



**SASB
STANDARDS**

Now part of IFRS Foundation

Agricultural Products

Sustainability Accounting Standard

FOOD & BEVERAGE SECTOR

Sustainable Industry Classification System® (SICS®) FB-AG

Under Stewardship of the International Sustainability Standards Board

INDUSTRY STANDARD | VERSION 2023-12



IFRS®
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About the SASB Standards

As of August 2022, the International Sustainability Standards Board (ISSB) of the IFRS Foundation assumed responsibility for the SASB Standards. The ISSB has committed to maintain, enhance and evolve the SASB Standards and encourages preparers and investors to continue to use the SASB Standards.

IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* (IFRS S1) requires entities to refer to and consider the applicability of disclosure topics in the SASB Standards when identifying sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects. Similarly, IFRS S1 requires entities to refer to and consider the applicability of metrics in the SASB Standards when determining what information to disclose regarding sustainability-related risks and opportunities.

In June 2023, the ISSB amended climate-related topics and metrics in the SASB Standards to align them with the industry-based guidance accompanying IFRS S2 *Climate-related Disclosures*. In December 2023, the ISSB amended the non-climate-related topics and metrics in connection with the International Applicability of SASB Standards project.

Effective Date

This version 2023-12 of the Standard is effective for all entities for annual periods beginning or after January 1, 2025. Early adoption is permitted for all entities.

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INTRODUCTION

Overview of SASB Standards

The SASB Standards are a set of 77 industry-specific sustainability accounting standards (“SASB Standards” or “Industry Standards”), categorised pursuant to the [Sustainable Industry Classification System® \(SICS®\)](#).

SASB Standards include:

1. **Industry descriptions** – which are intended to help entities identify applicable industry guidance by describing the business models, associated activities and other common features that characterise participation in the industry.
2. **Disclosure topics** – which describe specific sustainability-related risks or opportunities associated with the activities conducted by entities within a particular industry.
3. **Metrics** – which accompany disclosure topics and are designed to, either individually or as part of a set, provide useful information regarding an entity’s performance for a specific disclosure topic.
4. **Technical protocols** – which provide guidance on definitions, scope, implementation and presentation of associated metrics.
5. **Activity metrics** – which quantify the scale of specific activities or operations by an entity and are intended for use in conjunction with the metrics referred to in point 3 to normalise data and facilitate comparison.

Entities using the SASB Standards as part of their implementation of ISSB Standards should consider the relevant ISSB application guidance.

For entities using the SASB Standards independently from ISSB Standards, the [SASB Standards Application Guidance](#) establishes guidance applicable to the use of all Industry Standards and is considered part of the Standards. Unless otherwise specified in the technical protocols contained in the Industry Standards, the guidance in the SASB Standards Application Guidance applies to the definitions, scope, implementation, compilation and presentation of the metrics in the Industry Standards.

Historically, the [SASB Conceptual Framework](#) set out the basic concepts, principles, definitions and objectives that guided the SASB Standards Board in its approach to setting standards for sustainability accounting.

Use of the Standards

SASB Standards are intended to aid entities in disclosing information about sustainability-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term. An entity determines which Industry Standard(s) and which disclosure topics are relevant to its business, and which associated metrics to report. In general, an entity should use the SASB Standard specific to its primary industry as identified in [SICS[®]](#). However, companies with substantial business in multiple SICS[®] industries should refer to and consider the applicability of the disclosure topics and associated metrics in additional SASB Standards.

The disclosure topics and associated metrics contained in this Standard have been identified as those that are likely to be useful to investors. However, the responsibility for making materiality judgements and determinations rests with the reporting entity.

Industry Description

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

SUSTAINABILITY DISCLOSURE TOPICS & METRICS

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tonnes (t) CO ₂ -e	FB-AG-110a.1
	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	FB-AG-110a.2
	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AG-110a.3
Energy Management	(1) Operational energy consumed, (2) percentage grid electricity and (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AG-130a.1
Water Management	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic metres (m ³), Percentage (%)	FB-AG-140a.1
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	FB-AG-140a.2
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	Number	FB-AG-140a.3
Food Safety	Global Food Safety Initiative (GFSI) audit (1) non-conformance rates and (2) associated corrective action rates for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-AG-250a.1
	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) recognised food safety certification programme	Quantitative	Percentage (%) by cost	FB-AG-250a.2
	(1) Number of recalls issued and (2) total amount of food product recalled ¹	Quantitative	Number, Metric tonnes (t)	FB-AG-250a.3

continued...

¹ Note to **FB-AG-250a.3** – The disclosure shall include a description of notable recalls, such as those that affected a significant amount of product or those related to serious illnesses or fatalities.

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TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	Quantitative	Rate	FB-AG-320a.1
Environmental & Social Impacts of Ingredient Supply Chain	(1) Percentage of agricultural products sourced that are certified to a third-party environmental or social standard, and (2) percentages by standard	Quantitative	Percentage (%) by cost	FB-AG-430a.1
	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-AG-430a.2
	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing	Discussion and Analysis	n/a	FB-AG-430a.3
GMO Management	Discussion of strategies to manage the use of genetically modified organisms (GMOs)	Discussion and Analysis	n/a	FB-AG-430b.1
Ingredient Sourcing	Identification of principal crops and description of risks and opportunities presented by climate change	Discussion and Analysis	n/a	FB-AG-440a.1
	Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by cost	FB-AG-440a.2

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Production by principal crop ²	Quantitative	Metric tonnes (t)	FB-AG-000.A
Number of processing facilities ³	Quantitative	Number	FB-AG-000.B
Total land area under active production	Quantitative	Hectares	FB-AG-000.C
Cost of agricultural products sourced externally ⁴	Quantitative	Presentation currency	FB-AG-000.D

² Note to **FB-AG-000.A** – Principal crops are crops that accounted for 10% or more of consolidated revenue in any of the last three fiscal years.

³ Note to **FB-AG-000.B** – Processing facilities include facilities that are involved in the manufacturing, processing, packing or holding of agricultural products, and exclude administrative offices.

⁴ Note to **FB-AG-000.D** – Agricultural products are defined as food, feed and biofuel ingredients sourced for use in the entity's operations. The scope of agricultural products sourced externally excludes agricultural products grown on land owned or operated by the entity.

Greenhouse Gas Emissions

Topic Summary

Entities in the Agricultural Products industry generate direct greenhouse gas (GHG) emissions from processing and transporting goods via land and sea freight operations. Emissions regulations may increase the cost of capital, operational costs and affect the operational efficiency of entities without strategies to manage GHG emissions. Employing innovative technologies that use alternative fuels and energy inputs—including biomass waste generated from internal processes—and improving fuel efficiency are ways entities can limit exposure to volatile fuel pricing, supply disruptions, future regulatory costs and other potential consequences of GHG emissions.

Metrics

FB-AG-110a.1. Gross global Scope 1 emissions

- 1 The entity shall disclose its gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the seven GHGs covered under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).
 - 1.1 Emissions of all GHGs shall be consolidated and disclosed in metric tonnes of carbon dioxide equivalents (CO₂-e) and calculated in accordance with published 100-year time horizon global warming potential (GWP) values. To date, the preferred source for GWP values is the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2014).
 - 1.2 Gross emissions are GHGs emitted into the atmosphere before accounting for offsets, credits or other similar mechanisms that have reduced or compensated for emissions.
- 2 Scope 1 emissions are defined and shall be calculated according to the methodology contained in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).
 - 2.1 Acceptable calculation methodologies include those that conform to the *GHG Protocol* as the base reference, but provide additional guidance, such as industry- or region-specific guidance. Examples may include:
 - 2.1.1 *GHG Reporting Guidance for the Aerospace Industry* published by the International Aerospace Environmental Group (IAEG)
 - 2.1.2 *Greenhouse Gas Inventory Guidance: Direct Emissions from Stationary Combustion Sources* published by the US Environmental Protection Agency (EPA)
 - 2.1.3 India GHG Inventory Program
 - 2.1.4 ISO 14064-1

2.1.5 *Petroleum Industry Guidelines for reporting GHG emissions*, 2nd edition, 2011, published by Ipieca

2.1.6 *Protocol for the quantification of greenhouse gas emissions from waste management activities* published by Entreprises pour l'Environnement (EpE).

2.2 GHG emissions data shall be consolidated and disclosed according to the approach with which the entity consolidates its financial reporting data, which generally is aligned with the 'financial control' approach defined by the *GHG Protocol*, and the approach published by the Climate Disclosure Standards Board (CDSB) described in REQ-07, 'Organisational boundary', of the *CDSB Framework for reporting environmental and social information*.

- 3 The entity may discuss any change in its emissions from the previous reporting period including whether the change was because of emissions reductions, divestment, acquisition, mergers, changes in output or changes in calculation methodology.
- 4 In the case that current reporting of GHG emissions to the CDP or other entity (for example, a national regulatory disclosure programme) differs in terms of the scope and consolidation approach used, the entity may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.
- 5 The entity may discuss the calculation methodology for its emissions disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations or mass balance calculations.

FB-AG-110a.2. Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets

- 1 The entity shall discuss its long- and short-term strategy or plan to manage its Scope 1 greenhouse gas (GHG) emissions.
 - 1.1 Scope 1 emissions are defined according to *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).
 - 1.2 The scope of GHG emissions includes the seven GHGs covered under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).
- 2 The entity shall discuss its emission reduction target(s) and analyse its performance against the target(s), including, if relevant:
 - 2.1 The scope of the emission reduction target (for example, the percentage of total emissions to which the target is applicable);
 - 2.2 Whether the target is absolute or intensity-based, and the metric denominator if it is an intensity-based target;

- 2.3 The percentage reduction against the base year, with the base year representing the first year against which emissions are evaluated towards the achievement of the target;
 - 2.4 The time lines for the reduction activity, including the start year, the target year and the base year;
 - 2.5 The mechanism(s) for achieving the target; and
 - 2.6 Any circumstances in which the target or base year emissions have been, or may be, recalculated retrospectively or the target or base year has been reset.
- 3 The entity shall discuss the activities and investments required to achieve the plans or targets, and any risks or limiting factors that might affect achievement of the plans or targets.
 - 4 The entity shall discuss the scope of its strategies, plans or reduction targets, such as whether they pertain differently to different business units, geographies or emissions sources.
 - 5 The entity shall discuss whether its strategies, plans or reduction targets are related to, or associated with, emissions limiting or emissions reporting-based programmes or regulations (for example, the EU Emissions Trading Scheme, Quebec Cap-and-Trade System, California Cap-and-Trade Program), including regional, national, international or sectoral programmes.
 - 6 Disclosure of strategies, plans or reduction targets shall be limited to activities that were ongoing (active) or reached completion during the reporting period.

FB-AG-110a.3. Fleet fuel consumed, percentage renewable

- 1 The entity shall disclose the total amount of fuel consumed by its fleet vehicles as an aggregate figure, in gigajoules (GJ).
 - 1.1 The calculation methodology for fuel consumed shall be based on actual fuel consumed as opposed to design parameters.
 - 1.2 Acceptable calculation methodologies for fuel consumed may include methodologies based on:
 - 1.2.1 Adding fuel purchases made during the reporting period to beginning inventory at the start of the reporting period, less any fuel inventory at the end of the reporting period
 - 1.2.2 Tracking fuel consumed by vehicles
 - 1.2.3 Tracking fuel expenses.
- 2 The entity shall disclose the percentage of the total amount of fuel consumed by its fleet vehicles that is renewable fuel.
 - 2.1 Renewable fuel generally is defined as fuel that meets all the following requirements:
 - 2.1.1 Produced from renewable biomass

2.1.2 Used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil or jet fuel

2.1.3 Achieved net greenhouse gas (GHG) emissions reduction on a life cycle basis.

2.2 The entity shall disclose the Standard or regulation used to determine if a fuel is renewable.

3 The scope of disclosure includes fuel consumed by vehicles owned or operated by the entity.

4 The scope of disclosure excludes fuel consumed in the transportation of the entity's products by third parties.

Energy Management

Topic Summary

Processing and milling agricultural products require substantial energy input. While some agricultural products entities generate energy on-site through the direct combustion of fossil fuels or biomass, most energy is procured from the electrical grid. Energy consumption contributes to environmental impacts, including climate change and pollution. Energy management affects 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 entities. Therefore, energy efficiency gained through process improvements can lower operating costs. The trade-off between on-site versus grid-sourced electricity as well as the use of alternative energy can play important roles in influencing both the long-term cost and reliability of an entity's energy supply and the extent of regulatory impact from direct versus indirect emissions.

Metrics

FB-AG-130a.1. (1) Operational energy consumed, (2) percentage grid electricity and (3) percentage renewable

- 1 The entity shall disclose (1) the total amount of energy it consumed (excluding fleet vehicles) as an aggregate figure, in gigajoules (GJ).
 - 1.1 The scope of energy consumption excludes fuel consumed by fleet vehicles, but includes energy from all other sources, including energy purchased from external sources and energy produced by the entity itself (self-generated). For example, purchased electricity, heating, cooling and steam energy all are included within the scope of energy consumption.
 - 1.2 The scope of energy consumption includes only energy directly consumed by the entity during the reporting period.
 - 1.3 In calculating energy consumption from fuels and biofuels, the entity shall use higher heating values (HHV), also known as gross calorific values (GCV), which are measured directly or taken from the Intergovernmental Panel on Climate Change (IPCC).
- 2 The entity shall disclose (2) the percentage of energy it consumed (excluding fleet vehicles) that was supplied from grid electricity.
 - 2.1 The percentage shall be calculated as purchased grid electricity consumption divided by total energy consumption.
- 3 The entity shall disclose (3) the percentage of energy it consumed (excluding fleet vehicles) that was renewable energy.
 - 3.1 Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, such as geothermal, wind, solar, hydro and biomass.

- 3.2 The percentage shall be calculated as renewable energy consumption divided by total energy consumption.
- 3.3 The scope of renewable energy includes renewable fuel the entity consumed, renewable energy the entity directly produced and renewable energy the entity purchased, if purchased through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs) or Guarantees of Origin (GOs), a Green-e Energy Certified utility or supplier programme, or other green power products that explicitly include RECs or GOs, or for which Green-e Energy Certified RECs are paired with grid electricity.
- 3.3.1 For any renewable electricity generated on-site, any RECs and GOs shall be retained (not sold) and retired or cancelled on behalf of the entity for the entity to claim them as renewable energy.
- 3.3.2 For renewable PPAs and green power products, the agreement shall explicitly include and convey that RECs and GOs be retained or replaced and retired or cancelled on behalf of the entity for the entity to claim them as renewable energy.
- 3.3.3 The renewable portion of the electricity grid mix that is outside of the control or influence of the entity is excluded from the scope of renewable energy.
- 3.4 For the purposes of this disclosure, the scope of renewable energy from biomass sources is limited to materials certified to a third-party standard (for example, Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification or American Tree Farm System), materials considered eligible sources of supply according to the *Green-e Framework for Renewable Energy Certification, Version 1.0* (2017) or Green-e regional standards or materials eligible for an applicable jurisdictional renewable portfolio standard.
- 4 The entity shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel use (including biofuels) and conversion of kilowatt hours (kWh) to GJ (for energy data including electricity from solar or wind energy).

Water Management

Topic Summary

The Agricultural Products industry relies on water for processing activities, and entities in the industry also typically generate wastewater or effluent. The availability of water, because of physical availability or regulatory access, directly impacts the industry's ability to operate processing facilities efficiently. Entities in the industry increasingly are exposed to water-related risks and regulations, which may increase capital expenditure costs, operating costs, remediation costs or potential fines. Entities can manage water-related risks and opportunities and mitigate long-term costs through capital investments and assessment of facility locations relative to water scarcity risks, improvements to operational efficiency, and work with regulators and communities on issues related to water access and effluent. A separate supply chain-oriented topic, Ingredient Sourcing, addresses the risks related to crop production driven by water availability and access.

Metrics

FB-AG-140a.1. (1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress

- 1 The entity shall disclose the amount of water, in thousands of cubic metres, withdrawn from all sources.
 - 1.1 Water sources include surface water (including water from wetlands, rivers, lakes and oceans), groundwater, rainwater collected directly and stored by the entity, and water and wastewater obtained from municipal water supplies, water utilities or other entities.
- 2 The entity may disclose portions of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources.
 - 2.1 Fresh water may be defined according to the local laws and regulations where the entity operates. If no legal definition exists, fresh water shall be considered to be water that has less than 1,000 parts per million of dissolved solids.
 - 2.2 Water obtained from a water utility in compliance with jurisdictional drinking water regulations can be assumed to meet the definition of fresh water.
- 3 The entity shall disclose the amount of water, in thousands of cubic metres, consumed in its operations.
 - 3.1 Water consumption is defined as:
 - 3.1.1 Water that evaporates during withdrawal, use and discharge
 - 3.1.2 Water that is directly or indirectly incorporated into the entity's product or service
 - 3.1.3 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

- 4 The entity shall analyse all 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.
- 5 The entity shall disclose water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- 6 The entity shall disclose water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

FB-AG-140a.2. Description of water management risks and discussion of strategies and practices to mitigate those risks

- 1 The entity shall describe its water management risks associated with water withdrawals, water consumption and discharge of water or wastewater.
 - 1.1 Risks associated with water withdrawals and water consumption include risks to the availability of adequate, clean water resources, which include:
 - 1.1.1 Environmental constraints—such as operating in water-stressed regions, drought, concerns of aquatic impingement or entrainment, interannual or seasonal variability, and risks from the impact of climate change
 - 1.1.2 Regulatory and financial constraints—such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (for example, those from local communities, non-governmental organisations and regulatory agencies), direct competition with and impact from the actions of other users (for example, commercial and municipal users), restrictions to withdrawals because of regulations and constraints on the entity's ability to obtain and retain water rights or permits.
 - 1.2 Risks associated with the discharge of water or wastewater include the ability to obtain rights or permits related to discharges, compliance with regulations related to discharges, restrictions to discharges, the ability to maintain control over the temperature of water discharges, liabilities, reputational risks and increased operating costs because of regulation, stakeholder perceptions and concerns related to water discharges (for example, those from local communities, non-governmental organisations and regulatory agencies).
- 2 The entity may describe water management risks in the context of:
 - 2.1 How risks may vary by withdrawal source, including surface water (including water from wetlands, rivers, lakes and oceans), groundwater, rainwater collected directly and stored by the entity, and water and wastewater obtained from municipal water supplies, water utilities or other entities
 - 2.2 How risks may vary by discharge destinations, including surface water, groundwater or wastewater utilities.
- 3 The entity may discuss the potential effects that water management risks may have on its operations and the time line over which such risks are expected to manifest.

- 3.1 Effects include those associated with costs, revenue, liabilities, continuity of operations and reputation.
- 4 The entity shall discuss its short- and long-term strategies or plans to mitigate water management risks, which include:
 - 4.1 The scope of its strategy, plans, goals or targets, such as how they relate to various business units, geographies or water-consuming operational processes.
 - 4.2 Any water management goals or targets it has prioritised, and an analysis of performance against those goals or targets.
 - 4.2.1 Goals and targets may include those associated with reducing water withdrawals, reducing water consumption, reducing water discharges, reducing aquatic impingements, improving the quality of water discharges and maintaining regulatory compliance.
 - 4.3 The activities and investments required to achieve the plans, goals or targets, and any risks or limiting factors that might affect achievement of the plans or targets.
 - 4.4 Disclosure of strategies, plans, goals or targets shall be limited to activities that were ongoing (active) or reached completion during the reporting period.
- 5 For water management targets, the entity shall additionally disclose:
 - 5.1 Whether the target is absolute or intensity-based, and the metric denominator if it is an intensity-based target.
 - 5.2 The time lines for the water management plans, including the start year, the target year and the base year.
 - 5.3 The mechanism(s) for achieving the target, including:
 - 5.3.1 Efficiency efforts, such as the use of water recycling or closed-loop systems
 - 5.3.2 Product innovations, such as redesigning products or services to require less water
 - 5.3.3 Process and equipment innovations, such as those that enable the reduction of aquatic impingements or entrainments
 - 5.3.4 Use of tools and technologies (for example, the World Wildlife Fund Water Risk Filter, the Global Water Tool and Water Footprint Network Footprint Assessment Tool) to analyse water use, risks and opportunities
 - 5.3.5 Collaborations or programmes in place with the community or other organisations.
 - 5.4 The percentage reduction or improvement from the base year, in which the base year is the first year against which water management targets are evaluated towards the achievement of the target.

- 6 The entity shall discuss whether its water management practices result in any additional life cycle effects or trade-offs in its organisation, including trade-offs in land use, energy production and greenhouse gas (GHG) emissions, and why the entity chose these practices despite life cycle trade-offs.

FB-AG-140a.3. Number of incidents of non-compliance associated with water quality permits, standards and regulations

- 1 The entity shall disclose the total number of incidents of non-compliance, including violations of a technology-based standard and exceedances of quantity or quality-based standards.
- 2 The scope of disclosure includes incidents governed by applicable jurisdictional statutory permits and regulations, which include the discharge of a hazardous substance, violation of pre-treatment requirements or total maximum daily load (TMDL) exceedances.
- 3 The scope of disclosure shall only include incidents of non-compliance that resulted in a formal enforcement action(s).
 - 3.1 Formal enforcement actions are defined as governmental recognised actions that address a violation or threatened violation of water quantity or quality laws, regulations, policies or orders, and can result in administrative penalty orders, administrative orders and judicial actions, among others.
- 4 Violations shall be disclosed, regardless of their measurement methodology or frequency. These include violations for:
 - 4.1 Continuous discharges, limitations, standards and prohibitions that are generally expressed as maximum daily, weekly and monthly averages; and
 - 4.2 Non-continuous discharges or limitations that are generally expressed in terms of frequency, total mass, maximum rate of discharge and mass or concentration of specified pollutants.

Food Safety

Topic Summary

Agricultural products are either sold directly to consumers in raw form or are processed beforehand. Maintaining product quality and safety is critical because contamination by pathogens, chemicals or spoilage presents serious health risks to humans and animals. Contamination may result from poor farming, transport, storage or handling practices. Food quality and safety issues can result in changes in demand and regulatory action. Product recalls can harm brand reputation, reduce revenues and involve costly fines. Obtaining food safety certifications and ensuring suppliers follow food safety guidelines may help entities safeguard against product safety risks and improve consumers' perceived quality of their products.

Metrics

FB-AG-250a.1. Global Food Safety Initiative (GFSI) audit (1) non-conformance rates and (2) associated corrective action rates for (a) major and (b) minor non-conformances

- 1 The entity shall disclose (1) its facilities' non-conformance rates with Global Food Safety Initiative (GFSI) recognised food safety certification programmes for (a) major non-conformances, and separately, (b) minor non-conformances.
 - 1.1 A major non-conformance is defined by the relevant GFSI-recognised certification programme and includes the highest severity of non-conformances requiring escalation by auditors. Major non-conformances may arise from significant risks to food safety, non-compliance with relevant regulatory requirements or failure to correct minor non-conformances. Major non-conformances must be corrected in accordance with the relevant GFSI-recognised certification programme under audit.
 - 1.2 A minor non-conformance is defined by the relevant GFSI-recognised certification programme and by itself is not indicative of a systemic problem.
 - 1.3 The entity shall calculate the non-conformance rates as the number of non-conformances (for each respective category) identified in its facilities divided by the number of facilities audited.
 - 1.4 The scope of the disclosure includes audit results from facilities owned or operated by the entity.
- 2 The entity shall disclose (2) the corrective action rates associated with its facilities' (a) major non-conformances, and separately, (b) minor non-conformances.
 - 2.1 A corrective action is defined as the completion of an action (generally identified in a Corrective Action Plan), within the time line defined by the GFSI-recognised certification programme, designed to eliminate the cause of a detected non-conformance, including implementing practices or systems to eliminate any non-conformance and ensure against reoccurrence of the non-conformance, as well as verifying the action taken.

2.2 The entity shall calculate the corrective action rates as the number of corrective actions that address non-conformances (for each respective category) divided by the total number of non-conformances identified (for each respective category).

3 The entity may disclose the GFSI-recognised certification programme used to audit its facilities.

FB-AG-250a.2. Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) recognised food safety certification programme

1 The entity shall disclose the percentage of agricultural products sourced from Tier 1 supplier farms or facilities certified to a Global Food Safety Initiative (GFSI) recognised certification programme.

1.1 Tier 1 suppliers are defined as suppliers that transact directly with the entity.

1.2 The percentage shall be calculated as the cost of agricultural products sourced from Tier 1 suppliers certified to an applicable GFSI-recognised certification programme, divided by the total cost of agricultural products sourced from all Tier 1 suppliers.

2 The scope of the disclosure excludes packaging materials or other goods and inputs that are not food or ingredients.

3 The entity may disclose the relevant GFSI-recognised certification programme used to audit its suppliers.

FB-AG-250a.3. (1) Number of recalls issued and (2) total amount of food product recalled

1 The entity shall disclose (1) the total number of food-safety-related recalls it issued during the reporting period, including voluntary and involuntary recalls.

1.1 A food-safety-related recall is defined as the removal of a marketed product that occurs if a food may reasonably be believed to cause consumers to become ill.

1.2 Involuntary recalls are those requested or mandated by applicable jurisdictional legal or regulatory authorities, and they are issued when a product does not comply with regulatory food safety standards, when a food safety-related defect in a product is identified or during instances of import refusal.

1.3 Voluntary recalls are those initiated by the entity to remove products from the market for food safety-related concerns.

2 The entity shall disclose (2) the total weight, in metric tonnes, of food product subject to recalls.

3 The scope of the disclosure includes voluntary recalls initiated by the entity and involuntary recalls requested or mandated by applicable jurisdictional legal or regulatory authorities and instances of import refusal.

4 The scope of the disclosure excludes market withdrawals, which are defined as an entity's removal or correction of a distributed product that involves a minor violation not subject to legal action by applicable jurisdictional legal or regulatory authorities, or practices that do not involve violations (for example, normal stock rotation practices).

- 5 The entity may separately disclose the percentage of recalls that were (a) voluntary and (b) involuntary.

Note to **FB-AG-250a.3**

- 1 The entity shall provide a discussion of notable recalls, such as those that affected a significant number of products or those related to potential or actual serious illnesses or fatalities.

- 1.1 A recall may be considered notable if it is mentioned in periodic jurisdictional recall reports.

- 2 For such recalls, the entity may provide:

- 2.1 description and cause of the recall issue;

- 2.2 total weight of food products recalled;

- 2.3 cost to remedy the issue;

- 2.4 whether the recall was voluntary or involuntary;

- 2.5 corrective actions; and

- 2.6 any other significant outcomes (for example, legal proceedings or fatalities).

Workforce Health & Safety

Topic Summary

Industrial processes used in the Agricultural Products industry present significant occupational hazards. Employees may be engaged in labour-intensive activities involving common hazards such as falls, transportation accidents, equipment-related accidents, and heat-related illness or injury, among others. Violations of health and safety standards could result in regulatory penalties and costs for corrective actions. High injury and fatality rates may suggest that an entity has a weak governance structure and a weak workplace safety culture and could result in significant reputational harm. Strong performance on managing workforce health and safety can help build brand image and promote worker morale, which may result in increased productivity, reduced worker turnover and enhanced community relations.

Metrics

FB-AG-320a.1. (1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees

- 1 The entity shall disclose (1) its total recordable incident rate (TRIR) for work-related injuries and illnesses.
 - 1.1 An injury or illness is considered a recordable incident if it results in death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. Additionally, a significant injury or illness diagnosed by a physician or other licensed health care professional is considered a recordable incident, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.
 - 1.1.1 First aid is defined as emergency care or treatment for an ill or injured person before regular medical aid can be provided.
 - 1.1.2 The entity may use applicable jurisdictional criteria for definitions of a recordable incident and a non-recordable incident such as first aid. The entity shall disclose the legal, regulatory or industry framework used as the source for these criteria and definitions.
- 2 The entity shall disclose (2) its fatality rate for work-related fatalities.
- 3 The entity shall disclose (3) its near miss frequency rate (NMFR) for work-related near misses.
 - 3.1 A near miss is defined as an unplanned or uncontrolled event or chain of events that has not resulted in a recordable injury, illness, physical damage or environmental damage, but had the potential to do so in other circumstances.
 - 3.2 The entity may disclose its process for classifying, identifying and reporting near misses.
- 4 All disclosed rates shall be calculated as: $(\text{statistic count} \times 200,000) / \text{total number of hours worked by all employees in the year reported}$.

- 4.1 The '200,000' in the rate calculation represents the total number of hours 100 full-time workers working 40 hours per week for 50 weeks per year can provide annually.
- 5 The scope of the disclosure includes work-related incidents only.
- 5.1 Work-related incidents are injuries and illnesses resulting from events or exposures in the work environment.
- 5.2 The work environment is the establishment and other locations where one or more employees are working or are present as a condition of their employment.
- 5.3 The work environment includes not only physical locations, but also the equipment or materials used by the employee during the course of work.
- 5.4 Incidents that occur while an employee is travelling are work-related if, at the time of the injury or illness, the employee was engaged in work activities in the interest of the employer.
- 5.5 A work-related incident must be a new case, not a previously recorded injury or illness being updated.
- 6 The entity shall disclose the rates by each of these employee categories:
- 6.1 direct employees, defined as individuals on the entity's payroll, whether they are full-time, short service, part-time, executive, labour, salary, seasonal, migrant or hourly employees; and
- 6.2 contract employees, defined as individuals who are not on the entity's payroll, but whom the entity supervises or manages, including independent contractors and those employed by third parties (for example, temp agencies and labour brokers).
- 7 The scope of the disclosure includes all employees regardless of employee location or type of employment.

Environmental & Social Impacts of Ingredient Supply Chain

Topic Summary

Agricultural products entities source agricultural inputs from many suppliers. How entities in the industry engage with suppliers on environmental and social issues may affect consumer demand, reputational risks, and the ability of entities to effectively manage their crop supply and respond to price fluctuations. Supply chain management issues related to labour, environmental practices, ethics or corruption may result in regulatory fines or increased long-term operational costs for entities. Similarly, agricultural products entities may face reputational damage if their suppliers perform poorly on environmental or social issues. Entities can mitigate these risks and potentially increase consumer demand or access new market opportunities by engaging with essential suppliers to implement sustainable agricultural practices or source from certified suppliers.

Metrics

FB-AG-430a.1. (1) Percentage of agricultural products sourced that are certified to a third-party environmental or social standard, and (2) percentages by standard

- 1 The entity shall disclose (1) the percentage of agricultural products, by cost, that it sourced that are certified to a third-party environmental or social standard.
 - 1.1 Agricultural products are defined as raw materials such as food, feed and biofuel ingredients sourced for use in the entity's operations.
 - 1.2 Environmental standards are defined as standards that address environmental impacts related to the production of agricultural products such as protection of primary forests, maintenance of surface water and groundwater quality, and implementation of integrated pest management (IPM) solutions or an Organic System Plan.
 - 1.3 Social standards are defined as standards that address social impacts related to the production of agricultural products such as workforce compensation, training and continual monitoring of health and safety risks associated with applications of agrochemicals, and child labour practices.
 - 1.4 The percentage shall be calculated as the cost of agricultural products purchased from Tier 1 suppliers that have been certified to a third-party environmental or social standard divided by the total cost of agricultural products purchased from Tier 1 suppliers.
 - 1.5 Examples of certifications to third-party environmental and social standards may include:
 - 1.5.1 Bonsucro;
 - 1.5.2 Fairtrade International;
 - 1.5.3 Fair Trade USA;

- 1.5.4 Roundtable on Sustainable Palm Oil (RSPO);
 - 1.5.5 Roundtable on Responsible Soy (RTRS);
 - 1.5.6 Rainforest Alliance;
 - 1.5.7 SA8000;
 - 1.5.8 US Department of Agriculture (USDA) Organic; and
 - 1.5.9 UTZ.
- 2 The entity shall disclose (2) the percentage of agricultural products, by cost, that it sourced that are certified to a third-party environmental or social standard, by standard.
- 2.1 The entity shall calculate the percentage as the cost of agricultural products purchased from Tier 1 suppliers certified to each respective third-party environmental or social standard divided by the total cost of agricultural products purchased from Tier 1 suppliers.
- 2.1.1 For Bonsucro certification, the entity shall disclose whether the agricultural raw materials are certified to the Bonsucro Production Standard or the Bonsucro Chain of Custody Standard.
 - 2.1.2 For Fairtrade certification, the entity shall disclose whether the agricultural products are certified to the standards for small-scale producers, hired labour organisations, contract production, traders or independent small holders.
 - 2.1.3 For RSPO certification, the entity shall disclose which of the RSPO supply chain models the agricultural products are certified to Identity Preserved (IP), Segregated (SG), Mass Balance (MB) or Book and Claim (B&C).
 - 2.1.4 For RTRS certification, the entity shall disclose whether the agricultural products are certified to the RTRS Production standard or the RTRS Chain of Custody standard, and whether traceability in the Chain of Custody standard is maintained through country material balance, segregation or mass balance.
 - 2.1.5 For other third-party certifications, the entity may specify the type of certification.
- 2.2 The entity may aggregate the percentages, by cost, of more than one third-party certification into one aggregate percentage, if the certifications are for the same agricultural product and have similar environmental or social criteria.
- 3 The scope of the disclosure includes agricultural products purchased from Tier 1 suppliers, including those grown on a contract basis or sourced as a commodity.
- 3.1 Tier 1 suppliers are defined as suppliers that transact directly with the entity.

- 3.2 Agricultural products grown on a contract basis include those for which the entity has agreed the conditions of crop production and the quality of crops directly with the farmer, consistent with the Food and Agriculture Organization of the United Nations (FAO) Contract Farming Resource Centre.
- 3.3 Agricultural products sourced as a commodity include those bought through the spot market, to-arrive bids, grain elevators or other measures by which the entity is unable to control the production process.

FB-AG-430a.2. Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances

- 1 The entity shall disclose (1) its supplier facilities' non-conformance rate with external social and environmental audit standards or internally developed supplier codes of conduct for (a) major non-conformances, and separately, (b) minor non-conformances.
 - 1.1 A major non-conformance is defined as the highest severity of non-conformance requiring escalation by auditors. Major non-conformances include the presence of underage child workers (below the legal age for work or apprenticeship), forced labour, 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-conformances include material breaches and systemic violations of code requirements or laws. Major non-conformances may also be known as critical or priority non-conformances.
 - 1.2 A minor non-conformance is defined as a non-conformance that by itself does not confirm a systemic problem with the management system, but are typically isolated or random incidents that present low risks to workers or the environment.
 - 1.3 The entity shall calculate the non-conformance rates as the total number of non-conformances (in each respective category) identified among its supplier facilities divided by the number of supplier facilities audited.
- 2 The entity shall disclose (2) the corrective action rates associated with its supplier facilities' (a) major non-conformances, and separately, (b) minor non-conformances.
 - 2.1 A corrective action is defined as the completion of an action (generally identified in a corrective action plan) within 90 days, designed to eliminate the cause of a detected non-conformance, including implementing practices or systems to eliminate any non-conformance and ensure no reoccurrences, as well as verifying the action taken.
 - 2.2 The entity shall calculate the corrective action rates as the number of corrective actions that address non-conformances (in each respective category) divided by the total number of non-conformances identified (in each respective category).
- 3 The entity shall disclose the standards or codes of conduct used to measure social and environmental responsibility audit compliance.

FB-AG-430a.3. Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing

- 1 The entity shall discuss its strategy to manage environmental and social risks that arise from its contract growing and commodity sourcing practices.
 - 1.1 Environmental and social risks include extreme weather events, water stress, degradation of the environment, labour rights, community rights and harmful child labour practices.
- 2 For environmental risks, relevant strategies to discuss may include the diversification of suppliers, supplier training programmes on environmental best management practices—including implementation of agricultural management practice systems (MPS) for fertiliser use, integrated pest management (IPM) and efforts to address deforestation—expenditures on research and development for alternative and substitute crops, or audits or certifications of suppliers' environmental practices.
- 3 For social risks, relevant strategies to discuss include supplier training programmes on agrochemical application, engagement with suppliers on issues relating to labour, human rights and workforce health and safety such as pesticide exposure, maintenance of a supply chain code of conduct, and audits or certifications of suppliers' social practices.
- 4 The scope of the disclosure includes all agricultural raw materials sourced by the entity, including those sourced directly from contract growers or through producer supply agreements.
- 5 The entity may identify which commodities or agricultural raw materials present an operational risk, what type of risk they represent and the strategies the entity uses to mitigate that risk.

GMO Management

Topic Summary

Agricultural products developed using genetically modified organism (GMO) technology have experienced increasing consumer interest. In many cases, GMO technology has enabled improvements in crop yield through development of disease- or drought-resistant strains, but consumer concerns persist regarding the perceived health, environmental or social impacts related to the cultivation and consumption of GMOs. Some jurisdictions have banned the use or cultivation of GMOs. Food and beverage entities along the food supply chain, including entities in the Agricultural Products industry, are seeking effective means to assess GMO-related risks and opportunities, and to effectively communicate with consumers on the topic. Entities in the Agricultural Products industry that can meet changing consumer trends and regulatory changes through their products or effective communication may reduce potential reputational risks and revenue loss as well as access new market opportunities.

Metrics

FB-AG-430b.1. Discussion of strategies to manage the use of genetically modified organisms (GMOs)

- 1 The entity shall discuss its strategy to manage the use of genetically modified organisms (GMOs), including a discussion of jurisdictions that restrict the importation of GMOs, the risks associated with required labelling of products containing GMOs, changes in consumer preferences, and opportunities associated with the use of GMOs.
 - 1.1 GMOs are defined as organisms, except for human beings, in which genetic material has been altered in a way that does not occur naturally by mating or natural recombination.
- 2 The entity shall disclose a list of jurisdictions that restrict, ban or suspend imports of one or more of the entity's products because of regulations on GMOs.
 - 2.1 The scope of the disclosure includes regulations, trade restrictions and other measures restricting the importation of GMOs.
 - 2.2 The entity shall discuss, with respect to each restriction: the scope of products affected, the duration for which the restriction has been in place, the stated reason for the restriction (for example, health concerns or biodiversity impacts), and the effect on the entity's operations and financial condition.
- 3 The entity shall disclose a list of products (or product categories) subject to applicable jurisdictional laws or regulations that require GMO labelling.
- 4 The entity shall discuss the risks and opportunities associated with GMO labelling requirements, including those developed by the entity's downstream customers (for example, processed food entities and food retailers).
- 5 The entity shall discuss the risks and opportunities associated with any changes in consumer preferences regarding the use or labelling of products containing GMOs.

Ingredient Sourcing

Topic Summary

Agricultural products entities source a wide variety of commodities and ingredients from farmers or intermediary distributors. The industry's ability to reliably source ingredients at desired price points fluctuates with crop yield, which may be affected by climate change, water scarcity, land management and other resource scarcity considerations. Entities that source more productive and less resource-intensive crops, or those that work closely with suppliers to increase their adaptability to climate change and other resource scarcity risks, may reduce crop price volatility and crop supply disruptions. Additionally, entities may improve their brand reputation and develop new market opportunities. Failure to effectively manage sourcing risks can result in higher costs of capital, reduced margins and constrained revenue growth.

Metrics

FB-AG-440a.1. Identification of principal crops and description of risks and opportunities presented by climate change

- 1 The entity shall identify any principal crops that are a priority to its business.
 - 1.1 Principal crops are those crops that accounted for 10% or more of consolidated revenue in any of the last three reporting periods, as disclosed in FB-AG-000.A.
- 2 The scope of disclosure shall include crops cultivated directly by the entity, grown on a contract basis or sourced as a commodity.
 - 2.1 Crops cultivated directly by the entity include those grown on farms owned or operated by the entity.
 - 2.2 Crops grown on a contract basis include those for which the entity has contracted directly for the conditions of crop production and the quality of crops with the farmer, consistent with the Food and Agriculture Organization of the United Nations (FAO) 'Contract Farming Resource Center'.
 - 2.3 Crops sourced as a commodity include those bought through the spot market, to-arrive bids, grain elevators or other measures by which the entity is unable to control the production process.
- 3 The entity shall describe the risks or opportunities that are presented to its principal crops by climate change scenarios, including, where relevant:
 - 3.1 Identification of the risks presented by climate change, which may include availability of water, shifts in crop regions, pest migration and extreme weather events
 - 3.2 Discussion of the scenarios used to determine the risks and opportunities presented by climate change
 - 3.3 Discussion of how such scenarios will manifest (for example, effects directly on the entity or the entity's supply chain) and the potential implications that these would have on its priority crops

3.4 The timeline over which such risks and opportunities are expected to manifest.

4 The entity may discuss 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 organisations (for example, Intergovernmental Panel on Climate Change Climate Scenario Process).

5 The entity shall discuss efforts to assess and monitor the impacts of climate change and the related strategies to alleviate or adapt to any risks, and its efforts to recognise any opportunities (for example, FAO 'Climate-Smart Agriculture' approach).

5.1 Alleviation strategies may include use of crop insurance, investments in hedging instruments and supply chain diversification.

5.2 Adaptation strategies may include improving ecosystem management and biodiversity, development of tolerant crop varieties and optimising timing of planting and harvesting.

FB-AG-440a.2. Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress

1 The entity shall disclose the percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress.

1.1 Agricultural products are defined as raw materials such as food, feed and biofuel ingredients sourced for use by the entity's operations.

2 The percentage shall be calculated as the cost of agricultural products purchased from Tier 1 suppliers that withdraw and consume water in regions with High or Extremely High Baseline Water Stress to produce the agricultural products divided by the total cost of agricultural products purchased from Tier 1 suppliers.

2.1 The entity shall identify Tier 1 suppliers 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.

3 The scope of disclosure is agricultural products purchased from Tier 1 suppliers, including those grown on a contract basis or sourced as a commodity.

3.1 Tier 1 suppliers are defined as suppliers that transact directly with the entity for agricultural products.

3.2 Agricultural products grown on a contract basis include those for which the entity has directly contracted the conditions of crop production and the quality of crops with the farmer, consistent with the Food and Agriculture Organization of the United Nations (FAO) Contract Farming Resource Center.

3.3 Agricultural products sourced as a commodity include those bought through the spot market, to-arrive bids, grain elevators or other measures by which the entity is not able to control the production process.

4 If the entity is unable to identify or collect data pertaining to all Tier 1 suppliers, the entity shall disclose the percentage of agricultural products for which the source region and water risks are unknown.



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