Implementation Guide
FOR COMPANIES

Sustainability Accounting Standards Board

ABOUT SASB

The Sustainability Accounting Standards Board (SASB) is an independent 501(c)3 nonprofit. SASB's mission is to develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors. That mission is accomplished through a rigorous process that includes evidence-based research and broad, balanced stakeholder participation.

ABOUT THIS GUIDE

The SASB Implementation Guide is a reference document for issuers who are in the process of integrating the use of SASB standards into their existing 10-K or 20-F disclosure processes. SASB standards are a cost-effective way for issuers to communicate their material sustainability impacts to investors in a decision-useful format that satisfies the requirements of Regulation S-K.

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Foreword BY ROBERT HERZ

I've devoted much of my career working to provide better information to the capital markets. What you measure matters, how you report it matters, and both are important to investment analysis and the healthy functioning of our economy. The corollary is that we should be measuring and reporting on those things that matter.

Investors tell me they're interested in sustainability issues, but they have to sift through data that is not standardized, not comparable, and in many cases not material. They want standardized metrics that are targeted at the issues that really matter to a particular industry.

SASB standards identify sustainability topics and related metrics, at an industry level, that are likely to be material to companies in that industry. Companies can voluntarily use SASB standards to provide disclosures on material sustainability issues that are relevant, comparable, and useful to investors.

With more standardized disclosure across an industry, companies can benchmark themselves and investors can benchmark them. They are non-financial metrics, but they are metrics that drive financial performance and help answer the question, "If I were going to make a big investment in or buy a company, what would I look at besides the financial statements?"

This guide is intended to assist companies in using SASB standards—that is, select appropriate sustainability accounting standards for their organization and effectively embed those topics and metrics into core management and reporting functions. Ultimately, the disclosure of material sustainability information, including known trends, events, and uncertainties, is consistent with both the spirit of MD&A and the regulatory framework established by the SEC. SASB standards offer an opportunity to enhance accounting's traditional role of providing necessary, relevant, and reliable information to the capital markets.

As financial reporting professionals, you have the unique opportunity to help your company provide the information that investors want and markets need. Thank you for your consideration of SASB standards.

Robert H. Herz

Robert Herz
Former Chair of FASB
SASB Board of Directors
November 30, 2015

OBJECTIVES OF THE GUIDE

The information contained in this Implementation Guide is intended to help companies achieve three objectives. Companies can use the Guide, along with SASB standards (or "Standards"), to:

1. **Identify the sustainability topics most likely to be material to an investor,**
2. **Understand the current state of disclosure and performance on those topics, and**
3. **Enhance existing reporting processes to more effectively disclose material information on sustainability topics.**

ABOUT SASB

The Sustainability Accounting Standards Board (SASB) is an independent 501(c)(3) organization that develops industry-specific standards for use in disclosing material sustainability information in mandatory filings made with the Securities and Exchange Commission ("SEC").

SASB develops and maintains sustainability accounting standards for 79 industries in 10 sectors: Health Care, Financials, Technology & Communication, Non-Renewable Resources, Transportation, Services, Resource Transformation, Consumption, Renewable Resources & Alternative Energy, and Infrastructure.

SASB's standards-development process includes evidence-based research, multi-stakeholder working groups, a 90-day public comment period, and a review by an independent standards council. The 2,800 participants in SASB's working groups have included professionals from publicly traded companies with $11 trillion market capitalization and investment firms with $23.4 trillion in assets under management.

WHY SASB?

In a world where megatrends such as population growth, food scarcity, climate change, and resource constraints are reshaping the business landscape, financial accounting alone cannot capture the complete picture of a company's value. A variety of frameworks have emerged in response to the demand for non-financial information in corporate reporting. But the capital markets have their own needs, unique from those of suppliers, customers, communities, interest groups, and other stakeholders. Investors demand reliable and comparable sustainability information with clear links to financial performance.

Complementing the work of the SEC, the Financial Accounting Standards Board (FASB), and other organizations and initiatives, SASB aims to improve disclosure effectiveness, with a premium placed on material, decision-useful information for investors. Therefore, the Standards address sustainability topics that are reasonably likely to affect the financial condition or operating performance of a company or an entire industry and provide companies with a way to better satisfy the requirements of Regulation S-K.

With an average of just five topics and 14 metrics per industry, SASB standards offer a cost-effective way to meet the needs of investors and an efficient alternative to the demands of sustainability surveys and questionnaires. Furthermore, research shows that by focusing on the limited set of sustainability-related risks and opportunities identified by the SASB standards—those reasonably likely to have material impacts—companies can achieve superior results, including return on sales, sales growth, return on assets, and return on equity, in addition to improved risk-adjusted shareholder returns.[1]

ABOUT THE STANDARDS

The Standards are comprised of disclosure topics ("SASB topics") and accounting metrics ("SASB metrics") designed to facilitate sustainability disclosures in SEC filings that are comparable at an industry level, thereby enhancing the usefulness of reporting. Note that while the Standards provide guidance as to which topics are reasonably likely to constitute material information for a company within a particular industry, determination of materiality for the purposes of disclosure under Regulation S-K is entity-specific. Although the Guide provides a framework for selecting industry topics appropriate to a company's particular context, management is responsible for determining whether the resulting information is material and should be included in filings.

The level of time and effort required by a company to fully implement SASB standards will vary depending on the availability and quality of data, the rigor of internal controls, the need to collaborate with business unit leaders and individuals across corporate functions (e.g., operations, finance, and sustainability), and the current state of the company's disclosures.

AUDIENCE

The Guide is intended for corporate professionals responsible for reporting to investors and analysts, with a particular emphasis on preparing SEC filings such as the 10-K and 20-F.

Members of finance, accounting, audit, legal, sustainability, and risk functions are likely to find it useful in assessing and improving how their company measures, manages, and reports material information on the sustainability factors that are linked to financial value.

The Guide helps users to embed the Standards into existing processes in a way that enables effective management of risks and opportunities specific to their industry and operating context.

WHAT'S AHEAD

The Guide will facilitate completion of the following steps, intended to help companies more easily integrate the Standards into existing processes:

1 MATERIALITY ASSESSMENT

Which SASB topics represent known trends, events, demands, or uncertainties that are reasonably likely to impact the business in the short, medium, and/or long term?

Which of those topics are reasonably likely to have a material impact on the company's financial condition or operating performance?

2 DISCLOSURE ANALYSIS & BENCHMARKING

Is the company already collecting and reporting information related to the SASB topics in some form in either internal, external, mandatory, or voluntary reports?

Does the company commonly use boilerplate language when discussing sustainability topics? How can disclosures be made more useful?

Is the information contained in the company's various reporting channels properly aligned?

3 PERFORMANCE EVALUATION & BENCHMARKING

How does the company's performance on a given SASB topic and associated accounting metrics compare with that of its industry peers?

On which SASB topics could improved performance lead to value creation or competitive advantage?

4 IMPLEMENTATION CONSIDERATIONS

What should the company consider when embedding SASB topics and metrics into core business functions—both for internal management and external reporting purposes?

What are the systems, processes, and controls considerations?

5 DISCLOSURE CONSIDERATIONS

What are the appropriate channels for disclosing material sustainability information in statutory filings?

How can SASB standards improve the effectiveness of sustainability disclosures?

Materiality Assessment
Select topics for implementation

▼

Disclosure Analysis & Benchmarking
Assess readiness and alignment gaps

▼

Performance Evaluation & Benchmarking
Identify strengths, weaknesses, opportunities, and threats

▼

Implementation Considerations
Integrate into existing business processes

▼

Disclosure Considerations
Develop narrative for MD&A

1 Materiality Assessment

Section 1 provides guidance on how a company might consider the potential for material impacts associated with performance on the SASB disclosure topics for its industry. At the end of this section, a company will have selected the topics most appropriate for its business, which can then be considered for implementation and disclosure.

INTRODUCTION

Companies and providers of capital now recognize that sustainability issues can and do impact business outcomes. However, it is equally important to note that those impacts vary significantly from one industry to the next. Companies within an industry share similar sustainability challenges because of the resources they rely on to produce goods and services and the effects they have on society and the environment. By design, the SASB standards reflect the unique sustainability profile of each industry.

SASB achieves this focus on industry-specific impacts through the lens of materiality. Materiality is a legal concept defined in the U.S. by the Supreme Court. The Court defines material information as presenting "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 information made available." SASB does not define "materiality," but rather looks to the Court's definition for the purpose of standard setting.[2]

In addition to performing evidence-based research guided by this legal principle, SASB vets each of its disclosure topics with a group of industry experts—including balanced representation of corporate, investor, and other perspectives—to assess likely materiality. On average, more than 82 percent of investors and issuers agreed on the likely materiality of SASB's proposed disclosure topics. When a topic failed to reach at least 75 percent consensus, it was either flagged for further review (if close to 75 percent) or not carried forward. (For a more detailed sector-specific breakdown of Industry Working Group feedback, *see Appendix F.*)

As a result, SASB standards identify the sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies in a given industry. There is a reasonable likelihood that the SASB disclosure topics will be applicable to companies in the industry because 1) they are evidence-based, 2) they are consensus-driven, 3) they are industry-specific, and 4) more than two-thirds are already being disclosed in SEC filings.

Nevertheless, materiality is an "inherently fact-specific finding,"[3] and the final determination of materiality is the onus of the corporation. SASB recommends that companies follow a straightforward process, outlined below, to select the appropriate SASB standards to assess and implement, depending on the company's specific operating context.

SUPPORTING RESOURCES

The Standards are supported by the following reference documents, which are available on the SASB Standards Navigator:

Industry Research Briefs: These briefs provide the basis for the standard setting and identify channels through which SASB topics might impact a company's financial condition or results of operations, including research and evidence (evidence of interest, financial impact, and forward-looking impact) relied on during the standard-setting process.

Mock 10-Ks: These documents provide examples of the type of disclosure SASB standards are designed to enable in MD&A. They demonstrate the use of narrative and analytics to disclose management's view into known trends and uncertainties, consistent with SEC guidance on preparation of MD&A. *(See Appendix G.)*

Conceptual Framework: This document sets forth the objectives, guiding principles, and methodologies that serve as the basis for development of the SASB standards and associated guidance.

Rules of Procedure: This document sets forth the process for development, codification, and maintenance of the standards.

Assembling a Team

Assembling and educating a cross-functional team is a critical early step to start the integration process. A cross-functional team provides diverse perspectives in assessing sustainability topics for disclosure and considering how selected sustainability topics can be embedded in the DNA of the organization. It may be possible to leverage existing cross-functional teams—e.g., for internal control, disclosure processes, or business strategy. Companies may want to draw from:

- Finance and accounting
- Sustainability
- Environmental, health, and safety ("EH&S")
- General counsel
- Risk management
- Internal audit
- Internal control
- Strategy
- Operations
- Information Technology
- Compliance
- Human resources
- Investor relations
- Relevant functional areas *(e.g., sales/marketing, supply chain, manufacturing)*

REVIEW SASB STANDARDS

Before selecting topics and assessing their likelihood for material impacts, a company should familiarize itself with the SASB standards for its industry. The Standards can be accessed on SASB's Standards Navigator by entering the company's ticker symbol or by selecting its Sustainable Industry Classification System (SICS™) industry. SASB's SICS code differs from the SEC's industry classification coding, which issuers use during the filing process. If the company generates significant revenue from multiple industries, SASB recommends considering whether topics from multiple industry Standards may be applicable.

Note that because SASB standards are designed to address sustainability topics that are broadly applicable to companies within an industry, they will not necessarily include all the sustainability factors that are reasonably likely to have a material impact. Companies may find that information related to additional sustainability topics is appropriate for disclosure based on their specific facts and circumstances.

In the U.S., Regulation S-K establishes the requirements for disclosure of material information by publicly listed corporations. Although Regulation S-K includes no explicit requirement or reference to sustainability topics, SEC interpretive guidance has established that MD&A disclosure requirements may create sustainability-related disclosure obligations for companies.[4] Disclosure will be covered in more detail in Section 5, and a list of relevant laws and regulations is included in the back of this Guide.

CLASSIFICATION SYSTEM

Most major industry classification systems use sources of revenue as their basis for classifying companies into specific sectors and industries. However, a company's market value is determined by more than financial performance. SASB developed the SICS™ to group industries based on their resource intensity and sustainability risks and opportunities. *(See Appendix B.)*

Companies can find where they are classified within SICS and access industry standards on the SASB Standards Navigator.

SUSTAINABILITY IN MD&A

In the MD&A, companies are required to disclose any known event, trend, or uncertainty that is reasonably likely to have a material effect on the company's results of operations, liquidity, or financial condition or would cause reported financial information not to be necessarily indicative of future operating results or financial condition. SEC guidance has established that this may include sustainability information.

SEC, Commission Guidance Regarding Disclosure Related to Climate Change (February 2010)

SEC STAFF ACCOUNTING BULLETIN (SAB) NO. 99

SEC Staff Accounting Bulletin (SAB) No. 99 – Materiality states that registrants should not use financial thresholds or rules of thumb to make ultimate materiality determinations. Rather, **registrants should perform "a full analysis of all relevant considerations,"** including both quantitative and qualitative factors, in deciding whether information is material. Similarly, the FASB holds that materiality cannot be captured by a formula and that quantitative thresholds should not be used to make materiality determinations.

17 C.F.R. Part 11, SEC Staff Accounting Bulletin No. 99 – Materiality (August 11, 1999).

Statement of Financial Accounting Concepts No. 2, Qualitative Characteristics of Accounting Information (1980).

Statement of Financial Accounting Concepts No. 8, Qualitative Characteristics of Useful Accounting Information (2010).

PROVIDE FEEDBACK

SASB welcomes feedback on the topics and metrics included in the Standards, as well as on the cost-effectiveness of their implementation. Visit **comment.sasb.org** to comment.

SASB recognizes that materiality is not an easily applied concept and requires significant judgment, particularly for non-financial information. The SEC has acknowledged that identifying and assessing known material trends, events, and uncertainties require companies to consider a substantial amount of financial and non-financial information available, including information that itself may not be required to be disclosed.[5] Furthermore, assessing the materiality of sustainability information involves looking beyond conventional financial measures to a broader consideration of social, environmental, and governance issues *(see Appendix A)* that have the potential to affect the results of operations and/or financial condition in the near, medium, or long term.

Having reviewed the Standards for the relevant industry or industries, as well as the supporting resources provided by SASB, the company will be better prepared to select and assess the appropriate sustainability topics to disclose to investors.

SELECT TOPICS WITH THE SASB FIVE-FACTOR TEST

The topic selection exercise is designed to assist companies in considering the potential for a material impact associated with performance on each SASB disclosure topic for their industry. As one part of its standard-setting process *(see sidebar)*, SASB has conducted this process for each topic at the industry level to arrive at a set of topics that are reasonably likely to constitute material information, so the company may wish to focus primarily on evidence that demonstrates the topic lacks relevance to its specific circumstances. Selected topics should serve as inputs to existing disclosure preparation and strategic management processes, where the following questions are answered:

- **Is there sufficient evidence to conclude that company activities related to the topic are not reasonably likely to cause a material effect (positive or negative) on financial condition or results of operations?**
- **Is the evidence clear that the topic is not strategically appropriate to the company or of interest to investors?**

INTRODUCTION TO THE SASB FIVE-FACTOR TEST

SASB designed an evidence-based approach to help select the sustainability topics for which to develop a corresponding standard.[i] The Five-Factor Test serves two important purposes for SASB. First, it acts as a method to identify topics that may present risks and/or impact the financial condition or results of operations for companies

SASB PROCESS

SASB has followed a rigorous, evidence-based, multi-stakeholder process to develop provisional sustainability accounting standards for 79 SICS industries in 10 sectors:

Research phase: SASB performs evidence-based research, including the following components:

Evidence of interest: SASB assesses investor interest in each topic using the Five-Factor Test.

Evidence of impact: SASB evaluates the type and magnitude of financial impacts for each topic.

Development phase: SASB engages a group of industry experts—including balanced representation from corporate, investor, and other perspectives—to provide feedback and reach consensus on the disclosure topics and metrics.

Finalization phase: The standards are exposed to public comment; process and outcomes are reviewed by an independent Standards Council.

A MORE ROBUST APPROACH

When assessing sustainability topics for inclusion in their CSR reports, many corporations use frameworks that compare stakeholder interests with company impacts. The SASB Five-Factor Test represents a more useful approach that is in keeping with the higher disclosure standard for SEC filings.

Stakeholder concerns can indeed rise to the level of investor interest when they are so serious as to affect financial value drivers such as brand value, customer safety or loyalty, or market share. However, the Five-Factor Test casts a wider net—beyond corporate and stakeholder views—by considering other factors that may trigger a material condition, including regulatory changes, industry norms, and the opportunity for innovation.

i In developing its Five-Factor Test, SASB modified an approach developed by Harvard Initiative for Responsible Investment in "From Transparency to Performance: Industry-Based Sustainability Reporting on Key Issues" (August 2010), which was based on logic put forward by AccountAbility in 2003.

in a given industry. Second, it surfaces instances of investor interest in the topic.

In the same way that this process allows SASB to develop an understanding of which sustainability topics are important to address through standard-setting, it may help a company's management to select topics appropriate to its specific operating context. The company can use the Five-Factor Test to assess whether company activities related to the topic might be reasonably likely to have a material impact on financial condition or results of operations.

The first factor addresses direct financial impacts and risks related to the company's performance on each topic. The next three factors each address drivers and trends that have the potential to indirectly impact the company's financial performance. The fifth factor addresses upside opportunities that can have an impact on the company's financial performance.

DIRECT FINANCIAL IMPACTS & RISK: This factor assesses the likelihood that corporate performance on the topic will have a direct and measurable impact on near- or medium-term financial performance.

LEGAL, REGULATORY & POLICY DRIVERS: Existing, evolving, or emerging regulation may influence company actions and affect financial performance by forcing the internalization of certain costs and/or by creating upside opportunity associated with sustainability-related externalities.

INDUSTRY NORMS, BEST PRACTICES & COMPETITIVE DRIVERS: Peer actions and disclosure on industry issues may create pressure for high standards of performance related to the management and disclosure of sustainability topics in order to remain competitive and satisfy investors.

STAKEHOLDER CONCERNS & SOCIAL TRENDS: Stakeholders may raise concerns that could influence medium- or long-term financial or operating performance or create acute short-term financial impacts through changes in customer demand, influence on new regulations, and disruptions to business viability.

OPPORTUNITIES FOR INNOVATION: New products and business models to address the topic can drive market expansion or have the potential for a disruptive change that provides new sources of competitive advantage. Financial impacts and risks associated with these innovations may be of interest to investors.

INDUSTRY RESEARCH BRIEFS

In the SASB Industry Research Briefs, each topic is mapped to specific types of financial impact—e.g., impact on revenues, costs, assets, liabilities, and/or cost of capital. This information can be found in Appendix IIB of the Briefs, which are available on the SASB website and Standards Navigator.

Applying the SASB Five-Factor Test

A company can systematically consider the Five-Factor Test for each topic, understand the triggers, catalog key findings, and draw insights regarding topics that are reasonably likely to have material impacts. In general, the more triggers that are strongly linked to a particular topic, the more likely it is that information related to the topic will be material to investors. However, a preponderance of evidence for even one of the five factors may be enough to indicate a reasonable likelihood for a potential material impact. A company may also choose to rate each issue on the Five Factors for the purpose of tracking trends over time. *(See Figure 1, page 11.)* When assessing whether management (or mismanagement) of the topic is reasonably likely to have an effect on the financial condition or operating performance of the company, the company should consider the following aspects of financial impact for each of the Five Factors:

- Type of direct impact(s) on results of operations and financial condition, including:

Revenues and/or Costs	Assets and/ or Liabilities	Cost of Capital
Market share	Tangible assets	Risk premium
Cost of goods sold (COGS)	Intangible assets	Availability of capital
Research and development (R&D)	Pension and other liabilities	Industry divestment risk
Capital expenditures (CAPEX)	Contingent liabilities and provisions	
Extraordinary expenses		
Pricing power		

- Likelihood of impact(s)
- Time frame of impact(s) (short, medium, or long term)
- Magnitude of impact(s)

Figure 1. Sample Assessment Using the SASB Five-Factor Test

SUSTAINABILITY ISSUE / OPPORTUNITY	Direct Financial Impacts & Risk	Legal, Regulatory & Policy Drivers	Industry Norms & Competitive Drivers	Stakeholder Concerns & Social Trends	Opportunities for Innovation	Total Score	Notes / Comments
ENVIRONMENT							
GHG Emissions	10	10	7	7	7	41	*Hydrocarbon reserve exposure to climate change mitigation efforts*
Air Quality	5	7	5	5	5	27	*More strategic approach to pollutants including NO_2, VOCs, and PM*
Water Management	8	6	7	5	10	36	*Need plan to secure water supplies without exacerbating stressed regions*
Biodiversity Impacts	3	7	2	6	2	20	*Some exposure to protected areas and endangered species*
SOCIAL CAPITAL							
Security, Human Rights & Rights of Indigenous Peoples	4	8	6	9	4	31	*Improve risk management plan for operations in areas of conflict*
Community Relations	3	5	5	10	2	25	*Strengthen community outreach in later project stages*
LEADERSHIP & GOVERNANCE							
Business Ethics & Payments Transparency	5	9	5	8	1	28	*Significant operations in areas of high corruption*
Health, Safety & Emergency Management	5	8	6	7	3	29	*Renew focus on emergency preparedness and response, safety culture*
Reserves Valuation & Capital Expenditures	10	9	3	7	7	36	*Significant CAPEX for exploration/development of new fossil fuel reserves*
Management of the Legal & Regulatory Environment	3	4	5	3	4	19	*Minimal political activity around company's core operations*

0 = no impact
5 = potential for impact
10 = significant impact
(immediacy, likelihood, magnitude of impact)

36-50 high risk/opportunity = likelihood of significant impacts
21-35 medium risk/opportunity = potential for modest impacts
0-20 low risk/opportunity = not significant at this time

The Five-Factor Test is intended to help a company consider whether its activities related to a SASB disclosure topic might be reasonably likely to have a material impact on financial condition or results of operations. Numerical ratings are intended only as judgments of the potential for risk and/or opportunity related to the topic and do not represent a conclusion about materiality, or necessarily imply a duty to disclose.

In its review of evidence for financial impacts, SASB considers a five-year time horizon, the typical basis for a discounted cash flow analysis. Note that the SEC has not quantified a specific future time period that must be considered in assessing the impact of a known trend, event, or uncertainty that is reasonably likely to have a material impact. As with any other judgment required by Item 303, the necessary time period will depend on a registrant's particular circumstances and the particular trend, event, or uncertainty under consideration.[6]

FACTOR 1: DIRECT FINANCIAL IMPACTS & RISK

The company should consider whether management or mismanagement of the topic may impact the entity's ability to create value. An impact may be acute in nature or chronic in its persistence.

An impact may also either positively or negatively affect the financial performance of the entity depending on performance.

To aid in selecting topics, the company might consider the following aspects of actual or potential financial impacts and risk:

- **Does the topic correspond to impacts on balance sheet or income statement items?**
- **Is performance on the topic affecting intangible assets, reputation, cost and sourcing of capital, and the potential for long-term growth (i.e., factors outside financial statements affecting valuation)?**

To support an examination of this factor, the company may wish to review the literature on the financial implications of sustainability issues, such as the SASB Industry Research Briefs or media reports of issues that affect tangible and intangible value. The company might also interview those who manage performance on the topic to better understand its potential to result in a financial impact. Furthermore, the company's and its peers' SEC filings can provide additional insights into financial impacts and risks associated with the topic.

FACTOR 2: LEGAL, REGULATORY & POLICY DRIVERS

The company should consider the legal, regulatory, and policy drivers that may affect business risks and opportunities in the industry, and how it is positioned relative to its competitors to adapt to such developments related to the topic. To aid in selecting topics, the company might consider the following:

- **Do current laws or regulations related to the topic require the company to reduce, eliminate or otherwise manage activities that can have negative impacts?**
- **Are changes to laws and regulations related to the topic expected in the near, medium, or long term?**
- **Is the company at risk of being the focus of regulatory attention due to its historical performance on the topic?**
- **Could changes to laws and regulations related to the topic create market opportunities for the company?**

The company may be aware of the legislative trends affecting its industry and it might work with internal or external counsel to review expected, imminent, and potential impacts. The company might also examine disclosures of peer companies to identify relevant legal, regulatory, and/or policy drivers related to the topic. Industry associations, legal news, and SASB Industry Research Briefs can also help companies identify drivers for consideration.

FACTOR 3: INDUSTRY NORMS, BEST PRACTICES & COMPETITIVE DRIVERS

The company should consider peer performance and practices (including disclosure) on the topic that may ultimately lead to normative standards of performance or competitive threats to the business.

To aid in selecting topics, the company might consider the following aspects of industry norms, best practices, and competitiveness that may affect financial performance:

- **Do peer companies disclose information on the topic?**
- **How do peer companies frame economic or financial implications related to the topic?**
- **How are peer companies managing the topic? Are there best practices?**
- **Are peer companies acting to minimize costs or risks related to the topic? Are they creating new value or improving their competitive advantage?**
- **How does the company's performance on the topic compare to that of the industry?**

The company might review industry publications or meet with internal stakeholders to understand how the topic is being addressed by peer companies and what industry norms, best practices, or competitive efforts may be appropriate to consider.

FACTOR 4: STAKEHOLDER CONCERNS & SOCIAL TRENDS

The company should identify broad stakeholder concerns and social trends and consider how these currently affect the entity's operating performance and may manifest as changes in demand for products or services, impacts on intangible assets and long-term growth, damage to tangible assets, creation of contingent liabilities, or operational risks. To aid in selecting topics, the company might consider the following aspects of stakeholder concerns and social trends that may affect financial performance and reflect investor interest:

- **Has the company faced shareholder resolutions associated with the topic?**
- **Is the number of resolutions and votes in favor of a resolution related to the topic increasing over time or expanding among peer companies?**
- **Are there other channels, such as questionnaires or analyst calls, through which investors are requesting information on the topic?**
- **What leverage do stakeholders (e.g., employees, customers, contractors, suppliers who have expressed concern or support for the company's performance on the topics) have over the company's financial performance or results of operations?**
- **Will changes in customer preferences or resource availability affect the company's ability to effectively serve market demand?**

The company might review surveys, questionnaires, and/or shareholder resolutions to consider if the topic has been raised by investors. Reviewing investor proxy voting guidelines, key assumptions disclosed in analyst reports, and analyst call transcripts may also be useful. The company might also review media reports of stakeholder concerns, social trends, or government investigations related to the company or broader industry to consider stakeholder concerns and social trends associated with the topic. Companies also obtain valuable information regarding topics that are of interest to stakeholders and that may become financially material in the future through deep engagement with a broader range of stakeholders.

FACTOR 5: OPPORTUNITIES FOR INNOVATION

The company should consider its business model in the context of technologies, markets, and new approaches that have the potential to create business opportunities related to the topic.

To aid in selecting topics, the company might consider the following aspects of opportunities for innovation that may affect financial performance:

- **Are there emerging or best-in-class technologies or business practices that would allow the company to improve performance on the topic so as to minimize risks or capture value?**
- **Is there research and development within the company, or externally, that could result in disruptive technologies, processes, products, or services? Would these developments support new markets or help reach new customer segments?**
- **Are such innovations currently cost-effective to implement? How soon might they be cost-effective?**

The company might draw insights from interviewing key directors and management, reviewing innovation-related articles in the media, and evaluating the presentation of the topic in industry or professional journals. By distinguishing innovations that add incremental value from those that can help solve large societal needs, the company can appropriately consider how performance on the topic may relate to reduced risk and/or opportunities for innovation.

SUMMARY

The Five-Factor Test is intended to be a starting point for companies to select sustainability topics appropriate to their specific operating context that warrant further consideration for management and/or disclosure. By considering the factors in aggregate for each topic, the company will be in a stronger position to move forward by assessing its current state of disclosure and management on those topics selected.

At this point, the company will have answered the following questions:

- **Which SASB disclosure topics are *not* relevant to the company's specific operating conditions?**
- **For each of the SASB disclosure topics, which of the Five Factors can trigger a material impact on the financial condition or operating performance of the company?**
- **Which SASB topics are appropriate for the company to disclose to investors?**
- **Which topics may present a risk to the company if disclosure is omitted?**

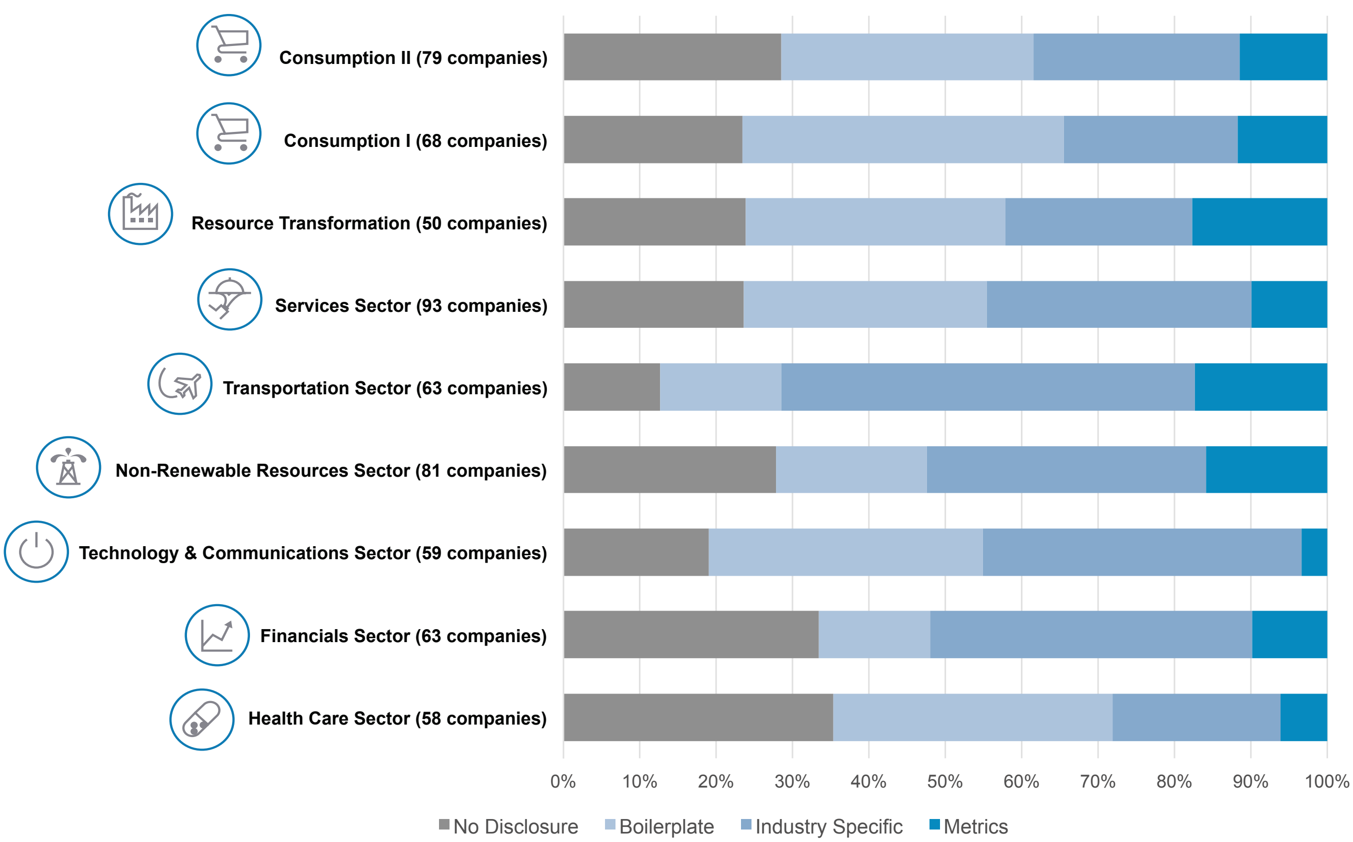
2 Disclosure Analysis & Benchmarking

Section 2 helps the company determine its readiness and better understand the potential for implementing SASB standards. By assessing its current practices for reporting on key sustainability topics, as well as those of its industry peers, the company will be better prepared to focus its efforts on those areas where improvement is needed.

INTRODUCTION

Although SASB research shows that nearly three-quarters of SASB disclosure topics are already addressed by issuers in their SEC filings *(see Figure 2)*, the information being disclosed is rarely decision-useful to investors. More than 40 percent of all disclosures on sustainability topics contain boilerplate language, while only about 15 percent of such disclosures use metrics. Even then, companies use different metrics and/or calculation methods, which hinders comparability.

Figure 2. Current State of Disclosure on SASB Topics in SEC Filings



Meanwhile, companies often identify sustainability information contained in other reporting channels—such as a stand-alone corporate social responsibility (CSR) report—as "material," creating confusion for investors and potential legal liability for the issuer.[ii]

By analyzing its own existing sustainability disclosures—along with those of its industry peers—a company can better assess its readiness to implement SASB standards.

ASSESS THE CURRENT STATE OF DISCLOSURE

For each selected topic, SASB recommends that a company assess whether and how it is currently reporting relevant information in statutory filings and other corporate reporting channels. This will help the company identify both reporting gaps and opportunities to leverage what is already in place.

The table in *Figure 3* and the chart in *Figure 4* along with the accompanying content provide guidance for performing this evaluation. A company might record its results and use them to draw insights.

ii For example, statements made in sustainability reports have been cited as false or misleading by the plaintiffs in a Rule 10b-5 case (In re BP p.l.c. Sec. Litig., 852 F. Supp. 2d 767, 796 (S.D. Tex. 2012))

DECISION-USEFUL DISCLOSURE

Companies should use the Standards as an opportunity to take a fresh look at related disclosures and demonstrate their ability to manage dynamic risks and opportunities. Research indicates that investors are interested in disclosures that:

- Articulate the company-specific implications of sustainability topics,
- Describe the financial implications of sustainability risks and opportunities,
- Are comparable among companies in the same industry,
- Are linked to the overall business strategy, and
- Allow for benchmarking quantitative performance.

PwC, *Sustainability Goes Mainstream: Insights into Investor Views* (May 2014).

Figure 3. Sample Disclosure Analysis

	DISCLOSURE CHANNEL						
DISCLOSURE TOPIC	**10-K Filing**	**CSR Report**	**Corporate Website**	**Annual Report**	**Investor Questionnaire**	**SASB Metrics?**	**Notes / Comments**
ENVIRONMENT							
GHG Emissions	Metrics	Metrics	Metrics	Metrics	Metrics	3/3	*Reported GHG reduction figures in 10-K, but no trend data (available)*
Air Quality	Industry-Specific	Metrics	Industry-Specific	Industry-Specific	Metrics	1/1	*Pollutant data already disclosed in sustainability report, but not in 10-K*
Water Management	Industry-Specific	Industry-Specific	Industry-Specific	Industry-Specific	Metrics	2/4	*Most water management data available, but not being publicly reported*
Biodiversity Impacts	None	Industry-Specific	Industry-Specific	None	Industry-Specific	1/3	*Environmental management policy disclosed; other metrics may take time*
SOCIAL CAPITAL							
Security, Human Rights & Rights of Indigenous Peoples	Boilerplate	Industry-Specific	Industry-Specific	Boilerplate	Industry-Specific	1/3	*Metrics available, but not being reported; issue being treated inconsistently*
Community Relations	Boilerplate	Metrics	Industry-Specific	Boilerplate	Metrics	2/2	*Metrics reported and ID'd as material in CSR report not disclosed elsewhere*
LEADERSHIP & GOVERNANCE							
Business Ethics & Payments Transparency	Boilerplate	Boilerplate	Boilerplate	Boilerplate	Boilerplate	0/2	*Metrics not available, but relatively easy to prepare*
Health, Safety & Emergency Management	Industry-Specific	Metrics	Metrics	Industry-Specific	Metrics	3/3	*All metrics already reported in some channels, not in others*
Reserves Valuation & Capital Expenditures	Metrics	Boilerplate	Boilerplate	Metrics	Industry-Specific	0/3	*Inconsistent treatment; metrics available; scenario projection may take time*
Management of the Legal & Regulatory Environment	None	None	None	None	None	0/2	*Metrics relatively easy to prepare, may require review*

Disclosure Analysis

By analyzing the content and form of its existing disclosures, a company can better assess the differences between its current reporting practices and those recommended by SASB. Companies are likely to find that they are already addressing many of their selected topics in one or more reporting channels, allowing them to leverage existing functions and processes to strengthen their statutory filings through the use of SASB metrics.

When cataloging its existing disclosures on the SASB topics for its industry, a company should do the following:

- **Record the use or availability of the SASB metrics associated with the topic**
- **Categorize the disclosure for benchmarking against industry peers**

SASB categorizes the current state of disclosure using the following four categories:

1. **NONE: No disclosure on the topic.**
2. **BOILERPLATE: Generic statements that could apply to any given company in any given industry or language that appears in the 10-K disclosures of multiple registrants.**
3. **INDUSTRY-SPECIFIC: Disclosure that is understood in the context of the industry in question.**
4. **METRICS: Disclosure that includes quantitative metrics, regardless of whether they are SASB metrics, to measure performance around the issue. Goals and target figures are not considered as metrics, unless they are accompanied by performance metrics toward those targets.**

When assessing the quality of their disclosures, particularly those in SEC filings, companies should also consider the characteristics of decision-useful disclosure referenced below to identify opportunities for improved disclosure. The questions listed draw from a range of disclosure-effectiveness initiatives by regulators, standard setters (e.g., FASB, IASB), and other organizations (e.g., the International Integrated Reporting Council, or IIRC), in addition to corporate reporting insights. In reviewing disclosures on selected topics, consider the following:

BETTER THAN BOILERPLATE

Research shows that more detailed disclosures enhance analysts' understanding and impact investors' decision making. One study, which focused on 10-K Risk Factor disclosures—those required by Item 503(c) of Regulation S-K—found that analysts are better able to assess fundamental risk when firms' risk-factor disclosures are more detailed and avoid vague, abstract, or "boilerplate" language. It also found that the market more readily incorporates detailed information into stock prices, suggesting that such non-financial disclosures help investors better assess firms' financial statements.

Ole-Kristian Hope, Danqi Hu and Hai Lu, "The Benefits of More Detailed Risk-Factor Disclosures," University of Toronto (2015).

SASB METRICS AND DISCLOSURE

SASB metrics are designed to:

- Improve the decision-usefulness of the company's disclosures on the topic
- Exhibit financial or operating performance on the topic
- Provide comparability at an industry level
- Be well-defined, with criteria that are understandable and suitable for assurance
- Enable reporting on both an absolute basis and a normalized comparison through activity metrics (e.g., per square foot, per volume of sales)
- Allow for an accompanying narrative and presentation of past or future trend/uncertainty

MD&A DISCLOSURES

MD&A was the top area for SEC comment in 2013 and 2014. SEC comment letters emphasize the importance the SEC places on the quality and transparency of MD&A.

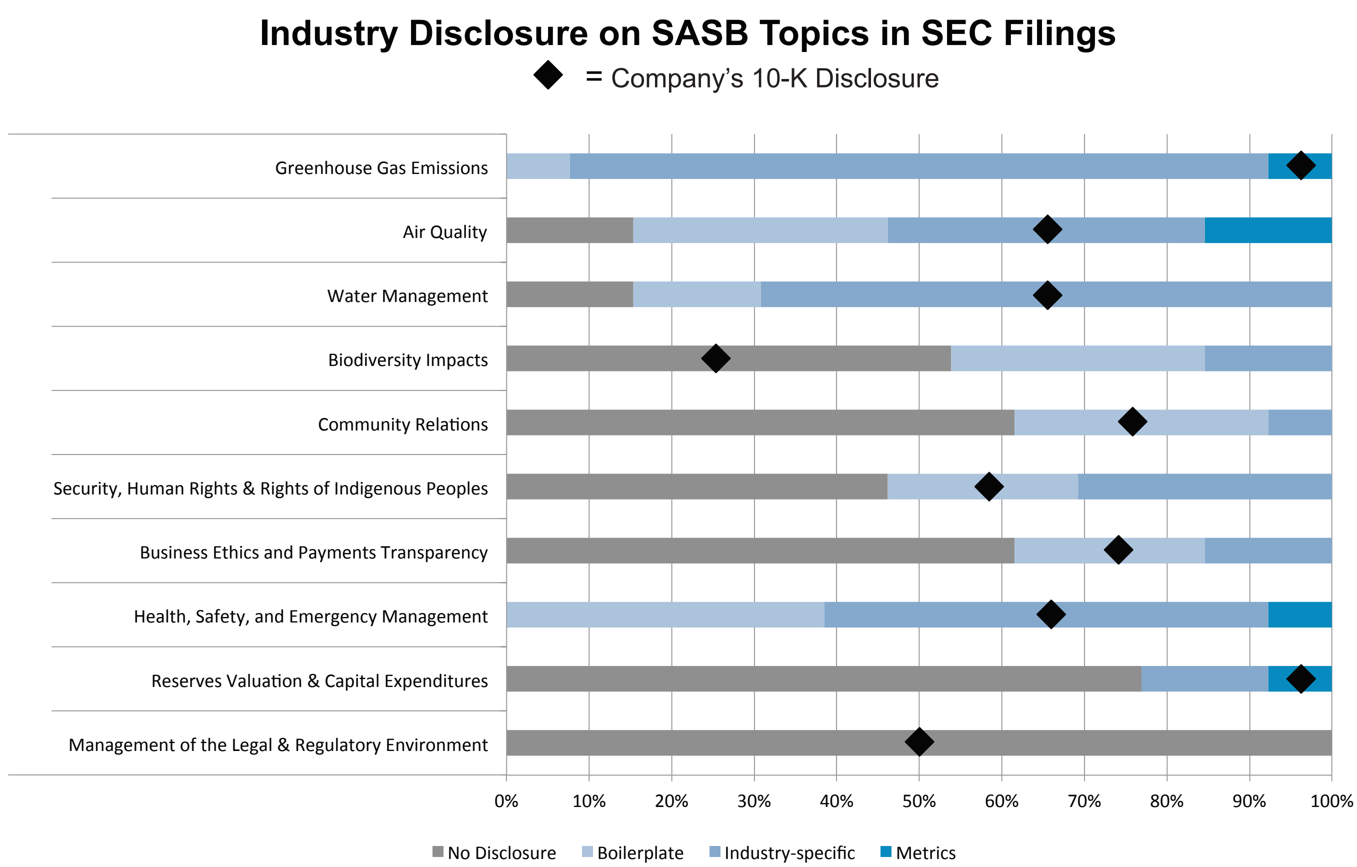
Companies should reflect on the guidance the SEC published to elicit more meaningful disclosure (SEC Interpretation 33-8350, FR-72) and consider whether inclusion of information based on the Standards could enhance the usefulness and quality of MD&A disclosures, while also reducing "questionnaire fatigue."

- Does the disclosure on the topic include a **SHORT- AND LONG-TERM IMPACT ANALYSIS**, as appropriate?
- Is the disclosure on the topic **CONSISTENT** throughout MD&A, risk factors, description of business, legal proceedings, and with other corporate reporting?
- Is the disclosure regarding the topic **SPECIFIC TO THE COMPANY'S CIRCUMSTANCES**, including markets, business model, strategic priorities, and performance (financial and operational)?
- Is the disclosure regarding the topic supported with **PERFORMANCE TARGETS AND BENCHMARKS**? Does it include insight into the reasonable likelihood of an impact and the quantitative and qualitative effect of a given risk or opportunity?
- Would **CHARTS, TABLES, GRAPHS, AND/OR HEADINGS** make the information regarding the topic more digestible and understandable?
- Is the disclosure on the topic **CONCISE**? Is it **COMPARABLE** to peer disclosures?

Disclosure Benchmarking

Having categorized its own 10-K or 20-F disclosures during the disclosure analysis exercise, the company can now compare its current state of disclosure to that of its industry overall. *(See Figure 4.)* When peer companies disclose material information on industry issues, investors may be primed to expect that all firms impacted by the issue will address its management in their SEC filings. By plotting a company's own disclosures against those of industry peers, it can better understand where it stands in relation to routine, emerging, and/or best practices.

Figure 4. Sample Disclosure for the Oil & Gas – Exploration & Production Industry



To assist companies with this exercise, SASB includes a summary of the current state of disclosure for each topic and industry in the appendices of its Industry Research Briefs. A sector-level summary of these disclosure tables is also included here in Appendix E.

High-quality, detailed disclosure provides investors with a better understanding of how company leadership makes decisions that might affect their investment. When investors have greater confidence in a company's leadership and governance, they are more likely to become—or remain—shareholders. In assessing the quality of its existing disclosures and planning future disclosures, the company should consider what the information says—or could say—about the quality of the firm and its management and how well positioned the firm is to manage known sustainability trends and uncertainties and/or material risks and opportunities.

QUESTIONNAIRE FATIGUE

Requests for sustainability information from investors, NGOs, and ratings agencies create a reporting burden for companies. For example, in 2014, one S&P 500 company reported that it developed responses to more than 650 requests from ratings groups alone. The firm said the process took several months and involved more than 75 people across the organization with little benefit to the company and its shareholders.

SASB standards can ease this burden by helping the company report decision-useful information to investors and others on the industry-specific subset of sustainability issues that are reasonably likely to have material impacts.

ALIGN WITH OTHER REPORTING CHANNELS

Information regarding some of the selected topics may be disclosed in other corporate reporting channels (e.g., investor presentations, sustainability or CSR reports, publicly accessible analysts' calls, website postings) that use differing definitions of materiality. This practice has the potential to confuse both internal and external audiences, including investors. Furthermore, use of the word "material" outside of legally mandated filings may create liability risk for the company.

Companies should use caution when characterizing information outside of SEC filings (e.g., sustainability or CSR reports) as "material" if they are using a definition other than the U.S. Supreme Court definition. Doing so may create unnecessary risk (e.g., the risk of securities litigation).[7] Note that in sustainability or CSR reports prepared in accordance with the Global Reporting Initiative ("GRI") framework, materiality is defined more broadly than it is under U.S. law, which places the investor at the center of this determination. Companies should not call information "material" unless it has been determined to be so under the securities law definition. Information that does not meet the securities law definition should be described as something other than "material," such as "relevant," "important," or "significant."

QUALITY, NOT QUANTITY

Application of the Standards should focus on enhancing the quality and context around sustainability factors that impact value creation—not simply adding volume to current disclosures.

Research shows the average number of pages in annual reports devoted to footnotes and MD&A has quadrupled over the past 20 years. If the rate of increase continues, financial statement footnote disclosures and MD&A will average more than 500 pages in annual reports by 2032.

SASB's Mock 10-Ks (available on the sector pages of SASB's website) provide examples of how SASB standards can support more meaningful narrative and analytics in MD&A, helping to disclose management's view into known trends and uncertainties.

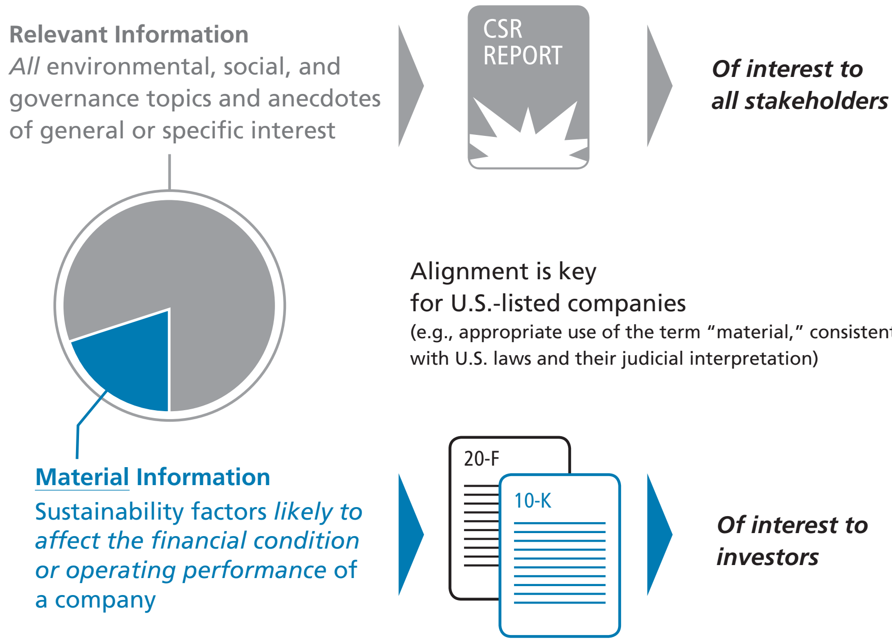
KPMG LLP and Financial Executives Research Foundation, Inc., *Disclosure overload and complexity: hidden in plain sight* (2011)

SASB's Alignment with Other Reporting Frameworks

In developing its standards, SASB works hard to harmonize with existing initiatives designed to measure, manage, and report sustainability performance. SASB considers a variety of sources—including frameworks, standards, regulations, certifications, and definitions—and selects metrics that are already in use when they are industry-specific and best characterize performance on the topics. When existing metrics are not available to capture decision-useful, industry-specific information, SASB makes every effort to develop new metrics that reference existing benchmarks or standards. *(For examples, see Appendices C and D)*. By sourcing metrics from parallel efforts, the SASB standards represent a cost-effective solution for companies to navigate an increasingly complex reporting landscape. However, although SASB considers sustainability frameworks such as GRI as inputs to its process, companies may not find significant overlap between the Standards and the metrics used in their sustainability reports. This is because SASB's

Figure 5. Relationship Between CSR/ Sustainability Report and 10-K Filing

SASB supports presentation of material information in statutory filings. Other sustainability frameworks support the development of CSR reports.



focus is on industry-specific information for investors, while sustainability reports serve a different purpose for a broader audience.

SUMMARY

The disclosure analysis and benchmarking exercises in this section are intended to help the company take a fresh look at its current practices for disclosing information on key sustainability topics. By assessing the quality and location of its own disclosures, and by comparing them to those of industry peers, the company can better leverage existing processes and more efficiently focus its efforts to improve the effectiveness of its disclosures. Furthermore, by bringing all of its reporting channels into alignment, the company can reduce risk and improve understanding among internal and external decision makers.

By adopting SASB metrics for disclosure, companies will ensure that the capital markets have access to comparable, investor-grade information on industry-specific sustainability issues, thereby eliminating or reducing the burden of investor questionnaires on sustainability topics.

At this point, the company will have answered the following questions:

PROMOTING UNDERSTANDING

"If companies disclose material information (historical or forward-looking) other than in their filed documents ... they also should evaluate that material information to determine whether it is required to be included in MD&A, either because it falls within a specific disclosure requirement or because its omission would render misleading the filed document in which MD&A appears. We are not seeking to sweep into MD&A all the information that a company communicates. Rather, companies should consider their communications and determine what information is material and is required in, or would promote understanding of, MD&A."

SEC, FR-72, Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations (December 2003)

- **Is the company already collecting and reporting information related to the selected SASB topics in some form in either internal, external, mandatory, or voluntary reports?**
- **Are current disclosures in SEC filings complete, multidimensional, and robust? How are sustainability drivers, strategic objectives, and performance presented in the 10-K or 20-F versus other channels?**

- **Do current disclosures provide a complete window into management's view of known trends, events, or uncertainties and their impact on long-term viability?**
- **How do the company's existing disclosures compare to those included in the SASB standard for the industry? Do they exhibit the characteristics of decision-useful disclosure for investors?**
- **How do the company's disclosures compare to those of industry peers in terms of quality? What is needed for the company to align with best practices?**
- **Does current reporting present an integrated view of risk management and competitive positioning in a way that maximizes investor confidence in the quality of information and the quality of management?**
- **Does the company's sustainability or CSR report use a proprietary definition of materiality? If so, how can the company use different language to promote understanding and avoid legal liability?**

3 Performance Evaluation & Benchmarking

Section 3 helps the company determine any strengths, weaknesses, opportunities, and threats related to the SASB disclosure topics for its industry. By assessing its current management of key sustainability issues and evaluating its performance on those issues in the context of industry peers, the company will be better prepared to effectively manage and report on its selected SASB topics.

INTRODUCTION

Although SASB standards are designed primarily for external reporting, they can also be useful to internal decision-makers. Because the Standards are developed through the lens of materiality, each disclosure topic and metric is explicitly tied to financial impacts that can help guide corporate performance management. A company can better prepare itself to integrate the Standards by:

- **Assessing its current practices for measuring and managing SASB topics**
- **Evaluating its performance on those topics in the proper context**

ASSESS THE CURRENT STATE OF MANAGEMENT

Strong performance requires effective management. A company may manage sustainability topics in a variety of ways. It may manage them as part of its corporate strategy, separately as part of a sustainability strategy, or through various actions by specific groups or functions. Similarly, if related performance goals or targets exist, they may be "owned" by any number of individuals, including executive officers, management groups, business unit managers, and managers in sustainability, facilities, public affairs, risk, or all employees.

For each selected topic (and any others that are relevant but were not selected based on the Five Factors), SASB recommends the company assess how the selected topics are currently addressed in its business strategies and risk assessments. This will enable the company to identify management gaps and opportunities to leverage what is already in place. Those practices can then be assessed against each of the following criteria:

- **Appropriate business environment**
- **Effective business intelligence**

Business Environment

The Standards are intended to support disclosure in statutory filings, therefore any information added to a filing would be subject to the same disclosure controls and procedures and completeness and accuracy certification requirements that apply to financial reporting.[8] These requirements create a higher standard for sustainability disclosures than may exist in other communication channels, such as a sustainability report or CSR report.

Sustainability data typically relies on separate information systems and processes that are outside of the control environment established for financial reporting. Information is often prepared in ad-hoc spreadsheets that aggregate data points from global facilities with few formal controls. In reviewing its data management practices for selected SASB topics, a company should consider the following:

DATA TRACKING TOOLS

SASB has partnered with software platforms that can support enterprise data in alignment with SASB standards. For more information, visit SASB's Partners Page.

- **Is the information already available within EXISTING FINANCIAL REPORTING systems and/or enterprise resource planning platforms? If not, how can it be readily incorporated?**
- **Does the company have a FORMAL ACCOUNTING AND/OR AUDIT POLICY that provides guidance to ensure consistent and reliable data collection, analysis, and reporting across the organization?**
- **Is there CLEAR OWNERSHIP of and ACCOUNTABILITY for the management and reporting processes?**
- **Has the company DOCUMENTED its reporting processes, including:**
  - **a** **Key risks for misstatements and associated controls to prevent or detect misstatements?**
  - **b** **Time frame required to align with the financial reporting period (and provisions for instances where the appropriate time frame is longer than the financial reporting period)?**
- **Have internal audit, finance, and/or relevant third parties been ENGAGED TO REVIEW the quality of the information and supporting processes?**
- **Based on analytical procedures, is there CONFIDENCE in data quality?**

Internal controls and disclosure controls and procedures are covered in more detail in Section 4.

Business Intelligence

Metrics related to the selected topics can provide companies with business intelligence to support internal decision making and management of the topics, as well as decision-useful disclosures for external users. These two objectives are intertwined. In reviewing its management of selected topics, a company should consider the following:

- **Is information INTEGRATED into existing management reporting systems, processes, and reports and if so, is management actively relying on this information to run its operations?**
- **Is data COLLECTED REGULARLY? Can it be collected in a TIMELY MANNER and at a REASONABLE COST?**

NON-FINANCIAL KPIs

The SEC previously emphasized that within MD&A "companies should identify and **discuss key performance indicators, including non-financial performance indicators,** that management uses to manage the business and that would be material to Investors." This closely aligns with findings and positions presented in FASB's Business Reporting Research Project. SASB metrics are specifically designed for this purpose. While the SASB topics represent information that is reasonably likely to be material to investors, financial value is only derived through *managing performance* on the topic.

SEC, Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations (December 2003).

FASB, Improving Business Reporting: Insights into Enhancing Voluntary Disclosures, Steering Committee Report (2001).

- **Is information DRIVING A CHANGE in company-level plans and targets in the near, medium, or long term?**
- **Where relevant, is information INTEGRATED INTO KEY ANALYSIS supporting management decisions (e.g., capital expenditures, product development, mergers and acquisitions)?**
- **Are INCENTIVES aligned with performance?**

By implementing SASB metrics associated with each topic, the company can improve its capacity to provide meaningful business intelligence to both management and investors.

EVALUATE PERFORMANCE IN CONTEXT

A company's performance on a given topic is most meaningful when assessed in the context of industry and peer practices. Companies can use the following approach to consider their relative performance, with these objectives in mind:

1. **To craft a more meaningful narrative for the company's MD&A, discussing current positioning relative to peers for each topic. (Discussed in more detail in Section 5.)**
2. **To determine whether the company's strategy needs to be adjusted to change its position in the future.**

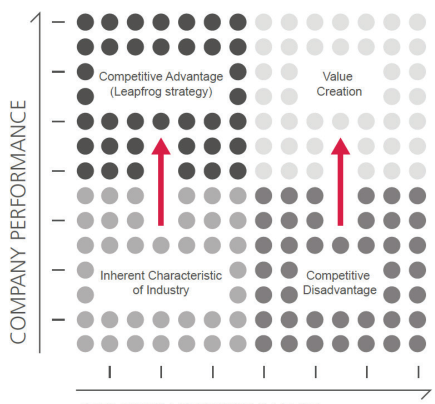
3 To establish a baseline based on credible data to help the company actively manage risks, set goals, and continually improve performance.

To provide this context, use available data to compare performance on each topic to industry peers (and/or, if available, overall industry performance). For certain topics or industries, it may be difficult to find this information. Where data is available, companies should consider differences in reporting scope and boundary.

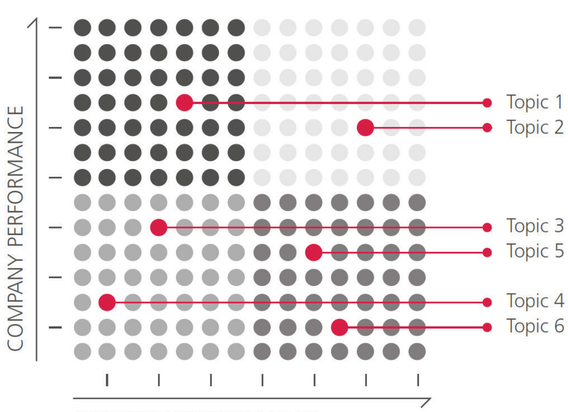
Strategies to improve performance should reflect consideration of corporate strengths and where the company performs with respect to the industry. For example, when performance across the industry on a given topic is weak, there may be opportunity to innovate and create a competitive advantage. *(See Figure 6.)*

Figure 6. Sample Performance Benchmarking

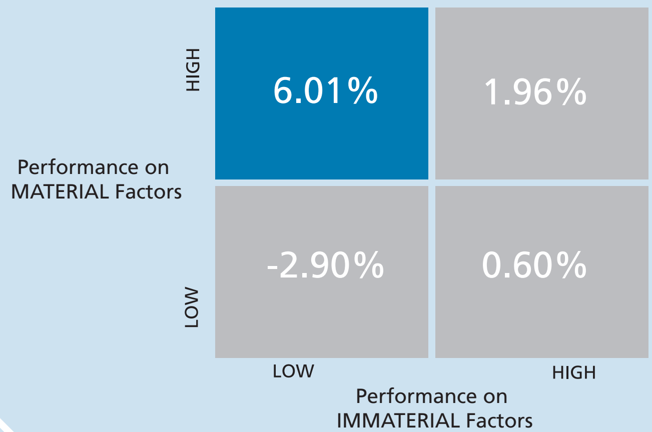
Framework for benchmark



Mock results



Stock Returns (in annualized alpha) by Type of Sustainability Performance



MATERIALITY MATTERS

Harvard University research shows that the financial and market returns of firms focused on "material sustainability issues" significantly outperform those of other firms. Data collection for the study was driven by SASB's standards and materiality guidance. Read the full report: Corporate Sustainability: First Evidence on Materiality (March 2015).

In which quadrant does the company perform vs. industry?

- **COMPETITIVE ADVANTAGE:** Company performance stands out in an industry with poor performance, indicating the company has leapfrogged its competition to attain competitive advantage on the topic.

▲ Opportunity to create *competitive advantage and lead industry innovation* on products/services, business models, value chain, etc.

- **INHERENT CHARACTERISTICS OF INDUSTRY:** Company performance and industry performance are both weak due to inherent industry challenges
- **COMPETITIVE DISADVANTAGE:** Company performance lags behind industry performance, indicating the company is at risk of shareholder or stakeholder action
- **VALUE CREATION:** Strong company performance is aligned with industry performance and represents an area where companies are creating value for investors

▲ Opportunity to create value by improving management and performance.

Companies can use results of this exercise to:

- **Assess desired future positioning in the context of the industry (e.g., manage for competitive advantage or to catch up with peers), and**
- **Establish strategy to achieve desired future positioning (e.g., adjust capital allocation process, integrate sustainability considerations into supply-chain management).**

SUMMARY

Companies can use the results of the assessments in this section to stimulate an internal discussion exploring performance on the selected topics and associated metrics. The insights gained from these assessments can be used to educate and build alignment among key internal stakeholders around what should be managed and the risks or financial impacts to the business.

By assessing current practices for managing and reporting on key sustainability topics, as well as evaluating performance on those topics against peers, the company will be better prepared to embed the Standards into core functions and processes.

Upon completing Section 3, the company will have answered the following questions:

- **Are there sustainability topics for which business value is at stake that are not actively managed in terms of performance?**
- **Do the systems and processes providing information about selected topics result in complete, accurate, and decision-useful information for management?**
- **Is performance on selected topics on par, lagging, or leading industry performance? How will this impact the company's strategy moving forward? How does this put the company at risk?**
- **How can core strengths of the company be leveraged to achieve a competitive advantage on critical dimensions of the company's sustainability-related strategies?**
- **Are there topics that do not have a material impact on the business now but that may in the future, and thus should be managed with that in mind?**

4 Implementation Considerations

After selecting topics (Section 1) and achieving greater focus through assessing its current state of disclosure (Section 2), management, and performance (Section 3), the company will be prepared to integrate SASB topics into its existing core financial reporting functions and processes. Section 4 provides an outline of some of the key factors a company may want to consider as it moves forward with implementation.

INTRODUCTION

The SASB standards are intended to support investment decision making with investor-grade information, which carries with it a responsibility for completeness, accuracy, and reliability, as stipulated in Regulation S-K and more recently in the Sarbanes-Oxley Act. Therefore, SASB data my require controls, assurance, and certification similar to those used for financial information.

SASB standards and metrics are designed so that a company may integrate them into existing information systems and processes in the same control environment established for financial reporting. To support this effort, this section highlights key integration points to help management produce meaningful, reliable sustainability disclosures in a timely and efficient manner.

FINANCIAL REPORTING PROCESSES

To more effectively embed sustainability disclosures into existing financial reporting and disclosure processes, management may want to consider taking the steps outlined in Figure 7. Many of these topics are discussed in greater detail in subsequent sections of the Guide.

THE BOARD'S ROLE

Useful information on material non-financial factors will help boards of directors understand, prioritize, and monitor related risks and opportunities, thus helping the board to fulfill its responsibilities with respect to:

- risk oversight,
- strategy and value-creation oversight,
- and fiduciary duties.

For more on the board's role with respect to sustainability, see the National Association of Corporate Directors' guidance in "Oversight of Corporate Sustainability Activities."

Figure 7. Points of Alignment with Financial Reporting Processes

INPUT

- **Integrate sustainability-related questions in the controller's questionnaire (or similar mechanism to collect input throughout the organization).**

  Companies can include questions regarding the sustainability metrics selected in the controller's questionnaire to both gather the information needed to assess the impact associated with the topic in future periods and confirm robust procedures are in place. Other existing tools may be useful for learning more about the data collection and control environment around new disclosures.

- **Establish control objectives, risks, control activities, and testing approaches consistent with those in place for other disclosures.**

  Existing internal controls and disclosure controls and procedures can be leveraged for sustainability topics through collaboration across a cross-functional team.

- **Integrate sustainability data into business intelligence platforms.**

  It may be necessary to engage with the company's ERP provider to understand opportunities to incorporate or build in selected sustainability topics and metrics. SASB has developed ERP partnerships to enable companies to track data in accordance with SASB standards. **Visit the SASB website** for more information.

PROCESS

- **Integrate new sustainability disclosures in disclosure preparation and review processes.**

  Companies can update their financial close process and review procedures to specifically contemplate the new sustainability disclosures; this is complementary to the process subject to internal control over financial reporting ("ICFR"). At least in the first year of SASB disclosure, it may be useful to expand the audit committee's oversight and the disclosure committee's agenda to include discussion of the standards' implementation.

- **Determine whether third-party assurance is appropriate.**

  MD&A is not subject to the financial audit, therefore the information contained therein is not required to be independently verified. However, for companies that elect to obtain voluntary external assurance, SASB's rigorously developed standards include metrics and technical protocols designed to provide the basis for suitable criteria (as defined in AT Section 101[9] and referenced in AT Section 701[10]), helping them to provide trustworthy information to the markets.

OUTPUT

- **Develop management's narrative for MD&A, including both financial and non-financial performance.**

  SASB metrics can help investors better understand how indicative past performance is of future performance. This topic is discussed in more detail in Section 5.

- **Prepare leadership to discuss the new disclosures with investors and shareholders.**

  In the first periods of disclosure of "new" material information, executives who engage with investors and analysts will need to be appropriately briefed on the Standards, the company's rationale for disclosure, and the actual content of the disclosures.

- **Engage with investors to continuously improve future disclosure.**

  Engaging with and soliciting direct input from both current and prospective investors and analysts can help the company better understand investor information needs and how the Standards can help satisfy those needs.

INTERNAL CONTROLS & PROCEDURES

Effective internal controls are the foundation on which both reliable disclosure and effective decision making rest, minimizing the company's risk of a material misstatement (including omissions).

In making disclosures related to SASB topics and metrics, companies should:

1. **Consider using SASB metrics as an input to existing DISCLOSURE CONTROLS AND PROCEDURES to help ensure complete disclosures (required to comply with Regulation S-K Item 307[iii]), and**
2. **Consider leveraging the existing INTERNAL CONTROL framework used to achieve external financial reporting objectives to also support the achievement of external non-financial reporting objectives.**

Disclosure Controls and Procedures

SASB recommends companies consider the topics presented in the Standards as part of the existing disclosure controls and procedures (DCP). For example, as part of a company's DCP, management typically evaluates the effect of trends, demands, events, and uncertainties on the business to determine what (if any) disclosures should be included in their filings.

Disclosure controls and procedures are designed to ensure that information in filings (including the MD&A) is "recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms" and "accumulated and communicated to the company's management ... as ... appropriate to allow timely decisions regarding required disclosure."

A key purpose of disclosure controls and procedures is to ensure complete, accurate, and timely disclosures; the Standards can be useful as an input to help achieve those objectives. For example, companies can leverage the Standards as a way to consider a broad range of trends, events, and uncertainties that have already been vetted by corporate and investment professionals through SASB's Industry Working Group process.

Note that neither the content nor the process for preparing MD&A disclosures is subject to the independent financial statement audit or the audit of internal control over financial reporting. However, voluntary third-party assurance on quantitative data and analysis presented in the MD&A section may be appropriate, and is addressed later in this section.

iii Item 307 of Regulation S-K requires disclosure of the conclusions of the CEO and the CFO regarding the effectiveness of the registrant's disclosure controls and procedures for each reporting period.

DISCLOSURE CONTROLS & PROCEDURES

The SEC explains that a company's disclosure controls and procedures should not be limited to disclosure specifically required, but should also ensure timely collection and evaluation of:

- Information potentially subject to required disclosure,
- Information that is relevant to an assessment of the need to disclose developments and risks that pertain to the company's businesses, and
- Information that must be evaluated in the context of the disclosure requirement of Exchange Act Rule 12b-20.

SEC, Certification of Disclosure in Companies' Quarterly and Annual Reports (August 2002).

Internal Controls over Non-Financial Information

Before the company is prepared to make disclosures on sustainability topics and metrics in its statutory filings, internal controls may be needed to help minimize the risk of unreliable reporting. The most widely used framework for establishing internal controls is the Committee of Sponsoring Organizations of the Treadway Commission's ("COSO") Internal Control—Integrated Framework ("Framework"). The Framework is intended to help companies achieve objectives and to optimize the inevitable tension between the value creation and value protection activities.[11] The 2013 update to the Framework specifically references non-financial reporting objectives, suggesting that sustainability reporting objectives could be integrated into companies' existing internal control frameworks.

SEC registrants already have a control framework in place to evaluate and support assertions regarding the effectiveness of internal controls over financial reporting ("ICFR") as this is a required management certification. Therefore, a company may find it most effective to leverage the framework that is currently used in financial reporting to establish internal control over the achievement of external non-financial reporting objectives.

A company may wish to consider integration points with respect to the following interrelated components of internal control:

- **Control Environment**

  A strong internal-control environment sets the stage for the processes and discipline that govern controls around sustainability information. Clarifying the company's commitment to complete, accurate reporting is especially important when preparing sustainability information, as most information is currently collected by functions not historically connected to financial reporting.

- **Risk Assessment**

  In the context of using the Standards, risk assessment relates to both:

1. **Establishing the company's overall objectives for reporting and managing sustainability information; and**
2. **Identifying risks to achieving those objectives.**

  The objective of the risk assessment is to determine what risks are present that may impact the achievement of the company's objectives in order to determine which risks are deemed acceptable vs. which risks need established control activities to help mitigate the risks. Most sustainability information is collected and calculated by manual processes using high degrees of judgment; the risk assessment should carefully evaluate the company's level of precision to ensure the assessment reflects the maturity of the data collection process.

- **Control Activities**

  Control activities are the actions taken to help mitigate risks in order to achieve corporate objectives. These activities are performed at various levels within the organization (e.g., entity level, information technology level). They can also vary in nature (e.g., preventive vs. detective, manual vs. automated controls). Existing processes for collecting sustainability information may lack basic fundamental control activities, so companies should consider both the design and execution of relevant control activities.

- **Information & Communication**

  Timely, relevant, and reliable information is key to understanding what is happening both in the internal and external business environment. This includes having the appropriate performance measures and communication processes in place. For example, sustainability information may currently be collected annually or even less frequently, limiting the company's ability to actively manage performance or identify data anomalies.

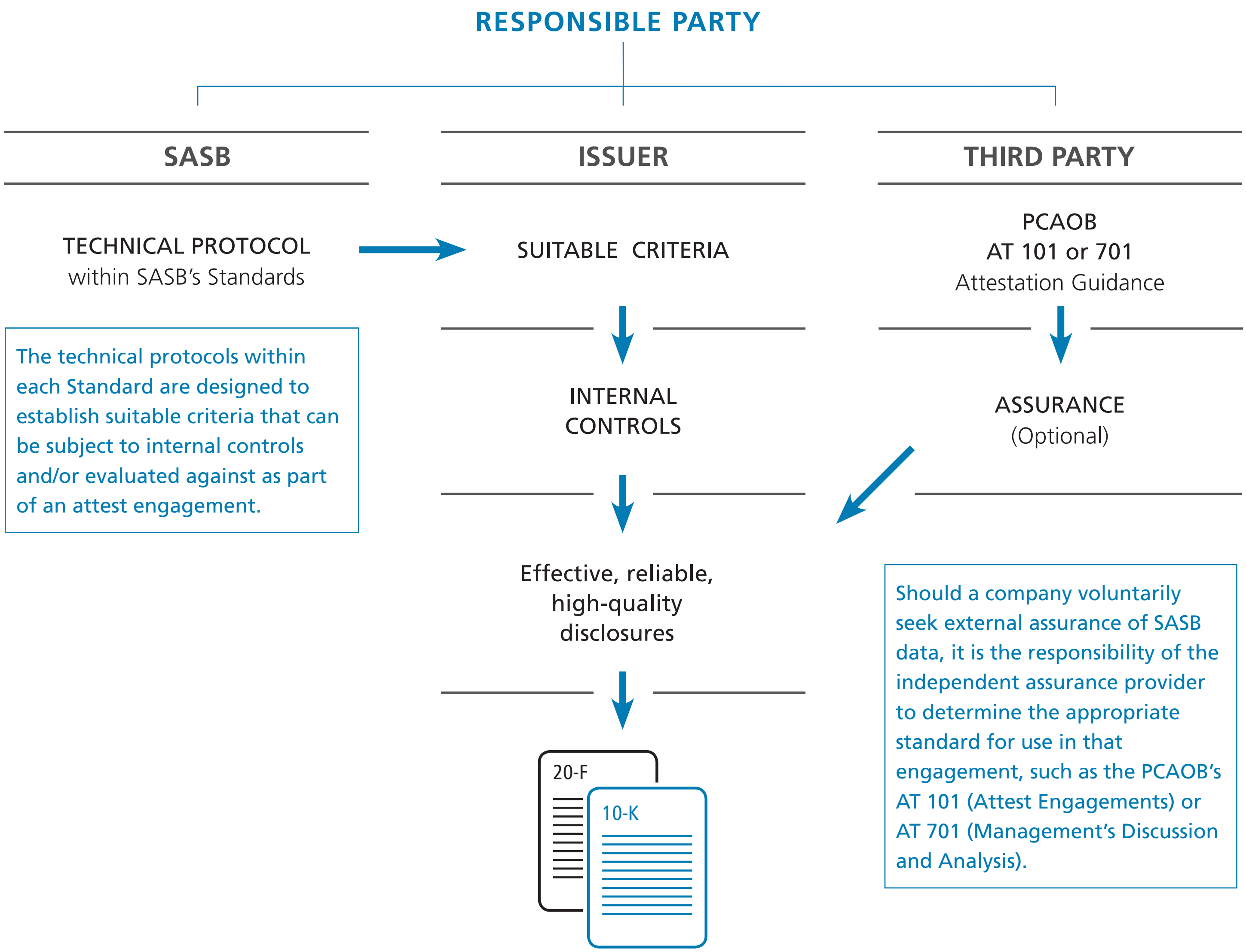
- **Monitoring Activities**

  Monitoring activities address the effectiveness of the risk assessment, key internal control activities, and information/communication. Management should regularly assess the application of the five COSO components of internal control over sustainability information, both for management decision-making and for disclosure in filings.

- **Boundaries and Criteria**

  In addition to COSO components, boundaries must be set and criteria defined at a metric level. SASB recommends that disclosures related to sustainability topics and metrics include information for the parent company and for those entities that are consolidated for financial reporting purposes for consistency with other accompanying information within filings. Companies may face data limitations during the first few years of using the Standards (e.g., lack of quality data for all regions or business units). In such cases, companies should define the data limitations in reporting the metric (including key assumptions made) to ensure the disclosure does not mislead investors. Once the boundary is defined, the criteria for each metric can be developed. Criteria are the standards or benchmarks used to measure and present the subject matter.[12]

Figure 8. Illustrative Explanation of Criteria for Disclosures



To ensure reliability and comparability of metrics across companies, SASB considers the following attributes of suitable criteria when selecting metrics and developing the technical protocols within each standard:[13]

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

INDEPENDENT ASSURANCE

SASB standards are designed for the disclosure of material sustainability information in the MD&A section of Form 10-K, but the MD&A is not required to be audited. Nevertheless, some companies may elect to seek external assurance of their sustainability disclosures to assure investors that the information they are relying on is comparable and trustworthy.

In the U.S., the Public Company Accounting Oversight Board ("PCAOB") sets the attestation and auditing standards for public companies. Although PCAOB audit standards are limited to financial statements, the attestation standards can be applied to a variety of subject matters, including sustainability data.

The PCAOB's AT Section 101 standard is frequently used for attest engagements over sustainability information. It applies to attestation engagements executed by a certified public accountant over a determined subject matter. While this standard serves a broad range of subject matters, it could be applied to the review of disclosed sustainability information, in the MD&A or elsewhere.

AT Section 101 outlines the attributes required of suitable criteria, which are listed above. The accounting metrics and related technical protocols in the SASB sustainability accounting standards are intended to form the basis for suitable criteria, as identified by many existing assurance standards, including AT 101. *(See Figure 8.)* These attributes are also referenced in AT 701, which sets forth attestation standards and provides guidance to a practitioner concerning the performance of an attest engagement with respect to MD&A.

SCOPE OF DISCLOSURE

Unless otherwise specified in the industry standard(s), SASB recommends:

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

SUPPORTING TRUSTWORTHY DATA

The PCAOB's AT Section 101 provides a framework for developing an attestation engagement that includes the following general standards:

1. The engagement shall be performed by a practitioner having adequate **knowledge of the subject matter**. Practitioners can help satisfy this general standard through SASB's Fundamentals of Sustainability Accounting (FSA) Credential.
2. The practitioner shall perform the engagement only if he or she has reason to believe that the subject matter is **capable of evaluation against criteria that are suitable and available** to users. The technical protocols included in SASB standards are designed to provide the basis for suitable criteria.

SUMMARY

By leveraging existing business functions and processes, the company can use the Standards to provide both internal and external decision makers with more meaningful sustainability information in a timely, efficient manner. Upon completing Section 3, the company will have considered the following questions:

- **How does the company embed SASB topics and metrics into core business functions related to external reporting objectives?**
- **What considerations related to disclosure controls and procedures are relevant to SASB standards?**
- **What are the relevant systems, processes, and controls considerations related to internal controls over non-financial information?**
- **With respect to sustainability disclosures, what attestation guidance should the company consider if it elects to engage an independent, third-party assurance provider?**

FSA CREDENTIAL

SASB offers the Fundamentals of Sustainability Accounting (FSA) Credential to individuals seeking to demonstrate subject-matter expertise on SASB standards as related to financial reporting, management, and analysis. The credential helps practitioners recognize, disclose, and interpret performance on the industry-specific sustainability factors most likely to have material impacts.

5 Disclosure Considerations

The company has now selected topics, performed a readiness assessment, embedded the Standards in core functions and processes, and established controls as necessary. With high-quality information now available for its selected topics, the company is prepared to consider that information for disclosure in statutory filings. Section 5 provides guidance for developing management's narrative for MD&A as well as other disclosure considerations.

INTRODUCTION

SASB standards are intended primarily for use in the MD&A section of a company's annual Form 10-K or 20-F filing. MD&A is intended to provide readers information "necessary to an understanding of [a company's] financial condition, changes in financial condition, and results of operations."[14]

As the SEC has explained, MD&A is a narrative explanation "through the eyes of management" that has three primary purposes: [15]

1. **Explaining from management's perspective, a company's financial statements;**
2. **Enhancing financial disclosure and provide the context for analyzing a company's financial information; and**
3. **Describing the quality of earnings and cash flow, as well as factors that could affect these metrics, so that investors can better understand how indicative past performance is of future performance.**

The measure of a high-quality MD&A is not its length, but rather the breadth and depth of its analysis. A company's management can leverage the work done during the Performance Evaluation & Benchmarking exercise in Section 3 to inform its discussion and analysis, along with the guidance below.

MOCK 10-K

SASB has prepared Mock 10-Ks to serve as examples of effective disclosure of the Standards in MD&A; there is one for each sector to serve as a guide for companies. The Mock 10-Ks provide illustrative guidance on format, length, and analysis for MD&A disclosure using SASB standards.

These documents are available on the SASB website and the SASB Standards Navigator. See example in Appendix G.

In addition to MD&A, the company may also want to consider SASB standards for use in other sections of its 10-K filings, which are discussed later in this section.

IMPROVING DISCLOSURE EFFECTIVENESS

As discussed in Section 2, nearly three-quarters of SASB topics are already being disclosed in SEC filings. However, a significant percentage of those use boilerplate language and very few include metrics. SASB standards can help management improve the quality of its sustainability disclosures.

Figure 9 shows examples of industry-specific sustainability disclosures moving from boilerplate to decision-useful metrics. Disclosures in the "boilerplate" and "metrics" columns are taken from actual SEC filings.

Figure 9: Moving from Boilerplate to Decision-Useful Disclosure

BOILERPLATE	COMPANY-SPECIFIC	SASB METRIC(S)
Cruise Lines Industry—Fuel Use & Air Emissions		
"We are subject to complex laws and regulations, including environmental laws and regulations, which could adversely affect our operations and any changes in the current laws and regulations could lead to increased costs or decreased revenue."	"We measure our ability to use direct energy efficiently by calculating the amount of primary source energy we consume. **We have achieved a 21% cumulative reduction in unit fuel consumption since 2007** and look to further manage and reduce our fuel consumption costs in the future."	• Gross global Scope 1 emissions (CO_2-e) • Total energy consumed (GJ), percentage from heavy fuel oil (%), percentage from onshore power supply (OPS) (%), percentage from renewables (%) • Air emissions for the following pollutants: NOx, SOx, and particulate matter (PM) (t) • Average Energy Efficiency Design Index (EEDI) for new ships
Auto Parts Industry—Energy Management		
"Higher raw material and energy costs around the world may offset our efforts to reduce our cost structure. As a result, higher raw material and energy costs could result in declining margins and operating results and adversely affect our financial condition."	"We have launched several energy saving programs. **Our total energy consumption corresponds to 257,000 metric tons of CO_2 (using the Greenhouse Gas Protocol), which was an increase of 4% from 2012.** This is mainly a consequence of expanding production in China, which is dominated by coal based energy."	• Total energy consumed (GJ), percentage grid electricity (%), percentage renewable (%)

Figure 9 (cont'd): Moving from Boilerplate to Decision-Useful Disclosure

BOILERPLATE	COMPANY-SPECIFIC	SASB METRIC(S)
Chemicals Industry—Product Design for Use-phase Efficiency		
"We are subject to existing and evolving standards relating to the registration of chemicals which could potentially impact the availability and viability of some of the raw materials we use in our production processes. Our ongoing global product stewardship efforts are directed at maintaining our compliance with these standards."	"The company continuously evaluates opportunities for existing and new product and service offerings in light of the anticipated demands of a low-carbon economy. **About $2.5 billion of the company's 2013 revenue was generated from sales of products that help direct and downstream customers improve energy efficiency and/or reduce GHG emissions."**	• Revenue from products designed for use-phase resource efficiency ($)
Airlines Industry—Environmental Footprint of Fuel Use		
"Our operations are covered by environmental regulations at local, national and international levels. These regulations cover, among other things, emissions to the atmosphere … Compliance with these regulations and new or existing regulations that may be applicable to us in the future could increase our cost base and adversely affect our operations and financial results."	"Based on projected fuel consumption in 2014, a **one dollar change in the price of a barrel of crude oil would change the Company's annual fuel expense by approximately $94 million."**	• Gross global Scope 1 emissions (CO_2-e) • Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets • Total fuel consumed (GJ), percentage renewable (%) • Notional amount of fuel hedged, by maturity date (Millions of gallons, Year)

For examples of SASB metrics used in the context of MD&A, see Appendix G and consult the Mock 10-Ks on the Using SASB website. These documents demonstrate the use of narrative and analytics to disclose management's view into known trends and uncertainties, consistent with SEC guidance on the preparation of MD&A.

DISCLOSURE REQUIREMENTS

The following section reviews three specific disclosure provisions in Regulation S-K that companies should consider when assessing whether disclosure of sustainability information may be necessary. Ultimately, management is responsible for determining, based on the company's own particular facts and circumstances, whether disclosure is required in any of the below sections of filings.

Companies should engage counsel to enhance their understanding of these disclosure requirements. With respect to disclosure requirements related to sustainability information, companies can review existing rules and regulations to ensure consistency with guidance provided by the SEC in:

- **Division of Corporation Finance guidance regarding disclosure obligations relating to cybersecurity risks and cyber incidents, CF Disclosure Guidance: Topic No. 2 (October 2011)**
- **Commission guidance regarding disclosure related to climate change, 17 CFR Parts 211, 231 and 241 (February 2010) [FR-82]**

With respect to MD&A disclosures in particular, the guidance draws from the Commission statement and general interpretive guidance on MD&A disclosures, as required by Item 303 of Regulation S-K:

- **Commission Statement About Management's Discussion and Analysis of Financial Condition and Results of Operations, Release No. 33-8056 (Jan. 22, 2002) [67 FR 3746];**
- **Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, Release No. 33-8350 (Dec. 29, 2003) [FR-72];**
- **Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, Release No. 33-6835 (May 18, 1989) [54 FR 22427].**

DISCLOSURE COMMITTEE

The SEC recommends that companies create a disclosure committee that is responsible for considering the materiality of information and determining disclosure obligations on a timely basis. The disclosure committee can leverage the work done during the topic-selection exercise *(Section 1)* to help assess the materiality of information regarding trends, demands, events, and uncertainties related to the topics, including their potential to impact the company's financial condition or results of operations.

SEC, Certification of Disclosure in Companies' Quarterly and Annual Reports (August 2002)

Presentation in Form 10-K and Other Filings

The Standards are designed to help companies better meet the disclosure obligations of MD&A (§ 229.303 of Regulation S-K).

In addition to MD&A, the SEC's interpretive guidance on disclosure requirements related to climate change and cybersecurity also highlight the applicability of other Form 10-K sections, namely the description of business (§ 229.101) and risk factors (§ 229.503(c)).

Figure 10: Regulation S-K Provisions within Forms 10-K / 20-F

INTENDED LOCATION FOR SASB DISCLOSURE:

REG S-K ITEM
MD&A

PURPOSE OF ITEM
Provide insight into the organization's financial condition, changes in financial condition, and results of operations. Specifically, satisfy three objectives to provide:

- Narrative explanation of the financial statements that enables investors to see the company through the eyes of management;
- Context within which financial information should be analyzed; and
- Quality of, and potential variability of, a company's earnings and cash flow, so that investors can ascertain the likelihood that past performance is indicative of future performance.

Analysis, supported by metrics (financial and non-financial), should substantiate the discussion around known trends, demands, commitments, events, and uncertainties.

REGULATION S-K
§ 229.303
Item 303: 'Management's discussion and analysis (MD&A) of financial condition and results of operations'

FORM 10-K
Item 7
Management's Discussion and Analysis of Financial Condition and Results of Operations

FORM 20-F
Item 5
"Operating and Financial Review and Prospects"

ADDITIONAL LOCATION TO EVALUATE:

REG S-K ITEM
Description of business

PURPOSE OF ITEM
Provide an overview of form of organization, principal products/services, major customers, and competitive conditions for reportable segments and key geographic areas. Should describe any material effects that compliance with environmental laws may have on capital expenditure, earnings, and competitive position.

REGULATION S-K
§ 229.101
Item 101: 'Description of Business'

FORM 10-K
Item 1
Business

FORM 20-F
Item 4B
Information on the Company – Business overview

ADDITIONAL LOCATION TO EVALUATE:

REG S-K ITEM
Risk factors

PURPOSE OF ITEM
Describe the most significant factors that may adversely affect the company's business, operations, industry, or financial position, or its future financial performance, to make investment in the issuer speculative or risky.

REGULATION S-K
§ 229.503(c)
Item 503(c): 'Prospectus summary, risk factors, and ratio of earnings to fixed charges'

FORM 10-K
Item 1A
Risk Factors

FORM 20-F
Item 3D
Key Information – Risk Factors

Note the Standards may also be applicable to S-1 / F-1 filings.

Source: PART 229 Regulation S-K; 2003 Interpretative Guidance 33-8350 MD&A; 17 CFR Parts 211, 231 and 241 – Commission Guidance Regarding Disclosures Related to Climate Change

Management's Discussion and Analysis

Item 303 of Regulation S-K requires companies to provide a discussion and analysis of their business as seen through the eyes of those who manage the business. The MD&A calls for companies to provide investors and other users with material information that is necessary to form an understanding of the company's financial condition and operating performance, as well as its prospects for the future.[16] Such requirements are intended to satisfy the principal objectives as presented in Figure 10.

While SASB topics may be relevant to any of the requirements of Item 303, the most relevant is the requirement to disclose **MATERIAL EVENTS, TRENDS, AND UNCERTAINTIES**. Companies are required to disclose "any known trends or uncertainties that have had or that the company reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the company 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."[17] Item 303 states that 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**."[18] [emphasis added]

SASB anticipates sustainability disclosure will focus on the following content elements within MD&A:

- **EXECUTIVE OVERVIEW: Although not required, the SEC expects an informative executive-level overview to provide insight into material opportunities, challenges, and risks on which the company's executives are most focused for both the short and long term, as well as the actions they are taking to address them.**
- **RESULTS OF OPERATIONS AND FINANCIAL CONDITION: The SEC requires disclosure of a known trend or uncertainty that is "reasonably likely to have a material effect on financial condition or operating performance."[19]**

MD&A DISCLOSURE

In preparing MD&A disclosure, companies should be guided by the general purpose of MD&A requirements: to give investors an opportunity to look at the company through the eyes of management by providing a historical and prospective analysis of the company's financial condition and results of operations, with particular emphasis on the company's prospects for the future. MD&A requirements are intentionally flexible and general. Because no two companies are identical, good MD&A disclosure for one company is not necessarily good MD&A disclosure for another. The same is true for MD&A disclosure of the same company in different years.

SEC Interpretation: Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures. Securities Act Release No. 33-6835; 34-26831; IC-16961 (May 18, 1989) [FR-36].

- **ENVIRONMENTAL AND PRODUCT LIABILITIES: The SEC requires disclosure of environmental liabilities for which the company has information that creates a reasonable likelihood of a material effect on its financial condition or results of operations. MD&A should discuss, to the extent material, historical and anticipated product liabilities and environmental expenditures, including recurring costs associated with managing hazardous substances and pollution in ongoing operations, capital expenditures, mandated expenditures to remediate previously contaminated sites, and other nonrecurring expenses.**
- **NOTE ON FORWARD-LOOKING INFORMATION: Many of the topics identified by SASB address trends that are expected to occur over the medium and long term. Companies should consider the trajectory of the relevant trend and the potential speed of those changes relative to their own preparedness.**

In addressing prospective financial condition and operating performance, the SEC requires disclosure of material forward-looking information regarding known material trends and uncertainties. The SEC also encourages discussion of prospective matters and forward-looking information in circumstances where that information may not be required but will provide useful material information for investors that promotes understanding—though not all forward-looking information falls within the realm of optional disclosure.[20]

Description of Business

Item 101 of Regulation S-K requires companies to provide a description of their business and their subsidiaries. Item 101(c)(1)(xii) expressly requires disclosure regarding certain costs of complying with environmental laws.

If a risk or opportunity related to a SASB topic materially "affects the registrant's products, services, relationships with customers or suppliers, or competitive conditions, the registrant should provide disclosure in the company's description of business."[21] In determining whether to include disclosure, companies should consider the impact on each of their reportable segments.

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 company speculative or risky, clearly stating the risk and specifying how the risk affects the particular filing company. Companies should disclose risks related to SASB topics if they are among the most significant factors that make an investment in the company speculative or risky.[22]

In determining whether risk factor disclosure is required, companies are expected to evaluate risks (including those arising from SASB topics) and take into account all available relevant information, including prior events and the associated severity and frequency. As part of this evaluation, companies should consider the probability of events occurring and the quantitative and qualitative magnitude of those risks, including potential costs and other consequences. Companies should also consider the adequacy of preventative actions taken to reduce risks in the context of the industry in which they operate.

Consistent with the Regulation S-K Item 503(c) requirements for risk factor disclosures, sustainability risk disclosure must adequately describe the nature of the material risks and specify how each risk affects the business. SEC guidance states that companies should not present risks that could apply to any issuer or any offering and should avoid generic risk factor disclosure.[23] Depending on the company's particular facts and circumstances, and to the extent material, appropriate disclosures may include:

- **Discussion of aspects of the company's business or operations that give rise to material sustainability risks and the potential costs and consequences;**
- **Description of related incidents experienced by the company that are individually, or in the aggregate, material, including a description of the costs and other consequences;**
- **Description of relevant insurance coverage; or**
- **Description of occurrence (e.g., specific cyberattack, extreme weather event) and its known and potential costs and other consequences.**

FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act (PSLRA) provides companies with a safe harbor from liability for forward-looking statements in MD&A. The safe harbor applies to a forward-looking statement that is:

1. Accompanied by meaningful cautionary statements, or
2. Immaterial, or
3. Unsupported by allegations that the statement was made with actual knowledge that the statement was false or misleading.

For further guidance, refer to SEC Interpretation FR-72, which is intended to elicit more meaningful MD&A disclosure.

Section 21E of the Securities Exchange Act of 1934, 15 U.S.C. § 78u-5.

REQUIRED ENVIRONMENTAL DISCLOSURE

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 company and its subsidiaries.

17 CFR 229.101—(Item 101) Description of business.

The disclosure should enable investors to appreciate the nature of the risks faced by the particular company in a manner that would not compromise the company's security or competitiveness.[24]

ADDITIONAL CONSIDERATIONS

LEGAL – Companies should consult with counsel to identify relevant requirements for sustainability disclosures in filings, legal implications of disclosing or failing to disclose certain information, and the process for drafting and obtaining approval of the disclosures. Note that failure to comply with MD&A disclosure requirements in Item 303 of Regulation S-K may provide the basis for liability under Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5.

INDEPENDENT FINANCIAL AUDIT – As discussed in Section 4, disclosure of sustainability matters in any of the three sections set forth in MD&A, description of business, or risk factors falls outside the scope of the report by the company's independent auditor. The financial auditor treats the MD&A, description of business, and risk factor disclosures as accompanying information or "other information," as discussed in the PCAOB's AU 550. The auditor has a responsibility to "read the other information and consider whether such information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, appearing in the financial statements."[25]

Note that the auditor may be engaged separately to conduct an examination or review of an MD&A presentation; refer to PCAOB AT 701 for further information.

SUMMARY

Having successfully embedded the Standards in all appropriate business functions, the company should consider the disclosure obligations related to material sustainability information and assess which of its SASB topics are appropriate for inclusion in SEC filings. Upon completing Section 5, the company will have considered the following questions:

- **How can the SASB standards strengthen the company's disclosures on material sustainability factors, thereby improving management's narrative in MD&A?**
- **What are the appropriate channels for disclosing material sustainability information in statutory filings?**

COULD THE COMPANY BE SUED FOR OMITTING AN MD&A DISCLOSURE OF A MATERIAL KNOWN TREND OR UNCERTAINTY?

A company's liability risk stemming from omissions in its MD&A would seem to be a basic question of securities law, but only recently have there been decisions by U.S. courts of appeals. In one case, *Stratte-McClure v. Morgan Stanley*, the Second Circuit Court of Appeals—which handles New York cases—held that a company could be sued for a violation of Section 10(b) of the Exchange Act and Rule 10b-5 thereunder (the general federal antifraud provisions) in connection with an MD&A omission relating to an investment bank's exposure to the subprime sector. The court stated that the plaintiff in such a lawsuit could go forward if he/she met all of the requirements for 10b-5 liability, including materiality and scienter.

The Court of Appeals for the Ninth Circuit, with jurisdiction over the West Coast, reached a different conclusion from the Second Circuit in *In re NVIDIA*. There, the Ninth Circuit held that "item 303 does not create a duty to disclose for purposes of Section 10(b) and Rule 10-5"; instead, "a duty to disclose must be separately shown."

Given the importance of the Second Circuit in securities law litigation, it would seem that a company does have some liability risk if it fails to disclose a known material uncertainty or trend in its MD&A.

Stratte-McClure v. Morgan Stanley, 2015 WL. 136312 (2d Cir. Jan 12, 2015).
In re NVIDIA Corp. Securities Litigation, 768 F.3d 1046 (9th Cir. 2014).

Key Resources

Regulation S-K

CFR §229.101 – Item 101, Description of business

CFR §229.303 – Item 303, Management's discussion and analysis of financial condition and results of operations

CFR §229.307 – Item 307, Disclosure controls and procedures

CFR §229.503(c) – Item 503(c), Risk Factors

SEC, Division of Corporation Finance guidance regarding disclosure obligations relating to cybersecurity risks and cyber incidents, CF Disclosure Guidance: Topic No. 2 (October 2011)

SEC, Commission guidance regarding disclosure related to climate change, 17 CFR Parts 211, 231 and 241 (February 2010) [FR-82]

SEC, Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, Release No. 33-8350 (Dec. 29, 2003) [FR-72];

SEC, Commission Statement About Management's Discussion and Analysis of Financial Condition and Results of Operations, Release No. 33-8056 (Jan. 22, 2002) [67 FR 3746];

SEC, Staff Accounting Bulletin No. 99—Materiality, Release No. SAB 99 (Aug. 12, 1999)

SEC, Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, Release No. 33-6835 (May 18, 1989) [54 FR 22427].

PCAOB, AT Section 101 – Attest Engagements

PCAOB, AT Section 701 – Management's Discussion and Analysis

SASB Standards Navigator

SASB Industry Research Briefs

SASB Mock 10-Ks

APPENDIX A: SASB'S UNIVERSE OF SUSTAINABILITY ISSUES

For each industry, SASB considers a comprehensive list of sustainability issues. This list is narrowed down to a much smaller set of key, industry-specific topics as SASB applies its materiality lens through research and vetting.

Environment

- GHG emissions
- Air quality
- Energy management
- Fuel management
- Water and wastewater management
- Waste and hazardous materials management
- Biodiversity impacts

Social Capital

- Human rights and community relations
- Access and affordability
- Customer welfare
- Data security and customer privacy
- Fair disclosure and labeling
- Fair marketing and advertising

Human Capital

- Labor relations
- Fair labor practices
- Diversity and inclusion
- Compensation and benefits
- Recruitment, development, and retention

Business Model and Innovation

- Lifecycle impacts of products and services
- Environmental and social impacts on assets and operations
- Product packaging
- Product quality and safety

Leadership and Governance

- Systemic risk management
- Accident and safety management
- Business ethics and transparency of payments
- Competitive behavior
- Regulatory capture and political influence
- Materials sourcing
- Supply chain management

APPENDIX B: SASB'S SUSTAINABLE INDUSTRY CLASSIFICATION SYSTEM (SICS™)

Where traditional industry classification systems group companies by sources of revenue, SASB's approach considers the resource intensity of firms and whether or not they face common sustainability risks and opportunities.

Consumption

- Agricultural Products
- Meat, Poultry & Dairy
- Processed Foods
- Non-Alcoholic Beverages
- Alcoholic Beverages
- Tobacco
- Household & Personal Products
- Multiline and Specialty Retailers & Distributors
- Food Retailers & Distributors
- Drug Retailers & Convenience Stores
- E-Commerce
- Apparel, Accessories & Footwear
- Building Products & Furnishings
- Appliance Manufacturing
- Toys & Sporting Goods

Financials

- Commercial Banks
- Investment Banking & Brokerage
- Asset Management & Custody Activities
- Consumer Finance
- Mortgage Finance
- Security & Commodity Exchanges
- Insurance

Health Care

- Biotechnology
- Pharmaceuticals
- Medical Equipment & Supplies
- Health Care Delivery
- Health Care Distributors
- Managed Care

Infrastructure

- Electric Utilities
- Gas Utilities
- Water Utilities
- Waste Management
- Engineering & Construction Services
- Home Builders
- Real Estate Owners, Developers & Investment Trusts
- Real Estate Services

Non-Renewable Resources

- Oil & Gas – Exploration & Production
- Oil & Gas – Midstream
- Oil & Gas – Refining & Marketing
- Oil & Gas – Services
- Coal Operations
- Iron & Steel Producers
- Metals & Mining
- Construction Materials

Renewable Resources & Alternative Energy

- Biofuels
- Solar Energy
- Wind Energy
- Fuel Cells & Industrial Batteries
- Forestry & Logging
- Pulp & Paper Products

Resource Transformation

- Chemicals
- Aerospace & Defense
- Electrical & Electronic Equipment
- Industrial Machinery & Goods
- Containers & Packaging

Services

- Education
- Professional Services
- Hotels & Lodging
- Casinos & Gaming
- Restaurants
- Leisure Facilities
- Cruise Lines
- Advertising & Marketing
- Media Production & Distribution
- Cable & Satellite

Technology & Communications

- Electronic Manufacturing Services & Original Design Manufacturing
- Software & IT Services
- Hardware
- Semiconductors
- Telecommunications
- Internet Media & Services

Transportation

- Automobiles
- Auto Parts
- Car Rental & Leasing
- Airlines
- Air Freight & Logistics
- Marine Transportation
- Rail Transportation
- Road Transportation

APPENDIX C: SASB'S SOURCES OF METRICS AND ALIGNMENT

Summary of SASB metrics by source:

Sector	Required Public	Voluntary Public	Required Tracking	Internally Available
Transportation	15%	21%	36%	27%
Services	8%	27%	25%	39%
Resource Transformation	0%	12%	21%	67%
Consumption I	1%	12%	29%	58%
Consumption II	1%	20%	37%	42%
Renewables	4%	45%	7%	43%
Infrastructure	8%	40%	7%	45%
Total	**5%**	**20%**	**27%**	**48%**

Key sources of SASB metrics:

Nearly a quarter (23% or 255/1,097) of SASB's industry-specific metrics are directly aligned with the following widely used disclosure and reporting frameworks:

SASB Topic	Metrics Alignment
Greenhouse Gas Emissions	CDP Climate Change Information Request (CC3, CC8.2); GRI G4 (EN15, EN19); Greenhouse Gas Protocol (WBCSD and WRI)
Energy Management	Greenhouse Gas Protocol (WBCSD and WRI); GRI G4 (EN3)
Air Emissions	U.S. Environmental Protection Agency (EPA); GRI G4 (EN21)
Water Management	CDP Water Information Request (W1.2a, W1.2c, W2-W4); World Resource Institute Aqueduct™; GRI G4 (EN8-EN9, EN22); WBCSD Global Water Tool (GWT); CEO Water Mandate
Employee Health & Safety	U.S. Occupational Safety and Health Administration Form 300
Diversity	U.S. Equal Employment Opportunity Commission EEO-1 Report
Data Security	U.S. SEC CF Disclosure Guidance: Topic No. 2, Cybersecurity
Fines and Settlements	U.S. SEC Regulation S-K Item 103 (Legal Proceedings)

Notes:

- 22% of metrics are qualitative in nature, for which "alignment" is a different consideration.
- SASB has not conducted the data analysis for the balance of the quantitative metrics, but many have strong direct alignment with industry-specific data collection and reporting frameworks.

APPENDIX D: KEY REFERENCES UNDERLYING SASB METRICS

SASB standards are built on many existing frameworks, standards, regulations, certifications, and definitions. Following is a sample of what aligns and/or directly references SASB's standards, by sector:

SASB Sector	Key Underlying References (selected)		
Health Care	• WHO Prequalification of Medicines Programme (PQP) • FDA FAERS and MedWatch • FDA Clinical Investigator Inspections	• Rx-360 International Pharmaceutical Supply Chain Consortium • Centers for Medicare & Medicaid Services requirements	• Provisions of the Patient Protection and Affordable Care Act (PPACA) • Hospital Values Based Purchasing Performance score • HIPAA and HITECH
Financials	• FINRA • Basel III • Federal Financial Institutions Examination Council's (FFIEC)	• Equator Principles (EP III) • Dodd-Frank Act Stress Test (DFAST) • COSO ERM Framework	• Dodd-Frank Wall Street Reform and Consumer Protection Act • FEMA special flood hazard areas
Technology & Communication	• EICC Validated Audit Process • EPEAT® • Basel Action Network's e-Steward® standard • U.S. EPA's Responsible Recycling Practices (R2) standard	• (SEC) CF Disclosure Guidance: Topic No. 2, Cybersecurity • International Electrotechnical Commission - IEC 62474 • ENERGY STAR® • Digital Advertising Alliance (DAA) Self-Regulatory Program	• Children's Online Privacy Protection Act (COPPA) • Directive 2002/58/EC (ePrivacy Directive) • National Institute of Standards and Technology (NIST)
Non-Renewable Resources	• Transparency International's Corruption Perception Index • IFC Performance Standards on Environmental and Social Sustainability • IPIECA Oil and Gas Industry Guidance on Voluntary Sustainability Reporting	• Renewable Volume Obligation (RVO) • International Union for Conservation of Nature (IUCN) Protected Areas • Pipeline and Hazardous Materials Safety Administration (PHMSA)	• ANSI/API Recommended Practice 754 – Process Safety Performance Indicators for the Refining and Petrochemical Industries • Mine Safety and Health Administration (MSHA)
Transportation	• New Car Assessment Program • EU End of Life of Vehicle Directive • NHTSA • Corporate Average Fuel Economy • AIAG • Federal Aviation Administration (FAA)	• International Civil Aviation Organization (ICAO) • Federal Motor Carrier Safety Administration (FMCSA) - Behavior Analysis and Safety Improvement Categories (BASICs)	• International Maritime Organization (IMO) metrics and conventions • International Convention for the Prevention of Pollution from Ships (MARPOL) • Federal Rail Administration (FRA) Recommended Violation Defects
Services	• Student Right-to-Know-Act • Gainful Employment Rule	• National Council on Problem Gambling's Internet Responsible Gambling Standards • CDC Foodborne illness standards	• USDA Dietary Guidelines for Americans • Advertising Self-Regulatory Council

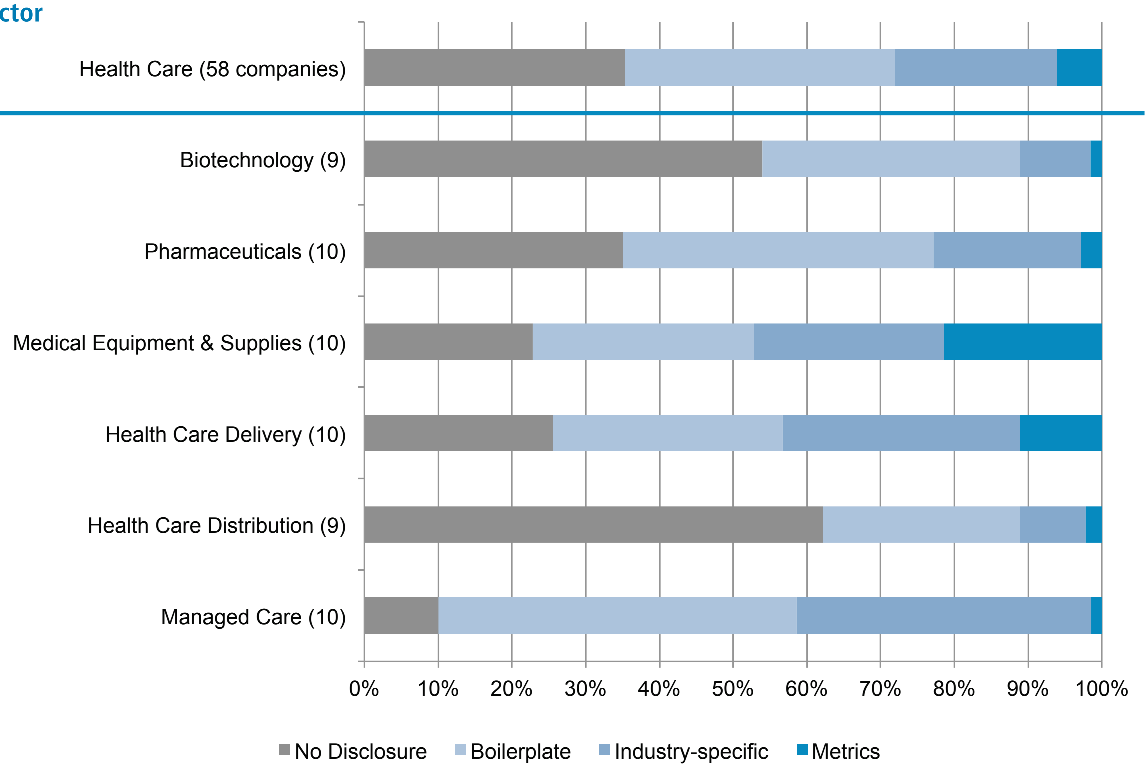
APPENDIX D: KEY REFERENCES UNDERLYING SASB METRICS (CONT.)

SASB Sector	Key Underlying References (selected)
Resource Transformation	• REACH substances of very high concern (SVHC) • American Chemistry Council's Responsible Care Management System • World Health Organization (WHO) Acute Toxicity Hazard Categories • Center for Chemical Process Safety's "Process Safety Leading and Lagging Metrics • U.S. Consumer Product Safety Commission • Airworthiness Directives - FAA, ESSA • OECD Anti-corruption guidelines • EPEAT® • Basel Action Network's e-Steward® standard • U.S. EPA's Responsible Recycling Practices (R2) standard • (SEC) CF Disclosure Guidance: Topic No. 2, Cybersecurity • International Electrotechnical Commission - IEC 62474 • ENERGY STAR® • Heavy Duty (HD) National Program • Forest Stewardship Council • Sustainable Forest Initiative • Programme for the Endorsement of Forest Certification • American Tree Farm System
Consumption	• Marine Stewardship Council • Roundtable for Responsible Soy • Roundtable for Sustainable Palm Oil • Rainforest Alliance • Sustainable Agriculture Initiative • World Health Organization (WHO) Acute Toxicity Hazard Categories • Global Food Safety Initiative (GFSI) • Natural Resources Conservation Service (NRCS) Comprehensive Nutrient Management Plan (CNMP) • Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) • USDA Smart Snacks in School criteria • Children's Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria • FDA's Recalls, Market Withdrawals, & Safety Alerts • USDA's Current Recalls and Alerts • Sustainable Apparel Coalition Higg Index • ICTI CARE Process (ICP) • California DTSC Candidate Chemicals List • U.S. Green Building Council's (USGBC) LEED • ISO 14040 and ISO14044 • ENERGY STAR® • WaterSense • ANSI/BIFMA e3 level®: Business Furniture
Renewable Resources & Alternative Energy	• Renewable Fuel Standard (EPA RFS2) • International Food Policy Research Institute Global Hunger Index • California Air Resources Board Low Carbon Fuel Standard Program • European Union Renewable Energy Directive • Roundtable on Sustainable Biomaterials (RSB) certification • Basel Action Network's e-Steward® standard • U.S. EPA's Responsible Recycling Practices (R2) standard • IEC 61400-1, Edition 3.0—Design requirements • Forest Stewardship Council • Sustainable Forest Initiative • Programme for the Endorsement of Forest Certification • American Tree Farm System • International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability • International Union for Conservation of Nature (IUCN) Protected Areas • United Nations Environment Program • International Labour Organization (ILO) conventions
Infrastructure	• U.S. EPA Hazard Potential Classification • U.S. EPA National Environmental Policy Act (NEPA) • National Institute of Standards and Technology (NIST) Smart Grid Interoperability Standards • U.S. Department of Energy's (DOE) Federal Energy Management Program (FEMP) M&V Guidelines • State renewable portfolio standards (RPS) • System Average Interruption Duration Index (SAIDI) • U.S. National Primary Drinking Water Regulations • U.S. Safe Drinking Water Act • European Drinking Water Directive • World Health Organization (WHO) Guidelines for Drinking-water Quality • FEMA Special Flood Hazard Areas (SFHA) • Global Real Estate Sustainability Benchmark (GRESB) Real Estate Survey Guidance • U.S. Green Building Council LEED • Green Globes • ENERGY STAR® • HERS® Index Score • WaterSense

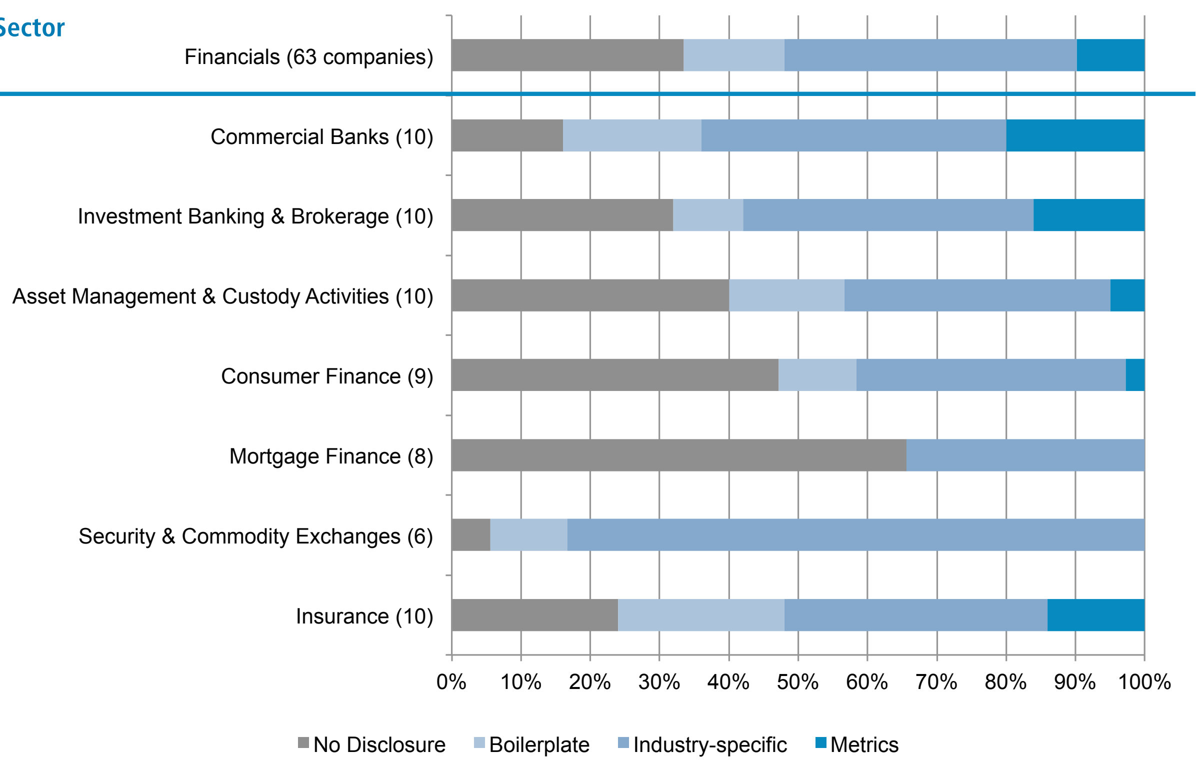
APPENDIX E: CURRENT STATE OF DISCLOSURE IN SEC FILINGS

Nearly three-quarters (74 percent) of SASB topics are already being disclosed in SEC filings, but rarely in a decision-useful way. More than 40 percent of those use boilerplate language; only 15 percent use metrics.

Health Care Sector

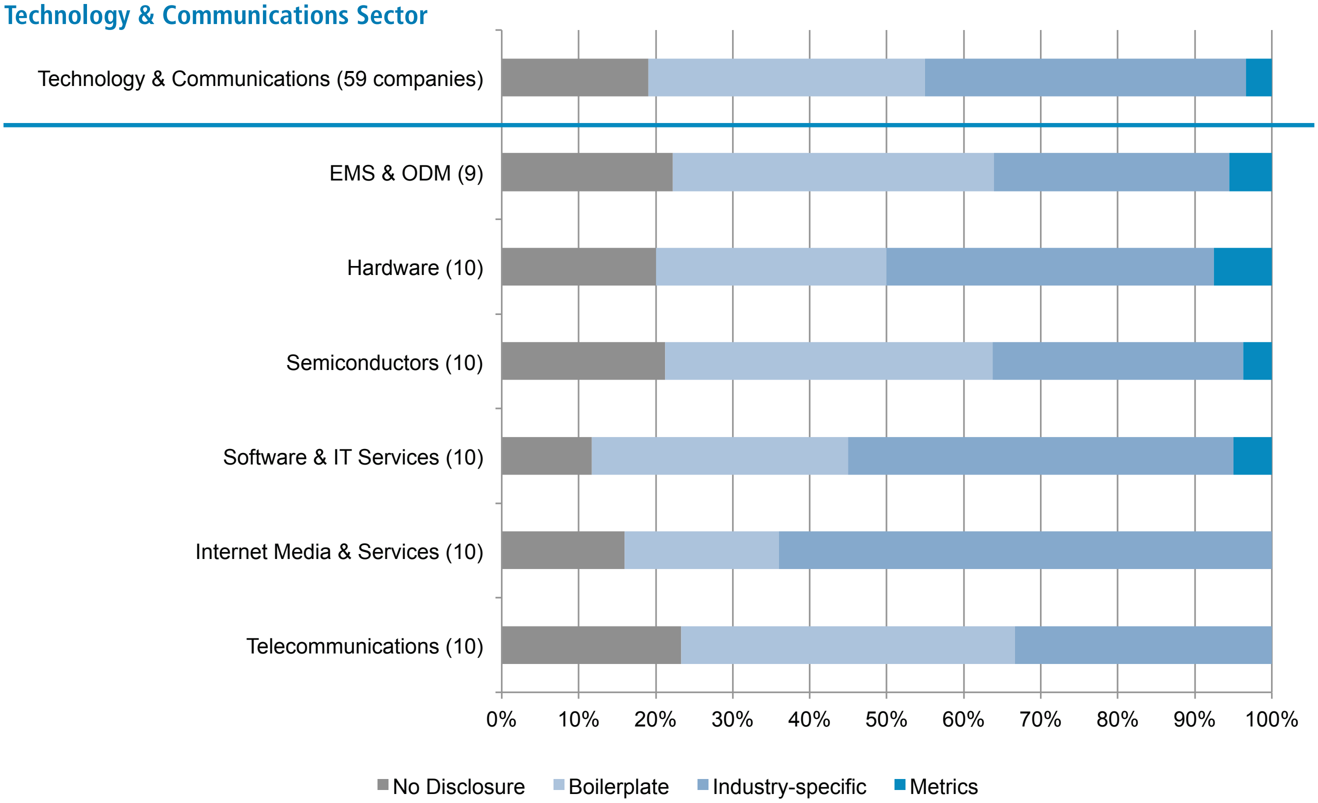


Financials Sector

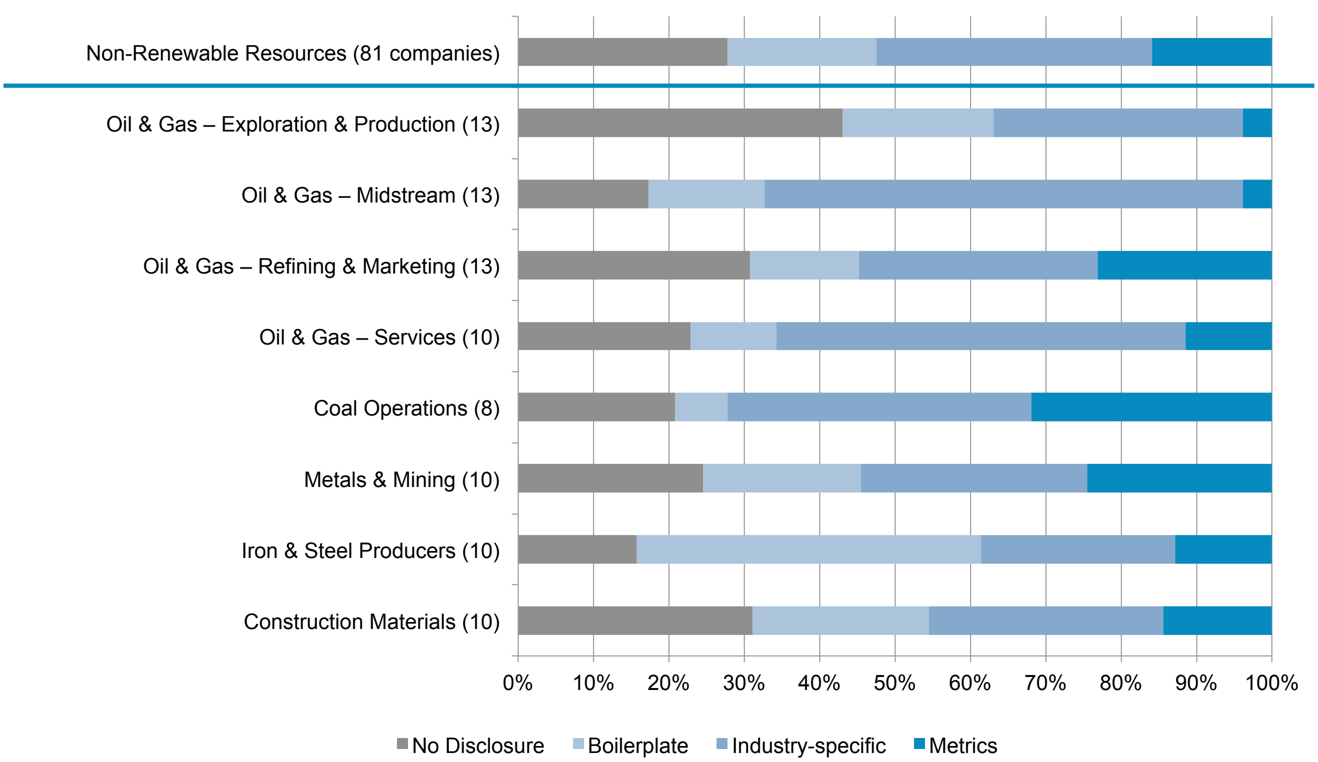


APPENDIX E: CURRENT STATE OF DISCLOSURE IN SEC FILINGS (CONT.)

Technology & Communications Sector

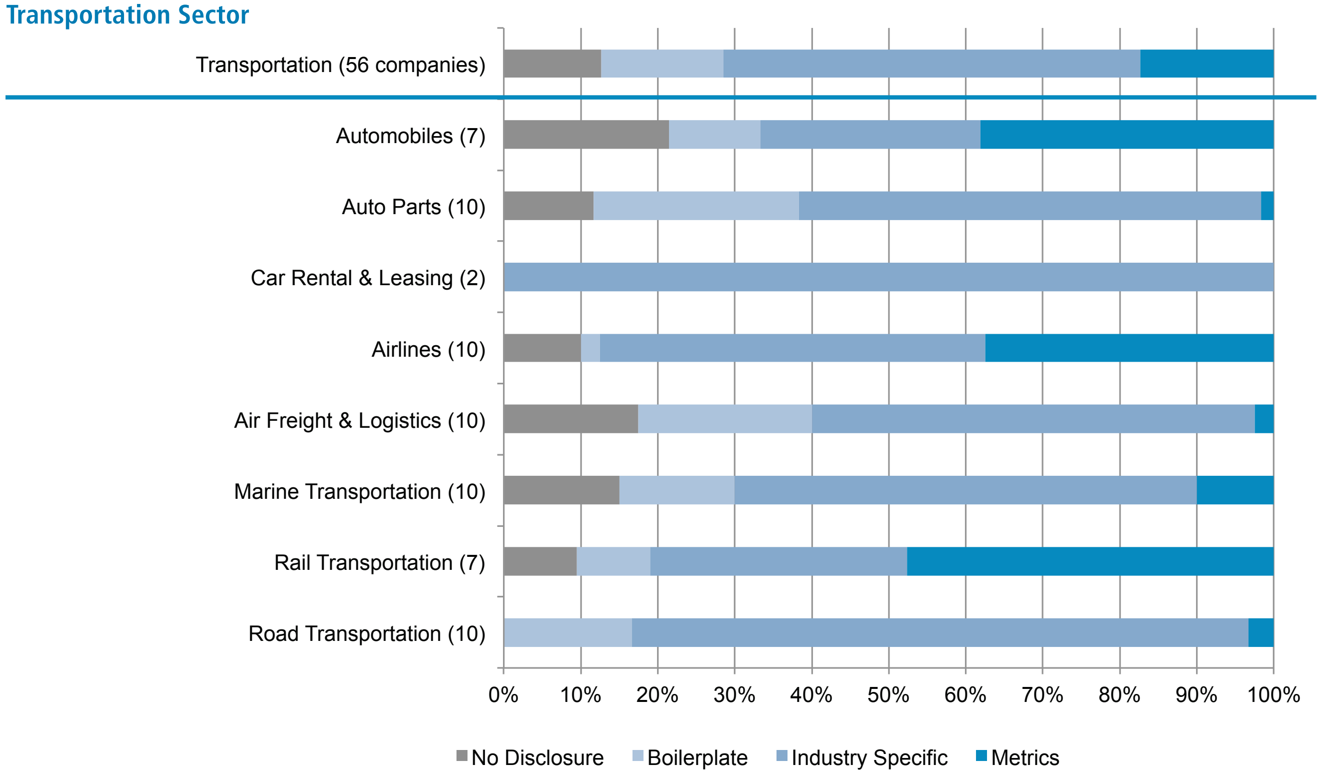


Non-Renewable Resources Sector

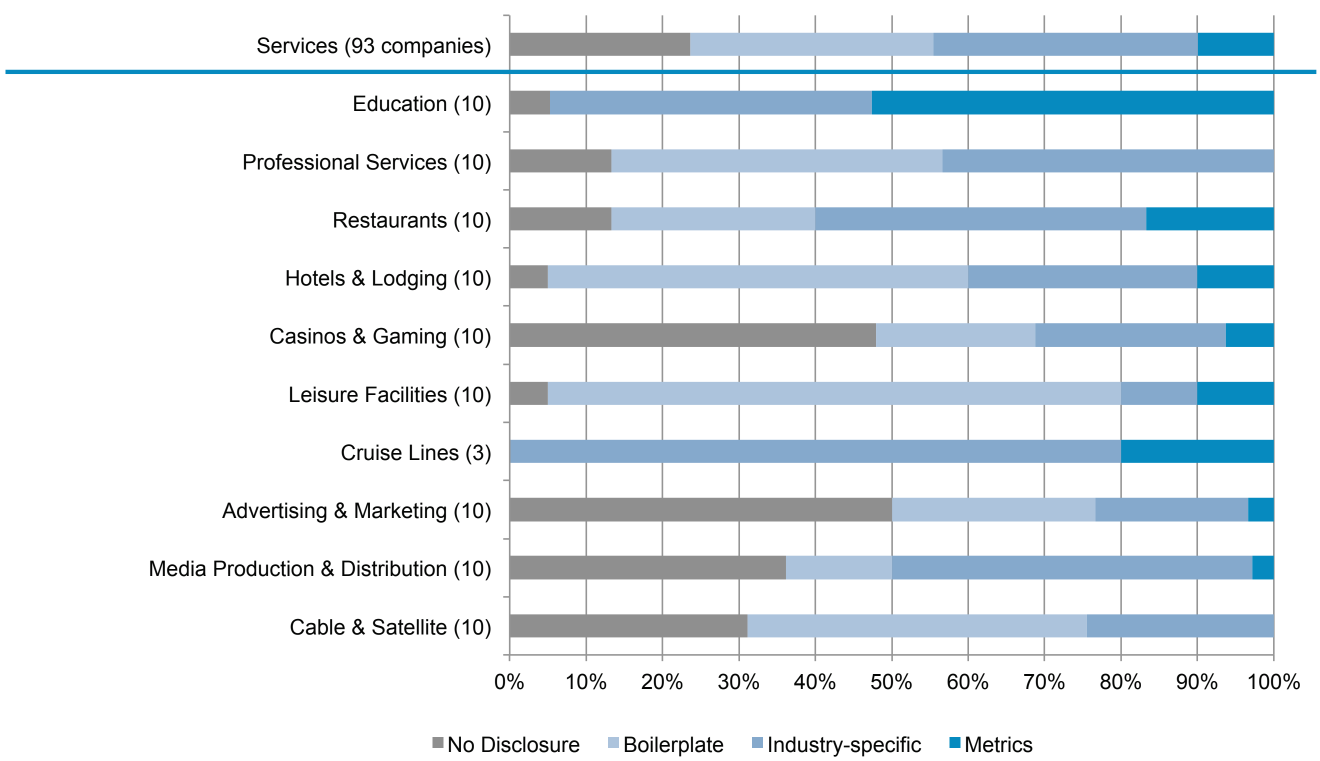


APPENDIX E: CURRENT STATE OF DISCLOSURE IN SEC FILINGS (CONT.)

Transportation Sector

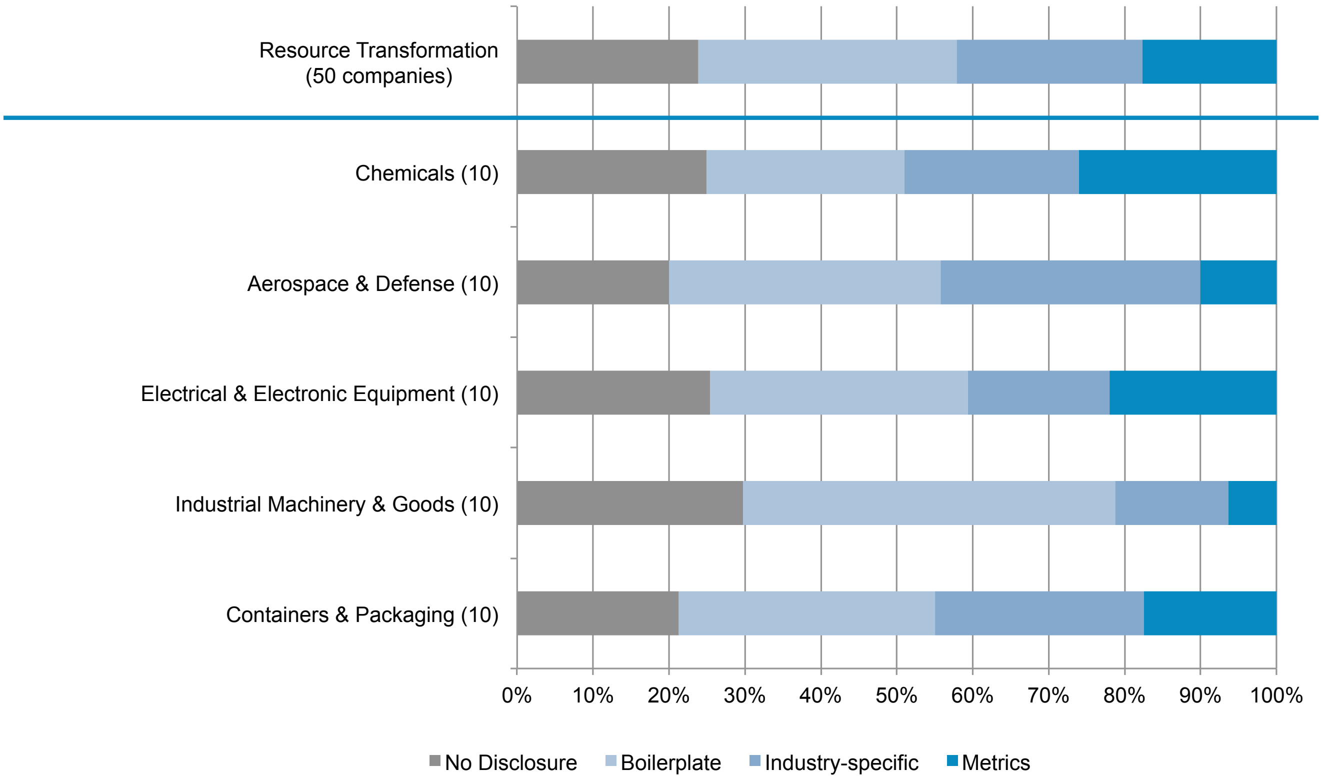


Services Sector

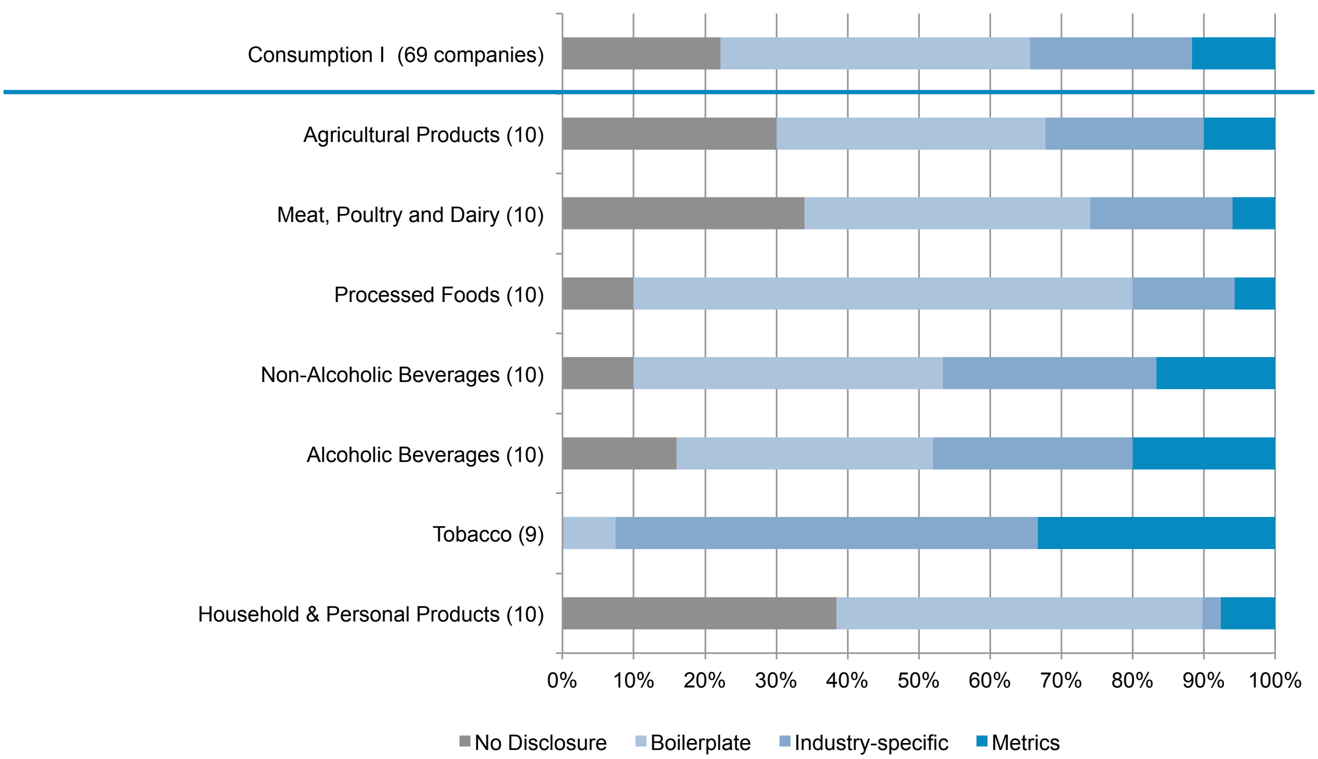


APPENDIX E: CURRENT STATE OF DISCLOSURE IN SEC FILINGS (CONT.)

Resource Transformation Sector

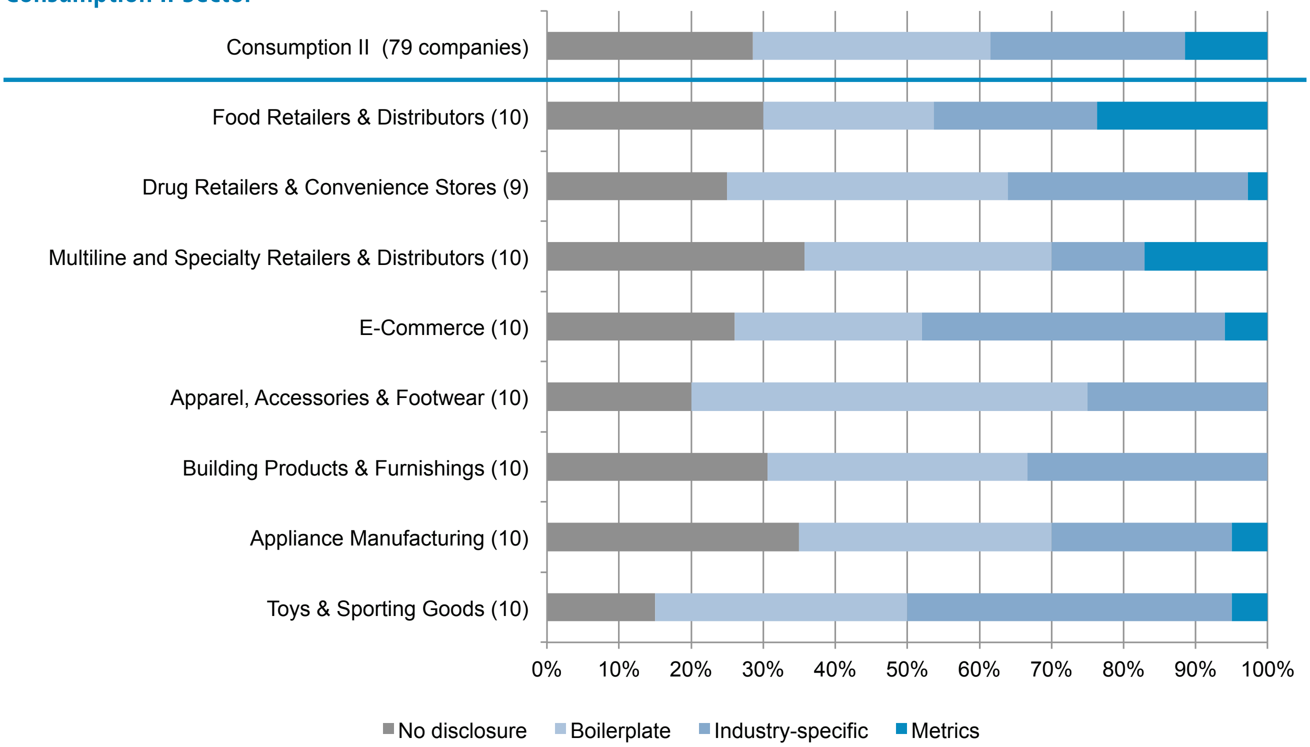


Consumption I Sector

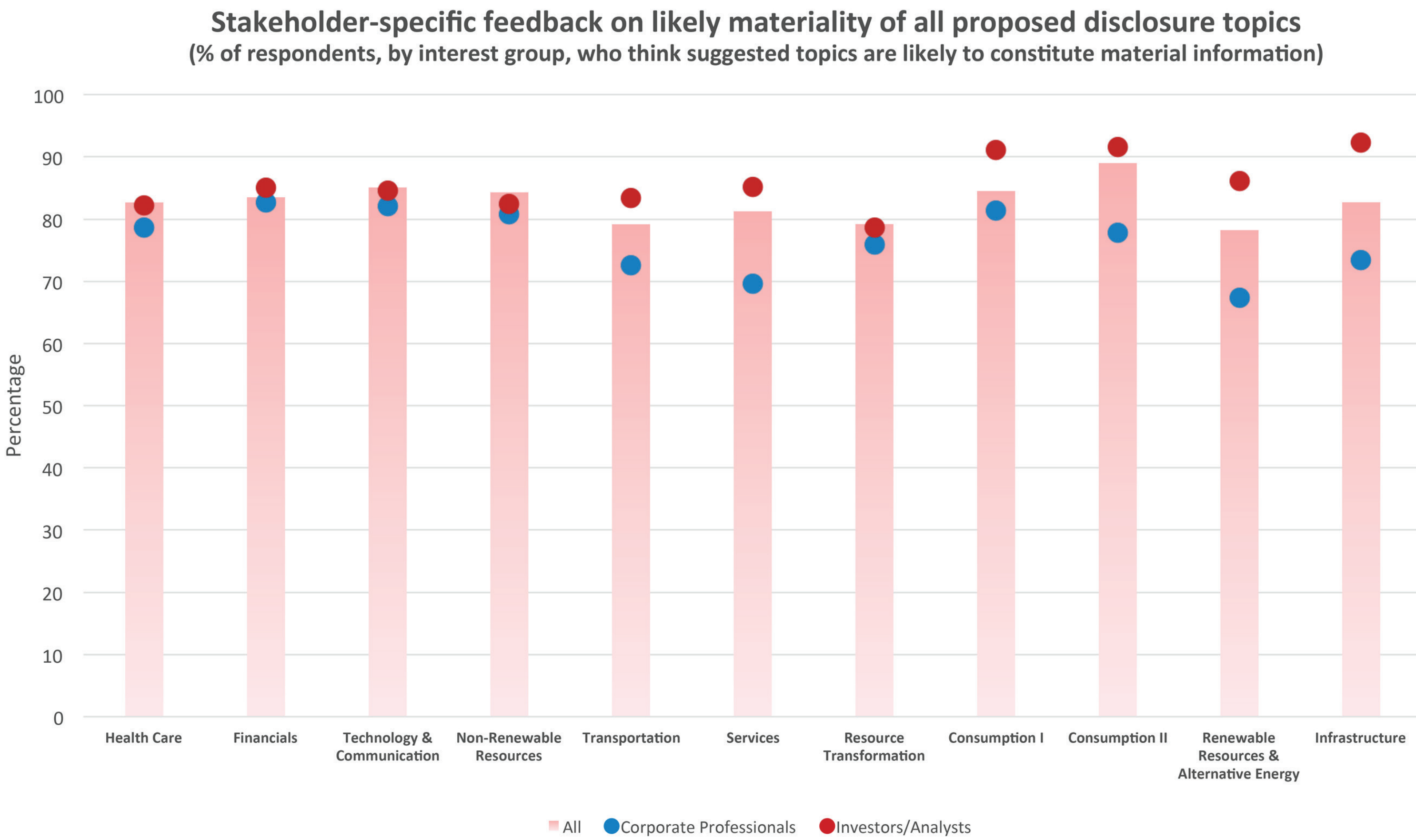


APPENDIX E: CURRENT STATE OF DISCLOSURE IN SEC FILINGS (CONT.)

Consumption II Sector



APPENDIX F: CONSENSUS AMONG SASB INDUSTRY WORKING GROUPS



APPENDIX G: EXAMPLE 10-K FOR PROCESSED FOODS COMPANY

The following is a mock excerpt from a Form 10-K filing for a processed foods company, "AgaSea Foods Unlimited," that incorporates disclosure to the SASB standard for Processed Foods into its Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A). This document serves as an example of one type of disclosure SASB envisions for its standards; it is not intended to provide a template for companies to follow.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2014

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 000-12345

AgaSea Foods Unlimited

(Exact name of registrant as specified in its charter)

Delaware	**99-999999**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
429 Kirk Street, Suite 1970, Las Vegas, Nevada	**89106-1111**
(Address of principal executive offices)	(Zip Code)

…

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Sustainability Performance

Overview

At AgaSea Foods Unlimited, all sustainability matters fall under the purview of the Chief Operating Officer, who reports on these issues to the Company's Board of Directors. Our current COO has advised the Board that all the disclosure topics identified by the Sustainability Accounting Standards Board's (SASB) Sustainability Accounting Standard – Processed Foods (CN0103) represent trends and uncertainties that may materially impact our operational performance or financial condition. What follows are disclosures and discussions of our performance on these seven sustainability topics. Following that are Table 1, which summarizes the quantitative metrics contained herein, and Table 2, which displays "activity metrics." The purpose of these "activity metrics," which indicate the scale of our operations, is to place in context the disclosures and discussions and to facilitate a normalized comparison of our performance to that of other processed foods companies of varying sizes.

Energy & Fleet Fuel Emissions

Energy is a critical input to our operations, and it constitutes a significant share of our operating costs and our carbon footprint. Energy efficiency is key to preserving margins and therefore important to our financial results. In 2009, we initiated a Company-wide cost-management plan that included implementing several energy-efficiency measures. One of the results of this initiative was a 12 percent reduction in total energy consumed in 2014 as compared to 2010.

Operational energy consumed, percentage grid electricity, percentage renewable

Our two primary sources of energy are public utilities and natural gas. We are currently piloting the use of biomass as an energy source but do not expect it to replace our existing power sources to a substantial degree. For the past three years, we have also piloted the purchase of Green-e Energy Certified renewable energy certificates (RECs), but we are not currently planning to expand these purchases. In addition to focusing on efficiency, we are working to reduce our reliance on grid electricity in order to reduce price risk. Through prudent use of hedging instruments, we can lower the variability in the price we pay for natural gas and, as a result, further limit energy price risk. Over the medium and long term, these measures can help us control costs and preserve margins.

	Year Ended December 31,		
Metric	**2012**	**2013**	**2014**
Operational energy consumed (in thousands of gigajoules)	26,890	26,233	25,490
Percentage grid electricity	43%	40%	39%
Percentage renewable	1%	2%	2%

Fleet fuel consumed, percentage renewable

External companies conduct the vast majority of our transportation operations. Over the past three years, we conducted approximately 4 percent of our total transportation operations, as measured in total distance traveled. The numbers reported here do not necessarily represent 4 percent of our total fleet fuel consumption, nor do they necessarily indicate that none of our total transportation operations are fueled with renewable resources. Each of our external partners operates independently, and we do not currently include fuel consumption or usage of renewable fuels as criteria when selecting transportation partners.

As part of the cost-management plan initiated in 2009, we upgraded many Company-owned vehicles to more efficient models and reassessed many of our typical logistical patterns. As a result, fuel consumption dropped by 19 percent between 2010 and 2014.

	Year Ended December 31,		
Metric	**2012**	**2013**	**2014**
Fleet fuel consumed (in gigajoules)	412,888	390,119	345,228
Percentage renewable	0%	0%	0%

Water Management

Like energy, water plays a crucial role in our operations. Its cost has historically been low relative to the costs of other inputs, but in making medium- and long-term projections, we do not expect that trend to continue. Therefore, we included increasing water efficiency as a major component in our 2009 cost-management initiative. The results of those efforts are now paying off in the form of reduced water use. We describe our efficiency measures and overall water-use strategy in greater detail in the third part of this section.

Total water withdrawn, total water consumed, percentage in regions with high or extremely high baseline water stress

We obtain the vast majority of our water from local municipal sources. We do not obtain a substantial amount of water from other sources. It is important to note that we reuse approximately 35 percent of water from our operations to help irrigate local farms. However, according to the SASB standard, this water is still counted as consumed by our operations because it is not returned to the original catchment area from which it was withdrawn.

In all our operations, we make every effort to reduce our water consumption to help reduce our operating risk. We describe some examples and discuss our water-saving strategy in more detail later in this section.

Metric	Year Ended December 31, 2012	2013	2014
Total water withdrawn	57,134	54,980	49,237
Total water consumed	51,421	49,480	44,113
Water withdrawn in locations with high or extremely high baseline water stress (as a percentage of total water withdrawn)	13%	10%	10%
Water consumed in locations with high or extremely high baseline water stress (as a percentage of total water consumed)	13%	10%	10%

Water-related non-compliance incidents

More than half of the Company's water-related non-compliance incidents over the last three fiscal years have related to exceeding our total maximum daily load (TMDL) wasteload allocations (WLAs) under the National Pollutant Discharge Elimination System (NPDES), and approximately twenty percent have related to exceeding wastewater pretreatment parameters for water we discharge to publicly owned treatment works (POTWs). Although we strive for zero incidents of non-compliance, we do not expect their current level, or the fines associated with them, to have a material impact on our results of operations. In general, we expect the number of WLA exceedances to fall as we continue to implement the water-efficiency measures described later.

Metric	Year Ended December 31, 2012	2013	2014
Number of incidents of non-compliance with water quality and/or quantity permits, standards, and regulations	16	21	15

Water risks and risk mitigation strategies

With the importance of water to our operations, we carefully monitor trends relating to our ability to procure it efficiently. Of particular importance are trends in availability of adequate, clean supplies and in public perceptions about our stewardship of this vital resource. The first could affect our operating costs, and the second could affect our social license to operate. Several factors influence our access to adequate supplies of clean water, as summarized in the following matrix.

Type of risk	Sources of risk	Mitigating actions taken	Potential to materially affect operating results
Environmental	• Short- and medium-term: 1) Natural variability from season to season and year to year. 2) Operating in water-stressed regions. • Short-, medium, and long-term: Impacts of climate change, including drought.	• Water-efficiency measures. • Forecasting and analysis activities. • Long-term facilities location planning. • Support for public policy to reduce the effects of climate change.	• Moderate to high, primarily by impacting operating costs and, by extension, margins.

Type of risk	Sources of risk	Mitigating actions taken	Potential to materially affect operating results
Costs	• Short-, medium-, and long-term: 1) Increased cost to use our existing water supplies (primarily public utilities). 2) Increased cost to access potential alternative sources. Both types of costs would primarily be driven by increased competition for water.	• Water-efficiency measures. • R&D to redesign operations and facilities to use substantially less water. • Including higher future water costs in medium- and long-term planning analyses.	• Moderate to high, primarily by impacting margins.
Public perceptions	• Short-term: 1) Increased concern and activism over our operations' water usage. 2) Decreased brand value resulting from negative perceptions. • Medium- and long-term: 1) Policies restricting access to public water supplies. 2) Policies increasing the rates we pay for supplies from public water sources.	• Water-efficiency measures. • Support for public policy to reduce the effects of climate change. • Public education campaigns on our responsible water usage practices.	• Uncertain. May be higher in the medium- to long-term than the short-term. Mitigating activities may result in this issue being immaterial.

The mitigating actions noted above are designed to reduce the magnitude of the impact of the risks and, in turn, prevent them from materially affecting our results of operations.

Our water-efficiency measures span all of our operations and focus on the short-term (one to five years) and medium-term (five to eight years). We focus first on reducing our water consumption because this practice helps us reduce our risk. For example, we have reformulated approximately nine percent of our products to reduce the water necessary to produce them. As we upgrade existing production facilities and plan to build new ones, we are installing equipment designed to reduce our need for water for other purposes, such as cooling and cleaning. We also work to re-engineer processes with existing equipment to reduce our need for water. Usually, we put water-saving equipment and practices into areas with high or extremely high baseline water stress before we put them elsewhere. When we reformulate recipes, we generally reformulate them across our production facilities, rather than attempting to produce multiple versions of the same product in different locations. This practice helps us maintain or increase operating efficiency. When analyzing potential investments designed to reduce our water consumption, we assume water will cost more in the future than it does today, and that it may cost substantially more in certain areas.

In addition, we use forecasting tools to align water withdrawn as closely as possible with water necessary to run our facilities (i.e., the water we consume) and use the ratio of water consumed to water withdrawn to assess our efficiency. We first introduced these in water-stressed regions and therefore our results in those areas lead the results of those efforts elsewhere. This practice helps ensure we do not unnecessarily stress local water supplies.

In 2010, we instituted a water re-use policy that mandates all fresh water withdrawn be used at least twice whenever technologically possible. This policy remains in place and has helped us reduce our total water consumption and increase our provisions of water to local farms for irrigation. In some locations, we invested in increased and/or improved infrastructure in order to transport the water to these farms. We are also piloting rainwater collection at two of our production facilities to determine if such measures would be beneficial throughout our operations.

To make further reductions in our total water usage, we are planning now for the long-term (nine to twenty years). Our R&D team is assessing ways to redesign both our operations and our facilities in an effort to substantially reduce our need for water. However, we do not expect these projects to affect our total water consumption for at least five years. Our operations planning team is assessing the potential to relocate some of our facilities to places with lower levels of water stress and/or relatively more abundant water supplies. It is important to note that this strategy would come with substantial cost tradeoffs and may not ultimately prove feasible.

Also relevant to the long-term are our efforts to support public policy to reduce the effects of climate change. These efforts help improve quality of life for everyone, and they demonstrate to our customers and the residents of the communities in which we operate our commitment to acting as good stewards of public resources.

We have set a target to reduce our water consumption per kilogram of finished product (excluding packaging) by twenty-five percent from 2010 levels by 2030. To date, we are on track to meet the target. The mechanisms described above are the primary ways we will achieve this target, and we expect our R&D team's efforts to provide at least some of the reductions. Risk exists that these projects will not result in the reductions we expect. In addition, water-usage reductions may be possible to achieve but not necessarily represent operational improvements. For example, if our R&D team develops a way to substantially reduce water consumption that is not cost-beneficial because it requires large investments in capital equipment, we may not reach our target. Should we fall short of our target, our costs may increase, but it is currently not possible to determine whether they would do so to such a degree as to materially impact our results of operations.

In addition to risks affecting our ability to access clean water, we face risks related to discharging wastewater, which we summarize in the following matrix.

Type of risk	Sources of risk	Mitigating actions taken	Potential to materially affect operating results
Environmental	• Ongoing compliance with existing and evolving regulations. • Preventing release of potentially polluting substances. • Emergence of new pollutants of concern.	• Thorough understanding of regulatory requirements. • Careful maintenance of facilities, particularly water-treatment operations. • Regular monitoring of environmental research regarding potential pollutants of concern.	• Low to moderate.
Costs	• Fines, penalties, and/or litigation associated with non-compliance with regulations.	• Thorough understanding of regulatory requirements. • Careful maintenance of facilities, particularly water-treatment operations.	• Low to moderate.

Type of risk	Sources of risk	Mitigating actions taken	Potential to materially affect operating results
Public perceptions	• Reduced social license to operate resulting from negative perceptions. • Policies substantially altering our operating cost structures.	• Thorough understanding of regulatory requirements. • Careful maintenance of facilities, particularly water-treatment operations. • Regular monitoring of environmental research regarding potential pollutants of concern.	• Low to moderate.

In general, these risks do not affect different time horizons or locations in different ways. Rather, we are constantly working to ensure all our operations are safe and meet all regulatory requirements. We do monitor research regarding potentially emerging issues, and we see this research as having the potential to impact our operations in the short- and/or medium-term. In areas unrelated to wastewater discharge, this has already occurred. For example, the public concern over bisphenol A (BPA), and many consumers' expectation that companies remove the substance from their packaging as soon as possible, demonstrates how quickly emerging research can sometimes necessitate operational changes. (Indeed, we were one of the first processed foods companies to completely eliminate BPA from packaging.) Our water-related improvement target does not currently include specific goals related to the quality of water discharge. We are instead focused on compliance, maintenance, and monitoring as noted above.

Food Safety

We value our customers and their patronage, which is why we make food safety a top priority. Our ability to ensure the safety of our products relates directly to our ability to maintain sales and revenues, manage costs, and protect our brand value. Therefore, we carefully monitor all indicators of potential problems on an ongoing basis, and we thoroughly investigate the root causes of all non-conformance incidents and violations.

Global Food Safety Initiative audit conformance

Our products contain ingredients from a variety of sources, and we are proud that 100 percent of our production facilities are Global Food Safety Initiative (GFSI)-certified. They are audited either through the BRC Global Standard for Food Safety or the Global Aquaculture Alliance BAP Seafood Processing Standard, depending on the business segment.

Our 2013 compliance with our GFSI audits is not indicative of our long-term performance. However, we did not dismiss these numbers as anomalies. Instead, we responded with a two-part approach: a comprehensive operational review of the plants at which the largest share of non-conformances occurred and a Company-wide training refresher for all production facility employees. The plant-specific review revealed both equipment- and staff-related problems. After having a third-party inspection conducted, we replaced a total of three pieces of malfunctioning equipment at two different plants. After interviewing the facility staff, we changed multiple procedures and conducted mandatory refresher training in addition to the aforementioned Company-wide training.

It is important to note that for the past five fiscal years, the associated corrective action rate for GFSI major non-conformances has been 100 percent within 45 days.

Metric	Year Ended December 31, 2012	2013	2014
GFSI major non-conformance rate	1%	4%	2%
Associated corrective action rate	75%	71%	76%
GFSI minor non-conformance rate	7%	11%	8%
Associated corrective action rate	100%	100%	100%

Percentage of ingredients sourced from supplier facilities certified to a GFSI scheme

Because of the importance of food safety to our Company performance, we require all tier-one (direct) suppliers to be certified by a GFSI scheme. If a tier-one supplier loses its certification, its contract is not immediately terminated. However, if the supplier does not regain certification within six to nine months (depending on a variety of factors), the contract will be terminated. We recognize that this requirement may reduce the pool of potential tier-one suppliers, and therefore potentially increase input costs. The benefits, which include reducing risk (and the associated costs) and protecting brand value, outweigh these costs.

Metric	Year Ended December 31, 2012	2013	2014
Percentage of ingredients sourced from supplier facilities certified to a GFSI scheme	100%	100%	100%

Notice of food safety violations

Our operations are closely monitored by multiple regulatory agencies. We strive to comply with all regulations at all facilities. However, all manufacturing processes are subject to error. The relative increase in violation notices received in 2013 primarily relates to the problems described above in the GFSI audit section. That is, the same processes and equipment at the same plants that resulted in GFSI audit non-conformance incidents caused the majority of the 2013 food safety violations. The remediation measures discussed in that section also apply here. It is important to note that no enforcement actions were taken because we corrected all violations in a timely manner.

Metric	Year Ended December 31, 2012	2013	2014
Notice of food safety violations received	7	11	3
Percentage corrected	100%	100%	100%

Recalls

We issued two recalls in 2014, both of which related to undeclared allergens in the form of wheat. This mislabeling created risk for consumers sensitive to wheat and/or gluten due to allergies, celiac disease, or other conditions. These two recalls are both considered notable according to the SASB standard's definition. To our knowledge, no fatalities occurred as a result of sensitive consumers eating the mislabeled products, but many consumers reported suffering serious negative reactions. Upon investigation, we discovered that the mislabeling occurred because production had been moved to different equipment that processed wheat, whereas the products had previously been manufactured on equipment that did not also process wheat. The resulting potential cross-contamination was not reflected in the labeling.

Upon discovery of the issue, we immediately notified retailers, who in turn removed the affected products from shelves and posted notices to customers. We also posted notices on our website and through the Food and Drug Administration's (FDA) press release service. In addition, we worked with multiple media outlets to notify the public of the recall, and we provided a toll-free phone number for consumers to call with questions and to report reactions. We also provided consumers the option to contact us through our website. We have also reviewed our Company-wide procedures regarding production-line changes to help reduce the risk of this type of event recurring. To date, the cost of these two recalls has totaled approximately $987,000, and we expect to incur additional costs in 2015 and possibly beyond. We have paid, and expect to be required to pay, further fines and/or penalties in connection with this recall, but the total amount may not be determined for some time. Although total recall-related costs may be much higher than the total costs incurred so far (particularly if consumers take legal action against the Company), we do not currently expect them to have a material impact on our results of operations.

Metric	Year Ended December 31, 2012	2013	2014
Number of recalls issued	0	0	2
Total amount of food product recalled (metric tons)	0	0	105.4

Health & Nutrition

Over the past two decades, we have substantially increased the number of products we offer that meet specific health and nutrition criteria. Our customers have asked us to make these products, both by voicing their opinions and by purchasing products, from both us and our competitors, that meet these criteria. We have substantially reduced the amount of saturated fat, cholesterol, and sodium in our products, as these have been subject of particular concern from consumers.

Revenue from products labeled and/or marketed to promote health and nutrition attributes

When our products meet the FDA's guidelines regarding the use of "healthy," "light," "reduced," or similar, we will generally label the product and market it as such. For some products, however, we have found that using this term in labeling and marketing can actually reduce sales. In those cases, we generally avoid the use of the word rather than change the formulation of the product. It appears that in some cases, such as with our MovieNight microwave popcorn, consumers do not purchase the product specifically because it is healthy and may, in fact avoid purchasing if it is labeled as such. Therefore, the total revenue from products we sell that meet the guidelines for use of the term "healthy" is actually somewhat higher than the numbers below indicate.

Metric	Year Ended December 31, 2012	2013	2014
Revenue from products labeled and/or marketed to promote health and nutrition attributes (in millions)	$5,668	$6,004	$6,127

Revenue from products that meet Smart Snacks in School criteria or foreign equivalent

We take special care when designing products that are specifically marketed to children, and we have increased the share of our products designed for children that meet the Smart Snacks in School criteria. Although we recognize that this shift in focus may reduce our total revenues, we believe that those costs are offset by enhancements in our brand value and reduced risk of negative public perceptions. We currently offer products that meet the children's nutritional criteria established by the following countries: the United Kingdom, Canada, and Mexico. Other countries have developed these guidelines, but we currently do not have a large enough market presence in these places to warrant reformulating our products, where necessary, to meet these guidelines. However, we monitor development of these guidelines on an ongoing basis and regularly evaluate whether or not reformulation will benefit both our customers and our shareholders.

Metric	Year Ended December 31, 2012	2013	2014
Revenue from products sold in the U.S. that meet Smart Snacks in School criteria (in millions)	$237	$244	$251
Revenue from products sold outside the U.S. that meet the foreign children's nutrition criteria (in millions)	$25	$25	$26

Processes to identify and manage products and ingredients of concern and to identify and manage emerging dietary preferences

Our success depends on our ability to meet consumers' preferences and expectations, which are evolving more quickly today than in the past. We comply with all applicable regulations related to ingredients and food additives, and we focus primarily on market research to understand consumer preferences. In 2004, we substantially expanded our market research team to improve our capacity; this team also monitors research from academic and activist sources, which often influence consumer concerns and therefore can serve as a leading indicator for our operations.

Over the past three fiscal years, concerns regarding artificial colors, potential allergens, and portion sizes have been most salient to consumers and, by extension, to our operations and our planning. In response to these concerns, we have:

- Begun replacing artificial colors in several of our most popular products with natural colors derived from sources such as beets and turmeric.
- Sought certification for products that are free of common allergens, particularly gluten.
- Adjusted portion sizes for approximately 40 percent of our packaged foods, primarily cereals, snacks, and dried fruits.
- Adjusted portion sizes for approximately 22 percent of our frozen meals.

Because we believe in consumer choice, and we recognize that consumers' preferences often differ from government standards, we focus on responding to consumer demands and on giving consumers the information they want regarding our products. We do not currently follow externally developed strategies regarding concern identification or risk communication, nor do we follow externally developed guidelines regarding portion sizes and nutritional content, except as required by regulations or for labeling or marketing purposes.

We develop individual responses each time our market research indicates consumer concern about an ingredient, a class of ingredients (such as artificial colors), a combination of ingredients, or a packaging component (such as BPA). A one-size-fits all approach simply cannot satisfy customer expectations or appropriately assuage their concerns. These responses include customized communication plans. Long before we would need to communicate publicly, however, our R&D team will have thoroughly reviewed the relevant available research and, in many cases, begun evaluating alternatives. By continuously focusing on market research, we are frequently able to identify potential concerns before they attract widespread attention.

We follow essentially the same procedure when understanding and addressing public concerns about the nutritional content and portion sizes of our foods. Nutrition science is evolving, and in many cases, offers conflicting views and guidelines. As a result, we recognize that we cannot satisfy every consumer expectation. Therefore, we prioritize those issues that our research indicates are of high and/or widespread concern or we anticipate are likely to be soon.

All our products that meet the criteria for the USDA Organic label are labeled as such, as are products that meet the criteria for Certified Gluten-Free. The USDA Organic label cannot be applied to products that contain genetically modified ingredients, but we do not currently offer products with the Non-GMO Project Verified label. We continually review the potential costs and benefits of expanding the certification programs in which we participate, but we do not expect to introduce products meeting other certification standards this year.

In connection with our 2014 recall, we received a variety of complaints from consumers who became ill from eating wheat- and gluten-containing products. It is possible that these consumers may file lawsuits, and we cannot predict the outcome of these matters. However, we do not expect lawsuits related to this matter, should they be filed, to materially impact our results of operations.

Product Labeling & Marketing

Number of child advertising impressions made, percentage promoting products meeting the CFBAI Uniform Nutrition Criteria

We advertise our products in a wide variety of media, including media directed specifically towards children. In 2011, we set a goal for all our advertising specifically aimed at children to meet the Children's Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria by 2015. Although the criteria became more stringent in 2013, we reached the goal one year early. It is important to note that the SASB standard regarding the percentage of advertising promoting products meeting the criteria includes all advertising, not just that which is child directed. It is also important to note that we can control the content of our advertising aimed at children and that we can control which media carry those advertisements, but we cannot control which forms of media children consume.

We rely on a set of outside advertising and marketing agencies to collect data on how many of our total advertising impressions are made on children. We review the methodology these agencies use and work to ensure that the criteria are comparable across agencies and across media. Estimation methods include rating points and target ratios, visits-per-month data, and others. In addition, our marketing department analyzes data collected by our market research team to enhance the value of the agency-provided data and deepen our understanding of how both children and their parents perceive our products.

Metric	Year Ended December 31, 2012	2013	2014
Number of child advertising impressions made (in thousands)	12,432	14,900	15,213
Percentage promoting products meeting the CFBAI Uniform Nutrition Code	77%	77%	78%

Revenue from products labeled as containing GMOs and non-GMO

We do not specifically label products as containing genetically modified organisms (GMOs), nor do we label products as specifically being free of GMOs (non-GMO). We may need to change this practice in order to comply with GMO-labeling regulations that may soon go into effect in different U.S. states. It is not now clear whether those laws will go into effect as scheduled because federal legislation, pending at the time of this filing, may supersede and/or render moot the state legislation. If state-issued regulations regarding GMO labeling do take effect, we will likely incur costs related to re-labeling and/or reformulating our products. In some cases, we may determine that no longer selling certain products in certain markets is the best option. For example, if a state with a small population imposes GMO-labeling requirements, the costs to comply may be too high to justify continuing to sell affected products in that state. In that case, our sales and revenues may decline. We do not expect these uncertainties to materially impact our operating results in the short-term, but it is not now possible to assess how GMO labeling requirements may affect our results in the medium- or long-term.

Also, as noted earlier, we sell products labeled as USDA Organic, and those products are free of GMOs, and we assume that consumers are aware of the USDA's requirement. Therefore, the numbers below reflect revenues from USDA Organic-labeled products.

Metric	Year Ended December 31, 2012	2013	2014
Revenue from products labeled as containing GMOs	$0	$0	$0
Revenue from products labeled as non-GMO (in millions)	$1,106	$1,257	$1,710

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

We carefully monitor our products and labels to ensure accuracy. Consumers expect to be able to rely on our labels, and multiple or major incidents of mislabeling can negatively affect brand value. The one notice of violation indicated below relates to the 2014 recall described earlier. In addition, we have not received non-conformance notices of any kind from any other third-party, industry, or other standards or codes organizations.

Metric	Year Ended December 31, 2012	2013	2014
Notices of violations received for non-conformance with regulatory labeling and/or marketing codes	0	0	1

Amount of legal and regulatory fines and settlements associated with marketing and/or labeling practices

Because we have taken great care with our labeling, we have largely avoided fines associated with mislabeling. The fines shown below relate to the 2014 recall described earlier. In the section on recalls, we also include the corrective actions we have implemented to prevent this problem from recurring. Also, it is important to note that we may face additional fines, civil settlements, or other financial penalties related to the recall in the near future.

	Year Ended December 31,		
Metric	**2012**	**2013**	**2014**
Legal and regulatory fines and settlements associated with marketing and/or labeling practices (in thousands)	$0	$0	$103

Packaging Lifecycle Management

Efficient usage of packaging benefits everyone: the Company, our customers, and our shareholders. It also benefits the environment. In some areas in which we operate, and in some areas in which we sell products, recycling and composting are commonplace. In these areas, consumers expect that at least some components of packaging will be recyclable or compostable. Although our research indicates that only a very small share of consumers make purchasing decisions specifically based on the recyclability and/or compostability of packaging, we recognize the importance of improving our performance in this area. We discuss our packaging strategy later in this section.

Total weight of packaging sourced, percentage made from recycled or renewable materials, and percentage that is recyclable or compostable

We describe our efforts to reduce the environmental impact of packaging in the next section. Here, it is important to note that the total weight of packaging sourced declined from 2012 to 2014 even though revenues and total units sold both increased.

	Year Ended December 31,		
Metric	**2012**	**2013**	**2014**
Total weight of packaging sourced	391,909	391,892	391,828
Percentage made from recycled or renewable materials	37%	37%	37%
Percentage that is recyclable or compostable	43%	47%	52%

Strategy to reduce environmental impact of packaging through its lifecycle

Packaging serves many purposes: it preserves food quality and safety, provides information about the food, and may also serve as a preparation container, such as with many of our frozen meals or microwave popcorns. Over the past decade, we have made many changes to our packaging, including replacing coatings on cardboard to improve recyclability, switching from plastic-based to cardboard-based packages for some products, and redesigning packaging to be more efficient. In some cases, these packaging changes have not changed the amount of packaging material required but have instead reduced the need for other inputs, such as fuel for transportation. For example, we now sell all our margarine products in containers that are essentially cubes rather than the traditional round containers. Making this switch allowed us to reduce fuel expenditures for transporting this product class by fourteen percent, which in turn helps us reduce our carbon emissions.

Because packaging serves multiple purposes and can affect various aspects of our products' overall environmental impact, revising our packaging requires careful analysis of the full product and packaging lifecycle. We must ensure packaging can meet all the demands placed upon it and that changing one aspect of packaging will not have a detrimental environmental effect at some other point in the packaging's lifecycle. In addition, using recyclable packaging has no environmental benefit if consumers do not have local access to recycling facilities, are unaware that the packaging is recyclable, or are unsure of how to recycle it. As such, one aspect of our strategy is supporting policies to increase recycling programs and to promote consumer education.

Underlying all aspects of our strategy is compliance with current and expected regulation. It is probable that these regulations will become stricter in the future than they are today. Some countries have already imposed regulations on manufacturers of durable goods, such as electronics and appliances, to take end-to-end responsibility for products and take them back at the end of their useful lives. These same countries, or other countries, may choose to impose similar regulations on our industry. We are currently monitoring trends and developments and incorporate the most likely possible outcomes into our planning and our efficiency-first measures. We cannot currently estimate the effect that so-called producer-take back regulations would have on our results of operations because it is not yet clear how, where, when, or if these regulations will take effect.

The potential to achieve efficiencies and the need to satisfy customer preferences are the other major drivers of our strategy. As part of our efficiency efforts, we have engaged an external consulting firm that is conducting Life Cycle Assessments (LCAs) in accordance with ISO 14040 and ISO 14044 on our top-selling products. A target date for completion of this assessment has not yet been set. In the medium- and long-term, it is probable that the changes implemented as a result of these LCAs will help preserve margins, but it is not currently possible to determine what effect these changes may have on our results of operations.

Some packaging changes that may not be salient to the consumer have the potential for substantial environmental benefits. For example, we have begun sourcing many of our cardboard-based packaging from firms that use faster-growing trees and have implemented systems to reduce packaging waste. We estimate that these changes will reduce our total packaging consumption by approximately three percent per year every year, and that these reductions may grow in the future.

Our efficiency-first focus includes sourcing packaging products from a variety of suppliers, which helps reduce risks surrounding supply availability. Our internal packaging management team thoroughly understands the demands placed on packaging and incorporates its knowledge and experience into planning, operations, and sourcing decisions.

We completed implementation of ISO 18602, which relates to packaging optimization, in November 2013. We are in the process of implementing ISO 18604, which relates to recyclable packaging. The order of these implementations reflects our efficiency-first focus. Once we have maximized efficiency, we plan to set and publicize specific targets for packaging performance. We expect our efficiency efforts to require at least two more years to complete, but implementation may take longer. We believe delays in completing these efforts are unlikely. If a delay does occur, it is unlikely to materially affect our results of operations.

Environmental & Social Impacts of Ingredient Supply Chains

Percentage of food ingredients sourced from regions with High or Extremely High Baseline Water Stress

As disclosed earlier, we are making substantial efforts in the near-, mid- and long-term to ensure we use water as efficiently as possible. We do not directly control the water usage practices of our tier-one (direct) suppliers, but we have actively communicated with them regarding the importance of water conservation for more than a decade. In addition to wanting to be good stewards of natural resources, we also recognize that water-related risks facing tier-one suppliers could, in turn, impact our operations. If, for example, suppliers of key ingredients lack access to sufficient water supplies, our costs may increase, which may affect our sales, revenues, and operating margins.

All our suppliers face water-related costs and, therefore, have incentive to use water efficiently. We do not currently impose any contractual or other requirements on suppliers regarding how they use water or where they locate their farms or facilities. However, we actively promote communication among our suppliers so that they may develop and share best practices and other water-conservation strategies. It is in everyone's best interest to use water wisely, and we and our suppliers recognize that fact. The numbers below cover 100 percent of our tier-one suppliers.

Metric	Year Ended December 31, 2012	2013	2014
Percentage of food ingredients sourced from regions with High or Extremely High Baseline Water Stress	18%	18%	19%

Percentage of food ingredients sourced that are certified to third-party environmental and/or social standards

Currently, we sell products that bear the USDA Organic label, as described earlier, but we do not sell products that bear other environmental and/or social certifications or labels. However, some of our tier-one suppliers participate in such programs, primarily the Rainforest Alliance and Bon Sucro. As a result, some of our products contain ingredients that meet these certifications, but we do not label our products as such. For Bon Sucro certification, several of our suppliers of sugar indicate to us that their products are certified to the Bon Sucro Production Standard. For Rainforest Alliance certification, our suppliers indicate to us that their products (primarily cocoa, bananas, and pineapples) are certified to the Sustainable Agriculture standard.

We do not currently include participation in these certification programs as a supplier-selection criterion, and we believe participation is a matter of supplier choice. The increase in purchases of certified ingredients in 2014 over the previous two years is due primarily to increased demand for our USDA Organic-labeled products. Although we expect consumer interest in organic food to increase in general, and therefore this trend to continue in particular, we do not currently expect our performance on this metric to materially affect our results of operations.

Metric	Year Ended December 31, 2012	2013	2014
Percentage of food ingredients sourced that are certified to third-party environmental and/or social standards	14%	14%	16%
USDA Organic	10%	10%	12%
Bon Sucro	2%	2%	2%
Rainforest Alliance	2%	2%	2%

Suppliers' social and environmental responsibility audit conformance

The three certification systems noted above all require pre-certification audits and annual follow-up audits to maintain certification. We carefully monitor our and our suppliers' compliance with the USDA Organic certification requirements. Because we do not label products as certified by Bon Sucro or Rainforest Alliance, we have relied on our suppliers to provide data on those non-conformance rates.

We also contractually mandate all tier-one suppliers to adhere to our internal standards regarding labor practices. These standards, which can be viewed online at http://www.agaseafoods.com/laborstandards, help us attract reliable workers and to reduce a variety of different risks, particularly those related to safety and labor relations. To the extent that a particular supplier consistently demonstrates poor conformance to these standards, contractual penalties will take effect. We do not publicly disclose the terms of our supplier contracts, but we have previously discontinued relationships with suppliers due to poor performance in this area. No such discontinuations have occurred within the last three fiscal years.

Improvements to supplier conformance with social and environmental standards stems from a Company-wide operational review conducted in 2012 that was aimed at risk reduction. With demand growing for our USDA Organic products, we recognize the importance of ensuring our products meet the standard. If they do not, our brand value could diminish, which could materially affect our results of operations. In addition, conformance to our labor standards was lower than we had initially expected when we implemented them in 2007. (We granted suppliers a two-year phase-in period during which suppliers were immune from contractual penalties.) Improving conformance to these standards is key to reducing risk and costs, as noted above, so the review also focused on this issue.

When non-conformance incidents occur, we both work to remedy the problem and to understand its root cause(s) to prevent it from recurring. This practice helps us reduce long-term risks and costs that can arise from inconsistent operational results and/or frequently switching suppliers. We are proud of our 100 percent corrective action rates and believe they demonstrate our commitment to careful monitoring and continuous improvement.

Metric	Year Ended December 31, 2012	2013	2014
Suppliers' social and environmental responsibility audit major non-conformance rate	7%	4%	3%
Associated corrective action rate	100%	100%	100%
Suppliers' social and environmental responsibility audit major non-conformance rate	14%	9%	9%
Associated corrective action rate	100%	100%	100%

Priority food ingredients and sourcing risks

It is vital to our operations to maintain continuous supplies of key ingredients. We source from a variety of suppliers, a practice that helps reduce many types of risk. When some ingredients are unavailable or have risen substantially in price, we may substitute substantially similar ingredients to preserve margins and finished-product availability. We develop alternative recipes and production processes and analyze when it is wise to use these alternatives as part of our risk-mitigation strategy. We also secure agreements with suppliers that help mitigate risk. For example, we may negotiate agreements such that we are a "priority one" customer whose orders are filled first. We may also negotiate long-term agreements with key suppliers. We recognize that our competitors' approaches to managing supply risks often differ substantially from ours. However, we believe our strategy is an ideal fit for our scale and our market positioning as a highly affordable brand.

The five ingredients that constitute our largest food ingredient expense are wheat, corn, sugar, tomatoes, and soy. The risks associated with each are shown in the following matrix.

Ingredient	Risk to supplies	Potential to materially impact results of operations
Wheat	• Drought and long-term effects of climate change on water supplies. • Severe weather events.	• Low to moderate, particularly in the medium- to long-term.
Corn	• Drought and long-term effects of climate change on water supplies. • Severe weather events. • Competition for supplies due to increased demand for ethanol/other biofuels.	• Likely moderate, particularly in the medium- to long-term.
Sugar	• Drought and long-term effects of climate change on water supplies. • Competition for supplies due to increased demand for ethanol/other biofuels. • Pollution, erosion, and habitat loss prompting social concerns about production and reduced license to operate.	• Likely moderate, particularly in the medium- to long-term.

Ingredient	Risk to supplies	Potential to materially impact results of operations
Soy	• Deforestation and erosion prompting social concerns about production and reduced license to operate.	• Low in the short-term, possibly moderate in the medium-term.
Tomatoes	• Public perception of use of greenhouses in production.	• Very low to low.

The translation from risks to supplies to risks to operations is not direct. As noted, we take several steps to reduce the risk to our operations. Still, over time, certain risks are likely to become greater, especially those affecting corn and sugar. Both these crops are in demand to produce biofuels, which are growing in popularity. The vast majority of beet sugar grown in the United States is genetically modified and therefore cannot be used in organic products. Therefore, we source organic sugar from locations such as Hawaii, Australia, and other areas. Cane sugar production is associated, particularly in developing countries, with habitat loss. To the extent that concerns regarding this and other issues increase, we may need to increase our efforts to secure organic sugar. We may also need to increase our efforts to identify alternative ingredients that also meet USDA Organic standards. It is possible these efforts may not help reduce costs or risks. As a result, margins may thin, and we may need to increase prices. These changes may, in turn, impact our results of operations.

Risks presented by supplies of other ingredients are, particularly in the short- and medium-term, relatively lower. Still, we monitor public perception of these risks as part of our market research program and are prepared to adjust our risk-mitigation strategies as needed. We also allocate a portion of our R&D budget for alternative-ingredient research. Generally speaking, we plan to devote an increasing share of R&D funding to this issue over the next three to ten years. Many of the risks are either environmental in nature or relate directly to the environment in the sense that they prompt social concern regarding environmental effects. We are currently assessing to what degree implementing environmental risk-mitigation strategies would improve our results of operations, our social license to operate, and our sales and revenues.

With respect to labor issues, we believe our code of conduct regarding labor practices mitigates the primary short- and medium-term risks associated with these ingredients as well as other ingredients.

Table 1. Summary of Quantitative Accounting Metrics

Disclosure Topic	Metric	Year Ended December 31, 2012	2013	2014
Energy & Fleet Fuel Management	Operational energy consumed (in thousands of gigajoules)	26,890	26,233	25,490
	Percentage grid electricity	43%	40%	39%
	Percentage renewable	1%	2%	2%
	Fleet fuel consumed (in gigajoules)	412,888	390,119	345,228
	Percentage renewable	0%	0%	0%
Water Management	Total water withdrawn	57,134	54,980	49,237
	Total water consumed	51,421	49,480	44,113
	Water withdrawn in locations with high or extremely high baseline water stress (as a percentage of total water withdrawn)	13%	10%	10%
	Water consumed in locations with high or extremely high baseline water stress (as a percentage of total water consumed)	13%	10%	10%
	Number of incidents of non-compliance with water quality and/or quantity permits, standards and regulations	16	21	15
Food Safety	GFSI major non-conformance rate	1%	4%	2%
	Associated corrective action rate	75%	71%	76%
	GFSI minor non-conformance rate	7%	11%	8%
	Associated corrective action rate	100%	100%	100%
	Percentage of ingredients sourced from supplier facilities certified to a GFSI scheme	100%	100%	100%
	Notice of food safety violations received	7	11	3
	Percentage corrected	100%	100%	100%
	Number of recalls issued	0	0	2
	Total amount of food product recalled (metric tons)	0	0	105.4
Health & Nutrition	Revenue from products labeled and/or marketed to promote health and nutrition attributions (in millions)	$5,668	$6,004	$6,127
	Revenue from products sold in the U.S. that meet Smart Snacks in School criteria (in millions)	$237	$244	$251
	Revenue from products sold outside the U.S. that meet the foreign children's nutrition criteria (in millions)	$25	$25	$26
	Number of child advertising impressions made (in thousands)	12,432	14,900	15,213

Table 1. Summary of Quantitative Accounting Metrics

Disclosure Topic	Metric	Year Ended December 31, 2012	2013	2014
Product Labeling & Marketing	Percentage promoting products meeting the CFBAI Uniform Nutrition Code	77%	77%	78%
Product Labeling & Marketing (cont.)	Revenue from products labeled as containing GMOs	$0	$0	$0
	Revenue from products labeled as non-GMO (in millions)	$1,106	$1,257	$1,710
	Notices of violations received for non-conformance with regulatory labeling and/or marketing codes	0	0	1
	Legal and regulatory fines and settlements associated with marketing and/or labeling practices (in thousands)	$0	$0	$103
Packaging Lifecycle Management	Total weight of packaging sourced	391,909	391,892	391,828
	Percentage made from recycled or renewable materials	37%	37%	37%
	Percentage that is recyclable or compostable	43%	47%	52%
Environmental & Social Impacts of Ingredient Supply Chains	Percentage of food ingredients sourced from regions with high or extremely high baseline water stress	18%	18%	19%
	Percentage of food ingredients sourced that are certified to third-party environmental and/or social standards	14%	14%	16%
	USDA Organic	10%	10%	10%
	Bon Sucro	2%	2%	2%
	Rainforest Alliance	2%	2%	2%
	Suppliers' social and environmental responsibility audit major non-conformance rate	7%	4%	3%
	Associated corrective action rate	100%	100%	100%
	Suppliers' social and environmental responsibility audit major non-conformance rate	14%	9%	9%
	Associated corrective action rate	100%	100%	100%

Table 2. Activity Metrics

Metric	Year Ended December 31, 2012	2013	2014
Weight of products sold (excluding packaging, in thousands of metric tons)	1,097.4	1,108.4	1,131.1
Total fleet road miles (in thousands)	4,142.7	4,681.4	4,954.7
Number of production facilities	70	70	70

APPENDIX H: DISCLOSURE TOPICS

Consumption I

	Agricultural Products	Meat, Poultry & Dairy	Processed Foods	Non-Alcoholic Beverages	Alcoholic Beverages	Tobacco	Household & Personal Products
Environment	• Greenhouse Gas Emissions • Energy & Fleet Fuel Management • Water Withdrawal • Land Use & Ecological Impacts	• Greenhouse Gas Emissions • Energy Management • Water Withdrawal • Land Use & Ecological Impacts	• Energy & Fleet Fuel Management • Water Management	• Energy & Fleet Fuel Management • Water Management	• Energy Management • Water Management		• Water Management
Social Capital	• Food Safety & Health Concerns	• Food Safety	• Food Safety • Health & Nutrition • Product Labeling & Marketing	• Health & Nutrition • Product Labeling & Marketing	• Responsible Drinking & Marketing	• Public Health • Marketing Practices	
Human Capital	• Fair Labor Practices & Workforce Health & Safety	• Workforce Health & Safety					
Business Model & Innovation	• Climate Change Impacts on Crop Yields	• Antibiotic Use In Animal Production • Animal Care & Welfare	• Packaging Lifecycle Management	• Packaging Lifecycle Management	• Packaging Lifecycle Management		• Packaging Lifecycle Management • Product Environmental, Health, and Safety Performance
Leadership & Governance	• Environmental & Social Impacts of Ingredient Supply Chains • Management of the Legal & Regulatory Environment	• Environmental & Social Impacts of Animal Supply Chains • Environmental Risks in Animal Feed Supply Chains	• Environmental & Social Impacts of Ingredient Supply Chains	• Environmental & Social Impacts of Ingredient Supply Chains	• Environmental & Social Impacts of Ingredient Supply Chains		• Environmental & Social Impacts of Palm Oil Supply Chain

Consumption II

	Food Retailers & Distributors	Drug Retailers & Conv. Stores	Multiline & Specialty Retailers & Distributors	E-Commerce	Apparel, Accessories & Footwear	Building Products & Furnishings	Appliance Manufacturing	Toys & Sporting Goods
Environment	• Air Emissions from Refrigeration • Energy & Fleet Fuel Management • Food Waste Management	• Energy Management in Retail	• Energy Management in Retail & Distribution	• Energy & Water Footprint of Hardware Infrastructure • Logistics & Packaging Efficiency		• Energy Management in Manufacturing		
Social Capital	• Data Security • Food Safety • Product Health & Nutrition • Product Labeling & Marketing	• Data Security & Privacy • Management of Controlled Substances • Patient Health Outcomes	• Data Security	• Data Security & Fraud Protection • Data Privacy	• Management of Chemicals in Products	• Management of Chemicals in Products	• Product Safety	• Chemical & Safety Hazards of Products
Human Capital	• Fair Labor Practices		• Workforce Diversity & Inclusion • Fair Labor Practices	• Employee Recruitment, Inclusion, and Performance				
Business Model & Innovation						• Product Lifecycle Environmental Impacts	• Product Lifecycle Environmental Impacts	
Leadership & Governance	• Management of Environmental & Social Impacts in the Supply Chain	• Drug Supply Chain Integrity	• Product Sourcing, Packaging, and Marketing		• Raw Materials Sourcing & Innovation • Labor Conditions in the Supply Chain • Environmental Impacts in the Supply Chain	• Wood Sourcing		• Labor Conditions in the Supply Chain

APPENDIX H: DISCLOSURE TOPICS (CONT.)

Financials

	Commercial Banks	Investment Banking & Brokerage	Asset Management & Custody Activities	Consumer Finance	Mortgage Finance	Exchanges	Insurance
Environment					• Environmental risk to mortgaged properties		• Environmental risk exposure
Social Capital	• Financial inclusion and capacity building • Customer privacy and data security		• Transparent information and fair advice for customers	• Financial inclusion • Customer privacy and data security • Transparent information and fair advice for customers • Responsible lending and debt prevention	• Transparent information and fair advice for customers • Responsible lending and debt prevention	• Promoting transparent and efficient capital markets	• Plan performance
Human Capital		• Employee incentives and risk-taking • Employee inclusion	• Employee incentives and risk-taking • Employee inclusion				
Business Model & Innovation	• Integration of environmental, social and governance risk factors in credit risk analysis	• Integration of environmental, social and governance risk factors in advisory, underwriting, and brokerage activities	• Integration of environmental, social and governance risk factors in investment management and advisory				• Integration of environmental, social and governance risk factors in investment management • Policies designed to incentivize responsible behavior
Leadership & Governance	• Management of the legal and regulatory environment • Systemic risk management	• Management of the legal and regulatory environment • Systemic risk management	• Management of the legal and regulatory environment • Systemic risk management		• Management of the legal and regulatory environment	• Managing conflicts of interest • Managing business continuity and technology risks	• Systemic risk management

Health Care

	Biotechnology	Pharmaceuticals	Medical Equipment and Supplies	Health Care Delivery	Health Care Distributors	Managed Care
Environment	• Energy, water and waste efficiency	• Energy, water and waste efficiency	• Energy, water and waste efficiency	• Energy and waste efficiency • Climate change impacts on human health and infrastructure	• Fuel efficiency	• Climate change impacts on human health
Social Capital	• Safety of clinical trial participants • Access to Medicines • Counterfeit drugs • Ethical marketing • Affordability and fair pricing • Drug safety and side-effects	• Safety of clinical trial participants • Access to Medicines • Counterfeit drugs • Ethical marketing • Affordability and fair pricing • Drug safety and side-effects	• Product safety • Affordability and fair pricing • Ethical marketing	• Quality of care and patient satisfaction • Access for low-income patients • Patient privacy and electronic health records	• Product safety • Counterfeit drugs	• Access to coverage • Customer privacy and technology standards
Human Capital	• Employee recruitment, development and retention • Employee health and safety	• Employee recruitment, development and retention • Employee health and safety		• Employee recruitment, development and retention		
Business Model & Innovation			• Product design and lifecycle management		• Product lifecycle management	• Improved outcomes
Leadership & Governance	• Corruption and bribery • Manufacturing and supply chain quality management	• Corruption and bribery • Manufacturing and supply chain quality management	• Corruption and bribery • Manufacturing and supply chain quality management	• Fraud and unnecessary procedures • Pricing and billing transparency	• Corruption and bribery	• Plan performance • Pricing and billing transparency

APPENDIX H: DISCLOSURE TOPICS (CONT.)

Non-Renewable Resources

	Oil & Gas – Exploration & Production	Oil & Gas – Midstream	Oil & Gas – Refining & Marketing	Oil & Gas – Services	Coal Operations	Iron & Steel Producers	Metals & Mining	Construction Materials
Environment	• GHG emissions • Air quality • Water management • Biodiversity impacts	• GHG & other air emissions • Ecological impacts	• GHG emissions • Air quality • Water management • Hazardous materials management	• Emissions reduction services & fuels management • Water management services • Chemicals management • Ecological impact management	• GHG emissions • Water management • Waste management • Biodiversity impacts	• GHG emissions • Air quality • Energy management • Water management • Waste management	• GHG emissions • Air quality • Energy management • Water management • Waste & hazardous materials management • Biodiversity impacts	• GHG emissions • Air quality • Energy management • Water management • Waste management • Biodiversity impacts
Social Capital	• Community relations • Security, Human Rights & Rights of Indigenous Peoples				• Community relations & rights of Indigenous Peoples		• Community relations • Security, Human Rights & Rights of Indigenous Peoples	
Human Capital					• Workforce health, safety & well-being • Labor relations	• Workforce health, safety & well-being	• Workforce health, safety & well-being • Labor relations	• Workforce health, safety & well-being
Business Model & Innovation			• Product specifications & clean fuel blends					• Product innovation
Leadership & Governance	• Business ethics & payments transparency • Health, safety& emergency management • Reserves valuation & capital expenditures • Management of the legal & regulatory environment • Contractor & supply chain management	• Competitive behavior • Operational safety, emergency preparedness & response	• Pricing integrity & transparency • Health, safety & emergency management • Management of the legal & regulatory environment	• Business ethics & payments transparency • Health, safety & emergency management • Management of the legal & regulatory environment	• Reserves valuation & capital expenditures	• Supply chain management	• Business ethics & payments transparency	• Pricing integrity & transparency

Resource Transformation

	Chemicals	Aerospace & Defense	Electrical & Electronic Equipment	Industrial Machinery & Goods	Containers & Packaging
Environment	• Greenhouse Gas Emissions • Air Quality • Energy & Feedstock Management • Water Management • Hazardous Waste Management	• Energy Management • Hazardous Waste Management	• Energy Management • Hazardous Waste Management	• Energy Management	• Greenhouse Gas Emissions • Air Quality • Energy Management • Water Management • Waste Management
Social Capital		• Data Security • Product Safety	• Product Safety		• Product Safety
Human Capital				• Employee Health & Safety	
Business Model & Innovation	• Safety & Environmental Stewardship of Chemicals & Genetically Modified Organisms • Product Design for Use-phase Efficiency	• Fuel Economy & Emissions in Use-phase	• Product Lifecycle Management & Innovation for Environmental Efficiency	• Fuel Economy & Emissions in Use-phase • Remanufacturing Design & Services	• Product Lifecycle Management
Leadership & Governance	• Political Spending • Health, Safety, and Emergency Management	• Business Ethics • Supply Chain Management & Materials Sourcing	• Business Ethics & Competitive Behavior • Materials Sourcing	• Materials Sourcing	• Materials Sourcing

APPENDIX H: DISCLOSURE TOPICS (CONT.)

Services

	Education	Professional Services	Hotels & Lodging	Casinos & Gaming	Restaurants	Leisure Facilities	Cruise Lines	Advertising & Marketing	Media Production & Distribution	Cable & Satellite
Environment			• Energy & Water Management • Ecosystem Protection & Climate Adaptation	• Energy Management	• Energy & Water Management • Food & Packaging Waste Management	• Energy Management	• Fuel Use & Air Emissions • Discharge Management & Ecological Impacts			• Infrastructure Energy Use & Fleet Fuel Consumption
Social Capital	• Quality of Education & Gainful Employment • Marketing & Recruiting Practices	• Professional Integrity • Data Security		• Responsible Gaming	• Food Safety • Nutritional Content	• Customer & Worker Safety	• Shipboard Health & Safety Management	• Advertising Integrity • Data Privacy	• Journalistic Integrity & Sponsorship Identification • Media Pluralism	• Data Privacy • Data Security
Human Capital		• Workforce Diversity & Engagement	• Fair Labor Practices	• Smoke-free Casinos	• Fair Labor Practices		• Fair Labor Practices	• Workforce Diversity & Inclusion		
Business Model & Innovation										
Leadership & Governance				• Internal Controls on Money Laundering • Political Spending	• Supply Chain Management & Food Sourcing		• Accident Management		• Intellectual Property Protection & Media Piracy	• Managing Systemic Risks from Technology Disruptions • Competitive Behavior & Open Internet

Technology & Communications

	Hardware	EMS & ODM	Semiconductors	Software & IT Services	Internet Media & Services	Telecommunications
Environment		• Water & waste management in manufacturing	• GHG emissions • Energy management in manufacturing • Water & waste management in manufacturing	• Environmental footprint of hardware infrastructure	• Environmental footprint of hardware infrastructure	• Environmental footprint of operations
Social Capital	• Product security			• Data privacy & freedom of expression • Data security	• Data privacy, advertising standards, and freedom of expression • Data security	• Data privacy • Data security
Human Capital	• Employee inclusion	• Fair labor practices	• Recruiting & managing a global, skilled workforce • Employee health & safety	• Recruiting & managing a global, diverse skilled workforce	• Employee recruitment, inclusion, and performance	
Business Model & Innovation	• Product lifecycle management	• Product lifecycle management	• Product lifecycle management			• Product end-of-life management
Leadership & Governance	• Supply chain management & materials sourcing	• Supply chain management & materials sourcing	• Supply chain management & materials sourcing • Intellectual property protection & competitive behavior	• Managing systemic risks from technology disruptions • Intellectual property protection & competitive behavior	• Intellectual property protection & competitive behavior	• Managing systemic risks from technology disruptions • Competitive behavior

APPENDIX H: DISCLOSURE TOPICS (CONT.)

Transportation

	Automobiles	Auto Parts	Car Rental & Leasing	Airlines	Air Freight & Logistics	Marine Transportation	Rail Transportation	Road Transportation
Environment	• Materials Efficiency & Recycling	• Energy Management • Materials Efficiency & Waste Management		• Environmental Footprint of Fuel Use	• Environmental Footprint of Fuel Use	• Environmental Footprint of Fuel Use • Ecological Impacts	• Environmental Footprint of Fuel Use	• Environmental Footprint of Fuel Use
Social Capital	• Product Safety	• Product Safety	• Customer safety					
Human Capital	• Labor Relations			• Labor Relations	• Fair Labor Practices			• Driver Working Conditions
Business Model & Innovation	• Fuel Economy & Use-phase Emissions	• Product Lifecycle Management	• Fleet Fuel Economy & Utilization					
Leadership & Governance	• Materials Sourcing	• Competitive Behavior • Materials Sourcing		• Competitive behavior • Accidents & Safety Management	• Accidents & Safety Management • Supply Chain Management	• Business Ethics • Accidents & Safety Management	• Competitive behavior • Accidents & Safety Management	• Accidents & Safety Management

References

[1] Mozaffar Khan, George Serafeim, and Aaron Yoon, "Corporate Sustainability: First Evidence on Materiality," Harvard Business School (March 2015).

[2] TSC Industries, Inc., v. Northway, Inc., 426 U.S. 438 (1976).

[3] Matrixx Initiatives, Inc., v. Siracusano, 563 U.S. ___ (2011).

[4] SEC, Commission Guidance Regarding Disclosure Related to Climate Change (February 2010).

[5] SEC Release No. 33-8350 [68 FR 75055, the "2003 Release"] (December 2003).

[6] SEC, Commission Guidance Regarding Disclosure Related to Climate Change (February 2010).

[7] Nancy S. Cleveland, David M. Lynn, Stephen A. Pike, "Sustainability Reporting: The Lawyer's Response," American Bar Association *Business Law Today* (January 2015).

[8] SEC, Commission Guidance Regarding Disclosure Related to Climate Change (February 2010).

[9] AT Section 101 – Attest Engagements, paragraphs .23-.32

[10] AT Section 701 – Management's Discussion and Analysis, paragraph .04

[11] Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), *Governance and Operational Performance – Improving organizational performance and governance*, page 6 (February 2014).

[12] AT Section 101 – Attest Engagements, paragraph .24.

[13] Ibid.

[14] C.F.R. § 229.303 (Item 303)(a).

[15] SEC FR-72, Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations (December 2003).

[16] Ibid.

[17] C.F.R. § 229.303 (Item 303)(a)(3)(ii).

[18] Id. at § 229.303 (Item 303)(a)(3)(ii).

[19] SEC FR-72, Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations (December 2003).

[20] Ibid.

[21] See Item 101 of Regulation S-K; and Form 20-F, Item 4.B.

[22] See Item 503(c) of Regulation S-K; and Form 20-F, Item 3.D.

[23] Item 503(c) of Regulation S-K instructs companies to "not present risks that could apply to any issuer or any offering" and, further, to "explain how the risk affects the issuer or the securities being offered." Item 503(c) of Regulation S-K.

[24] CF Disclosure Guidance: Topic No. 2, Division of Corporation Finance guidance regarding disclosure obligations relating to cybersecurity risks and cyber incidents (October 2011).

[25] PCAOB, AU Section 550, Other Information in Documents Containing Audited Financial Statements.

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