



SASB CONCEPTUAL FRAMEWORK

SUSTAINABILITY ACCOUNTING STANDARDS BOARD
(SASB)

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Introduction

This Conceptual Framework sets out the basic concepts, principles, definitions, and objectives that guide the appointed technical Sustainability Accounting Standards Board members (hereafter “the SASB”) in its approach to setting standards for sustainability accounting. A companion document, the *SASB Rules of Procedure*, is focused on the governance processes and practices for standards setting. Together, these documents provide direction for the SASB and its work.

Section 1 of this document presents an overview of sustainability accounting, describing its objectives and audience. The remainder of the document is organized around the following framework, which illustrates how the various concepts contained herein relate to and build upon one another in the course of the SASB’s standards-setting work.

Figure 1: The SASB Framework



ABOUT SASB

The Sustainability Accounting Standards Board (SASB) is an independent 501(c)(3) nonprofit organization. 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 balanced stakeholder participation. SASB standards are designed for voluntary use in disclosures required by existing U.S. regulation in filings with the Securities and Exchange Commission (SEC), such as Forms 10-K and 20-F.

1. Overview of Sustainability Accounting and Disclosure

In developing the first set of sustainability accounting standards for the U.S. capital markets, SASB addresses a set of fundamental questions:

- What is sustainability accounting?
- What is the purpose of sustainability accounting?
- How does it differ from financial accounting?
- Who is its intended audience?
- How will it be used?

SUSTAINABILITY ACCOUNTING

The concept of sustainability or sustainable development is defined in the Brundtland Report (*Our Common Future*) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”¹

For the purposes of SASB standards, sustainability refers to *corporate activities that maintain or enhance the ability of the company to create value over the long term*. Sustainability accounting refers to the measurement, management, and reporting of such corporate activities.

Sustainability accounting reflects the management of a corporation’s environmental and social impacts arising from production of goods and services, as well as its management of the environmental and social capitals necessary to create long-term value. It also includes the impacts that sustainability challenges have on innovation, business models, and corporate governance and vice versa.

Therefore, SASB’s sustainability topics are organized under five broad sustainability dimensions:

- 1. Environment.** This dimension includes corporate impacts on the environment, either through the use of nonrenewable, natural resources as inputs to the factors of production (e.g., water, minerals, ecosystems, and biodiversity) or through harmful releases into the environment (such as air, land, and water) that may negatively affect natural resources and result in impacts to the company’s financial condition or operating performance.
- 2. Social Capital.** This dimension relates to the perceived role of business in society, or the expectation that a business will contribute to society in return for a social license

¹ United Nations World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987), p. 43.

to operate. It addresses the management of relationships with key outside parties, such as customers, local communities, the public, and the government. It includes issues related to human rights, protection of vulnerable groups, local economic development, access to and quality of products and services, affordability, responsible business practices in marketing, and customer privacy.

3. **Human Capital.** This dimension addresses the management of a company's human resources (employees and individual contractors) as key assets to delivering long-term value. It includes issues that affect the productivity of employees, such as employee engagement, diversity, and incentives and compensation, as well as the attraction and retention of employees in highly competitive or constrained markets for specific talent, skills, or education. It also addresses working conditions and the management of labor relations in industries that rely on economies of scale and compete on the price of products and services, and in industries with legacy pension liabilities. Finally, it includes the management of the health and safety of employees and the ability to create a safety culture for companies that operate in dangerous working environments.
4. **Business Model and Innovation.** This dimension addresses the impact of sustainability issues on innovation and business models. It addresses the integration of environmental, human, and social issues in a company's value-creation process, including resource recovery and other innovations in the production process; as well as in product innovation, including efficiency and responsibility in the design, use phase, and disposal of products. It also includes management of environmental and social impacts on tangible and financial assets—either a company's own or those that it manages as the fiduciary for others.
5. **Leadership and Governance.** This dimension involves the management of issues that are inherent to the business model or common practice in the industry and that are in potential conflict with the interest of broader stakeholder groups (e.g., government, community, customers, and employees), and therefore create a potential liability or, worse, a limitation or removal of a license to operate. This includes regulatory compliance, and regulatory and political influence. It also includes risk management, safety management, supply-chain and materials sourcing, conflicts of interest, anticompetitive behavior, and corruption and bribery.

In developing its provisional standards, the SASB identified sustainability topics from an initial set of 30 broadly relevant sustainability issues (see Figure 2) organized under these five sustainability dimensions.

Figure 2: SASB Universe of Sustainability Issues**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

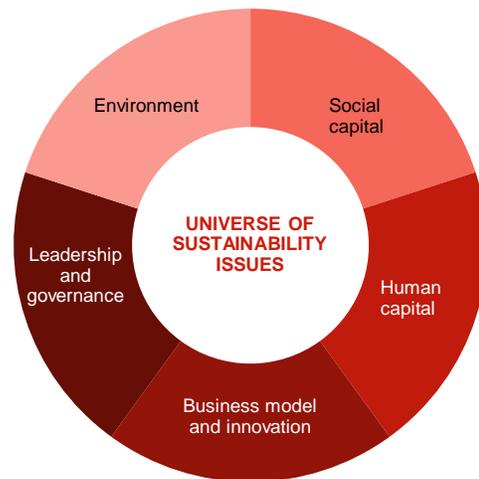
- Labor relations
- Fair labor practices
- Diversity and inclusion
- Employee health, safety, and wellbeing
- Compensation and benefits
- Recruitment, development, and retention

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



Although the “universe” of sustainability issues served as a starting point for the SASB’s provisional standards setting, this extensive list was refined through a series of steps designed to identify those issues reasonably likely to have material impacts on companies in an industry. Because each of these issues tends to have a different impact or consequence depending on the context in which it arises, sustainable corporate activities will vary from one industry to another, meaning each industry has its own unique sustainability profile. The disclosure topics included in SASB’s industry-specific provisional standards are therefore a sub-set of this universe of sustainability issues, tailored to the industry’s specific context.

PURPOSE OF SUSTAINABILITY ACCOUNTING AND DISCLOSURE

Market value typically differs from book value, in part, because traditional financial statements do not necessarily capture all of the factors that contribute to a company’s long-term ability to create value. Much of this “value gap” is attributable to, or can be significantly impaired by the management or mismanagement of, environmental, social, and human capitals as well as corporate governance. Therefore, corporate reporting must extend beyond financial statements to facilitate the measurement and reporting of sustainability information that will enhance a decision maker’s understanding of all material risks and opportunities. Like financial accounting, sustainability accounting has both confirmatory and predictive value, so it can be used to evaluate past performance and be used for future planning and decision support. As a complement to financial

accounting, it helps provide a more complete view of a corporation's performance on material factors likely to affect its ability to create long-term value.

Financial accounting addresses some elements of sustainability performance. However, financial accounting is intended, for the most part, to reflect an entity's current financial condition and financial performance. Assessing the financial impact of sustainability issues is inherently limited by the absence of proper valuation techniques and/or adequate market pricing. While environmental, human, and social capitals can be understood conceptually as economic assets and liabilities, the lack of comparable data makes accounting for these sustainability factors challenging—a deficiency SASB standards are built to address.

Therefore, the SASB's approach to sustainability accounting consists of defining operational metrics on material, industry-specific sustainability topics likely to affect current or future financial value. Like financial accounting information, sustainability accounting information captures past and current performance, and can also be forward-looking to the extent that it helps management describe known trends, events, and uncertainties² that may reveal an actual or potential impact on the financial condition or operating performance of a reporting entity. SASB metrics—both qualitative and quantitative—will thus be of interest to investors and creditors, thereby helping to communicate and to more completely represent company performance.

Thus, sustainability accounting facilitates a more complete understanding of the fundamentals of a reporting entity. For example, impacts associated with sustainability-related "known trends" may result from:

- Management of critical capitals necessary for production of goods or services;
- Vulnerability to depletion or misuse of these capitals;
- Exposure to new or existing regulation or changing societal norms;
- Scenario-planning regarding alternative resources or business models;
- Risks associated with mismanagement of certain environmental, social, or governance issues; and
- Opportunities associated with global or industry sustainability challenges.

SASB believes that, over time, accounting for sustainability performance will give investors a more complete view of the outlook and ability of a corporation (and/or entire industry) to manage risks and sustain value creation. Also, through sustainability accounting, investors can better compare and distinguish companies based on their strategies and operations with respect to these issues.

² 17 C.F.R. §229.303 – Item 303, Management's discussion and analysis of financial condition and results of operations

USERS OF SUSTAINABILITY ACCOUNTING STANDARDS

SASB standards are intended for voluntary use by public companies in making disclosures on material sustainability factors in Forms 10-K, 20-F, and 40-F as required by existing U.S. regulation. They are a market-driven response to the need for sustainability information that is decision-useful for investors and cost-effective for issuers.

SASB standards may also be applicable to the disclosure of material sustainability information by other types of organizations, including privately held corporations and foreign corporations publicly listed in other jurisdictions.

As one of its core principles, the SASB seeks to align its standards and metrics with existing frameworks and other reporting mechanisms and protocols, such as regulatory filings or industry-developed best practices.

Corporations have many important stakeholders and a variety of channels through which they may already be communicating some sustainability information, including websites, sustainability reports, voluntary industry reporting, government agencies, and corporate social responsibility reports. However, SASB standards are developed for use in statutory financial filings for the benefit of investors and others who rely on such filings.

BENEFICIARIES OF SUSTAINABILITY ACCOUNTING STANDARDS

Investors

U.S. securities laws seek to protect investors by requiring companies whose securities are registered with the SEC to provide annual and other periodic filings that are necessary for a “reasonable investor” to make informed investment decisions. (See the definition of “materiality” in Section 2). As changes occur in the broader economy, the information markets need to efficiently allocate capital may also change in ways that may require public companies to adjust their disclosures.³ SASB standards are intended to help issuers identify and more effectively disclose the information today’s investors need to make informed decisions.

As of 2016, more than 1,600 organizations with \$62 trillion in assets under management were signatories to the Principles for Responsible Investment (PRI), indicating a commitment to incorporate sustainability issues into investment analysis and decision-making processes.⁴ Meanwhile, the Forum for Sustainable and Responsible Investment’s 2016 report found that 20 percent of professionally managed assets in the U.S. include sustainability considerations in their investment mandates.⁵ However, achieving the objectives of the PRI or other desired sustainable investment goals is hindered by a lack of comparable, decision-useful data and information about these issues. Even when such

³ Business Roundtable, “[The Materiality Standard for Public Company Disclosure: Maintain What Works](#)” (October 2015)

⁴ Principles for Responsible Investment website, <http://www.unpri.org>, accessed Dec. 13, 2016

⁵ The Forum for Sustainable and Responsible Investment, *2016 Report on Sustainable and Responsible Investing Trends* (November 14, 2016)

information is available, culling it from current reports can require substantial time and expense for investors.

SASB's mission is to facilitate effective disclosure of material sustainability information in SEC filings so that investors have access to the sustainability information that is necessary to make informed investment decisions with reasonable effort and minimal expense.

SASB standards and other products are designed to support investors in their efforts to integrate sustainability information into core activities, such as the following:

- **Fundamental analysis:** The availability of sustainability fundamentals alongside financial fundamentals provides the data needed to adjust equity and debt valuation models, as well as evaluate management quality for individual securities selection.
- **Comparison and benchmarking:** The data that results from thousands of publicly traded companies disclosing standardized, industry-specific sustainability accounting metrics will enable investors to perform peer-to-peer comparisons on critical dimensions of sustainability performance and establish industry benchmarks against which issuers can be compared.
- **Portfolio management:** SASB standards identify sustainability topics that are reasonably likely to constitute material information for companies within a specific industry. SASB's Sustainable Industry Classification System™ (SICS™) groups industries with similar business models and sustainability impacts. Together, SICS™ and the industry-specific disclosure topics will help investors identify and manage under- or overexposure to certain types of sustainability risks and opportunities, enabling alpha-seeking and risk-control on these sustainability dimensions to be directly integrated into the portfolio construction and management processes.
- **Active engagement:** Investors and companies can use SASB standards—and the information they yield—to guide conversations, resulting in more focused, more productive engagements on material sustainability factors.

Companies

An increasing number of companies have begun reporting on sustainability issues in voluntary, stand-alone reports on corporate social responsibility (CSR) or sustainability. Indeed, 81 percent of the S&P 500 produced a sustainability report in 2015, up from less than 20 percent in 2011,⁶ and by 2016 more than 13,000 companies had produced more than 80,000 reports globally.⁷

However, these reports are costly to produce and lack focus on the sustainability issues that are of most interest to investors, namely those most likely to have material impacts on a company's financial condition or operating performance. These CSR reports also frequently have a reporting bias, as the information contained within them can be selected

⁶ Governance & Accountability Institute, "2016 Flash Report" (March 15, 2016)

⁷ Corporate Register website, <http://www.corporateregister.com>, accessed Dec. 13, 2016

for perceptual reasons. As a result, companies also field requests for sustainability information in the form of surveys and questionnaires from investors and ratings agencies, creating an additional significant burden on the issuer with limited benefit to its shareholders.⁸

By focusing on the subset of sustainability factors that are material to investment decision making, SASB standards yield information that may be useful to a company's management while also providing a cost-effective solution for disclosure to investors. Academic research has shown that such a focus is correlated with outperformance in terms of sales, sales growth, return on assets, and return on equity in addition to improved risk-adjusted shareholder returns.⁹ SASB metrics can enhance or be incorporated into companies' performance evaluation systems to promote goal congruence and coordination, communicate expectations, motivate business units, provide feedback to top-level decision-makers, and inform benchmarking efforts. They can also help managers identify those operations that are falling short of expectations, and to focus their attention on what needs improvement.

Policymakers

Regulators, such as the SEC, have a mandate to promote and enforce the effective disclosure of material topics. The results of the SASB's industry-specific research provide these and other policymakers with a better understanding of the sustainability factors that are most likely to have material impacts on companies in each industry, as well as insights into what useful disclosure on these topics looks like. Regulators can use the standards to evaluate filings for both completeness and effectiveness.

In mid-2016, the SEC issued a Concept Release seeking public feedback on ways it could modernize Regulation S-K disclosure requirements to make them more useful for today's investors. The subject of sustainability-related disclosure generated two-thirds of the non-form comment letters submitted in response. Of those, 80 percent called for improved disclosure of sustainability information in SEC filings, with more than two-thirds of those in support of a market standard, such as SASB's, to assist companies in meeting their filing requirements.

⁸ Ann Klee, "Ratings Good for the Environment?" *Environmental Forum* (May/June 2015)

⁹ Mozaffar Khan, George Serafeim, and Aaron Yoon, "Corporate Sustainability: First Evidence on Materiality," Harvard Business School (March 2015)

2. Core Objectives of the SASB

SASB is committed to facilitating more effective disclosure of material sustainability information by issuers to investors. This section lays out the core objectives guiding SASB's work as a standards setter. The SASB's due process is designed to produce standards for information that is:

- reasonably likely to be **material**;
- **decision-useful** for companies and their investors; and
- **cost-effective** for corporate issuers.

SASB STANDARDS IDENTIFY INFORMATION THAT IS LIKELY TO BE MATERIAL

SASB standards address the sustainability topics that are reasonably likely to have material impacts on the financial condition or operating performance of companies in an industry. *SASB recognizes that each company is responsible for determining what information is material and what information should be included in its SEC filings.* In identifying sustainability topics that are reasonably likely to have material impacts, the SASB applies the definition of "materiality" established under the U.S. securities laws.

According to the U.S. Supreme Court, information is material if there is "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available."¹⁰

A duty to disclose material sustainability information may arise under the requirements of Regulation S-K. Regulation S-K, which sets forth the specific non-financial-statement disclosure requirements associated with Form 10-K and other SEC filings, requires that companies describe known trends, events, and uncertainties that are reasonably likely to have material impacts on their financial condition or operating performance in the Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) section of Form 10-K. Corresponding requirements exist for Forms 20-F and 40-F.

The MD&A requirement 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.¹¹ The SEC's interpretive guidance on disclosure requirements related to climate change and cybersecurity highlight the applicability of other Form 10-K sections to sustainability-related disclosure, namely the description of business (§229.101), and risk factors

¹⁰ TSC Industries v. Northway, Inc., 426 U.S. 438, 449 (1976)

¹¹ SEC, FR-72, Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations (December 2003)

(§229.503(c)).^{12,13} It further reminds registrants that they are required to disclose, in addition to the information expressly required by regulation, “such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading.”¹⁴ In accordance with these requirements, SASB standards help issuers identify and report on sustainability topics that, substantiated by evidence, constitute known trends, events, and uncertainties that are reasonably likely to have material impacts on companies in an industry.

SASB STANDARDS YIELD DECISION-USEFUL INFORMATION

SASB standards provide investors with decision-useful information on the sustainability issues that are reasonably likely to materially affect near-, medium-, or long-term business value. The decision-usefulness of sustainability information is enhanced when it is representationally fair, useful, applicable, comparable, complete, verifiable, aligned, neutral, and distributive. (See Page 19.)

For each topic identified in an industry, the SASB selects or develops decision-useful accounting metrics to account for company performance on the topic. Accounting metrics address sustainability impacts, as well as opportunities for innovation. Taken together, they characterize a company’s positioning with respect to sustainability issues and the potential for long-term value creation.

Public disclosure using SASB sustainability accounting standards facilitates:

- Peer-to-peer comparison and benchmarking of corporate performance on key sustainability issues;
- More focused efforts by companies to manage risk and improve performance on key sustainability issues;
- A comprehensive view of material sustainability risks and opportunities for investors;
- Integrated presentation of financial statements and material sustainability information, allowing investors to better understand performance in context;
- Public access to regularly reported sustainability data via SEC filings and the SEC EDGAR database; and
- Sustainability information that is reliable, trustworthy, and verifiable.

¹² SEC, Commission Guidance Regarding Disclosure Related to Climate Change (February 2010)

¹³ CF Disclosure Guidance: Topic No. 2 Division of Corporation Finance guidance regarding disclosure obligations relating to cybersecurity risks and cyber incidents (October 2011)

¹⁴ 17 C.F.R. §230.408 and §240.12b-20, Additional information.

SASB STANDARDS ARE COST-EFFECTIVE FOR CORPORATE ISSUERS

SASB standards are designed to provide a cost-effective way for companies to disclose material, decision-useful sustainability information to investors. The SASB achieves this objective in two key ways:

1. Because they focus on only those sustainability issues that are reasonably likely to have material impacts, SASB standards identify the minimum set of topics for consideration in each industry, the majority of which are already addressed in SEC filings by many public companies in some fashion.¹⁵
2. A significant percentage of the metrics in SASB standards are aligned with initiatives already in use. As part of its standards-setting process, the SASB identifies and documents existing metrics and practices used to account for performance on each disclosure topic. When possible, the SASB harmonizes its standards with existing metrics, definitions, frameworks, and management disclosure formats, both industry-specific and general, thereby minimizing the corporate reporting burden. The SASB currently references standards and metrics from over 200 organizations such as CDP, EPA, OSHA, GRI, IPIECA, and many others.

Use of SASB metrics may also mitigate the need for the costly and time-consuming questionnaires that investors, analysts, and ratings groups frequently use to obtain sustainability information.

¹⁵ SASB, *The State of Disclosure 2016* (December 1, 2016); SASB research shows that 69 percent of industry-leading companies currently disclose information in SEC filings on at least three-quarters of the sustainability topics included in their industry standard, and 38 percent provide disclosure on every SASB topic. However, of those disclosures, only 24 percent include metrics while 53 percent use boilerplate language.

3. Fundamental Tenets of the SASB Approach to Standards-Setting

The SASB takes a systematic approach to its standards-setting activities to ensure that its standards identify industry-specific sustainability factors that are likely to have material impacts, while also providing disclosure guidance that is cost-effective for issuers and decision-useful for investors. To achieve these objectives, SASB standards are:

- Evidence-Based
- Market-Informed
- Industry-Specific

EVIDENCE-BASED

The SASB takes an evidence-based approach to assess whether sustainability topics are likely to be of interest to the reasonable investor, and whether they are reasonably likely to have material impacts on the financial condition or operating performance of the company. In doing so, this approach considers evidence of interest to investors and evidence of financial impact. In analyzing sustainability topics, the SASB looks for the presence of both types of evidence, identifying topics that might be of interest to the reasonable investor and assessing their potential for financial impact.

This method enables a relative prioritization of sustainability topics relevant to investors and suitable for inclusion in companies' SEC filings; it is an indication that a disclosure standard is warranted, but it is not a determination of materiality. This process allows for an understanding of which issues are important to address in standards setting. It also ensures that SASB standards are kept to a minimum set of topics that are reasonably likely to constitute material information.

It is important to note that SASB analysts seek evidence of interest and financial impact for sustainability disclosure topics, while the metrics in SASB standards together characterize performance on a particular topic. In other words, the SASB assesses the likely materiality of sustainability issues at the level of disclosure topics and not metrics.

Evidence of Interest to a Reasonable Investor

The SASB assesses the likely materiality of sustainability topics in part by looking at evidence of interest from the perspective of a reasonable investor.

Evidence of interest to a reasonable investor is assessed along five factors:

- 1. 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.

- 2. Legal, Regulatory & Policy Drivers:** Existing, changing, or emerging regulation may influence company actions and affect financial performance by forcing the internalization of certain costs associated with compliance and/or by creating upside opportunity associated with new products, markets, or business models that become viable under a different regulatory regime.
- 3. Industry Norms & Competitive Drivers:** Peer actions and disclosure on industry issues may create investor pressure for higher standards of performance related to the management and disclosure of certain sustainability topics.
- 4. 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 loss of license to operate, reputational damage, changes in customer demand, and disruptions to business viability.
- 5. Opportunities for Innovation:** New products and business models to address industry sustainability challenges can drive market expansion or potentially create a disruptive change that provides new sources of competitive advantage. Financial impacts and risks associated with these innovations may be of interest to investors.

Evidence of Financial Impact

The SASB assesses the actual or potential impact of sustainability issues on the financial condition or operating performance of companies. The SASB considers whether management (or mismanagement) of the topic has the potential to materially affect the valuation of a company or its operational or financial performance.

The SASB conducts extensive research to identify evidence of financial impact associated with sustainability issues, and relies on robust and diverse sources of credible evidence that support different types of financial impacts. The SASB primarily analyzes two types of information: (i) industry-level and (ii) company-specific.

Industry-level information provides the financial and regulatory context in which companies in that industry operate, as well as context on how the industry as a whole is affected by, or impacts, sustainability issues (e.g., large contributors to greenhouse gases, industries with high injury or fatality rates, average industry costs associated with energy consumption, etc.). This information is drawn from credible sources such as databases of U.S. government agencies (environmental, safety data), industry research products, academic studies, and financial publications, among others. The SASB conducts additional analysis of data where necessary to assess industry performance relative to other industries and over time.

Company-specific information provides tangible examples of actual or potential impact on company valuation or financial performance resulting from sustainability issues (e.g., large or frequent fines faced by companies, cost savings through implementation of energy efficiency measures, and reputational and market damage from customer or stakeholder action). This information is derived from company reporting through sustainability reports

and websites, as well as regulatory filings, news media, and case studies from NGOs and research organizations, among others.

Taken together, this information provides an overall picture of whether the management or mismanagement of the topic has the potential to affect the valuation or operational and financial performance of most companies in an industry. As far as possible, in order to ensure that the disclosure topics identified are relevant for an industry over time, the SASB evaluates evidence based on the underlying industry structure, regulatory environment, and financial drivers of an industry, and by focusing on long-term trends rather than anecdotal impacts from a specific corporation. This research is supplemented by evaluating the current state of affairs in an industry or sector, to ensure emerging sustainability topics are included in the standards as they become relevant.

In conducting its research, the SASB identifies specific types of financial impacts, namely revenues and costs, assets and liabilities, and/or the cost of capital.

- **Revenue/Costs:** Projected revenue, earnings, market share, and/or pricing power can be impacted by material sustainability factors. Costs can be impacted by operational efficiency (i.e., energy, labor, supply chain), by investments needed for compliance with sustainability-related regulation, or through the availability or price of raw materials or other inputs for production.
- **Assets/Liabilities:** Sustainability factors can affect both tangible assets and intangible assets. For example, water scarcity can impair agricultural and grazing land as well as nearby processing facilities, while labor and community relations can impact brand value. Liabilities can also be impacted by weather-related events, while litigation and regulatory actions related to sustainability issues can create contingent liabilities.
- **Cost of Capital/Risk Profile:** A company's financial condition and market valuation can be impacted by sustainability factors through increases to its cost of capital or limitations on its access to capital. Better disclosure enables a more complete understanding of exposure to risk and more accurate pricing of risk associated with volatile performance and/or industries with an unstable outlook.

The financial impact of sustainability issues can be actual or potential, positive or negative (i.e., risks or opportunities), chronic or acute, and priced or unpriced. Actual impacts, for example, might materialize in the form of existing regulation requiring capital expenditures or current shifts in consumer demand. Potential impacts may arise from pending regulation on sustainability issues or from threats of competition for market share or capital. Acute impacts may result from a catastrophic event such as an unplanned environmental discharge or breach of customer privacy or safety. Acute impacts affect price in the short term and are often predicated by poor records of managing these types of risks when compared to industry norms. Chronic impacts can include the long-term erosion of value associated with an asset that may be stranded in the face of regulation (oil reserves, for

example) and/or the threat of divestment from investors. Chronic impacts can also include value creation through improved workforce training or cost savings due to increased operational efficiency. Risks that are priced are generally well disclosed and are better understood by investors. Risks that are unpriced are generally undisclosed or poorly disclosed.

When assessing sustainability issues with the potential for material financial impact, the SASB considers the two-part test that the SEC has established for companies to determine whether known trends, demands, commitments, events, or uncertainties should be disclosed in the MD&A section of Form 10-K:¹⁶

In weighing its duty to disclose information in MD&A, management must make two assessments where a trend, demand, commitment, event or uncertainty is known:

- 1. Is the known trend, demand, commitment, event or uncertainty likely to come to fruition? If management determines that it is not reasonably likely to occur, no disclosure is required.*
- 2. If management cannot make that determination, it must evaluate objectively the consequences of the known trend, demand, commitment, event, or uncertainty on the assumption that it will come to fruition. Disclosure is then required unless management determines that a material effect on the registrant's financial condition or results of operations is not reasonably likely to occur.*

MARKET-INFORMED

Although evidence-based research provides a foundation for the SASB's standards-setting process, the outcomes are shaped in large part by feedback from participants in the capital markets—i.e., corporate issuers and mainstream investors. The SASB actively solicits input and carefully weighs all stakeholder perspectives in considering which aspects of a sustainability topic warrant standardized disclosure and in determining how to frame, describe, and measure those aspects for the purposes of standardization. However, although the SASB considers the views of all stakeholders, its determinations are guided by its core objectives to provide the users and providers of financial capital with material, decision-useful, cost-effective disclosures. Further, the evidence basis of the standards, underpinned by the legal basis of materiality in the U.S., provides useful guidance in the face of competing stakeholder inputs.

As part of the SASB's due process, its standards have undergone vetting by industry experts, comprising a balanced group of one-third corporate professionals, one-third investors, and one-third other stakeholders. The SASB aims to consider sustainability topics for standards-setting when consensus among issuers and investors indicates that the topic

¹⁶ 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]

is reasonably likely to have a material impact on most companies in the industry. Furthermore, the SASB solicits feedback from industry experts to evaluate how well its proposed metrics meet the criteria outlined in Section 4, and incorporates input as appropriate before issuing new standards or updates to standards.

The SASB's standards ratification and maintenance process is further guided by market feedback in that it is transparent, open to public comments, and governed by the SASB, which comprises experts in standards setting whose deliberations are supported by external sector and technical expertise. (See the accompanying *SASB Rules of Procedure* document for details on governance of the standards-setting process.)

Finally, the SASB engages in ongoing consultation with both issuers and investors to ensure the maintenance of decision-useful, cost-effective standards. As changes occur in an industry's competitive context, in the broader sustainability landscape, or in the interests of the reasonable investor, this bottom-up, market-based approach is key to ensuring that the SASB standards evolve to support market needs.

INDUSTRY-SPECIFIC

Analyzing the materiality of sustainability information requires an understanding of the specific impact of business on society and the environment, as well as the impact of sustainability challenges on business. Companies operating in a specific industry are more likely than companies in disparate industries to have similar business models and use resources in similar ways. Therefore, they are likely to have similar sustainability risks and opportunities. The SASB develops sustainability accounting standards at the industry level, focusing on issues that are closely tied to resource use, business models, and other factors at play in the industry. As a result, financial analysts, who also evaluate corporate performance within an industry context, can easily integrate and assess material sustainability factors alongside financial fundamentals.

Traditional industry classification systems present a challenge to SASB's industry focus because they do not always group industries with common sustainability characteristics. In addition, traditional classification systems establish hierarchies and layers of industries based on revenue and other economic variables, providing less visibility—and access to capital—for industries with greater sustainability risks or opportunities but smaller economic footprints.

To address these issues, the SASB developed SICST[™], which builds on traditional classification systems (e.g., SIC, GICS, and BICS) and categorizes sectors and industries in accordance with a fundamental view of their business models, their resource intensity and sustainability impacts, and their sustainability innovation potential. SICST[™] classification of individual companies can be publicly accessed at www.sasb.org using company ticker symbols.

Systemic Sustainability Issues

Certain prominent sustainability issues, such as climate change, water use, human capital, and political contributions, generate great interest from a variety of parties, including the media, the public, government agencies, nongovernmental organizations, and investors. However, the SASB subjects these issues to the same evidence-based, market-informed approach used for all potential disclosure topics.

Through its industry focus, the SASB systematically assesses the relevance of each topic and the potential for material impacts on companies in each SICSTM industry. This ensures that topics recommended for disclosure are included in the standards based on evidence amassed in an industry context as well as on input from a balanced group of industry experts.

When topics are determined to be reasonably likely to have material impacts in more than one industry, they are referred to as cross-cutting issues. However, from one industry to the next, the SASB may recommend different approaches to the disclosure of information related to these topics. This is because general sustainability topics often have unique impacts on different business models, and analysts may need industry-specific performance metrics to assess risk and/or future outlook. For example, climate risk is present in many industries, but the performance metrics are often unique. In real estate, investors are interested in the vulnerability of assets and the quality of building stock. In health care, event preparedness and business-continuity risk is important, as are changing disease migration patterns. In oil and gas, the carbon intensity of reserves and current emissions are important to assess fundamental and relative risk. The SASB evaluates the best metrics to characterize performance on a topic within an industry context. However, consistent treatment of similar issues and similar accounting metrics across industries is preferred whenever possible to make the system more useful to investors with diversified portfolios.

4. Guiding Principles and Criteria for Standards Development

As outlined in Section 3, the SASB's approach to standards development is designed to be evidence-based, to include broad stakeholder participation, and to reflect industry-specific sustainability impacts. As the SASB carries out this work, a set of principles (at the disclosure topic level) and criteria (at the metric level) guide internal decisions and interactions with external stakeholders who are involved in helping the SASB set industry standards. The principles are used in conjunction with the SASB's core objectives (defined in Section 2) to inform the final selection of topics for which standards are developed within an industry. Meanwhile, the criteria are used to rigorously evaluate the quality of the accounting metrics that are proposed for use in describing corporate performance on a topic, ensuring that they facilitate disclosure of information that is material, decision-useful, and cost-effective.

PRINCIPLES FOR TOPIC SELECTION

The SASB considers the following set of principles when identifying sustainability topics that warrant an industry standard. Each potential topic is evaluated against these principles before being proposed for inclusion in an industry standard, helping to focus the standards on only the critical sustainability topics that are most likely to require disclosure under Regulation S-K.

- **Potential to affect corporate value.** Through research and stakeholder input, the SASB identifies topics that can or do affect operational and financial performance through three channels of impact: (1) revenues and costs, (2) assets and liabilities, and (3) cost of capital or risk profile.
- **Of interest to investors.** The SASB addresses issues likely to be of interest to investors by assessing whether a topic emerges from the "total mix" of information available through the existence of, or potential for, impacts on five factors: (1) direct financial impacts and risk; (2) legal, regulatory, and policy drivers; (3) industry norms, best practices, and competitive drivers; (4) stakeholder concerns that could lead to financial impacts; and (5) opportunities for innovation.
- **Relevant across an industry.** The SASB addresses topics that are systemic to an industry and/or represent risks and opportunities unique to the industry and which, therefore, are likely to apply to many companies within the industry.
- **Actionable by companies.** The SASB assesses whether broad sustainability trends can be translated into industry-specific topics that are within the control or influence of individual companies.
- **Reflective of stakeholder (investor and issuer) consensus.** The SASB considers whether there is consensus among issuers and investors that each disclosure topic is

reasonably likely to constitute material information for most companies in the industry.¹⁷

CRITERIA FOR ACCOUNTING METRICS

At the level of accounting metrics, the SASB considers the following set of criteria when evaluating potential metrics to measure performance on aspects of each sustainability topic:

- **Fair Representation:** A metric adequately and accurately describes performance related to the aspect of the disclosure topic it is intended to address, or is a proxy for performance on that aspect of the disclosure topic;
- **Useful:** A metric will provide useful information to companies in managing operational performance on the associated topic and to investors in performing financial analysis;
- **Applicable:** Metrics are based on definitions, principles, and methodologies that are applicable to most companies in the industry based on their typical operating context;
- **Comparable:** Metrics will yield primarily (a) quantitative data that allow for peer-to-peer benchmarking within the industry and year-on-year benchmarking for an issuer, but also (b) qualitative information that facilitates comparison of disclosure;
- **Complete:** Individually, or as a set, the metrics provide enough data and information to understand and interpret performance associated with all aspects of the sustainability topic;
- **Verifiable:** Metrics are capable of supporting effective internal controls for the purposes of data verification and assurance;
- **Aligned:** Metrics are based on those already in use by issuers or are derived from standards, definitions, and concepts already in use by issuers, governments, industry associations, and others
- **Neutral:** Metrics are free from bias and value judgment on behalf of the SASB, so that they yield an objective disclosure of performance that investors can use regardless of their worldview or outlook; and
- **Distributive:** Metrics are designed to yield a discernable range of data for companies within an industry or across industries allowing users to differentiate performance on the topic or an aspect of the topic.

¹⁷ During the SASB's provisional phase of standards-setting, it formed Industry Working Groups composed of a balanced representation of investors, corporate professionals, and other stakeholders. When a topic failed to reach at least 75 percent consensus that it would likely constitute material information and therefore warrant a standard, it was either flagged for further review (if close to 75 percent or respondents expressed significant uncertainty) or not carried forward. On average, more than 82 percent of investors, issuers, and other stakeholders agreed on the likely materiality of the disclosure topics included in the SASB's provisional phase standards. *SASB Rules of Procedure* further describes how market feedback continues to inform the SASB's standards ratification and maintenance process.

5. Elements of Standardized Presentation

Each SASB standard is presented in a structured manner to ensure consistent application and facilitate cost-effective, decision-useful information. Broadly speaking, SASB standards comprise (1) disclosure guidance; and (2) sustainability accounting standards on sustainability topics for use by U.S. and foreign public companies in their annual filings with the SEC, such as Forms 10-K, 20-F, or 40-F. To the extent relevant, SASB standards may also be applicable to other filings with the SEC, such as Form 10-Q, Form S-1, and Form 8-K.

More specifically, each SASB standard includes the following standardized elements:

GENERAL DISCLOSURE GUIDANCE

The standard provides general guidance for issuers in using SASB standards, including the scope, reporting format, timing, limitations, and forward-looking statements. The SASB's disclosure guidance identifies sustainability topics at the industry level, which—depending on specific operating context—may constitute material information for a company within that industry. Each company is ultimately responsible for determining what information is material, and what information the company may be required to disclose in its Form 10-K, Form 20-F, or other SEC filings. Therefore, *SASB standards are intended as guidance for companies as they perform their own determinations of materiality and disclosure obligations.*

INDUSTRY DESCRIPTION

The standard describes the industry that is the subject of the standard, including any assumptions about the business model and industry segments that are included or not included.

TOPIC AND TOPIC DESCRIPTION

The standard lists and briefly describes how management or mismanagement of the various aspects of the topic may affect value creation.

SUSTAINABILITY ACCOUNTING METRICS

The standard provides companies with standardized quantitative—or, in some cases, qualitative—metrics intended to measure performance on each disclosure topic or an aspect of the topic.

Sustainability accounting metrics should be accompanied by a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported, where not addressed by the specific accounting metrics, including strategy, competitive positioning, degree of control, performance, and trends over time.

TECHNICAL PROTOCOLS

For each sustainability accounting metric, technical protocols provide guidance on definitions, scope, accounting guidance, compilation, and presentation that may serve as the basis for “suitable criteria,” defined by the PCAOB’s AT Section 101¹⁸ as having the following attributes:

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

ACTIVITY METRICS

The standard includes activity metrics to measure the scale of the issuer’s business, providing operational context and facilitating normalization of SASB accounting metrics, which is important for the analysis of related disclosures.

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

An issuer’s disclosure of these activity metrics should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for investors relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant.¹⁹

¹⁸ PCAOB, [AT Section 101](#) – Attest Engagements

¹⁹ FASB Business Reporting Research Project, *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures* (January 29, 2001)

Appendix: SASB Sustainable Industry Classification System™ (SICS™)

Where traditional industry classification systems group companies by sources of revenue, the SASB's approach considers the resource intensity of firms, and groups industries with like sustainability characteristics, including 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



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