



SUSTAINABILITY ACCOUNTING STANDARD
CONSUMPTION I SECTOR

AGRICULTURAL PRODUCTS

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0101

Prepared by the
Sustainability Accounting Standards Board®

June 2015
Provisional Standard

AGRICULTURAL PRODUCTS

Sustainability Accounting Standard

About SASB

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

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INTRODUCTION

Purpose & Structure

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

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

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company’s specific operating context— for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 - 32¹ and referenced in AT 701², as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

Industry Description

The Agricultural Products industry is engaged in growing, processing, trading, and distributing vegetables and fruits, and producing and milling agricultural commodities including grains, sugar, consumable oils, maize, soybeans, and animal feed. Agricultural products companies are also involved in wholesale and distribution of products such as grains and beans. Agricultural products are sold directly to consumers and to businesses for use in consumer and industrial products. Vertically integrated agricultural products companies operate farms, crop processing facilities, and storage and distribution networks. The industry is global and companies may source a substantial part of agricultural commodities from thousands of third-party growers in various countries. Therefore, managing sustainability risks, including environmental and social issues, within the farms and companies in the supply chain is critical to securing raw materials and reducing the risk of price increases.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#ftn.at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Material Sustainability Topics in SEC Filings

1. Industry-level Sustainability Topics

For the Agricultural Products industry, SASB has identified the following sustainability topics:

- Greenhouse Gas Emissions
- Energy & Fleet Fuel Management
- Water Withdrawal
- Land Use & Ecological Impacts
- Food Safety & Health Concerns
- Fair Labor Practices & Workforce Health & Safety
- Climate Change Impacts on Crop Yields
- Environmental & Social Impacts of Ingredient Supply Chains
- Management of the Legal & Regulatory Environment

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SIC industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment –prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

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

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

For purposes of comparability and usability, that companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

c. Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Material Sustainability Topics

For each sustainability topic included in the Agricultural Products industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

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

⁸ See US GAAP consolidation rules (Section 810).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Production by principal crop ¹⁰	Quantitative	Metric tons (t)	CN0101-A
Number of processing facilities ¹¹	Quantitative	Number	CN0101-B
Total land area under active production	Quantitative	Hectares	CN0101-C
Amount of agricultural raw materials sourced externally ¹²	Quantitative	U.S. Dollars (\$)	CN0101-D

Units of Measure

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

Uncertainty

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

Estimates

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

¹⁰ Principal crops are those crops that accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, consistent with 17 CFR 229.101.

¹¹ Processing facilities include those facilities that are involved in the manufacturing, processing, packing, or holding of agricultural products and exclude administrative offices.

¹² The amount of agricultural raw materials sourced externally should be calculated as the cost to purchase such materials, where agricultural raw materials are defined by CN0101-23.135 and are limited to those products grown on land that is not owned or operated by the registrant.

Timing

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

Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	CN0101-01
	Biogenic carbon dioxide (CO ₂) emissions ¹³	Quantitative	Metric tons (t) CO ₂ -e	CN0101-02
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	Discussion & Analysis	n/a	CN0101-03
Energy & Fleet Fuel Management	Operational energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0101-04
	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0101-05
Water Withdrawal	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0101-06
	Discussion of water withdrawal risks and description of management strategies and practices to mitigate those risks	Discussion & Analysis	n/a	CN0101-07
Land Use & Ecological Impacts	Description of strategies to manage land use and ecological impacts	Discussion & Analysis	n/a	CN0101-08
	(1) Volume of wastewater reused and (2) volume of wastewater discharged to the environment ¹⁴	Quantitative	Cubic meters (m ³)	CN0101-09
	Number of incidents of non-compliance with water-quality permits, standards, and regulations	Quantitative	Number	CN0101-10
	Amount of fertilizer consumption by: (1) nitrogen-based, (2) phosphate-based, and (3) potassium-based fertilizers	Quantitative	Metric tons (t)	CN0101-11
	Amount of pesticide consumption by hazard level ¹⁵	Quantitative	Metric tons (t)	CN0101-12
Food Safety & Health Concerns	Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate	CN0101-13
	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) scheme	Quantitative	Percentage (%) by spend	CN0101-14
	Number of recalls issued, total amount of food product recalled ¹⁶	Quantitative	Number, Metric tons (t)	CN0101-15
	Description of strategies to manage the use of genetically modified organisms (GMOs)	Discussion & Analysis	n/a	CN0101-16

¹³ Note to **CN0101-02**—Disclosure should include discussion of whether the registrant's biogenic CO₂ emissions are carbon neutral.

¹⁴ Note to **CN0101-09**—Disclosure shall include a description of the risk related to wastewater discharge and the wastewater treatment and management method(s) used.

¹⁵ Note to **CN0101-12**—Disclosure shall include a description of any uses of WHO Class Ia and Ib pesticides.

¹⁶ Note to **CN0101-15**—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.

Table 1. Sustainability Disclosure Topics & Accounting Metrics (cont.)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Fair Labor Practices & Workforce Health & Safety	Percentage of farms and facilities certified for fair labor practices	Quantitative	Percentage (%)	CN0101-17
	(1) Total recordable injury rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees	Quantitative	Rate	CN0101-18
	Description of efforts to assess, monitor, and reduce exposure of direct, seasonal, and migrant employees to pesticides	Discussion & Analysis	n/a	CN0101-19
Climate Change Impacts on Crop Yields	Amount of crop losses, percentage offset through financial mechanisms	Quantitative	U.S. Dollars (\$), Percentage (%)	CN0101-20
	Average crop yield and five-year standard deviation per major crop type by major operating region	Quantitative	Metric tons (t)	CN0101-21
	Identification of principal crops and discussion of risks and opportunities presented by climate change	Discussion & Analysis	n/a	CN0101-22
Environmental & Social Impacts of Ingredient Supply Chains	Percentage of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by spend	CN0101-23
	Description of management strategy for environmental and social risks arising from contract growing and commodity sourcing	Discussion & Analysis	n/a	CN0101-24
	Percentage of agricultural raw materials that are certified to a third-party environmental and/or social standard	Quantitative	Percentage (%) by spend	CN0101-25
Management of the Legal & Regulatory Environment	Discussion of positions on the regulatory and political environment related to environmental and social factors and description of efforts to manage risks and opportunities presented	Discussion & Analysis	n/a	CN0101-26

Greenhouse Gas Emissions

Description

Agriculture is a significant contributor to global greenhouse gas (GHG) emissions, particularly extremely potent non-carbon dioxide emissions. In the Agricultural Products industry, direct GHG emissions occur during different stages of value creation. The majority of emissions in crop cultivation stem from land management practices, including fertilizer application, land clearing, and crop burning, and occur primarily in the form of methane and nitrous oxide. The monitoring and control of non-point emissions such as these is more challenging than for point sources. More stringent GHG regulations that include crop cultivation in their scope present risks and opportunities for the Agricultural Products industry. Regulatory compliance can increase costs of doing business, reducing operational efficiency, particularly for companies that are not adept at, or are facing difficulties with, managing GHG reductions. At the same time, fuel used in milling processes, which also contributes to the industry's direct GHG emissions, accounts for a large portion of total costs. Companies that invest in energy efficiency and manage their energy mix effectively can substantially reduce their operating expenses and improve profit margins. Firms that currently derive most of their energy from biogenic sources may benefit from lower risks associated with energy independence, such as volatile fuel prices and supply disruptions, as well as from regulations that exempt biogenic emissions from compliance. On the other hand, if the regulatory environment were to change toward accounting for these emissions as Scope 1, with associated reduction obligations, agricultural companies may be significantly impacted.

Accounting Metrics

CN0101-01. Gross global Scope 1 emissions

.01 The registrant shall disclose gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the six GHGs covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride).

- Emissions of all gases shall be disclosed in metric tons of carbon dioxide equivalents (CO₂-e), calculated in accordance with published 100-year time horizon global warming potential (GWP) factors. To date, the preferred source for GWP factors is the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2013).
- Gross emissions are GHGs emitted to the atmosphere before accounting for any GHG reduction activities, offsets, or other adjustments for activities in the reporting period that have reduced or compensated for emissions.
- Disclosure corresponds to section CC8.2 of the CDP Climate Change Questionnaire and Questionnaire and section 4.25 of the Climate Disclosure Standards Board (CDSB) *Climate Change Reporting Framework* (CCRF) (2012), which corresponds with REQ-04 of the CDSB Framework for Reporting Environmental Information and Natural Capital (2015).
 - The registrant shall consider the CDP Climate Change Questionnaire as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.

- .02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in [*The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*](#), Revised Edition, March 2004 (hereafter, the “GHG Protocol”).
- These emissions include direct emissions of GHGs from stationary or mobile sources that include, but are not limited to, drainage and tillage of soil, fertilizers, land-use change, equipment, production facilities, and transportation (i.e., marine, road, or rail).
- .03 GHG emission data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is generally aligned with:
- The Financial Control approach defined by the GHG Protocol and referenced by the [*CDP Guidance for companies reporting on climate change on behalf of investors & supply chain members 2015*](#) (hereafter, the “CDP Guidance”).¹⁷
 - The approach detailed in Section 4.23, “Organizational boundary setting for GHG emissions reporting,” of the CDSB Climate Change Reporting Framework (CCRF) (2012), which corresponds with REQ-07 of the CDSB Framework for Reporting Environmental Information and Natural Capital (2015).¹⁸
- .04 The underlying technical approach to data collection, analysis, and disclosure shall be consistent with the CDP Guidance.
- The registrant shall consider the CDP Guidance as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.
- .05 The registrant should discuss any change in its emissions from the previous fiscal year, such as if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- .06 In the case that current reporting of GHG emissions to the CDP or other entity (e.g., a national regulatory disclosure program) differs in terms of the scope and consolidation approach used, the registrant may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.
- .07 The registrant should discuss the calculation methodology for its emissions disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.
- .08 The registrant should consult the most recent version of each document referenced in this standard at the time disclosure occurs.

¹⁷ “An organization has financial control over an operation if it has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities. Generally an organization has financial control over an operation for GHG accounting purposes if the operation is treated as a group company or subsidiary for the purposes of financial consolidation.” *Guidance for companies reporting on climate change on behalf of investors & supply chain members 2013*, p. 95.

¹⁸ This is based on the requirements of International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) on consolidation and equity accounting and is consistent with how information relating to entities within a group or interest in joint ventures/associates would be included on consolidated financial statements, as per the CDSB *Climate Change Reporting Framework*.

CN0101-02. Biogenic carbon dioxide (CO₂) emissions

.09 The registrant shall disclose its biogenic carbon dioxide (CO₂) emissions from the combustion of biomass, where:

- Biogenic CO₂ emissions are defined by the U.S. Environmental Protection Agency (EPA) as CO₂ emissions related to the natural carbon cycle, as well as those resulting from the combustion, harvest, digestion, fermentation, decomposition, or processing of biologically based materials, where:
 - The carbon cycle is defined as the flow of carbon in various forms through the atmosphere, ocean, terrestrial biosphere, and lithosphere.
 - Biologically based materials (or “biogenic materials”) are defined as non-fossilized and biodegradable organic materials originating from modern or contemporarily grown plants, animals, or microorganisms (including products, by-products, residues, and wastes from agriculture, forestry, and related industries, as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material). These feedstocks do not include materials such as peat, coal, petroleum, natural gas, and other products that are derived from biologic materials but are considered non-renewable during the time frame relevant to policymaking.

.10 Examples of biogenic CO₂ emissions include:

- CO₂ derived from combustion of biological material, including forest-derived and agriculture-derived feedstocks
- CO₂ from the combustion of biogas collected through biological decomposition of waste in landfills, wastewater treatment, or manure-management processes
- CO₂ from combustion of the biological fraction of municipal solid waste or biosolids

.11 The registrant shall calculate and disclose its biogenic CO₂ emissions according to methodology outlined in the U.S. EPA’s [Framework for Assessing Biogenic CO₂ Emissions from Stationary Sources](#).

Note to CN0101-02

.12 The registrant may choose to demonstrate whether its biogenic CO₂ emissions are carbon neutral, based on the considerations outlined by the EPA’s [Framework for Assessing Biogenic CO₂ Emissions from Stationary Sources](#) and the WRI/WBCSD GHG Protocol.

.13 Relevant discussion topics include, but are not limited to:

- The carbon flux of the forestlands where the biomass originated
- The type of biomass used
- The source(s) of the biomass
- The area of forestlands used to grow the biomass

- The percentage of the biomass burned by the registrant (by weight) that was cut on land not owned by the registrant
- Whether the biomass was grown, harvested, and combusted in a carbon neutral manner

CN0101-03. Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets

.14 The registrant shall discuss the following, where relevant:

- The scope, such as whether strategies, plans, and/or reduction targets pertain differently to different business units, geographies, or emissions sources;
- Whether strategies, plans, and/or reduction targets are related to or associated with an emissions disclosure (reporting) or reduction program (e.g., E.U. ETS, RGGI, WCI, etc.), including regional, national, international, or sectoral programs; and
- The activities and investments required to achieve the plans, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.15 For emission-reduction targets, the registrant shall disclose:

- The percentage of emissions within the scope of the reduction plan;
- The percentage reduction from the base year;
 - The base year is the first year against which emissions are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target;
- The timelines for the reduction activity, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year; and
- The mechanism(s) for achieving the target, such as agroforestry, composting, integrated pest management, low tillage, on-site energy-generation efficiency efforts, energy source diversification, etc. Where necessary, the registrant shall discuss any circumstances in which the target base year emissions have been, or may be, recalculated retrospectively or where the target base year has been reset.

.16 Disclosure corresponds with:

- CDSB CCRF Section 4, “Management actions.”¹⁹

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

- CDP questionnaire (2015) CC3, "Targets and Initiatives."

.17 Relevant initiatives to discuss may include, but are not limited to, precision fertilizer application, reducing changes in land use, implementing minimum till practices, and avoiding drainage of wetlands, consistent with the [IPCC Fourth Assessment Report: Climate Change 2007: Working Group III: Mitigation of Climate Change](#).

Additional References

[GHG Protocol Agricultural Protocol](#)

[GHG Protocol Agricultural Guidance](#)

Energy & Fleet Fuel Management

Description

Sugar, grain, and oilseed milling requires substantial quantities of energy, which is sourced from the direct combustion of fossil fuels (leading to direct sustainability impacts) and the electrical grid (leading to indirect impacts). At the same time, companies in the wholesale segment operate extensive fleets, which require a substantial amount of fuel to operate. Fossil fuel and electrical energy consumption can contribute to environmental impacts, including climate change and pollution. Energy management primarily impacts current and future costs of operation. Climate regulation and other sustainability factors could result in higher or more volatile electricity and fuel prices, increasing operating costs for agricultural products companies. Reducing energy consumption, through process improvements or fleet efficiency, for example, can lower costs, directly affecting a company's bottom line. The tradeoff between on-site versus grid-sourced electricity and the use of alternative energy can play an important role in influencing both the cost and reliability of a company's energy supply, as well as the extent of direct versus indirect emissions. While investment in on-site renewable energy may create increased up-front costs, it can bring long-term savings. Additionally, renewable energy use may shield agricultural products companies from punctuated price spikes for fossil fuels or energy shortages, particularly in emerging markets, where there may be progressive instances of demand outstripping supply.

Accounting Metrics

CN0101-04. Operational energy consumed, percentage grid electricity, percentage renewable

- .18 The registrant shall disclose energy consumption from all sources, excluding fleet vehicles, as an aggregate figure in gigajoules or their multiples.
- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
 - The scope includes only energy consumed by entities owned or controlled by the organization.
 - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
 - The scope of disclosure excludes fuel consumption by fleet vehicles.
- .19 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .20 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- .21 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.

.22 The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.

- For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.²⁰
- Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, consistent with EPA [definitions](#), such as geothermal, wind, solar, hydro, and biomass.

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

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.
- Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered “eligible renewables” according to the Green-e Energy National Standard Version 2.5 (2014), and materials that are eligible for a state Renewable Portfolio Standard.

.24 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kWh to gigajoules (for energy data including electricity from solar or wind energy).

CN0101-05. Fleet fuel consumed, percentage renewable

.25 The registrant shall disclose total fuel consumption by fleet vehicles as an aggregate figure in gigajoules or their multiples.

- The scope includes fuel consumed by vehicles owned or operated by the registrant.

.26 Fuel consumption shall be based on actual fuel consumed (i.e., not based on design parameters).

²⁰ SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid.

- .27 Acceptable methods for calculating fuel consumption include adding fuel purchases made during the year to beginning inventory at the start of the year, less any fuel inventory at the end of the year, or tracking fuel consumption by vehicle or through expense reports.
- .28 The registrant shall disclose renewable fuel consumption as a percentage of its total fuel consumption.
- Renewable fuel is defined, consistent with the U.S. EPA's Renewable Fuel Standard (40 CFR Section 80.1401), as a fuel which meets the following requirements:
 - Fuel that is produced from renewable biomass.
 - Fuel that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel.
 - Fuel that has lifecycle greenhouse gas (GHG) emissions that are at least 20 percent less than baseline lifecycle GHG emissions, unless the fuel is exempt from this requirement pursuant to § 80.1403.
- .29 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .30 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels).

Water Withdrawal

Description

The Agricultural Products industry is reliant on water for crop cultivation and product processing, with crop yields depending on receiving requisite amounts of water. The industry generally accounts for relatively large water withdrawals compared to other uses of water in a community or region. The risk for individual companies in the Agricultural Products industry is determined by the degree of vertical integration, the type of crop processed or grown, and the presence of operations in regions of elevated water stress. For companies with no direct cultivation operations, water risk is present primarily in the availability of water for product processing. Increasing water stress worldwide, related to climate change and other factors, is therefore a critical issue for the industry. Rising water stress increases the risk of crop failure, directly reducing crop producers' revenues and increasing raw material costs for crop processors. Furthermore, limited access to water could directly affect the ability to operate processing facilities or require investment in alternate sources of water. All of the aforementioned impacts indicate that the value of water rights for agricultural products companies could significantly increase in the future. Heightened water scarcity due to factors such as droughts may prompt regulatory authorities to limit companies' ability to withdraw necessary amounts of water, especially in regions with High or Extremely High Baseline Water Stress.

Accounting Metrics

CN0101-06. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

- .31 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:
- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.
- .32 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources, where:
- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
 - Water obtained from a water utility in compliance with U.S. [National Primary Drinking Water Regulations](#) can be assumed to meet the definition of fresh water.
- .33 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:
- Water that evaporates during withdrawal, usage, and discharge;
 - Water that is directly or indirectly incorporated into the registrant's product or service; and

- Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

.34 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute’s (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).

.35 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.

.36 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

CN0101-07. Discussion of water withdrawal risks and description of management strategies and practices to mitigate those risks

.37 The registrant shall discuss how it manages risks associated with water withdrawals and water consumption.

.38 The registrant shall discuss, if applicable, risks to the availability of adequate, clean water resources.

- Relevant context to provide includes, but is not limited to:
 - Environmental constraints, such as how risks vary by withdrawal sources (e.g., wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or water utilities), operations in water-stressed regions, drought, interannual or seasonal variability, or risks due to the impact of climate change.
 - External constraints, such as changes in water costs, stakeholder perceptions and concerns related to water withdrawals (such as those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions from regulation, or constraints on the registrant’s ability to obtain and retain water rights or permits.

.39 The registrant should include a discussion of the potential implications that these risks may have on its operations and the timeline over which such risks are expected to manifest.

.40 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:

- Any water management targets it has set, and an analysis of performance against those targets.
 - Water management targets can include water management goals that the registrant sees as a priority to manage its risks and opportunities associated with water withdrawal and/or consumption.
 - Targets can include, but are not limited to, those for reducing water withdrawals and/or reducing water consumption.

- The scope of its strategy, plans or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
- The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.41 For water management targets, the registrant shall additionally disclose:

- The percentage reduction from the base year;
 - The base year is the first year against which water management targets are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target;
- The timelines for the water management activities, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year; and
- The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as the use of water recycling, drip irrigation, cover cropping, and/or closed-loop systems
 - Product innovations such as redesigning crops to require less water
 - Process and equipment innovations, such as those that enable the use of less water in farming or processing operations
 - Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
 - Collaborations or programs in place with the community or other organizations

.42 The registrant shall discuss if its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy consumption, and greenhouse gas (GHG) emissions, and why the registrant chose these practices despite lifecycle tradeoffs.

Additional Resources

[GRI-Global Reporting Initiative \(GRI G4\)](#)
[CDP 2015 Water Questionnaire](#)
[CEO Water Mandate](#)
[Global Water Footprint Assessment Standard](#)
[Ceres Aqua Gauge Framework](#)

Land Use & Ecological Impacts

Description

Land and ecosystems are key natural resources for the Agricultural Products industry. The vast global land footprint of crop cultivation, combined with intensive modern agricultural practices, has diverse ecological impacts, which generate regulatory risks and can adversely affect the cultivation of crops. As the global population continues to grow, the Agricultural Products industry will be facing more challenges in keeping its land productivity high enough to satisfy increasing demand. For these reasons, agricultural products companies are faced with the challenge of maintaining high yields in the long term, but reducing environmental externalities associated with fertilizer and pesticide use, monoculture cultivation, forest fragmentation, and land clearing. Pollution of water and land resources presents a risk of regulatory fines or restrictions on companies' use of agrochemicals or land resources, which could have an impact on operating expenditures or production revenues. Moreover, companies unable to prudently manage agricultural productivity and mitigate long-term environmental impacts may experience lower crop yields and devaluation of their land. The use of various types of fertilizers may lead to different environmental externalities, with varying regulatory risks. At the same time, reducing the use of pesticides is likely to help companies mitigate regulatory risks, as the use of highly hazardous pesticides furthers the potential for increased scrutiny due to the heightened human and environmental health effects of these products.

Accounting Metrics

CN0101-08. Description of strategies to manage land use and ecological impacts

- .43 The registrant shall discuss its strategies to manage the land use and ecological impacts of its farming operations, including implementation of agricultural management practice systems (MPS), integrated pest management (IPM), and efforts to address deforestation.
- .44 The registrant shall describe its efforts to use agricultural MPS and the implementation of MPS components, which include, but are not limited to:
 - Conservation tillage
 - Crop nutrient management
 - Conservation buffers
 - Irrigation water management
 - Erosion and sediment control
- .45 The registrant shall describe its efforts to reduce the risks associated with use of pesticides, such as the implantation of IPM practices, where relevant practices include:
 - Crop rotation and inter-cropping
 - Seedbed sanitation, conservation tillage, and pruning and direct sowing
 - Use of pest-resistant/tolerant cultivars

- Monitoring of harmful organisms
- Priority use of biological, physical, or other non-chemical methods and application of pesticides as a last resort
- Use of targeted pesticide application that is of minimal harm to the environment and human health
- Providing training and protective equipment for pesticide applicators

.46 The registrant may choose to disclose its involvement in IPM-related initiatives and certification programs, including, but not limited to:

- The Sustainable Agriculture Initiative
- Sysco Sustainable/IPM Program

.47 The registrant shall discuss its involvement in deforestation and efforts to address deforestation, where relevant discussion includes, but is not limited to:

- The degree to which the registrant is involved in deforestation, including the number of acres of forest land brought under agricultural management during the reporting period.
- The use of policies to establish local, regional, and corporate-wide guidance on deforestation and land-use change practices.
- Engagement with local communities, governmental entities, and non-governmental organizations about deforestation practices and/or moratoriums.

.48 Where applicable and relevant, the registrant shall describe specific MPS, IPM plans, and deforestation policies and practices that apply to areas with protected conservation status and/or areas of critical habitat, which are defined by the International Finance Corporation (IFC) ([here](#)) as:

- Areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.

CN0101-09. (1) Volume of wastewater reused and (2) volume of wastewater discharged to the environment

.49 The volume of wastewater that is (1) reused and (2) discharged to the environment shall be calculated in cubic meters, where:

- Wastewater is generally defined as water for which the registrant has no further use and is discarded or released to the environment and that results from agricultural land runoff, groundwater contamination, and effluents from processing facilities and other point sources.

.50 The registrant shall disclose the amount of wastewater that is reused or recycled, where:

- Recycled water usage includes any volume of water that is recycled and reused, and water reused multiple times shall be counted as recycled each time it is recycled and reused.
- Recycled water includes water that is reused in closed-loop and open-loop systems.
- Recycled water includes grey water, water treated prior to reuse, and water not treated prior to reuse.

.51 The registrant should disclose the source from which its wastewater was generated, where:

- Sources include, but are not limited to, farm field operations and processing operations.
 - Appropriate measurements of wastewater generated from point sources, including processing facilities, should include those approved by the U.S. Clean Water Act 40 CFR 136.
 - Appropriate measurements of wastewater generated from non-point sources may be in-stream runoff gauges, edge-of-field monitoring, or estimations.

.52 For the registrant's operations that are not flowmetered in a way that allows direct measurement of wastewater generation, estimation is acceptable. The registrant shall disclose the estimation methodology employed, which may include:

- Average sample load
- Average sample concentration times average sample discharge
- Flow-weighted concentration times annual discharge
- Surface runoff load plus base-flow runoff load
- Wet-season load plus dry-season load

Note to **CN0101-09**

.53 The registrant shall discuss its risks associated with discharge of water to the environment and describe how it manages these risks.

.54 The registrant shall discuss, where applicable, risks associated with its discharge of wastewater.

- Relevant information to provide includes, but is not limited to:
- Environmental constraints, such as the ability to maintain compliance with regulations focused on the quality of effluent discharged to the environment, the ability to eliminate existing and emerging pollutants of concern, and the ability to maintain control over runoff and storm water discharges.
 - External constraints, such as increased liability and/or reputational risks, restrictions to discharges and/or increased operating costs due to regulation, stakeholder perceptions and concerns related to

water discharges (e.g., those from local communities, non-governmental organizations, and regulatory agencies), and the ability to obtain discharge rights or permits.

- How risks may vary by discharges to different destinations, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or other water utilities.

.55 The registrant should include a discussion of the potential impacts that these risks may have on its operations and the timeline over which such risks are expected to manifest.

- Impacts may include, but are not limited to, those associated with costs, revenues, liabilities, continuity of operations, and reputation.

.56 The registrant shall briefly describe treatment methods used for water discharged to the environment, where treatment methods include:

- Mechanical or chemical methods such as the use of ultraviolet light, chlorine (or other chemicals), and water filtration systems;
- Non-mechanical methods such as the use of waste-stabilization ponds, riparian buffers, and/or wetlands; or
- A combination of both mechanical and non-mechanical methods.

.57 The registrant shall describe the reasons for choosing such treatment methods, which may include, but are not limited to:

- The type of effluents being discharged;
- The regulatory or voluntary standards that the registrant is subject to;
- The environmental setting of the farm or facility; and
- The financial implications of developing such treatment methods.

.58 The registrant should disclose the volume of water treated and returned to the environment by each treatment method.

CN0101-10. Number of incidents of non-compliance with water-quality permits, standards, and regulations

.59 The registrant shall disclose the total number of instances of non-compliance, including violations of technology-based standards and exceedances of quality-based standards.

.60 The scope of disclosure includes incidents governed by federal, state, and local statutory permits and regulations, including, but not limited to, the discharge of a hazardous substance, violation of pretreatment requirements, total maximum daily load (TMDL) exceedances, and/or water withdrawal exceedances.

- .61 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).
- .62 An incident of non-compliance, regardless of the measurement methodology or frequency, shall be disclosed. These include violations for:
- Continuous discharges, limitations, standards, and prohibitions that are generally expressed as maximum daily, weekly, and monthly averages.
 - Non-continuous discharges, limitations that are generally expressed in terms of total mass, maximum rate of discharge, frequency, and mass or concentration of specified pollutants.

CN0101-11. Amount of fertilizer consumption by: (1) nitrogen-based, (2) phosphate-based, and (3) potassium-based fertilizers

- .63 The registrant shall disclose the amount of fertilizer (in metric tons) that was consumed for use in operations, where:
- The amount of fertilizer consumed shall be calculated as the amount of fertilizer in inventory at the beginning of the reporting period, plus any purchase of fertilizer made during the reporting period, less any fertilizer inventory on hand at the end of the reporting period.
- .64 The registrant shall disclose fertilizer consumption by the amount (in metric tons) of primary nutrient type, according to the following classifications listed in the Association of American Plant Food Control Officials (AAPFCO) Product Label Guide (available [here](#)):
- Nitrogen-based (including, but not limited to, NH_4 and NO_3), reported as N
 - Phosphate-based (including, but not limited to, $\text{Ca}(\text{H}_2\text{PO}_4)_2$ and $(\text{NH}_4)_2\text{HPO}_4$), reported as P_2O_5
 - Potassium-based (including, but not limited to, K_2SO_4 and KCl), reported as K_2O
- .65 The registrant should discuss the calculation methodology for its fertilizer consumption, such as whether data are from weight measurements or estimations and the conversion factor used.
- The conversion factor is the amount of primary nutrient found in a unit of the fertilizer compound.
 - Where fertilizer conversion rates are not readily available, the registrant may use the relevant rate determined by the Fertilizer Statistics Methodology (FAOSTAT) as developed by the Food and Agriculture Organization (FAO) (publicly available [here](#)).
- .66 The registrant should disclose the amount of fertilizer consumed by principal crops, where:
- Principal crops are those crops that accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, as disclosed in CN0101-A and consistent with 17 CFR 229.101.

CN0101-12. Amount of pesticide consumption by hazard level

.67 The registrant shall disclose the amount of pesticides (in metric tons) consumed for use in operations, where:

- The amount of pesticides consumed shall be calculated as the amount of pesticides in inventory at the beginning of the reporting period, plus any purchase of pesticides made during the reporting period, less any pesticide inventory on hand at the end of the reporting period.
- For purpose of this disclosure, the amount of pesticides shall be considered as the weight of active ingredients in pesticide mixtures, which can be calculated by multiplying the proportion of active ingredients by the total weight of the mixture.
- The term “pesticide” is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, in accordance with 40 CFR 152.3.

.68 The registrant shall disclose its consumption of active pesticide ingredients (in metric tons) by hazard level, according to the World Health Organization (WHO) Acute Toxicity Hazard Categories (publicly available [here](#)), where hazard levels are defined as:

- Ia Extremely hazardous
- Ib Highly hazardous
- II Moderately hazardous
- III Slightly hazardous
- U Unlikely to present acute hazard

.69 The registrant should disclose the amount of pesticides consumed by principal crops, where:

- Principal crops are those crops that accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, as disclosed in CN0101-A and consistent with 17 CFR 229.101.

.70 The registrant may also choose to disclose the amount of pesticide ingredients consumed that are inert (other ingredients) and that are persistent, bioaccumulative, and toxic (PBT) or carcinogenic, mutagenic, or reprotoxic (CMR), but which are not currently included on the list of WHO: Acute Toxicity Hazard Categories, where:

- An inert ingredient is defined as a substance other than an active ingredient that is intentionally included in a pesticide, in accordance with 40 CFR 153.125.
- PBT chemicals are defined as substances that remain unaffected in the environment, travel up the food chain due to their tendency to be soluble in fat but not in water, and are poisonous to animals and/or plants.
- Carcinogens (C) are defined as substances and preparations that, if inhaled, ingested, or allowed to penetrate the skin, may induce cancer or increase its incidence.

- Mutagens (M) are defined as substances and preparations that, if they are inhaled, ingested, or allowed to penetrate the skin, may induce heritable genetic defects or increase their incidence.
- Reprotoxins (R) are defined as substances and preparations that, if inhaled, ingested, or allowed to penetrate the skin, may produce or increase the incidence of non-heritable adverse effects in the progeny and/or an impairment of male or female reproductive functions or capacity.

Note to **CN0101-12**

.71 The registrant shall describe, where applicable, the scope, including the regions, crops, and requirements for which WHO Class Ia and Ib pesticides are used.

Additional References

[USDA Natural Resources Conservation Services: Edge of Field Monitoring](#)
[International Journal of Sediment Research: Nutrient Load Estimation Methods for Rivers](#)
[Food and Agriculture Organization Integrated Pest Management Practices](#)

Food Safety & Health Concerns

Description

Agricultural products are sold directly to consumers in raw form or are further processed into a wide variety of foods. Maintaining product quality and safety is critical, as contamination by pathogens, chemicals, or spoilage presents serious human and animal health risks. Sources of such contamination include bacteria that inhabit the surfaces of fruits and vegetables, molds that develop in grains during unusually wet or dry growing periods, poor farming practices such as the disposal of solid waste on land, and damage and stress during harvesting or storage, among others. Food quality and safety issues can lead to consumer-driven demand changes and regulatory action. Product recalls can harm brand reputation, reduce revenues, and lead to costly fines. Major non-conformances with the Global Food Safety Initiative (GFSI) scheme, which benchmarks farm assurance standards, may indicate systemic governance risks, which could affect risk premiums. Moreover, social trends indicate that customers are becoming increasingly concerned about perceived health impacts related to the consumption of GMO products. As a response to these concerns and changing consumer preferences, food and beverage companies look for opportunities to increase the amount of organic products they offer. Therefore, agricultural products companies able to convert their practices to growing non-GMO crops may capture a larger share of the rapidly growing GMO-free products market.

Accounting Metrics

CN0101-13. Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate

- .72 The registrant shall disclose its conformance with GFSI-recognized food safety schemes based on the number of non-conformances that were identified during audits.
- .73 The scope of disclosure includes audit results from facilities that are owned and/or operated by the registrant.
- .74 The registrant shall calculate and disclose the major non-conformance rate as the total number of major and critical non-conformances identified in the supply chain divided by the number of facilities audited.
 - Major non-conformances are the highest severity of non-conformance and require escalation by auditors. Major non-conformances may arise from a significant risk to food safety, non-compliance with relevant regulatory requirements, and failure to adequately address prior minor non-conformances. Major non-conformances must be corrected in accordance with the relevant GFSI scheme under audit.
 - Major non-conformances may also be referred to as critical or priority non-conformances.
- .75 The registrant shall calculate and disclose the minor non-conformance rate as the total number of minor non-conformances identified in the supply chain divided by the number of facilities audited.
 - A minor non-conformance is defined by the relevant GFSI scheme and is by itself not indicative of a systemic problem.
- .76 The registrant shall calculate and disclose its corrective action rate for major non-conformances as the number of corrective action plans completed in accordance with the relevant GFSI scheme, no later than 30 days from the

audit date, to address major non-conformances, divided by the total number of major non-conformances that have been identified.

.77 The registrant shall calculate and disclose its corrective action rate for minor non-conformances as the number of corrective action plans completed in accordance with the relevant GFSI scheme, no later than 365 days from the audit date, to address minor non-conformances, divided by the total number of minor non-conformances that have been identified.

.78 A corrective action is defined as an action to eliminate the cause of a detected non-conformity or other undesirable matter, in accordance with the GFSI, and may be further defined by the relevant GFSI scheme under audit.

.79 The scope of schemes includes those recognized by the GFSI, including, at time of publication:

- PrimusGFS Standard V2.1—December 2011
- GlobalG.A.P Integrated Farm Assurance Scheme Version 4 and Produce Safety Standard Version 4
- FSSC 22000—October 2011 Issue
- CanadaGAP Scheme Version 6 Options B and C and Program Management Manual Version 3
- SQF Code 7th Edition Level 2
- IFS Food Standard Version 6
- BRC Global Standard for Food Safety Issue 6

.80 The registrant should disclose the GFSI-recognized scheme to which its facilities are audited.

CN0101-14. Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) scheme

.81 The registrant shall disclose the percentage of agricultural products, by value in U.S. dollars, sourced from supplier farms and/or facilities that are certified to a Global Food Safety Initiative (GFSI) scheme.

.82 The scope of disclosure includes the registrant's tier-1 suppliers, where:

- Tier-1 suppliers are defined as suppliers that transact directly with the registrant for food ingredients.

.83 The registrant shall calculate the percentage of agricultural products sourced from supplier farms and/or facilities certified to a GFSI scheme as the amount (in U.S. dollars) of agricultural products sourced from farms and/or facilities certified to a GFSI scheme, divided by the total amount of agricultural products.

.84 The scope of schemes includes those recognized by the GFSI, including, at time of publication:

- PrimusGFS Standard V2.1—December 2011
- Global Aquaculture Alliance BAP Seafood Processing Standard

- FSSC 22000—October 2011 Issue
- SQF Code 7th Edition Level 2
- IFS Food Standard Version 6
- BRC Global Standard for Food Safety Issue 6
- Global Red Meat Standard 4th Edition Version 4.1
- GlobalG.A.P Integrated Farm Assurance Scheme Version 4 and Produce Safety Standard Version 4
- CanadaGAP Scheme Version 6 Options B and C and Program Management Manual Version 3

CN0101-15. Number of recalls issued, total amount of food product recalled

- .85 The registrant shall disclose the total number of recalls issued, the scope of which includes voluntary recalls initiated by the registrant and involuntary recalls requested and/or mandated by the Food and Drug Administration (FDA) or foreign equivalent.
- .86 The registrant shall disclose the total amount (in metric tons) of products subject to recall.
- .87 Involuntary recalls are those requested or mandated by government agencies (e.g., the FDA in the U.S. or the China Food and Drug Administration in China).
- .88 A database of FDA-regulated recalls is available [here](#).
- .89 The registrant may choose, in addition to total units recalled, to disclose the percentage of recalls that were (1) voluntarily and (2) involuntarily issued.

Note to CN0101-15

- .90 The registrant shall discuss notable recalls, such as those that affected a significant amount of product or those related to serious illness or fatality.
- .91 A recall should be considered notable if it is mentioned in the FDA's [Recalls, Market Withdrawals, & Safety Alerts](#).
- .92 For such recalls, the registrant should provide:
- Description and cause of the recall issue
 - The total weight of products recalled
 - The cost to remedy the issue (in U.S. dollars)
 - Whether the recall was voluntary or involuntary
 - Corrective actions

- Any other significant outcomes (e.g., legal proceedings or consumer fatalities)

CN0101-16. Description of strategies to manage the use of genetically modified organisms (GMOs)

- .93 The registrant shall discuss its strategy to manage its use of genetically modified organisms (GMOs), including a discussion of markets that restrict the importation of GMOs, the risks associated with required labeling of products containing GMOs, changes in consumer preferences, and opportunities associated with the use of GMOs.
- .94 The registrant shall include a list of countries and regions that restrict, ban, or have suspended imports of one or more of the registrant's products due to regulations on GMOs.
- .95 The scope of this disclosure includes regulations, trade restrictions, and other measures used to restrict the importation (whether explicit or de facto) of GMOs, including, but not limited to:
- E.U. Regulation No. 1829/2003
 - The New Zealand Hazardous Substances and New Organisms Act of 1996
 - The Norwegian Gene Technology Act
 - The South African Genetically Modified Organisms Act of 1997
- .96 The registrant shall discuss the following with respect to each restriction: the scope of products affected, the length of time the restriction has been in place, the stated reason for the restriction (e.g., health concerns, biodiversity impacts, or other reasons), and the effect on the registrant's results of operations and financial condition.
- .97 The registrant shall discuss the risks associated with labeling requirements for GMOs, including those requirements developed through regulation or through the registrant's downstream customers (e.g., processed food companies and food retailers).
- .98 The registrant shall include a list of products that are subject to markets in which regulations require the labeling of GMOs, including, but not limited to, the following regulations:
- E.U. Directive 2001/18/EC;
 - Regulation EC 1829/2003;
 - Maine HP 0490 LD 718;
 - Vermont H. 112 Act 0120;
 - Connecticut House Bill 6527; or
 - Other U.S. state or federal regulation, as enacted.

- .99 The registrant shall discuss the risks and opportunities associated with any changes in consumer preferences regarding the use and/or labeling of products containing GMOs. In this disclosure, the registrant shall discuss any efforts to address the resulting risks and/or opportunities.
- .100 The registrant shall discuss the opportunities regarding food safety and health concerns that GMOs address.

Fair Labor Practices & Workforce Health & Safety

Description

Agricultural products companies have diverse operations ranging from crop cultivation to grain milling. The industry's human capital across these operations can be adversely affected by labor issues in poorly managed operations. Common hazards include falls, transportation accidents and heat-related illness or injury, among others. Furthermore, workers in both farming and milling are exposed to toxic substances such as agricultural pesticides due to spills, lack of adequate protective equipment, and contact with direct spray or drift from nearby fields, which can be harmful with long-term exposure. Also, child labor is common in farming for many reasons, including historical precedent, limited access to education, poverty, inadequate agricultural technology, and traditional beliefs about the role of children in farming. Moreover, migrant workers are common in the industry due to political unrest, population growth, land reform issues, and limited job opportunities in farm workers' countries of origin as well as demand for low-cost labor to fill jobs no longer attractive to citizens of developed countries because of low wages and/or poor workplace conditions. Violations of health, safety, and labor standards could result in monetary penalties and costs for corrective actions. High injury rates, particularly fatality rates, may lead to significant reputational harm and indicate weak governance structures and safety culture. Implementation of fair labor practices can help build brand image while promoting worker morale, which can lead to increased productivity, reduce worker turnover, and enhance community relations.

Accounting Metrics

CN0101-17. Percentage of farms and facilities certified for fair labor practices

- .101 The registrant shall disclose the percentage of its farms and facilities that are certified for fair labor practices, where:
- Certified fair labor practices include, but are not limited to, fair compensation of employees, training of agrochemical applicators, continual monitoring of health and safety risks associated with applications of agrochemicals, and the absence of harmful child-labor practices, where:
 - Harmful child-labor practices include, but are not limited to, labor that is harmful to a child's health, development, and/or schooling.
- .102 The registrant shall calculate the percentage as the number of farms and/or facilities that are certified for fair labor practices divided by the total number of farms and/or facilities, where:
- The scope of disclosure shall include company-owned and -operated farms and processing facilities.
 - The scope of disclosure does not include the registrant's corporate and administrative offices.
- .103 A farm or processing facility is considered to be certified for fair labor practices if it has been granted certification by one or more of the following:
- Roundtable on Sustainable Palm Oil (RSPO)
 - Roundtable on Responsible Soy (RTRS)

- Rainforest Alliance
- Fair Trade USA
- Fair Trade International
- UTZ Certified
- EcoSocial
- SA8000
- Fair for Life
- Bon Sucro
- Any other fair labor certification, audit, or program that contains criteria on the fair labor practices described in CN0101-17.101.

.104 The registrant should indicate to which standards its farms and facilities are certified.

CN0101-18. (1) Total recordable injury rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees

.105 Registrants whose workforce is entirely U.S.-based shall disclose its total recordable injury rate (TRIR) and fatality rate as calculated and reported in the Occupational Safety and Health Administration's (OSHA) Form 300.

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

.106 Registrants whose workforce includes non-U.S.-based employees shall calculate its TRIR and fatality rate according to the U.S. Bureau of Labor Statistics [guidance](#) and/or using the U.S. Bureau of Labor Statistics [calculator](#).

.107 The registrant shall disclose its near miss frequency rate (NMFR), where a near miss is defined as an incident in which no property or environmental damage or personal injury occurred, but where damage or personal injury easily could have occurred but for a slight circumstantial shift.

- The registrant should refer to organizations such as the National Safety Council (NSC) for guidance on implementing near miss reporting.
- The registrant should disclose its process for classifying, identifying, and reporting near miss incidents.

.108 The registrant shall disclose its TRIR, fatality rate, and NMFR for each of the following employee categories:

- Direct employees;

- Seasonal and migrant employees.

.109 Seasonal employees are defined as individuals employed on a seasonal or other temporary basis who are not required to be absent overnight from their permanent place of residence, in accordance with the U.S. Department of Labor (DOL).

.110 Migrant employees are defined as individuals employed on a seasonal or other temporary basis who are required to be absent overnight from their permanent place of residence, in accordance with the DOL, including employees with H2-A visas or the foreign equivalent.

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

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

- The rate for seasonal and migrant employees is calculated as [(seasonal employees statistic count + migrant employees statistic count) / (seasonal employees total hours worked + migrant employees hours worked)]*200,000.

CN0101-19. Description of efforts to assess, monitor, and reduce exposure of direct, seasonal, and migrant employees to pesticides

.113 The registrant shall discuss efforts to assess, monitor, and reduce exposure of employees to pesticides, where:

- Pesticides are defined as any substances or mixtures of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, in accordance with 40 CFR 152.3.

.114 The registrant shall describe its approach to managing both short-term (i.e., acute) exposure and prolonged (i.e., chronic) exposure.

.115 Relevant efforts to discuss include, but are not limited to, risk assessments, participation in long-term health studies, health and wellness monitoring programs, providing readily accessible protective equipment, and implementation of pesticide applicator training and certification programs.

.116 Relevant efforts to discuss pertaining to seasonal and migrant employees include, but are not limited to, translation of training programs and labels into employees' native languages, providing readily available information on local health care providers, and implementation of no-spray buffer zones surrounding on-site employee housing.

.117 Seasonal employees are defined as individuals employed on a seasonal or other temporary basis who are not required to be absent overnight from their permanent place of residence, in accordance with the U.S. Department of Labor's (DOL) definition.

.118 Migrant employees are defined as individuals employed on a seasonal or other temporary basis who are required to be absent overnight from their permanent place of residence, in accordance with the DOL definition, including employees with H2-A visas or the foreign equivalent.

- .119 The registrant may discuss compliance with the EPA's Agricultural Worker Protection Standard.
- .120 The scope of employees shall focus on farm employees, but the registrant should discuss other employees that handle pesticides as relevant.

Climate Change Impacts on Crop Yields

Description

Anthropogenic climate change can have a significant impact on the Agricultural Products industry, primarily in regard to increased difficulties—or, conversely, opportunities—associated with crop cultivation. Global average temperature increases are expected to contribute to changes in precipitation patterns, temperature variation, and the number and range of crop diseases and pests. In higher latitudes, agricultural production may rise as the growing season lengthens and temperatures moderate. However, low latitudes could experience falling yields as drought, flooding, extreme temperatures, and fires become more frequent. Climate change will likely increase the risk of crop failure, both progressive and punctuated, or lower yields, and, therefore, affect the quantity of salable agricultural products. This directly reduces revenues of primary crop producers and raises the price of sourced crops. The industry's adaptation potential is dependent on a variety of factors. Companies can better manage the effects of climate change through proactively addressing its potential impacts, including by implementing adaptive farming strategies. By increasing research and development spending toward breeding more adaptive crops, agricultural products companies may be able to ensure higher yields in the long term. Agricultural producers able to adapt to climate change challenges successfully are likely to ensure competitive advantage and strengthen their risk profile, which can have a positive long-term impact on cost of capital.

Accounting Metrics

CN0101-20. Amount of crop losses, percentage offset through financial mechanisms

- .121 The registrant shall disclose the amount (in U.S. dollars) of crop losses related to climate and weather events that it has incurred.
 - The scope of disclosure includes, but is not limited to, climate- and weather-related events such as floods, droughts, pest infestations, fungal blight, and other crop diseases.
- .122 The registrant shall calculate the amount of crop losses as the guaranteed yield value less the actual yield value, regardless of whether the crop losses are subject to and guaranteed through a crop insurance program.
- .123 The registrant shall disclose the relevant method used to determine the guaranteed yield values, where relevant methods include, but are not limited to, those listed in the [U.S. Department of Agriculture \(USDA\) Risk Management Agency's Policies](#), such as:
 - Actual Production History (APH)
 - Actual Revenue History (ARH)
 - Adjusted Gross Revenue (AGR)
- .124 The percentage offset through financial mechanisms shall be calculated as the amount (in U.S. dollars) of financial gain received due to events resulting in crop losses divided by the total amount (in U.S. dollars) of crop losses incurred, where:

- Financial gain may include crop insurance payouts, gains on weather derivatives, gains on futures contracts, or other financial gains received due to an underlying event that resulted in crop losses to the registrant.

.125 The registrant should disclose the mechanism by which losses are offset.

.126 The registrant should disclose the amount of crop losses and the percentage offset through financial mechanisms by principal crop type, where:

- Principal crops are those crops that accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, as disclosed in CN0101-A and consistent with 17 CFR 229.101.

CN0101-21. Average crop yield and five-year standard deviation per major crop type by major operating region

.127 The registrant shall disclose the average yield and five-year standard deviation per major crop type (in metric tons per hectare) of planted land by each major operating region, where:

- Crop yield is defined as the total amount (in metric tons) of harvested and appraised production from unit hectares for the reporting period on a per-hectare basis, consistent with 7 CFR 1437.102.
- Standard deviation is defined as the sum of the square of the differences between yields in individual years and the average yield over the period, divided by the number of years in the period.
- The scope of disclosure shall include all planted land in which seed, plants, or trees have been placed, appropriate for the crop and planting method, at a correct depth, into a seedbed that has been properly prepared for the planting method and production practice, consistent with the 7 CFR 760.802 definition of “planted acreage.”

.128 The registrant shall disclose the average crop yield and five-year standard deviation per principal crop type by major operating region, where:

- Principal crops are those crops that accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, as disclosed in CN0101-A and consistent with 17 CFR 229.101.
- Major operating regions are defined as those geographic areas where the registrant has significant production capacity, consistent with the guidance of 17 CFR 229.101 on long-lived assets.

.129 The average crop yield per hectare shall be calculated as the total yield per principal crop type (by major operating region) divided by the total hectares of planted land per principal crop type (by major operating region) for the current reporting period.

.130 The standard deviation shall be calculated as the sum of the square of the differences between average crop yields per principal crop type (by major operating regions) in individual years and the average yield per principal crop type (by major operating region) over the five-year period, divided by the five years in the period.

CN0101-22. Identification of principal crops and discussion of risks and opportunities presented by climate change

.131 The registrant shall identify any principal crops that are a priority to the registrant's business, where:

- Principal crops are those crops that accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, as disclosed in CN0101-A and consistent with 17 CFR 229.101.

.132 The scope of disclosure shall include crops that are cultivated directly by the registrant, grown on a contract basis, or sourced as a commodity, where:

- Crops cultivated directly by the registrant include those grown on farms owned and/or operated by the registrant.
- Crops grown on a contract basis include those for which the registrant has directly contracted the conditions of crop production and the quality of crops with the farmer, consistent with the FAO's definition (available [here](#)).
- Crops sourced as a commodity include those bought through the spot market, to-arrive bids, grain elevators, or other measures by which the registrant is not able to control the production process.

.133 The registrant shall discuss the risks and/or opportunities that are presented to its principal crops by climate change scenarios, including, where relevant:

- Identification of the risks presented by climate change, including, but not limited to, availability of water, shifts in crop regions, pest migration, and extreme weather events.
- Discussion of the scenarios used to determine the risks and opportunities presented by climate change.
- Discussion of how such scenarios will manifest (e.g., effects directly on the registrant or effects on the registrant's supply chain) and the potential implications that these would have on its priority crops.
- The timeline over which such risks and opportunities are expected to manifest.

.134 The registrant may include discussion of the methods or models used to develop these scenarios, including the use of global gridded crop models or scientific research provided by governmental and non-governmental organizations (e.g., [Intergovernmental Panel on Climate Change Climate Scenario Process](#)).

.135 The registrant shall discuss efforts to assess and monitor the impacts of climate change and the related strategies to alleviate and/or adapt to any risks and/or utilize any opportunities, where:

- Alleviation strategies include, but are not limited to, use of crop insurance, investments in hedging instruments, and supply chain diversification.
- Adaptation strategies include, but are not limited to, improving ecosystem management and biodiversity, development of tolerant crop varieties, and optimizing timing of planting and harvesting.

Additional References

[EPA Climate Impacts on Agriculture and Food Supply](#)

[FAO: "Climate-Smart" Agriculture](#)

Environmental & Social Impacts of Ingredient Supply Chains

Description

Agricultural products companies source a portion of their inputs globally from farmers or other corporations. Managing sustainability risks, including environmental and social issues, within farms and companies in supply chains is critical to securing raw materials and reducing the risk of price increases. Specific factors that can affect the supply of raw materials include reduced crop yields due climate change, increasing water scarcity, land management, labor conditions, and environmental impacts of cultivation. Climate change and environmental degradation could increase the probability of crop failure or lower yields, and in turn could raise purchase costs. In addition, issues such as labor abuse can similarly increase purchase costs if these issues cause supplies to be constrained or truncated. Supply chain interruption can cause loss of revenue and market share if companies are not able to find alternatives to key suppliers, and can increase purchasing costs if supplies are found elsewhere at higher cost. Sourcing from certified suppliers gives agricultural companies assurance that the inputs to their products are developed in accordance with a high standard for social and environmental principles, thus reducing the risk that a company will face damage to brand image or operational impacts due to its sourcing practices.

Accounting Metrics

CN0101-23. Percentage of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress

- .136 The registrant shall disclose the percentage, by value in U.S. dollars, of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress, where:
- Agricultural raw materials are defined as raw materials such as food, feed, and biofuel ingredients that are sourced for use in the registrant's production operations.
- .137 The scope of agricultural raw materials shall include those items grown by tier-1 suppliers, including those grown on a contract basis or sourced as a commodity, where:
- Tier-1 suppliers are defined as suppliers that transact directly with the registrant for food ingredients.
 - Crops grown on a contract basis include those for which the registrant has directly contracted the conditions of crop production and the quality of crops with the farmer, consistent with the FAO's definition (available [here](#)).
 - Crops sourced as a commodity include those bought through the spot market, to-arrive bids, grain elevators, or other measures by which the registrant is not able to control the production process.
- .138 The percentage is calculated as the total cost, in U.S. dollars, of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress divided by the total cost of agricultural raw materials sourced.
- .139 Using the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), the registrant shall analyze all of its tier-1 suppliers' known sources for water risks and identify sources that are in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress.

- .140 The scope of disclosure includes all tier-1 suppliers. Should the registrant be unable to identify or collect data pertaining to all tier-1 suppliers, the registrant shall disclose the percentage of ingredients for which source region and water risks are unknown.

CN0101-24. Description of management strategy for environmental and social risks arising from contract growing and commodity sourcing

- .141 The registrant shall discuss its strategic approach to managing its environmental and social risks arising from its contract growing and commodity sourcing practices, where:
- The scope of disclosure should focus on agricultural raw materials that are sourced from directly contracted growers, sourced through producer supply agreements, or procured through other means.
 - Environmental and social risks include, but are not limited to, extreme weather events, water stress, degradation of the environment, labor rights, community rights, and harmful child-labor practices.
- .142 The registrant should identify which commodities or agricultural raw materials present a risk to its operations, which risk they represent, and the strategies the registrant uses to mitigate that risk.
- .143 For environmental risks, relevant strategies to discuss include the diversification of suppliers, supplier training programs on environmental best management practices, expenditures on R&D for alternative and substitute crops, and audits or certifications of suppliers' environmental practices.
- .144 For social risks, relevant strategies to discuss include supplier training programs on agrochemical application, engagement with suppliers on labor and human rights issues, maintenance of a supply chain code of conduct, and audits or certifications of suppliers' social practices.

CN0101-25. Percentage of agricultural raw materials that are certified to a third-party environmental and/or social standard

- .145 The registrant shall disclose the percentage, by value in U.S. dollars, of agricultural raw materials sourced to third-party environmental and/or social standards, where:
- Agricultural raw materials are defined as raw materials such as food, feed, and biofuel ingredients that are sourced for use in the registrant's production operations.
 - Environmental standards include, but are not limited to, protection of primary forests, maintenance of surface water and groundwater quality, and implementation of integrated pest management (IPM) solutions or an Organic System Plan.
 - Social standards include, but are not limited to, fair compensation of employees, training of agrochemical applicators, continual monitoring of health and safety risks associated with applications of agrochemicals, and the absence of harmful child-labor practices.
 - Standards that include both social and environmental criteria contain measures that incorporate both social and environmental requirements, as mentioned above.

- .146 The percentage is calculated as the total cost, in U.S. dollars, of agricultural raw materials that are certified to a third-party environmental and/or social standard divided by the total cost of agricultural raw materials sourced.
- .147 The scope of this disclosure includes third-party certifications that are based on either environmental or social best practices, or both.
- .148 The scope of agricultural raw materials shall include those items grown by a tier-1 supplier or third party that are sourced for eventual sale where environmental and/or social certifications include, but are not limited to:
- Roundtable on Sustainable Palm Oil (RSPO)
 - Roundtable on Responsible Soy (RTRS)
 - Rainforest Alliance
 - Fair Trade USA
 - Fair Trade International
 - UTZ Certified
 - Bon Sucro
 - USDA Organic
 - SA8000
- .149 The registrant shall disclose, on a percentage of cost basis, the standards to which its agricultural raw materials are certified, where:
- For RSPO certification, the registrant shall disclose whether the agricultural raw materials are certified to the (1) Book & Claim or Mass Balance methods and (2) Identify and Preserved or segregated models.
 - For RTRS certification, the registrant shall disclose whether the agricultural raw materials are certified to the RTRS Production standard or the RTRS Chain of Custody Standard and whether traceability in the chain of custody standard is kept through segregation or mass balance.
 - For Fairtrade International and Fairtrade U.S.A., the registrant shall disclose whether agricultural raw materials are certified to the standards for small producer organizations, hired labour, contract production, traders, independent small holders, or capture fisheries.
 - For Bon Sucro certification, the registrant shall disclose whether the agricultural raw materials are certified to the Bon Sucro Production Standard or the Bon Sucro Chain of Custody Standard.
 - For certifications not included here, similar efforts should be made to distinguish between the certification-specific standards that are employed.

- For certifications that deliver the same environmental and/or social criteria (e.g., Fair Trade International and Fair Trade USA) and for ingredients that are derived from the same commodity, the registrant may aggregate the percentage into one reportable figure.

Management of the Legal & Regulatory Environment

Description

The interaction of companies with the regulatory environment includes political contributions and lobbying, which can be directed towards issues with sustainability implications, such as crop insurance subsidies and the Renewable Fuel Standard (RFS) program in the case of the Agricultural Products industry. Corporate lobbying is particularly relevant for U.S. markets, where financial contributions and lobbying by registered lobbyists are legally recognized ways of engaging with policymakers. Crop insurance mitigates weather and environment-related risk, which could increase significantly in the future because of climate change. However, subsidies for crop insurance, without appropriate measures incorporating long-term sustainability considerations, may reduce incentives to practice farming techniques such as conservation tillage and more efficient irrigation. They may also lead to environmental degradation from expanding acreage into marginal lands or employing more harmful intensive farming practices. In addition to lobbying in support of crop insurance subsidies, heavy reliance on the biofuel industry—one of the main purchasers of corn and soybean crops—prompts agricultural companies to lobby for support of the RFS program. Negative externalities related to agricultural feedstock production for biofuels, including possible impacts on food prices, are prompting proposals for a shift in regulatory support from crop-based biofuels to advanced biofuels that use alternative feedstocks and have lower externalities. As regulations continue to evolve, if government support for food-crop-based biofuels is reduced or withdrawn, this would put a substantial share of agricultural companies' revenue at risk. In general, lobbying, campaign contributions, and other politically influential spending or activities that promote policies creating perverse incentives related to the industry's social or environmental impacts could erode companies' social license to operate over the long term. While successful lobbying can result in positive short-term gains, these benefits could subsequently be reversed to reflect the balance of corporate and public interest in those issues, leading to a more burdensome or uncertain regulatory environment. Agricultural products companies could therefore benefit from a clear strategy for engaging policymakers and regulators that is aligned with long-term sustainable business outcomes and that accounts for societal and environmental externalities. Through a combination of their strategy for engaging with regulators and managing sustainability issues relevant for their industry, focused on positive societal outcomes, companies will likely be better prepared for medium- to long-term regulatory adjustments, reducing business uncertainty.

Accounting Metrics

CN0101-26. Discussion of positions on the regulatory and political environment related to environmental and social factors and description of efforts to manage risks and opportunities presented

- .150 The registrant shall identify risks and opportunities it faces related to legislation, regulation, rulemaking, actions of individual politicians, and the overall political environment (hereafter referred to collectively as "regulatory and political environment") related to environmental and social factors.
- The scope shall include existing, emerging, and known future risks and opportunities.
 - The scope shall include risks and opportunities that may exist within the U.S. at the local, state, and federal level.
 - The registrant may discuss risks and opportunities in international markets.

- The regulatory and political environment related to environmental and social factors includes that which address biodiversity, emissions and effluents, toxic substances, climate change, immigration, food safety, wages, intellectual property, and financial regulations.

.151 Relevant risks include, but are not limited to, risk of increased compliance costs, risk of policy reversal (e.g., risks associated with changes to Federal crop insurance), risk of loss of financial incentives (e.g., reduction or elimination of subsidies, tax incentives, grants, etc.), risk to reputation due to registrant's stance and actions related to the regulatory and political environment, risk that the regulatory and political environment may not be aligned with long-term strategy, and risk of misalignment with customers', investors', and other stakeholders' expectations.

- If the registrant receives subsidies and/or incentives, it may choose to disclose the amounts it currently receives and portion that may be a risk in the case of policy reversal.

.152 Relevant opportunities include, but are not limited to, improved financial conditions (e.g., through trade protections, financial subsidies, tax benefits, etc.), preferential market status (including federal contracts) due to environmental and social practices that are aligned with regulatory and political environment, improved access to human capital, enhanced brand reputation due to registrant's stance and actions related to the regulatory and political environment, and other benefits due to alignment of regulatory and political environment with long-term strategy.

.153 For each risk and opportunity associated with the regulatory and political environment the registrant has identified, it shall disclose:

- For specific pieces of legislation, regulation, or candidates, whether its position is of support or opposition.
- For general environmental and social topics such as climate change, immigration, and other topics associated with the general lobbying issue codes defined by The Lobbying Disclosure Act of 1995, a description of the type of regulation or legislation that it supports or opposes.

.154 The registrant shall discuss its efforts to manage risks and opportunities associated with each aspect of the regulatory and political environment it has identified in CN0101-26.153, where relevant efforts to discuss include the use of each of the following:

- Direct lobbying or "the attempt to influence a legislative body through communication with a member or employee of a legislative body, or with a government official who participates in formulating legislation."
- Grass roots lobbying or "the attempt to influence legislation by attempting to affect the opinion of the public with respect to the legislation and encouraging the audience to take action with respect to the legislation."
- Direct or indirect contributions or expenditures in support of, or opposition to, a candidate for public office or a ballot measure.

- Any payments made to trade associations or tax-exempt entities, that may be used (where permitted) for lobbying, to make campaign contributions, or to otherwise exert influence on a political campaign or ballot measure.
 - The scope includes political organizations, classified under Section 527 of the Internal Revenue Code, that seek to influence the “selection, nomination, election, or appointment of any individual to Federal, State, or local public office or office in a political organization, or the election of Presidential electors.”
 - The scope includes advocacy organizations, commonly classified as social welfare organizations under Section 501(c)(4) of the Internal Revenue Code.
- Other interactions with regulators and regulatory agencies, such as through legislative testimony, employment of former members of congress, regulatory agencies, and other public servants.
- Any direct or indirect political expenditure (one-time or recurring) that must be reported to the Federal Election Commission (FEC), the Internal Revenue Service (IRS), or a state disclosure agency.

.155 In addition to its efforts to influence the regulatory and political environment, the registrant shall discuss its overall strategy to manage risks and opportunities associated with each aspect of the regulatory and political environment it has identified, such as the following other actions or activities:

- Any changes it has made or plans to make to its business structure or model;
- The development of new technologies or services; and
- Any changes it has made or plans to make to its operational process, control, or organizational structures.

.156 With respect to the emerging or potential future regulatory and political environment the registrant shall discuss its view of:

- Which outcome is most likely to come to fruition;
- The likelihood the outcome will occur (i.e., a qualitative assessment of certainty or uncertainty);
- The time horizon over which it expects the outcome to occur; and
- The expected magnitude of the impact (e.g., a one time, acute impact on costs, an ongoing moderate impact on ability to retain employees, etc.).

.157 The registrant should describe if its stance may align or differ with its peers, other companies, and with the official stance of its trade organization(s) and discuss any relevant reasons for alignment or divergence.

.158 The registrant may choose to disclose the total amount of political spending and a list of the recipients, which includes:

- Any direct or indirect contributions or expenditures in support of, or opposition to, a candidate for public office or a ballot measure.
- Any payments made to trade associations or tax-exempt entities that are used to influence a political campaign (including advocacy organizations, commonly classified as social welfare organizations under Section 501(c)(4) of the Internal Revenue Code, or business leagues, chambers of commerce, boards of trade, and similar organizations classified under Section 501(c)(6) of the Internal Revenue Code).
- Any direct or indirect political expenditure (one-time or recurring) that must be reported to the Federal Election Commission, the Internal Revenue Service, or a state disclosure agency.
- Any direct or indirect contributions to registered lobbyists or lobbying organizations, including contributions made to trade organizations that contribute to political lobbying efforts.

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Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0102

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Provisional Standard

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INTRODUCTION

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Meat, Poultry & Dairy industry.

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

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company’s specific operating context— for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 - 32¹ and referenced in AT 701², as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

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. Companies are vertically integrated to varying degrees, depending upon 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. The industry’s largest companies have international operations, although the U.S. accounts for a large share of meat, poultry, and dairy production.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

For the Meat, Poultry & Dairy industry, SASB has identified the following sustainability disclosure topics:

- Greenhouse Gas Emissions
- Energy Management
- Water Withdrawal
- Land Use & Ecological Impacts
- Food Safety
- Workforce Health & Safety
- Antibiotic Use in Animal Production
- Animal Care & Welfare
- Environmental & Social Impacts of Animal Supply Chains
- Environmental Risks in Animal Feed Supply Chains

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICs industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment –prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

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

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

For purposes of comparability and usability, companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Sustainability Topics

For each sustainability topic included in the Meat, Poultry & Dairy industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

Such data—termed "activity metrics"—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions

⁸ See US GAAP consolidation rules (Section 810).

(e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of processing and manufacturing facilities	Quantitative	Number	CN0102-A
Animal protein production, by category; percentage outsourced ¹⁰	Quantitative	Metric tons (t), Number/head, or Gallons; Percentage (%)	CN0102-B

Units of Measure

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

Uncertainty

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

Estimates

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

¹⁰ Note to **CN0102-11**—Categories include, but are not limited to, chicken, pork, beef, dairy products, and shell eggs. Units of measure shall be appropriate to product category.

Timing

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

Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	CN0102-01
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	Discussion & Analysis	n/a	CN0102-02
Energy Management	Total energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0102-03
Water Withdrawal	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0102-04
	Discussion of risks associated with water withdrawal and description of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	CN0102-05
Land Use & Ecological Impacts	Number of incidents of non-compliance with water-quality permits, standards, and regulations	Quantitative	Number	CN0102-06
	Discussion of risks associated with water discharges and description of strategies and practices to mitigate those risks	Discussion & Analysis	n/a	CN0102-07
	Amount of animal litter and manure generated, percentage managed according to a nutrient management plan	Quantitative	Metric tons (t), Percentage (%)	CN0102-08
	Percentage of pasture and grazing land managed to NRCS Conservation Plan criteria	Quantitative	Percentage by hectares (%)	CN0102-09
	Animal protein production from concentrated animal feeding operations (CAFO)	Quantitative	Metric tons (t)	CN0102-10
Food Safety	Number of recalls issued, total weight of products recalled ¹¹	Quantitative	Number, Metric tons (t)	CN0102-11
	Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate	CN0102-12
	Percentage of supplier facilities that meet the Global Food Safety Initiative (GFSI) requirements	Quantitative	Percentage (%)	CN0102-13
	Discussion of markets that ban imports of the registrant's products	Discussion & Analysis	n/a	CN0102-14

¹¹ Note to **CN0102-11**—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.

Table 1. Sustainability Disclosure Topics & Accounting Metrics (cont.)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Workforce Health & Safety	(1) Total recordable injury rate (TRIR) and (2) fatality rate	Quantitative	Rate	CN0102-15
	Description of practices to monitor for and mitigate chronic and acute health conditions	Discussion & Analysis	n/a	CN0102-16
Antibiotic Use in Animal Production	Percentage of animal production that receives (1) medically important antibiotics and (2) nontherapeutic antibiotics	Quantitative	Percentage by weight (%)	CN0102-17
Animal Care & Welfare	Percentage of pork produced without the use of gestation crates	Quantitative	Percentage by weight (%)	CN0102-18
	Percentage of cage-free shell egg sales	Quantitative	Percentage (%)	CN0102-19
	Percentage of production certified to a third-party animal welfare standard	Quantitative	Percentage by weight (%)	CN0102-20
Environmental & Social Impacts of Animal Supply Chains	Percentage of livestock from suppliers implementing NRCS Conservation Plans or the equivalent	Quantitative	Percentage by weight (%)	CN0102-21
	Percentage of contract producers in regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage by contract value (%)	CN0102-22
	Percentage of supplier and contract production facilities verified to meet animal welfare standards	Quantitative	Percentage (%)	CN0102-23
	Discussion of strategy to manage opportunities and risks to livestock supply presented by climate change	Discussion & Analysis	n/a	CN0102-24
Environmental Risks in Animal Feed Supply Chains	Percentage of feed sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage by weight (%)	CN0102-25
	Discussion of strategy to manage opportunities and risks to feed sourcing presented by climate change	Discussion & Analysis	n/a	CN0102-26

Greenhouse Gas Emissions

Description

The Meat, Poultry & Dairy industry generates significant Scope 1 greenhouse gas (GHG) emissions from both animal and energy-generation sources. GHG emissions contribute to climate change and create additional regulatory compliance costs and risks for meat, poultry, and dairy companies due to climate change mitigation policies. The majority of the industry's emissions stem directly from the animals themselves through the release of methane during enteric fermentation, and during manure management. The direct emissions from livestock production and animal raising represent a significant portion of total GHG emissions released among all sources, both in the U.S. and globally. These emissions sources are currently not widely regulated, which presents uncertainties as to the future of GHG regulations for the industry, given expanding GHG regulations in different regions globally. Companies in this industry also use large quantities of fossil fuels to meet energy requirements, generating additional direct GHG emissions and creating direct regulatory risks. Future emission regulations could result in additional operating or compliance costs. By implementing new technologies to capture animal emissions and focusing on energy efficiency, companies can mitigate regulatory risk and volatile energy costs while also limiting their GHG emissions.

Accounting Metrics

CN0102-01. Gross global Scope 1 emissions

- .01 The registrant shall disclose gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the six GHGs covered under the Kyoto Protocol (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride).
- Emissions of all gases shall be disclosed in metric tons of carbon dioxide equivalents (CO₂-e), calculated in accordance with published 100-year time horizon global warming potential (GWP) factors. To date, the preferred source for GWP factors is the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2013).
 - Gross emissions are GHGs emitted to the atmosphere before accounting for any GHG reduction activities, offsets, or other adjustments for activities in the reporting period that have reduced or compensated for emissions.
 - Disclosure corresponds to section CC8.2 of the CDP Climate Change Questionnaire and Questionnaire and section 4.25 of the Climate Disclosure Standards Board (CDSB) Climate Change Reporting Framework (CCRF) (2012), which corresponds with REQ-04 of the CDSB Framework for Reporting Environmental Information and Natural Capital (2015).
 - The registrant shall consider the CDP Climate Change Questionnaire as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.
- .02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*, Revised Edition, March 2004 (hereafter, the "GHG Protocol").

- These emissions include direct emissions of GHGs from stationary or mobile sources that include, but are not limited to, enteric fermentation, livestock waste, land-use change, equipment, production facilities, and transportation (i.e., marine, road, or rail).
- .03 GHG emission data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is generally aligned with:
- The Financial Control approach defined by the GHG Protocol and referenced by the [*CDP Guidance for companies reporting on climate change on behalf of investors & supply chain members 2015*](#) (hereafter, the “CDP Guidance”).¹²
 - The approach detailed in Section 4.23, “Organizational boundary setting for GHG emissions reporting,” of the CDSB Climate Change Reporting Framework (CCRF) (2012), which corresponds with REQ-07 of the CDSB Framework for Reporting Environmental Information and Natural Capital (2015).¹³
- .04 The underlying technical approach to data collection, analysis, and disclosure shall be consistent with the CDP Guidance.
- The registrant shall consider the CDP Guidance as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.
- .05 The registrant should discuss any change in its emissions from the previous fiscal year, such as if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- .06 In the case that current reporting of GHG emissions to the CDP or other entity (e.g., a national regulatory disclosure program) differs in terms of the scope and consolidation approach used, the registrant may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.
- .07 The registrant should discuss the calculation methodology for its emissions disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, mass balance calculations, etc.
- .08 The registrant should consult the most recent version of each document referenced in this standard at the time disclosure occurs.

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

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

CN0102-02. Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets

.09 The registrant shall discuss the following, where relevant:

- The scope, such as whether strategies, plans, and/or reduction targets pertain differently to different business units, geographies, or emissions sources;
- Whether strategies, plans, and/or reduction targets are related to or associated with an emissions disclosure (reporting) or reduction program (e.g., E.U. ETS, RGGI, WCI, etc.), including regional, national, international, or sectoral programs; and
- The activities and investments required to achieve the plans, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.10 For emission-reduction targets, the registrant shall disclose:

- The percentage of emissions within the scope of the reduction plan;
- The percentage reduction from the base year;
 - The base year is the first year against which emissions are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target;
- The timelines for the reduction activity, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year; and
- The mechanism(s) for achieving the target, such as animal waste (manure) management, animal feeding practices, on-site energy-generation efficiency efforts, energy source diversification, etc. Where necessary, the registrant shall discuss any circumstances in which the target base year emissions have been, or may be, recalculated retrospectively or where the target base year has been reset.

.11 Disclosure corresponds with:

- CDSB CCRF Section 4, "Management actions."¹⁴
- CDP questionnaire (2015) CC3, "Targets and Initiatives."

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

- .12 Relevant initiatives to discuss may include, but are not limited to, use of manure for energy through anaerobic digestion, improved pasture quality, and implementation of dietary additives that reduce methanogenesis, consistent with the [IPCC Fourth Assessment Report: Climate Change 2007: Working Group III: Mitigation of Climate Change](#).

Energy Management

Description

Purchased electricity contributes to significant operating costs for meat, poultry, and dairy companies, which require electricity and fuel as primary inputs for value creation in their processing facilities. The industry's energy-intensive production has direct regulatory implications due to Scope 1 GHG emissions from on-site fossil fuel use. The financial risks from the direct use of fossil fuels are discussed earlier under the topic of Greenhouse Gas Emissions. Impacts from purchased electricity consumption, including emissions from utilities (usually accounted for as the Scope 2 emissions of a company purchasing electricity), have the potential to affect the results of meat, poultry, and dairy companies' operations through impacts on costs. Sustainability factors—such as increasing GHG emissions regulation, incentives for energy efficiency and renewable energy, and risks associated with nuclear energy and its increasingly limited license to operate—are leading to increases and volatility in the price of conventional electricity sources while making alternative sources cost-competitive. Efficient energy usage is essential for competitive advantage in this industry, as purchased fuels and electricity account for a significant portion of total production costs. Decisions about the use of alternative fuels, renewable energy, and on-site generation of electricity (versus purchasing from the grid) can play an important role in influencing both the costs and the reliability of the energy supply.

Accounting Metrics

CN0102-03. Total energy consumed, percentage grid electricity, percentage renewable

- .13 The registrant shall disclose total energy consumption from all sources as an aggregate figure in gigajoules or their multiples.
- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
 - The scope includes only energy consumed by entities owned or controlled by the organization.
 - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
- .14 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .15 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- .16 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.

.17 The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.

- For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.¹⁵
- Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, consistent with EPA [definitions](#), such as geothermal, wind, solar, hydro, and biomass.

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

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.
- Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered “eligible renewables” according to the Green-e Energy National Standard Version 2.5 (2014), and materials that are eligible for a state Renewable Portfolio Standard.

.19 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kWh to gigajoules (for energy data including electricity from solar or wind energy).

¹⁵ SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid.

Water Withdrawal

Description

Water is an essential factor of production in the Meat, Poultry & Dairy industry, as it is required to hydrate animals and process animal products. While water has historically been an abundant resource in many parts of the world, it is becoming an increasingly scarce resource due to population growth, increasing consumption per capita, poor water management, and climate change. Water scarcity can result in higher supply costs and risks of shortages for meat, poultry, and dairy producers.

Accounting Metrics

CN0102-04. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

- .20 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:
- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.
- .21 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources, where:
- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
 - Water obtained from a water utility in compliance with U.S. [National Primary Drinking Water Regulations](#) can be assumed to meet the definition of fresh water.
- .22 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:
- Water that evaporates during withdrawal, usage, and discharge;
 - Water that is directly or indirectly incorporated into the registrant's product or service; and
 - Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.
- .23 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).
- .24 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.

- .25 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

CN0102-05. Discussion of risks associated with water withdrawal and description of strategies and practices to mitigate those risks

- .26 The registrant shall discuss its risks associated with water withdrawals and water consumption and describe how it manages these risks.

- .27 The registrant shall discuss, where applicable, risks to the availability of adequate, clean water resources.

- Relevant information to provide includes, but is not limited to:
 - Environmental constraints, such as operating in water-stressed regions, drought, interannual or seasonal variability, and risks caused by the impact of climate change.
 - External constraints, such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (e.g., those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions to withdrawals due to regulations, and the registrant's ability to obtain and retain water rights or permits.
 - How risks may vary by withdrawal source, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or supply from other water utilities.

- .28 The registrant should include a discussion of the potential impacts that these risks may have on its operations and the timeline over which such risks are expected to manifest.

- Impacts may include, but are not limited to, those associated with costs, revenues, liabilities, continuity of operations, and reputation.

- .29 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:

- Any water management targets it has set, and an analysis of performance against those targets.
 - Water management targets can include water management goals that the registrant prioritizes to manage its risks and opportunities associated with water withdrawal and consumption.
 - Targets can include, but are not limited to, those associated with reducing water withdrawals and reducing water consumption.
- The scope of its strategy, plans, or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
- The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.30 For water management targets, the registrant shall additionally disclose:

- The percentage reduction or improvements from the base year, where:
 - The base year is the first year against which water management targets are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target.
- The timelines for the water management plans, including the start year, the target year, and the base year.
- The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as the use of rain water capture, runoff capture and reuse, water recycling, and/or closed-loop systems
 - Product innovations such as redesigning products or services to require less water
 - Process and equipment innovations, such as those that enable the use of less water in manufacturing or operations
 - Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
 - Collaborations or programs in place with the community or other organizations

.31 Disclosure of strategies, plans, and targets shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.

.32 The registrant shall discuss if its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy consumption, and greenhouse gas (GHG) emissions, and why the registrant chose these practices despite lifecycle tradeoffs.

Additional Resources

GRI-Global Reporting Initiative (GRI G4)
CDP 2015 Water Questionnaire
CEO Water Mandate
Global Water Footprint Assessment Standard

Land Use & Ecological Impacts

Description

Meat, poultry, and dairy operations have diverse ecological impacts, primarily as a result of their significant land-use needs and the contamination of the air, land, and groundwater by animal waste. While the impacts are different, both traditional and Concentrated Animal Feeding Operations (CAFO) lead to significant ecological impacts. The primary concern from CAFOs and animal-product processing facilities is the generation of large and concentrated amounts of waste and pollutants into the environment. Treating effluent water and waste from facilities involves significant costs. Non-CAFO animal farming, which requires large tracts of pastureland, can lead to physical degradation of land resources. Land use and ecological impacts result in legal and regulatory risks in the form of fines, litigation, and difficulties obtaining permits for facility expansions or waste discharges.

Accounting Metrics

CN0102-06. Number of incidents of non-compliance with water-quality permits, standards, and regulations

- .33 The registrant shall disclose the total number of instances of non-compliance, including violations of a technology-based standard and exceedances of a quality-based standard.
- .34 The scope of disclosure includes incidents governed by federal, state, and local statutory permits and regulations including, but not limited to, the discharge of a hazardous substance, violation of pretreatment requirements, total maximum daily load (TMDL) exceedances, and/or water withdrawal exceedances.
- .35 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).
- .36 An incident of non-compliance shall be disclosed regardless of the measurement methodology or frequency. These include violations:
 - For continuous discharges, limitations, standards, and prohibitions that are generally expressed as maximum daily, weekly, and monthly averages.
 - For non-continuous discharges, limitations that are generally expressed in terms of total mass, maximum rate of discharge, frequency, and mass or concentration of specified pollutants.

CN0102-07. Discussion of risks associated with water discharges and description of strategies and practices to mitigate those risks

- .37 The registrant shall discuss its risks associated with discharge of water to the environment and describe how it manages these risks.
- .38 The registrant shall discuss, where applicable, risks associated with its discharge of wastewater.
 - Relevant information to provide includes, but is not limited to:
 - Environmental constraints, such as the ability to maintain compliance with regulations focused on the quality of effluent discharged to the environment, the ability to eliminate existing and

emerging pollutants of concern, and the ability to maintain control over runoff and storm water discharges.

- External constraints, such as increased liability and/or reputational risks, restrictions to discharges and/or increased operating costs due to regulation, stakeholder perceptions and concerns related to water discharges (e.g., those from local communities, non-governmental organizations, and regulatory agencies), and the ability to obtain discharge rights or permits.
- How risks may vary by discharges to different destinations, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or other water utilities.

.39 The registrant should include a discussion of the potential impacts that these risks may have on its operations and the timeline over which such risks are expected to manifest.

- Impacts may include, but are not limited to, those associated with costs, revenues, liabilities, continuity of operations, and reputation.

.40 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:

- Any water management-targets it has set, and an analysis of performance against those targets.
 - Water-management targets can include water-management goals that the registrant prioritizes to manage its risks and opportunities associated with water discharge.
 - Targets can include, but are not limited to, those associated with reducing water discharges and improving the quality of waste water discharges.
- The scope of its strategy, plans, or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
- The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.41 For water-management targets, the registrant shall additionally disclose:

- The percentage reduction or improvements from the base year, where:
 - The base year is the first year against which water-management targets are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target.
- The timelines for the water-management plans, including the start year, the target year, and the base year.

- The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as the use of rain water capture, runoff capture and reuse, water recycling, and/or closed-loop systems
 - Process and equipment innovations, such as those that enable the use and discharge of less water in manufacturing or operations
 - Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
 - Collaborations or programs in place with the community or other organizations

.42 Disclosure of strategies, plans, and targets shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.

.43 The registrant may choose to discuss if its water-management decisions and practices incorporate consideration of any additional lifecycle impacts or environmental tradeoffs for the registrant, including tradeoffs associated with land-use impacts, energy consumption, and GHG emissions.

CN0102-08. Amount of animal litter and manure generated, percentage managed according to a nutrient management plan

.44 The registrant shall disclose the total amount, in tons, of animal litter and manure its facilities generated, where:

- The scope includes both dry and liquid manures and litter.

.45 The registrant shall calculate the percentage as the amount of animal litter and manure generated from facilities that implement a nutrient management plan divided by the total amount of animal litter and manure generated, where:

- A nutrient management plan is a documented management practice that addresses the generation, collection, treatment, storage, and agronomic use of all manure for both:
 - The production area, including the animal confinement area, storage areas for feed and other raw materials, animal mortality facilities, and manure-handling containment or storage areas; and
 - The land treatment area, including any land under control of the registrant, whether it is owned, rented, or leased, to which manure or process wastewater is, or might be, applied for crop, hay, or pasture production or other uses.

.46 At a minimum, the nutrient management plan shall meet the minimum specific elements of the Natural Resources Conservation Service (NRCS) [Comprehensive Nutrient Management Plan](#) (CNMP) which are:

- Background and Site Information
- Manure and Wastewater Handling and Storage
- Farmstead Safety and Security

- Land Treatment Practices
- Soil and Risk Assessment Analyses
- Nutrient Management according to the criteria in the Nutrient Management Conservation Practice (Code 590)
- Recordkeeping
- References

CN0102-09. Percentage of pasture and grazing land managed to NRCS Conservation Plan criteria

- .47 The registrant shall calculate the percentage as the area of pasture and grazing land, in hectares, that is managed to Natural Resources Conservation Service (NRCS) conservation plan criteria divided by the total area, in hectares, of the registrant's pasture and grazing land.
- .48 Land shall be considered to be managed to a NRCS conservation plan if its management:
- Follows the planning process described by the [National Planning Procedures Handbook](#); and
 - Follows management practices outlined in the [National Range and Pasture Handbook](#) (NRPH), USDA, NRCS, Grazing Lands Technology Institute Revision 1, December 2003.
- .49 Land is within the scope of disclosure if it is addressed by the NRPH definition of rangeland, which includes grazed forest, naturalized pasture, pastureland, hayland, and grazed and hayed cropland.
- .50 The scope includes land that is owned, operated (e.g., through a lease), and/or controlled by the registrant.

CN0102-10. Animal protein production from concentrated animal feeding operations (CAFO)

- .51 The registrant shall disclose the amount, in metric tons, of animal protein produced that was raised in Concentrated Animal Feeding Operations (CAFO) where:
- The amount shall be calculated as the carcass (or dressed) weight of animal protein.
 - CAFO is defined according to CFR Title 40, Part 122.23, "Concentrated animal feeding operations."
- .52 The scope is limited to animal protein from CAFOs that the registrant owns and operates, and it excludes those with which it contracts animal production (e.g., independent producers) and those that otherwise supply animal protein to the registrant (e.g., for processing by the registrant).

Food Safety

Description

Meat, poultry, and dairy products are either sold directly to consumers in their raw form (e.g., milk or eggs) or are further processed into a wide variety of foods. Maintaining product quality and safety is crucial, as contamination by pathogens, chemicals, or spoilage presents serious human and animal health risks. Food safety practices and procedures in the industry have recently been subject to more intense scrutiny and oversight, and future outbreaks of diseases among cattle, poultry, or pigs could lead to further governmental regulation. Food safety issues may arise at any time during the production or processing phase and companies can be significantly impacted through product recalls, damaged brand reputation, and increased regulatory scrutiny, including trade restrictions. While food safety issues can arise throughout multiple levels of a company's value chain, it is often the final brand that faces the most reputational harm. Companies can better address safety concerns when they arise and mitigate future risks by improving food safety policies and the visibility of their supply chains.

Accounting Metrics

CN0102-11. Number of recalls issued, total weight of products recalled

- .53 The registrant shall disclose the total number of recalls issued, the scope of which includes voluntary recalls initiated by the registrant and recalls requested by the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA), or equivalent national authority.
- .54 The registrant shall disclose the total amount, in metric tons, of products recalled.
- .55 A database of USDA-regulated recalls is available [here](#).
- .56 The registrant may choose, in addition to the total number of recalls, to disclose the percentage of recalls that were (1) registrant initiated and (2) requested by a regulatory agency, where:
 - Recalls requested by a regulatory agency are those requested by governmental entities (e.g., the USDA in the U.S. or the China Food and Drug Administration).
 - Registrant-initiated recalls are those proactively initiated by the registrant or its business partners in order to take foods off the market prior to any request from a regulatory agency.

Note to CN0102-11.

- .57 The registrant shall discuss notable recalls, such as those that affected a significant amount of product or those related to serious illness or fatality.
- .58 For such recalls, the registrant should provide:
 - Description and cause of the recall issue
 - The total weight of products recalled
 - The cost to remedy the issue (in U.S. dollars)

- Whether the recall was voluntary or involuntary (mandated by the FDA)
- Corrective actions
- Any other significant outcomes (e.g., legal proceedings or fatalities)

CN0102-12. Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate

- .59 The registrant shall disclose its conformance with Global Food Safety Initiative (GFSI) recognized food safety schemes based on the number of non-conformances that were identified during audits.
- .60 The scope of disclosure includes audit results from facilities that are owned and/or operated by the registrant.
- .61 The registrant shall calculate and disclose the major non-conformance rate as the total number of major (or critical) non-conformances identified in the supply chain divided by the number of facilities audited.
- Major non-conformances are the highest severity of non-conformance and require escalation by auditors. Major non-conformances may arise from a significant risk to food safety, non-compliance with relevant regulatory requirements, and failure to adequately address prior minor non-conformances. Major non-conformances must be corrected in accordance with the relevant GFSI scheme under audit.
 - Major non-conformances may also be referred to as critical or priority non-conformances.
- .62 The registrant shall calculate and disclose the minor non-conformance rate as the total number of minor non-conformances identified in the supply chain divided by the number of facilities audited.
- A minor non-conformance is defined by the relevant GFSI scheme and is by itself not indicative of a systemic problem.
- .63 The registrant shall calculate and disclose its corrective action rate for major non-conformances as the number of corrective action plans completed in accordance with the relevant GFSI scheme, no later than 30 days from the audit date, to address major non-conformances, divided by the total number of major non-conformances that have been identified.
- .64 The registrant shall calculate and disclose its corrective action rate for minor non-conformances as the number of corrective action plans completed in accordance with the relevant GFSI scheme, no later than 365 days from the audit date, to address minor non-conformances, divided by the total number of minor non-conformances that have been identified.
- .65 A corrective action is defined as an action to eliminate the cause of a detected non-conformity or other undesirable matter, in accordance with the GFSI, and may be further defined by the relevant GFSI scheme under audit.

.66 The scope of schemes includes those recognized by GFSI, including, at the time of publication:

- PrimusGFS Standard V2.1—December 2011
- GlobalG.A.P Integrated Farm Assurance Scheme Version 4 and Produce Safety Standard Version 4
- FSSC 22000—October 2011 Issue
- CanadaGAP Scheme Version 6 Options B and C and Program Management Manual Version 3
- SQF Code 7th Edition Level 2
- IFS Food standard Version 6
- BRC Global Standard for Food Safety Issue 6

.67 The registrant should disclose the GFSI-recognized scheme to which its facilities are audited.

CN0102-13. Percentage of supplier facilities that meet the Global Food Safety Initiative (GFSI) requirements

.68 The registrant shall disclose the percentage of its supplier facilities that are certified to a Global Food Safety Initiative (GFSI) scheme.

- The percentage shall be calculated as the number of facilities certified to a GFSI scheme divided by the total number of supplier facilities.
- The scope of disclosure includes facilities operated by entities with which the registrant contracts animal production (e.g., independent producers) and those that otherwise supply animal protein to the registrant (e.g., for processing by the registrant).
- The scope of disclosure excludes suppliers of materials and products that are not animal protein.

.69 The scope of schemes includes those recognized by the GFSI, including, at time of publication:

- PrimusGFS Standard V2.1—December 2011
- Global Aquaculture Alliance BAP Seafood Processing Standard
- FSSC 22000—October 2011 Issue
- SQF Code 7th Edition Level 2
- IFS Food Standard Version 6
- BRC Global Standard for Food Safety Issue 6
- Global Red Meat Standard 4th Edition Version 4.1
- GlobalG.A.P Integrated Farm Assurance Scheme Version 4 and Produce Safety Standard Version 4
- CanadaGAP Scheme Version 6 Options B and C and Program Management Manual Version 3

CN0102-14. Discussion of markets that ban imports of the registrant's products

- .70 The registrant shall disclose a list of countries and regions that restrict, ban, or have suspended imports of the registrant's products due to sanitary and phytosanitary (SPS) measures.
- The scope of disclosure excludes import bans, embargoes, or restrictions that are in place due to non-SPS measures.
- .71 SPS measures are food, animal, and plant safety and health standards and regulations enacted by governments to protect human, animal, or plant life or health in accordance with the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).
- .72 The registrant shall discuss the following with respect to each ban: The scope of meat or meat products affected, the length of time the ban has been in place, the stated reason for the ban (e.g., risk of bovine spongiform encephalopathy), and the effect on the registrant's results of operations and financial condition.

Workforce Health & Safety

Description

The Meat, Poultry & Dairy industry has relatively high injury rates compared with those in other industries. Common hazards include falls, transportation accidents, heat-related injuries, asphyxiation, and machinery injuries. Exposure to hazardous substances, including particulate matter dust, may increase the risk of chronic illnesses, and workers can also fall ill from pathogens they contact when handling meat or animal waste. Worker injuries or fatalities can lead to negative publicity, low worker morale and productivity, and increased health care and injury compensation costs. Additionally, regulators may levy fines against companies for noncompliance with worker health and safety standards, as well as preventable accidents, and can require remedial action such as employee training. Developing a strong company safety culture and reducing employees' exposure to harmful situations is critical in order to proactively guard against accidents and improve employees' health and safety.

Accounting Metrics

CN0102-15. (1) Total recordable injury rate (TRIR) and (2) fatality rate

- .73 Registrants whose workforce is entirely U.S.-based shall disclose their total recordable injury rate (TRIR) and fatality rate as calculated and reported in the Occupational Safety and Health Administration's (OSHA) Form 300.
- OSHA guidelines provide details on determining whether an event is a recordable occupational incident and definitions for exemptions for incidents that occur in the work environment but are not occupational.
- .74 Registrants whose workforce includes non-U.S.-based employees shall calculate their TRIR and fatality rate according to the U.S. Bureau of Labor Statistics [guidance](#) and/or using the U.S. Bureau of Labor Statistics [calculator](#).
- .75 The registrant shall disclose its TRIR and fatality rate for all employees, including direct full-time employees, contract employees, and seasonal and migrant employees.
- .76 The scope includes all employees, domestic and foreign.
- .77 Rates shall be calculated as: $(\text{statistic count} / \text{total hours worked}) * 200,000$.

CN0102-16. Description of practices to monitor for and mitigate chronic and acute health conditions

- .78 The registrant shall discuss efforts to assess, monitor, and mitigate chronic and acute health conditions in employees including, but not limited to:
- Chronic respiratory conditions such as chronic bronchitis, chronic lung disease (e.g., COPD), declines in lung function, organic toxic dust syndrome, and conditions resulting from particulate matter.
 - Acute respiratory conditions such as chemical burns, inflammation of the respiratory tract, acute or subacute bronchitis, and death.

.79 Relevant efforts to discuss include, but are not limited to, risk assessments, participation in long-term health studies, health and wellness monitoring programs, readily accessible personal protective equipment (PPE), and implementation of relevant worker training programs.

Antibiotic Use in Animal Production

Description

The use of antibiotics to boost the growth of livestock and improve output of animal production is becoming an increasing concern among consumers and is leading to regulatory scrutiny over animal production. As a result of antibiotics use, there are concerns that humans can become exposed to antibiotic-resistant strains of bacteria through a number of sources that are linked back to animal production. While the use of antibiotics in animal feed or water supplies can improve the output of animal production, meat, poultry, and dairy companies must balance the positive benefits with the potential negative long-term health and safety impacts on consumers. Furthermore, there is an inherent link between antibiotic use and the Animal Care & Welfare topic. The nontherapeutic use of antibiotics allows for closer animal quarters associated with CAFOs. The use of antibiotics in animal production presents reputational and regulatory risks for meat, poultry, and dairy producers, both of which can affect long-term profitability through impacts on demand and market share. Oftentimes, companies in the industry supply contractors with animal feed containing antibiotics, which provides them with direct control over this issue. In other cases where companies get supplies from third-parties, they can select and specify suppliers that do not use antibiotics in animal raising, as one way to manage the issue.

Accounting Metrics

CN0102-17. Percentage of animal production that receives (1) medically important antibiotics and (2) nontherapeutic antibiotics

.80 The registrant shall disclose the percentage of animal production that received medically important antibiotics, where:

- Medically important antibiotics (or “medically important antimicrobial drugs”) are defined according to the U.S. Food and Drug Administration’s (FDA) Veterinary Feed Directive (VFD) as all three tiers (“critically important,” “highly important,” and “important”) of antimicrobial drugs listed in Appendix A to its Guidance for Industry (GFI) #152 to be “medically important.”
 - The current list of medically important antimicrobial drug classes includes: aminoglycosides, lincosamides, macrolides, penicillins, streptogramins, sulfonamides, and tetracyclines.
 - Updates made to the list of drug classes included GFI #152 Appendix A shall constitute updates to this standard.
- The percentage is calculated as the carcass (or dressed) weight of animal protein that received medically important antibiotics at any stage of its life divided by the total carcass (or dressed) weight of animal protein production.
- The scope includes animal protein from operations that the registrant owns and operates, operations with which it contracts animal production (e.g., independent producers), and operations that otherwise supply animal protein to the registrant (e.g., for processing by the registrant).
- The registrant may choose to provide disclosure by animal protein type (e.g., pork, beef, and poultry).

.81 The registrant shall disclose the percentage of animal production that received nontherapeutic antibiotics, where:

- Nontherapeutic (or subtherapeutic) antibiotic usage includes any use of the drug as a feed or water additive for an animal, in the absence of any clinical sign of disease in the animal, for the purpose of growth promotion, feed efficiency, weight gain, routine disease prevention, or other routine purpose.
- The percentage is calculated as the carcass (or dressed) weight of animal protein that received nontherapeutic antibiotics at any stage of its life divided by the total carcass (or dressed) weight of animal protein production.
- The scope includes animal protein from operations that the registrant owns and operates, operations with which it contracts animal production (e.g., independent producers), and operations that otherwise supply animal protein to the registrant (e.g., for processing by the registrant).
- The registrant may choose to provide disclosure by animal protein type (e.g., pork, beef, and poultry).
- The scope of antibiotics includes both antibiotics that treat human disease and those that do not (e.g., ionophores).

Animal Care & Welfare

Description

There is increasing public and regulatory scrutiny of the industry's treatment of animals. In the U.S., farm animals are largely excluded from federal and state animal welfare statutes, including the Animal Welfare Act. However, the pressure on the industry to improve animal welfare and certain animal-raising methods has come from consumer and advocacy group action and shifting consumer trends. In recent years, consumer demand has shifted away from specific production methods, such as the use of gestation crates and other small caged enclosures that threaten animal health and welfare. Companies that are prepared to meet these trends may be able to increase their market share by capturing this market demand and being first-to-market with products that comply with new regulations.

Accounting Metrics

CN0102-18. Percentage of pork produced without the use of gestation crates

- .82 The registrant shall calculate the percentage as the weight, in metric tons, of pork produced from gestation-free sources divided by the total weight of pork production.
- Weight of production shall be calculated using carcass weight or retail weight (where the registrant has sourced pork or pork products that have already been processed).
- .83 A gestation crate is defined as an enclosure for housing an individual breeding sow, where the enclosure fulfills the animal's static space requirements but does not allow for dynamic movement such as turning around and is typically non-bedded, with concrete floors and metal stalls.
- .84 The scope of disclosure includes pork or pork products that originated from breeding sows that were confined to gestation crates, regardless of whether or not the registrant housed the sow.
- .85 The scope includes all pork and pork product products that the registrant brings to market, including pork from facilities that the registrant owns and operates and pork from facilities from which the registrant contracts animal production (e.g., independent producers).
- .86 The registrant should discuss, where relevant:
- How, if in any way, the use of gestation crates is addressed in contracts with producers and independent farmers.
 - Requirements of key customers related to the use of gestation crates and how the registrant addresses them.
 - Any targets the registrant has related to phasing out gestation crates and its progress toward those targets.

CN0102-19. Percentage of cage-free shell egg sales

- .87 The registrant shall calculate the percentage as the number of shell eggs produced from cage-free hens divided by the total shell egg production, where:
- Cage-free is defined as confinement of laying hens in a building, room, or open area with unlimited access to food and water, and with freedom to roam within these areas during the production cycle.
- .88 The scope includes all eggs that the registrant brings to market, including eggs from facilities that the registrant owns and operates, eggs from facilities from which the registrant contracts egg production (e.g., independent producers), and eggs that the registrant purchases for resale.

CN0102-20. Percentage of production certified to a third-party animal welfare standard

- .89 The registrant shall calculate the percentage as the weight, in metric tons, of animal protein production verified to have been raised in accordance with a third-party animal welfare standard divided by the total weight of animal protein production.
- Weight of production shall be calculated using carcass weight or retail weight (where the registrant has sourced animals or animal products that have already been processed).
- .90 The scope includes all animal protein production that the registrant brings to market, including animal protein from facilities that the registrant owns and operates and animal protein from facilities from which the registrant contracts animal production (e.g., independent producers).
- .91 Animal welfare standards are standards that relate to the following aspects of beef, pork, and/or poultry production:
- Animal treatment and handling
 - Housing and transportation conditions
 - Slaughter facilities and procedures
 - Use of antibiotics and hormones
- .92 Applicable certifications include, but are not limited to, the following: Animal Welfare Approved, Food Alliance, Global Animal Partnership's 5-Step Program, Certified Humane Certification Program, and American Humane Certified.
- .93 The registrant should disclose the animal welfare standards to which its production is certified.
- .94 The registrant may choose to discuss animal welfare standards that it implements in its operations and/or supply chain that are not third-party verified (i.e., those that are enforced by the registrant or a trade association).

Environmental & Social Impacts of Animal Supply Chains

Description

Many companies supplement their own raising of animals with those from outside farmers or other corporations that have rearing operations, and thus many of the previously discussed environmental and social impacts exists within the industry's supply chain. Some of these impacts include deforestation, land use and waste management, water withdrawals, and animal treatment. Other issue within supplier operations include food safety and antibiotics use, the financial and performance implications of which are discussed under those respective disclosure topics. Additionally, climate change risks present a long-term challenge for the Meat, Poultry & Dairy industry. The global presence of top companies in this industry heightens the probability of diverse physical impacts of climate change within supply chains, which can affect crucial factors of production for animal raising and processing, including grasslands and water. Managing environmental risks within a company's animal supply chain is critical to securing a steady source of animals at reasonable costs, while managing social risks can prevent reputational damage and impacts on demand from the inhumane treatment of animals.

Accounting Metrics

CN0102-21. Percentage of livestock from suppliers implementing NRCS Conservation Plans or the equivalent

.95 The registrant shall calculate the percentage as the total live weight of livestock sourced from suppliers that manage pasture and grazing land to Natural Resources Conservation Service (NRCS) conservation plan criteria divided by the total live weight of livestock sourced by the registrant.

- The scope of disclosure shall include livestock purchased by the registrant during the fiscal year, adjusted for any changes in inventory of live animals.

.96 Land shall be considered to be managed to a NRCS conservation plan if its management:

- Follows the planning process described by the [National Planning Procedures Handbook](#); and
- Follows management practices outlined in the [National Range and Pasture Handbook](#) (NRPH), USDA, NRCS, Grazing Lands Technology Institute Revision 1, December 2003.

.97 Land is within the scope of disclosure if it is addressed by the NRPH definition of rangeland, which includes grazed forest, naturalized pasture, pastureland, hayland, and grazed and hayed cropland.

CN0102-22. Percentage of contract producers in regions with High or Extremely High Baseline Water Stress

.98 The registrant shall calculate the percentage as the value of contracts, in U.S. dollars, associated with contract production of animal protein from entities located in water-stressed regions divided by the total value of contracts associated with contract production of animal protein, where:

- Water-stressed regions are defined according to the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), as areas with High (40–80%) or Extremely High (>80%) Baseline Water Stress.

- A contract producer (or grower) is an entity with which the registrant has an agreement under which the producer typically agrees to provide facilities, labor, utilities, and care for livestock owned by the registrant in return for a payment.

CN0102-23. Percentage of supplier and contract production facilities verified to meet animal welfare standards

.99 The registrant shall disclose the percentage of its supplier facilities that have been verified to be operating in accordance with animal welfare standards.

- The percentage shall be calculated as the number of facilities verified to be operating in accordance with animal welfare standards divided by the total number of supplier facilities.
- The scope of disclosure includes facilities operated by entities with which the registrant contracts animal production (e.g., independent producers) and those that otherwise supply animal protein to the registrant (e.g., for processing by the registrant).

.100 Animal welfare standards are standards that relate to the following aspects of beef, pork, and/or poultry production:

- Animal treatment and handling
- Housing and transportation conditions
- Slaughter facilities and procedures
- Use of antibiotics and hormones

.101 The registrant should disclose the animal welfare standards to which its production is certified.

.102 Standards include those that the registrant has developed and enforces in its supply chain, those developed and enforced by a trade association, or and those developed and enforced by a third party.

- Third-party standards include, but are not limited to, the following: Animal Welfare Approved, Food Alliance, Global Animal Partnership's 5-Step Program, Certified Humane Certification Program, and American Humane Certified.

CN0102-24. Discussion of strategy to manage opportunities and risks to livestock supply presented by climate change

.103 The registrant shall discuss the risks and/or opportunities to its livestock production that may be presented by climate change scenarios.

- Livestock production risks and opportunities include those affecting all lifecycle phases of bringing animal protein to market, including breeding, grazing, feedlot, slaughter, processing, and distribution/transportation of live animals and processed animal protein products.

.104 The registrant should identify the risks presented by climate change, including, but not limited to, availability of water, shifts in rangeland quality, disease migration, and more frequent extreme weather events.

- .105 The registrant should discuss how such scenarios will manifest (e.g., at point they will affect the registrant's supply chain) and how each type of livestock (i.e., beef cattle, dairy cattle, pigs, poultry, etc.) would specifically be affected and how other operating conditions (e.g., transportation and logistics, physical infrastructure, etc.) would be affected.
- .106 The registrant shall discuss efforts to assess and monitor the impacts of climate change and the related strategies it employs to adapt to any risks and/or recognize any opportunities.
- Strategies include, but are not limited to, use of insurance, investments in hedging instruments, supply chain diversification, improving ecosystem management and biodiversity, and development of tolerant livestock breeds.
- .107 The registrant should discuss the probability that risks and opportunities will come to fruition, the likely magnitude of the impact on financial results and operating conditions, and the timeframe over which such risks and opportunities are expected to manifest.
- .108 The registrant may include discussion of the methods or models used to develop the climate change scenario(s) it uses, including the use of scientific research provided by governmental and non-governmental organizations (e.g., [Intergovernmental Panel on Climate Change Climate Scenario Process](#)).
- .109 Climate change mitigation strategies in which the registrant engages, such as the reduction of direct CO₂ emissions or the promotion of reduced-emissions techniques to partners (e.g., contract growers or independent suppliers), shall be addressed in CN102-02.

Environmental Risks in Animal Feed Supply Chains

Description

The animal feed supply chain for meat, dairy, and poultry producers is exposed to risks from climate change and increasing water scarcity. This can affect the production of animal feed and increase companies' costs. Animal feed represents a significant proportion of animal raising costs. Companies can mitigate these risks by monitoring their feed supply chains for long-term impacts associated with climate change, sourcing from suppliers managing these risks well, and attempting to hedge short-term price fluctuations.

Accounting Metrics

CN0102-25. Percentage of feed sourced from regions with High or Extremely High Baseline Water Stress

.110 The registrant shall calculate the percentage as the amount of feed, in metric tons, sourced from water-stressed areas divided by the total amount of feed utilized by the registrant, where:

- Water-stressed regions are defined according to the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), as areas with High (40–80%) or Extremely High (>80%) Baseline Water Stress.
- Feed includes soybean meal, cornmeal and other grains, and other fodder provided to livestock, but excludes forage.
- The amount of feed sourced shall be calculated as the amount purchased, adjusted for any changes in inventory of feed.

.111 The scope of disclosure includes feed grown and/or manufactured by the registrant and feed that is purchased by the registrant.

CN0102-26. Discussion of strategy to manage opportunities and risks to feed sourcing presented by climate change

.112 The registrant shall discuss the risks and/or opportunities to its feed sourcing that may be presented by climate change scenarios.

- Feed-sourcing risks and opportunities include those at the cultivation, milling and other processing, and transportation phases of animal feed production.

.113 The registrant should identify the risks presented by climate change, including, but not limited to, availability of water, shifts in rangeland quality, disease migration, and more frequent extreme weather events.

.114 The registrant should discuss how such scenarios will manifest (e.g., if the effects will be directly felt by the registrant or if they will affect the registrant's supply chain) and how each type of feed (i.e., soybean meal, cornmeal and other grains, hay, etc.) would specifically be affected and how other operating conditions (e.g., transportation and logistics, physical infrastructure, etc.) would be affected.

- .115 The registrant shall discuss efforts to assess and monitor the impacts of climate change and the related strategies it employs to adapt to any risks and/or recognize any opportunities.
- Strategies include, but are not limited to, use of insurance, investments in hedging instruments, supply chain diversification, and improving ecosystem management and biodiversity.
- .116 The registrant should discuss the probability that risks and opportunities will come to fruition, the likely magnitude of the impact on financial results and operating conditions, and the timeframe over which such risks and opportunities are expected to manifest.
- .117 The registrant may include discussion of the methods or models used to develop the climate change scenario(s) it uses, including the use of global gridded crop models or scientific research provided by governmental and non-governmental organizations (e.g., [Intergovernmental Panel on Climate Change Climate Scenario Process](#)).
- .118 Climate change mitigation strategies in which the registrant engages, such as the reduction of direct CO₂ emissions or the promotion of reduced-emissions techniques to partners (e.g., contract growers or independent suppliers), shall be addressed in CN102-02.

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SUSTAINABILITY ACCOUNTING STANDARD
CONSUMPTION I SECTOR

PROCESSED FOODS

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0103

Prepared by the
Sustainability Accounting Standards Board®

June 2015
Provisional Standard

PROCESSED FOODS

Sustainability Accounting Standard

About SASB

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

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INTRODUCTION

Purpose & Structure

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

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

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company’s specific operating context—for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 -. 32¹ and referenced in AT 701², as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

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 compete globally and source ingredients from all over the world. Large companies in the industry generate sales globally, and international opportunities are driving growth.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#ftn.at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Material Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Disclosure Topics

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

- Energy & Fleet Fuel Management
- Water Management
- Food Safety
- Health & Nutrition
- Product Labeling & Marketing
- Packaging Lifecycle Management
- Environmental & Social Impacts of Ingredient Supply Chains

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICs industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment –prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

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

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

effect on the registrant's financial condition or results of operation is not reasonably likely to occur.

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

For purposes of comparability and usability, that companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

c. Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Material Sustainability Topics

For each sustainability topic included in the Processed Foods industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

Such data—termed "activity metrics"—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions

⁸ See US GAAP consolidation rules (Section 810).

(e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Weight of products sold	Quantitative	Metric tons (t)	CN0103-A
Total fleet road miles	Quantitative	Miles	CN0103-B
Number of production facilities	Quantitative	Number	CN0103-C

Units of Measure

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

Uncertainty

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

Estimates

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

Timing

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.
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Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy & Fleet Fuel Management	Operational energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0103-01
	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0103-02
Water Management	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0103-03
	Number of incidents of non-compliance with water quality and/or quantity permits, standards, and regulations	Quantitative	Number	CN0103-04
	Discussion of water management risks and description of strategies and practices to mitigate those risks	Discussion & Analysis	n/a	CN0103-05
Food Safety	Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate	CN0103-06
	Percentage of ingredients sourced from supplier facilities certified to a Global Food Safety Initiative (GFSI) scheme	Quantitative	Percentage (%) by spend	CN0103-07
	Notice of food safety violations received, percentage corrected	Quantitative	Number, Percentage (%)	CN0103-08
	Number of recalls issued, total amount of food product recalled ¹⁰	Quantitative	Number, Metric tons (t)	CN0103-09
Health & Nutrition	Revenue from products labeled and/or marketed to promote health and nutrition attributes	Quantitative	U.S. Dollars (\$)	CN0103-10
	Revenue from products that meet Smart Snacks in School criteria or foreign equivalent	Quantitative	U.S. Dollars (\$)	CN0103-11
	Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences	Discussion & Analysis	n/a	CN0103-12

¹⁰ Note to **CN0103-09**—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.

Table 1. Sustainability Disclosure Topics & Accounting Metrics (cont.)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Product Labeling & Marketing	Number of child advertising impressions made, percentage promoting products meeting the Children's Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria	Quantitative	Number, Percentage (%)	CN0103-13
	Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO	Quantitative	U.S. Dollars (\$)	CN0103-14
	Notices of violations received for non-conformance with regulatory labeling and/or marketing codes	Quantitative	Number, Percentage (%)	CN0103-15
	Amount of legal and regulatory fines and settlements associated with marketing and/or labeling practices ¹¹	Quantitative	U.S. Dollars (\$)	CN0103-16
Packaging Lifecycle Management	(1) Total weight of packaging sourced, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable	Quantitative	Metric tons (t), Percentage (%)	CN0103-17
	Description of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion & Analysis	n/a	CN0103-18
Environmental & Social Impacts of Ingredient Supply Chains	Percentage of food ingredients sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by spend	CN0103-19
	Percentage of food ingredients sourced that are certified to third-party environmental and/or social standards, by certification scheme	Quantitative	Percentage (%) by spend	CN0103-20
	Suppliers' social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate	CN0103-21
	List of priority food ingredients and discussion of sourcing risks due to environmental and social considerations	Discussion & Analysis	n/a	CN0103-22

¹¹ Note to **CN0103-16**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Energy & Fleet Fuel Management

Description

The Processed Foods industry is highly reliant on energy and fuel as primary inputs for value creation, both in manufacturing food products distributing finished products to consumers. Energy is needed to operate large manufacturing facilities for use in steps such as cooking, refrigeration, packaging, and transportation. Energy production and consumption contributes to significant environmental impacts, including climate change and pollution, which have the potential to indirectly yet materially impact the results of operation of processed foods companies. Energy efficiency in production and distribution can mitigate exposure to volatile energy costs and limit a company's contribution to direct and indirect GHG emissions. Producers may be able to further reduce the risk posed by volatile fossil fuel energy costs—particularly natural gas, which is used heavily in the industry—by diversifying their energy portfolio across a range of sources. Additionally, companies in the industry rely on third-party distribution as well as directly owned systems to transport their products to consumers. Efficiencies gained in fleet fuel management can reduce costs and limit the carbon footprint associated with product transportation.

Accounting Metrics

CN0103-01. Operational energy consumed, percentage grid electricity, percentage renewable

- .01 The registrant shall disclose energy consumption from all sources, excluding fleet vehicles, as an aggregate figure in gigajoules or their multiples.
- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
 - The scope includes only energy consumed by entities owned or controlled by the organization.
 - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
 - The scope of disclosure excludes fuel consumption by fleet vehicles.
- .02 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .03 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- .04 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.

.05 The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.

- For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.¹²
- Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, consistent with EPA [definitions](#), such as geothermal, wind, solar, hydro, and biomass.

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

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.
- Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered “eligible renewables” according to the Green-e Energy National Standard Version 2.5 (2014), and materials that are eligible for a state Renewable Portfolio Standard.

.07 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kWh to gigajoules (for energy data including electricity from solar or wind energy).

CN0103-02. Fleet fuel consumed, percentage renewable

.08 The registrant shall disclose total fuel consumption by fleet vehicles as an aggregate figure in gigajoules or their multiples.

- The scope includes fuel consumed by vehicles owned or operated by the registrant.

.09 Fuel consumption shall be based on actual fuel consumed (i.e., not based on design parameters).

.10 Acceptable methods for calculating fuel consumption include adding fuel purchases made during the year to beginning inventory at the start of the year, less any fuel inventory at the end of the year, or tracking fuel consumption by vehicle or through expense reports.

¹² SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid.

- .11 The registrant shall disclose renewable fuel consumption as a percentage of its total fuel consumption.
- Renewable fuel is defined, consistent with the U.S. EPA's Renewable Fuel Standard (40 CFR Section 80.1401), as a fuel which meets the following requirements:
 - Fuel that is produced from renewable biomass.
 - Fuel that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel.
 - Fuel that has lifecycle greenhouse gas (GHG) emissions that are at least 20 percent less than baseline lifecycle GHG emissions, unless the fuel is exempt from this requirement pursuant to § 80.1403.
- .12 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .13 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels).

Water Management

Description

Water management is an increasingly material issue for companies in the Processed Foods industry, as large amounts of water are required for cooking, processing, and cleaning finished goods. The total use of water depends on the type of food being prepared. Companies may face additional risks associated with discharging polluted water from the food-making process, which can lead to costly fines and stricter regulations. At the same time, increasing pollution and climate change will create major operational risks for processed foods companies, especially those operating in water-scarce regions. Disclosure around a company's total water withdrawal and exposure to water-stressed regions can help identify direct cost savings associated with water efficiency, as well as risks related to operating in water-stressed regions. Additional disclosure around fines and water quality violations can help quantify direct costs from fines as well as identifying corporations that are better at managing compliance risks.

Accounting Metrics

CN0103-03. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

- .14 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:
- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.
- .15 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources, where:
- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
 - Water obtained from a water utility in compliance with U.S. [National Primary Drinking Water Regulations](#) can be assumed to meet the definition of fresh water.
- .16 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:
- Water that evaporates during withdrawal, usage, and discharge;
 - Water that is directly or indirectly incorporated into the registrant's product or service; and
 - Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

- .17 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute’s (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).
- .18 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- .19 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

CN0103-04. Number of incidents of non-compliance with water quality and/or quantity permits, standards, and regulations

- .20 The registrant shall disclose the total number of instances of non-compliance, including violations of a technology-based standard and exceedances of a quality-based standard.
- .21 The scope of disclosure includes incidents governed by federal, state, and local statutory permits and regulations including, but not limited to, the discharge of a hazardous substance, violation of pretreatment requirements, total maximum daily load (TMDL) exceedances, and/or water withdrawal exceedances.
- .22 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).
- .23 An incident of non-compliance shall be disclosed regardless of the measurement methodology or frequency. These include violations:
 - For continuous discharges, limitations, standards, and prohibitions that are generally expressed as maximum daily, weekly, and monthly averages.
 - For non-continuous discharges, limitations that are generally expressed in terms of total mass, maximum rate of discharge, frequency, and mass or concentration of specified pollutants.

CN0103-05. Discussion of water management risks and description of strategies and practices to mitigate those risks

- .24 The registrant shall discuss its risks associated with water withdrawals, water consumption, and discharge of water to the environment and describe how it manages these risks.
- .25 The registrant shall discuss, where applicable, risks to the availability of adequate, clean water resources.
 - Relevant information to provide includes, but is not limited to:
 - Environmental constraints, such as operating in water-stressed regions, drought, interannual or seasonal variability, and risks due to the impact of climate change.
 - External constraints, such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (e.g., those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users

(commercial and municipal), restrictions to withdrawals due to regulations, and constraints on the registrant's ability to obtain and retain water rights or permits.

- How risks may vary by withdrawal source, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or supply from other water utilities.

.26 The registrant shall discuss, where applicable, risks associated with its discharge of wastewater.

- Relevant information to provide includes, but is not limited to:
 - Environmental constraints, such as the ability to maintain compliance with regulations focused on the quality of effluent discharged to the environment, the ability to eliminate existing and emerging pollutants of concern, and the ability to maintain control over runoff and storm water discharges.
 - External constraints, such as increased liability and/or reputational risks, restrictions to discharges and/or increased operating costs due to regulation, stakeholder perceptions and concerns related to water discharges (e.g., those from local communities, non-governmental organizations, and regulatory agencies), and the ability to obtain discharge rights or permits.
 - How risks may vary by discharges to different sources, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or other water utilities.

.27 The registrant should include a discussion of the potential impacts that these risks may have on its operations and the timeline over which such risks are expected to manifest.

- Impacts may include, but are not limited to, those associated with costs, revenues, liabilities, continuity of operations, and reputation.

.28 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:

- Any water management targets it has set, and an analysis of performance against those targets.
 - Water management targets can include water management goals that the registrant prioritizes to manage its risks and opportunities associated with water withdrawal, consumption, or discharge.
 - Targets can include, but are not limited to, those associated with reducing water withdrawals, reducing water consumption, reducing water discharges, and improving the quality of wastewater discharges.
- The scope of its strategy, plans, or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
- The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.29 For water management targets, the registrant shall additionally disclose:

- The percentage reduction or improvement from the base year, where:
 - The base year is the first year against which water management targets are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target.
- The timelines for the water management plans, including the start year, the target year, and the base year.
- The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as the use of water recycling and/or closed-loop systems
 - Product innovations such as redesigning products or services to require less water
 - Process and equipment innovations, such as those that enable the use of less water in manufacturing or operations
 - Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
 - Collaborations or programs in place with the community or other organizations

.30 Disclosure of strategies, plans, and targets shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.

.31 The registrant shall discuss if its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy consumption, and greenhouse gas (GHG) emissions, and why the registrant chose these practices despite lifecycle tradeoffs.

Additional Resources

GRI-Global Reporting Initiative (GRI G4)
CDP 2015 Water Questionnaire
CEO Water Mandate
Global Water Footprint Assessment Standard

Food Safety

Description

Food safety, as it relates to production quality, spoilage, contamination, supply chain traceability, and allergy labeling, can affect company operations through product recalls, lawsuits, fines, and capital expenditures. Food safety recalls can happen for numerous reasons, including packaging defects, food contamination, spoilage, and mislabeling. Adding to the complexity of the issue, food safety issues often arise within a company's supply chain, yet ultimately end up causing recalls of final products. Because of this, supply chain traceability is beginning a greater concern for companies in the industry, particularly amid new regulation. Poor management of food quality and safety may lead to recalls and lawsuits that can materially impact a processed foods company's operations through fines and tarnished brand reputation. Disclosure around the topic of food safety may give investors a better understanding of a company's operational risk characteristics and the potential impact of recalls on future operations. Conformance with the GFSI scheme provides a good indication of companies' performance on the issue, as major non-conformances may indicate systemic governance risks, which could affect risk premiums. A high percentage of ingredient supplier facilities that meet GFSI requirements will reduce the risk of recalls, which can be of varying magnitude and can result in direct expenses to processed foods companies.

Accounting Metrics

CN0103-06. Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate

- .32 The registrant shall disclose its conformance with Global Food Safety Initiative (GFSI) -recognized food safety schemes based on the number of non-conformances that were identified during audits.
- .33 The scope of disclosure includes audit results from facilities that are owned and/or operated by the registrant.
- .34 The registrant shall calculate and disclose the major non-conformance rate as: total number of major (and/or critical) non-conformances identified in the supply chain divided by the number of facilities audited.
 - Major non-conformances are the highest severity of non-conformance and require escalation by auditors. Major non-conformances may arise from a significant risk to food safety, non-compliance with relevant regulatory requirements, and failure to adequately address prior minor non-conformances. Major non-conformances must be corrected in accordance with the relevant GFSI scheme under audit.
 - Major non-conformances may also be referred to as critical or priority non-conformances.
- .35 The registrant shall calculate and disclose the minor non-conformance rate as: total number of minor non-conformances identified in the supply chain divided by the number of facilities audited.
 - A minor non-conformance is defined by the relevant GFSI scheme and is by itself not indicative of a systemic problem.

- .36 The registrant shall calculate and disclose its corrective action rate for major non-conformances as the number of corrective action plans completed in accordance with the relevant GFSI scheme, no later than 30 days from the audit date, to address major non-conformances, divided by the total number of major non-conformances that have been identified.
- .37 The registrant shall calculate and disclose its corrective action rate for minor non-conformances as the number of corrective action plans completed in accordance with the relevant GFSI scheme, no later than 365 days from the audit date, to address minor non-conformances, divided by the total number of minor non-conformances that have been identified.
- .38 A corrective action is defined as an action to eliminate the cause of a detected non-conformity or other undesirable matter, in accordance with the GFSI, and may be further defined by the relevant GFSI scheme under audit.
- .39 The scope of schemes includes those recognized by the GFSI, including, at time of publication:
- PrimusGFS Standard V2.1—December 2011
 - Global Aquaculture Alliance BAP Seafood Processing Standard
 - FSSC 22000—October 2011 Issue
 - SQF Code 7th Edition Level 2
 - IFS Food Standard Version 6
 - BRC Global Standard for Food Safety Issue 6
 - Global Red Meat Standard 4th Edition Version 4.1
- .40 The registrant should disclose the GFSI-recognized scheme to which its facilities are audited.

CN0103-07. Percentage of ingredients sourced from supplier facilities certified to a Global Food Safety Initiative (GFSI) scheme

- .41 The registrant shall disclose the percentage of food ingredients, by value in U.S. dollars, sourced from supplier facilities that are certified to a Global Food Safety Initiative (GFSI) scheme.
- .42 The scope of disclosure includes the registrant's tier-1 suppliers, where:
- Tier-1 suppliers are defined as suppliers that transact directly with the registrant for food ingredients.
- .43 The registrant shall calculate the percentage of food ingredients sourced from supplier facilities certified to a GFSI scheme as the amount (in U.S. dollars) of ingredient expenses for ingredients sourced from facilities certified to a GFSI scheme, divided by the total amount of food ingredient expenses.

.44 The scope of schemes includes those recognized by the GFSI, including, at time of publication:

- PrimusGFS Standard V2.1—December 2011
- Global Aquaculture Alliance BAP Seafood Processing Standard
- FSSC 22000—October 2011 Issue
- SQF Code 7th Edition Level 2
- IFS Food Standard Version 6
- BRC Global Standard for Food Safety Issue 6
- Global Red Meat Standard 4th Edition Version 4.1
- GlobalG.A.P Integrated Farm Assurance Scheme Version 4 and Produce Safety Standard Version 4
- CanadaGAP Scheme Version 6 Options B and C and Program Management Manual Version 3

CN0103-08. Notice of food safety violations received, percentage corrected

.45 The registrant shall disclose the number of notices received that substantiate a violation of advisory and administrative code(s), statute(s), or other requirement(s) related to food safety.

- Food and Drug Administration's (FDA) notices of violation (NOV) include, but are not limited to, Untitled Letters, Warning Letters, Section 305 Notices (Citations), or Administrative Detention.
- U.S. Department of Agriculture (USDA) notices of violation include, but are not limited to, product withholdings and suspensions, Notice of Warning, and regulatory control actions.
- A listing of USDA NOVs is available [here](#), a database for FDA Warning Letters is available [here](#), Untitled Letters are available [here](#), and a listing of Section 305 Notices and Administrative Detentions can be requested through the Freedom of Information Act [here](#).

.46 The scope of disclosure includes advisory and administrative violations for any food-safety-related issue including, but not limited to, issues related to facilities' hygienic practices, product allergen labeling, product contamination, food and color additive violations, and other food safety issues covered by the Food, Drug, and Cosmetic Act, the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act.

.47 The registrant shall calculate the percentage of NOV corrected as the number of NOV received and corrected divided by the total number of NOV received.

- An NOV is considered corrected when a company takes corrective action(s) before the regulatory agency initiates an enforcement action, where enforcement actions include, but are not limited to:
 - Civil actions such as seizures, injunctions, and false claims acts or other actions; and
 - Criminal actions such as conviction and pre-trial diversion or other agreements.

.48 If the registrant failed to take corrective action and no enforcement action was initiated, the NOV shall not be considered corrected.

CN0103-09. Number of recalls issued, total amount of food product recalled

.49 The registrant shall disclose the total number of recalls issued for its products.

- The scope of recalls includes recalls voluntarily initiated by the registrant and those requested and/or mandated by the FDA, USDA, or equivalent foreign regulatory organization.
- The scope of this disclosure shall include instances of import refusals, a database for which is available [here](#).

.50 The registrant shall disclose the total amount (in metric tons) of products subject to recall.

.51 A database of FDA-regulated recalls is available [here](#) and a listing of USDA-regulated recalls is available [here](#).

.52 The registrant may choose, in addition to the total number of recalls, to disclose the percentage of recalls that were (1) registrant-initiated and (2) requested by a regulatory agency, where:

- Recalls requested by a regulatory agency are those requested by governmental entities (e.g., the FDA or USDA in the U.S. or the China Food and Drug Administration).
- Registrant-initiated recalls are those proactively initiated by a food manufacturer or distributor in order to take foods off the market prior to any request from a regulatory agency.

Note to CN0103-09

.53 The registrant shall discuss notable recalls such as those that affected a significant amount of product or those related to serious illness or fatality.

.54 A recall should be considered notable if it is mentioned in the FDA's [Recalls, Market Withdrawals, & Safety Alerts](#) or the USDA's [Current Recalls and Alerts](#).

.55 For such recalls, the registrant should provide:

- Description and cause of the recall issue
- The total weight of products recalled

- The cost to remedy the issue (in U.S. dollars)
- Whether the recall was voluntary or involuntary
- Corrective actions
- Any other significant outcomes (e.g., legal proceedings, consumer fatalities, etc.)

Health & Nutrition

Description

Key nutritional and health concerns such as obesity, ingredient safety, and nutritional value are shaping the Processed Foods industry's competitive landscape. Health and nutrition are real concerns for consumers, regulators, and the healthcare system. These concerns about food products can affect a company's license to operate and its ability to provide long-term value to shareholders. Processed foods producers are recognizing the consequences of consumers' shifting preferences and increased awareness of the health of their products. New regulations or imposed taxes on processed foods such as snack foods have the ability to influence industry profitability and pose risks for industry participants. Studies have suggested adverse health consequences from consuming large quantities of food with little nutritional value, which can lead to health issues such as higher levels of cholesterol, increased risk for heart disease, and higher levels of obesity. These concerns present risks for companies that produce foods with little nutritional value. On the other hand, companies that generate a greater share of their revenue from products labeled and/or marketed to promote health and nutrition attributes are better positioned to gain market share of a growing segment while avoiding the risks associated with potential regulation and public outcry relating to the use of artificial sweeteners.

Accounting Metrics

CN0103-10. Revenue from products labeled and/or marketed to promote health and nutrition attributes

.56 The registrant shall disclose the total revenue (in U.S. dollars) received from the sale of its products that are labeled and/or marketed to promote health and nutrition attributes, where:

- Products that are labeled to promote health and nutrition attributes contain labels and other written, printed, or graphic matter on the article itself, on any containers and wrappers, or otherwise accompanying the article, consistent with the definition of labeling provided by 21 U.S.C. § 321(m), that promote health and nutrition attributes.
- Consistent with the American Marketing Association's definition of marketing, products are considered to be marketed to promote health and nutrition attributes when the registrant communicates, delivers, and exchanges offerings that promote the product's health and nutrition attributes.

.57 Products are considered to promote health and nutrition attributes when labeling or marketing contains claims that:

- Additives (e.g., artificial sweeteners, colors, preservatives, and industrially produced trans fats) have been eliminated.
- Fat, saturated fat, sodium, and cholesterol are equal to or less than the requirements for the use of the term "healthy" and related terms as prescribed by the FDA's Food Labeling Guide, available [here](#).
- Beneficial nutrients (e.g., vitamins A and C, calcium, iron, protein, and fiber) meet or exceed the requirements for the use of the term "healthy" and related terms as prescribed by the FDA's Food Labeling Guide, available [here](#).

- A relative claim, such as “light,” “reduced,” or “less” can be made regarding the product’s added sugar content, consistent with the FDA’s Food Labeling Guide, available [here](#).

CN0103-11. Revenue from products that meet Smart Snacks in School criteria or foreign equivalent

.58 The registrant shall disclose the total revenue (in U.S. dollars) received from the sale of its products that meet the Smart Snacks in School criteria or a foreign equivalent.

- The Smart Snacks in School criteria are defined by the Healthy, Hunger-Free Kids Act of 2010, as codified by 7 CFR Section 210.11, available [here](#).
- Foreign equivalents are considered to be those regulations, standards, or guidelines published by foreign governments as a set of nutritional criteria for foods that are acceptable for sale in public schools.

.59 The scope of disclosure shall include all products that meet the general nutrition standards of the Healthy, Hunger-Free Kids Act of 2010 or foreign equivalent, and is not limited to the revenue derived from the sale of products on school campuses or during the school day.

.60 The registrant shall disclose the revenues from markets outside the United States and that are thus subject to foreign equivalents, where foreign equivalents include, but are not limited to:

- England’s Nutritional Standards and Requirements for School Food
- Canada’s School Food Guidelines for School Food Providers, Second Edition
- Mexico’s General Guidelines for Dispensing and Distribution of Processed Foods and Beverages in the National Education System
- In foreign markets where equivalent regulations do not exist, products should be assessed according to the Smart Snacks in School criteria.

CN0103-12. Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences

.61 The registrant shall discuss its process to identify and manage products and ingredients of consumer, academic, activist, regulatory, or other concern including, but not limited to, the use of additives, portion sizes, and product content certifications.

.62 The registrant shall discuss efforts to identify concerns, the products related to those concerns, and resulting risks associated with the use of artificial colors, flavors, sweeteners, preservatives, and other ingredients or additives as described by the FDA, available [here](#).

- Relevant efforts to discuss include, but are not limited to, risk assessments, participation in long-term health studies, completion of toxicological screens, procedures for receiving and reviewing consumer concerns, labeling of novel food items, and phasing out, substituting, or using alternative materials for ingredients of concern.

- The scope of disclosure shall focus on food ingredients, additives, and novel foods, but should include potential synergistic effects of ingredients or products as relevant.

.63 The registrant shall describe how identified concerns are managed and risks communicated.

- The registrant may choose to discuss implementation of relevant food-ingredient and additive standards, such as those under the CODEX Alimentarius International Food Standards of the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) (available [here](#)) as a strategy to manage ingredients and products of concern.

.64 The registrant shall discuss the use of portion control, efforts taken to improve the nutritional content of its products, and/or other measures taken to address consumer concerns, trends, and preferences.

- The registrant may choose to discuss whether strategies are related to or associated with a formal health and nutrition initiative or strategy (e.g., WHO Global Strategy on Diet, Physical Activity and Health, Healthy Weight Commitment Foundation, or the Alliance for a Healthier Generation), including regional, national, international, or industry-specific programs.

.65 The registrant shall discuss its use of certification programs that address consumer concerns and preferences over ingredients, additives, and potential allergens, where such certifications include, but are not limited to:

- USDA Organic
- Non-GMO Project Verified
- Certified Gluten-Free

.66 The registrant shall discuss any significant complaints, such as those resulting in lawsuits, relating to products and/or ingredients of consumer concern and any efforts to mitigate the related future risks.

Product Labeling & Marketing

Description

Processed foods producers make product claims aimed at winning customers by demonstrating a perceived benefit of consumption. Companies have often made claims about their products that may have been misleading and untruthful, resulting in fines and litigation that could be materially harmful to operations. Concerns over increasing rates of childhood obesity have also raised questions about processed foods companies' marketing practices to this sensitive subset of the population. This has led to regulatory initiatives that monitor the marketing of unhealthy food to children, which present new challenges to the industry. Disclosure on the number of child advertising impressions made will lend insight into processed foods companies' attempts to increase sales of products that address nutrition concerns specifically directed toward children and will also help establish a company's risk exposure to public outcry relating to the marketing of products to children and whether those products meet public expectations. New laws and regulations regarding the use and labeling of GMOs have a direct impact on the industry, as many of the ingredients in processed foods are derived from GMO ingredients. These issues can affect the competitive landscape of the industry, as companies may be subject to litigation and criticism if they make misleading statements, advertise toward children, and don't label their products containing GMOs. The percentage of a company's product portfolio labeled as GMO as opposed to non-GMO gives investors the data needed to understand how well positioned a company is to comply with regulations surrounding the labeling of GMOs.

Accounting Metrics

CN0103-13. Number of child advertising impressions made, percentage promoting products meeting the Children's Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria

- .67 The registrant shall disclose the total number of advertising impressions made on children, regardless of whether the advertising is directed toward children, where:
- An advertising impression is a measure of the number of times an advertisement is seen, heard, watched, or read.
 - Children are defined as age 12 and under, consistent with the Children's Food and Beverage Initiative (CFBAI) definition.
- .68 The scope includes advertising impressions made through media such as television, radio, print, Internet, interactive games (including advergames), tablets, smartphones, video games, computer games, DVDs, and word of mouth, consistent with the scope of CFBAI commitments and reporting requirements.
- .69 The registrant shall disclose the percentage of advertising impressions made on children that promote products that meet the [CFBAI's Uniform Nutritional Criteria](#), regardless of whether such impressions were made during programs with child audiences of less than 35 percent (i.e., the CFBAI's threshold for child-directed programming).
- .70 The percentage is calculated as the total number of child advertising impressions promoting products that meet the [CFBAI Uniform Nutritional Criteria](#) divided by the total number of child advertising impressions made.

.71 The registrant shall disclose its methodology for collecting data and estimating the number of advertising impressions made on children, where reasonable estimation methods include, but are not limited to:

- Gross rating points and target ratios to determine impressions from television, radio, and print advertising.
- Average visits per month, average page visits per month, and targeted index by age for company-owned websites.
- Total number of ads viewed and child audience share on third-party websites, advergames, tablets, smartphones, video games, and computer games.

CN0103-14 Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO

.72 The registrant shall disclose its revenue (in U.S. dollars) from products that are labeled as (1) containing genetically modified organisms (GMOs) and (2) free of GMOs, where:

- GMOs are defined as organisms, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination, consistent with E.U. Directive 2001/18/EC.

.73 The scope of disclosure includes all of the products sold in markets that the registrant operates in.

.74 The registrant should disclose the revenue from its products that are labeled as (1) containing GMOs and (2) non-GMO in markets subject to GMO labeling regulation, including, but not limited to:

- E.U. Directive 2001/18/EC;
- Regulation EC 1829/2003;
- Maine HP 0490 LD 718;
- Vermont H. 112 Act 0120;
- Connecticut House Bill 6527; and
- Other U.S. state or federal regulation, as enacted.

CN0103-15. Notices of violations received for non-conformance with regulatory labeling and/or marketing codes

.75 The registrant shall disclose the number of notices received that substantiate a violation of labeling- and/or marketing-related regulatory code(s), statute(s), or other requirement(s).

- A labeling- and/or marketing-related non-conformance, consistent with the United States Fair Packaging and Labeling Act (Title 15, Chapter 39) and the Federal Trade Commission (FTC) Act (Title 15 Chapter 2), includes products with labels that are misbranded or use deceptive acts of advertising.

- Incidences include, but are not limited to, the FDA's Untitled Letters, Warning Letters, or foreign equivalents and the FTC's cease-and-desist orders, civil penalties, corrective advertising remedies, or foreign equivalents.
- A database of Warning Letters is available [here](#), and Untitled Letters are available [here](#).

.76 The scope of disclosure includes non-conformances that are subject to regulations including, but not limited to, the following:

- The Federal Food and Drugs Act of 1906 (Title 21, Chapter 1)
- The Federal Food, Drug, and Cosmetic Act (Title 21, Chapter 9)
- The Fair Packaging and Labeling Act (Title 15, Chapter 39)
- The Federal Trade Commission Act (Title 15, Chapter 2)
- Other U.S. state or federal and foreign regulations, as enacted

.77 The registrant may disclose any other non-conformances with third-party, industry, or internal codes on labeling and/or marketing, including, but not limited to:

- Non-conformances reported by the Children's Advertising Review Unit (CARU) (available [here](#)).
- Non-conformances reported by the Advertising Self-Regulatory Council (ASRC) (available [here](#))

CN0103-16. Amount of legal and regulatory fines and settlements associated with marketing and/or labeling practices

.78 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with marketing and/or labeling practices, such as those related to enforcement of U.S. laws and regulations on nutrient content claims, health claims, other unfair or deceptive claims, and/or misbranded labeling, including violations of the Federal Food and Drugs Act of 1906 and the Nutrition Labeling and Education Act of 1990, among others.

.79 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to CN0103-16

.80 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., nutrient content claims, health claims, misbranded labeling, etc.) of fines and settlements.

.81 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in practices, management, codes, products, or training.

Packaging Lifecycle Management

Description

Purchasing packaging materials represents a major business cost and contributes to the environmental footprint of processed foods companies. Each stage of a package's lifecycle, including design, transportation, and disposal, presents its own unique environmental challenges and opportunities that should be considered by processed foods companies. Environmental benefits can include reducing the resources needed for packaging materials, reducing GHG emissions in transportation, and reducing the amount of solid waste consumers send to landfills, as food containers and packaging are responsible for a significant amount of waste in the U.S. every year. Processed foods companies can work with packaging manufacturers to improve the environmental characteristics of their packaging through better design, which helps build a better brand reputation and generate cost savings. Innovations such as light-weighting materials can result in cost benefits during the purchasing and transportation phases of processed food production. Other innovations can result in better end-of-life management (e.g., through use of recyclable or compostable materials). A higher percentage of products made from recyclable materials indicates that a company is proactively addressing end-of-life considerations associated with its products, mitigating the risk of cost and compliance impacts from extended producer responsibility regulation.

Accounting Metrics

CN0103-17. (1) Total weight of packaging sourced, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable

.82 The registrant shall disclose the total weight of packaging purchased by the registrant, in metric tons, where:

- Packaging includes any material containing the registrant's product or otherwise accompanying the product, as well as secondary materials used by the registrant for shipping and distribution of products. This includes:
 - Primary packaging that is designed to come into direct contact with the product; and
 - Secondary packaging that is designed to contain one or more primary packages together with any protective materials, where required.
 - The scope excludes tertiary packaging that is designed to contain one or more articles or packages, or bulk material, for the purposes of transport, handling and/or distribution. Tertiary packaging is also known as "distribution" or "transport" packaging

.83 The registrant shall disclose the percentage of packaging (by weight) made from recycled and/or renewable materials.

- Recycled content is defined, consistent with definitions in ISO 14021:1999, "Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling)," as the portion, by mass, of recycled or recovered material in a product or packaging, where only pre-consumer and post-consumer materials shall be considered as recycled content, and where:

- Recycled material is defined as material that has been reprocessed from recovered (or reclaimed) material by means of a manufacturing process and made into a final product or a component for incorporation into a product.
- Recovered material is defined as material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered (or reclaimed) as a material input, in lieu of new primary material, for a recycling or manufacturing process.
- Pre-consumer material is defined as material that has been diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap that are generated in a process and are capable of being reclaimed within the same process that generated them.
- Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- Renewable resources are defined, consistent with the [Global Protocol on Packaging Sustainability 2.0](#), as resources that are composed of biomass from a living source and are replenished at a rate equal to or greater than the rate of depletion, where:
 - Biomass is defined as a material of biological origin, excluding materials embedded in geological formations or transformed to fossilized material and excluding peat. This includes organic material (both living and dead) from above and below ground, such as trees, crops, grasses, tree litter, algae, animals, and waste of biological origin (e.g., manure), consistent with the [Global Protocol on Packaging Sustainability 2.0](#).

.84 The percentage is calculated as the total weight of packaging made from recycled and/or renewable materials divided by the total weight of all packaging used by the registrant.

- For packaging materials that contain both recycled and virgin parts, or which are made from both renewable and nonrenewable resources, the registrant shall classify a portion of the material as recycled or renewable based on an estimate of the weight of each portion.

.85 The registrant shall disclose the percentage of packaging (by weight) that is recyclable and/or compostable, where:

- For purpose of this disclosure, recyclable material includes those materials that are reusable, where:
 - “Recyclable” is defined as a product or packaging that can be diverted from the waste stream through available processes and programs and can be collected, processed, and returned to use in the form of raw materials or products, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”
 - “Reusable” is defined as a product or packaging that has been conceived and designed to accomplish, within its lifecycle, a certain number of trips, rotations, or uses for the same purpose

for which it was conceived, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”

- “Compostable” is defined as that which undergoes degradation by biological processes during composting to yield CO₂, water, inorganic compounds, and biomass at a rate consistent with other known compostable materials and that leaves no visible, distinguishable, or toxic residue. Compostable plastics are further defined by ASTM Standard D6400, 2004, “Standard Specification for Compostable Plastics.”

- .86 The percentage is calculated as the total weight of recyclable and/or compostable packaging divided by the total weight of all packaging.
- .87 The registrant should disclose (1) the total weight of packaging sourced, (2) the percentage made from recycled or renewable materials, and (3) the percentage that is recyclable or compostable for each major packaging substrate (e.g., wood fiber, glass, metal, and petroleum-based).

CN0103-18. Description of strategies to reduce the environmental impact of packaging throughout its lifecycle

- .88 The registrant shall discuss its strategies to reduce the environmental impact of packaging throughout its lifecycle, such as reducing packaging weight and volume for a given application or using alternative materials, including those that are recycled, recyclable, reusable, and/or compostable.
- .89 The registrant shall discuss the circumstances surrounding its use of recycled and renewable packaging, including, but not limited to, discussions of supply availability, consumer preferences, and packaging durability requirements.
- .90 The registrant shall discuss the circumstances surrounding its use of packaging that is recyclable and compostable, including, but not limited to, discussions of regulations, packaging end-of-life commitments, consumer demand, and packaging durability.
- .91 Relevant disclosure may include, but is not limited to, discussion of the following:
- Implementation of EN 13428 or ISO 18602, which include criteria on minimization of packaging weight and optimization to the amount needed for safety, hygiene, and consumer acceptance of the packed product.
 - Implementation of EN 13430 or ISO 18604, which include criteria for recyclable packaging.
 - Implementation of EN 13432, ISO 14855-1:2005, ASTM D6400, or ASTM D6868, which include criteria for packaging recoverable through biodegradation and composting.
 - Implementation of ISO 14021, which includes criteria for renewable and recycled material content claims.
 - Performance on the [Global Protocol on Packaging Sustainability 2.0](#) metrics for Packaging Weight and Optimization and/or Assessment and Minimization of Substances Hazardous to the Environment.

- .92 The registrant should, where relevant, discuss any packaging-related targets and performance against those targets. Examples of such targets include, but are not limited to:
- Reduction in packaging footprints
 - Reduction in packaging weight either in total or on a per-unit basis
 - Increasing recycled, recyclable, reusable, renewable, and/or compostable content
- .93 The registrant may choose to discuss its use of Life Cycle Assessment (LCA) analysis in the context of its approach to environmental impact reduction and maximization of product efficiency, including weight reduction and transportation efficiency.
- When discussing improvements to the environmental efficiency of packaging products, improvements should be discussed in terms of LCA functional unit service parameters (i.e., time, extent, and quality of function).

Additional References

EPA [Waste Hierarchy](#)

Summary of the [EPA Municipal Solid Waste Program](#)

Environmental & Social Impacts of Ingredient Supply Chains

Description

Companies in the industry utilize a significant amount of agricultural inputs, many of which are produced in areas affected by drought or otherwise susceptible to shifts in weather patterns. This exposure can lead to price inflation and can affect company profitability. Ultimately, climate change, water scarcity, and land-use restriction present risks to a company's long-term ability to source key materials and ingredients. Additionally, companies are continually competing on ethical sourcing practices and certifications for their products, which address labor issues and worker rights. Responsible sourcing and fair trade practices have the potential to offer companies opportunities to capture growing demand from socially conscious consumers, while also securing a steady supply of key ingredients. Managing a company's exposure to environmental and social risks can lead to improved supply chain resiliency and enhanced reputation, which provide value to shareholders. Moreover, sourcing from suppliers with strong conformance to social and environmental principles gives companies assurance that the inputs to its products are developed in a way that reduces the risk of reputational damage.

Accounting Metrics

CN0103-19. Percentage of food ingredients sourced from regions with High or Extremely High Baseline Water Stress

- .94 The registrant shall disclose the percentage, by value in U.S. dollars, of food ingredients sourced from regions with High or Extremely High Baseline Water Stress.
- .95 The scope of food ingredients shall include those items grown by tier-1 suppliers.
 - Tier-1 suppliers are defined as suppliers that transact directly with the registrant for food ingredients.
- .96 The percentage is calculated as the total cost, in U.S. dollars, of food ingredients sourced from regions with High or Extremely High Baseline Water Stress divided by the total cost of food ingredients sourced.
- .97 Using the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), the registrant shall analyze all of its known sources for water risks and identify sources that are in a location with High (40–80%) or Extremely High (>80%) Baseline Water Stress.
- .98 The scope of disclosure includes all tier-1 suppliers. Should the registrant not know all tier-1 suppliers, the registrant shall disclose the percentage of ingredients from unknown regions that are grown by tier-1 suppliers.

CN0103-20. Percentage of food ingredients sourced that are certified to third-party environmental and/or social standards, by certification scheme.

- .99 The registrant shall disclose the percentage, by value in U.S. dollars, of food ingredients sourced that have been certified to third-party environmental and/or social standards, where:

- Environmental standards include, but are not limited to, protection of primary forests, maintenance of surface water and groundwater quality, and implementation of integrated pest management solutions or an Organic System Plan.
- Social Standards include, but are not limited to, fair compensation of employees, training of agrochemical applicators, continual monitoring of health and safety risks associated with applications of agrochemicals, and absence of harmful child-labor practices.
- Standards that include both social and environmental criteria contain measures that incorporate both social and environmental requirements, as mentioned above.

.100 The percentage is calculated as the total cost, in U.S. dollars, of food ingredients that are certified to a third-party environmental and/or social standard divided by the total cost of food ingredients sourced.

.101 The scope of disclosure includes third-party certifications that are based on either environmental or social best practices or both.

.102 The scope of food ingredients shall include those items grown by a tier-1 supplier or third party that are sourced for eventual sale. Environmental and/or social certifications include, but are not limited to:

- Roundtable on Sustainable Palm Oil (RSPO)
- Roundtable on Responsible Soy (RTRS)
- Rainforest Alliance
- Fair Trade USA
- Fairtrade International
- UTZ Certified
- Bon Sucro
- USDA Organic
- SA8000

.103 The registrant shall disclose, on a percentage of cost basis, the standards to which its food supply is certified, and the following where relevant:

- For RSPO certification, the registrant shall disclose whether the agricultural raw materials are certified to the (1) Book & Claim or Mass Balance methods and (2) Identify and Preserved or segregated models.
- For RTRS certification, the registrant shall disclose whether the ingredients are certified to the RTRS Production standard or the RTRS Chain of Custody Standard and whether traceability in the chain of custody standard is kept through segregation or mass balance.

- For Fairtrade International and Fairtrade U.S.A., the registrant shall disclose whether ingredients are certified to the standards for small producer organizations, hired labour, contract production, traders, independent small holders, or capture fisheries.
- For Bon Sucro certification, the registrant shall disclose whether the ingredients are certified to the Bon Sucro Production Standard or the Bon Sucro Chain of Custody Standard.
- For certifications not included here, similar efforts should be made to distinguish between the certification-specific standards that are employed.
- For certifications that evaluate and certify similar environmental and/or social criteria (e.g., Fair Trade International and Fair Trade USA) and for ingredients that are derived from the same commodity, the registrant may aggregate the percentage into one reportable figure.

CN0103-21. Suppliers' social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate

.104 The registrant shall disclose its suppliers' conformance with external social and environmental audit standards or internally developed supplier code(s) of conduct, based on the number of non-conformances identified.

- The registrant may limit its disclosure to those suppliers that, in aggregate, account for 80 percent or more of its supplier sourcing that is directly related to manufacturing.

.105 The registrant shall calculate and disclose the major non-conformance rate as the total number of major non-conformances identified in the supply chain divided by the number of facilities audited.

- Major non-conformances are the highest severity of non-conformance and require escalation by auditors. Major non-conformances confirm the presence of underage child workers (below the legal age for work or apprenticeship), forced labor, health and safety issues that can cause immediate danger to life or serious injury, and environmental practices that can cause serious and immediate harm to the community. Major non-conformance includes material breach or systemic breaking of code requirement or law. Issues representing an immediate danger must be corrected as soon as practical, but not longer than 90 days after discovery.
- Major non-conformances may also be referred to as critical or priority non-conformances.

.106 The registrant shall calculate and disclose the minor non-conformance rate as the total number of minor non-conformances identified in the supply chain divided by the number of facilities audited.

- A minor non-conformance by itself doesn't indicate a systemic problem with the management system. It is typically an isolated or random incident and represents a low risk to workers and the environment.

.107 The registrant shall calculate and disclose its corrective action rate for major non-conformances as the number of corrective action plans completed within 90 days to address major non-conformances divided by the total number of major non-conformances that have been identified.

- .108 The registrant shall calculate and disclose its corrective action rate for minor non-conformances as the number of corrective action plans completed within 90 days to address minor non-conformances divided by the total number of minor non-conformances that have been identified.
- .109 A corrective action is defined as the implementation of practices or systems to eliminate any non-conformance and ensure there will be no reoccurrence of the non-conformance, and verification that the corrective action has taken place.
- .110 The registrant shall disclose the standards to which it has measured social and environmental responsibility audit compliance.
- For internally developed supplier code(s) of conduct, the registrant shall disclose the public location where such code(s) can be viewed.

CN0103-22. List of priority food ingredients and discussion of sourcing risks due to environmental and social considerations

- .111 The registrant shall identify any food ingredients that are a priority to the registrant's business.
- Priority food ingredients are defined as the five ingredients that constitute the largest food ingredient expense (excluding water) and/or those ingredients that are otherwise essential to the registrant's products or have significant environmental or social risks.
- .112 The registrant shall discuss its strategic approach to managing the environmental and social risks that arise from its priority food ingredients, where:
- Environmental risks include, but are not limited to, effects of drought and climate change on ingredient prices, reputational damage due to deforestation, and other risks resulting from the environmental impacts associated with the registrant's supply chain.
 - Social risks include, but are not limited to, effects of workers' rights on productivity, reputational damage due to human rights issues, and other risks resulting from the social impacts associated with the registrant's supply chain.
 - The scope of disclosure should focus on food ingredients that are sourced from directly contracted growers or through producer supply agreements, or that are procured through other means.
- .113 The registrant should identify which food ingredients present risks to its operations, the risks that are represented, and the strategies the registrant uses to mitigate such risks.
- .114 For environmental risks, relevant strategies to discuss include the diversification of suppliers, supplier training programs on environmental best management practices, expenditures on R&D for alternative and substitute crops, and audits or certifications of suppliers' environmental practices.
- .115 For social risks, relevant strategies to discuss include supplier training programs on agrochemical application, engagement with suppliers on labor and human rights issues, and maintenance of a supply chain code of conduct.

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SUSTAINABILITY ACCOUNTING STANDARD
CONSUMPTION I SECTOR

NON-ALCOHOLIC BEVERAGES

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0201

Prepared by the
Sustainability Accounting Standards Board®

June 2015
Provisional Standard

NON-ALCOHOLIC BEVERAGES

Sustainability Accounting Standard

About SASB

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

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INTRODUCTION

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Non-Alcoholic Beverages industry.

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

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company's specific operating context—for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 -. 32¹ and referenced in AT 701², as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

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. Companies partake in syrup manufacturing, marketing, bottling operations, and distribution, with larger companies typically being more vertically integrated into finished-product operations that bottle, sell, and distribute the finished products. The industry is dominated by its largest companies, and these companies have global operations, generating a majority of revenue outside the U.S.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#ftn.at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Material Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Disclosure Topics

For the Non-Alcoholic Beverages industry, SASB has identified the following sustainability disclosure topics:

- Energy & Fleet Fuel Consumption
- Water Management
- Health & Nutrition
- Product Labeling & Marketing
- Packaging Lifecycle Management
- Environmental & Social Impacts of Ingredient Supply Chains

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SIC industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment –prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

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

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

For purposes of comparability and usability, that companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

c. Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Material Sustainability Topics

For each sustainability topic included in the Non-Alcoholic Beverages industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

Such data—termed "activity metrics"—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions

⁸ See US GAAP consolidation rules (Section 810).

(e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Volume of products sold	Quantitative	Millions of hectoliters	CN0201-A
Number of production facilities	Quantitative	Number	CN0201-B
Total fleet road miles traveled	Quantitative	Miles	CN0201-C

Units of Measure

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

Uncertainty

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

Estimates

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

Timing

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

Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy & Fleet Fuel Management	Operational energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0201-01
	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0201-02
Water Management	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0201-03
	Discussion of water management risks and description of management strategies and practices to mitigate those risks	Discussion and Analysis	n/a	CN0201-04
Health & Nutrition	Revenue from (1) zero- and low-calorie, (2) no-added-sugar, and (3) artificially sweetened beverages	Quantitative	U.S. Dollars (\$)	CN0201-05
	Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences	Discussion and Analysis	n/a	CN0201-06
Product Labeling & Marketing	Number of child advertising impressions made, percentage promoting products meeting the Children's Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria	Quantitative	Number, Percentage (%)	CN0201-07
	Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO	Quantitative	U.S. Dollars (\$)	CN0201-08
	Notices of violations received for non-conformance with regulatory labeling and/or marketing codes	Quantitative	Number, Percentage (%)	CN0201-09
	Amount of legal and regulatory fines and settlements associated with labeling and/or marketing practices ¹⁰	Quantitative	U.S. Dollars (\$)	CN0201-10

¹⁰ Note to **CN0201-10**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Table 1. Sustainability Disclosure Topics & Accounting Metrics (cont.)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Packaging Lifecycle Management	(1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable	Quantitative	Metric tons (t), Percentage (%)	CN0201-11
	Description of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	CN0201-12
Environmental & Social Impacts of Ingredient Supply Chains	Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by spend	CN0201-13
	Suppliers' social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate	CN0201-14
	List of priority beverage ingredients and discussion of sourcing risks due to environmental and social considerations	Discussion & Analysis	n/a	CN0201-15

Energy & Fleet Fuel Management

Description

Companies in the Non-Alcoholic Beverages industry rely on purchased electricity and fuel as critical inputs for manufacturing and transporting finished products to consumers. Consumption of fossil fuels and electrical energy can contribute to environmental impacts, including climate change and pollution. These impacts have the potential to affect the value of companies in this industry, as greenhouse gas (GHG) emission regulations and new incentives for energy efficiency and renewable energy could lead to increased price volatility for fossil fuels and conventional electricity while making alternative sources cost-competitive. Companies that manage their overall energy use through increased manufacturing and transportation efficiencies and use of alternative energy sources can increase profitability by lowering expenses and reducing risk.

Accounting Metrics

CN0201-01. Operational energy consumed, percentage grid electricity, percentage renewable

- .01 The registrant shall disclose energy consumption from all sources, excluding fleet vehicles, as an aggregate figure in gigajoules or their multiples.
- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
 - The scope includes only energy consumed by entities owned or controlled by the organization.
 - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
 - The scope of disclosure excludes fuel consumption by fleet vehicles.
- .02 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .03 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- .04 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.
- .05 The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.
- For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.

- For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
- The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.¹¹
- Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, consistent with EPA [definitions](#), such as geothermal, wind, solar, hydro, and biomass.

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

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.
- Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered “eligible renewables” according to the Green-e Energy National Standard Version 2.5 (2014), and materials that are eligible for a state Renewable Portfolio Standard.

.07 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kWh to gigajoules (for energy data including electricity from solar or wind energy).

CN0201-02. Fleet fuel consumed, percentage renewable

.08 The registrant shall disclose total fuel consumption by fleet vehicles as an aggregate figure in gigajoules or their multiples.

- The scope includes fuel consumed by vehicles owned or operated by the registrant.

.09 Fuel consumption shall be based on actual fuel consumed (i.e., not based on design parameters).

.10 Acceptable methods for calculating fuel consumption include adding fuel purchases made during the year to beginning inventory at the start of the year, less any fuel inventory at the end of the year, or tracking fuel consumption by vehicle or through expense reports.

.11 The registrant shall disclose renewable fuel consumption as a percentage of its total fuel consumption.

- Renewable fuel is defined, consistent with the U.S. EPA’s Renewable Fuel Standard (40 CFR Section 80.1401), as a fuel which meets the following requirements:
 - Fuel that is produced from renewable biomass.

¹¹ SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid.

- Fuel that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel.
 - Fuel that has lifecycle greenhouse gas (GHG) emissions that are at least 20 percent less than baseline lifecycle GHG emissions, unless the fuel is exempt from this requirement pursuant to § 80.1403.
- .12 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .13 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels).

Water Management

Description

Water management relates to a company's direct water usage, the exposure of its operations to water-scarce regions, and its management of wastewater. Companies in the Non-Alcoholic Beverages industry use a large amount of water in their operations, as they combine water with raw ingredients to create finished products. Because non-alcoholic beverage companies rely heavily on access to a large volume of clean water and water stress is increasing in different regions globally, companies may be exposed to supply disruptions that could significantly impact operations and add to costs. Companies operating in water-stressed regions that fail to address local water concerns may face further risk of losing their social license to operate. Additionally, proper wastewater treatment is an important element of managing water issues in operations, since bottling plants release large quantities of effluents. Improving water management through increased efficiency, recycling, and proper disposal, particularly in regions with baseline water stress, can lead to lower operating costs, reduced risks, and higher intangible asset value.

Accounting Metrics

CN0201-03. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

- .14 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:
- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.
- .15 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources, where:
- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
 - Water obtained from a water utility in compliance with U.S. [National Primary Drinking Water Regulations](#) can be assumed to meet the definition of fresh water.
- .16 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:
- Water that evaporates during withdrawal, usage, and discharge;
 - Water that is directly or indirectly incorporated into the registrant's product or service; and
 - Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

- .17 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute’s (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).
- .18 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- .19 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

CN0201-04. Discussion of water management risks and description of management strategies and practices to mitigate those risks

- .20 The registrant shall discuss how it manages risks associated with water withdrawals, water consumption, and discharge of water to the environment.
- .21 The registrant shall discuss, if applicable, risks to the availability of adequate, clean water resources.
 - Relevant context to provide includes, but is not limited to:
 - Environmental constraints, such as how risks vary by withdrawal sources (e.g., wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or water utilities), operations in water-stressed regions, drought, interannual or seasonal variability, or risks due to the impact of climate change.
 - External constraints, such as changes in water costs, stakeholder perceptions and concerns related to water withdrawals (such as those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions from regulation, or constraints on the registrant’s ability to obtain and retain water rights or permits.
 - How risks may vary by discharges to different destinations, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or other water utilities.
- .22 The registrant shall discuss, if applicable, risks associated with the discharge of wastewater.
 - Relevant context to provide includes, but is not limited to:
 - Environmental constraints, such as how risks vary by discharge destination (i.e., wetlands, rivers, lakes, oceans, or water utilities), the ability to maintain compliance with regulations focused on the quality of effluent discharged to the environment, and the ability to eliminate existing and emerging pollutants of concern.
 - External constraints, including increased liability, reputational damage, restrictions from regulation, stakeholder perceptions and concerns related to water discharges (such as those from local communities, non-governmental organizations, and regulatory agencies), or constraints on the registrant’s ability to obtain discharge rights or permits.

- How risks may vary by discharges to sources, including wetlands, rivers, lakes, oceans, ground water, rainwater, and municipal water supplies or supply from other water utilities.
- .23 The registrant should include a discussion of the potential implications that these risks may have on its operations and the timeline over which such risks are expected to manifest.
- .24 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:
- Any water management targets it has set, and an analysis of performance against those targets.
 - Water management targets can include water management goals that the registrant sees as a priority to manage its risks and opportunities associated with water withdrawal, consumption, or discharge.
 - Targets can include, but are not limited to, those associated with reducing water withdrawals, reducing water consumption, reducing water discharges, and improving the quality of wastewater discharges.
 - The scope of its strategy, plans, or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
 - The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.
- .25 For water management targets, the registrant shall additionally disclose:
- The percentage reduction from the base year;
 - The base year is the first year against which water management targets are evaluated towards the achievement of the target.
 - Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target;
 - The timelines for the water management activities, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year; and
 - The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as recycling and closed-loop systems
 - Use of water-saving equipment
 - Product innovations such as redesigning a product to include less water within it
 - Process innovations, including using less water in the manufacturing of a product

- Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
- Collaborations or programs in place with the community or other organizations

.26 Disclosure of strategies, plans, and targets shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.

.27 The registrant shall discuss if its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy consumption, and greenhouse gas (GHG) emissions, and why the registrant chose these practices despite lifecycle tradeoffs.

Additional Resources

GRI-Global Reporting Initiative (GRI G4)
 CDP 2015 Water Questionnaire
 CEO Water Mandate
 Global Water Footprint Assessment Standard
 Ceres Aqua Gauge Framework

Health & Nutrition

Description

The Health & Nutrition issue relates to key nutritional and health concerns such as obesity, ingredient safety, nutritional content, and acute health impacts resulting from the consumption of non-alcoholic beverages. Beverage manufacturers recognize the risk of consumers' evolving preferences and increased awareness of product health consequences. Studies indicate that consuming high-calorie sugar-sweetened beverages can have adverse health consequences including higher levels of cholesterol, increased risk for heart disease, and obesity. Findings such as these can alter consumer perceptions of the industry's products, leading to long-term shifts in purchasing decisions. Furthermore, efforts to reduce obesity, in the form of new regulations or taxes on sugar-sweetened beverages, have the ability to influence industry profitability and future demand. The potential adverse health effects of other specific ingredients pose additional concerns, and companies may face related lawsuits. Opportunities exist in new segments of the beverage market that address consumers' demand for improved nutritional value. Companies that address the increasingly important issue of product nutritional value and health impacts by offering healthier alternatives and ensuring product safety can capture additional market share and limit their exposure to regulation and litigation.

Accounting Metrics

CN0201-05. Revenue from (1) zero- and low-calorie, (2) no-added-sugar, and (3) artificially sweetened beverages

.28 The registrant shall disclose the total revenue (in U.S. dollars) received from the sale of its (1) zero- and low-calorie (2) no-sugar-added (3) artificially sweetened beverage products, where:

- Zero-calorie beverages are defined as those containing less than five calories per reference amount customarily consumed and per labeled serving according to the requirements of 21 CFR Section 101.60, "Nutrient content claims for the calorie content of foods."
 - According to the requirements of 21 CFR section 101.60, zero-calorie may also be referred to as "calorie free," "free of calories," "no calories," "zero calories," "without calories," "trivial source of calories," "negligible source of calories," or "dietarily insignificant source of calories."
- Low-calorie beverages are defined as those containing less than 40 calories per reference amount customarily consumed and per labeled serving, according to the requirements of 21 CFR Section 101.60.
- Beverages with no added sugars are defined as those in which no amount of sugars or any other ingredient that contains sugars and that functionally substitutes for added sugars is added during processing or packaging, according to the requirements of 21 CFR Section 101.60.
 - For purpose of this disclosure, artificially sweetened and zero- and low-calorie beverages shall be excluded from the scope of beverages with no added sugars.

- Artificially sweetened beverages are defined, consistent with the U.S. National Library of Medicine's definition, as those that contain chemically processed substances that are used in place of sweeteners with sugar or sugar alcohol.
 - Artificial sweeteners include aspartame, sucralose, saccharin, neotame, acesulfame potassium, and advantame.

.29 If the registrant receives revenue from artificially sweetened beverages that are not classified as zero- or low-calorie, then it should separately disclose this portion of its revenue.

.30 The registrant may choose to separately disclose revenues from zero- and low-calorie beverages that do not contain artificial sweeteners (e.g., water, tea, coffee, etc.).

CN0201-06. Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences

.31 The registrant shall discuss its process to identify and manage products and ingredients of consumer, academic, activist, regulatory, or other concern, including, but not limited to, the use of additives and portion sizes.

.32 The registrant shall discuss efforts to identify concerns, the products related to those concerns, and resulting risks associated with the use of artificial colors, flavors, sweeteners, preservatives, and other ingredients or additives as described by the FDA, available [here](#).

- Relevant efforts to discuss include, but are not limited to, risk assessments, participation in long-term health studies, completion of toxicological screens, procedures for receiving and reviewing consumer concerns, labeling of novel food items, and phasing out, substituting, or using alternative materials for ingredients of concern.
- The scope of disclosure shall focus on ingredients, additives, and novel beverages, but should include potential synergistic effects of ingredients or products, such as those associated with the use of caffeine and other stimulants, as relevant.

.33 The registrant shall describe how the concerns identified are managed and the risks communicated.

- The registrant may choose to discuss implementation of relevant beverage ingredient and additive standards, such as those under the CODEX Alimentarius International Food Standards of the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) (available [here](#)) as a strategy to manage ingredients and products of concern.

.34 The registrant shall discuss the use of portion control, efforts taken to improve the nutritional content of its products, and/or other measures taken to address consumer concerns, trends, or preferences.

- The registrant may choose to discuss whether strategies are related to or associated with a formal health and nutrition initiative or strategy (e.g., WHO Global Strategy on Diet, Physical Activity and Health, Healthy Weight Commitment Foundation, or the Alliance for a Healthier Generation), including regional, national, international, or industry-specific programs.

- .35 The registrant shall discuss any significant complaints, such as those resulting in lawsuits or relating to products and/or ingredients of consumer concern and any efforts to mitigate the related future risks.

Product Labeling & Marketing

Description

In their advertising and marketing practices, companies in the Non-Alcoholic Beverages industry routinely make claims related to the health benefits of specific ingredients and products, which may at times be misleading or untruthful. The trend toward promoting health benefits is likely to increase as the market for healthier beverages continues to expand. These claims can result in litigation or regulatory action that may impact operations and company reputations. Companies in the industry are also subject to criticism and regulation surrounding marketing to children, especially in the U.S., where childhood obesity is rapidly increasing. In response to these concerns, companies have launched new initiatives to voluntarily monitor and control advertising toward children. Additionally, new laws and regulations surrounding the use and labeling of genetically modified organisms (GMOs) may play an increasing role in the industry, as some of the ingredients used in non-alcoholic beverages may be genetically modified. Although the health and environmental impacts of GMOs remain the topic of debate and scientific inquiry, the issue can still influence consumers' purchasing decisions and create pressure on governments to introduce related laws. Failure to manage marketing and labeling can lead to impacts on brand value, reduced market share, and increased expenses and liabilities.

Accounting Metrics

CN0201-07. Number of child advertising impressions made, percentage promoting products meeting the Children's Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria

- .36 The registrant shall disclose the total number of advertising impressions made on children, regardless of whether the advertising is directed toward children, where:
- An advertising impression is a measure of the number of times an advertisement is seen, heard, watched, or read.
 - Children are defined as age 12 and under, consistent with the Children's Food and Beverage Initiative (CFBAI) definition.
- .37 The scope includes advertising impressions made through media such as television, radio, print, Internet, interactive games (including advergames), tablets, smartphones, video games, computer games, DVDs, and word of mouth, consistent with the scope of media provided by the CFBAI commitments and reporting requirements.
- .38 The registrant shall disclose the percentage of advertising impressions made on children that promote beverage products that meet the [CFBAI Uniform Nutritional Criteria](#), regardless of whether such impressions were made during programs with child audiences of less than 35 percent (i.e., the CFBAI's threshold for child-directed programming).
- .39 The percentage is calculated as the total number of child advertising impressions promoting products that meet the [CFBAI Uniform Nutritional Criteria](#) divided by the total number of child advertising impressions made.

.40 The registrant shall disclose the estimation methods used to calculate the number of advertising impressions made on children, including its method for collecting such data, where reasonable estimation methods include, but are not limited to:

- Gross rating points and target ratios to determine impressions in television, radio, and print advertising.
- Average visits per month, average page visits per month, and targeted index by age for company-owned websites.
- Total number of ads viewed and child audience share on third-party websites, advergames, tablets, smartphones, video games, and computer games.

CN0201-08. Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO

.41 The registrant shall disclose its revenue (in U.S. dollars) from products that are labeled as (1) containing genetically modified organisms (GMOs) and (2) free of GMO, where:

- GMOs are defined as organisms, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination, consistent with E.U. Directive 2001/18/EC.

.42 The scope of disclosure includes all of the products sold in markets that the registrant operates in.

.43 The registrant should disclose the percentage of its product portfolio labeled as (1) containing GMOs and (2) non-GMO, including those products it voluntarily labels as well as those labeled for sale in markets subject to GMO labeling regulation, including, but not limited to:

- E.U. Directive 2001/18/EC;
- Regulation EC 1829/2003;
- Maine HP 0490 LD 718;
- Vermont H. 112 Act 0120;
- Connecticut House Bill 6527; or
- Other U.S. state or federal regulation, as enacted.

CN0201-09. Notices of violations received for non-conformance with regulatory labeling and/or marketing codes

.44 The registrant shall disclose the number of notices received that substantiate a violation of labeling- and/or marketing-related regulatory code(s), statute(s), or other requirement(s).

- A labeling- and/or marketing-related non-conformance, consistent with the United States Fair Packaging and Labeling Act (Title 15, Chapter 39) and the FTC Act (Title 15 Chapter 2), includes products with labels that are misbranded or use deceptive acts of advertising.
- Incidences include, but are not limited, to the FDA's Untitled Letters, Warning Letters, or foreign equivalents and the FTC's cease-and-desist orders, civil penalties, corrective advertising remedies, or foreign equivalents.
- A database of Warning Letters is available [here](#), and Untitled Letters are available [here](#).

.45 The scope of disclosure includes non-conformances that are subject to regulations including, but not limited to, the following:

- The Federal Food and Drugs Act of 1906 (Title 21, Chapter 1)
- The Federal Food, Drug, and Cosmetic Act (Title 21, Chapter 9)
- The Fair Packaging and Labeling Act (Title 15, Chapter 39)
- The Federal Trade Commission Act (Title 15, Chapter 2)
- Other U.S. state or federal and foreign regulations, as enacted

.46 The registrant may disclose any other non-conformances with third-party, industry, or internal codes for labeling and/or marketing, including, but not limited to:

- Non-conformances reported by the Children's Advertising Review Unit (CARU) (available [here](#)).
- Non-conformances reported by the Advertising Self-Regulatory Council (ASRC) (available [here](#))

CN0201-10. Amount of legal and regulatory fines and settlements associated with labeling and/or marketing practices

.47 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with labeling and/or marketing practices, such as those related to enforcement of U.S. laws and regulations on nutrient content claims, health claims, other unfair or deceptive claims, and/or misbranded labeling, including violations of the Federal Food and Drugs Act of 1906 and the Nutrition Labeling and Education Act of 1990, among others.

.48 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to **CN0201-10**

- .49 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., nutrient content claims, health claims, misbranded labeling, etc.) of fines and settlements.
- .50 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in practices, management, codes, products, or training.

Packaging Lifecycle Management

Description

Packaging materials represent a significant cost to companies in the Non-Alcoholic Beverages industry. Although many non-alcoholic beverage companies do not manufacture their own bottles and packaging, they face the reputational risks associated with the negative externalities that their products' containers can create over their lifecycle.

Companies are also directly impacted by legislation regarding end-of-life management of beverage containers. Non-Alcoholic beverage companies therefore have an incentive to work with packaging manufacturers to improve the environmental characteristics of their products. In the design phase, materials choice can help drive consumer demand, reduce environmental impacts, and mitigate risks associated with end-of-life regulations. Furthermore, efforts to reduce the amount of materials used in packaging can reduce transportation costs, exposure to supply and price volatility of key materials, and the amount of virgin materials extracted. In the end-of-life phase, take-back and recycling programs and partnerships can pre-empt regulation, help achieve cost savings, and reduce environmental impact. Companies that effectively manage this issue can improve profitability and reduce cost of capital.

Accounting Metrics

CN0201-11. (1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable

.51 The registrant shall disclose the total weight of packaging purchased by the registrant, in metric tons, where:

- Packaging includes any material containing the registrant's product or otherwise accompanying the product, as well as secondary materials used by the registrant for shipping and distribution of products. This includes:
 - Primary packaging that is designed to come into direct contact with the product; and
 - Secondary packaging that is designed to contain one or more primary packages together with any protective materials, where required.
 - The scope excludes tertiary packaging that is designed to contain one or more articles or packages, or bulk material, for the purposes of transport, handling and/or distribution. Tertiary packaging is also known as "distribution" or "transport" packaging

.52 The registrant shall disclose the percentage of packaging (by weight) made from recycled and/or renewable materials.

- Recycled content is defined, consistent with definitions in ISO 14021:1999, "Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling)," as the portion, by mass, of recycled or recovered material in a product or packaging, where only pre-consumer and post-consumer materials shall be considered as recycled content, and where:
 - Recycled material is defined as material that has been reprocessed from recovered (or reclaimed) material by means of a manufacturing process and made into a final product or a component for incorporation into a product.

- Recovered material is defined as material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered (or reclaimed) as a material input, in lieu of new primary material, for a recycling or manufacturing process.
- Pre-consumer material is defined as material that has been diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap that are generated in a process and are capable of being reclaimed within the same process that generated them.
- Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- Renewable resources are defined, consistent with the [Global Protocol on Packaging Sustainability 2.0](#), as resources that are composed of biomass from a living source and are replenished at a rate equal to or greater than the rate of depletion, where:
 - Biomass is defined as a material of biological origin, excluding materials embedded in geological formations or transformed to fossilized material and excluding peat. This includes organic material (both living and dead) from above and below ground, such as trees, crops, grasses, tree litter, algae, animals, and waste of biological origin (e.g., manure), consistent with the [Global Protocol on Packaging Sustainability 2.0](#).

.53 The percentage is calculated as the total weight of packaging made from recycled and/or renewable materials divided by the total weight of all packaging used by the registrant.

- For packaging materials that contain both recycled and virgin parts, or which are made from both renewable and nonrenewable resources, the registrant shall classify a portion of the material as recycled or renewable based on an estimate of the weight of each portion.

.54 The registrant shall disclose the percentage of packaging (by weight) that is recyclable and/or compostable, where:

- For purpose of this disclosure, recyclable material includes those materials that are reusable, where:
 - “Recyclable” is defined as a product or packaging that can be diverted from the waste stream through available processes and programs and can be collected, processed, and returned to use in the form of raw materials or products, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”
 - “Reusable” is defined as a product or packaging that has been conceived and designed to accomplish, within its lifecycle, a certain number of trips, rotations, or uses for the same purpose for which it was conceived, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”

- “Compostable” is defined as that which undergoes degradation by biological processes during composting to yield CO₂, water, inorganic compounds, and biomass at a rate consistent with other known compostable materials and that leaves no visible, distinguishable, or toxic residue. Compostable plastics are further defined by ASTM Standard D6400, 2004, “Standard Specification for Compostable Plastics.”

- .55 The percentage is calculated as the total weight of recyclable and/or compostable packaging divided by the total weight of all packaging.
- .56 The registrant should disclose (1) the total weight of packaging sourced, (2) the percentage made from recycled or renewable materials, and (3) the percentage that is recyclable or compostable for each major packaging substrate (e.g., wood fiber, glass, metal, and petroleum-based).

CN0201-12. Description of strategies to reduce the environmental impact of packaging throughout its lifecycle

- .57 The registrant shall discuss its strategies to reduce the environmental impact of packaging throughout its lifecycle, such as reducing packaging weight and volume for a given application or using alternative materials, including those that are recycled, recyclable, reusable, and/or compostable.
- .58 The registrant shall discuss the circumstances surrounding its use of recycled and renewable packaging, including, but not limited to, discussions of supply availability, consumer preferences, and packaging durability requirements.
- .59 The registrant shall discuss the circumstances surrounding its use of packaging that is recyclable and compostable, including, but not limited to, discussions of regulations, packaging end-of-life commitments, consumer demand, and packaging durability.
- .60 Relevant disclosure may include, but is not limited to, discussion of the following:
- Implementation of EN 13428 or ISO 18602, which include criteria for minimization of packaging weight and optimization to the amount needed for safety, hygiene, and consumer acceptance of the packed product.
 - Implementation of EN 13430 or ISO 18604, which include criteria for recyclable packaging.
 - Implementation of EN 13432, ISO 14855-1:2005, ASTM D6400, or ASTM D6868, which include criteria for packaging recoverable through biodegradation and composting.
 - Implementation of ISO 14021, which includes criteria for renewable and recycled material content claims.
 - Performance on the [Global Protocol on Packaging Sustainability 2.0](#) metrics for Packaging Weight and Optimization and/or Assessment and Minimization of Substances Hazardous to the Environment.

.61 The registrant should, where relevant, discuss any packaging-related targets and performance against those targets. Examples of such targets include, but are not limited to:

- Reduction in packaging footprints
- Reduction in packaging weight either in total or on a per-unit basis
- Increasing recycled, recyclable, reusable, renewable, and/or compostable content

.62 The registrant may choose to discuss its use of Life Cycle Assessment (LCA) analysis in the context of its approach to environmental impact reduction and maximization of product efficiency, including weight reduction and transportation efficiency.

- When discussing improvements to the environmental efficiency of packaging products, improvements should be discussed in terms of LCA functional unit service parameters (i.e., time, extent, and quality of function).

Additional References

[EPA Waste Hierarchy](#)

[Summary of the EPA Municipal Solid Waste Program](#)

Environmental & Social Impacts of Ingredient Supply Chains

Description

Environmental and social impacts can occur within non-alcoholic beverage companies' ingredient supply chains. Companies rely on numerous ingredients that are highly susceptible to price volatility, largely due to environmental factors such as shifting weather patterns, droughts, and crop disease. As the impacts of climate change and water scarcity continue to increase in frequency and severity, the price and availability of these key ingredients are likely to become increasingly unstable. Furthermore, the environmental impacts caused by supplying these ingredients, including pollution, soil erosion, and deforestation, are likely to lead to additional price volatility. The potential for supply shortages or disruptions due to social considerations, including labor violations, child labor, fair wages, and food shortages, present further risk to a company's long-term ability to source key materials and ingredients. Companies that proactively implement programs to address these risks through active management, measurement, and engagement with key suppliers and farmers can build more resilient supply chains. These companies could limit the price volatility of key ingredients and increase their availability while improving brand reputation, leading to increased market share and reduced costs.

Accounting Metrics

CN0201-13. Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress

- .63 The registrant shall disclose the percentage, by value in U.S. dollars, of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress.
- The scope of disclosure excludes water that is withdrawn at company-owned or -operated facilities
- .64 The scope of disclosure includes the registrant's tier-1 suppliers, where:
- Tier-1 suppliers are defined as suppliers that transact directly with the registrant for food ingredients.
- .65 The percentage is calculated as the total cost, in U.S. dollars, of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress divided by the total cost of beverage ingredients sourced.
- .66 Using the WRI Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), the registrant shall analyze all of its known sources for water risks and identify sources that are in a location with High (40–80%) or Extremely High (>80%) Baseline Water Stress.
- .67 The scope of disclosure includes all tier-1 suppliers. Should the registrant be unable to identify or collect data pertaining to all tier-1 suppliers, the registrant shall disclose the percentage of ingredients for which source region and water risks are unknown.

CN0201-14. Suppliers' social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate

.68 The registrant shall disclose its suppliers' conformance with external social and environmental audit standards or internally developed supplier code(s) of conduct, based on the number of non-conformances identified.

- The registrant may limit its disclosure to those suppliers that, in aggregate, account for 80 percent or more of its supplier sourcing that is directly related to manufacturing.

.69 The registrant shall calculate and disclose the major non-conformance rate as the total number of priority non-conformances identified in the supply chain divided by the number of facilities audited.

- Major non-conformances are the highest severity of non-conformance and require escalation by auditors. Major non-conformances confirm the presence of underage child workers (below the legal age for work or apprenticeship), forced labor, health and safety issues that can cause immediate danger to life or serious injury, and environmental practices that can cause serious and immediate harm to the community. Major non-conformance includes material breach or systemic breaking of code requirement or law. Issues representing an immediate danger must be corrected as soon as practical, but not longer than 90 days after discovery.
- Major non-conformances may also be referred to as critical or priority non-conformances.

.70 The registrant shall calculate and disclose the minor non-conformance rate as the total number of minor non-conformances identified in the supply chain divided by the number of facilities audited.

- A minor non-conformance by itself doesn't indicate a systemic problem with the management system. It is typically an isolated or random incident and represents a low risk to workers and the environment.

.71 The registrant shall calculate and disclose its corrective action rate for major non-conformances as the number of corrective action plans completed within 60 days to address major non-conformances divided by the total number of major non-conformances that have been identified.

.72 The registrant shall calculate and disclose its corrective action rate for minor non-conformances as the number of corrective action plans completed within 90 days to address minor non-conformances divided by the total number of minor non-conformances that have been identified.

.73 A corrective action is defined as the implementation of practices or systems to eliminate any non-conformance and ensure there will be no reoccurrence of the non-conformance, and verification that the corrective action has taken place.

.74 The registrant shall disclose the standards to which it has measured social and environmental responsibility audit compliance.

- For internally developed supplier code(s) of conduct, the registrant shall disclose the public location where such code(s) can be viewed.

CN0201-15. List of priority beverage ingredients and discussion of sourcing risks due to environmental and social considerations

.75 The registrant shall identify any beverage ingredients that are a priority to the registrant's business, where:

- Priority beverage ingredients are defined as the five ingredients that constitute the largest beverage ingredient expense (excluding water) and/or those ingredients that have otherwise been identified by the registrant as essential to its products or as having significant environmental or social risks.

.76 The registrant shall discuss its strategic approach to managing the environmental and social risks that arise from its priority beverage ingredients, where:

- Environmental risks include, but are not limited to, effects of drought and climate change on ingredient prices, reputational damage due to deforestation, and other risks resulting from the environmental impacts associated with the registrant's supply chain.
- Social risks include, but are not limited to, effects of workers' rights on productivity, reputational damage due to human rights issues, and other risks resulting from the social impacts associated with the registrant's supply chain.
- The scope of disclosure should focus on beverage ingredients that are sourced from directly contracted growers or through producer supply agreements, or that are procured through other means.

.77 The registrant should identify which beverage ingredients present risks to its operations, the risks that are represented, and the strategies the registrant uses to mitigate such risks.

.78 For environmental risks, relevant strategies to discuss include the diversification of suppliers, supplier training programs on environmental best management practices, expenditures on R&D for alternative and substitute crops, and audits or certifications of suppliers' environmental practices.

.79 For social risks, relevant strategies to discuss include supplier training programs on agrochemical application, engagement with suppliers on labor and human rights issues, and maintenance of a supply chain code of conduct.

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SUSTAINABILITY ACCOUNTING STANDARD
CONSUMPTION I SECTOR

ALCOHOLIC BEVERAGES

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0202

Prepared by the
Sustainability Accounting Standards Board®

June 2015
Provisional Standard

ALCOHOLIC BEVERAGES

Sustainability Accounting Standard

About SASB

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

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INTRODUCTION

Purpose & Structure

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

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

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company’s specific operating context— for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 -. 32¹ and referenced in AT 701², as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

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. A majority of industry revenue is generated outside of the U.S., and many of the industry’s largest companies are headquartered in foreign countries. 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.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#ftn.at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Material Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Disclosure Topics

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

- Energy Management
- Water Management
- Responsible Drinking & Marketing
- Packaging Lifecycle Management
- Environmental & Social Impacts of Ingredient Supply Chains

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICs industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

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

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

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

effect on the registrant's financial condition or results of operation is not reasonably likely to occur.

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis-

For purposes of comparability and usability, that companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

c. Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Material Sustainability Topics

For each sustainability topic included in the Alcoholic Beverages industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

Such data—termed "activity metrics"—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions

⁸ See US GAAP consolidation rules (Section 810).

(e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Volume of products sold	Quantitative	Millions of hectoliters	CN0201-A
Number of production facilities	Quantitative	Number	CN0201-B
Total fleet road miles traveled	Quantitative	Miles	CN0201-C

Units of Measure

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

Uncertainty

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

Estimates

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

Timing

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

Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	Total energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CN0202-01
Water Management	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0202-02
	Discussion of water management risks and description of management strategies and practices to mitigate those risks	Discussion and Analysis	n/a	CN0202-03
Responsible Drinking & Marketing	Number of advertising impressions, percentage made on individuals above the legal drinking age	Quantitative	Number, Percentage (%)	CN0202-04
	Notices of violations received for non-conformance with industry and regulatory marketing and/or labeling codes ¹⁰	Quantitative	Number	CN0202-05
	Amount of legal and regulatory fines and settlements associated with labeling and/or marketing practices ¹¹	Quantitative	U.S. Dollars (\$)	CN0202-06
	Description of efforts to promote responsible consumption of alcohol	Discussion and Analysis	n/a	CN0202-07
Packaging Lifecycle Management	(1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable	Quantitative	Metric tons (t), Percentage (%)	CN0202-08
	Description of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	CN0202-09
Environmental & Social Impacts of Ingredient Supply Chains	Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by spend	CN0202-10
	Suppliers' social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate, Percentage (%)	CN0202-11
	List of priority beverage ingredients and discussion of sourcing risks due to environmental and social considerations	Discussion & Analysis	n/a	CN0202-12

¹⁰ Note to **CN0202-05**—Disclosure shall include discussion of notices of violation that resulted in an enforcement action(s), excluding fines and settlements as disclosed in CN0202-06.

¹¹ Note to **CN0202-06**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Energy Management

Description

Companies in the Alcoholic Beverages industry rely on both purchased electricity and fuel as critical inputs for value creation. Fossil fuel and electrical energy consumption can contribute to environmental impacts, including climate change and pollution. These impacts have the potential to affect the value of companies in this industry as regulations of greenhouse gas (GHG) emissions and new incentives for energy efficiency and renewable energy could lead to increased price volatility for fossil fuels and conventional electricity while making alternative sources cost-competitive. Companies that manage their overall energy use through increased efficiency and use of alternative energy sources can increase profitability by lowering expenses and reducing risk.

Accounting Metrics

CN0202-01. Total energy consumed, percentage grid electricity, percentage renewable

- .01 The registrant shall disclose total energy consumption from all sources as an aggregate figure in gigajoules or their multiples.
- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
 - The scope includes only energy consumed by entities owned or controlled by the organization.
 - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
- .02 In calculating energy consumption from fuels and biofuels, the registrant shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).
- .03 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- .04 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.
- .05 The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.
- For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
 - For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.

- The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.¹²
- Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, consistent with EPA [definitions](#), such as geothermal, wind, solar, hydro, and biomass.

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

- Energy from hydro sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.
- Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered “eligible renewables” according to the Green-e Energy National Standard Version 2.5 (2014), and materials that are eligible for a state Renewable Portfolio Standard.

.07 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kWh to gigajoules (for energy data including electricity from solar or wind energy).

¹² SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid.

Water Management

Description

Water management relates to a company's direct water usage and the exposure of its operations to water-scarce regions. Companies in the Alcoholic Beverages industry use a large amount of water in their operations, as they combine water with raw ingredients to create finished alcoholic products. Because alcoholic beverage companies rely heavily on access to a large volume of clean water and water stress is increasing in different regions globally, companies may be exposed to supply disruptions that could significantly impact operations and add to costs. Companies operating in water-stressed regions that fail to address local water concerns may face further risk of losing their social license to operate. Improving water management through increased efficiency and recycling, particularly in regions with baseline water stress, can lead to lower operating costs, reduced risk, and higher intangible asset value.

Accounting Metrics

CN0202-02. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

.08 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:

- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.

.09 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources, where:

- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
- Water obtained from a water utility in compliance with U.S. [National Primary Drinking Water Regulations](#) can be assumed to meet the definition of fresh water.

.10 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:

- Water that evaporates during withdrawal, usage, and discharge;
- Water that is directly or indirectly incorporated into the registrant's product or service; and
- Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

.11 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).

- .12 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- .13 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

CN0202-03. Discussion of water management risks and description of management strategies and practices to mitigate those risks

- .14 The registrant shall discuss how it manages risks associated with water withdrawals and water consumption.
- .15 The registrant shall discuss, if applicable, risks to the availability of adequate, clean water resources.
- Relevant context to provide includes, but is not limited to:
 - Environmental constraints, such as how risks vary by withdrawal sources (e.g., wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or water utilities), operations in water-stressed regions, drought, interannual or seasonal variability, or risks due to the impact of climate change.
 - External constraints, such as changes in water costs, stakeholder perceptions and concerns related to water withdrawals (such as those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions from regulation, or constraints on the registrant's ability to obtain and retain water rights or permits.
 - How risks may vary by withdrawal source, including wetlands, rivers, lakes, oceans, ground water, rainwater, and municipal water supplies or supply from other water utilities.
- .16 The registrant should include a discussion of the potential implications that these risks may have on its operations and the timeline over which such risks are expected to manifest.
- .17 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:
- Any water management targets it has set, and an analysis of performance against those targets.
 - Water management targets can include water management goals that the registrant sees as a priority to manage its risks and opportunities associated with water withdrawal and/or consumption.
 - Targets can include, but are not limited to, those associated with reducing water withdrawals and reducing water consumption.
 - The scope of its strategy, plans or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
 - The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.

.18 For water management targets, the registrant shall additionally disclose:

- The percentage reduction from the base year;
 - The base year is the first year against which water management targets are evaluated toward the achievement of the target.
- Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target;
- The timelines for the water management activities, including the start year, the target year, and the base year. Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year; and
- The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as recycling and closed-loop systems
 - Use of water-saving equipment
 - Product innovations such as redesigning a product to include less water within it
 - Process innovations, including using less water in the manufacturing of a product
 - Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
 - Collaborations or programs in place with the community or other organizations

.19 Disclosure of strategies, plans, and targets shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.

.20 The registrant shall discuss if its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy consumption, and greenhouse gas (GHG) emissions, and why the registrant chose these practices despite lifecycle tradeoffs.

Additional Resources

GRI-Global Reporting Initiative (GRI G4)
CDP 2015 Water Questionnaire
CEO Water Mandate
Global Water Footprint Assessment Standard
Ceres Aqua Gauge Framework

Responsible Drinking & Marketing

Description

The irresponsible consumption of alcoholic beverages can lead to negative social externalities such as drunk driving, addiction, public health issues, underage drinking, and even death. Every year, irresponsible alcohol consumption contributes to millions of deaths worldwide, a large portion of which includes underage youth and young adults. The harmful use of alcohol is a growing concern, particularly in developing countries that do not have laws to protect against alcohol's detrimental effects. Many companies and organizations are recognizing risks to society as well as company operations if the harmful use of alcohol is not addressed. Alcoholic beverage companies may be forced to internalize the costs of these social externalities through taxes, lawsuits, or reputational harm, which can have a material impact on operations and financial results. Failing to properly manage social externalities may lead to further unfavorable regulation and erode the industry's social license to operate. Through education, engagement, community partnerships, and responsible marketing, particularly to underage individuals, companies can address and mitigate many of the social externalities associated with alcohol misuse. Companies that effectively manage this issue can reduce the likelihood of extraordinary expenses, improve market share, and decrease liabilities.

Accounting Metrics

CN0202-04. Number of advertising impressions, percentage made on individuals above the legal drinking age

.21 The registrant shall disclose the total number of advertising impressions made, where:

- An advertising impression is a measure of the number of times an advertisement is seen, heard, watched, or read.

.22 The scope includes advertising impressions made through media, including print, electronic, broadcast, and digital media, consistent with the scope of media provided by the Beer, Wine and Spirits Producers' Commitments to Reduce Harmful Drinking (Commitments).

.23 The registrant shall disclose the percentage of advertising impressions that were made on individuals at or above the legal drinking age, where:

- Legal drinking age is the minimum age established by local law at which a person can purchase alcoholic beverages.
- In countries where no legal minimum age for the consumption of alcohol exists, the "age of majority" shall be used to determine impressions made on individuals at or above the legal drinking age, consistent with the International Center for Alcohol Policies Industry Views on Beverage Alcohol Advertising and Marketing, with Special Reference to Young People, available [here](#).

.24 The percentage is calculated as the total number of advertising impressions made on individuals at or above the legal drinking age divided by the total number of advertising impressions made.

.25 The registrant shall disclose the estimation methods used to calculate the number of advertising impressions made, including its method for collecting such data. Where reasonable estimation methods include, but are not limited to:

- Gross rating points and target ratios to determine impressions in television, radio, and print advertising.
- Total number of ads viewed and audience demographics for electronic and digital media.
- Expected audience size, audience demographics, and recall measures for embedded advertisements that appear across different media.

CN0202-05. Notices of violations received for non-conformance with industry and regulatory marketing and/or labeling codes

.26 The registrant shall disclose the number of notices it received that substantiate a violation of labeling, marketing industry, and/or regulatory code(s), statute(s), or other requirement(s), where:

- A marketing and/or labeling-related non-conformance, consistent with the United States Federal Alcohol Administration Act (Title 27, Chapter 8) and the Alcoholic Beverage Labeling Act (Title 27, Chapter 8), includes product labels that are misbranded, lack appropriate government warnings, disparage competitors, and use deceptive or otherwise misleading acts.
- Non-conformance with industry codes includes complaints relating to the placement and content of product labeling and marketing that are found to be in violation of industry codes upon third-party review.

.27 The scope of disclosure includes notices of violations received due to non-conformance with both laws and industry self-regulations, including the following:

- The Federal Alcohol Administration Act (Title 27, Chapter 8)
- The Alcoholic Beverage Labeling Act (Title 27, Chapter 8)
- The Advertising Standards Authority (a database of rulings is available [here](#))
- The Distilled Spirits Council of the United States (a listing of rulings is available [here](#))
- The Alcohol Beverage Advertising Code (a database of rulings is available [here](#))
- The Portman Group (a listing of rulings is available [here](#))
- Any other national or international legal regulation or industry self-regulation that the registrant is subject to.

.28 The registrant may disclose any other non-conformances with internal code(s) of practice on marketing and/or labeling.

Note to **CN0202-05.**

.29 The registrant shall discuss notices of violation that resulted in an enforcement action. Enforcement actions include, but are not limited to, injunction(s), detainment of products(s), and cease and desist orders levied the Alcohol Tobacco Tax and Trade Bureau (TTB) or foreign equivalents.

- Legal and regulatory fines and settlements are excluded from the scope of discussion and shall be disclosed in CN0202-06.

.30 For such enforcement actions, the registrant should provide:

- Description and cause of the enforcement action
- The cost to remedy the issue (in U.S. dollars)
- Corrective actions
- Any other significant outcomes (e.g., legal proceedings, fines, or settlements)

CN0202-06. Amount of legal and regulatory fines and settlements associated with labeling and/or marketing practices

.31 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with marketing and/or labeling practices, such as those related to enforcement of U.S. laws and regulations on nutrient content claims, health claims, other unfair or deceptive claims, and/or misbranded labeling, including violations of the United States Federal Alcohol Administration Act (Title 27, Chapter 8) and the Alcoholic Beverage Labeling Act (Title 27, Chapter 8), among others.

.32 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to **CN0202-06.**

.33 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., nutrient content claims, health claims, misbranded labeling, etc.) of fines and settlements.

.34 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in practices, management, codes, products, or training.

CN0202-07. Description of efforts to promote responsible consumption of alcohol

.35 The registrant shall discuss the following aspects of its efforts to promote the responsible consumption of alcohol:

- The scope of its efforts, such as whether strategies, plans, and/or engagement targets pertain differently to different business units, geographies, or beverage products.

- Whether strategies, plans, and/or engagement targets are related to or associated with a code, strategy, or commitment (e.g., The WHO Global Strategy to Reduce the Harmful Use of Alcohol or the Beer, Wine and Spirits Producers' Commitments) as promulgated by an industry, non-governmental, governmental, or intergovernmental organization.
 - The activities and investments required to achieve the plans, and any risks or limiting factors that might affect achievement of the plans and/or targets.
- .36 For purpose of this disclosure, engagement shall be defined as being established through direct face-to-face contact, remote learning, and other forums that allow for a dialogue between the registrant and the individuals engaged, consistent with KPI 2c from the Beer, Wine and Spirits Producers' Commitments.
- .37 Relevant programs to discuss may include, but are not limited to, education of parents, youth, and retailers on the effects and repercussions of underage drinking; efforts to educate consumers and retailers about the consequences of drinking and driving and engage them in measures to halt such behaviors; and programs that inform consumers and other relevant parties about the health and social effects of binge and chronic drinking abuse.
- .38 The registrant shall disclose any targets it has for engagement of the population through responsible drinking programs and provide an analysis of performance against those targets, including:
- The markets within the scope of the engagement plan(s);
 - The types of responsible drinking program(s) used, including, but not limited to, programs that are delivered through advertisements, in-person consumer engagement, or in-person retailer engagement;
 - The subject focus(es) of responsible drinking program(s), such as reduction of underage drinking, drinking and driving, and binge drinking or over-consumption; and
 - The timelines for the engagement plans, including the start year and the target year.
- .39 Disclosure shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.

Packaging Lifecycle Management

Description

Packaging materials represent a significant cost to companies in the Alcoholic Beverages industry. Although many alcoholic beverage companies do not manufacture their own bottles and packaging, they face the reputational risks associated with the negative externalities that their products' containers can create over their lifecycle. Companies are also directly impacted by legislation regarding end-of-life management of beverage containers. Alcoholic beverage companies therefore have an incentive to work with packaging manufacturers to improve the environmental characteristics of their products. In the design phase, materials choice can help drive consumer demand, reduce environmental impacts, and mitigate risks associated with end-of-life regulation. Furthermore, efforts to reduce the amount of materials used in packaging can reduce transportation costs, exposure to supply and price volatility, and the amount of virgin materials extracted. In the end-of-life phase, take-back and recycling programs and partnerships can pre-empt regulation, help achieve cost savings, and reduce environmental impact. Companies that effectively manage this issue can improve profitability and reduce cost of capital.

Accounting Metrics

CN0201-08. (1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable

.41 The registrant shall disclose the total weight of packaging purchased by the registrant, in metric tons, where:

- Packaging includes any material containing the registrant's product or otherwise accompanying the product, as well as secondary materials used by the registrant for shipping and distribution of products. This includes:
 - Primary packaging that is designed to come into direct contact with the product; and
 - Secondary packaging that is designed to contain one or more primary packages together with any protective materials, where required.
 - The scope excludes tertiary packaging that is designed to contain one or more articles or packages, or bulk material, for the purposes of transport, handling and/or distribution. Tertiary packaging is also known as "distribution" or "transport" packaging

.42 The registrant shall disclose the percentage of packaging (by weight) made from recycled and/or renewable materials.

- Recycled content is defined, consistent with definitions in ISO 14021:1999, "Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling)," as the portion, by mass, of recycled or recovered material in a product or packaging, where only pre-consumer and post-consumer materials shall be considered as recycled content, and where:
 - Recycled material is defined as material that has been reprocessed from recovered (or reclaimed) material by means of a manufacturing process and made into a final product or a component for incorporation into a product.

- Recovered material is defined as material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered (or reclaimed) as a material input, in lieu of new primary material, for a recycling or manufacturing process.
- Pre-consumer material is defined as material that has been diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap that are generated in a process and are capable of being reclaimed within the same process that generated them.
- Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- Renewable resources are defined, consistent with the [Global Protocol on Packaging Sustainability 2.0](#), as resources that are composed of biomass from a living source and are replenished at a rate equal to or greater than the rate of depletion, where:
 - Biomass is defined as a material of biological origin, excluding materials embedded in geological formations or transformed to fossilized material and excluding peat. This includes organic material (both living and dead) from above and below ground, such as trees, crops, grasses, tree litter, algae, animals, and waste of biological origin (e.g., manure), consistent with the [Global Protocol on Packaging Sustainability 2.0](#).

.43 The percentage is calculated as the total weight of packaging made from recycled and/or renewable materials divided by the total weight of all packaging used by the registrant.

- For packaging materials that contain both recycled and virgin parts, or which are made from both renewable and nonrenewable resources, the registrant shall classify a portion of the material as recycled or renewable based on an estimate of the weight of each portion.

.44 The registrant shall disclose the percentage of packaging (by weight) that is recyclable and/or compostable, where:

- For purpose of this disclosure, recyclable material includes those materials that are reusable, where:
 - “Recyclable” is defined as a product or packaging that can be diverted from the waste stream through available processes and programs and can be collected, processed, and returned to use in the form of raw materials or products, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”
 - “Reusable” is defined as a product or packaging that has been conceived and designed to accomplish, within its lifecycle, a certain number of trips, rotations, or uses for the same purpose for which it was conceived, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”

- “Compostable” is defined as that which undergoes degradation by biological processes during composting to yield CO₂, water, inorganic compounds, and biomass at a rate consistent with other known compostable materials and that leaves no visible, distinguishable, or toxic residue. Compostable plastics are further defined by ASTM Standard D6400, 2004, “Standard Specification for Compostable Plastics.”

- .45 The percentage is calculated as the total weight of recyclable and/or compostable packaging divided by the total weight of all packaging.
- .46 The registrant should disclose (1) the total weight of packaging sourced, (2) the percentage made from recycled or renewable materials, and (3) the percentage that is recyclable or compostable for each major packaging substrate (e.g., wood fiber, glass, metal, and petroleum-based).

CN0201-09. Description of strategies to reduce the environmental impact of packaging throughout its lifecycle

- .47 The registrant shall discuss its strategies to reduce the environmental impact of packaging throughout its lifecycle, such as reducing packaging weight and volume for a given application or using alternative materials, including those that are recycled, recyclable, reusable, and/or compostable.
- .48 The registrant shall discuss the circumstances surrounding its use of recycled and renewable packaging, including, but not limited to, discussions of supply availability, consumer preferences, and packaging durability requirements.
- .49 The registrant shall discuss the circumstances surrounding its use of packaging that is recyclable and compostable, including, but not limited to, discussions of regulations, packaging end-of-life commitments, consumer demand, and packaging durability.
- .50 Relevant disclosure may include, but is not limited to, discussion of the following:
- Implementation of EN 13428 or ISO 18602, which include criteria for minimization of packaging weight and optimization to the amount needed for safety, hygiene, and consumer acceptance of the packed product.
 - Implementation of EN 13430 or ISO 18604, which include criteria for recyclable packaging.
 - Implementation of EN 13432, ISO14855-1:2005, ASTM D6400, or ASTM D6868, which include criteria for packaging recoverable through biodegradation and composting.
 - Implementation of ISO 14021, which includes criteria for renewable and recycled material content claims.
 - Performance on the [Global Protocol on Packaging Sustainability 2.0](#) metrics for Packaging Weight and Optimization and/or Assessment and Minimization of Substances Hazardous to the Environment.
- .51 The registrant should, where relevant, discuss any packaging-related targets and performance against those targets. Examples of such targets include, but are not limited to:

- Reduction in packaging footprints
- Reduction in packaging weight either in total or on a per-unit basis
- Increasing recycled, recyclable, reusable, renewable, and/or compostable content

.52 The registrant may choose to discuss its use of Life Cycle Assessment (LCA) analysis in the context of its approach to environmental impact reduction and maximization of product efficiency, including weight reduction and transportation efficiency.

- When discussing improvements to the environmental efficiency of packaging products, improvements should be discussed in terms of LCA functional unit service parameters (i.e., time, extent, and quality of function).

Additional References

[EPA Waste Hierarchy](#)
[Summary of the EPA Municipal Solid Waste Program](#)

Environmental & Social Impacts of Ingredient Supply Chains

Description

Environmental and social impacts can occur within alcoholic beverage companies' ingredient supply chains. Companies rely on numerous ingredients that are highly susceptible to price volatility, largely due to environmental factors such as shifting weather patterns, droughts, and crop disease. As the impacts of climate change and water scarcity continue to increase in frequency and severity, the price and availability of these key ingredients are likely to become increasingly unstable. Furthermore, the environmental impacts caused by supplying these ingredients, including pollution, soil erosion, and deforestation, are likely to lead to additional price volatility. The potential for supply shortages or disruptions due to social considerations, including labor violations, child labor, fair wages, and food shortages, present further risk to a company's long-term ability to source key materials and ingredients. Companies that proactively implement programs to address these risks through active management, measurement, and engagement with key suppliers and farmers can build more resilient supply chains. These companies could limit the price volatility of key ingredients and increase their availability while improving brand reputation, leading to increased market share and reduced costs.

Accounting Metrics

CN0202-10. Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress

- .53 The registrant shall disclose the percentage, by value in U.S. dollars, of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress.
- The scope of disclosure excludes water that is withdrawn the registrant's owned or -operated facilities
- .54 The scope of disclosure includes the registrant's tier-1 suppliers, where:
- Tier-1 suppliers are defined as suppliers that transact directly with the registrant for food ingredients.
- .55 The percentage is calculated as the total cost, in U.S. dollars, of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress divided by the total cost of beverage ingredients sourced.
- .56 Using the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), the registrant shall analyze all of its known sources for water risks and identify sources that are in a location with High (40–80%) or Extremely High (>80%) Baseline Water Stress.
- .57 The scope of disclosure includes all tier-1 suppliers. Should the registrant be unable to identify or collect data pertaining to all tier-1 suppliers, the registrant shall disclose the percentage of ingredients for which source region and water risks are unknown.

CN0202-11. Suppliers' social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate

- .58 The registrant shall disclose its suppliers' conformance with external social and environmental audit standards or internally developed supplier code(s) of conduct, based on the number of non-conformances identified.
- The registrant may limit its disclosure to those suppliers that, in aggregate, account for 80 percent or more of its supplier sourcing that is directly related to manufacturing.
- .59 The registrant shall calculate and disclose the major non-conformance rate as the total number of priority non-conformances identified in the supply chain divided by the number of facilities audited.
- Major non-conformances are the highest severity of non-conformance and require escalation by auditors. Major non-conformances confirm the presence of underage child workers (below the legal age for work or apprenticeship), forced labor, health and safety issues that can cause immediate danger to life or serious injury, and environmental practices that can cause serious and immediate harm to the community. Major non-conformance includes material breach or systemic breaking of code requirement or law. Issues representing an immediate danger must be corrected as soon as practical, but not longer than 90 days after discovery.
 - Major non-conformances may also be referred to as critical or priority non-conformances.
- .60 The registrant shall calculate and disclose the minor non-conformance rate as the total number of minor non-conformances identified in the supply chain divided by the number of facilities audited.
- A minor non-conformance by itself doesn't indicate a systemic problem with the management system. It is typically an isolated or random incident and represents a low risk to workers and the environment.
- .61 The registrant shall calculate and disclose its corrective action rate for major non-conformances as the number of corrective action plans completed within 60 days to address major non-conformances divided by the total number of major non-conformances that have been identified.
- .62 The registrant shall calculate and disclose its corrective action rate for minor non-conformances as the number of corrective action plans completed within 90 days to address minor non-conformances divided by the total number of minor non-conformances that have been identified.
- .63 A corrective action is defined as the implementation of practices or systems to eliminate any non-conformance and ensure there will be no reoccurrence of the non-conformance, and verification that the corrective action has taken place.
- .64 The registrant shall disclose the standards to which it has measured social and environmental responsibility audit compliance.
- For internally developed supplier code(s) of conduct, the registrant shall disclose the public location where such code(s) can be viewed.

CN0202-12. List of priority beverage ingredients and discussion of sourcing risks due to environmental and social considerations

.65 The registrant shall identify any beverage ingredients that are a priority to the registrant's business, where:

- Priority beverage ingredients are defined as the five ingredients that constitute the largest beverage ingredient expense (excluding water) and/or those ingredients that have otherwise been identified by the registrant as essential to its products or as having significant environmental or social risks.

.66 The registrant shall discuss its strategic approach to managing the environmental and social risks that arise from its priority beverage ingredients, where:

- Environmental risks include, but are not limited to, effects of drought and climate change on ingredient prices, reputational damage due to deforestation, and other risks resulting from the environmental impacts associated with the registrant's supply chain.
- Social risks include, but are not limited to, effects of workers' rights on productivity, reputational damage due to human rights issues, and other risks resulting from the social impacts associated with the registrant's supply chain.
- The scope of disclosure should focus on beverage ingredients that are sourced from directly contracted growers or through producer supply agreements, or that are procured through other means.

.67 The registrant should identify which beverage ingredients present risks to its operations, the risks that are represented, and the strategies the registrant uses to mitigate such risks.

.68 For environmental risks, relevant strategies to discuss include the diversification of suppliers, supplier training programs on environmental best management practices, expenditures on R&D for alternative and substitute crops, and audits or certifications of suppliers' environmental practices.

.69 For social risks, relevant strategies to discuss include supplier training programs on agrochemical application, engagement with suppliers on labor and human rights issues, and maintenance of a supply chain code of conduct.

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Sustainability Accounting Standard

About SASB

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

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INTRODUCTION

Purpose & Structure

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

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

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company’s specific operating context— for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 -. 32¹ and referenced in AT 701², as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

Industry Description

The Tobacco industry is comprised of companies that farm tobacco and 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.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

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

- Public Health
- Marketing Practices

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICs industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment –prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

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

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

For purposes of comparability and usability, companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

c. Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Sustainability Topics

For each sustainability topic included in the Tobacco Products industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

Such data—termed "activity metrics"—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions

⁸ See US GAAP consolidation rules (Section 810).

(e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Cigarette sales volume	Quantitative	Number of cigarettes	CN0302-A
Smokeless tobacco sales volume	Quantitative	Number of cans	CN0302-B

Units of Measure

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

Uncertainty

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

Estimates

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

Timing

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

Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Public Health	Revenue from (1) smokeless tobacco products, (2) non-tobacco nicotine-delivery products, and (3) other "tobacco harm-reduction" products	Quantitative	U.S. Dollars (\$)	CN0302-01
	Description of the process to assess risks and opportunities associated with "tobacco harm-reduction" products	Discussion & Analysis	n/a	CN0302-02
Marketing Practices	Amount of legal and regulatory fines, settlements, and enforcement actions associated with marketing, labeling, and advertising ¹⁰	Quantitative	U.S. Dollars (\$)	CN0302-03
	Description of alignment of tobacco advertising, promotion, and sponsorship (TAPS) activities with Article 13 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC)	Discussion & Analysis	n/a	CN0302-04
	Description of alignment of tobacco labeling and packaging practices with Article 11 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC)	Discussion & Analysis	n/a	CN0302-05

¹⁰ Note to **CN0302-03**—Disclosure shall include a description of fines, settlements, and enforcement actions and corrective actions implemented in response to events.

Public Health

Description

Over the past several decades, as scientific studies have linked tobacco use to negative health effects, tobacco product manufacturers have faced lawsuits from individuals, governments, corporations, and other groups. In some cases, these have resulted in multibillion-dollar settlements. Health problems associated with tobacco include lung disease, cancer, and heart disease. Compounding these health risks is the fact that nicotine, found naturally in tobacco leaves, is an addictive substance. A growing public awareness of these risks has driven down tobacco use dramatically in many countries, including the United States. In an effort to address this, tobacco product manufacturers have created an array of “reduced-harm” products, such as e-cigarettes, aimed at minimizing the health impacts of tobacco use and accessing new markets. These products are not without their own health risks, but they are potentially less harmful than cigarettes. Future scientific studies could either prove or disprove these assertions of reduced harm, with continuing impacts on company value.

Accounting Metrics

CN0302-01. Revenue from (1) smokeless tobacco products, (2) non-tobacco nicotine-delivery products, and (3) other “tobacco harm-reduction” products

- .01 The registrant shall disclose its revenue, in U.S. dollars, from smokeless tobacco products such as chewing tobacco, moist snuff (i.e., dipping tobacco), dry snuff, and snus.
- .02 The registrant shall disclose its revenue, in U.S. dollars, from non-tobacco nicotine-delivery products such as electronic cigarettes, and pharmaceutical nicotine-replacement therapy products (e.g., gums, lozenges, patches, etc.).
- .03 The registrant shall disclose its revenue, in U.S. dollars, from other “tobacco harm-reduction” products, such as “heat-not-burn” cigarettes, which are intended to replace combustible tobacco products.

CN0302-02. Description of the process to assess risks and opportunities associated with “tobacco harm-reduction” products

- .04 The registrant shall discuss its process to evaluate risks and opportunities associated with “tobacco harm-reduction” products, where:
 - “Tobacco harm-reduction” products are defined as non-combustible nicotine-containing products such as smokeless tobacco, nicotine-replacement therapy products, and electronic cigarettes.
- .05 The registrant shall discuss the scope, success, and growth plans related to its current “tobacco harm-reduction” product portfolio and, where relevant, its plans to introduce future products and product categories.
- .06 The registrant shall discuss risks it faces related to its “tobacco harm-reduction” products, such as technical challenges with bringing the products to market, consumer and public perceptions of the safety of the products, regulatory risks, reputational risks, and other risks.
- .07 The registrant shall discuss opportunities presented by “tobacco harm-reduction” products such as the ability to capture new market segments and the ability to contribute to reducing cigarette smoking.

.08 Where relevant, the registrant shall discuss whether risks and opportunities associated with its “tobacco harm-reduction” products and strategies pertain differently to different product segments and/or geographic markets.

Marketing Practices

Description

Tobacco product marketing is heavily regulated, both in the U.S. and abroad. The World Health Organization's Framework Convention on Tobacco Control has led many countries to introduce new, stricter regulatory approaches. Many laws aim to prevent people from adopting tobacco use at a young age as well as ensuring transparent advertising about tobacco's health risks. The industry has faced costly legal battles related to the marketing and advertising of its products, including the Master Settlement Agreement (MSA) in the U.S., which changed the way tobacco products are marketed and mandated substantial annual payments to U.S. states. Marketing for new smokeless tobacco products and traditional tobacco products have to balance regulatory requirements with the need to reach new markets. Companies have differing degrees of exposure to international marketing and regulatory issues, depending on the geographic scope of operations.

Accounting Metrics

CN0302-03. Amount of legal and regulatory fines, settlements, and enforcement actions associated with marketing, labeling, and advertising

- .09 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with marketing, labeling, and advertising, including, but not limited to, those related to violations of the Tobacco Master Settlement Agreement, the Family Smoking Prevention and Tobacco Control Act, and the European Union Tobacco Advertising Directive.
- .10 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to CN0302-03

- .11 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., related to warning labels, advertising bans, promotion, sponsorship, etc.) of fines and settlements.
- .12 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.

CN0302-04. Description of alignment of tobacco advertising, promotion, and sponsorship (TAPS) activities with Article 13 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC)

- .13 The registrant shall describe the degree to which its tobacco advertising, promotion, and sponsorship (TAPS) practices are aligned with Article 13: Tobacco advertising, promotion, and sponsorship.
- .14 The registrant shall indicate in which direct TAPS activities it engages, where direct activities include, but are not limited to, advertising, promotion, and sponsorship in or on:
 - Print (newspapers and magazines);

- Radio and television (including broadcast, cable, and satellite);
- On-screen advertisements shown before feature films;
- Outdoor displays (including billboards and signage on transit vehicles and in transit stations);
- Point-of-sale advertising, signage, and product displays in retail stores; and
- The Internet.

.15 The registrant shall indicate in which indirect TAPS activities it engages, where indirect activities include, but are not limited to:

- Free distribution of tobacco and related products in the mail or through other means;
- Promotional discounts;
- Identifying non-tobacco goods and services with a tobacco brand name (i.e., “brand stretching”);
- Use of brand names of non-tobacco products for tobacco products (i.e., “brand sharing”);
- Placement of products and brand names in television, films, and other audiovisual entertainment products, including on the Internet; and
- Sponsored events, including “corporate social responsibility” programs.

.16 The registrant shall discuss the alignment of its marketing and labeling practices with Article 13 regardless of whether it is selling products in countries party to the FCTC, and regardless of whether it is meeting its legal obligations (insofar as they are less strict than FCTC Article 13).

.17 The scope of disclosure shall apply to the registrant’s practices globally. If the registrant employs materially different practices in different markets, it shall describe those differences.

CN0302-05. Description of alignment of tobacco labeling and packaging practices with Article 11 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC)

.18 The registrant shall describe the degree to which its packaging and labeling practices are aligned with Article 11: Packaging and labelling of tobacco products of the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC).

.19 The registrant shall indicate in which packaging and labeling practices it engages, including, but not limited to:

- Use of terms such as “low tar,” “light,” “ultra-light,” or “mild” or any other terms, descriptors, trademarks, figures, or signs that directly or indirectly imply that a particular tobacco product is less harmful than other tobacco products.
- Use of rotating, clear, large, visible, legible health warnings, covering no less than 30% of the product’s principal display areas, that have been approved by a competent national authority.

- .20 The registrant shall discuss the alignment of its marketing and labeling practices with Article 11 regardless of whether it is selling products in countries party to the FCTC, and regardless of whether it is meeting its legal obligations (insofar as they are less strict than Article 11).
- .21 The scope of disclosure shall apply to the registrant's practices globally. If the registrant employs materially different practices in different markets, it shall describe those differences.

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SUSTAINABILITY ACCOUNTING STANDARD
CONSUMPTION I SECTOR

HOUSEHOLD & PERSONAL PRODUCTS

Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0602

Prepared by the
Sustainability Accounting Standards Board®

June 2015
Provisional Standard

HOUSEHOLD & PERSONAL PRODUCTS

Sustainability Accounting Standard

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INTRODUCTION

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the Household & Personal Products industry.

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

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- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

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.

¹ http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#at_101_fn7

² <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

Guidance for Disclosure of Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Topics

For the Household & Personal Products industry, SASB has identified the following sustainability disclosure topics:

- Water Management
- Product Environmental, Health, and Safety Performance
- Packaging Lifecycle Management
- Environmental & Social Impacts of Palm Oil Supply Chain

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

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”^{3, 4}

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICs industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

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

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

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment –prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

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

³ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

⁴ C.F.R. 229.303(item 303)(a)(3)(ii).

effect on the registrant's financial condition or results of operation is not reasonably likely to occur.

3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management's Discussion and Analysis

For purposes of comparability and usability, companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled **"Sustainability Accounting Standards Disclosures."**⁵

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

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

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

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

c. Rule 12b-20

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

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

⁵ SEC [Release Nos. 33-8056; 34-45321; FR-61] [Commission Statement about Management's Discussion and Analysis of Financial Condition and Results of Operations](#): "We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing."

Guidance on Accounting for Sustainability Topics

For each sustainability topic included in the Household & Personal Products industry Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20⁶—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

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

Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),⁷ for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

⁶ SEC Rule 12b-20: "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading."

⁷ Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;⁸
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Use of Financial Data

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

Activity Metrics and Normalization

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

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

Such data—termed "activity metrics"—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions

⁸ See US GAAP consolidation rules (Section 810).

(e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.⁹

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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Units of products sold, total weight of products sold	Quantitative	Number, Metric tons (t)	CN0602-A
Number of manufacturing facilities	Quantitative	Number	CN0602-B

Units of Measure

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

Uncertainty

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

Estimates

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

Timing

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

⁹ *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

Limitations

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

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

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

Forward-looking Statements

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

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

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

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Water Management	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0602-01
	Discussion of water management risks and description of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	CN0602-02
Packaging Lifecycle Management	(1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable	Quantitative	Metric tons (t), Percentage (%)	CN0602-03
	Description of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	n/a	CN0602-04
Product Environmental, Health, and Safety Performance	Revenue from products that contain REACH substances of very high concern (SVHC)	Quantitative	U.S. Dollars (\$)	CN0602-05
	Revenue from products that contain substances on the California DTSC Candidate Chemicals List	Quantitative	U.S. Dollars (\$)	CN0602-06
	Discussion of process to identify and manage emerging materials and chemicals of concern	Discussion and Analysis	n/a	CN0602-07
	Revenue from products designed with green chemistry principles	Quantitative	U.S. Dollars (\$)	CN0602-08
Environmental & Social Impacts of Palm Oil Supply Chain	Amount of palm oil sourced, percentage certified through (1) Roundtable on Sustainable Palm Oil (RSPO) Book & Claim and Mass Balance systems and (2) RSPO Identity Preserved and Segregated systems	Quantitative	Metric tons (t), Percentage (%)	CN0602-09

Water Management

Description

Water is vital to the Household & Personal Products industry, both as a coolant in manufacturing processes and as a main input for many of the industry's products. Water is becoming a scarce resource around the world due to increasing consumption as a result of population growth, rapid urbanization, and reduced supplies due to drought and climate change. Many firms in this industry have operations in regions of the world that are facing water scarcity. Without careful planning, companies could face increased costs, or worse, lose access to water in these regions. Having rigorous checks in place to ensure a steady supply of water to all factories, as well as investing in technology to increase the efficiency of water use, will help firms in this industry keep a lower risk profile as water scarcity inevitably becomes a more pressing international issue.

Accounting Metrics

CN0601-01. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

.01 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:

- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.

.02 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources, where:

- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
- Water obtained from a water utility in compliance with U.S. [National Primary Drinking Water Regulations](#) can be assumed to meet the definition of fresh water.

.03 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:

- Water that evaporates during withdrawal, usage, and discharge;
- Water that is directly or indirectly incorporated into the registrant's product or service; and
- Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

- .04 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute’s (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).
- .05 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- .06 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

CN0602-02. Discussion of water management risks and description of strategies and practices to mitigate those risks

- .07 The registrant shall discuss its risks associated with water withdrawals, water consumption, and discharge of water to the environment and describe how it manages these risks.
- .08 The registrant shall discuss, where applicable, risks to the availability of adequate, clean water resources.
- Relevant information to provide includes, but is not limited to:
 - Environmental constraints, such as operating in water-stressed regions, drought, interannual or seasonal variability, and risks due to the impact of climate change.
 - External constraints, such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (e.g., those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (commercial and municipal), restrictions to withdrawals due to regulations, and the ability to obtain and retain water rights or permits.
 - How risks may vary by withdrawal source, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or supply from other water utilities.
- .09 The registrant shall discuss, where applicable, risks associated with its discharge of wastewater.
- Relevant information to provide includes, but is not limited to:
 - Environmental constraints, such as the ability to maintain compliance with regulations focused on the quality of effluent discharged to the environment, the ability to eliminate existing and emerging pollutants of concern, and the ability to maintain control over runoff and storm water discharges.
 - External constraints, such as increased liability and/or reputational risks, restrictions to discharges and/or increased operating costs due to regulation, stakeholder perceptions and concerns related to water discharges (e.g., those from local communities, non-governmental organizations, and regulatory agencies), and the ability to obtain discharge rights or permits.

- How risks may vary by discharges to different destinations, including wetlands, rivers, lakes, oceans, groundwater, rainwater, municipal water supplies, or other water utilities.
- .10 The registrant should include a discussion of the potential impacts that these risks may have on its operations and the timeline over which such risks are expected to manifest.
- Impacts may include, but are not limited to, those associated with costs, revenues, liabilities, continuity of operations, and reputation.
- .11 The registrant shall provide a description of its short-term and long-term strategy or plan to manage these risks, including the following, where relevant:
- Any water management targets it has set, and an analysis of performance against those targets.
 - Water management targets can include water management goals that the registrant prioritizes to manage its risks and opportunities associated with water withdrawal, consumption, or discharge.
 - Targets can include, but are not limited to, those associated with reducing water withdrawals, reducing water consumption, reducing water discharges, and improving the quality of wastewater discharges.
 - The scope of its strategy, plans, or targets, such as whether they pertain differently to different business units, geographies, or water-consuming operational processes.
 - The activities and investments required to achieve the plans and targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.
- .12 For water management targets, the registrant shall additionally disclose:
- The percentage reduction or improvements from the base year, where:
 - The base year is the first year against which water management targets are evaluated toward the achievement of the target.
 - Whether the target is absolute or intensity based, and the metric denominator if it is an intensity-based target.
 - The timelines for the water management plans, including the start year, the target year, and the base year.
 - The mechanism(s) for achieving the target, including:
 - Efficiency efforts, such as the use of water recycling and/or closed-loop systems
 - Product innovations such as redesigning products or services to require less water

- Process and equipment innovations, such as those that enable the use of less water in manufacturing or operations
 - Use of tools and technologies (e.g., the [World Wildlife Fund Water Risk Filter](#), [WRI/WBCSD Global Water Tool](#), and [Water Footprint Network Footprint Assessment Tool](#)) to analyze water use, risk, and opportunities
 - Collaborations or programs in place with the community or other organizations
- .13 Disclosure of strategies, plans, and targets shall be limited to activities that were ongoing (active) or reached completion during the fiscal year.
- .14 The registrant shall discuss if its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy consumption, and greenhouse gas (GHG) emissions, and why the registrant chose these practices despite lifecycle tradeoffs.

Additional Resources

GRI-Global Reporting Initiative (GRI G4)
 CDP 2015 Water Questionnaire
 CEO Water Mandate
 Global Water Footprint Assessment Standard
 Ceres Aqua Gauge Framework

Packaging Lifecycle Management

Description

The Household & Personal Products industry uses a large amount of materials for product packaging, which often constitutes a significant portion of companies' expenses. In addition, packaging design, particularly packaging weight, has a direct impact on transportation expenses, which can be significant. At the same time, the industry is facing pressure from both consumers and large retail outlets to address the environmental characteristics of its packaging, as material extraction and waste contribute to environmental externalities. The sustainability performance of packaging depends largely on the type, use, and ultimate disposal of materials. However, companies that effectively manage the sustainability characteristics of their product packaging—including light-weighting of materials, the use of recycled content and recyclable materials, and the use of sustainably sourced materials—may be better positioned to capture shifting consumer demand and avoid (or mitigate the impacts of) regulation related to extended producer responsibility. By managing the sustainability of product packaging, companies can also potentially reduce input and transportation costs.

Accounting Metrics

CN0602-03. (1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable

.15 The registrant shall disclose the total weight of packaging purchased by the registrant, in metric tons, where:

- Packaging includes any material containing the registrant's product or otherwise accompanying the product, as well as secondary materials used by the registrant for shipping and distribution of products. This includes:
 - Primary packaging that is designed to come into direct contact with the product; and
 - Secondary packaging that is designed to contain one or more primary packages together with any protective materials, where required.
 - The scope excludes tertiary packaging that is designed to contain one or more articles or packages, or bulk material, for the purposes of transport, handling and/or distribution. Tertiary packaging is also known as "distribution" or "transport" packaging

.16 The registrant shall disclose the percentage of packaging (by weight) made from recycled and/or renewable materials.

- Recycled content is defined, consistent with definitions in ISO 14021:1999, "Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling)," as the portion, by mass, of recycled or recovered material in a product or packaging, where only pre-consumer and post-consumer materials shall be considered as recycled content, and where:
 - Recycled material is defined as material that has been reprocessed from recovered (or reclaimed) material by means of a manufacturing process and made into a final product or a component for incorporation into a product.

- Recovered material is defined as material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered (or reclaimed) as a material input, in lieu of new primary material, for a recycling or manufacturing process.
- Pre-consumer material is defined as material that has been diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap that are generated in a process and are capable of being reclaimed within the same process that generated them.
- Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- Renewable resources are defined, consistent with the [Global Protocol on Packaging Sustainability 2.0](#), as resources that are composed of biomass from a living source and are replenished at a rate equal to or greater than the rate of depletion, where:
 - Biomass is defined as a material of biological origin, excluding materials embedded in geological formations or transformed to fossilized material and excluding peat. This includes organic material (both living and dead) from above and below ground, such as trees, crops, grasses, tree litter, algae, animals, and waste of biological origin (e.g., manure), consistent with the [Global Protocol on Packaging Sustainability 2.0](#).

.17 The percentage is calculated as the total weight of packaging made from recycled and/or renewable materials divided by the total weight of all packaging used by the registrant.

- For packaging materials that contain both recycled and virgin parts, or which are made from both renewable and nonrenewable resources, the registrant shall classify a portion of the material as recycled or renewable based on an estimate of the weight of each portion.

.18 The registrant shall disclose the percentage of packaging (by weight) that is recyclable, reusable, and/or compostable, where:

- For purpose of this disclosure, recyclable material includes those materials that are reusable, where:
 - “Recyclable” is defined as a product or packaging that can be diverted from the waste stream through available processes and programs and can be collected, processed, and returned to use in the form of raw materials or products, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”
 - “Reusable” is defined as a product or packaging that has been conceived and designed to accomplish, within its lifecycle, a certain number of trips, rotations, or uses for the same purpose for which it was conceived, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling).”

- “Compostable” is defined as that which undergoes degradation by biological processes during composting to yield CO₂, water, inorganic compounds, and biomass at a rate consistent with other known compostable materials and that leaves no visible, distinguishable, or toxic residue. Compostable plastics are further defined by ASTM Standard D6400, 2004, “Standard Specification for Compostable Plastics.”
- .19 The percentage is calculated as the total weight of recyclable and/or compostable packaging divided by the total weight of all packaging.
- .20 The registrant should disclose (1) the total weight of packaging sourced, (2) the percentage made from recycled or renewable materials, and (3) the percentage that is recyclable or compostable for each major packaging substrate (e.g., wood fiber, glass, metal, and petroleum-based).

CN0602-04. Description of strategies to reduce the environmental impact of packaging throughout its lifecycle

- .21 The registrant shall discuss its strategies to reduce the environmental impact of packaging throughout its lifecycle, such as reducing packaging weight and volume for a given application or using alternative materials, including those that are recycled, recyclable, reusable, and/or compostable.
- .22 The registrant shall discuss the circumstances surrounding its use of recycled and renewable packaging, including, but not limited to, discussions of supply availability, consumer preferences, and packaging durability requirements.
- .23 The registrant shall discuss the circumstances surrounding its use of packaging that is recyclable and compostable, including, but not limited to, discussions of regulations, packaging end-of-life commitments, consumer demand, and packaging durability.
- .24 Relevant disclosure may include, but is not limited to, discussion of the following:
- Implementation of EN 13428 or ISO 18602, which include criteria for minimization of packaging weight and optimization to the amount needed for safety, hygiene, and consumer acceptance of the packed product.
 - Implementation of EN 13430 or ISO 18604, which include criteria for recyclable packaging.
 - Implementation of EN 13432, ISO14855-1:2005, ASTM D6400, or ASTM D6868, which include criteria for packaging recoverable through biodegradation and composting.
 - Implementation of ISO 14021, which includes criteria for renewable and recycled material content claims.
 - Performance on the Global Protocol on Packaging Sustainability 2.0 metrics for Packaging Weight and Optimization and/or Assessment and Minimization of Substances Hazardous to the Environment.

.25 The registrant should, where relevant, discuss any packaging-related targets and performance against those targets. Examples of such targets include, but are not limited to:

- Reduction in packaging footprints
- Reduction in packaging weight either in total or on a per-unit basis
- Increasing recycled, recyclable, reusable, renewable, and/or compostable content

.26 The registrant may choose to discuss its use of Life Cycle Assessment (LCA) analysis in the context of its approach to environmental impact reduction and maximization of product efficiency, including weight reduction and transportation efficiency.

- When discussing improvements to the environmental efficiency of packaging products, improvements should be discussed in terms of LCA functional unit service parameters (i.e., time, extent, and quality of function).

Additional References

EPA [Waste Hierarchy](#)

Summary of the [EPA Municipal Solid Waste Program](#)

Product Environmental, Health, and Safety Performance

Description

The Household & Personal Products industry is facing growing consumer and regulatory pressure over the use of chemicals of concern, which have been linked to negative environmental externalities and impacts on human health. Some of these chemicals include persistent, bioaccumulative, and toxic (PBT) substances and carcinogenic, mutagen, or teratogenic chemicals, all of which are under increased threat of legislation. Isolating and determining causal channels for negative health and environmental impacts is difficult, which means there is often a significant lag between a product's introduction to the market and the point at which regulation and/or public opinion causes companies in the industry to reformulate. Directives in the E.U. and legislation in the U.S. place restrictions on or suggest alternatives to the use of harmful chemicals within the industry. Separately, the Food & Drug Administration in the U.S. may secure greater regulatory power over chemicals used by the cosmetics industry, which would very likely result in higher costs for the Household & Personal Products industry. Large retailers have implemented programs to ban chemicals of concern in the products they sell, which is placing greater pressure on the industry. Companies that are able to anticipate the changing regulatory landscape and implement stricter processes and testing will have a competitive advantage. Early adopters of innovations in green chemistry and the reduction of chemicals of concern may improve profitability by being better able to capture customer demand and avoiding regulatory burdens.

Accounting Metrics

CN0602-05. Revenue from products that contain REACH substances of very high concern (SVHC)

- .27 The registrant shall calculate the percentage as the revenue, in U.S. dollars, from products that contain substances listed on the Candidate List of Substances of Very High Concern for Authorisation (hereafter "SVHC Candidate List") promulgated by the European Chemicals Agency (ECHA) divided by total revenue from products.
- .28 A product shall be considered to contain a substance on the SVHC Candidate List if the concentration of the substance in the product is above 0.1% (w/w).
 - The scope of disclosure includes products that contain these substances, regardless of whether the product is subject to E.U. regulation.
- .29 The SVHC Candidate List, which is associated with Regulation (EC) No 1907/2006 – REACH, may be accessed [here](#).
- .30 Products that contain substances that have exemptions from authorization under REACH may be considered excluded from the scope of this disclosure.

CN0602-06. Revenue from products that contain substances on the California DTSC Candidate Chemicals List

- .31 The registrant shall disclose the amount of revenue from products that contain substances listed on the California Department of Toxic Substances Control's (DTSC) Candidate Chemicals List (accessible [here](#)).

- Candidate chemicals are defined, according to the California Code of Regulations, Title 22, § 69502, as chemicals that exhibit a “hazard trait and/or an environmental or toxicological endpoint” and are either: (a) found on one or more of the authoritative lists specified in section 69502.2(a) of the regulation; or (b) listed by DTSC using the criteria specified in section 69502.2(b).
- The scope of disclosure includes, but is not limited to, chemicals and products currently under regulation due to inclusion on the Priority Products list (the initial list of Priority Products may be accessed [here](#)).
 - Updates to the Candidate Chemicals List, made per the California Code of Regulations, Title 22, § 69502.3, shall constitute updates to this standard.
- The scope of disclosure includes all products (and their chemical constituents) sold by the registrant, regardless of whether they are subject to the California Safe Consumer Products Regulations (i.e., regardless of whether they have been “placed into the stream of commerce in California”).

.32 A product shall be considered to contain a substance on the California DTSC Candidate List if the concentration of the substance in the product is above 0.1% (w/w).

.33 The registrant may choose to discuss whether it has conducted an “Alternatives Assessment” as described by DTSC regulation and, if so, its results.

CN0602-07. Discussion of process to identify and manage emerging materials and chemicals of concern

.34 The registrant shall discuss its strategy and approach to managing the use of materials, chemicals, and substances that may be of human health and/or environmental concern to consumers, customers (e.g., retailers and commercial buyers), regulators, and/or others (e.g., non-governmental organizations, scientific researchers, etc.).

- “Materials, chemicals, and substances” includes individual compounds, classes of chemicals, and categories of chemicals.

.35 At a minimum, the registrant shall discuss how it assesses materials and chemicals for hazard characteristics and risk traits, including the operational processes it employs for these assessments and other actions it takes to manage hazards and risks.

.36 Relevant operational processes may include, but are not limited to, product formulation and design, product safety testing, risk characterization, prioritization of product risks, product labeling, product declarations (e.g., material safety data sheets), sharing of information on product risks, and management of new information on product risks.

.37 Relevant actions to discuss may include the exclusion of substances (e.g., use of banned substances lists), use of material substitution assessments, use of tools and screening methods (e.g., GreenScreen® For Safer Chemicals or CleanGredients® Data Verification), or any other methods that consider the usage of materials, chemicals, and substances of concern.

.38 The registrant shall discuss the use of chemicals listed in the “Safer Consumer Products DRAFT Priority Product Work Plan, Three Year Work Plan | 2015-2017, April 2015” as potential candidate chemicals in Beauty, Personal Care, and Hygiene products, including:

- Aldehydes such as formaldehyde that are used as cross-linking agents, modifiers, and preservatives;
- Alkyl phenols and ethoxylates (used as surfactants);
- Azo dyes, coal tars, lead, and lead acetate (used as colorants, dyes, and pigments);
- Phthalates (used as emulsifiers and plasticizers); and
- Triclosan (used as an antimicrobial).

.39 The registrant should discuss its use of chemicals that appear on California’s Proposition 65 list of carcinogens and reproductive toxicants, Washington State’s List of Chemicals of High Concern to Children, and/or other equivalent state and country regulations regarding chemicals of concern.

.40 The registrant should discuss the use of the emerging materials and chemicals of concern which may include, but are not limited to:

- Preservatives such as parabens (PHBA), benzophenones, and other phenols used as preservatives;
- Antimicrobials such as triclocarban and nanosilver;
- Toluene;
- Polyvinyl chloride; and
- Polyethylene microbeads.

CN0602-08. Revenue from products designed with green chemistry principles

.41 The registrant shall disclose the amount of its revenue that is from products designed with one or more green chemistry principles, where “green chemistry principles” are defined by [12 Principles of Green Chemistry](#).

.42 Relevant products include:

- Products that contain “safer” chemicals while maintaining function and efficacy, thereby meeting Green Chemistry Principle 4, “Design benign chemicals.”
- Products that are biodegradable, in that they break down into innocuous degradation products and do not persist in the environment, thereby meeting Green Chemistry Principle 10, “Design for degradation.”
- Products that can be shown to meet the following Green Chemistry Principles: 1 (“Prevent waste”), 2 (“Atom efficiency”), 3 (“Less hazardous chemical syntheses”), 5 (“Benign solvents and auxiliaries”), 6 (“Design for energy efficiency”), 7 (“Use of renewable feedstocks”), 8 (“Reduce chemical

derivatives”), 9 (“Use catalysts, not stoichiometric reagents”), 11 (“Real-time analysis for pollution prevention”), or 12 (“Inherently benign chemistry for accident prevention”).

- .43 A product shall be considered to have been designed with green chemistry principles if documentation shows that tools, frameworks, standards, and/or certifications were used to incorporate one or more green chemistry principles into the design, materials selection, manufacturing processes, use-phase, and/or end-of-life disposal of the product.
- .44 Specific green chemistry efforts may include products that are designed according to the American Chemistry Society (ACS) Green Chemistry Initiative (GCI) Formulator’s Roundtable [guidance](#), the EPA Design for Environment Program, and/or third-party certification such as Cradle-to-Cradle certification.

Environmental & Social Impacts of Palm Oil Supply Chain

Description

Palm oil has rapidly risen in popularity over the last two decades as a cheap input for a wide range of goods in this industry, including cleaning products, candles, and cosmetics. If not sourced responsibly, palm oil materials contribute to environmental and social externalities that can present reputational and regulatory risks for companies. Palm oil harvesting in specific regions of the world can contribute to deforestation, GHG emissions, and other environmental and social problems. Companies in this industry are exposed to the risk of supply chain disruptions, input price increases, and reputational damage associated with environmental and social externalities from palm oil sourcing. Companies face pressure to track and responsibly source palm oil. Additionally, they face pressure to ensure minimum standards for working conditions in the supply chain, as the production of palm oil is often associated with fair labor issues. Implementing sourcing standards can contribute to reducing risks, as can innovations at the product-design phase to reduce dependence on controversial materials such as palm oil.

Accounting Metrics

CN0602-09. Amount of palm oil sourced, percentage certified through (1) Roundtable on Sustainable Palm Oil (RSPO) Book & Claim and Mass Balance systems and (2) RSPO Identity Preserved and Segregated systems

- .45 The registrant shall disclose the amount, in metric tons, of palm oil that it sourced during the fiscal year.
- .46 The registrant shall disclose the percentage, on a weight basis, of palm oil it sourced that has been third-party certified to bear a Roundtable on Sustainable Palm Oil (RSPO) claim under the “Book & Claim” (BC) or “Mass Balance” (MB) supply chain mechanism, where:
- The percentage shall be calculated as the weight, in metric tons, of BC and MB RSPO-certified palm oil sourced by the registrant divided by the total weight, in metric tons, of palm oil sourced by the registrant.
 - BC palm oil is represented by certificates purchased through the GreenPalm certificate-trading program.
- .47 The registrant shall disclose the percentage, on a weight basis, of palm oil it sourced that has been third-party certified to bear an RSPO claim under an “Identity Preserved” (IP) or “Segregated” (SG) supply chain mechanism, where:
- The percentage shall be calculated as the weight, in metric tons, of IP and SG RSPO-certified palm oil sourced by the registrant divided by the total weight, in metric tons, of palm oil sourced by the registrant.
- .48 The registrant may choose to discuss other strategies, approaches, and mechanisms used to manage risks and opportunities associated with the environmental and social impacts of palm oil sourcing.

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