



SUSTAINABILITY ACCOUNTING STANDARD  
CONSUMPTION I SECTOR

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# AGRICULTURAL PRODUCTS

## Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0101  
Prepared by the  
Sustainability Accounting Standards Board®

January 2015

Exposure Draft Standard for Public Comment

# 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.

### About this Standard

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

The public comment period lasts for 90 days, beginning on Wednesday, January 14th, 2015, and ending on Tuesday, April 14th, 2015. The Standard is subject to change thereafter.

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

### SUSTAINABILITY ACCOUNTING STANDARDS BOARD

75 Broadway, Suite 202  
San Francisco, CA 94111  
415.830.9220  
[info@sasb.org](mailto:info@sasb.org)

[www.sasb.org](http://www.sasb.org)

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# INTRODUCTION

## Purpose & Structure

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

SASB Standards are comprised of **(1) disclosure guidance and (2) accounting standards for 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 Forms 10-Q, S-1, and 8-K.

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

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

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

## Industry Description

The Agricultural Products industry is engaged in growing, processing, trading, and distributing all vegetables and fruits and producing and milling agricultural commodities including all grains, sugar, consumable oils, maize, soybeans, animal feed, and ethanol. The industry operates globally, sourcing and distributing agricultural products from around the world. Agricultural products are sold directly to consumers as well as to businesses for use in consumer and industrial products. Industry participants have differing degrees of vertical integration into agriculture products, with some companies operating farms, processing facilities, and storage and distribution networks.

# 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 Management
- Water Withdrawal
- Land Use & Ecological Impacts
- Food Safety
- Fair Labor Practices & Workforce Health & Safety
- Climate Change Impacts on Crop Yields
- Environmental & Social Impacts of Ingredient Supply Chains
- Political Spending

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- **Legal proceedings**—Item 103 of Regulation S-K requires companies to describe briefly any material pending or contemplated legal proceedings. Instructions to Item 103 provide specific disclosure requirements for administrative or judicial proceedings arising from laws and regulations that target discharge of materials into the environment that are or 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/>.

# Guidance on Accounting of Material Sustainability Topics

For sustainability topics in the Agricultural Products industry, SASB identifies accounting metrics.

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

As appropriate—and consistent with Rule 12b-204<sup>3</sup>—for each sustainability topic, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

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

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

## Users of the SASB Standards

The SASB Standards are intended for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),<sup>4</sup> for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Nevertheless, disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

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<sup>3</sup> SEC Rule 12b-20: “In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading.”

<sup>4</sup> Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

# Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities in which the registrant has a controlling interest and therefore are consolidated for financial reporting purposes (controlling interest is generally defined as ownership of 50% or more of voting shares);<sup>5</sup>
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand its performance with respect to sustainability issues (typically this disclosure would be limited to risks and opportunities associated with these entities).

## Reporting Format

### Activity Metrics and Normalization

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

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

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

Activity metrics disclosed should:

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

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<sup>5</sup>See US GAAP consolidation rules (Section 810).



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

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Production by major product line <sup>6</sup>	Quantitative	Metric Tons	CN0101-A
Number of processing facilities	Quantitative	Number	CN0101-B
Total land area under active production	Quantitative	Hectares	CN0101-C
Amount of agricultural raw materials sourced externally <sup>7</sup>	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 imperfectness of third-party reporting systems or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.

## Estimates

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

## Timing

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

## Limitations

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

<sup>6</sup> Major product lines are those which accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, consistent with 17 CFR 229.101.

<sup>7</sup> The amount of agricultural raw materials sourced externally should be calculated on a cost of goods sold (COGS) basis where agricultural raw materials are defined by CN0101-16.92.

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."

## Assurance

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

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

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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
<b>Greenhouse Gas Emissions</b>	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO <sub>2</sub> -e	CN0101-01
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, including emissions reduction targets and an analysis of performance against those targets	Discussion & Analysis	n/a	CN0101-02
<b>Energy Management</b>	Total energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules, Percentage (%)	CN0101-03
<b>Water Withdrawal</b>	Total fresh water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m <sup>3</sup> ), Percentage (%)	CN0101-04
<b>Land Use &amp; Ecological Impacts</b>	Amount of fertilizer consumption by: (1) nitrogen-based, (2) phosphate-based, and (3) potassium-based fertilizers	Quantitative	Metric tons (t)	CN0101-05
	Number of incidents of non-compliance with water quality permits, standards, and regulations	Quantitative	Number	CN0101-06
	Volume of wastewater generated, percentage (1) reused and (2) discharged to the environment <sup>8</sup>	Quantitative	Cubic meters (m <sup>3</sup> ), Percentage (%)	CN0101-07
	Amount of pesticide consumption, by hazard level	Quantitative	Metric tons (t)	CN0101-08
<b>Food Safety</b>	Global Food Safety Initiative 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	CN0101-09
	Number of recalls issued, total amount of food product recalled <sup>9</sup>	Quantitative	Number, Metric tons (t)	CN0101-10

<sup>8</sup> Note to **CN0101-07**— Disclosure shall include a description of wastewater treatment methods used and the reason for choosing such methods.

<sup>9</sup> Note to **CN0101-10**—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
<b>Fair Labor Practices &amp; Workforce Health &amp; Safety</b>	Amount of production certified for fair labor practices	Quantitative	Metric tons (t)	CN0101-11
	(1) Total Recordable Injury Rate (TRIR), (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full-time employees and (b) seasonal and migrant employees	Quantitative	Rate	CN0101-12
	Description of efforts to assess, monitor, and reduce exposure of full-time and migrant/seasonal employees to pesticides	Discussion & Analysis	n/a	CN0101-13
<b>Climate Change Impacts on Crop Yields</b>	Amount of crop losses, percentage offset through financial mechanisms	Quantitative	U.S. Dollars (\$), Percentage (%)	CN0101-14
	Identification of priority crops and discussion of risks and/or opportunities presented by climate change	Discussion & Analysis	n/a	CN0101-15
<b>Environmental &amp; Social Impacts of Ingredient Supply Chains</b>	Percentage of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by spend	CN0101-16
	Percentage of agricultural raw materials that are certified to a third-party environmental and/or social standard	Quantitative	Percentage (%) by spend	CN0101-17
	Description of management strategy for environmental and social risks arising from contract growers and commodity sourcing	Discussion & Analysis	n/a	CN0101-18
<b>Political Spending</b>	Amount of political campaign spending, lobbying expenditures, and contributions to tax-exempt groups including trade associations	Quantitative	U.S. Dollars (\$)	CN0101-19
	Five largest political, lobbying, or tax-exempt group expenditures	Quantitative	U.S. Dollars (\$)	CN0101-20

# Greenhouse Gas Emissions

## Description

The Agricultural Products industry faces regulatory risks associated with its direct contribution to greenhouse gas (GHG) emissions. Agriculture is a significant source of global GHG emissions, and unlike other GHG-intensive industries such as manufacturing and energy production, which burn large quantities of fossil fuels and generate carbon dioxide (CO<sub>2</sub>), the majority of emissions in crop cultivation stem from land management practices, including fertilizer application, land clearing, and crop burning. The monitoring and control of non-point emissions such as these is challenging. Additionally, less significant sources of GHG emissions in the industry include energy use for processing agricultural products, operating machinery such as irrigation pumps, and milling processes. Proposals for regulations that target emissions from crop cultivation and processing sources have been set forth in the U.S. and internationally. These actions suggest that future GHG regulations are likely to affect crop cultivation and processing facilities within the Agricultural Products industry.

## 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, and sulfur hexafluoride).

- Emissions of all gases shall be disclosed in metric tons of carbon dioxide equivalents (CO<sub>2</sub>-e), calculated in accordance with published global warming potential (GWP) factors. To date, the preferred source for GWP factors is the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995).
- Gross emissions are GHGs emitted to the atmosphere before accounting for any GHG reduction activities, offsets, or other adjustments for activities in the reporting period that have reduced or compensated for emissions.
- Disclosure corresponds to section CC8.2 of the Carbon Disclosure Project (CDP) Questionnaire and section 4.25 of the Climate Disclosure Standards Board (CDSB) *Climate Change Reporting Framework* (CCRF).

.02 Scope 1 emissions are defined by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD) in [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#), Revised Edition, March 2004 (hereafter, the "GHG Protocol").

- These emissions include direct emissions of GHGs from stationary or mobile sources that include, but are not limited to, equipment, production facilities, office buildings, and transportation (i.e., marine, road, or rail).

.03 GHG emission data shall be consolidated according to the approach with which the registrant consolidates its financial reporting data, which is generally aligned with:

- The Financial Control approach defined by the GHG Protocol and referenced by the [CDP Guidance for companies reporting on climate change on behalf of investors & supply chain members 2013](#) (hereafter, the “CDP Guidance”).<sup>10</sup>
- The approach detailed in Section 4.23, “Organizational boundary setting for GHG emissions reporting,” of the CDSB *Climate Change Reporting Framework* (CCRF).<sup>11</sup>

.04 The underlying technical approach to data collection, analysis, and disclosure shall be consistent with the CDP Guidance.

- The registrant shall consider the CDP Guidance as a normative reference, thus any updates made year-on-year shall be considered updates to this guidance.

.05 The registrant should discuss any change in its emissions from the previous fiscal year, such as if the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.

.06 In the case that current reporting of GHG emissions to the CDP or other entity (e.g., a national regulatory disclosure program) differs in terms of the scope and consolidation approach used, the registrant may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.

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

**CN0101-02. Description of long-term and short-term strategy or plan to manage Scope 1 emissions, including emissions reduction targets and an analysis of performance against those targets**

.08 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.

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

<sup>10</sup> “An organization has financial control over an operation if it has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities. Generally an organization has financial control over an operation for GHG accounting purposes if the operation is treated as a group company or subsidiary for the purposes of financial consolidation.” *Guidance for companies reporting on climate change on behalf of investors & supply chain members 2013*, p. 95.

<sup>11</sup> This is based on the requirements of International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) on consolidation and equity accounting and is consistent with how information relating to entities within a group or interest in joint ventures/associates would be included on consolidated financial statements, as per the CDSB *Climate Change Reporting Framework*.

- 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 energy efficiency efforts, energy source diversification, carbon capture and storage, etc.
- .10 Where necessary, the registrant shall discuss any circumstances in which the target base year emissions have been, or may be, recalculated retrospectively or where the target base year has been reset.
- .11 Disclosure corresponds with:
- CDSB Section 4, "Management actions."<sup>12</sup>
  - CDP questionnaire CC3, "Targets and Initiatives."
- .12 Relevant initiatives to discuss may include, but are not limited to, precision fertilizer application, reducing changes in land use, implementing minimum till practices, and avoided drainage of wetlands, consistent with the [IPCC Fourth Assessment Report: Climate Change 2007: Working Group III: Mitigation of Climate Change](#).

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<sup>12</sup> 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.

# Energy Management

## Description

Agricultural products companies are reliant on purchased energy and fuel as a primary input for value creation in processing, milling, and operating farm equipment. Electricity consumption can indirectly contribute to climate change and air pollution through combustion of fossil fuels at the utility level. The cost of grid electricity may increase to offset carbon pricing regulation of utilities, presenting price volatility risks to large consumers of purchased electricity. With manufacturing plants located in multiple regions, the likelihood and impact of energy price volatility will vary depending on the exact location of facilities. Energy management, understood as the way in which a company manages its overall purchased energy usage, reliance on different types of energy, and ability to access alternative sources of energy, is becoming increasingly material for the industry. Agriculture producers have begun implementing energy conservation practices to save costs on increasing energy prices.

## Accounting Metrics

### CN0101-03. 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 (except for fleet vehicles), purchased electricity, and heating, cooling, and steam energy.
  - The scope of disclosure excludes fuel consumption by fleet vehicles.
- .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.
- 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 the control or influence of the registrant is excluded from disclosure.<sup>13</sup>
- .17 Renewable energy is defined as energy from sources that are capable of being replenished in a short time through ecological cycles, such as geothermal, wind, solar, hydro, and biomass.
- For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:
    - Energy from hydro sources that are certified by the Low Impact Hydropower Institute.
    - Energy from biomass sources is limited to sources that are considered “eligible renewables” according to the Green-e Energy National Standard Version 2.4 or that are eligible for a state Renewable Portfolio Standard.
- .18 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kWh to gigajoules (including for electricity from solar or wind energy).

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<sup>13</sup> SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid, and that a premium has been paid by the purchaser of the REC to enable generation of renewable energy beyond any renewable energy already in the grid mix, absent the market for RECs.

# Water Withdrawal

## Description

The Agricultural Products industry is highly reliant on water for crop cultivation and product processing. Individual company risk is determined by the degree of vertical integration, the type of crops 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. Direct water consumption introduces operating risks due to reduced availability, higher water prices, and competition with other water users. These factors are exacerbated by inefficient irrigation practices and climate change, which raises the probability of extreme weather events, including droughts and floods, which can adversely affect crop yields.

## Accounting Metrics

### **CN0101-04. Total fresh water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress**

- .19 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from fresh water sources for use in operations.
- 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 can be assumed to meet the definition of fresh water.<sup>14</sup>
- .20 The registrant shall disclose the total amount of water by volume (in thousands of cubic meters) that was recycled during the fiscal year. This figure shall include the amount recycled in closed-loop and open-loop systems.
- Any volume of water reused multiple times shall be counted as recycled each time it is recycled and reused.
- .21 Using the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct (publicly available online [here](#)), the registrant shall analyze all of its operations for water risks and identify facilities that are in a location with High (40–80%) or Extremely High (>80%) Baseline Water Stress. Water withdrawn in locations with High or Extremely High Baseline Water Stress shall be indicated as a percentage of the total water withdrawn.
- .22 For the registrant's operations that are not sub-metered in a way that allows direct measurement of water use, estimation is acceptable and shall be disclosed as such.

<sup>14</sup> <http://water.epa.gov/drink/contaminants/secondarystandards.cfm>  
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# Land Use & Ecological Impacts

## Description

Land and ecosystems are key natural resources for the Agricultural Products industry. The vast global 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. The primary channels of ecological impacts are species habitat degradation and biodiversity loss resulting from the use of agrochemicals (including pesticides and fertilizers), monoculture cultivation, forest fragmentation, and land clearing. Water, air, and soil pollution resulting from the use of agrochemicals also presents a regulatory risk due to potential bans on the use of pesticides or restrictions on land use in ecologically sensitive areas. Furthermore, species habitat degradation and biodiversity loss due to agricultural practices can have an adverse impact on crop yields. Agricultural products companies can mitigate operating risks from these factors by implementing cultivation and production practices that account for harmful environmental externalities.

## Accounting Metrics

### **CN0101-05. Amount of fertilizer consumption by: (1) nitrogen-based, (2) phosphate-based, and (3) potassium-based fertilizers**

.23 The registrant shall disclose the amount of fertilizer (in metric tons) that was consumed for use in operations.

- The amount of fertilizer consumed should 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.

.24 The registrant shall disclose fertilizer consumption by the amount (in metric tons) of primary nutrient type, according to the Association of American Plant Food Control Officials (AAPFCO) Product Label Guide (available [here](#)). Substances include:

- Nitrogen-based (including, but not limited to,  $\text{NH}_4$  and  $\text{NO}_3$ ), 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  $\text{P}_2\text{O}_5$
- Potassium-based (including, but not limited to,  $\text{K}_2\text{SO}_4$  and KCl), reported as  $\text{K}_2\text{O}$

.25 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](#)).

#### **CN0101-06. Number of incidents of non-compliance with water quality permits, standards, and regulations**

- .26 The registrant shall disclose the total number of instances of non-compliance with water quality permits, standards, and regulations, including violations of technology-based standards and exceedances of quality-based standards.
- .27 The scope of disclosure includes incidents related to statutory permits and regulations or voluntary agreements, standards, or guidelines, such as total maximum daily load (TMDL) exceedances.
- .28 Voluntary standards include, among others, the registrant's own water quality standards (parameters) or "effluent guidelines" from the International Finance Corporation's (IFC) General Environmental, Health, and Safety Guidelines, or where outlined in the following industry-specific processing facility guidelines:
- Sugar Manufacturing
  - Vegetable Oil Manufacturing
- .29 Typical parameters of concern include total nitrogen, total phosphorous, biological oxygen demand (BOD), chemical oxygen demand (COD), total coliform bacteria, biocides, total suspended solids (TSS), and pH.
- .30 An incident of non-compliance shall be disclosed regardless of whether it resulted in an enforcement action (e.g., fine, warning letter, etc.).
- .31 Violations, regardless of their measurement methodology or frequency, shall be disclosed. These include:
- For continuous discharges, limitations, standards, and prohibitions that are generally expressed as maximum daily, weekly average, and monthly averages.
  - For non-continuous discharges, limitations that are generally expressed in terms of frequency, total mass, maximum rate of discharge, and mass or concentrations of specified pollutants.

#### **CN0101-07. Volume of wastewater generated, percentage (1) reused and (2) discharged to environment**

- .32 The volume of wastewater 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, ground water contamination, and effluents from processing facilities and other point sources.
- .33 The percentage reused shall be calculated as the volume of wastewater that was reused divided by the total volume of wastewater generated.
- .34 The percentage discharged to the environment shall be calculated as the volume of wastewater that was discharged to the environment divided by the total volume of wastewater generated.
- .35 The registrant should disclose the source (e.g., farm field operations or processing operations) from which its wastewater was generated, where:

- 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 through in-stream runoff gauges, edge-of-field monitoring, or estimations.

.36 For the registrant's operations that are not flowmetered in a way that allows direct measurement of wastewater generation, estimation is acceptable and shall be disclosed as such, where estimation methods 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 CN0101-07.**

.37 The registrant shall briefly describe treatment methods (e.g., mechanical, non-mechanical, or a combination) used for water discharged to the environment.

.38 The registrant shall describe the reasons for choosing such treatment methods. These may include, but are not limited to, the type of effluents being discharged, the environmental setting of the farm or facility, and the financial implications of developing such treatment methods.

**CN0101-08. Amount of pesticide consumption, by hazard level**

.39 The registrant shall disclose the amount of pesticides (in metric tons) consumed for use in operations.

- The amount of pesticides consumed should 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 should be considered as the weight of active ingredients in pesticide mixtures, where this 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.

.40 The registrant shall disclose pesticide consumption of active 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

.41 The registrant should discuss the calculation methodology for its pesticide consumption, such as whether data are from weight measurements or estimations.

.42 The registrant may also choose to disclose the amount pesticide ingredients consumed that are inert (other ingredients) and that are persistent, bioaccumulative, and toxic (PBT) or which are 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.

Notes

Additional References

USDA Natural Resources Conservation Services: [Edge of Field Monitoring](#)

International Journal of Sediment Research: [Nutrient Load Estimation Methods for Rivers](#)

# Food Safety

## Description

Agricultural products are sold directly to consumers in raw form (e.g., vegetables) or are further processed into a wide variety of processed foods. Maintaining product quality and safety is critical, as contamination by pathogens, chemicals, or spoilage presents serious human and animal health risks. Companies can be impacted through product recalls, damaged brand reputation, and increased regulatory scrutiny. Companies can proactively manage product safety by maintaining strong product quality and food safety performance in order to mitigate these risks and avoid costly recalls.

## Accounting Metrics

### **CN0101-09. 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**

- .43 The registrant shall disclose its conformance with GFSI-recognized food safety schemes based on the number of non-conformances that were identified during audits.
- .44 The scope of disclosure includes audit results from facilities that are owned and/or operated by the registrant.
- .45 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.
  - For schemes that contain both major and critical non-conformances, critical non-conformances shall be accounted for as major non-conformances.
- .46 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.
- .47 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, not 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.
- .48 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, but not 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.

.49 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.

.50 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 7<sup>th</sup> Edition Level 2
- IFS Food Standard Version 6
- BRC Global Standard for Food Safety Issue 6

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

**CN0101-10. Number of recalls issued, total amount of food product recalled**

.52 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 by the Food and Drug Administration (FDA) or foreign equivalent.

.53 The registrant shall disclose the total amount (in metric tons) of products recalled.

.54 Involuntary recalls are those required by government agencies (e.g., the FDA in the U.S. or the China Food and Drug Administration in China).

.55 A database of FDA-regulated recalls is available [here](#).

.56 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 CN0101-10.**

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



.59 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)

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# 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 can be adversely affected by workforce safety and labor issues. Injury statistics indicate that the industry has relatively high injury and fatality rates as compared to other manufacturing industries. Common hazards include falls, transportation accidents, heat-related injuries, asphyxiation, and machinery accidents. Furthermore, workers are exposed to substances in the workplace that can be harmful due to long-term exposure. These issues create regulatory risks, including violations of safety standards. The presence of migrant workers and children in farm work raises concerns over fair labor standards and child safety, and may lead to underreporting of accidents and safety abuses. Developing a strong internal safety and fair labor culture, including improved workforce training and incident reporting, can minimize or avoid negative consequences related to workforce safety and labor issues.

## Accounting Metrics

### CN0101-11. Amount of production certified for fair labor practices

.60 The registrant shall disclose the total amount, in metric tons, of its production that is certified for fair labor practices.

- 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.
  - Harmful child-labor practices include, but are not limited to, labor that is harmful to the child's health, development, and/or schooling.

.61 The registrant shall calculate the amount as the weight of its products produced on farms or processed at facilities that are certified for fair labor practices.

.62 The scope of disclosure shall include company-owned and -operated farms and processing facilities.

.63 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 in *de minimis* contains standards on the fair labor practices included in CN0101-09.52.

.64 The registrant should indicate to which standards its farms are certified.

**CN0101-12. (1) Total Recordable Injury Rate (TRIR), (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full-time employees and (b) seasonal and migrant employees**

.65 For registrants whose workforce is entirely U.S.-based, the registrant shall disclose its Total Recordable Injury Rate (TRIR) and fatality rate as calculated and reported in the Occupational Safety and Health Administration’s (OSHA) Form 300.

- OSHA guidelines provide details on 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.

.66 For registrants whose workforce includes non-U.S.-based employees, the registrant 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](#).

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

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

.68 The registrant shall disclose its TRIR, Fatality Rate, and NMFR for each of the following categories of employee:

- Direct, full time employees;
- Contract employees; and
- Seasonal and migrant employees.

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

- .70 Migrant employees are defined as individuals employed in a seasonal or other temporary nature who are required to be absent overnight from their permanent place of residence, in accordance with the DOL, but not to exclude employees with H2-A visas or the foreign equivalent.
- .71 The scope includes all employees, domestic and foreign.
- .72 Rates shall be calculated as: (statistic count / total hours worked)\*200,000.
- Where 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.

**CN0101-13. Description of efforts to assess, monitor, and reduce exposure of full-time and migrant/seasonal employees to pesticides**

- .73 The registrant shall discuss efforts to assess, monitor, and reduce exposure of employees to pesticides.
- 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.
- .74 The registrant shall describe its approach to managing both short-term (i.e., acute) exposure and prolonged (i.e., chronic) exposure.
- .75 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.
- .76 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
- .77 Seasonal employees are defined as individuals employed in a seasonal or other temporary nature 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.
- .78 Migrant employees are defined as individuals employed in a seasonal or other temporary nature, who are required to be absent overnight from their permanent place of residence, in accordance with the DOL definition, but not to exclude employees with H2-A visas or the foreign equivalent.
- .79 The registrant may discuss compliance with the EPA’s Agricultural Worker Protection Standard.
- .80 The scope of employees shall focus on farm employees, but should discuss other employees that handle pesticides as relevant.

# Climate Change Impacts on Crop Yields

## Description

Climate change presents a significant challenge to the Agricultural Products industry due to the migration of pests, changes in heat and rainfall patterns, and increases in the number and severity of extreme weather events, all of which can significantly influence crop yields. Research suggests that crop yields could be harmed by rising temperatures associated with climate change. To mitigate any such crop yield reduction, companies in this industry have introduced adaptation strategies, which range from implementing farm practices that promote crop resilience to investing in the development of crops that are tolerant to shifting climate patterns. Furthermore, global gridded crop models can be used to better understand climate risks to crops in various regions and hedging and crop insurance can be used to reduce financial losses. Additionally, non-vertically integrated firms that understand the sourcing risks associated with climate change may be able to make better-informed decisions as to where and how investments in capital infrastructure should be made.

## Accounting Metrics

### CN0101-14. Amount of crop losses, percentage offset through financial mechanisms

- .81 The registrant shall disclose the amount (in U.S. dollars) of crop losses related to climate and weather events that it has incurred.
- .82 The registrant shall calculate the amount of crop losses as the guaranteed yield value less the actual yield value.
- .83 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)
- .84 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.
- .85 The registrant should disclose the mechanism by which losses are offset.

**CN0101-15. Identification of priority crops and discussion of risks and/or opportunities presented by climate change**

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

- Priority crops are defined as those crops which are essential to the registrant's principal products, where principal products are those which accounted for 10 percent or more of consolidated revenue in any of the last three fiscal years, consistent with 17 CFR 229.101.

.87 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.

.88 The registrant shall discuss the risks and/or opportunities that are presented by climate change scenarios to its priority crops, 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 this would have on its priority crops.
- The timeline over which such risks and opportunities are expected to manifest.

.89 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](#)).

.90 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.

.91 Where relevant, the registrant shall discuss any climate change mitigation strategies under disclosure CN0101-02.

Notes

Additional References

FAO: [“Climate-Smart” Agriculture](#)

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# Environmental & Social Impacts of Ingredient Supply Chains

## Description

Depending on the degree of vertical integration, agricultural product companies source a significant portion of their inputs from farmers or other corporations. Managing sustainability risks, including environmental and social issues, within the supply chain 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 to climate change, increasing water scarcity, land management, fair labor practices, workforce health and safety, and environmental impacts of cultivation. Lower crop yields among suppliers could directly increase purchase costs, while purchasers associated with suppliers that perform poorly on environmental or social issues could face reputational damage. Companies should recognize these risks and proactively engage with key suppliers to implement sustainable agricultural practices and/or certifications.

## Accounting Metrics

### **CN0101-16. Percentage of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress**

- .92 The registrant shall disclose the percentage, on a cost of goods sold (COGS) basis, of agricultural raw materials sourced from regions with High or Extremely High Baseline Water Stress, where:
- Agricultural raw materials are defined as those raw materials such as food, feed, and biofuel ingredients that are sourced for use in the registrant's production operations.
- .93 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.
- .94 The percentage is calculated as the total cost of goods sold, 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.
- .95 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
- .96 For the registrant's sources that are unknown and cannot be directly measured, estimation is acceptable and shall be disclosed as such.

### **CN0101-17. Percentage of agricultural raw materials that are certified to a third-party environmental and/or social standard**

- .97 The registrant shall disclose the percentage, on a cost of goods sold (COGS) basis, of agricultural raw materials sourced to third-party environmental and/or social standards, where:



- The percentage shall be calculated as the COGS that are certified to a third party environmental and/or social standard, divided by total COGS.
- Agricultural raw materials are defined as those raw materials such as food, feed, and biofuel ingredients that are sourced for use in the registrants' production operations.
- Environmental standards include, but are not limited to, protection of primary forests, maintenance of surface and ground water 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 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.

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

.99 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

.100 The registrant should indicate to which standards its food supply is certified.

**CN0101-18. Description of management strategy for environmental and social risks arising from contract growers and commodity sourcing**

.101 The registrant shall discuss its strategic approach to managing its environmental and social risks arising from its contract growers and commodity sourcing practices, where:

- The scope of disclosure should focus on agricultural raw materials sourced from directly contracted growers or through producer supply agreements, or that are 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.

.102 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.

.103 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.

.104 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.

# Political Spending

## Description

Political spending and corporate lobbying can have positive short-term outcomes for the Agricultural Products industry and its businesses and shareholders, but policy decisions influenced by lobbying may also have negative impacts on society, the environment, and, in the long term, shareholder value, as social pressure may lead to over-protective regulations. In the Agricultural Products industry, corporate lobbying can influence crop prices and crop insurance subsidy policies that may be harmful to the environment. In some instances, government payments support overproduction, which may lead to environmental degradation through expanded acreage into marginal lands or more harmful intensive farming practices. As climate change could significantly impact the industry in the future through increased risk of crop loss, support for policies that affect or delay climate mitigation policy action could exacerbate this risk to agricultural operations.

## Accounting Metrics

### **CN0101-19. Amount of political campaign spending, lobbying expenditures, and contributions to tax-exempt groups including trade associations**

.105 The registrant shall disclose its total monetary contributions to political campaigns, lobbyists or lobbying organizations, and tax-exempt groups, including trade associations that aim to influence political campaigns or participate in political lobbying.

.106 The scope of disclosure includes the following:

- Political spending, 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(s) (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.

### **CN0101-20. Five largest political, lobbying, or tax-exempt group expenditures**

.107 The registrant shall disclose the recipients of its five largest contributions disclosed in CN0101-18, defined as the five largest amounts in aggregate during the fiscal year to an individual candidate, organization, ballot measure, or lobbying issue topic.

- .108 The registrant shall disclose the amount (in U.S. dollars) contributed to each individual, organization, ballot measure, or lobbying issue topic.
- .109 The registrant shall consider lobbying issue topics, at a minimum, to be general lobbying issue codes defined by The Lobbying Disclosure Act of 1995, but should include specific lobbying issues where available.

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