fair Advice for Customers	(1) Number and (2) percentage of covered employees with a record of investment-related investigations, consumer-initiated complaints, private civil litigations, or other regulatory proceedings ²	Quantitative	Number, Percentage (%)	FN-AC-270a.1
	Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of financial product- related information to new and returning customers ³	Quantitative	Reporting currency	FN-AC-270a.2
	Description of approach to informing customers about products and services	Discussion and Analysis	n/a	FN-AC-270a.3
Employee Diversity & Inclusion	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals, and (4) all other employees*	Quantitative	Percentage (%)	FN-AC-330a.1
Incorporation of Environmental, Social, and Governance Factors in Investment Management & Advisory	Amount of assets under management, by asset class, that employ (1) integration of environmental, social, and governance (ESG) issues, (2) sustainability themed investing, and (3) screening	Quantitative	Reporting currency	FN-AC-410a.1
	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment and/or wealth management processes and strategies	Discussion and Analysis	n/a	FN-AC-410a.2
	Description of proxy voting and investee engagement policies and procedures	Discussion and Analysis	n/a	FN-AC-410a.3
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations ⁵	Quantitative	Reporting currency	FN-AC-510a.1
	Description of whistleblower policies and procedures	Discussion and Analysis	n/a	FN-AC-510a.2

² Note to FN-AC-270a.1 – The entity shall describe how it ensures that covered employees file and update FINRA and SEC forms in a

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Asset Management Custody Activities Standard 2021.pdf

timely manner.

3 Note to FN-AC-270a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

monetary losses.

Note to FM-AC-330a.1 – The entity shall describe its policies and programs for fostering equitable employee representation across its plant approximant.

global operations.

Note to FN-AC-510a.1 — The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

b. **Commercial Banks**

Industry Description

Commercial banks accept deposits and make loans to individuals and corporations as well as engage in lending for infrastructure, real estate, and other projects. By providing these services, the industry serves an essential role in the functioning of global economies and in facilitating the transfer of financial resources to their most productive capacity. The industry is driven by the volume of deposits, quality of loans made, the economic environment, and interest rates. It is further characterized by risk from mismatched assets and liabilities. The regulatory environment that governs the commercial banking industry saw significant changes in the wake of the financial crisis of 2008 and continues to evolve today. These and other regulatory trends have the potential to impact shareholder value and sustainability performance. Commercial banks with global operations must manage new regulations in multiple jurisdictions that are creating regulatory uncertainty, particularly around consistent application of new rules.

Note: The SASB Commercial Banks (FN-CB) Standard addresses "pure play" commercial banking services, which the SASB recognizes may not include all the activities of integrated financial institutions, such as investment banking and brokerage services, mortgage finance, consumer finance, asset management and custody services, and insurance. Separate SASB accounting standards are available that address the sustainability issues for activities in those industries.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Data Security	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of account holders affected	Quantitative	Number, Percentage (%)	FN-CB-230a.1
	Description of approach to identifying and addressing data security risks	Discussion and Analysis	rı/a	FN-CB-230a.2
Financial Inclusion & Capacity Building	(1) Number and (2) amount of loans outstanding qualified to programs designed to promote small business and community development ³	Quantitative	Number, Reporting currency	FN-CB-240a.1
	(1) Number and (2) amount of past due and nonaccrual loans qualified to programs designed to promote small business and community development	Quantitative	Number, Reporting currency	FN-CB-240a.2
	Number of no-cost retail checking accounts provided to previously unbanked or underbanked customers	Quantitative	Number	FN-CB-240a.3
	Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers'	Quantitative	Number	FN-CB-240a.4
Incorporation of Environmental, Social, and Governance Factors in Credit Analysis	Commercial and industrial credit exposure, by industry	Quantitative	Reporting currency	FN-CB-410a.1
	Description of approach to incorporation of environmental, social, and governance (ESG) factors in credit analysis	Discussion and Analysis	n/a	FN-CB-410a.2
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations?	Quantitative	Reporting currency	FN-CB-510a.1
	Description of whistleblower policies and procedures	Discussion and Analysis	n/a	FN-CB-510a.2
systemic Risk Management	Global Systemically Important Bank (G-SIB) score, by category	Quantitative	Basis points (bps)	FN-CB-550a.1

Note to FN-CB-230a.1- Disclosure shall include a description of corrective actions implemented in response to data breaches.
 Note to FN-CB-240a.1- Disclosure shall include a description of how the entity's results of the Community Reinvestment Act (CRA) Examinations are integrated into its financial inclusion and capacity building strategy.
 Note to FN-CB-240a.4- Disclosure shall include a description of financial literacy initiatives.
 Note to FN-CB-510a.1- The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

Note to FN-CB-550a.1- The entity shall describe whether the Global Systemically Important Bank (G-SIB) score is calculated by the authorities and whether the entity is required to report the underlying data to the regulator

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Description of approach to incorporation of results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy, and other business activities	Discussion and Analysis	n/a	FN-CB-550a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Commercial_Banks_Standard_2018.pdf

c. Consumer Finance

Industry Description

The Consumer Finance industry provides loans to consumers. The largest segment of the industry is comprised of revolving credit loans through credit card products. Additional loan services include auto, micro lending, and student loans. Some companies in the industry also provide consumer-to-consumer money transfers, money orders, prepaid debit cards, and bill payment services. Industry performance is determined by consumer spending, rates of unemployment, per capita GDP, income, and population growth. Recent shifts toward consumer protection and transparency have aligned and will continue to align the interests of society with those of long-term investors. Companies that effectively manage their social capital will therefore be better positioned to maximize their financial capital.

Note: The SASB Consumer Finance (FN-CF) Standard is limited to the abovementioned consumer finance services. A separate SASB accounting standard addresses the sustainability issues for mortgage finance activities.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Customer Privacy	Number of account holders whose information is used for secondary purposes ²	Quantitative	Number	FN-CF-220a.1
	Total amount of monetary losses as a result of legal proceedings associated with customer privacy ³	Quantitative	Reporting currency	FN-CF-220a.2
Data Security	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of account holders affected ⁴	Quantitative	Number, Percentage (%)	FN-CF-230a.1
	Card-related fraud losses from (1) card-not- present fraud and (2) card-present and other fraud	Quantitative	Reporting currency	FN-CF-230a.2
	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	FN-CF-230a.3
Selling Practices	Percentage of total remuneration for covered employees that is variable and linked to the amount of products and services sold ⁵	Quantitative	Percentage (%)	FN-CF-270a.1
	Approval rate for (1) credit and (2) pre-paid products for applicants with FICO scores above and below 660°	Quantitative	Percentage (%)	FN-CF-270a.2
	(1) Average fees from add-on products, (2) average APR, (3) average age of accounts, (4) average number of trade lines, and (5) average annual fees for pre-paid products, for customers with FICO scores above and below 660	Quantitative	Reporting currency, Percentage (%), Months, Number, Reporting currency	FN-CF-270a.3
	(1) Number of complaints filed with the Consumer Financial Protection Bureau (CFPB), (2) percentage with monetary or non-monetary relief, (3) percentage disputed by consumer, (4) percentage that resulted in investigation by the CFPB	Quantitative	Number, Percentage (%)	FN-CF-270a.4
	Total amount of monetary losses as a result of legal proceedings associated with selling and servicing of products ⁷	Quantitative	Reporting currency	FN-CF-270a.5

Note to FN-CF-220a.1 – The entity shall describe its policies and procedures regarding the manner in which it discloses the use of customer data for third party use to customers, including the nature of its opt-in policy.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Consumer_Finance_Standard_2018.pdf

customer data for third party use to customers, including the nature of its opt-in policy.

Note to FN-CF-220a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to FN-CF-230a.1 – Disclosure shall include a description of corrective actions implemented in response to data breaches.
 Note to FN-CF-270a.1 – The entity shall describe remuneration policies for covered employees, including the link to products sold, the

process for setting sale targets, and benefits/penalties associated with meeting/missing the targets.

Note to FN-CF-270a.2 – The entity shall discuss its strategy for minimizing the number of past due and nonaccrual loans in its portfolio.

d. Insurance

Industry Description

The Insurance industry provides both traditional and nontraditional insurance-related products. Traditional policy lines include property, life, casualty, and reinsurance. Nontraditional products include annuities, alternative risk transfers, and financial guarantees. Companies in the insurance industry also engage in proprietary investments. Insurance companies generally operate within a single segment in the industry, e.g., property and casualty, although there are some large insurance companies with diversified operations. Similarly, companies may vary based on the level of their geographic segmentation. While large companies may underwrite insurance premiums in multiple countries, smaller companies generally operate at a national or even local level. Insurance premiums, underwriting revenue, and investment income drive industry growth, while insurance claim payments present the most significant cost and source of uncertainty for profits. Insurance companies provide products and services that enable the transfer, pooling, and sharing of risk necessary for a well-functioning economy. Insurance companies, through their products, can also create a form of moral hazard, lowering incentives to improve underlying behavior and performance, and thus contributing to sustainability impacts. Similar to other financial institutions, insurance companies face risks associated with credit and financial markets. Within the industry, companies that engage in non-traditional or non-insurance activities, including credit default swaps (CDS) protection and debt securities insurance, have been identified by regulators as being more vulnerable to financial market developments, and subsequently, more likely to amplify or contribute to systemic risk. As a result, insurance companies face the potential of being designated as Systemically Important Financial Institutions, thus exposing them to enhanced regulation and oversight.

Note: Accounting metrics for the material sustainability issues associated with the provision of health insurance are outlined in the SASB Managed Care (HC-MC) Industry Standard.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Transparent	Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of insurance product-related information to new and returning customers ²	Quantitative	Reporting currency	FN-IN-270a.1
Fair Advice for Customers	Complaints-to-claims ratio	Quantitative	Rate	FN-IN-270a.2
Customers	Customer retention rate	Quantitative	Rate	FN-IN-270a.3
	Description of approach to informing customers about products	Discussion and Analysis	n/a	FN-IN-270a.4
Incorporation of Environmental,	Total invested assets, by industry and asset class	Quantitative	Reporting currency	FN-IN-410a.1
Social, and Governance Factors in Investment Management	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment management processes and strategies	Discussion and Analysis	n/a	FN-IN-410a.2
Policies	Net premiums written related to energy efficiency and low carbon technology	Quantitative	Reporting currency	FN-IN-410b.1
Designed to Incentivize Responsible Behavior	Discussion of products and/or product features that incentivize health, safety, and/or environmentally responsible actions and/or behaviors	Discussion and Analysis	n/a	FN-IN-410b.2
	Probable Maximum Loss (PML) of insured products from weather-related natural catastrophes ³	Quantitative	Reporting currency	FN-IN-450a.1
Environmental Risk Exposure	Total amount of monetary losses attributable to insurance payouts from (1) modeled natural catastrophes and (2) non-modeled natural catastrophes, by type of event and geographic segment (net and gross of reinsurance)*	Quantitative	Reporting currency	FN-IN-450a.2
	Description of approach to incorporation of environmental risks into (1) the underwriting process for individual contracts and (2) the management of firm-level risks and capital adequacy	Discussion and Analysis	n/a	FN-IN-450a.3

Note to FN-IN-270a.1— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses

Systemic Risk	Exposure to derivative instruments by category: (1) total potential exposure to non-centrally cleared derivatives, (2) total fair value of acceptable collateral posted with the Central Clearinghouse, and (3) total potential exposure to centrally cleared derivatives	Quantitative	Reporting currency	FN-IN-550a.1
Management	Total fair value of securities lending collateral assets	Quantitative	Reporting currency	FN-IN-550a.2
	Description of approach to managing capital- and liquidity-related risks associated with systemic non-insurance activities	Discussion and Analysis	n/a	FN-IN-550a.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Insurance_Standard_2018.pdf

monetary losses.

Note to FN-IN-450a.1— The entity shall describe climate-related scenarios used, including the critical input parameters, assumptions and considerations, analytical choices, and time frames, in calculation of the PML.

Note to FN-IN-450a.2— The entity shall discuss how climate change-related impacts and variability of weather-related losses impact the cost of reinsurance and the entity's approach to transferring risk through reinsurance.

e. Investment Banking & Brokerage

Industry Description

The Investment Banking & Brokerage industry consists of firms performing a wide range of functions in the capital markets, including assisting with the capital-raising and allocation process, and providing market-making and advisory services for corporations, financial institutions, governments, and high net-worth individuals. Specific activities include financial advisory and securities underwriting services conducted on a fee basis; securities and commodities brokerage activities, which involves buying and selling securities or commodities contracts and options on a commission or fee basis for investors; and trading and principal investment activities, which involves the buying and selling of equities, fixed income, currencies, commodities, and other securities for client-driven and proprietary trading. Investment banks also originate and securitize loans for infrastructure and other projects. Companies in the industry generate their revenues from global markets and, therefore, are exposed to various regulatory environments. The industry continues to face regulatory pressure to reform and disclose aspects of operations that present systemic risks. Specifically, firms are facing new capital requirements, stress testing, limits on proprietary trading, and increased scrutiny on compensation practices.

Note: The SASB Investment Banking & Brokerage (FN-IB) Standard addresses "pure play" investment banking and brokerage services, which the SASB recognizes may not include all the activities of integrated financial institutions, such as mortgage finance, commercial banking, consumer finance, asset management and custody services, and insurance. Separate SASB accounting standards are available that address the sustainability issues for activities in those industries.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Employee Diversity & Inclusion	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals, and (4) all other employees ²	Quantitative	Percentage (%)	FN-IB-330a.1
incorporation of Environmental, Social, and	Revenue from (1) underwriting, (2) advisory, and (3) securitization transactions incorporating integration of environmental, social, and governance (ESG) factors, by industry	Quantitative	Reporting currency	FN-IB-410a.1
Governance Factors in Investment Banking &	(1) Number and (2) total value of investments and loans incorporating integration of environmental, social, and governance (ESG) factors, by industry	Quantitative	Number, Reporting currency	FN-IB-410a.2
Brokerage Activities	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment banking and brokerage activities	Discussion and Analysis	n/a	FN-IB-410a.3
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations ³	Quantitative	Reporting currency	FN-IB-510a.1
	Description of whistleblower policies and procedures	Discussion and Analysis	n/a	FN-IB-510a.2
Professional Integrity	(1) Number and (2) percentage of covered employees with a record of investment-related investigations, consumer-initiated complaints, private civil litigations, or other regulatory proceedings ⁴	Quantitative	Number, Percentage (%)	FN-IB-510b.1
	Number of mediation and arbitration cases associated with professional integrity, including duty of care, by party	Quantitative	Number	FN-IB-510b.2
	Total amount of monetary losses as a result of legal proceedings associated with professional integrity, including duty of care ⁵	Quantitative	Reporting currency	FN-IB-510b.3

Note to FN-IB-330a.1 – The entity shall describe its policies and programs for fostering equitable employee representation across its global operations.
 Note to FN-IB-510a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary

Note to FN-IB-510a.1— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

⁴ Note to FN-IB-510b.1— The entity shall describe how it ensures that covered employees file and update FINRA and SEC forms in a timely manner.

S Note to FN-IB-510b.3— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

	Description of approach to ensuring professional integrity, including duty of care	Discussion and Analysis	n/a	FN-IB-510b.4
	Global Systemically Important Bank (G-SIB) score, by category ^a	Quantitative	Basis points (bps)	FN-IB-550a.1
Systemic Risk Management	Description of approach to incorporation of results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy, and other business activities	Discussion and Analysis	n/a	FN-IB-550a.2
Employee Incentives & Risk Taking	Percentage of total remuneration that is variable for Material Risk Takers (MRTs) ⁷	Quantitative	Percentage (%)	FN-IB-550b.1
	Percentage of variable remuneration of Material Risk Takers (MRTs) to which malus or clawback provisions were applied	Quantitative	Percentage (%)	FN-IB-550b.2
	Discussion of policies around supervision, control, and validation of traders' pricing of Level 3 assets and liabilities	Discussion and Analysis	n/a	FN-IB-550b.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Investment_Banking_Brokerage_Standard_2018.pdf

f. Mortgage Finance

Industry Description

The Mortgage Finance industry provides an essential public good in enabling consumers to purchase homes and contributes to the overall home ownership rate. Companies in the industry lend capital to individual and commercial customers with property as collateral. The primary products are residential and commercial mortgages, while other services offered include: mortgage servicing, title insurance, closing and settlement services, and valuation. In addition, mortgage finance firms own, manage, and finance real estate related investments such as mortgage pass-through certificates and collateralized mortgage obligations. Recent trends in the regulatory environment indicate a significant shift toward consumer protection, disclosure, and accountability. Legislation passed in response to the 2008 mortgage crisis demonstrates the potential for further alignment between the interests of society and those of long-term investors.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Number and (2) value of residential mortgages of the following types: (a) Hybrid or Option Adjustable-rate Mortgages (ARM), (b) Prepayment Penalty, (c) Higher Rate, (d) Total, by FICO scores above or below 660	Quantitative	Number, Reporting currency	FN-MF-270a.1
Lending Practices	(1) Number and (2) value of (a) residential mortgage modifications, (b) foreclosures, and (c) short sales or deeds in lieu of foreclosure, by FICO scores above and below 660	Quantitative	Number, Reporting currency	FN-MF-270a.2
	Total amount of monetary losses as a result of legal proceedings associated with communications to customers or remuneration of loan originators ²	Quantitative	Reporting currency	FN-MF-270a.3
	Description of remuneration structure of loan originators	Discussion and Analysis	n/a	FN-MF-270a.4
	(1) Number, (2) value, and (3) weighted average Loan-to-Value (LTV) ratio of mortgages issued to (a) minority and (b) all other borrowers, by FICO scores above and below 660	Quantitative	Number, Reporting currency, Percentage (%)	FN-MF-270b.1
Discriminatory Lending	Total amount of monetary losses as a result of legal proceedings associated with discriminatory mortgage lending ^a	Quantitative	Reporting currency	FN-MF-270b.2
	Description of policies and procedures for ensuring nondiscriminatory mortgage origination	Discussion and Analysis	n/a	FN-MF-270b.3
	(1) Number and (2) value of mortgage loans in 100-year flood zones	Quantitative	Number, Reporting currency	FN-MF-450a.1
Environmental Risk to Mortgaged Properties	(1) Total expected loss and (2) Loss Given Default (LGD) attributable to mortgage loan default and delinquency due to weather- related natural catastrophes, by geographic region	Quantitative	Reporting currency, Percentage (%)	FN-MF-450a.2
	Description of how climate change and other environmental risks are incorporated into mortgage origination and underwriting	Discussion and Analysis	n/a	FN-MF-450a.3

Note to FN-MF-270a.3— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Mortgage_Finance_Standard_2018.pdf

Note to FN-MF-270b,2— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

g. Security & Commodity Exchanges

Industry Description

Security and commodity exchanges operate marketplaces in the form of physical trading floors or electronic platforms for trading financial securities, commodities, or other financial instruments. Companies in the industry primarily generate revenue from fees on trades and for clearing transactions as well as listing fees. Competition for fees continues to increase with the advent of alternative trading platforms that offer less expensive trades and provide listing services. Recent trends in the regulatory environment suggest a greater focus on transparency, risk management, and market stability. As new policies and market transformations encourage more responsible management of social capital and strong governance, firms that can address all forms of capital—not just financial—will be better positioned to protect shareholder value in the future.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Number and (2) average duration of (a) halts related to public release of information and (b) pauses related to volatility	Quantitative	Number, Minutes	FN-EX-410a.1
Promoting	Percentage of trades generated from automated trading systems ²	Quantitative	Percentage (%)	FN-EX-410a.2
Transparent & Efficient Capital Markets	Description of alert policy regarding timing and nature of public release of information	Discussion and Analysis	n/a	FN-EX-410a.3
	Description of policy to encourage or require listed companies to publicly disclose environmental, social, and governance (ESG) information	Discussion and Analysis	n/a	FN-EX-410a.4
Managing Conflicts of Interest	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations ³	Quantitative	Reporting currency	FN-EX-510a.1
	Discussion of processes for identifying and assessing conflicts of interest	Discussion and Analysis	n/a	FN-EX-510a.2
	(1) Number of significant market disruptions and (2) duration of downtime ⁴	Quantitative	Number, Hours (h)	FN-EX-550a.1
Managing Business Continuity & Technology Risks	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected ⁵	Quantitative	Number, Percentage (%)	FN-EX-550a.2
	Description of efforts to prevent technology errors, security breaches, and market disruptions	Discussion and Analysis	n/a	FN-EX-550a.3

Note to FN-EX-410a.2 – The entity shall discuss risks and opportunities (short- and long-term) associated with automated trading systems including algorithmic or high-frequency trading.

For more information, visit: https://www.sasb.org/wp-content/uploads/2018/11/Security_Commodity_Exchanges_Standard_2018.pdf

Note to FN-EX-510a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

⁴ Note to FN-EX-550a.1 – For each disruption, the entity shall describe the type and extent of the disruption, the root cause, and any corrective actions implemented in response.

⁵ Note to FN-EX-550a.2 – Disclosure shall include a description of corrective actions implemented in response to data breaches.

4. SASB Standards for Food & Beverage

- a. Agricultural Products
- b. Alcoholic Beverages
- c. Food Retailers & Distributors
- d. Meat, Poultry & Dairy
- e. Non-Alcoholic Beverages
- f. Processed Foods
- g. Restaurants
- h. Tobacco

a. Agricultural Products

Industry Description

The Agricultural Products industry is engaged in processing, trading, and distributing vegetables and fruits, and producing and milling agricultural commodities such as grains, sugar, consumable oils, maize, soybeans, and animal feed. Agricultural products are sold directly to consumers and to businesses for use in consumer and industrial products. Companies in the industry typically purchase agricultural products from entities that grow such products (either directly or indirectly) to then conduct value-adding activities (e.g., processing, trading, distributing, and milling). Agricultural products companies are also involved in wholesale and distribution. Companies in the industry may source a substantial portion of agricultural commodities from third-party growers in various countries. Therefore, managing sustainability risks within the supply chain is critical to securing a reliable supply of raw materials and reducing the risk of price increases and volatility over the long term.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	FB-AG-110a.1
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	FB-AG-110a.2
	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AG-110a.3
Energy Management	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AG-130a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	FB-AG-140a.1
Water Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	FB-AG-140a.2
	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	FB-AG-140a.3
	Global Food Safety Initiative (GFSI) audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-AG-250a.1
Food Safety	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) recognized food safety certification program	Quantitative	Percentage (%) by cost	FB-AG-250a.2
	(1) Number of recalls issued and (2) total amount of food product recalled ²	Quantitative	Number, Metric tons (t)	FB-AG-250a.3
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees	Quantitative	Rate	FB-AG-320a.1
Environmental & Social Impacts of Ingredient Supply Chain	Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard	Quantitative	Percentage (%) by cost	FB-AG-430a.1

Note to FB-AG-250a.3— Disclosure shall include a description of notable recalls, such as those that affected a significant amount of product or those related to serious illness or fatality.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-AG-430a.2
	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing	Discussion and Analysis	n/a	FB-AG-430a.3
GMO Management	Discussion of strategies to manage the use of genetically modified organisms (GMOs)	Discussion and Analysis	n/a	FB-AG-430b.1
Ingredient	Identification of principal crops and description of risks and opportunities presented by climate change	Discussion and Analysis	n/a	FB-AG-440a.1
Sourcing	Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by cost	FB-AG-440a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Agricultural_Products_Standard_2018.pdf

b. **Alcoholic Beverages**

Industry Description

The Alcoholic Beverages industry includes companies that brew, distill, and manufacture various alcoholic beverages, including beer, wine, and liquor. Companies in this industry transform agricultural products, including sugar, barley, and corn, into finished alcoholic beverages. The largest companies have global operations, with portfolios of numerous branded products. Levels of vertical integration within the industry vary due to regulation in different markets. Breweries generally have multiple manufacturing facilities to provide access to different markets, while vintners and distillers are typically located where they have a history of production.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AB-130a.1
Water	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	FB-AB-140a.1
Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	FB-AB-140a.2
	Percentage of total advertising impressions made on individuals at or above the legal drinking age	Quantitative	Percentage (%)	FB-AB-270a.1
Responsible Drinking &	Number of incidents of non-compliance with industry or regulatory labeling and/or marketing codes ²	Quantitative	Number	FB-AB-270a.2
Marketing	Total amount of monetary losses as a result of legal proceedings associated with marketing and/or labeling practices ³	Quantitative	Reporting currency	FB-AB-270a.3
	Description of efforts to promote responsible consumption of alcohol	Discussion and Analysis	n/a	FB-AB-270a.4
Packaging Lifecycle	(1) Total weight of packaging, (2) percentage made from recycled and/or renewable materials, and (3) percentage that is recyclable, reusable, and/or compostable	Quantitative	Metric tons (t), Percentage (%)	FB-AB-410a.1
Management	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	FB-AB-410a.2
Environmental & Social Impacts of Ingredient Supply Chain	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances'	Quantitative	Rate	FB-AB-430a.1
Ingredient Sourcing	Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by cost	FB-AB-440a.1
	List of priority beverage ingredients and description of sourcing risks due to environmental and social considerations	Discussion and Analysis	n/a	FB-AB-440a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Alcoholic Beverages Standard 2018.pdf

Note to FB-AB-270a.2 – The entity shall discuss notices of violation that resulted in an enforcement action.
Note to FB-AB-270a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

C. **Food Retailers & Distributors**

Industry Description

The Food Retailers & Distributors industry consists of companies engaged in wholesale and retail sales of food, beverage, and agricultural products. Store formats include retail supermarkets, convenience stores, warehouse supermarkets, liquor stores, bakeries, natural food stores, specialty food stores, seafood stores, and distribution centers. Companies may specialize in one type of store format or have facilities that contain multiple formats. Products are typically sourced worldwide and include fresh meat and produce, prepared foods, processed foods, baked goods, frozen and canned foods, nonalcoholic and alcoholic beverages, and a wide selection of household goods and personal care products.

Note: The standard discussed below is for "pure-play" food retail and distribution companies. Many major food retailers also have pharmacy operations and other retail operations, and may manufacture private-label processed foods. SASB has separate standards for the Drug Retailers, Multiline and Specialty Retailers & Distributors, and Processed Foods industries. Companies involved in multiple lines of business should also consider the disclosure topics and metrics outlined in these other standards.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Fleet Fuel Management	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-FR-110a.1
Air Emissions from Refrigeration	Gross global Scope 1 emissions from refrigerants	Quantitative	Metric tons (t) CO ₂ -e	FB-FR-110b.1
	Percentage of refrigerants consumed with zero ozone-depleting potential	Quantitative	Percentage (%) by weight	FB-FR-110b.2
	Average refrigerant emissions rate	Quantitative	Percentage (%)	FB-FR-110b.3
Energy Management	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-FR-130a.1
Food Waste Management	Amount of food waste generated, percentage diverted from the waste stream ²	Quantitative	Metric tons (t), Percentage (%)	FB-FR-150a.1
Data Security	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected ³	Quantitative	Number, Percentage (%)	FB-FR-230a.1
•	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	FB-FR-230a.2
	High-risk food safety violation rate	Quantitative	Rate	FB-FR-250a.1
Food Safety	(1) Number of recalls, (2) number of units recalled, (3) percentage of units recalled that are private-label products	Quantitative	Number, Percentage (%)	FB-FR-250a.2
D	Revenue from products labeled and/or marketed to promote health and nutrition attributes	Quantitative	Reporting currency	FB-FR-260a.1
Product Health & Nutrition	Discussion of the process to identify and manage products and ingredients related to nutritional and health concerns among consumers	Discussion and Analysis	n/a	FB-FR-260a.2
Product Labeling & Marketing	Number of incidents of non-compliance with industry or regulatory labeling and/or marketing codes	Quantitative	Number	FB-FR-270a.1
	Total amount of monetary losses as a result of legal proceedings associated with marketing and/or labeling practices ⁵	Quantitative	Reporting currency	FB-FR-270a.2

Note to FB-FR-150a.1 – Disclosure shall include the quantification methods used to calculate the amount of food waste generated. Note to FB-FR-230a.1 – Disclosure shall include a description of corrective actions implemented in response to data breaches. Note to FB-FR-250a.2 – Disclosure shall include notable recalls such as those that affected a significant number of customers or those

related to serious illness, injury, or fatality.

Note to FB-FR-270a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO	Quantitative	Reporting currency	FB-FR-270a.3
	(1) Average hourly wage and (2) percentage of in-store and distribution center employees earning minimum wage, by region	Quantitative	Reporting currency, Percentage (%)	FB-FR-310a.1
	Percentage of active workforce covered under collective bargaining agreements	Quantitative	Percentage (%)	FB-FR-310a.2
Labor Practices	(1) Number of work stoppages and (2) total days idle ⁶	Quantitative	Number, Days idle	FB-FR-310a.3
	Total amount of monetary losses as a result of legal proceedings associated with: (1) labor law violations and (2) employment discrimination?	Quantitative	Reporting currency	FB-FR-310a.4
	Revenue from products third-party certified to environmental or social sustainability sourcing standard	Quantitative	Reporting currency	FB-FR-430a.1
Management of Environmental & Social Impacts in the Supply Chain	Percentage of revenue from (1) eggs that originated from a cage-free environment and (2) pork produced without the use of gestation crates	Quantitative	Percentage (%) by revenue	FB-FR-430a.2
	Discussion of strategy to manage environmental and social risks within the supply chain, including animal welfare	Discussion and Analysis	n/a	FB-FR-430a.3
	Discussion of strategies to reduce the environmental impact of packaging	Discussion and Analysis	n/a	FB-FR-430a.4

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Food_Retailers_Distributors_Standard_2018.pdf

d. Meat, Poultry & Dairy

Industry Description

The Meat, Poultry & Dairy industry produces raw and processed animal products, including meats, eggs, and dairy products, for human and animal consumption. Key activities include animal raising, slaughtering, processing, and packaging. The industry's largest companies have international operations, and companies are vertically integrated to varying degrees, depending on the type of animal produced. Large industry operators typically rely on contract or independent farmers to supply their animals and may have varying degrees of control over their operations. The industry sells products primarily to the Processed Foods industry and to retail distributors that distribute finished products to key end markets including restaurants, livestock and pet feed consumers, and grocery retailers.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	FB-MP-110a.1
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	FB-MP-110a.2
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-MP-130a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	FB-MP-140a.1
Water Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	FB-MP-140a.2
	Number of incidents of non-compliance with water quality permits, standards, and regulations	Quantitative	Number	FB-MP-140a.3
	Amount of animal litter and manure generated, percentage managed according to a nutrient management plan	Quantitative	Metric tons (t), Percentage (%)	FB-MP-160a.1
Land Use & Ecological Impacts	Percentage of pasture and grazing land managed to Natural Resources Conservation Service (NRCS) conservation plan criteria	Quantitative	Percentage (%) by hectares	FB-MP-160a.2
	Animal protein production from concentrated animal feeding operations (CAFOs)	Quantitative	Metric tons (t)	FB-MP-160a.3
Food Safety	Global Food Safety Initiative (GFSI) audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-MP-250a.1
	Percentage of supplier facilities certified to a Global Food Safety Initiative (GFSI) food safety certification program	Quantitative	Percentage (%)	FB-MP-250a.2
	(1) Number of recalls issued and (2) total weight of products recalled ²	Quantitative	Number, Metric tons (t)	FB-MP-250a.3
	Discussion of markets that ban imports of the entity's products	Discussion and Analysis	n/a	FB-MP-250a.4

Note to FB-MP-250a.3 – Disclosure shall include a description of notable recalls, such as those that affected a significant amount of product or those related to serious illness or fatality.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Antibiotic Use in Animal Production	Percentage of animal production that received (1) medically important antibiotics and (2) not medically important antibiotics, by animal type	Quantitative	Percentage (%) by weight	FB-MP-260a.1
	(1) Total recordable incident rate (TRIR) and (2) fatality rate	Quantitative	Rate	FB-MP-320a.1
Workforce Health & Safety	Description of efforts to assess, monitor, and mitigate acute and chronic respiratory health conditions	Discussion and Analysis	n/a	FB-MP-320a.2
	Percentage of pork produced without the use of gestation crates	Quantitative	Percentage (%) by weight	FB-MP-410a.1
Animal Care & Welfare	Percentage of cage-free shell egg sales	Quantitative	Percentage (%)	FB-MP-410a.2
	Percentage of production certified to a third- party animal welfare standard	Quantitative	Percentage (%) by weight	FB-MP-410a.3
Environmental & Social Impacts	Percentage of livestock from suppliers implementing the Natural Resources Conservation Service (NRCS) conservation plan criteria or the equivalent	Quantitative	Percentage (%) by weight	FB-MP-430a.1
of Animal Supply Chain	Percentage of supplier and contract production facilities verified to meet animal welfare standards	Quantitative	Percentage (%)	FB-MP-430a.2
	Percentage of animal feed sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by weight	FB-MP-440a.1
Animal & Feed Sourcing	Percentage of contracts with producers located in regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by contract value	FB-MP-440a.2
	Discussion of strategy to manage opportunities and risks to feed sourcing and livestock supply presented by climate change	Discussion and Analysis	n/a	FB-MP-440a.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Meat_Poultry_Dairy_Standard_2018.pdf

e. Non-Alcoholic Beverages

Industry Description

The Non-Alcoholic Beverages industry produces a broad range of beverage products, including various carbonated soft drinks, syrup concentrates, juices, energy and sport drinks, teas, coffee, and water products. The industry is dominated by large, international companies. Companies partake in syrup manufacturing, marketing, bottling operations, and distribution, with larger companies typically being more vertically integrated into operations that bottle, sell, and distribute the finished products.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Fleet Fuel Management	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-NB-110a.1
Energy Management	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-NB-130a.1
Water	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	FB-NB-140a.1
Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	FB-NB-140a.2
route o	Revenue from (1) zero- and low-calorie, (2) no- added-sugar, and (3) artificially sweetened beverages	Quantitative	Reporting currency	FB-NB-260a.1
Health & Nutrition	Discussion of the process to identify and manage products and ingredients related to nutritional and health concerns among consumers	Discussion and Analysis	n/a	FB-NB-260a.2
	Percentage of advertising impressions (1) made on children and (2) made on children promoting products that meet dietary guidelines?	Quantitative	Percentage (%)	FB-NB-270a.1
Product abeling &	Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO	Quantitative	Reporting currency	FB-NB-270a.2
Marketing	Number of incidents of non-compliance with industry or regulatory labeling and/or marketing codes	Quantitative	Number	FB-NB-270a.3
	Total amount of monetary losses as a result of legal proceedings associated with marketing and/or labeling practices ³	Quantitative	Reporting currency	FB-NB-270a.4
Packaging Lifecycle Management	(1) Total weight of packaging, (2) percentage made from recycled and/or renewable materials, and (3) percentage that is recyclable, reusable, and/or compostable	Quantitative	Metric tons (t), Percentage (%)	FB-NB-410a.1

Note to FB-NB-270a.1 – The entity shall disclose the applicable dietary guidelines and the methodology used to estimate advertising impressions.

Note to FB-NB-270a.4 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	FB-NB-410a.2
Environmental & Social Impacts of Ingredient Supply Chain	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-NB-430a.1
Ingredient	Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by cost	FB-NB-440a.1
Sourcing	List of priority beverage ingredients and description of sourcing risks due to environmental and social considerations	Discussion and Analysis	n/a	FB-NB-440a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Non_Alcoholic_Beverages_Standard_2018.pdf

f. **Processed Foods**

Industry Description

The Processed Foods industry includes companies that process and package foods such as bread, frozen foods, snack foods, pet foods, and condiments for retail consumer consumption. Typically, these products are made ready to consume, are marketed for retail consumers, and can be found on food retailers' shelves. The industry is characterized by large and complex ingredient supply chains, as many companies source ingredients from around the world. Large companies operate globally, and international opportunities are driving growth.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-PF-130a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	FB-PF-140a.1
Water Management	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	FB-PF-140a.2
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	FB-PF-140a.3
Food Safety	Global Food Safety Initiative (GFSI) audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-PF-250a.1
	Percentage of ingredients sourced from Tier 1 supplier facilities certified to a Global Food Safety Initiative (GFSI) recognized food safety certification program	Quantitative	Percentage (%) by cost	FB-PF-250a.2
	(1) Total number of notices of food safety violation received, (2) percentage corrected	Quantitative	Number, Percentage (%)	FB-PF-250a.3
	(1) Number of recalls issued and (2) total amount of food product recalled ²	Quantitative	Number, Metric tons (t)	FB-PF-250a.4
	Revenue from products labeled and/or marketed to promote health and nutrition attributes	Quantitative	Reporting currency	FB-PF-260a.1
Health & Nutrition	Discussion of the process to identify and manage products and ingredients related to nutritional and health concerns among consumers	Discussion and Analysis	n/a	FB-PF-260a.2
Product Labeling & Marketing	Percentage of advertising impressions (1) made on children and (2) made on children promoting products that meet dietary guidelines ²	Quantitative	Percentage (%)	FB-PF-270a.1
	Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO	Quantitative	Reporting currency	FB-PF-270a.2

Note to FB-PF-250a.4 – Disclosure shall include a description of notable recalls, such as those that affected a significant amount of

product or those related to serious illness or fatality.

Note to FB-PF-270a.1 – Disclosure shall include the applicable dietary guideline and methodology used to estimate advertising impressions.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Number of incidents of non-compliance with industry or regulatory labeling and/or marketing codes	Quantitative	Number	FB-PF-270a.3
	Total amount of monetary losses as a result of legal proceedings associated with labeling and/or marketing practices ⁴	Quantitative	Reporting currency	FB-PF-270a.4
Packaging Lifecycle	(1) Total weight of packaging, (2) percentage made from recycled and/or renewable materials, and (3) percentage that is recyclable, reusable, and/or compostable	Quantitative	Metric tons (t), Percentage (%)	FB-PF-410a.1
Management	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	FB-PF-410a.2
Environmental & Social Impacts	Percentage of food ingredients sourced that are certified to third-party environmental and/or social standards, and percentages by standard	Quantitative	Percentage (%) by cost	FB-PF-430a.1
of Ingredient Supply Chain	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-PF-430a.2
Ingredient Sourcing	Percentage of food ingredients sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by cost	FB-PF-440a.1
	List of priority food ingredients and discussion of sourcing risks due to environmental and social considerations	Discussion and Analysis	n/a	FB-PF-440a.2

For more information, visit: https://www.sasb.org/wp-content/uploads/2018/11/Processed_Foods_Standard_2018.pdf

g. Restaurants

Industry Description

Companies in the Restaurants industry prepare meals, snacks, and beverages to customers' orders for immediate on- and off-premises consumption. Broadly divided into three subcategories, the restaurant industry includes limited service eating places, casual full-service eating places, and upscale full-service eating places. Limited-service restaurants provide services to customers who order and pay before eating. Fast-food restaurants represent the largest share of the limited service restaurants segment. Full-service restaurants offer more service, food for consumption primarily on-premises, and typically reflect higher quality food and prices.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-RN-130a.1
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	FB-RN-140a.1
Food &	(1) Total amount of waste, (2) percentage food waste, and (3) percentage diverted	Quantitative	Metric tons (t), Percentage (%)	FB-RN-150a.1
Packaging Waste Management	(1) Total weight of packaging, (2) percentage made from recycled and/or renewable materials, and (3) percentage that is recyclable, reusable, and/or compostable	Quantitative	Metric tons (t), Percentage (%)	FB-RN-150a.2
	(1) Percentage of restaurants inspected by a food safety oversight body, (2) percentage receiving critical violations	Quantitative	Percentage (%)	FB-RN-250a.1
Food Safety	(1) Number of recalls issued and (2) total amount of food product recalled	Quantitative	Number, Metric tons (t)	FB-RN-250a.2
	Number of confirmed foodborne illness outbreaks, percentage resulting in U.S. Centers for Disease Control and Prevention (CDC) investigation ³	Quantitative	Number, Percentage (%)	FB-RN-250a.3
	(1) Percentage of meal options consistent with national dietary guidelines and (2) revenue from these options	Quantitative	Percentage (%), Reporting currency	FB-RN-260a.1
Nutritional Content	(1) Percentage of children's meal options consistent with national dietary guidelines for children and (2) revenue from these options	Quantitative	Percentage (%), Reporting currency	FB-RN-260a.2
	Number of advertising impressions made on children, percentage promoting products that meet national dietary guidelines for children *	Quantitative	Number, Percentage (%)	FB-RN-260a.3
Labor Practices	(1) Voluntary and (2) involuntary turnover rate for restaurant employees	Quantitative	Rate	FB-RN-310a.1
	(1) Average hourly wage, by region and (2) percentage of restaurant employees earning minimum wage, by region	Quantitative	Reporting currency, Percentage (%)	FB-RN-310a.2

Note to FB-RN-250a.2 – Disclosure shall include a description of notable recalls and corrective actions implemented in response to events.

Note to FB-RN-250a.3 – Disclosure shall include a description of foodborne illness outbreaks that were investigated by the U.S. CDC and corrective actions implemented in response to events.

Note to FB-RN-260a.3 – Disclosure shall include a description of the applicable dietary guidelines and the methodology used to estimate advertising impressions.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Total amount of monetary losses as a result of legal proceedings associated with (1) labor law violations and (2) employment discrimination ⁵	Quantitative	Reporting currency	FB-RN-310a.3
Supply Chain Management & Food Sourcing	Percentage of food purchased that (1) meets environmental and social sourcing standards and (2) is certified to third-party environmental and/or social standards	Quantitative	Percentage (%) by cost	FB-RN-430a.1
	Percentage of (1) eggs that originated from a cage-free environment and (2) pork that was produced without the use of gestation crates	Quantitative	Percentage (%) by number, Percentage (%) by weight	FB-RN-430a.2
	Discussion of strategy to manage environmental and social risks within the supply chain, including animal welfare	Discussion and Analysis	n/a	FB-RN-430a.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Restaurants_Standard_2018.pdf

h. Tobacco

Industry Description

The Tobacco industry is comprised of companies that manufacture tobacco products including cigarettes, cigars, and smokeless tobacco products. Many large tobacco companies operate globally. Companies may obtain or sell exclusive rights to sell certain brands of cigarettes in diverse markets. Most tobacco is grown by independent tobacco farmers, who typically sell their crops to tobacco merchants or to manufacturers under contract.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Public Health	(1) Gross revenue and (2) revenue net of excise taxes from (a) non-tobacco nicotine products and (b) heated tobacco products	Quantitative	Reporting currency	FB-TB-260a.1
	Discussion of the process to assess risks and opportunities associated with "tobacco harm reduction" products	Discussion and Analysis	n/a	FB-TB-260a.2
Marketing Practices	Total amount of monetary losses as a result of legal proceedings associated with marketing, labeling, and/or advertising practices ²	Quantitative	Reporting currency	FB-TB-270a.1
	Description of the company's marketing policy and relevant positions on Articles 11 and 13 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC)	Discussion and Analysis	n/a	FB-TB-270a.2

Note to FB-TB-270a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Tobacco_Standard_2018.pdf

5. SASB Standards for Health Care

- a. Biotechnology & Pharmaceuticals
- b. Drug Retailers
- c. Health Care Delivery
- d. Health Care Distributors
- e. Managed Care
- f. Medical Equipment & Supplies

a. Biotechnology & Pharmaceuticals

Industry Description

The Biotechnology & Pharmaceuticals industry develops, manufactures, and markets a range of brand-name and generic medications. A significant portion of the industry is driven by research and development, a high risk of product failure during clinical trials, and the need to obtain regulatory approval. Concerns over pricing practices and consolidation within the sector have created downward pricing pressures. Demand for the industry's products is largely driving by population demographics, rates of insurance coverage, disease profiles, and economic conditions.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Safety of Clinical Trial Participants	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	Discussion and Analysis	n/a	HC-BP-210a.1
	Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI)	Quantitative	Number	HC-BP-210a.2
	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries ²	Quantitative	Reporting currency	HC-BP-210a.3
Access to	Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine Index	Discussion and Analysis	n/a	HC-BP-240a.1
Medicines	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	Discussion and Analysis	n/a	HC-BP-240a.2
	Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period	Quantitative	Number	HC-BP-240b.1
Affordability & Pricing	Percentage change in: (1) average list price and (2) average net price across U.S. product portfolio compared to previous year	Quantitative	Percentage (%)	HC-BP-240b.2
	Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year	Quantitative	Percentage (%)	HC-BP-240b.3
Drug Safety	List of products listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database	Discussion and Analysis	n/a	HC-BP-250a.1
	Number of fatalities associated with products as reported in the FDA Adverse Event Reporting System	Quantitative	Number	HC-BP-250a.2
	Number of recalls issued, total units recalled	Quantitative	Number	HC-BP-250a.3
	Total amount of product accepted for take- back, reuse, or disposal	Quantitative	Metric tons (t)	HC-BP-250a.4

Note to HC-BP-210a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type ³	Quantitative	Number	HC-BP-250a.5
	Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting	Discussion and Analysis	n/a	HC-BP-260a.1
Counterfeit Drugs	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products	Discussion and Analysis	n/a	HC-BP-260a.2
	Number of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products	Quantitative	Number	HC-BP-260a.3
Ethical	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims*	Quantitative	Reporting currency	HC-BP-270a.1
Marketing	Description of code of ethics governing promotion of off-label use of products	Discussion and Analysis	rv/a	HC-BP-270a.2
Employee	Discussion of talent recruitment and retention efforts for scientists and research and development personnel	Discussion and Analysis	n/a	HC-BP-330a.1
Recruitment, Development & Retention	(1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid- level managers, (c) professionals, and (d) all others	Quantitative	Rate	HC-BP-330a.2
Supply Chain Management	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third-party audit programs for integrity of supply chain and ingredients	Quantitative	Percentage (%)	HC-BP-430a.1
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery ^s	Quantitative	Reporting currency	HC-BP-510a.1
	Description of code of ethics governing interactions with health care professionals	Discussion and Analysis	n/a	HC-BP-510a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Biotechnology_Pharmaceuticals_Standard_2018.pdf

Note to HC-BP-250a.5 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the enforcement actions.

Note to HC-BP-270a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to HC-BP-510a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

b. **Drug Retailers**

Industry Description

The Drug Retailers industry comprises companies that operate retail pharmacies and distribution centers that supply retail stores. Stores may be company-owned or franchised. Large companies operate mainly in the U.S. and source drugs and other merchandise through wholesalers and distributors. The majority of the industry's revenues are derived from consumer sales of prescription and over-the-counter pharmaceutical products; other goods sold include household goods, personal care products, and a limited selection of groceries. Additionally, the pharmacy retailer segment is expanding its health-focused services by offering clinics at various retail locations, which adds to the industry's shifting sustainability landscape.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management in Retail	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	HC-DR-130a.1
	Description of policies and practices to secure customers' protected health information (PHI) records and other personally identifiable information (PII)	Discussion and Analysis	n/a	HC-DR-230a.1
Data Security & Privacy	(1) Number of data breaches, (2) percentage involving (a) personally identifiable information (PII) only and (b) protected health information (PHI), (3) number of customers affected in each category, (a) PII only and (b) PHI ²	Quantitative	Number, Percentage (%)	HC-DR-230a.2
	Total amount of monetary losses as a result of legal proceedings associated with data security and privacy ^a	Quantitative	Reporting currency	HC-DR-230a.3
Drug Supply	Description of efforts to reduce the occurrence of compromised drugs within the supply chain	Discussion and Analysis	n/a	HC-DR-250a.1
Chain Integrity	Number of drug recalls issued, total units recalled, percentage for private-label products ⁴	Quantitative	Number, Percentage (%)	HC-DR-250a.2
Management of Controlled	Percentage of controlled substance prescriptions dispensed for which a prescription drug monitoring program (PDMP) database was queried ⁵	Quantitative	Percentage (%)	HC-DR-260a.1
Substances	Total amount of monetary losses as a result of legal proceedings associated with controlled substances ⁶	Quantitative	Reporting currency	HC-DR-260a.2
	First fill adherence rate ⁷	Quantitative	Percentage (%)	HC-DR-260b.1
Patient Health	Description of policies and practices to prevent prescription dispensing errors	Discussion and Analysis	n/a	HC-DR-260b.2
Outcomes	Total amount of monetary losses as a result of legal proceedings associated with prescription dispensing errors ⁶	Quantitative	Reporting currency	HC-DR-260b.3

Note to HC-DR-230a.2 - Disclosure shall include a description of corrective actions implemented in response to data breaches.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Drug_Retailers_Standard_2018.pdf

Note to HC-DR-230a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

Note to HC-DR-250a.2 - The entity shall discuss notable recalls such as those that affected a significant number of units of one

product or those related to serious injury or fatality.

Note to HC-DR-260a.1 – Disclosure shall include a description of additional verification procedures the entity uses when dispensing controlled substances prescriptions to prevent controlled substance abuse.

Note to HC-DR-260a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

monetary losses.

Note to **HC-DR-260b.1** – Disclosure shall include a description of strategies used to increase medication adherence.

¹ Note to HC-DR-260b.3 - The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

c. Health Care Delivery

Industry Description

The Health Care Delivery industry owns and manages hospitals, clinics, and other health care-related facilities. Companies provide a range of services, including inpatient and outpatient care, surgery, mental health, rehabilitation, and clinical laboratory services. Demand for health care delivery services is driven largely by rates of insurance coverage, demographics, illness, and injury rates. The U.S. Patient Protection and Affordable Care Act (PPACA) increased the number of individuals with insurance; however, the future of this legislation remains uncertain. The industry is characterized by high fixed labor and facilities costs, and an increased regulatory emphasis on reduced costs of care and improved outcomes. Health care delivery companies also face significant competition for patients and resources from private, nonprofit, and religious health care systems.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	HC-DY-130a.1
	Total amount of medical waste, percentage (a) incinerated, (b) recycled or treated, and (c) landfilled	Quantitative	Metric tons (t)	HC-DY-150a.1
Waste Management	Total amount of: (1) hazardous and (2) non- hazardous pharmaceutical waste, percentage (a) incinerated, (b) recycled or treated, and (c) landfilled	Quantitative	Metric tons (t), Percentage (%)	HC-DY-150a.2
	Percentage of patient records that are Electronic Health Records (EHR) that meet "meaningful use" requirements	Quantitative	Percentage (%)	HC-DY-230a.1
Patient Privacy	Description of policies and practices to secure customers' protected health information (PHI) records and other personally identifiable information (PII)	Discussion and Analysis	n/a	HC-DY-230a.2
& Electronic Health Records	(1) Number of data breaches, (2) percentage involving (a) personally identifiable information (PII) only and (b) protected health information (PHI), (3) number of customers affected in each category, (a) PII only and (b) PHI ²	Quantitative	Number, Percentage (%)	HC-DY-230a.3
	Total amount of monetary losses as a result of legal proceedings associated with data security and privacy ⁸	Quantitative	Reporting currency	HC-DY-230a.4
Access for Low-	Discussion of strategy to manage the mix of patient insurance status	Discussion and Analysis	n/a	HC-DY-240a.1
Income Patients	Amount of Medicare Disproportionate Share Hospital (DSH) adjustment payments received	Quantitative	Reporting currency	HC-DY-240a.2
Quality of Care & Patient Satisfaction	Average Hospital Value-Based Purchasing Total Performance Score and domain score, across all facilities	Quantitative	Number	HC-DY-250a.1
	Number of Serious Reportable Events (SREs) as defined by the National Quality Forum (NQF)	Quantitative	Number	HC-DY-250a.2
	Hospital-Acquired Condition (HAC) Score per hospital	Quantitative	Number	HC-DY-250a.3
	Excess readmission ratio per hospital	Quantitative	Ratio	HC-DY-250a.4

Note to HC-DY-230a.3 – Disclosure shall include a description of corrective actions implemented in response to data breaches.

Note to HC-DY-230a.4 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Magnitude of readmissions payment adjustment as part of the Hospital Readmissions Reduction Program (HRRP)	Quantitative	Reporting currency	HC-DY-250a.5
Management of	Description of policies and practices to manage the number of prescriptions issued for controlled substances	Discussion and Analysis	n/a	HC-DY-260a.1
Controlled Substances	Percentage of controlled substance prescriptions written for which a prescription drug monitoring program (PDMP) database was queried	Quantitative	Percentage (%)	HC-DY-260a.2
	Description of policies or initiatives to ensure that patients are adequately informed about price before undergoing a procedure	Discussion and Analysis	n/a	HC-DY-270a.1
Pricing & Billing Transparency	Discussion of how pricing information for services is made publicly available	Discussion and Analysis	n/a	HC-DY-270a.2
Iransparency	Number of the entity's 25 most common services for which pricing information is publicly available, percentage of total services performed (by volume) that these represent	Quantitative	Number, Percentage (%)	HC-DY-270a.3
Employee Health & Safety	(1) Total recordable incident rate (TRIR) and (2) days away, restricted, or transferred (DART) rate	Quantitative	Rate	HC-DY-320a.1
Employee Recruitment,	(1) Voluntary and (2) involuntary turnover rate for: (a) physicians, (b) non-physician health care practitioners, and (c) all other employees	Quantitative	Rate	HC-DY-330a.1
Development & Retention	Description of talent recruitment and retention efforts for health care practitioners	Discussion and Analysis	n/a	HC-DY-330a.2
Climate Change Impacts on Human Health & Infrastructure	Description of policies and practices to address: (1) the physical risks due to an increased frequency and intensity of extreme weather events and (2) changes in the morbidity and mortality rates of illnesses and diseases, associated with climate change	Discussion and Analysis	n/a	HC-DY-450a.1
a imasuucture	Percentage of health care facilities that comply with the Centers for Medicare and Medicaid Services (CMS) Emergency Preparedness Rule	Quantitative	Percentage (%)	HC-DY-450a.2
Fraud & Unnecessary Procedures	Total amount of monetary losses as a result of legal proceedings associated with Medicare and Medicaid fraud under the False Claims Act ⁴	Quantitative	Reporting currency	HC-DY-510a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Health_Care_Delivery_Standard_2018.pdf

Note to **HC-DY-510a.1** – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

d. Health Care Distributors

Industry Description

Health care distributors purchase, inventory, and sell pharmaceutical products and medical equipment to hospitals, pharmacies, and physicians. Demand for the industry's services is driven largely by rates of insurance, pharmaceutical spending, illness, and demographics. Increased enrollment in government insurance programs under the U.S Patient Protection and Affordable Care Act, electronic health records, and consolidation throughout the Health Care sector will likely continue to shape the industry. The health care sector continues to face an emphasis on reduced costs and improved efficiencies, which will also impact the Health Care Distributors industry. Companies in this industry face challenges from consolidation and partnerships between pharmacies, payers, and manufacturers.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Fleet Fuel Management	Payload fuel economy	Quantitative	Gallons, Tons (U.S.), Miles	HC-DI-110a.1
	Description of efforts to reduce the environmental impact of logistics	Discussion and Analysis	n/a	HC-DI-110a.2
	Total amount of monetary losses as a result of legal proceedings associated with product safety ²	Quantitative	Reporting currency	HC-DI-250a.1
Product Safety	Description of efforts to minimize health and safety risks of products sold associated with toxicity/chemical safety, high abuse potential, or delivery	Discussion and Analysis	n/a	HC-DI-250a.2
Counterfeit Drugs	Description of methods and technologies used to maintain traceability of products throughout the distribution chain and prevent counterfeiting	Discussion and Analysis	n/a	HC-DI-260a.1
	Discussion of due diligence process to qualify suppliers of drug products and medical equipment and devices	Discussion and Analysis	n/a	HC-DI-260a.2
	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products	Discussion and Analysis	n/a	HC-DI-260a.3
Product Lifecycle Management	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	HC-DI-410a.1
	Amount (by weight) of products accepted for take-back and reused, recycled, or donated	Quantitative	Metric tons (t)	HC-DI-410a.2
Business Ethics	Description of efforts to minimize conflicts of interest and unethical business practices	Discussion and Analysis	n/a	HC-DI-510a.1
	Total amount of monetary losses as a result of legal proceedings associated with bribery, corruption, or other unethical business practices ³	Quantitative	Reporting currency	HC-DI-510a.2

Note to HC-DI-250a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Health_Care_Distributors_Standard_2018.pdf

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

e. **Managed Care**

Industry Description

The Managed Care industry offers health insurance products for individual, commercial, Medicare, and Medicaid members. Companies also provide administrative services and network access for self-funded insurance plans and manage pharmacy benefits. Enrollment in managed care has traditionally been correlated with employment rates, while revenues are driven by the inflation of medical costs. The Patient Protection and Affordable Care Act reduced the percentage of uninsured adults, and created additional demand for the industry's plans. However, legislative uncertainty and a focus on reducing health care costs may create downward pricing pressure and continue to drive consolidation within the industry. In addition, a focus on patient outcomes and plan performance continue to shape the industry's sustainability risks and opportunities.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Customer Privacy & Technology Standards	Description of policies and practices to secure customers' protected health information (PHI) records and other personally identifiable information (PII)	Discussion and Analysis	n/a	HC-MC-230a.1
	(1) Number of data breaches, (2) percentage involving (a) personally identifiable information (PII) only and (b) protected health information (PHI), (3) number of customers affected in each category, (a) PII only and (b) PHI ²	Quantitative	Number, Percentage (%)	HC-MC-230a.2
	Total amount of monetary losses as a result of legal proceedings associated with data security and privacy ^s	Quantitative	Reporting currency	HC-MC-230a.3
	Medical Loss Ratio (MLR)	Quantitative	Ratio	HC-MC-240a.1
Access to Coverage	Total amount of rebates accrued and paid due to non-compliance with the Patient Protection and Affordable Care Act for Medical Loss Ratio (MLR)	Quantitative	Reporting currency	HC-MC-240a.2
	Percentage of proposed rate increases receiving "not unreasonable" designation from Health and Human Services (HHS) review or state review	Quantitative	Percentage (%)	HC-MC-240a.3
Plan Performance	Average Medicare Advantage plan rating for each of the following plan types: (1) HMO, (2) local PPO, (3) regional PPO, (4) PFFS, and (5) SNP	Quantitative	Number	HC-MC-250a.1
	Enrollee retention rate by plan type, including: (1) HMO, (2) local PPO, (3) regional PPO, (4) PFFS, and (5) SNP	Quantitative	Rate	HC-MC-250a.2
	Percentage of claims denied that were appealed by customers and ultimately reversed	Quantitative	Percentage (%)	HC-MC-250a.3
	Plan enrollee grievance rate	Quantitative	Rate	HC-MC-250a.4
Improved Outcomes	Percentage of enrollees in wellness programs by type: (1) diet and nutrition, (2) exercise, (3) stress management, (4) mental health, (5) smoking or alcohol cessation, or (6) other	Quantitative	Percentage (%)	HC-MC-260a.1

Note to **HC-MC-230a.2** – Disclosure shall include a description of corrective actions implemented in response to data breaches. Note to **HC-MC-230a.3** – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the losses.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Total coverage for preventive health services with no cost sharing for the enrollees, total coverage for preventive health services requiring cost-sharing by the enrollee, percentage of enrollees receiving Initial Preventive Physical Examinations (IPEE) or Annual Wellness Visits (AWV)	Quantitative	Reporting currency, Percentage (%)	HC-MC-260a.2
	Number of customers receiving care from Accountable Care Organizations or enrolled in Patient-Centered Medical Home programs	Quantitative	Number	HC-MC-260a.3
Climate Change Impacts on Human Health	Discussion of the strategy to address the effects of climate change on business operations and how specific risks presented by changes in the geographic incidence, morbidity, and mortality of illnesses and diseases are incorporated into risk models	Discussion and Analysis	n/a	HC-MC-450a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Managed_Care_Standard_2018.pdf

f. Medical Equipment & Supplies

Industry Description

The Medical Equipment & Supplies industry researches, develops, and produces medical, surgical, dental, ophthalmic, and veterinary instruments and devices. Products are used in settings, including hospitals, clinics, and laboratories, and range from disposable items to highly specialized equipment. The increased prevalence of diseases associated with unhealthy lifestyles and an aging population are important factors that may impact growth in this industry. Emerging markets and the expansion of health insurance in the U.S. will contribute to further growth. However, the extension of government insurance programs, provider and payer consolidation, and regulatory emphasis on reduced costs in all markets may result in downward pricing pressure.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Affordability & Pricing	Ratio of weighted average rate of net price increases (for all products) to the annual increase in the U.S. Consumer Price Index	Quantitative	Ratio	HC-MS-240a.1
	Description of how price information for each product is disclosed to customers or to their agents	Discussion and Analysis	n/a	HC-MS-240a.2
	Number of recalls issued, total units recalled	Quantitative	Number	HC-MS-250a.1
	List of products listed in the FDA's MedWatch Safety Alerts for Human Medical Products database	Discussion and Analysis	n/a	HC-MS-250a.2
Product Safety	Number of fatalities related to products as reported in the FDA Manufacturer and User Facility Device Experience	Quantitative	Number	HC-MS-250a.3
	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type ²	Quantitative	Number	HC-MS-250a.4
Ethical	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims ³	Quantitative	Reporting currency	HC-MS-270a.1
Marketing	Description of code of ethics governing promotion of off-label use of products	Discussion and Analysis	n/a	HC-MS-270a.2
Product Design & Lifecycle Management	Discussion of process to assess and manage environmental and human health considerations associated with chemicals in products, and meet demand for sustainable products	Discussion and Analysis	n/a	HC-MS-410a.1
	Total amount of products accepted for take- back and reused, recycled, or donated, broken down by: (1) devices and equipment and (2) supplies	Quantitative	Metric tons (t)	HC-MS-410a.2
Supply Chain Management	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in third-party audit programs for manufacturing and product quality	Quantitative	Percentage (%)	HC-MS-430a.1
	Description of efforts to maintain traceability within the distribution chain	Discussion and Analysis	n/a	HC-MS-430a.2

Note to HC-MS-250a.4 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the enforcement actions.

Note to HC-MS-270a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	HC-MS-430a.3
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption ⁴	Quantitative	Reporting currency	HC-MS-510a.1
	Description of code of ethics governing interactions with health care professionals	Discussion and Analysis	n/a	HC-MS-510a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Medical Equipment Supplies Standard 2018.pdf

6. SASB Standards for Infrastructure

- a. Electric Utilities and Power Generators
- b. Engineering and Construction Services
- c. Gas Utilities and Distributors
- d. Home Builders
- e. Real Estate
- f. Real Estate Services
- g. Waste Management
- h. Water Utilities and Services

a. Electric Utilities and Power Generators

Industry Description

The Electric Utilities & Power Generators industry is made up of companies that generate electricity: build, own, and operate transmission and distribution (T&D) lines; and sell electricity. Utilities generate electricity from a number of different sources, commonly including coal, natural gas, nuclear energy, hydropower, solar, wind, and other renewable and fossil fuel energy sources. The industry comprises companies operating in both regulated and unregulated business structures. Regulated utilities maintain a business model in which they accept comprehensive oversight from regulators on their pricing mechanisms and their allowed return on equity, among other types of regulation, in exchange for their license to operate as a monopoly. Unregulated companies, or merchant power companies, are often independent power producers (IPPs) that generate electricity to sell to the wholesale market. which includes regulated utility buyers and other end-users. Furthermore, the industry is divided across regulated and deregulated power markets—referring to how far up the value chain regulated utility operations span. Regulated markets typically contain vertically integrated utilities that own and operate everything from the generation of power to its retail distribution. Deregulated markets commonly split generation from distribution, designed to encourage competition at the wholesale power level. Overall, companies in the industry are challenged with the complex mission of providing reliable, accessible, low-cost power while balancing the protection of human life and the environment. Note: The SASB Electric Utilities & Power Generators Industry covers activities related only to electricity provision, not to natural gas provision. Some utilities may operate in both electricity and natural gas markets. Utilities undertaking activities related to natural gas sourcing and distribution should also consider the separate Gas Utilities & Distributors Industry Standard (IF-GU).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	IF-EU-110a.1
Greenhouse	Greenhouse gas (GHG) emissions associated with power deliveries	Quantitative	Metric tons (t) CO ₂ -e	IF-EU-110a.2
Gas Emissions & Energy Resource Planning	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	r/a	IF-EU-110a.3
	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market ^a	Quantitative	Number, Percentage (%)	IF-EU-110a.4
Air Quality	Air emissions of the following pollutarits: (1) NO _v (excluding N ₂ O), (2) SO _v , (3) particulate matter (PM ₁₀), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	Quantitative	Metric tons (t), Percentage (%)	F-EU-120a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m²), Percentage (%)	F-EU-140a.1
Water Management	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	IF-EU-140a.2
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	IF-EU-140a.3
Coal Ash Management	Amount of coal combustion residuals (CCR) generated, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	IF-EU-150a.1
	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	Quantitative	Number	F-EU-150a.2
Energy Affordability	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	Quantitative	Rate	IF-EU-240a.1

Note to IF-EU-110a.4 – The entity shall discuss its operations in markets with renewable portfolio standards (RPS) regulations or where regulations are emerging, including whether it is meeting its regulatory obligations, whether regulations require future increases or changes to the entity's renewable energy portfolio, and strategies to maintain compliance with emerging regulations.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	Quantitative	Reporting currency	IF-EU-240a.2
	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days ³	Quantitative	Number, Percentage (%)	IF-EU-240a.3
	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	Discussion and Analysis	n/a	IF-EU-240a.4
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	Rate	IF-EU-320a.1
End-Use Efficiency & Demand	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	Quantitative	Percentage (%)	IF-EU-420a.1
	Percentage of electric load served by smart grid technology ⁴	Quantitative	Percentage (%) by megawatt hours (MWh)	IF-EU-420a.2
	Customer electricity savings from efficiency measures, by market	Quantitative	Megawatt hours (MWh)	IF-EU-420a.3
Nuclear Safety & Emergency Management	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	Quantitative	Number	IF-EU-540a.1
	Description of efforts to manage nuclear safety and emergency preparedness	Discussion and Analysis	n/a	IF-EU-540a.2
Grid Resiliency	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	Quantitative	Number	IF-EU-550a.1
	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days ¹	Quantitative	Minutes, Number	IF-EU-550a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Electric_Utilities_Power_Generators_Standard_2018.pdf

Note to IF-EU-240a.3 – The entity shall discuss how policies, programs, and regulations impact the number and duration of residential customer disconnections.

Note to IF-EU-420a.2 – The entity shall discuss the opportunities and challenges associated with the development and operations of a smart grid.

b. Engineering & Construction Services

Industry Description

The Engineering & Construction Services industry provides engineering, construction, design, consulting, contracting, and other related services that support various building and infrastructure projects. The industry is primarily made up of four major segments: engineering services, infrastructure construction, non-residential building construction, and building subcontractors and construction-related professional services. The infrastructure construction segment includes companies that design and/or build infrastructure projects such as power plants, dams, oil and gas pipelines, refineries, highways, bridges, tunnels, railways, ports, airports, waste treatment plants, water networks, and stadiums. The non-residential building construction segment includes companies that design and/or build industrial and commercial facilities such as factories, warehouses, data centers, offices, hotels, hospitals, universities, and retail spaces like malls. The engineering services segment includes companies that provide specialized architectural and engineering services such as design and development of feasibility studies for many of the project types listed above. Finally, the building subcontractors and other construction-related professional services segment includes smaller companies that provide ancillary services such as carpentry, electrical, plumbing, painting, waterproofing, landscaping, interior design, and building inspection. The industry's customers include infrastructure owners and developers in the public and private sectors. Large companies in this industry operate and generate revenue globally and typically specialize in multiple segments.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Environmental Impacts of	Number of incidents of non-compliance with environmental permits, standards, and regulations	Quantitative	Number	IF-EN-160a.1
Project Development	Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction	Discussion and Analysis	n/a	IF-EN-160a.2
Structural	Amount of defect- and safety-related rework costs	Quantitative	Reporting currency	IF-EN-250a.1
Integrity & Safety	Total amount of monetary losses as a result of legal proceedings associated with defect- and safety-related incidents:	Quantitative	Reporting currency	IF-EN-250a.2
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	IF-EN-320a.1
Lifecycle Impacts of	Number of (1) commissioned projects certified to a third-party multi-attribute sustainability standard and (2) active projects seeking such certification	Quantitative	Number	IF-EN-410a.1
Buildings & Infrastructure	Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design	Discussion and Analysis	r/a	IF-EN-410a.2
	Amount of backlog for (1) hydrocarbon- related projects and (2) renewable energy projects	Quantitative	Reporting currency	IF-EN-410b.1
Climate Impacts of Business Mix	Amount of backlog cancellations associated with hydrocarbon-related projects	Quantitative	Reporting currency	IF-EN-410b.2
	Amount of backlog for non-energy projects associated with climate change mitigation	Quantitative	Reporting currency	IF-EN-410b.3
Business Ethics	(1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index ³	Quantitative	Number, Reporting currency	IF-EN-510a.1

Note to IF-EN-250a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to IF-EN-510a.1 – The entity shall provide a brief description of its approach to managing ethical risks specific to the countries with low rankings in the index where the entity has active projects and/or backlog.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Total amount of monetary losses as a result of legal proceedings associated with charges of (1) bribery or corruption and (2) anti-competitive practices*	Quantitative	Reporting currency	IF-EN-510a.2
	Description of policies and practices for prevention of (1) bribery and corruption, and (2) anti-competitive behavior in the project bidding processes	Discussion and Analysis	n/a	IF-EN-510a.3

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

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Engineering Construction Services Standard 2018.pdf

c. Gas Utilities & Distributors

Industry Description

The Gas Utilities & Distributors industry is made up of gas distribution and marketing companies. Gas distribution involves operating local, low-pressure pipes to transfer natural gas from larger transmission pipes to end users. Gas marketing companies are gas brokers that aggregate natural gas into quantities that fit the needs of their different customers and then deliver it, generally through other companies' transmission and distribution lines. A relatively smaller portion of this industry is involved in propane gas distribution; therefore this standard is focused on natural gas distribution. Both types of gas are commonly used for heating and cooking by residential, commercial, and industrial customers. In structurally regulated markets, the utility is granted a full monopoly over the distribution and sale of natural gas. A regulator must approve the rates utilities charge to avoid the abuse of their monopoly position. In deregulated markets, distribution and marketing are legally separated and customers have a choice of which company to buy their gas from. In this case, a utility is quaranteed a monopoly only over distribution and is legally required to transmit all gas equitably along its pipes for a fixed fee. Overall, companies in the industry are tasked with providing safe, reliable, low-cost gas, while effectively managing their social and environmental impacts, such as community safety and methane emissions. Note: The SASB Gas Utilities & Distributors industry does not include gas transmission companies that transport highly pressurized natural gas over long distances from the wellhead. Gas transmission companies are included in the Oil & Gas - Midstream industry (EM-MD) in the Extractives & Minerals Processing sector. Furthermore, the SASB standard for the Gas Utilities & Distributors industry covers activities related only to gas provision and not to electricity provision. Some utilities may operate in both gas and electricity markets. Companies undertaking activities related to electricity generation and/or distribution should also consider the separate SASB Standard for the Electric Utilities & Power Generators industry (IF-EU).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy	Average retail gas rate for (1) residential, (2) commercial, (3) industrial customers, and (4) transportation services only	Quantitative	Rate	IF-GU-240a.1
	Typical monthly gas bill for residential customers for (1) 50 MMBtu and (2) 100 MMBtu of gas delivered per year	Quantitative	Reporting currency	IF-GU-240a.2
Affordability	Number of residential customer gas disconnections for non-payment, percentage reconnected within 30 days ²	Quantitative	Number, Percentage (%)	IF-GU-240a.3
	Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory	Discussion and Analysis	n/a	IF-GU-240a.4
End-Use	Percentage of gas utility revenues from rate structures that (1) are decoupled or (2) contain a lost revenue adjustment mechanism (LRAM)	Quantitative	Percentage (%)	IF-GU-420a.1
Efficiency	Customer gas savings from efficiency measures by market ^a	Quantitative	Million British Thermal Units (MMBtu)	IF-GU-420a.2
	Number of (1) reportable pipeline incidents, (2) Corrective Action Orders (CAO), and (3) Notices of Probable Violation (NOPV) ^a	Quantitative	Number	IF-GU-540a.1
Integrity of Gas Delivery Infrastructure	Percentage of distribution pipeline that is (1) cast and/or wrought iron and (2) unprotected steel	Quantitative	Percentage (%) by length	IF-GU-540a.2
	Percentage of gas (1) transmission and (2) distribution pipelines inspected	Quantitative	Percentage (%) by length	IF-GU-540a.3
	Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions	Discussion and Analysis	n/a	IF-GU-540a.4

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Gas_Utilities_Distributors_Standard_2018.pdf

Note to IF-GU-240a.3 – The entity shall discuss how policies, programs, and regulations impact the number and duration of residentia customer disconnections.

Note to IF-GU-420a.2 – The entity shall discuss customer efficiency measures that are required by regulations for each of its relevant markets.

Note to IF-GU-540a.1 — The entity shall discuss notable incidents such as those that affected a significant number of customers, created extended disruptions to service, or resulted in serious injury or death.

d. Home Builders

Industry Description

The Home Builders industry is comprised of companies that develop new homes and residential communities. Development efforts generally include the acquisition of land, site preparation, the construction of homes, and home sales. The majority of industry activity is focused on the development and sale of single-family homes, which are typically part of company-designed residential communities. A smaller segment is centered on townhomes, condominiums, multifamily housing, and mixed-use development. Many companies in the industry offer financing services to individual homebuyers. The industry is fragmented, as there is a large number of developers of all sizes, which vary in company structure and geographic focus. Listed companies tend to be significantly larger, and more integrated than the numerous privately held home builders.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Number of (1) lots and (2) homes delivered on redevelopment sites	Quantitative	Number	IF-HB-160a.1
	Number of (1) lots and (2) homes delivered in regions with High or Extremely High Baseline Water Stress	Quantitative	Number	IF-HB-160a.2
Land Use & Ecological mpacts	Total amount of monetary losses as a result of legal proceedings associated with environmental regulations ²	Quantitative	Reporting currency	IF-HB-160a.3
	Discussion of process to integrate environmental considerations into site selection, site design, and site development and construction	Discussion and Analysis	n/a	IF-HB-160a.4
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	IF-HB-320a.1
	(1) Number of homes that obtained a certified HERS® Index Score and (2) average score	Quantitative	Number, Index score	IF-HB-410a.1
	Percentage of installed water fixtures certified to WaterSense® specifications	Quantitative	Percentage (%)	IF-HB-410a.2
Design for Resource Efficiency	Number of homes delivered certified to a third-party multi-attribute green building standard	Quantitative	Number	IF-HB-410a.3
	Description of risks and opportunities related to incorporating resource efficiency into home design, and how benefits are communicated to customers	Discussion and Analysis	n/a	IF-HB-410a.4
	Description of how proximity and access to infrastructure, services, and economic centers affect site selection and development decisions	Discussion and Analysis	n/a	IF-HB-410b.1
Community Impacts of New Developments	Number of (1) lots and (2) homes delivered on infill sites	Quantitative	Number	IF-HB-410b.2
	(1) Number of homes delivered in compact developments and (2) average density	Quantitative	Number	IF-HB-410b.3
Climate Change Adaptation	Number of lots located in 100-year flood zones	Quantitative	Number	IF-HB-420a.1

Note to IF-HB-160a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	Discussion and Analysis	n/a	IF-HB-420a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Home_Builders_Standard_2018.pdf

e. Real Estate

Industry Description

The Real Estate industry is composed of companies that own, develop, and generally operate income-producing real estate assets. Companies in this industry are commonly structured as real estate investment trusts (REITs) and operate in a wide range of segments within the real estate industry, including residential, retail, office, health care, industrial, and hotel properties. REITs typically focus on the direct ownership of real estate assets, thereby providing investors with the opportunity to obtain real estate exposure without direct asset ownership and management. Although REITs are often concentrated in one segment of the Real Estate industry, many REITs are diversified through investment in multiple property types. For tax purposes, real estate companies in the U.S. often prefer to be structured as REITs. To be classified as a REIT, companies must maintain most of their assets in real estate, derive most income from these assets, and distribute a minimum threshold of their annual taxable income to shareholders as dividends, among other requirements. Most U.S.- listed companies in the industry operate exclusively within the U.S., while some companies have broadened their real estate portfolio exposure internationally.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Energy consumption data coverage as a percentage of total floor area, by property subsector	Quantitative	Percentage (%) by floor area	IF-RE-130a.1
	(1) Total energy consumed by portfolio area with data coverage, (2) percentage grid electricity, and (3) percentage renewable, by property subsector	Quantitative	Gigajoules (GJ), Percentage (%)	IF-RE-130a.2
Energy Management	Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector	Quantitative	Percentage (%)	IF-RE-130a.3
	Percentage of eligible portfolio that (1) has an energy rating and (2) is certified to ENERGY STAR, by property subsector	Quantitative	Percentage (%) by floor area	IF-RE-130a.4
	Description of how building energy management considerations are integrated into property investment analysis and operational strategy	Discussion and Analysis	n/a	IF-RE-130a.5
	Water withdrawal data coverage as a percentage of (1) total floor area and (2) floor area in regions with High or Extremely High Baseline Water Stress, by property subsector	Quantitative	Percentage (%) by floor area	IF-RE-140a.1
Water Management	(1) Total water withdrawn by portfolio area with data coverage and (2) percentage in regions with High or Extremely High Baseline Water Stress, by property subsector	Quantitative	Thousand cubic meters (m³), Percentage (%)	IF-RE-140a.2
	Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector	Quantitative	Percentage (%)	IF-RE-140a.3
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	IF-RE-140a.4
Management of Tenant Sustainability Impacts	(1) Percentage of new leases that contain a cost recovery clause for resource efficiency- related capital improvements and (2) associated leased floor area, by property subsector	Quantitative	Percentage (%) by floor area, Square feet (ft²)	IF-RE-410a.1
	Percentage of tenants that are separately metered or submetered for (1) grid electricity consumption and (2) water withdrawals, by property subsector	Quantitative	Percentage (%) by floor area	IF-RE-410a.2

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Discussion of approach to measuring, incentivizing, and improving sustainability impacts of tenants	Discussion and Analysis	n/a	IF-RE-410a.3
Climate Change Adaptation	Area of properties located in 100-year flood zones, by property subsector	Quantitative	Square feet (ft²)	IF-RE-450a.1
	Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	Discussion and Analysis	n/a	#F-RE-450a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Real_Estate_Standard_2018.pdf

f. Real Estate Services

Industry Description

The Real Estate Services industry is composed of companies that provide a range of services to real estate owners, tenants, investors, and developers. Primary services include property management, brokerage, appraisal, and information services for real estate owners. Property management services may include leasing, tenant relations, building maintenance, and building security. Many companies also provide brokerage services, facilitating sales and leasing transactions. Appraisals and other advisory or information services are other specialized services that are commonly provided to clients. Companies in the industry play important roles in the real estate value chain, which is a substantial part of the global economy.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Revenue from energy and sustainability services ²	Quantitative	Reporting currency	IF-RS-410a.1
Sustainability Services	(1) Floor area and (2) number of buildings under management provided with energy and sustainability services	Quantitative	Square feet (ft²), Number	IF-RS-410a.2
	(1) Floor area and (2) number of buildings under management that obtained an energy rating	Quantitative	Square feet (ft²), Number	IF-RS-410a.3
•	Brokerage revenue from dual agency transactions ³	Quantitative	Reporting currency	IF-RS-510a.1
Transparent Information & Management of Conflict of Interest	Revenue from transactions associated with appraisal services'	Quantitative	Reporting currency	IF-RS-510a.2
	Total amount of monetary losses as a result of legal proceedings associated with professional integrity, including duty of care ⁸	Quantitative	Reporting currency	IF-RS-510a.3

² Note to IF-RS-410a.1 - The entity shall provide a description of the energy and sustainability services it offers.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Real Estate Services Standard 2018.pdf

Note to IF-RS-510a.1 – The entity shall describe its approach to managing potential conflicts of interest in dual agency transactions.

Note to IF-RS-510a.2 – The entity shall describe its approach to managing potential conflicts of interest in appraisals.

Note to IF-RS-510a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

g. Waste Management

Industry Description

The Waste Management industry includes companies that collect, store, dispose of, recycle, or treat various forms of waste from residential, commercial, and industrial clients. Types of waste include municipal solid waste, hazardous waste, recyclable materials, and compostable or organic materials. Major companies are commonly vertically integrated, providing a range of services from waste collection to landfilling and recycling, while others provide specialized services such as treating medical and industrial wastes. Waste-to-energy operations are a distinct industry segment. Certain industry players also provide environmental engineering and consulting services, mostly to large industrial clients.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	IF-WM-110a.1
Greenhouse Gas Emissions	(1) Total landfill gas generated, (2) percentage flared, (3) percentage used for energy	Quantitative	Million British Thermal Units (MMBtu), Percentage (%)	IF-WM-110a.2
	Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	IF-WM-110a.3
Fleet Fuel	(1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	IF-WM-110b.1
Management	Percentage of alternative fuel vehicles in fleet	Quantitative	Percentage (%)	IF-WM-110b.2
	Air emissions of the following pollutants: (1) NO_x (excluding N_2O), (2) SO_x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	IF-WM-120a.1
Air Quality	Number of facilities in or near areas of dense population	Quantitative	Number	IF-WM-120a.2
	Number of incidents of non-compliance associated with air emissions	Quantitative	Number	IF-WM-120a.3
Management of	(1) Total Toxic Release Inventory (TRI) releases, (2) percentage released to water	Quantitative	Metric tons (t), Percentage (%)	IF-WM-150a.1
Management of Leachate & Hazardous	Number of corrective actions implemented for landfill releases	Quantitative	Number	IF-WM-150a.2
Waste	Number of incidents of non-compliance associated with environmental impacts	Quantitative	Number	IF-WM-150a.3
	Percentage of active workforce covered under collective bargaining agreements	Quantitative	Percentage (%)	IF-WM-310a.1
Labor Practices	(1) Number of work stoppages and (2) total days idle ²	Quantitative	Number, Days idle	IF-WM-310a.2

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	Quantitative	Rate	IF-WM-320a.1
Workforce Health & Safety	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance	Quantitative	Percentile	IF-WM-320a.2
	Number of road accidents and incidents	Quantitative	Number	IF-WM-320a.3
	(1) Amount of waste incinerated, (2) percentage hazardous, (3) percentage used for energy recovery	Quantitative	Metric tons (t), Percentage (%)	IF-WM-420a.1
Recycling &	Percentage of customers receiving (1) recycling and (2) composting services, by customer type	Quantitative	Percentage (%)	IF-WM-420a.2
Resource Recovery	Amount of material (1) recycled, (2) composted, and (3) processed as waste-to-energy	Quantitative	Metric tons (t)	IF-WM-420a.3
	Amount of electronic waste collected, percentage recovered through recycling	Quantitative	Metric tons (t), Percentage (%)	IF-WM-420a.4

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Waste_Management_Standard_2018.pdf

h. Water Utilities and Services

Industry Description

Companies in the Water Utilities & Services industry own and operate water supply and wastewater treatment systems (generally structured as regulated utility businesses), or provide operational and other specialized water services to system owners (usually marketbased operations). Water supply systems include the sourcing, treatment, and distribution of water to residences, businesses, and other entities such as governments. Wastewater systems collect and treat wastewater, including sewage, graywater, industrial waste fluids, and stormwater runoff, before discharging the resulting effluent back into the environment. Note: The scope of the Water Utilities & Services industry (IF-WU) excludes water services that fall into the category of infrastructure design and development. These activities fall within the Engineering & Construction Services industry (IFEC).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	IF-WU-130a.1
Distribution	Water main replacement rate ^a	Quantitative	Rate	IF-WU-140a.1
Network Efficiency	Volume of non-revenue real water losses	Quantitative	Thousand cubic meters (m²)	IF-WU-140a.2
Effluent Quality	Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations	Quantitative	Number	IF-WU-140b.1
Management	Discussion of strategies to manage effluents of emerging concern	Discussion and Analysis	n/a	IF-WU-140b.2
	Average retail water rate for (1) residential, (2) commercial, and (3) industrial customers	Quantitative	Rate	IF-WU-240a.1
Mater	Typical monthly water bill for residential customers for 10 Ccf of water delivered per month	Quantitative	Reporting currency	IF-WU-240a.2
Affordability & Access	Number of residential customer water disconnections for non-payment, percentage reconnected within 30 days ⁵	Quantitative	Number, Percentage (%)	#-WU-240a.3
	Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory	Discussion and Analysis	n/a	IF-WU-240a.4
Drinking Water	Number of (1) acute health-based, (2) non- acute health-based, and (3) non-health-based drinking water violations ⁶	Quantitative	Number	IF-WU-250a.1
Quality	Discussion of strategies to manage drinking water contaminants of emerging concern	Discussion and Analysis	n/a	IF-WU-250a.2
End-Use Efficiency	Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience	Quantitative	Percentage (%)	IF-WU-420a.1
	Customer water savings from efficiency measures, by market ^a	Quantitative	Cubic meters (m²)	IF-WU-420a.2

Note to IF-WU-140a.1 – The entity shall discuss the use of and challenges associated with planned and corrective maintenance in its

Note to IF-WU-240a.3 - The entity shall discuss how policies, programs, and regulations impact the number and duration of residential customer disconnections

Note to IF-WU-250a.1 - The entity shall discuss notable violations such as U.S. Environmental Protection Agency (EPA) Tier 1 events,

those that affected a significant number of customers, or those of extended duration.

Note to IF-WU-420a.2 — The entity shall discuss customer efficiency measures that are required by regulations for each of its relevant

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party	Quantitative	Thousand cubic meters (m³), Percentage (%)	IF-WU-440a.1
Water Supply Resilience	Volume of recycled water delivered to customers	Quantitative	Thousand cubic meters (m³)	IF-WU-440a.2
	Discussion of strategies to manage risks associated with the quality and availability of water resources	Discussion and Analysis	n/a	IF-WU-440a.3
	Wastewater treatment capacity located in 100-year flood zones	Quantitative	Cubic meters (m³) per day	IF-WU-450a.1
Network	(1) Number and (2) volume of sanitary sewer overflows (SSO), (3) percentage of volume recovered	Quantitative	Number, Cubic meters (m³), Percentage (%)	IF-WU-450a.2
Resiliency & Impacts of Climate Change	(1) Number of unplanned service disruptions, and (2) customers affected, each by duration category ⁶	Quantitative	Number	IF-WU-450a.3
	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure	Discussion and Analysis	n/a	IF-WU-450a.4

Note to IF-WU-450a.3 – The entity shall discuss notable service disruptions such as those that affected a significant population or those of extended duration.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Water_Utilities_Services_Standard_2018.pdf

7. SASB Standards for Renewable Resources and Alternative Energy

- a. Biofuels
- b. Forestry Management
- c. Fuel Cells and Industrial Batteries
- d. Pulp and Paper Products
- e. Solar Technology and Project Developers
- f. Wind Technology and Project developers

a. Biofuels

Industry Description

The Biofuels industry consists of companies that produce biofuels and process raw materials for production. Biofuels are manufactured using organic feedstocks and are used primarily as transportation fuels. Companies typically source feedstocks, which include food, oil crops, and animal products, from agricultural product distributors. Ethanol and biodiesel are the most widely produced biofuels, while other types include biogas, biohydrogen, and synthetic biofuels, produced from a variety of organic feedstocks. Biofuels companies' customers are chiefly fuel-blending and fuel-supply companies, including major integrated oil companies. While biofuels are produced worldwide, the publicly listed companies in the Biofuels industry operate primarily in the U.S., though some have minor operations abroad, notably in India, Brazil, and South Korea. Government regulations related to the use of renewable fuel are a significant demand driver in the industry.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Air Quality	Air emissions of the following pollutants: (1) NO, (excluding N ₂ O), (2) SO,, (3) volatile organic compounds (VOCs), (4) particulate matter (PM ₁₀), and (5) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	RR-BI-120a.1
	Number of incidents of non-compliance associated with air quality permits, standards, and regulations	Quantitative	Number	RR-BI-120a.2
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	RR-BI-140a.1
Water Management in Manufacturing	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RR-BI-140a.2
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RR-BI-140a.3
Lifecycle Emissions Balance	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	Quantitative	Grams of CO ₂ -e per megajoule (MJ)	RR-BI-410a.1
Sourcing & Environmental	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	Discussion and Analysis	n/a	RR-BI-430a.1
Impacts of Feedstock Production	Percentage of biofuel production third-party certified to an environmental sustainability standard	Quantitative	Percentage (%) of gallons	RR-BI-430a.2
Management of	Amount of subsidies received through government programs	Quantitative	Reporting currency	RR-BI-530a.1
the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	RR-BI-530a.2
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR) ²	Quantitative	Number, Rate	RR-BI-540a.1

Note to RR-BI-540a.1 – The entity shall describe incidents with a severity rating of 1 or 2, including their root cause, outcomes, and corrective actions implemented in response (e.g., technology improvements and operator training).

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Biofuels_Standard_2018.pdf

b. Forestry Management

Industry Description

The Forestry Management industry consists of companies that own and/or manage natural and planted forestry lands and timber tracts, or operate non-retail tree nurseries and rubber plantations. The industry conducts its operations on lands that can be company-owned or leased from public or private landowners. Companies typically sell timber to wood products manufacturers, pulp and paper producers, energy producers, and a variety of other customers. The industry's largest companies operate primarily in and are domiciled in the U.S. and Canada. Some have international operations including in Brazil and New Zealand. While some integrated companies may also operate sawmills, wood products facilities, or pulp and paper facilities, sustainability issues arising from these activities are addressed in SASB's Building Products & Furnishings (CG-BP) and Pulp & Paper Products (RR-PP) industry standard.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Area of forestland certified to a third-party forest management standard, percentage certified to each standard ²	Quantitative	Acres (ac), Percentage (%)	RR-FM-160a.1
Ecosystem	Area of forestland with protected conservation status	Quantitative	Acres (ac)	RR-FM-160a.2
Services & Impacts	Area of forestland in endangered species habitat	Quantitative	Acres (ac)	RR-FM-160a.3
	Description of approach to optimizing opportunities from ecosystem services provided by forestlands	Discussion and Analysis	n/a	RR-FM-160a.4
	Area of forestland in indigenous land	Quantitative	Acres (ac)	RR-FM-210a.1
Rights of Indigenous Peoples	Description of engagement processes and due diligence practices with respect to human rights, indigenous rights, and the local community	Discussion and Analysis	n/a	RR-FM-210a.2
Climate Change Adaptation	Description of strategy to manage opportunities for and risks to forest management and timber production presented by climate change	Discussion and Analysis	n/a	RR-FM-450a.1

Note to RR-FM-160a.1 – The entity shall describe forestry management practices for non-certified forestlands, and for any forest management certifications that were suspended or terminated, the entity shall disclose the number, associated acreage, and stated reason for suspension or termination.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Forestry_Management_Standard_2018.pdf

c. Fuel Cells and Industrial Batteries

Industry Description

The Fuel Cells & Industrial Batteries industry consists of companies that manufacture fuel cells for energy production and energy storage equipment such as batteries. Manufacturers in this industry mainly sell products to companies for varied energy-generation and energy-storage applications and intensities, from commercial business applications to large-scale energy projects for utilities. Companies in the industry typically have global operations and sell products to a global marketplace. Note: For the purposes of SASB standards, this industry does not include fuel cells or batteries used in light automotive vehicle applications. See SASB standards for the Auto Parts industry (TR-AP) for details on reporting this business segment. This industry also does not include non-industrial batteries for personal consumer use, which are classified under the Household & Personal Products industry (CG-HP).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RR-FC-130a.1
Workforce	(1) Total recordable incident rate (TRIR) and (2) fatality rate	Quantitative	Rate	RR-FC-320a.1
Health & Safety	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	Discussion and Analysis	n/a	RR-FC-320a.2
	Average storage capacity of batteries, by product application and technology type	Quantitative	Specific energy (Wh/kg)	RR-FC-410a.1
	Average energy efficiency of fuel cells as (1) electrical efficiency and (2) thermal efficiency, by product application and technology type	Quantitative	Percentage (%)	RR-FC-410a.2
Product Efficiency	Average battery efficiency as coulombic efficiency, by product application and technology type	Quantitative	Percentage (%)	RR-FC-410a.3
	Average operating lifetime of fuel cells, by product application and technology type	Quantitative	Hours (h)	RR-FC-410a.4
	Average operating lifetime of batteries, by product application and technology type	Quantitative	Number of cycles	RR-FC-410a.5
	Percentage of products sold that are recyclable or reusable	Quantitative	Percentage (%) by weight	RR-FC-410b.1
Product End-of- life Management	Weight of end-of-life material recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	RR-FC-410b.2
	Description of approach to manage use, reclamation, and disposal of hazardous materials	Discussion and Analysis	n/a	RR-FC-410b.3
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	RR-FC-440a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Fuel_Cells_Industrial_Batteries_Standard_2018.pdf

d. Pulp and Paper Products

Industry Description

The Pulp & Paper Products industry consists of companies that manufacture a range of wood pulp and paper products, including pulp fiber, paper packaging and sanitary paper, office paper, newsprint, and paper for industrial applications. Companies in the industry typically function as business-to-business entities and may have operations in multiple countries, such as the U.S., Canada, and Brazil. While some integrated companies own or manage timber tracts and are engaged in forest management, sustainability issues arising from these activities are addressed in SASB's Forestry Management (RR-FM) industry standard.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO2-e	RR-PP-110a.1
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	RR-PP-110a.2
Air Quality	Air emissions of the following pollutants: (1) NO, (excluding N ₂ O), (2) SO ₂ , (3) volatile organic compounds (VOCs), (4) particulate matter (PM), and (5) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	RR-PP-120a.1
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage from biomass, (4) percentage from other renewable energy ²	Quantitative	Gigajoules (GJ), Percentage (%)	RR-PP-130a.1
Water	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	RR-PP-140a.1
Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RR-PP-140a.2
Supply Chain Management	Percentage of wood fiber sourced from (1) third-party certified forestlands and percentage to each standard and (2) meeting other fiber sourcing standards and percentage to each standard ³	Quantitative	Percentage (%) by weight	RR-PP-430a.1
	Amount of recycled and recovered fiber procured	Quantitative	Metric tons (t)	RR-PP-430a.2

Note to RR-PP-130a.1 – The entity shall discuss risks and uncertainties associated with the use of biomass for energy.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Pulp Paper Products Standard 2018.pdf

Note to RR-PP-430a.1 – The entity shall discuss due diligence practices for fiber that is not from certified forestlands or certified to other fiber sourcing standards.

Note to RR-PP-430a.2 – The entity shall discuss its strategy to incorporate environmental lifecycle analyses into decisions to source recycled and recovered fiber versus virgin fiber.

Solar Technology and Project Developers e.

Industry Description

The Solar Technology & Project Developers industry comprises companies that manufacture solar energy equipment, including solar photovoltaic (PV) modules, polysilicon feedstock, solar thermal electricity-generation systems, solar inverters, and other related components. Companies may also develop, build, and manage solar energy projects and offer financing or maintenance services to customers. Two primary technologies are utilized in the industry: PV and concentrated solar power (CSP). Within solar PV, there are two main technologies: crystalline silicon-based solar and thin film solar, which includes panels made using copper indium gallium selenide and cadmium telluride. The primary markets for solar panels are residential, non-residential (commercial and industrial), and utility-scale projects. Companies in the industry operate globally.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management in Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RR-ST-130a.1
Water	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	RR-ST-140a.1
Management in Manufacturing	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RR-ST-140a.2
Hazardous Waste	Amount of hazardous waste generated, percentage recycled ²	Quantitative	Metric tons (t), Percentage (%)	RR-ST-150a.1
waste Management	Number and aggregate quantity of reportable spills, quantity recovered	Quantitative	Number, Kilograms (kg)	RR-ST-150a.2
Ecological	Number and duration of project delays related to ecological impacts	Quantitative	Number, Days	RR-ST-160a.1
Impacts of Project Development	Description of efforts in solar energy system project development to address community and ecological impacts	Discussion and Analysis	n/a	RR-ST-160a.2
Management of Energy Infrastructure	Description of risks associated with integration of solar energy into existing energy infrastructure and discussion of efforts to manage those risks	Discussion and Analysis	n/a	RR-ST-410a.1
Integration & Related Regulations	Description of risks and opportunities associated with energy policy and its impact on the integration of solar energy into existing energy infrastructure	Discussion and Analysis	rı/a	RR-ST-410a.2
Product End-of- life Management	Percentage of products sold that are recyclable or reusable	Quantitative	Percentage (%)	RR-ST-410b.1
	Weight of end-of-life material recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	RR-ST-410b.2
	Percentage of products by revenue that contain IEC 62474 declarable substances, arsenic compounds, antimony compounds, or beryllium compounds ⁴	Quantitative	Percentage (%)	RR-ST-410b.3

Note to RR-ST-150a.1 – The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.
Note to RR-ST-150a.2 – The entity shall discuss its long-term activities to remediate spills that occurred in years prior to the reporting.

period but for which remediation activities are ongoing.

Note to RR-ST-410b.3 – Disclosure shall include a discussion of approach to managing the use of IEC 62474 declarable substances,

arsenic compounds, antimony compounds, or beryllium compounds.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Description of approach and strategies to design products for high-value recycling	Discussion and Analysis	n/a	RR-ST-410b.4
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	RR-ST-440a.1
	Description of the management of environmental risks associated with the polysilicon supply chain	Discussion and Analysis	n/a	RR-ST-440a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Solar_Technology_Project_Developers_Standard_2018.pdf

f. Wind Technology & Project Developers

Industry Description

The Wind Technology & Project Developers industry comprises companies that manufacture wind turbines, blades, towers, and other components of wind power systems. Companies that develop, build, and manage wind energy projects are also included within the scope of this industry. Manufacturers may also offer post-sale maintenance and support services. Turbines can be installed onshore or offshore, which can cause differences in wind generating capacity and create challenges in project development for each type of installation. Most major wind technology companies operate globally.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	RR-WI-320a.1
	Average A-weighted sound power level of wind turbines, by wind turbine class	Quantitative	dB(A)	RR-WT-410a.1
Ecological Impacts of Project	Backlog cancellations associated with community or ecological impacts	Quantitative	Reporting currency	RR-WT-410a.2
Development	Description of efforts to address ecological and community impacts of wind energy production through turbine design	Discussion and Analysis	n/a	RR-WT-410a.3
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	RR-WT-440a.1
	Top five materials consumed, by weight	Quantitative	Metric tons (t)	RR-WT-440b.1
Materials Efficiency	Average top head mass per turbine capacity, by wind turbine class	Quantitative	Metric tons per megawatts (vMW)	RR-WT-440b.2
	Description of approach to optimize materials efficiency of wind turbine design	Discussion and Analysis	n/a	RR-WT-440b.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Wind_Technology_Project_Developers_Standard_2018.pdf

8. SASB Standards for Resource Management

- a. Aerospace & Defense
- b. Chemicals
- c. Containers & Packaging
- d. Electrical & Electronic Equipment
- e. Industrial Machinery & Goods

Aerospace and Defense a.

Industry Description

Companies in the Aerospace & Defense industry include manufacturers of commercial aircraft, aircraft parts, aerospace and defense products, as well as defense prime contractors. Commercial aircraft manufacturers represent approximately one quarter of industry revenues and sell mainly to commercial airlines and governments. Aerospace and defense parts manufacturers represent the largest segment of the industry by total revenue, selling primarily to governments. Both aerospace and defense manufacturers operate globally and serve a global customer base. Defense primes represent approximately one quarter of total industry revenues and manufacture products including military aircraft, space vehicles, missile systems, ammunition, small arms, naval ships, and other commercial and military vehicles. Their customers consist of various government agencies and related businesses with global operations. The defense prime category also includes firearms manufacturers that sell to law enforcement agencies, businesses, distributors, retailers, and consumers. Key sustainability topics within the industry include the energy efficiency and emissions profile of products and management of manufacturing energy and waste.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RT-AE-130a.1
Hazardous Waste	Amount of hazardous waste generated, percentage recycled ²	Quantitative	Metric tons (t), Percentage (%)	RT-AE-150a.1
Management	Number and aggregate quantity of reportable spills, quantity recovered	Quantitative	Number, Kilograms (kg)	RT-AE-150a.2
	(1) Number of data breaches, (2) percentage involving confidential information ⁴	Quantitative	Number, Percentage (%)	RT-AE-230a.1
Data Security	Description of approach to identifying and addressing data security risks in (1) company operations and (2) products	Discussion and Analysis	n/a	RT-AE-230a.2
	Number of recalls issued, total units recalled	Quantitative	Number	RT-AE-250a.1
	Number of counterfeit parts detected, percentage avoided	Quantitative	Number, Percentage (%)	RT-AE-250a.2
Product Safety	Number of Airworthiness Directives received, total units affected [®]	Quantitative	Number	RT-AE-250a.3
	Total amount of monetary losses as a result of legal proceedings associated with product safety'	Quantitative	Reporting currency	RT-AE-250a.4
Fuel Economy & Emissions in Use-phase	Revenue from alternative energy-related products	Quantitative	Reporting currency	RT-AE-410a.1
	Description of approach and discussion of strategy to address fuel economy and greenhouse gas (GHG) emissions of products	Discussion and Analysis	n/a	RT-AE-410a.2
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	RT-AE-440a.1

monetary losses

Note to RT-AE-150a.1 – The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

Note to RT-AE-150a.2 – The entity shall discuss its long-term activities to remediate spills that occurred in years prior to the reporting

period but for which remediation activities are ongoing.

Note to RT-AE-230a.1 – Disclosure shall include a description of corrective actions implemented in response to data breaches.

Note to RT-AE-250a.1 – Disclosure shall include a discussion of notable recalls, such as those that affected a significant number of

Note to RT-AE-250a.1 — Disclosure shall include a discussion of notable recalls, such as those that affected a significant number units or those related to a serious injury or fatality.

Note to RT-AE-250a.3 — The entity shall discuss notable Airworthiness Directives, such as those that resulted in an Emergency Airworthiness Directive, affected a significant number of products, or were associated with plane grounding(s) or accident(s).

Note to RT-AE-250a.4 — The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with incidents of corruption, bribery, and/or illicit international trade [®]	Quantitative	Reporting currency	RT-AE-510a.1
	Revenue from countries ranked in the "E" or "F" Band of Transparency International's Government Defence Anti-Corruption Index	Quantitative	Reporting currency	RT-AE-510a.2
	Discussion of processes to manage business ethics risks throughout the value chain	Discussion and Analysis	n/a	RT-AE-510a.3

Note to RT-AE-510a.1 – The entity shall briefly describe the nature (e.g., judgment or order issued after trial, settlement, guilty plea, deferred prosecution agreement, non-prosecution agreement) and context (e.g., bribing an official, etc.) of all monetary losses as a result of legal proceedings.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Aerospace_Defense_Standard_2018.pdf

b. Chemicals

Industry Description

Companies in the Chemicals industry transform organic and inorganic feedstocks into more than 70,000 diverse products with a range of industrial, pharmaceutical, agricultural, housing, automotive, and consumer applications. The industry is commonly segmented into basic (commodity) chemicals, agricultural chemicals, and specialty chemicals. Basic chemicals, the largest segment by volume produced, include bulk polymers, petrochemicals, inorganic chemicals, and other industrial chemicals. Agricultural chemicals include fertilizers, crop chemicals, and agricultural biotechnology. Specialty chemicals include paints and coatings, agrochemicals, sealants, adhesives, dyes, industrial gases, resins, and catalysts. Larger firms may produce basic, agricultural, and specialty chemicals, while most companies are specialized. Chemicals companies typically manufacture and sell products globally

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	RT-CH-110a.1
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	RT-CH-110a.2
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	RT-CH-120a.1
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy ²	Quantitative	Gigaĵoules (GJ), Percentage (%)	RT-CH-130a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	RT-CH-140a.1
Water Management	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RT-CH-140a.2
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RT-CH-140a.3
Hazardous Waste Management	Amount of hazardous waste generated, percentage recycled ³	Quantitative	Metric tons (t), Percentage (%)	RT-CH-150a.1
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	Discussion and Analysis	n/a	RT-CH-210a.1
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	RT-CH-320a.1
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Discussion and Analysis	n/a	RT-CH-320a.2

Note to RT-CH-130a.1 — The entity shall discuss its efforts to reduce energy consumption and/or improve energy efficiency throughout

the production processes.

Note to RT-CH-150a.1 – The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Product Design for Use-phase Efficiency	Revenue from products designed for use- phase resource efficiency	Quantitative	Reporting currency	RT-CH-410a.1
Safety & Environmental Stewardship of	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	Quantitative	Percentage (%) by revenue, Percentage (%)	RT-CH-410b.1
Chemicals	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	Discussion and Analysis	n/a	RT-CH-410b.2
Genetically Modified Organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Quantitative	Percentage (%) by revenue	RT-CH-410c.1
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	RT-CH-530a.1
Operational Safety, Emergency	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR) ⁴	Quantitative	Number, Rate	RT-CH-540a.1
Preparedness & Response	Number of transport incidents ⁵	Quantitative	Number	RT-CH-540a.2

⁴ Note to RT-CH-540a.1 - The entity shall describe incidents with a severity rating of 1 or 2, including their root cause, outcomes, and

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Chemicals_Standard_2018.pdf

corrective actions implemented in response.

Note to RT-CH-540a.2 – The entity shall describe significant transport incidents, including their root causes, outcomes, and corrective actions implemented in response.

c. Containers and Packaging

Industry Description

The Containers & Packaging industry converts raw materials, including metal, plastic, paper, and glass, into semi-finished or finished packaging products. Companies produce a wide range of products, including: corrugated cardboard packaging, food and beverage containers, bottles for household products, aluminum cans, steel drums, and other forms of packaging. Companies in the industry typically function as business-to-business entities and many operate globally.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	RT-CP-110a.1
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	RT-CP-110a.2
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM)	Quantitative	Metric tons (t)	RT-CP-120a.1
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	Quantitative	Gigajoules (GJ), Percentage (%)	RT-CP-130a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	RT-CP-140a.1
Water Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Quantitative	Number	RT-CP-140a.2
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RT-CP-140a.3
Waste Management	Amount of hazardous waste generated, percentage recycled ²	Quantitative	Metric tons (t), Percentage (%)	RT-CP-150a.1
	Number of recalls issued, total units recalled ^a	Quantitative	Number	RT-CP-250a.1
Product Safety	Discussion of process to identify and manage emerging materials and chemicals of concern	Discussion and Analysis	n/a	RT-CP-250a.2
Product Lifecycle Management	Percentage of raw materials from: (1) recycled content, (2) renewable resources, and (3) renewable and recycled content	Quantitative	Percentage (%) by weight	RT-CP-410a.1
	Revenue from products that are reusable, recyclable, and/or compostable	Quantitative	Reporting currency	RT-CP-410a.2
	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	RT-CP-410a.3

Note to RT-CP-150a.1 — The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

Note to RT-CP-250a.1 – The entity shall discuss notable recalls, such as those that affected a significant number of products, a significant number of units of one product, or those related to serious injury or fatality.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Supply Chain Management	Total wood fiber procured, percentage from certified sources	Quantitative	Metric tons (t), Percentage (%)	RT-CP-430a.1
	Total aluminum purchased, percentage from certified sources	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	RT-CP-430a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Containers_Packaging_Standard_2018.pdf

d. **Electrical and Electronic Equipment**

Industry Description

The Electrical & Electronic Equipment industry consists of companies that develop and manufacture a broad range of electric components, including power generation equipment, energy transformers, electric motors, switchboards, automation equipment, heating and cooling equipment, lighting, and transmission cables. These include: non-structural commercial and residential building equipment, such as Heating, Ventilation, and Air Conditioning (HVAC) systems, lighting fixtures, security devices, and elevators; electrical power equipment; traditional power generation and transmission equipment; renewable energy equipment; industrial automation controls; measurement instruments; and electrical components used for industrial purposes, such as coils, wires, and cables. Companies in this mature and competitive industry operate globally and typically generate a significant portion of their revenue from outside the country of their domicile.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RT-EE-130a.1
Hazardous	Amount of hazardous waste generated, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	RT-EE-150a.1
Waste Management	Number and aggregate quantity of reportable spills, quantity recovered	Quantitative	Number, Kilograms (kg)	RT-EE-150a.2
	Number of recalls issued, total units recalled ⁴	Quantitative	Number	RT-EE-250a.1
Product Safety	Total amount of monetary losses as a result of legal proceedings associated with product safety ⁵	Quantitative	Reporting currency	RT-EE-250a.2
Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	Percentage (%) by revenue	RT-EE-410a.1
	Percentage of eligible products, by revenue, that meet ENERGY STAR® criteria	Quantitative	Percentage (%) by revenue	RT-EE-410a.2
	Revenue from renewable energy-related and energy efficiency-related products	Quantitative	Reporting currency	RT-EE-410a.3
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	RT-EE-440a.1
Business Ethics	Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior	Discussion and Analysis	r/a	RT-EE-510a.1
	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption?	Quantitative	Reporting currency	RT-EE-510a.2
	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations ⁸	Quantitative	Reporting currency	RT-EE-510a.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Electrical Electronic Equipment Standard 2018.pdf

Note to RT-EE-150a.1 — The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

Note to RT-EE-150a.2 — The entity shall discuss its long-term activities to remediate spills that occurred in years prior to the reporting period but for which remediation activities are ongoing.

Note to RT-EE-250a.1 — The entity shall discuss notable recalls, such as those that affected a significant number of products or those

related to serious injury or fatality.

Note to RT-EE-250a.2 — The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

Note to RT-EE-410a.1 – Disclosure shall include a discussion of approach to managing the use of IEC 62474 declarable substances. Note to RT-EE-510a.2 - The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

Note to RT-EE-510a.3 – The entity shall briefly describe the nature (e.g., judgment or order issued after trial, settlement, guilty plea, deferred prosecution agreement, non-prosecution agreement) and context (e.g., price fixing, patent misuse, or antitrust) of all monetary losses as a result of legal proceedings.

e. Industry Machinery and Goods

Industry Description

The Industrial Machinery & Goods industry manufactures equipment for a variety of industries including construction, agriculture, energy, utility, mining, manufacturing, automotive, and transportation. Products include engines, earthmoving equipment, trucks, tractors, ships, industrial pumps, locomotives, and turbines. Machinery manufacturers utilize large amounts of raw materials for production, including steel, plastics, rubber, paints, and glass. Manufacturers may also perform the machining and casting of parts before final assembly. Demand in the industry is closely tied to industrial production, while government emissions standards and customer demand are driving innovations to improve energy efficiency and limit air emissions during product use.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RT-IG-130a.1
Employee Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	Rate	RT-IG-320a.1
	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Quantitative	Gallons per 1,000 ton-miles	RT-IG-410a.1
	Sales-weighted fuel efficiency for non-road equipment	Quantitative	Gallons per hour	RT-IG-410a.2
Fuel Economy & Emissions in	Sales-weighted fuel efficiency for stationary generators	Quantitative	Watts per gallon	RT-IG-410a.3
Use-phase	Sales-weighted emissions of: (1) nitrogen oxides (NO ₄) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines ²	Quantitative	Grams per kilowatt-hour	RT-IG-410a.4
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	RT-IG-440a.1
Remanufacturing Design & Services	Revenue from remanufactured products and remanufacturing services ³	Quantitative	Reporting currency	RT-IG-440b.1

Note to RT-IG-410a.4 – The entity shall discuss its strategies and approach to managing fleet fuel economy and emissions risks and opportunities.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Industrial_Machinery_Goods_Standard_2018.pdf

Note to RT-IG-440b.1 – Disclosure shall include a discussion of efforts to obtain end-of-life products and parts for remanufacture.

9. SASB Standards for Services

- a. Advertising and Marketing
- b. Casinos and Gaming
- c. Education
- d. Hotels and Lodging
- e. Leisure Facilities
- f. Media and Entertainment
- g. Professional and Commercial Services

a. Advertising and Marketing

Industry Description

The Advertising & Marketing industry is comprised of companies that create advertising campaigns for use in media, display, or direct mail advertising and related services including market research. Advertising and marketing companies are engaged primarily by businesses selling consumer products, entertainment, financial services, technology products, and telecommunication services. Larger advertising companies are structured as holding companies, owning multiple agencies across the globe that provide a wide range of services such as custom publishing, brand consultancy, mobile and online marketing, and public relations. For any advertising campaign, the same company may be engaged in all aspects, from graphic arts and content creation to data analytics, marketing research, and media planning and buying, or the company may be in charge only of certain aspects.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Data Privacy	Discussion of policies and practices relating to behavioral advertising and consumer privacy	Discussion and Analysis	n/a	SV-AD-220a.1
	Percentage of online advertising impressions that are targeted to custom audiences	Quantitative	Percentage (%) by revenue	5V-AD-220a.2
	Total amount of monetary losses as a result of legal proceedings associated with consumer privacy ³	Quantitative	Reporting currency	SV-AD-220a 3
Advertising Integrity	Total amount of monetary losses as a result of legal proceedings associated with false, deceptive, or unfair advertising ³	Quantitative	Reporting currency	SV-AD-270a.1
	Percentage of campaigns reviewed for adherence with the Advertising Self- Regulatory Council (ASRC) procedures, percentage of those in compliance	Quantitative	Percentage (%) by revenue	SV-AD-270a.2
	Percentage of campaigns that promote alcohol or tobacco products	Quantitative	Percentage (%) by revenue	5V-AD-270a.3
Workforce Diversity & Inclusion	Percentage of gender and racial/ethnic group representation for (1) management, (2) professionals, and (3) all other employees *	Quantitative	Percentage (%)	SV-AD-330a.1

Note to SV-AD-220a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Advertising Marketing Standard 2018.pdf

Note to SV-AD-270a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

⁴ Note to SV-AD-330a.1 – The entity shall describe its policies and programs for fostering equitable employee representation across its global operations.

b. Casinos and Gaming

Industry Description

Publicly held casinos and gaming companies operate gambling facilities and/or platforms, including brick-and-mortar casinos, riverboat casinos, online gambling websites, and racetracks. The broader industry in the U.S. is dominated by privately held Native American casinos, which significantly outnumber publicly held casinos. Native American casinos are generally owned and operated by tribes, but sometimes can be managed by commercial casino operators or other management companies. The industry is characterized by high levels of regulatory oversight, which represents the main barrier to entry for new operators. Fewer than half of U.S. states have legalized commercial casinos in some form. although industry regulation varies significantly worldwide. Note: Select companies in the Casinos & Gaming industry are also engaged in activities of the Hotels & Lodging and/or Restaurants industries. The SASB Standards for such activities are outlined in the Hotels & Lodging and Restaurants standards. For the purposes of this standard, it is assumed that casinos and gaming companies are engaged solely in operating gambling facilities and providing online gaming services, and therefore issues such as water management and food safety, which may be material for companies that have significant hotel and restaurant operations, are not covered by this industry standard.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	SV-CA-130a.1
	Percentage of gaming facilities that implement the Responsible Gambling Index	Quantitative	Percentage (%) by revenue	SV-CA-260a.1
Responsible Gaming	Percentage of online gaming operations that implement the National Council on Problem Gambling (NCPG) Internet Responsible Gambling Standards	Quantitative	Percentage (%) by revenue	SV-CA-260a.2
Smoke-free Casinos	Percentage of gaming floor where smoking is allowed	Quantitative	Percentage (%) of gaming floor area	SV-CA-320a.1
	Percentage of gaming staff who work in areas where smoking is allowed	Quantitative	Percentage (%) of man-hours	SV-CA-320a.2
Internal Controls on Money Laundering	Description of anti-money laundering policies and practices	Discussion and Analysis	r/a	SV-CA-510a.1
	Total amount of monetary losses as a result of legal proceedings associated with money laundering.	Quantitative	Reporting currency	SV-CA-510a.2

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

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Casinos_Gaming_Standard_2018.pdf

c. Education

Industry Description

The Education industry includes education institutions that are profit-seeking and generate revenue from student fees. At the primary and secondary levels, this includes mostly education management organizations (EMOs) and some businesses. At the tertiary (or higher) level, services are delivered on a full-time, part-time, distance-learning, and occasional basis across establishments such as junior colleges, business and secretarial schools, colleges, universities, and professional schools including medical, pharmaceutical, and veterinary programs. An increasing number of students in for-profit universities take courses online.

ТОРІС	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Data Security	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	SV-ED-230a.1
	Description of policies and practices relating to collection, usage, and retention of student information	Discussion and Analysis	n/a	SV-ED-230a.2
	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of students affected ²	Quantitative	Number, Percentage (%)	SV-ED-230a.3
	Graduation rate	Quantitative	Percentage (%)	SV-ED-260a.1
Quality of	On-time completion rate	Quantitative	Percentage (%)	SV-ED-260a.2
Education &	Job placement rate	Quantitative	Percentage (%)	SV-ED-260a.3
Gainful Employment	(1) Debt-to-annual earnings rate and (2) debt- to-discretionary income rate	Quantitative	Percentage (%)	SV-ED-260a.4
	Program cohort default rate	Quantitative	Percentage (%)	SV-ED-260a.5
Marketing & Recruiting Practices	Description of policies to assure disclosure of key performance statistics to prospective students in advance of collecting any fees and discussion of outcomes	Discussion and Analysis	n/a	SV-ED-270a.1
	Total amount of monetary losses as a result of legal proceedings associated with advertising, marketing, and mandatory disclosures ³	Quantitative	Reporting currency	SV-ED-270a.2
	(1) Instruction and student services expenses and (2) marketing and recruiting expenses	Quantitative	Reporting currency	SV-ED-270a.3
	Revenue from: (1) Title IV funding, (2) GI Bill funding, and (3) private student loans*	Quantitative	Reporting currency	SV-ED-270a.4

Note to SV-ED-230a.3 – Disclosure shall include a description of corrective actions implemented in response to data breaches.
 Note to SV-ED-270a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Education_Standard_2018.pdf

Note to SV-ED-270a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.
 Note to SV-ED-270a.4 – Disclosure shall include a discussion of risks and opportunities associated with these and other funding

⁴ Note to SV-ED-270a.4 — Disclosure shall include a discussion of risks and opportunities associated with these and other funding sources.

d. Hotels and Lodging

Industry Description

The Hotels & Lodging industry is composed of companies that provide overnight accommodation, including hotels, motels, and inns. It is a competitive industry that is primarily comprised of large hotel chains and in which customers base purchase decisions on a wide range of factors including quality and consistency of services, availability of locations, price, and loyalty program offers. Businesses are often structured in one or more of the following ways: direct revenue from hotel services, including room rental and food and beverage sales; management and franchise services with fee revenue from property management; and vacation residential ownership with revenue from sales of residential units. Note: Select companies in the Hotels & Lodging industry are also engaged in activities of the Restaurants industry. The SASB standards for such activities are outlined in the Restaurants industry standards. For the purposes of this standard, it is assumed that hotels and lodging companies do not provide food and beverage services, and therefore issues such as food safety, waste, and sourcing, which may be material for companies that offer food and beverages, are not covered by this industry standard.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	SV-HL-130a.1
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	SV-HL-140a.1
Ecological Impacts	Number of lodging facilities located in or near areas of protected conservation status or endangered species habitat	Quantitative	Number	SV-HL-160a.1
	Description of environmental management policies and practices to preserve ecosystem services	Discussion and Analysis	n/a	SV-HL-160a.2
Labor Practices	(1) Voluntary and (2) involuntary turnover rate for lodging facility employees	Quantitative	Rate	SV-HL-310a.1
	Total amount of monetary losses as a result of legal proceedings associated with labor law violations ²	Quantitative	Reporting currency	SV-HL-310a.2
	(1) Average hourly wage and (2) percentage of lodging facility employees earning minimum wage, by region	Quantitative	Reporting currency, Percentage (%)	SV-HL-310a.3
	Description of policies and programs to prevent worker harassment	Discussion and Analysis	n/a	SV-HL-310a.4
Climate Change Adaptation	Number of lodging facilities located in 100- year flood zones	Quantitative	Number	SV-HL-450a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Hotels_Lodging_Standard_2018.pdf

e. Leisure Facilities

Industry Description

The Leisure Facilities industry is comprised of companies that operate entertainment, travel, and recreation facilities and services. Companies in this industry operate amusement parks, movie theaters, ski resorts, sports stadiums, and athletic clubs and other venues. Leisure facilities companies mainly generate revenue by providing live, digital, and/or interactive entertainment to millions of guests and customers annually across various locations.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	SV-LF-130a.1
Customer Safety	(1) Fatality rate and (2) injury rate for customers ³	Quantitative	Rate	SV-LF-250a.1
	Percentage of facilities inspected for safety, percentage of facilities that failed inspection	Quantitative	Percentage (%)	SV-LF-250a.2
Workforce Safety	(1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) permanent employees and (b) seasonal employees	Quantitative	Rate	SV-LF-320a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Leisure_Facilities_Standard_2018.pdf

f. Media and Entertainment

Industry Description

Media and entertainment companies create content and/or acquire rights to distribute content over cable or broadcast media, including entertainment programs, news, music, and children's programming. Companies in this industry also publish books, newspapers, and periodicals, and broadcast radio and local television programming. Note: Companies in the Media & Entertainment industry are increasingly engaged in distributing content via the Internet. The SASB standards for such activities are outlined in the Internet Media & Services industry standard. For the purposes of this standard, it is assumed that media and entertainment companies distribute content using traditional channels, such as television broadcasts and movie theater screenings. Therefore, issues such as data center energy use and online privacy, which may be material for companies that deliver content online, are not covered by this industry standard.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Media Pluralism	Percentage of gender and racial/ethnic group representation for (1) management, (2) professionals, and (3) all other employees ²	Quantitative	Percentage (%)	SV-ME-260a,1
	Description of policies and procedures to ensuring pluralism in news media content	Discussion and Analysis	n/a	SV-ME-260a.2
	Total amount of monetary losses as a result of legal proceedings associated with libel or slander.	Quantitative	Reporting currency	SV-ME-270a.1
Journalistic	Revenue from embedded advertising	Quantitative	Reporting currency	SV-ME-270a.2
Integrity & Sponsorship Identification	Description of approach for ensuring journalistic integrity of news programming related to: (1) truthfulness, accuracy, objectivity, fairness, and accountability, (2) independence of content and/or transparency of potential bias, and (3) protection of privacy and limitation of harm	Discussion and Analysis	n√a	SV-ME-270a.3
Intellectual Property Protection & Media Piracy	Description of approach to ensuring intellectual property (IP) protection	Discussion and Analysis	n/a	SV-ME-520a.1

Note to SV-ME-260a.1 – The entity shall describe its policies and programs for fostering equitable employee representation across its global operations.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Media Entertainment Standard 2018.pdf

Note to SV-ME-270a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Professional and Commercial Services g.

Industry Description

The Professional & Commercial Services industry includes companies that rely on the unique skills and knowledge of their employees to serve a range of clients. Services are often provided on an assignment basis, where an individual or team is responsible for the delivery of services to clients. Offerings include, but are not limited to, management and administration consulting services, such as staffing and executive search services; legal, accounting, and tax preparation services; and financial and non-financial information services. Non-financial information service providers may specialize in an array of topics such as energy, healthcare, real estate, technology, and science. Financial information service companies include credit and rating agencies as well as data and portfolio analytics providers. Customers of professional and commercial service providers include private and public for-profit institutions and non-profit organizations.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	SV-PS-230a.1
Data Security	Description of policies and practices relating to collection, usage, and retention of customer information	Discussion and Analysis	n/a	SV-PS-230a.2
	(1) Number of data breaches, (2) percentage involving customers' confidential business information (CBI) or personally identifiable information (PII), (3) number of customers affected ²	Quantitative	Number, Percentage (%)	SV-PS-230a.3
Workforce	Percentage of gender and racial/ethnic group representation for (1) executive management and (2) all other employees ³	Quantitative	Percentage (%)	SV-PS-330a.1
Diversity & Engagement	(1) Voluntary and (2) involuntary turnover rate for employees	Quantitative	Rate	SV-PS-330a.2
	Employee engagement as a percentage ⁴	Quantitative	Percentage (%)	SV-PS-330a.3
Professional Integrity	Description of approach to ensuring professional integrity	Discussion and Analysis	n/a	SV-PS-510a.1
	Total amount of monetary losses as a result of legal proceedings associated with professional integrity ⁸	Quantitative	Reporting currency	SV-PS-510a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Professional_Commercial_Services_Standard_2018.pdf

Note to SV-PS-230a.3 – Disclosure shall include a description of corrective actions implemented in response to data breaches.
 Note to SV-PS-330a.1 – The entity shall describe its policies and programs for fostering equitable employee representation across its.

Note to SV-PS-330a.3 – Disclosure shall include a description of the methodology employed.

Note to SV-PS-510a.2 – The entity shall briefly describe the nature, context, and corrective actions taken as a result of the monetary

10. SASB Standards for Technology and Communications

- a. Electronic Manufacturing Services and Original Design Manufacturing
- b. Hardware
- c. Internet Media and Services
- d. Semiconductors
- e. Software and IT Services
- f. Telecommunication Services

a. Electronic Manufacturing Services and Original Design Manufacturing

Industry Description

The Electronic Manufacturing Services (EMS) & Original Design Manufacturing (ODM) industry consists of two main segments. EMS companies provide assembly, logistics, and after-market services for original equipment manufacturers. The ODM segment of the industry provides engineering and design services for original equipment manufacturers and may own significant intellectual property. Although EMS & ODM companies produce equipment for a variety of sectors, the industry is closely associated with the Hardware industry, which consists of companies that design technology hardware products such as personal computers, consumer electronics, and storage devices for both personal consumers and businesses. Note: The Electronic Manufacturing Services & Original Design Manufacturing industry does not include the design of technology hardware products. Companies that design and manufacture technology hardware products should consider the separate SASB Hardware Industry Standard (TC-HW) in addition to the SASB Electronic Manufacturing Services & Original Design Manufacturing Industry Standard (TC-ES).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	TC-ES-140a.1
Waste Management	Amount of hazardous waste from manufacturing, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TC-ES-150a.1
Labor Practices	(1) Number of work stoppages and (2) total days idle ²	Quantitative	Number, Days idle	TC-ES-310a.1
	(1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	Quantitative	Rate	TC-ES-320a.1
Labor	Percentage of (1) entity's facilities and (2) Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	Quantitative	Percentage (%)	TC-ES-320a.2
Conditions	(1) Non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent and (2) associated corrective action rate for (a) priority non-conformances and (b) other non- conformances, broken down for (i) the entity's facilities and (ii) the entity's Tier 1 supplier facilities	Quantitative	Rate	TC-ES-320a.3
Product Lifecycle Management	Weight of end-of-life products and e-waste recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TC-ES-410a.1
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	TC-ES-440a.1

Note to TC-ES-150a.1— The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

Note to TC-ES-310a.1— Disclosure shall include a description of the reason for each work stoppage, impact on operations, and any corrective actions taken.

For more information, visit:

https://www.sasb.org/wp-

content/uploads/2018/11/Electronic Manufacturing Services Original Design Manufacturing Standard 2018.pdf

b. Hardware

Industry Description

The Hardware industry consists of companies that design and sell technology hardware products, including computers, consumer electronics, communications equipment, storage devices, components, and peripherals. Many companies in the industry rely heavily on the Electronic Manufacturing Services & Original Design Manufacturing (EMS & ODM) industry for manufacturing services. The industry is expected to continue to grow as the use of technology rapidly grows, especially from consumers in emerging markets. Note: Companies engaged in activities of the Software & IT Services industry (TC-SI), Internet Media & Services (TC-IM) industry, and/or the EMS & ODM industry (TC-ES) should consider the separate SASB standards for these industries.

ТОРІС	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Product Security	Description of approach to identifying and addressing data security risks in products	Discussion and Analysis	n/a	TC-HW-230a.1
Employee Diversity & Inclusion	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees ²	Quantitative	Percentage (%)	TC-HW-330a.1
	Percentage of products by revenue that contain IEC 62474 declarable substances ³	Quantitative	Percentage (%)	TC-HW-410a.1
Product Lifecycle	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Quantitative	Percentage (%)	TC-HW-410a.2
Management	Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	Quantitative	Percentage (%)	TC-HW-410a.3
	Weight of end-of-life products and e-waste recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TC-HW-410a.4
	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	Quantitative	Percentage (%)	TC-HW-430a.1
Supply Chain Management	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Quantitative	Rate	TC-HW-430a.2
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	TC-HW-440a.1

Note to TC-HW-330a.1 – The entity shall discuss its policies and programs for fostering equitable employee representation across its global operations.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Hardware_Standard_2018.pdf

Note to TC-HW-410a.1 – Disclosure shall include a discussion of the approach to managing the use of IEC 62474 declarable substances.

⁴ Note to TC-HW-410a.2 – Disclosure shall include a discussion of efforts to incorporate environmentally focused principles into product design.

c. Internet Media and Services

Industry Description

The Internet Media & Services industry consists of two main segments. The Internet Media segment includes companies providing search engines and internet advertising channels, online gaming, and online communities such as social networks, as well as content, usually easily searchable, such as educational, medical, health, sports, or news content. The Internet-based Services segment includes companies selling services mainly through the Internet. The industry generates revenues primarily from online advertising, on usually free content, with other sources of revenue being subscription fees, content sales, or sale of user information to interested third parties.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Environmental Footprint of Hardware	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TC-IM-130a.1
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	TC-IM-130a.2
Infrastructure	Discussion of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	n/a	TC-IM-130a.3
	Description of policies and practices relating to behavioral advertising and user privacy	Discussion and Analysis	n/a	TC-IM-220a.1
	Number of users whose information is used for secondary purposes	Quantitative	Number	TC-IM-220a.2
	Total amount of monetary losses as a result of legal proceedings associated with user privacy	Quantitative	Reporting currency	TC-IM-220a.3
Data Privacy, Advertising Standards & Freedom of Expression	(1) Number of law enforcement requests for user information, (2) number of users whose information was requested, (3) percentage resulting in disclosure	Quantitative	Number, Percentage (%)	TC-IM-220a.4
	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring ³	Discussion and Analysis	n/a	TC-IM-220a.5
	Number of government requests to remove content, percentage compliance with requests	Quantitative	Number, Percentage (%)	TC-IM-220a.6
	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected *	Quantitative	Number, Percentage (%)	TC-IM-230a.1
Data Security	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Discussion and Analysis	n/a	TC-IM-230a.2
Employee Recruitment,	Percentage of employees that are foreign nationals ^a	Quantitative	Percentage (%)	TC-IM-330a.1
Inclusion &	Employee engagement as a percentage ⁶	Quantitative	Percentage (%)	TC-IM-330a.2

Note to **TC-IM-220a.3** – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to TC-IM-220a.5 – Disclosure shall include a description of the extent of the impact in each case and, where relevant, a discussion of the entity's policies and practices related to freedom of expression.

Note to TC-IM-230a.1 – Disclosure shall include a description of corrective actions implemented in response to data breaches. Note to TC-IM-330a.1 – Disclosure shall include a description of potential risks of recruiting foreign nationals and management approach to addressing these risks.

Note to TC-IM-330a.2 - Disclosure shall include a description of methodology employed.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Performance	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees ⁷	Quantitative	Percentage (%)	TC-IM-330a,3
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations.	Quantitative	Reporting currency	TC-IM-520a.1

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Internet_Media_Services_Standard_2018.pdf

d. Semiconductors

Industry Description

The Semiconductors industry includes companies that design or manufacture semiconductor devices, integrated circuits, their raw materials and components, or capital equipment. Some companies in the industry provide outsourced manufacturing, assembly, or other services for designers of semiconductor devices.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	(1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds	Quantitative	Metric tons (t) CO ₂ -e	TC-SC-110a.1
Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TC-SC-110a.2
Energy Management in Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TC-SC-130a.1
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	TC-SC-140a.1
Waste Management	Amount of hazardous waste from manufacturing, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TC-SC-150a.1
Employee	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	Discussion and Analysis	n/a	TC-SC-320a.1
Health & Safety	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations ³	Quantitative	Reporting currency	TC-SC-320a.2
Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that are (1) foreign nationals and (2) located offshore	Quantitative	Percentage (%)	TC-SC-330a.1
Product	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	Percentage (%)	TC-SC-410a.1
Lifecycle Management	Processor energy efficiency at a system-level for: (1) servers, (2) desktops, and (3) laptops ⁶	Quantitative	Various, by product category	TC-SC-410a.2
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	TC-SC-440a.1

Note to TC-SC-150a.1 – The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

Note to TC-SC-320a.2 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to TC-SC-330a.1 – Disclosure shall include a description of potential risks of recruiting foreign nationals and/or offshore employees, and management approach to addressing these risks.

Note to TC-SC-410a.1 – Disclosure shall include a discussion of efforts to minimize usage of these substances.

Note to TC-SC-410a.2 — Disclosure shall include a discussion of efforts to design for new and emerging usage patterns with respect to energy efficiency in all product categories (i.e., applications for servers, desktops, laptops, workstations, netbooks, tablets, mobile phones, and storage).

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations?	Quantitative	Reporting currency	TC-SC-520a.1

⁷ Note to TC-SC-520a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Semiconductors_Standard_2018.pdf

e. Software and IT Services

Industry Description

The Software & Information Technology (IT) Services industry offers products and services globally to retail, business, and government customers, and includes companies involved in the development and sales of applications software, infrastructure software, and middleware. The industry is generally competitive, but with dominant players in some segments. While relatively immature, the industry is characterized by high-growth companies that place a heavy emphasis on innovation and depend on human and intellectual capital. The industry also includes IT services companies delivering specialized IT functions, such as consulting and outsourced services. New industry business models include cloud computing, software as a service, virtualization, machine-to-machine communication, big data analysis, and machine learning. Additionally, brand value is key for companies in the industry to scale and achieve network effects, whereby wide adoption of a particular software product leads to self-perpetuating growth in sales.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TC-SI-130a.1
Environmental Footprint of Hardware	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	TC-SI-130a.2
nfrastructure	Discussion of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	n/a	TC-SI-130a.3
	Description of policies and practices relating to behavioral advertising and user privacy	Discussion and Analysis	n/a	TC-SI-220a.1
	Number of users whose information is used for secondary purposes	Quantitative	Number	TC-SI-220a.2
Data Privacy &	Total amount of monetary losses as a result of legal proceedings associated with user privacy ²	Quantitative	Reporting currency	TC-SI-220a.3
reedom of expression	(1) Number of law enforcement requests for user information, (2) number of users whose information was requested, (3) percentage resulting in disclosure	Quantitative	Number, Percentage (%)	TC-SI-220a.4
	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring ³	Discussion and Analysis	n/a	TC-SI-220a.5
	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected ⁴	Quantitative	Number, Percentage (%)	TC-SI-230a.1
Data Security	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Discussion and Analysis	n/a	TC-SI-230a.2
Recruiting & Managing a Global, Diverse & Skilled Workforce	Percentage of employees that are (1) foreign nationals and (2) located offshore	Quantitative	Percentage (%)	TC-SI-330a.1
	Employee engagement as a percentage	Quantitative	Percentage (%)	TC-SI-330a.2
	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees ⁷	Quantitative	Percentage (%)	TC-SI-330a.3

Note to TC-SI-220a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to TC-SI-220a.5 – Disclosure shall include a description of the extent of the impact in each case and, where relevant, a discussion of the entity's policies and practices related to freedom of expression.

Note to TC-SI-230a.1 – Disclosure shall include a description of corrective actions implemented in response to data breaches. Note to TC-SI-330a.1 – Disclosure shall include a description of potential risks of recruiting foreign nationals and/or offshore

employees, and management approach to addressing these risks.

Note to TC-SI-330a.2 – Disclosure shall include a description of methodology employed.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations ⁸	Quantitative	Reporting currency	TC-SI-520a.1
Managing Systemic Risks from	Number of (1) performance issues and (2) service disruptions; (3) total customer downtime ⁵	Quantitative	Number, Days	TC-SI-550a.1
Technology Disruptions	Description of business continuity risks related to disruptions of operations	Discussion and Analysis	n/a	TC-SI-550a.2

Note to TC-SI-330a.3 — The entity shall describe its policies and programs for fostering equitable employee representation across its plobal posteriors.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Software_IT_Services_Standard_2018.pdf

global operations.

Note to TC-SI-520a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the more tary losses.

monetary losses

Note to TC-SI-550a.1 – Disclosure shall include a description of each significant performance issue or service disruption and any corrective actions taken to prevent future disruptions.

f. Telecommunication Services

Industry Description

Telecommunication Services industry consists of wireless wireline and telecommunications companies, as well as companies that provide cable and satellite services. The wireless services segment provides direct communication through radio-based cellular networks and operates and maintains the associated switching and transmission facilities. The wireline segment provides local and long distance voice communication via the Public Switched Telephone Network. Wireline carriers also offer voice over internet protocol (VoIP) telephone, television, and broadband internet services over an expanding network of fiber optic cables. Cable providers distribute television programming from cable networks to subscribers. They typically also provide consumers with video services, high-speed internet service, and VoIP. These services are traditionally bundled into packages that provide subscribers with easier payment options than paying for each service separately. Satellite companies distribute TV programming through broadcasting satellites orbiting the Earth or through ground stations. Companies serve customers primarily in their domestic markets, although some companies operate in several countries.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Environmental Footprint of Operations	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TC-TL-130a.1
	Description of policies and practices relating to behavioral advertising and customer privacy	Discussion and Analysis	n/a	TC-TL-220a.1
	Number of customers whose information is used for secondary purposes	Quantitative	Number	TC-TL-220a.2
Data Privacy	Total amount of monetary losses as a result of legal proceedings associated with customer privacy ²	Quantitative	Reporting currency	TC-TL-220a.3
	(1) Number of law enforcement requests for customer information, (2) number of customers whose information was requested, (3) percentage resulting in disclosure	Quantitative	Number, Percentage (%)	TC-TL-220a.4
	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected ³	Quantitative	Number, Percentage (%)	TC-TL-230a.1
Oata Security	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Discussion and Analysis	n/a	TC-TL-230a.2
roduct End-of- fe Management	(1) Materials recovered through take back programs, percentage of recovered materials that were (2) reused, (3) recycled, and (4) landfilled	Quantitative	Metric tons (t), Percentage (%)	TC-TL-440a.1
	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations*	Quantitative	Reporting currency	TC-TL-520a.1
Competitive Behavior & Open Internet	Average actual sustained download speed of (1) owned and commercially-associated content and (2) non-associated content	Quantitative	Megabits per second (Mbps)	TC-TL-520a.2
	Description of risks and opportunities associated with net neutrality, paid peering, zero rating, and related practices	Discussion and Analysis	n/a	TC-TL-520a.3
Managing Systemic Risks rom	(1) System average interruption frequency and (2) customer average interruption duration ¹	Quantitative	Disruptions per customer, Hours per customer	TC-TL-550a.1

Note to TC-TL-220a.3 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

Note to TC-TL-230a.1 – Disclosure shall include a description of corrective actions implemented in response to data breaches.

Note to TC-TL-230a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

Note to TC-TL-550a.1 – Disclosure shall include a description of each significant performance issue or service disruption and any

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Technology Disruptions	Discussion of systems to provide unimpeded service during service interruptions	Discussion and Analysis	n/a	TC-TL-550a.2

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Telecommunication_Services_Standard_2018.pdf

11. SASB Standards for Transportation

- a. Air Freight and Logistics
- b. Airlines
- c. Auto Parts
- d. Automobiles
- e. Car Rental and Leasing
- f. Cruise Lines
- g. Marine Transportation
- h. Rail Transportation
- i. Road Transportation

a. Air Freight and Logistics

Industry Description

Air freight and logistics companies provide freight services and transportation logistics to both businesses and individuals. There are three main industry segments: air freight transportation, post and courier services, and transportation logistics services. Companies in the industry earn revenue from one or more of the segments and range from non-asset-based to asset-heavy. Transportation logistics services include contracting with road, rail, marine, and air freight companies to select and hire appropriate transportation. Services can also include customs brokerage, distribution management, vendor consolidation, cargo insurance, purchase-order management, and customized logistics information. The industry is key to global trade, granting it a degree of demand stability.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-AF-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	r/a	TR-AF-110a.2
	Fuel consumed by (1) road transport, percentage (a) natural gas and (b) renewable, and (2) air transport, percentage (a) alternative and (b) sustainable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-AF-110a.3
Air Quality	Air emissions of the following pollutants: (1) NO_x (excluding N_2O), (2) SO_x and (3) particulate matter (PM_{10})	Quantitative	Metric tons (t)	TR-AF-120a.1
	Percentage of drivers classified as independent contractors	Quantitative	Percentage (%)	TR-AF-310a.1
Labor Practices	Total amount of monetary losses as a result of legal proceedings associated with labor law violations ²	Quantitative	Reporting currency	TR-AF-310a.2
Employee Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	TR-AF-320a.1
	Percentage of carriers with BASIC percentiles above the FMCSA intervention threshold	Quantitative	Percentage (%)	TR-AF-430a.1
Supply Chain Management	Total greenhouse gas (GHG) footprint across transport modes	Quantitative	Metric tons (t) CO ₂ -e per ton- kilometer	TR-AF-430a.2
	Description of implementation and outcomes of a Safety Management System	Discussion and Analysis	rva	TR-AF-540a.1
Accident & Safety Management	Number of aviation accidents	Quantitative	Number	TR-AF-540a.2
	Number of road accidents and incidents	Quantitative	Number	TR-AF-540a.3
	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance	Quantitative	Percentile	TR-AF 540a.4

Note to TR-AF-310a.2— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Air_Freight_Logistics_Standard_2018.pdf

b. Airlines

Industry Description

The Airlines industry is comprised of companies that provide air transportation globally to passengers for both leisure and business purposes. This includes commercial full-service, low-cost, and regional airlines. Full-service carriers typically use a hub-and-spoke model to design their routes within countries and internationally. Low-cost carriers usually offer a smaller number of routes as well as no-frills service to their customers. Regional carriers typically operate under contract to full service carriers, expanding the network of the larger carriers. Many airline companies also have a cargo segment in their operations from which they generate additional revenue. It is common within the industry for companies to form partnerships or join alliances in order to increase network size. Operating as an alliance allows airlines to offer customers access to international or otherwise underserved itineraries on multiple airlines under one ticket. At the same time, airlines share some overhead costs and increase their competitive position in the global market without having to operate outside their home country.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-AL-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TR-AL-110a.2
	(1) Total fuel consumed, (2) percentage alternative, (3) percentage sustainable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-AL-110a.3
Labor Practices	Percentage of active workforce covered under collective bargaining agreements	Quantitative	Percentage (%)	TR-AL-310a.1
	(1) Number of work stoppages and (2) total days idle	Quantitative	Number, Days idle	TR-AL-310a.2
Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations ²	Quantitative	Reporting currency	TR-AL-520a.1
Accident & Safety Management	Description of implementation and outcomes of a Safety Management System	Discussion and Analysis	n/a	TR-AL-540a.1
	Number of aviation accidents	Quantitative	Number	TR-AL-540a.2
	Number of governmental enforcement actions of aviation safety regulations	Quantitative	Number	TR-AL-540a.3

Note to TR-AL-310a.2 – Disclosure shall include a description of the reason for each work stoppage, impact on operations, and any corrective actions taken.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Airlines_Standard_2018.pdf

Note to TR-AL-520a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

C. **Auto Parts**

Industry Description

Companies in the Auto Parts industry supply motor vehicle parts and accessories to original equipment manufacturers (OEM). Auto parts companies typically specialize in the manufacturing and assembly of certain parts or accessories, such as engine exhaust systems, alternative drivetrains, hybrid systems, catalytic converters, aluminum wheels (rims), tires, rearview mirrors, and onboard electrical and electronic equipment. Although the larger automotive industry includes several tiers of suppliers that provide parts and raw materials used to assemble motor vehicles, the scope of SASB's Auto Parts industry includes only Tier 1 suppliers that supply parts directly to OEMs. The scope of the industry excludes captive suppliers, such as engine and stamping facilities, that are owned and operated by OEMs. Similarity, it excludes Tier 2 suppliers, which provide inputs for the Auto Parts industry.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-AP-130a.1
Waste Management	(1) Total amount of waste from manufacturing, (2) percentage hazardous, (3) percentage recycled ²	Quantitative	Metric tons (t), Percentage (%)	TR-AP-150a.1
Product Safety	Number of recalls issued, total units recalled	Quantitative	Number	TR-AP-250a.1
Design for Fuel Efficiency	Revenue from products designed to increase fuel efficiency and/or reduce emissions	Quantitative	Reporting currency	TR-AP-410a.1
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	TR-AP-440a.1
Materials	Percentage of products sold that are recyclable	Quantitative	Percentage (%)	TR-AP-440b.1
Efficiency	Percentage of input materials from recycled or remanufactured content	Quantitative	Percentage (%)	TR-AP-440b.2
Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations ^a	Quantitative	Reporting currency	TR-AP-520a.1

Note to TR-AP-150a.1 – The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and the amounts of waste defined in accordance with each applicable framework.
 Note to TR-AP-250a.1 – Disclosure shall include a discussion of notable recalls, such as those that affected a significant number of vehicles, multiple vehicle models, or those related to a serious injury or fatality.
 Note to TR-AP-440b.2 – The entity shall describe its initiatives to obtain end-of-life products and parts for remanufacturing, including

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Auto Parts Standard 2018.pdf

product take-back programs.

Note to TR-AP-520a.1 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the

monetary losses

d. **Automobiles**

Industry Description

The Automobiles industry includes companies that manufacture passenger vehicles, light trucks, and motorcycles. Industry players design, build, and sell vehicles that run using a range of traditional and alternative fuels and powertrains. They sell these vehicles to dealers for consumer retail sales as well as sell directly to fleet customers, including car rental and leasing companies, commercial fleets, and governments. Due to the global nature of this industry, nearly all companies have manufacturing facilities, assembly plants, and service locations in several countries around the world. The Automobiles industry is highly concentrated, with a few large manufacturers and a diversified supply chain. Given the industry's reliance on natural resources and sensitivity to the business cycle, revenues are typically cyclical.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Percentage of vehicle models rated by NCAP programs with an overall 5-star safety rating, by region	Quantitative	Percentage (%)	TR-AU-250a.1
Product Safety	Number of safety-related defect complaints, percentage investigated	Quantitative	Number, Percentage (%)	TR-AU-250a.2
	Number of vehicles recalled ²	Quantitative	Number	TR-AU-250a.3
Labor Practices	Percentage of active workforce covered under collective bargaining agreements	Quantitative	Percentage (%)	TR-AU-310a.1
Labor Practices	(1) Number of work stoppages and (2) total days idle ¹	Quantitative	Number, Days idle	TR-AU-310a.2
	Sales-weighted average passenger fleet fuel economy, by region	Quantitative	Mpg, L/km, gCO ₂ /km, km/L	TR-AU-410a.1
Fuel Economy & Use-phase Emissions	Number of (1) zero emission vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold	Quantitative	Number	TR-AU-410a.2
	Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities	Discussion and Analysis	n/a	TR-AU-410a.3
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	TR-AU-440a.1
	Total amount of waste from manufacturing, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TR-AU-440b.1
Materials Efficiency & Recycling	Weight of end-of-life material recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TR-AU-440b.2
	Average recyclability of vehicles sold	Quantitative	Percentage (%) by sales- weighted metric tons (t)	TR-AU-440b.3

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Automobiles Standard 2018.pdf

Note to TR-AU-250a.3 – Disclosure shall include a discussion of notable recalls, such as those that affected a significant number of

Note to IN-AU-230a.3 — Disclosure shall include a discussion of installing receiving and include a discussion of installing receiving and any vehicles of one model or those related to a serious injury or fatality.

Note to TR-AU-310a.2 — Disclosure shall include a description of the reason for each work stoppage, impact on operations, and any corrective actions taken.

Note to TR-AU-440b.3 – Disclosure shall include a description of the entity's approach to optimizing vehicle recycling and recovery

e. Car Rental and Leasing

Industry Description

Companies in this industry rent or lease passenger vehicles to customers. Car rentals are typically for periods of less than a month, while leases are for a year or more. The industry includes car-sharing business models where rentals are measured hourly and typically include subscription fees. Car rental companies operate out of airport locations, which serve business and leisure travelers, and out of neighborhood locations, which mostly provide repair-shop and weekend rentals. The industry is concentrated, with several dominant market players, who operate globally using a franchise model. The growth of public transit and ride-sharing services in major metropolitan areas may represent a threat to the long-term profitability of the Car Rental & Leasing industry if customers chose to hail rides or take public transit rather than rent vehicles.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Customer Safety	Percentage of rental fleet vehicles rated by NCAP programs with an overall 5-star safety rating, by region	Quantitative	Percentage (%)	TR-CR-250a.1
	Number of vehicles recalled	Quantitative	Number	TR-CR-250a.2
Fleet Fuel Economy & Utilization	Rental day-weighted average rental fleet fuel economy, by region	Quantitative	Mpg, L/km, gCO ₂ /km, km/L	TR-CR-410a.1
	Fleet utilization rate	Quantitative	Rate	TR-CR-410a.2

Note to TR-CR-250a.2 – Disclosure shall include a description of the entity's policy for renting vehicles for which a recall has been issued.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Car Rental Leasing Standard 2018.pdf

f. Cruise Lines

Industry Description

The Cruise Lines industry comprises companies that provide passenger transportation and leisure entertainment, including deep sea cruises and river cruises. The industry is dominated by a few large companies. Cruises aim to provide a luxury resort experience for thousands of passengers at a time. The Cruise Lines industry has often been the fastest-growing segment of the travel industry, but is very cyclical.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-CL-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TR-CL-110a.2
Gas Emissions	(1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage onshore power supply (OPS), (4) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-CL-110a.3
	Average Energy Efficiency Design Index (EEDI) for new ships	Quantitative	Grams of CO ₂ per ton-nautical mile	TR-CL-110a.4
Air Quality	Air emissions of the following pollutants: (1) NO _i (excluding N _i O), (2) SO _{ii} and (3) particulate matter (PM _{ii})	Quantitative	Metric tors (t)	TR-CL-120a.1
	Total amount of ship waste discharged to the environment, percentage treated prior to discharge	Quantitative	Metric tons (t), Percentage (%)	TR-CL-160a.1
Discharge Management &	Percentage of fleet implementing ballast water (1) exchange and (2) treatment	Quantitative	Percentage (%)	TR-CL-160a.2
Ecological mpacts	Cruise duration in marine protected areas or areas of protected conservation status	Quantitative	Number of travel days	TR-CL-160a.3
	Number of notices of violations received for dumping ^a	Quantitative	Number	TR-CL-160a.4
	Number of alleged crime incidents involving passengers or employees	Quantitative	Number	TR-CL-250a.1
Customer Health & Safety	Fleet average CDC Vessel Sanitation Program inspection score, percentage of inspections failed	Quantitative	Number, Percentage (%)	TR-CL-250a 2
	(1) Serious injuries per million passengers and (2) number of voyages with a gastrointestinal illness count exceeding 2%	Quantitative	Rate, Number	TR-CL-250a.3
	Average hourly wage for seafarers, by region	Quantitative	Reporting currency	TR-CL-310a.1
Labor Practices	Percentage of seafarers working maximum hours	Quantitative	Percentage (%)	TR-CL-310a.2
	Percentage of seafarers paid for overtime	Quantitative	Percentage (%)	TR-CL-310a.3

Note to TR-CL-160a.4 – Disclosure shall include a description of significant penalties and corrective actions implemented in response to violations.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Total amount of monetary losses as a result of legal proceedings associated with labor law violations ³	Quantitative	Reporting currency	TR-CL-310a.4
Employee Health & Safety	Seafarer lost time incident rate (LTR)	Quantitative	Rate	TR-CL-320a.1
Accident Management	Number of Conditions of Class or Recommendations	Quantitative	Number	TR-CL-540a.1
	Number of port state control (1) deficiencies and (2) detentions	Quantitative	Number	TR-CL-540a.2
	Number of marine casualties, percentage classified as very serious*	Quantitative	Number	TR-CL-540a.3

Note to TR-CL-310a.4 – The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Cruise_Lines_Standard_2018.pdf

⁴ Note to TR-CL-540a.3 – Disclosure shall include a description of marine casualties and very serious marine casualties, outcomes, and corrective actions implemented in response.

g. Marine Transportation

Industry Description

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

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-MT-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TR-MT-110a.2
Gas Emissions	(1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-MT-110a.3
	Average Energy Efficiency Design Index (EEDI) for new ships	Quantitative	Grams of CO ₂ per ton-nautical mile	TR-MT-110a.4
Air Quality	Air emissions of the following pollutants: (1) NO_{ν} (excluding N_2O), (2) $SO_{\nu\nu}$ and (3) particulate matter (PM ₁₀)	Quantitative	Metric tons (t)	TR-MT-120a.1
	Shipping duration in marine protected areas or areas of protected conservation status	Quantitative	Number of travel days	TR-MT-160a.1
Ecological Impacts	Percentage of fleet implementing ballast water (1) exchange and (2) treatment	Quantitative	Percentage (%)	TR-MT-160a.2
	(1) Number and (2) aggregate volume of spills and releases to the environment	Quantitative	Number, Cubic meters (m³)	TR-MT-160a.3
Employee Health & Safety	Lost time incident rate (LTIR)	Quantitative	Rate	TR-MT-320a.1
	Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Number	TR-MT-510a.1
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption ²	Quantitative	Reporting currency	TR-MT-510a.2
	Number of marine casualties, percentage classified as very serious ³	Quantitative	Number, Percentage (%)	TR-MT-540a.1
Accident & Safety Management	Number of Conditions of Class or Recommendations	Quantitative	Number	TR-MT-540a.2
	Number of port state control (1) deficiencies and (2) detentions	Quantitative	Number	TR-MT-540a.3

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

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Marine_Transportation_Standard_2018.pdf

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

h. Rail Transportation

Industry Description

The Rail Transportation industry consists of companies that provide rail freight shipping and support services. Key activities include shipping containerized and bulk freight, including consumer goods and commodities. Rail companies typically own, maintain, and operate their rail networks, which may require significant capital expenditures. The U.S. operates the longest railroad network in the world, followed closely by Russia, China, India, Canada, Germany, and France. The industry exhibits economies of density due to its network effects, lending itself to natural monopoly conditions. Together with the large sunk costs of rail infrastructure, this provides a competitive advantage to incumbent firms in the industry and creates barriers to entry for new firms. Note: The scope of the Rail Transportation industry does not include passenger rail transportation.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-RA-110a.1
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TR-RA-110a.2
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-RA-110a.3
Air Quality	Air emissions of the following pollutants: (1) NO, (excluding N ₂ O) and (2) particulate matter (PM $_{10}$)	Quantitative	Metric tons (t)	TR-RA-120a.1
Employee Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	Rate	TR-RA-320a.1
Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti- competitive behavior regulations	Quantitative	Reporting currency	TR-RA-520a.1
	Number of accidents and incidents	Quantitative	Number	TR-RA-540a.1
Accident & Safety Management	Number of (1) accident releases and (2) non- accident releases (NARs) ²	Quantitative	Number	TR-RA-540a.2
	Number of Federal Railroad Administration (FRA) Recommended Violation Defects	Quantitative	Number	TR-RA-540a.3
	Frequency of internal railway integrity inspections ⁴	Quantitative	Rate	TR-RA-540a.4

Note to TR-RA-520a.1— The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses.

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Rail_Transportation_Standard_2018.pdf

Note to TR-RA-540a.2— Disclosure shall include a discussion of the entity's processes and procedures to manage non-accident and accident releases.

⁴ Note to TR-RA-540a.4- Disclosure shall include, where relevant, a discussion of rail maintenance practices, operating measures, and technologies that the entity implements in addition to inspections.

i. **Road Transportation**

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 (vehicles carrying the goods of only one customer) and less-than-truckload (vehicles carrying the goods of multiple customers). 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.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	TR-RO-110a.1
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	TR-RO-110a.2
	(1) Total fuel consumed, (2) percentage natural gas, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-RO-110a.3
Air Quality	Air emissions of the following pollutants: (1) NO $_{\rm s}$ (excluding N $_{\rm 2}$ O) $_{\rm c}$ (2) SO $_{\rm sc}$ and (3) particulate matter (PM $_{\rm 10}$)	Quantitative	Metric tons (t)	TR-RO-120a.1
	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	TR-RO-320a.1
Driver Working Conditions	(1) Voluntary and (2) involuntary turnover rate for all employees	Quantitative	Rate	TR-RO-320a.2
	Description of approach to managing short- term and long-term driver health risks	Discussion and Analysis	n/a	TR-RO-320a.3
	Number of road accidents and incidents	Quantitative	Number	TR-RO-540a.1
Accident & Safety Management	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance	Quantitative	Percentile	TR-RO-540a.2
	(1) Number and (2) aggregate volume of spills and releases to the environment	Quantitative	Number, Cubic meters (m³)	TR-RO-540a.3

Note to TR-RO-000.A – A revenue ton mile (RTM) is defined as one ton of revenue traffic transported one mile. Revenue ton-miles are computed by multiplying the miles traveled on each leg by the number of tons of revenue traffic carried on that leg.
 Note to TR-RO-000.B – Load factor is a measure of capacity utilization and is calculated as cargo miles traveled divided by total miles

For more information, visit:

https://www.sasb.org/wp-content/uploads/2018/11/Road Transportation Standard 2018.pdf