

TCFD Implementation Guide

Using SASB Standards and the CDSB Framework
to Enhance Climate-Related Financial Disclosures
in Mainstream Reporting



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Board





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ABOUT CDSB

The Climate Disclosure Standards Board (CDSB) was founded in 2007 and is an international consortium of nine business and environmental NGOs committed to advancing and aligning the global mainstream corporate reporting model to equate natural capital with financial capital. It does so by offering companies a framework for reporting environmental and climate information with the same rigor as financial information. In turn, this helps them to provide investors with decision-useful environmental and climate information via the mainstream corporate report, enhancing the efficient allocation of capital. Regulators also benefit from compliance-ready materials. Collectively, CDSB aims to contribute to more sustainable economic, social, and environmental systems.

Sustainability Accounting Standards Board

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ABOUT SASB

The Sustainability Accounting Standards Board (SASB) connects businesses and investors on the financial impacts of sustainability. An independent, standard-setting organization founded in 2011, SASB's mission is to help businesses around the world identify, manage, and report on sustainability factors that matter to investors. SASB standards are developed based on extensive feedback from companies, investors, and other market participants as part of a transparent, publicly documented process. By focusing on the sustainability factors most likely to have financially material impacts in each of 77 industries, SASB standards enable investors and companies to compare performance from company to company within an industry.

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Executive Summary

In June 2017, the Task Force on Climate-related Financial Disclosures (TCFD) issued its final recommendations for producing consistent, comparable, clear, and reliable corporate disclosures of climate-related information that would support informed decision-making and capital allocation by investors, lenders, and insurance underwriters. More than a year and a half later, although more than 617 organizations¹ have publicly expressed support for the TCFD, far fewer appear to have used the recommendations to guide their climate-related disclosures.

In explaining this implementation gap, market participants have cited a need for practical guidance for companies to use in attempting to fulfill the principles-based recommendations and make the 11 recommended disclosures in their mainstream reports. The Sustainability Accounting Standards Board (SASB) and the Climate Disclosure Standards Board (CDSB), two well-established organizations with rigorously developed TCFD-aligned reporting tools, are uniquely positioned to provide this guidance.

This paper is the first in a series of practical, TCFD-focused resources CDSB and SASB intend to develop and make available in the coming months and years, as climate-related tools and reporting practices continue to mature.

By offering how-to guidance, this publication aims to help companies enhance the robustness, consistency, comparability, and utility of TCFD implementation and reporting through SASB and CDSB’s market-tested frameworks, standards and resources.

Regardless of whether an organization has a sophisticated approach to managing climate risks and opportunities or is just getting started, it can use this guidance to move forward in supporting improved decision-making, enhanced market resilience, and more sustainable economic growth.

The guidance adheres to the following structure:

- **Overview:** An overview of the TCFD, SASB, and CDSB, and the drive for effective corporate climate-related disclosures;
- **Getting Started:** Key action steps to help companies lay the groundwork for effective climate-related disclosures;
- **Good Practice Disclosure:** Sample disclosures and accompanying discussion to provide companies with a practical understanding of the four core elements of the TCFD recommendations and their specific disclosures (see Figure 1); and
- **Looking Ahead:** A summary of how the CDSB Framework and SASB standards represent a clear solution to TCFD implementation, and areas of future focus.

Figure 1. Four core elements of the TCFD recommendations



¹ as of March 2019. See <https://www.fsb-tcfid.org/tcfid-supporters/>

Core Element 4: Metrics & Targets

In addition to the more qualitative considerations related to governance, strategy, and risk management, organizations can benefit greatly from measuring and managing their performance on climate-related issues using quantitative metrics and targets. Indeed, such measures can illuminate the effectiveness of an organization's approach to the first three core TCFD elements and to its consideration of climate-related risks and opportunities across different time horizons, including the medium to longer term. (Note that the latter point is also addressed in the section above covering Core Element 2 on Strategy.) The TCFD recommendations encourage the disclosure of relevant metrics to help investors and other decision makers “better assess the organization's potential risk-adjusted returns, ability to meet financial obligations, general exposure to climate-related issues, and progress in managing or adapting to those issues.”³⁸ Importantly, this data and information can also facilitate consistency and comparability, i.e., the apples-to-apples comparison of organizations within a given industry or sector.

CDSB Framework REQ-04 advises that “narrative should accompany quantitative results where it assists the reader in understanding the associated financial impacts to the organization.” Where quantitative information is unavailable for sources of environmental impact from operations, entities, and activities within the organization's reporting boundary, results should be expressed in qualitative terms. This is a useful point for preparers to note as TCFD reporting matures.

The TCFD recommends the following disclosures for all companies, subject to a materiality assessment:

- M**
a) *Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.*
- M**
b) *Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.*
- M**
c) *Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.*

Additionally, companies in certain key industries may need to make additional metrics and targets disclosures to satisfy the TCFD's Supplemental Guidance (see Page 23). For example, the TCFD recommends that large companies in key financial and non-financial industry groups disclose greenhouse gas emissions (GHG) regardless of the outcome of the materiality assessment by the reporting company.

How to read the excerpt for this TCFD recommended disclosure element (Metrics & Targets):

Mock excerpts from two hypothetical organizations' disclosures, one drawn from the automobiles industry and the other from the oil and gas industry, are presented below. The excerpt from each organization is presented in the left-hand column, with accompanying analysis in the right-hand column. The annotations in the right-hand column reference the guidance provided by the TCFD for the respective TCFD disclosure and illustrate how applying key requirements of the CDSB Framework and the appropriate industry-specific SASB standard can help organizations prepare disclosures in accordance with the recommendations.

Although the annotations do not always explicitly address how the principles shared by the TCFD, CDSB, and SASB (see Figure 5) have been applied, it is assumed these principles were considered in determining how to disclose such information in the mainstream report.

As these disclosure excerpts are presented for illustrative purposes, we have not applied every CDSB requirement or aspect of the SASB standard—instead, we pull out key examples to show how these two complementary tools can be used to more fully meet the TCFD recommendations. Each paragraph in the excerpt is numbered for ease of reference, with the number in the excerpt (on the left) corresponding with the numbered annotation (on the right) indicating where a specific CDSB Framework requirement or SASB industry standard enables the disclosure.

³⁸ *Supra* note 10.

MOCK DISCLOSURE: METRICS & TARGETS

Excerpt from AgriCo Annual Report

Metrics and Targets

The Company has implemented the SASB standard for the Agricultural Products industry to prepare its disclosures based on the risk exposures discussed in the preceding Governance, Strategy, and Risk Management sections. **1** The methodologies underlying these Metrics & Targets disclosures are detailed in the Agricultural Products standard available at sasb.org.

As of this report, the Company has not formally integrated these or other sustainability-related performance metrics into its policies for remuneration or other incentives for executive leadership, management, or employees. However, we have begun to explore the feasibility of such a program in helping us more effectively and efficiently deliver on our climate-related, environmental, and other sustainable business goals without creating unintended, adverse consequences. This work is a joint undertaking of the board's sustainability and compensation committees, who have engaged with a third-party advisory firm to develop company-specific recommendations, which will be submitted to the board of directors for consideration by the fourth quarter of 2019. **2**

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Guidance and Questions to Consider

Answering the following questions can help a company better understand how the performance metrics included in their respective SASB industry standard(s)—or other metrics, as appropriate— together with the CDSB Framework requirements can facilitate fulfillment of the TCFD recommendations for Metrics & Targets.

M
a) *Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.*

Which performance metrics does the company use to assess and manage financially material climate-related risks and opportunities such as those related to water, energy, land use, and waste management?

SASB STANDARD & CDSB FRAMEWORK: AgriCo has identified its performance metrics, including those related to water, energy, and other issues, by using the SASB standard for the Agricultural Products industry, which includes climate-related topics that AgriCo has identified as material to its business. **1** In addition to addressing the TCFD recommendations, these disclosures also satisfy CDSB REQ-04 (Sources of Environmental Impact), which calls for quantitative and qualitative performance results. REQ-04 adds that methodologies for preparing these results should be stated, and although the disclosure does not specify the methods, it does refer to where further details can be found on SASB's recognized methodologies. In citing the SASB industry standard, the disclosure also meets REQ-08 (Reporting Policies) in citing that this industry-specific standard has been used to prepare the disclosures. In subsequent disclosures, it will also be necessary to confirm that these reporting provisions have been used consistently from one reporting period to the next.

Are these climate-related performance metrics incorporated into the company's remuneration policies? If so, how?

CDSB FRAMEWORK: In assessing AgriCo's performance against targets, the company's disclosure helps investors better understand whether, how, and to what extent the company's incentive programs for executives, management, and employees are—or might be—aligned with long-term strategy to promote sustainable value creation. **2** CDSB REQ-01 (Governance) requires companies to consider disclosing how management-level staff are held accountable for and incentivized for addressing environmental issues. Although climate-related performance metrics are not incorporated into the company's remuneration policies as of yet,

MOCK DISCLOSURE: METRICS & TARGETS

Excerpt from AgriCo Annual Report

Similarly, the Company is exploring whether and how it might establish an “internal price” on carbon to mitigate pricing and regulatory risks and thus ensure a smoother transition to anticipated future scenarios. Incorporating such a price into strategic planning and project finance may serve as a useful mechanism to help us better achieve and build on the greenhouse gas emissions and energy efficiency targets discussed below, build a more resilient supply chain, and potentially gain competitive advantage in a changing economic and regulatory environment over the long-term. The sustainability committee has begun investigating a variety of structures, including emissions fees, shadow pricing, and implicit pricing, in the context of the UN Global Compact’s Business Leadership Criteria on Carbon Pricing, with recommendations to the board anticipated by the first quarter of 2020. **3**

Greenhouse Gas Emissions

Metric	Year Ended December 31,		
	2016	2017	2018
Gross global Scope 1 emissions, in thousands of metric tons CO ₂ -e	9,625	9,125	8,800
Fleet fuel consumed in GJ	807	772	740
Percentage renewable	5%	8.5%	16%

The Company has set a target to reduce overall energy consumption by 20% and greenhouse gas emissions by 40% by 2035 relative to a 2019 baseline. The Company’s emissions primarily consist of direct emissions from its processing facilities as well as its transportation fleet. To date, the Company has achieved a reduction in its emissions from its processing facilities of 10% and from its transportation fleet of 8%, resulting in gross reduction of 8.5%. Based on its results to date, the Company remains committed to its 2035 target. **4**

Related to its greenhouse gas emission reduction target, the Company set a target for its fuel usage (including all energy sources) to be 50% renewable by 2035. The Company similarly remains on track to achieve this goal.

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this disclosure shows the current state of practice and that this is actively being considered by the company.

Has the company established an internal carbon price?

CDSB FRAMEWORK: Although AgriCo’s direct and indirect emissions are not currently subject to carbon-pricing regulations, the company anticipates such regulations may emerge over the medium to long term (see Strategy, above). Thus, investors can benefit from understanding whether, how, and to what extent the company’s performance improvements may be supplemented by an internal pricing scheme in mitigating this risk. **3** Such disclosure is consistent with REQ-03, which calls for analysis of actual and potential causes of climate-related risk including “the effect of regulation designed to support or limit activity affecting natural capital.”

CDSB FRAMEWORK: REQ-04 of the CDSB Framework requires reporting organizations to, among other things, report material sources of environmental impacts including GHG emissions. The reporting organization is expected to report, in CO₂-equivalent metric tons, absolute and normalized Scope 1 and 2 GHG emissions, calculated by reference to a recognized GHG emissions measurement methodology. AutoCo provides its Scope 1 emissions over a three-year period, in keeping with REQ-05 (Performance and Comparative Analysis) which requires disclosures to convey how environmental results, such as Scope 1 emissions, compare with results from previous years. It also cross-refers to other targets used for assessing environmental performance in accordance with REQ-05. **4**

SASB STANDARD: SASB metric FB-AG-110a.2 includes a discussion of the company’s strategy to manage Scope 1 emissions, including disclosing the company’s emissions reduction target and performance against that target. **4**

SASB STANDARD: SASB metric FB-AG-130a.1 enables AgriCo to demonstrate to its investors that it is on track to meet its goal of diversifying its energy sources increasingly to renewable energy, a key element of its business strategy to mitigate climate risk. **5**

MOCK DISCLOSURE: METRICS & TARGETS

Excerpt from AgriCo Annual Report

Energy Management 5

Metric	Year Ended December 31,		
	2016	2017	2018
Operational energy consumed, in gigajoules	27,900	26,900	26,200
Percentage grid electricity	74%	74%	71%
Percentage renewable	10%	12%	17%

The Company has set a target to reduce overall energy consumption by 20% by 2035. To date, the Company has achieved a reduction of its energy usage of approximately 6%. The Company anticipates it will be able to accomplish its goal per the original timeframe established.

The Company also set a target to increase its share of electricity derived from renewable sources to 50% by 2035. 6 Based on its progress to date in identifying opportunities for solar energy deployment across its operations, the company has increased its share from 10% to 17% since its baseline year in 2016. The remaining installation opportunities that the Company has identified, as well as the completion of energy efficiency projects to lower overall energy usage, are anticipated to enable us to achieve our 2035 goal.

Water Management 7

Metric	Year Ended December 31,		
	2016	2017	2018
Total water withdrawn, in thousands of m ³ 8	1,503,709	1,495,900	1,480,850
Percentage withdrawn in regions with High or Extremely High Baseline Water Stress	10%	10%	10%
Total water consumed, in thousands of m ³	1,400,825	1,400,800	1,390,720
Percentage consumed in regions with High or Extremely High Baseline Water Stress 9	8%	8%	8%

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CDSB FRAMEWORK: REQ-03 of the CDSB Framework (Risks and Opportunities) requires disclosures to explain the material environmental risks and opportunities affecting the organization and its management. 5

Does the company measure climate-related opportunities, such as revenue from products and services designed for a lower-carbon economy?

CDSB FRAMEWORK: AgriCo’s energy management disclosure addresses the climate-resilience of the company’s energy mix—including opportunities for solar deployment—in the context of its long-term business strategy. Analysis of this discussion is further informed by the company’s trajectory on SASB metric FB-AG-130a.1 5 (in particular, its renewable percentage of operational energy consumed). The energy profile of agricultural products companies is likely to become an increasingly important competitive driver as the global economy transitions to a lower-carbon state and the cost, reliability, and availability of energy resources evolves. In this respect, the disclosure has explained the outcomes and financial impacts of this opportunity upon the organization, including in terms of its operations, in accordance with CDSB Framework REQ-03 (Risks and Opportunities). 6

How can metrics be presented to enable meaningful trend analysis?

CDSB FRAMEWORK: In reporting against its industry’s SASB standard, AgriCo has included performance data for its last three reporting periods. 7 The underlying technical protocols that support the SASB accounting metrics establish consistent definitions, calculations, and estimation methodologies that facilitate meaningful trend analysis and help fulfill both the TCFD’s principle 4 (“Disclosures should be consistent over time”) and CDSB principle 4 (“Disclosures shall be consistent and comparable”). Moreover, REQ-09 (Reporting Period) of the CDSB Framework states that “disclosures shall be provided at least annually” to ensure information is available on a timely basis. The three annual figures presented here allow for the identification of a discernable trend that both the percentage of water withdrawn and water consumed in water-stressed regions has remained relatively stable over the three-year period.

MOCK DISCLOSURE: METRICS & TARGETS

Excerpt from AgriCo Annual Report

The majority of the Company's water withdrawals and consumption are associated with its processing of agricultural products. The Company's processing facilities are largely located in areas that are not characterized by a high degree of water stress. The Company's water usage is a major contributor to overall energy usage, due to the energy required to pump, heat, cool, and treat process water. As such, as part of the Company's efforts to reduce overall energy usage, the Company's water usage has declined year-over-year as a result of the execution of multiple efficiency projects across the organization. **10**

To date, the Company has not established a target for water withdrawal or consumption reduction; however the Company continues to monitor its water usage as well as the potential emergence of water scarcity risk in the regions in which it has extensive processing operations as part of its overall risk management process.

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Are the methodologies used to calculate or estimate climate-related metrics clear?

CDSB FRAMEWORK: By reporting against the SASB standard for its industry, AgriCo ensures its methodologies are clear, as they follow the technical protocols associated with each SASB accounting metric. This type of rigor enhances the comparability of performance data across peer companies, in accordance with TCFD principle 5 ("Disclosures should be comparable among companies within a sector, industry, or portfolio"), CDSB Framework Principle 4 ("Disclosures shall be consistent and comparable," which encourages companies to refer to the SASB standards to understand material topics for their sector), and CDSB Framework REQ-05 which is aimed at supporting comparative analysis. REQ-04 also requires methodologies for preparing these results to be disclosed, which in the AgriCo excerpt are incorporated by reference to the SASB industry standard. **1**

SASB STANDARD: For example, in reporting its water withdrawn and consumed (SASB metric FB-AG-140a.1), AgriCo applied strict definitions supplied by the SASB standard to determine its applicable water sources, what constitutes "fresh water," what activities qualify as "consumption," and which geographic locations are designated as water-stressed by the World Resource Institute. **8**

Supplemental Guidance for Non-Financial Sectors:

Companies that, like AgriCo, operate in key non-financial industries (see list on Page 23) should also consider the following questions:

Do the metrics and targets disclosed provide historical trends and forward-looking projections (by relevant country and/or jurisdiction, business line, or asset type)?

SASB STANDARD: SASB metric FB-AG-140a.1 also enables AgriCo to identify that the majority of its water is not currently consumed in water-scarce regions, due to the location of its processing facilities. **9**

SASB STANDARD: In responding to SASB metric FB-AG-140a.2, AgriCo discusses that it has not identified water use as a major risk factor, and it has not established a corresponding target for water reduction at this time. **10** However, the company also notes that it has achieved a reduction in water usage as part of its energy efficiency efforts, as captured in SASB metric FB-AG-130a.1. **5**

MOCK DISCLOSURE: METRICS & TARGETS

Excerpt from AgriCo Annual Report

Ingredient Sourcing

Metric	Year Ended December 31,		
	2016	2017	2018
Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	20%	12%	10%

The Company faces product-specific risks associated with both acute and chronic physical climate risk, as discussed in the Strategy section above. **11** The Company experienced a significant decline in the percentage of its products sourced from water stressed regions as a result of the severe drought that occurred in Brazil in 2015-2016, impacting the Company’s cocoa-derived products. **12**

As part of its risk assessment process, the Company has identified long-term shifts in precipitation patterns that may impact its cocoa supply chain in both Brazil and Ghana, and has begun engaging suppliers to develop long-term plans to develop irrigation strategies and/or re-optimize cultivation areas. The Company recently announced a \$20M capital expenditure program in Brazil to partner with suppliers to improve their long-term climate resilience, as described in the Strategy section above. **13**

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SASB STANDARD: SASB metric FB-AG-440a.1 includes the list of specific crops that the company has identified as likely to be impacted by climate-related risks. AgriCo identified these crops in its Strategy disclosure (above) along with a discussion of how it plans to mitigate risks associated with sourcing these key ingredients. **11**

SASB STANDARD: SASB metric FB-AG-440a.2 enables AgriCo to identify the degree of water scarcity in regions where it is currently sourcing its products. Here, AgriCo identifies that it does not currently source a significant share of its products from water-scarce regions, but anticipates that this risk will emerge over time, thereby justifying the CAPEX investment noted by AgriCo to mitigate associated risks in its supply chain (see Strategy section). **12**

Do the metrics disclosed support the company’s scenario analysis and strategic planning process? Do they enable monitoring of the organization’s business environment from a strategic and risk management perspective?

CDSB FRAMEWORK: Finally, the disclosure is explicitly linked to the company’s strategic planning and risk management approach, in accordance with the SASB technical protocols for this qualitative, “discussion and analysis” metric. This narrative fits with the CDSB Framework REQ-06 (Outlook) whereby management is required to summarize its conclusions about the effect of environmental impacts, risks and opportunities, and policy outcomes (e.g., long-term shifts in precipitation patterns) on the organization’s future performance and position. **13**