



THE STATE OF DISCLOSURE

An analysis of the effectiveness of sustainability disclosure in SEC filings

2016

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 broad, balanced stakeholder participation. SASB standards are designed for the disclosure of material sustainability information in mandatory SEC filings, such as Form 10-K and 20-F. SASB develops and maintains sustainability accounting standards for 79 industries, focusing on the subset of industry-specific sustainability factors that are reasonably likely to have material impacts.

ABOUT THIS REPORT

The State of Disclosure Report is an annual reference document for investors and other users of financial information who are looking to better understand the material sustainability risks and opportunities embedded in their portfolios. By providing an overview of the quality of existing corporate disclosure on SASB topics, the report aims to provide these users with an improved understanding of how efficiently those risks and opportunities are currently being priced within an industry-specific context. Additionally, the report will provide a baseline against which future disclosure analyses may be measured, providing investors and other users of this information with insight into evolving trends related to corporate disclosure practices, market pricing, and key areas to be addressed in corporate engagement and portfolio risk management.



December 2016

Copyright ©2016 Sustainability Accounting Standards Board. The information, text, and graphics in this publication (the "Content") are owned by Sustainability Accounting Standards Board. All rights reserved. The Content may be used only for non-commercial or scholarly use, provided that all copyright and other proprietary notices related to the Content are kept intact, and that no modifications are made to the Content. The Content may not be otherwise disseminated, distributed, republished, reproduced, or modified without the prior written permission of Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.



TABLE OF CONTENTS

1	FOREWORD
2	EXECUTIVE SUMMARY
3	INTRODUCTION
4	Improving Disclosure Effectiveness
6	Analyzing the Current State of Disclosure
10	How to Use this Report
11	OVERVIEW
11	Overall Trends
11	Differences Among Sectors and Industries
12	Differences Among Sustainability Dimensions
15	Differences between Domestic and Foreign Domiciled Filers
16	Differences by Market Capitalization
18	SECTOR OVERVIEWS
19	Consumption I (Food & Beverage)
22	Consumption II (Consumer Goods)
25	Financials
28	Health Care
31	Infrastructure
34	Non-Renewable Resources
37	Renewable Resources & Alternative Energy
40	Resource Transformation
43	Services
46	Technology & Communications
49	Transportation
53	INDUSTRY RANKINGS
55	CONCLUSION
56	ADDITIONAL RESOURCES
57	APPENDICES

Foreword

I joined the SASB board of directors because I believe that, while the U.S. capital markets and regulatory system are the best in the world, they can still be—and, indeed, must be—improved for the benefit of investors, issuers, and markets. That belief drove my focus more than 10 years ago, when I was Director of Corporation Finance at the SEC, and continues to do so today.



In today's rapidly changing business landscape, investors often look beyond financial statements to understand how companies create long-term value. Financial reporting today has not kept pace with both company managers and investors' interest in broader categories of information that are also material to operations and financial performance. Recognition of this point explains in large part why the SEC included sustainability matters as a subject in its disclosure effectiveness initiative and why it has received extensive comment favoring more and improved sustainability information.

SASB's sustainability accounting standards respond to the call for improved sustainability disclosure. Indeed, the emphasis of SASB standards on securities-law concepts of materiality and their focus on industry standards represent a natural evolution of traditional financial reporting and a practical pathway to the goal of more effective sustainability disclosure. Moreover, while sensible and forward-looking regulation is important, a company should not only aim for compliance in its disclosure practices, but also help establish and enhance best practices. Considering the SASB standards is one way to achieve that objective.

In this inaugural report, SASB presents a review and analysis of current sustainability disclosures included in hundreds of SEC filings across every major industry. The findings serve as both a reason for optimism and a reminder that much work remains to be done. Although companies appear to have increasingly recognized the risks and opportunities involved in managing material sustainability issues, they have also struggled to communicate them effectively to their investors.

To be clear, this report is a review of disclosure—not performance. It's up to the market to assess the latter. In doing so, markets would benefit from improved quality, consistency, and comparability of information, rather than the boilerplate that, according to this report, currently characterizes more than half of the disclosures reviewed.

This report suggests that companies can do better and provides some examples as to how that is accomplished. It is provided in the spirit of contributing to the debate as to the ways in which we can improve sustainability reporting effectively and responsibly.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Beller". The signature is fluid and cursive, with the first name "Alan" and last name "Beller" clearly distinguishable.

Alan Beller
SASB Board of Directors
Former Director of the Division of Corporation Finance, U.S. Securities and Exchange Commission

Executive Summary

In today's rapidly changing business climate, investors are increasingly looking beyond financial statements for a more complete picture of a company's ability to create value over the long term. For example, in response to a recent initiative by the U.S. Securities and Exchange Commission (SEC) to modernize its disclosure requirements, investors made a resounding call for improved sustainability disclosure. Although companies have begun to address a growing number of sustainability factors in their SEC filings that have impacted—or are likely to impact—their financial condition or results of operations, these disclosures have not typically been high quality. This puts investors at a disadvantage when it comes to fully understanding their risk exposures.

In this report, the Sustainability Accounting Standards Board (SASB), which aims to improve the effectiveness of SEC reporting through the use of standardized disclosure, presents the findings of its analysis of existing sustainability disclosure. In this analysis, SASB reviewed the latest-available 10-K or 20-F filing for up to the top 10 companies in each of 79 industries, categorizing disclosures on the most crucial, industry-specific sustainability topics according to their effectiveness. SASB's analysis uncovered the following major points:

- Overwhelmingly, companies have recognized the existence of, or the potential for, material impacts related to the sustainability topics included in SASB standards. Indeed, 69 percent of companies in the analysis reported on at least three-quarters of the sustainability topics included in their industry standard, and 38 percent provided disclosure on every SASB topic.
- In all, 81 percent of entries analyzed, across all sectors and topics, included some form of disclosure; this is a clear indication that companies acknowledge the majority of the sustainability factors identified in SASB standards are currently having—or are reasonably expected to have—material impacts on their business.
- The most common form of disclosure—across the majority of industries and topics—was generic boilerplate language, which is inadequate for investment decision-making. Such vague, non-specific information was used 53 percent of the time when companies addressed a SASB topic.
- Companies used metrics—obviously more useful to investment analysis—in less than 24 percent of the cases where disclosure occurred. Importantly, even in these cases the metrics were non-standardized, and therefore lacked comparability from one industry firm to the next.

These findings, among all others contained in this report, demonstrate that, by and large, companies are taking a minimally compliant approach to sustainability disclosure, providing the market with information that is inadequate for making investment decisions. SASB exists to solve this problem by providing a materiality-focused market standard for sustainability disclosure to ensure more detailed and comparable disclosure that is decision-useful for investors and cost-effective for companies.

Ultimately, this report sheds light on various trends and patterns related to the effectiveness of sustainability disclosure, including how it differs across industries, sectors, topics, market capitalization, region, and more. As such, it provides a baseline for sustainability disclosure quality against which future improvement—or lack thereof—may be measured. It also answers: “Which industries provide the most effective disclosure and which provide the least?” Armed with this information, investors will have a more complete picture of the risks and opportunities they face, and a deeper understanding of where in their portfolio those risks are likely to be uncompensated.

“Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.”

- U.S. SUPREME COURT JUSTICE LOUIS BRANDEIS

Introduction

Effective decision-making requires useful data. Indeed, the transparent disclosure of material information is an essential component of an efficient market. This is why federal securities laws require public corporations to regularly report this information. However, transparency alone is not always enough; accountability is also important. Without it, investors and the public may drown in what the U.S. Supreme Court has called “an avalanche of trivial information.”¹

As such, this report, for the first time, presents an analysis of the emerging and rapidly evolving practice of material sustainability disclosure, providing a baseline against which future analyses may be measured. It finds that sustainability factors are increasingly exposed to the sunlight of transparency, but much less so to the electric light of accountability. As the quantity of such information has proliferated, its quality has not kept pace.

Investors and their portfolio companies have become increasingly aware of the link between sustainability factors and business outcomes. For example, increased energy efficiency can lead to operational cost savings; effective resource management can reduce input price volatility and the risk of supply disruptions; and stronger data security practices can mitigate the risk of fines, litigation, and reputational harm, while also lowering a firm’s cost of capital. As a result, the investment community—in particular, investors with longer term views—are increasingly asking for improved disclosure around financial risks based on non-financial statement information, while companies have begun to disclose more information about how they manage key sustainability issues but provide little in the way of information on financial impact. In short, companies may be providing more data but are not currently applying the same rigor to sustainability disclosure that they do with financial statement disclosure. This market incongruity creates a challenge for investors who need to better understand the material risks and opportunities they face in allocating capital.

In large part, the proliferation of sustainability reporting has been a response to regulatory influence. For example, in 2010 and 2011, the SEC issued guidance on disclosure related to climate

Materiality and Sustainability

Materiality is a fundamental principle of mandated disclosure in the United States. The concept of materiality recognizes that some information is important to investors in making investment decisions.

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.”⁺

The SEC’s Regulation S-K sets forth the disclosure requirements associated with Form 10-K and other SEC-required filings and, among other things, 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 or 20-F.⁺⁺

SASB’s industry-specific sustainability accounting standards, which are designed for integration into MD&A and other relevant sections of SEC filings, address precisely these topics. In its process for identifying topics, SASB relies upon the definition of “materiality” under the U.S. securities laws.

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

⁺⁺ 17 CFR §229.303

change and cybersecurity matters, respectively.^{2,3} In both releases, the Commission reiterated that unless a company’s management can determine that these issues are not reasonably likely to have a material impact on its financial condition or operating performance, disclosure is required under Regulation S-K.

In a 2016 Concept Release on disclosure effectiveness, the Commission explored the possibility of more robust and/or specific disclosure requirements for sustainability information. Two-thirds

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

2 Interpretation: Commission Guidance Regarding Disclosure Related to Climate Change, Securities and Exchange Commission (February 2, 2010).

3 CF Disclosure Guidance: Topic No. 2 – Cybersecurity, Division of Corporation Finance, Securities and Exchange Commission (October 13, 2011).

of all non-form letters the Commission received in response to the release discussed sustainability disclosure, and 80 percent of those called for improved disclosure of sustainability factors in SEC filings.⁴ (See “Supporting Improved Disclosure Effectiveness” sidebar.)

⁴ SEC website, “Comments on Concept Release: Business and Financial Disclosure Required by Regulation S-K,” accessed Aug. 15, 2016, at <https://www.sec.gov/comments/s7-06-16/s70616.htm>.

However, the increasing volume of sustainability information included in mandatory filings, in particular Forms 10-K and 20-F, has highlighted a shortcoming of such disclosure. In the absence of standards, like those used for the reporting of financial statement information, companies have taken a wide variety of approaches to presenting material sustainability information. So, although this type of information has become increasingly available, it has not always proved to be useful because it cannot be compared from one company to the next. Naturally, investors, creditors, and other users of this information are less concerned with its quantity than with its quality, and thus far its quality has been extremely inconsistent.

IMPROVING DISCLOSURE EFFECTIVENESS

In choosing to buy, sell, or hold a security, investors typically adopt an economic perspective. They attempt to allocate their capital as productively as possible among mutually exclusive opportunities. This type of decision cannot be made effectively when comparable information is not available. Indeed, 79 percent of global institutional investors say they are dissatisfied with

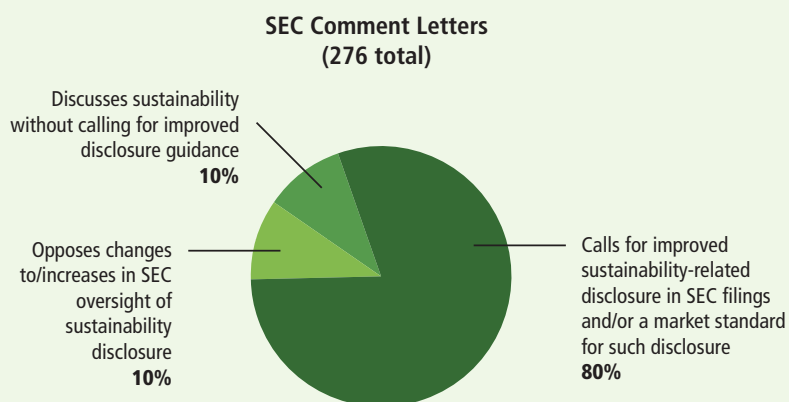
Supporting Improved Disclosure Effectiveness

On April 13, 2016, the Securities and Exchange Commission (SEC) issued a Concept Release outlining the various measures it might consider as part of an effort to modernize Regulation S-K, which establishes the non-financial statement reporting requirements for publicly listed corporations in the U.S.⁵ Among those considerations is the disclosure of sustainability information.

Despite the fact that sustainability disclosure was a relatively minor topic of discussion in the SEC release (covering about four of its 92 pages), two-thirds of the more than 276 non-form comment letters the Commission received in response addressed sustainability-related concerns.⁶ Eighty percent of sustainability-related letters called for improved disclosure of sustainability-related information in SEC filings, with only 10 percent of letters opposing SEC action on the matter.

This groundswell of interest in sustainability means that, in the words of a prominent New York law firm, “the sustainability topic is clearly on the table at this point, and the Commission will sooner or later have to—and should—address it.”⁷

In this context, this report may serve as a numerical baseline of the effectiveness of existing disclosure on material sustainability matters.



⁵ SEC Concept Release No. 33-10064, Business and Financial Disclosure Required by Regulation S-K, <https://www.federalregister.gov/articles/2016/04/22/2016-09056/business-and-financial-disclosure-required-by-regulation-s-k>

⁶ During the comment period, which closed July 21, 2016, the SEC received more than 25,000 comment letters. Most of these were form letters calling for improved disclosures of political spending, international tax issues, and sustainability plans; however, 276 non-form letters were also submitted.

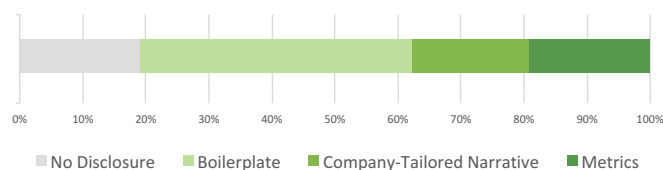
⁷ Sullivan & Cromwell LLP, Business and Financial Disclosure Required by Regulation S-K – File No. S7-06-16, Comment letter to the Securities and Exchange Commission, (August 9, 2016); available at <https://www.sec.gov/comments/s7-06-16/s70616-354.pdf>.

the comparability of sustainability reporting between companies in the same industry.⁸

Standardized sustainability disclosures would not only enable investors to make useful comparisons among companies, they would also provide a longitudinal perspective on each company's progress over time. Nevertheless, as this report illustrates, current sustainability disclosures lack comparability across most issues in every industry. In fact, the largest share of such information is characterized by boilerplate language. (See Figure 1.)

Figure 1. Sustainability disclosure in SEC filings for FY 2015⁹

(All Topics in 79 Industries across 10 Sectors - 4,081 Total Disclosures)



Boilerplate disclosures—generic statements that are not specifically tailored to the individual company and the risks it faces—are inadequate for investment decision-making. In the absence of a market standard against which to compare such disclosures, some courts have viewed certain vague, optimistic statements that may appear in disclosures as mere “puffery” that is “too untethered to anything measurable [...] to communicate anything that a reasonable person would deem important to a securities investment decision.”¹⁰ For example, hyperbolic statements like: “we believe our energy consumption is the lowest in the industry,” do little for the investor. Meanwhile, researchers have found that investors and analysts are better able to assess fundamental risk when firms’ disclosures are more detailed and avoid vague or abstract language.¹¹ Further, another study found that comparability not only lowers the cost of acquiring information but also helps analysts forecast earnings more accurately.¹²

It is worth noting that even the sustainability disclosures currently using metrics are rarely comparable across peer companies. (See “What Gets Measured Doesn’t Always Get Managed” sidebar.) Without standards, each company uses its own metrics, chooses its own scope, and employs its own calculation methods.

What Gets Measured Doesn’t Always Get Managed

Many companies have attempted to apply more rigor to measuring, managing, and reporting on their material sustainability risks and opportunities. However, in the absence of a standardized accounting format, it remains virtually impossible for investors—or even company management—to benchmark a firm’s performance against that of its peers.

For example, in the Cruise Lines industry, two companies provided the following disclosures related to Fuel Use & Air Emissions, a topic included in SASB’s provisional standard for the industry. Both companies used quantitative metrics to measure their performance on the issue—a high quality disclosure. However, without a standardized format for this disclosure, the information is nearly impossible to compare.

Royal Caribbean

“We have also taken a number of other steps to improve the overall fuel efficiency of our fleet, including our new ships on order, and, accordingly, reduce our fuel costs. We continue to work to improve the efficiency of our existing fleet, including improvements in operations and voyage planning as well as improvements to the propulsion, machinery, HVAC and lighting systems. The overall impact of these efforts has resulted in a 21.4% improvement in energy efficiency from 2005 through 2014 and we believe that our energy consumption per guest is currently the lowest in the cruise industry.”

Carnival Corp.

“[W]e are designing more energy efficient ships that will enter our fleet in the future, while continuing toward reducing the fuel consumption of our existing fleet. We had voluntarily set a goal of delivering a 20% reduction (per unit) from our 2005 baseline of CO₂e emissions from shipboard operations by 2015. We achieved our goal one year ahead of schedule and have set a new goal to achieve a 25% CO₂e emissions reduction (per unit) from our 2005 baseline by 2020. We measure our ability to use direct energy efficiently by calculating the amount of primary source energy we consume.”

Both companies provided larger discussions around these metrics, and Carnival also included a table of data breaking down its fuel consumption and emissions, including GHG, NO_x, and SO_x, along with footnotes on the company’s methodology for calculating the data. Although investors can see from these efforts that management at both companies has given considerable thought to relevant risks and taken steps to address them, it remains difficult—if not impossible—to make a meaningful comparison between the two, or to benchmark their performance against the industry as a whole.

8 PwC, “Sustainability Goes Mainstream,” May, 2014.

9 This and all subsequent bar charts summarize the results of a SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Forms 10-K and 20-F) for the top companies, by revenue, in each SIC industry (maximum of 10 companies).

10 City of Monroe Employees Ret. Sys. v. Bridgestone Corp., 399 F.3d 651 (6th Cir. 2005).

11 Hope, Ole-Kristian and Hu, Danqi and Lu, Hai, The Benefits of Specific Risk-Factor Disclosures, February 26, 2016, Rotman School of Management Working Paper No. 2457045; Singapore Management University School of Accountancy Research Paper No. 2015-35.

12 de Franco, Gus, and Kothari, S.P. and Verdi, Rodrigo S. The Benefits of Financial Statement Comparability, *Journal of Accounting Research*, 2011, vol. 49, issue 4, pages 895-931.

Just as with financial statement information, investors need sustainability information that is decision-useful. The decision-usefulness of sustainability information is enhanced when it is representationally fair, comparable, complete, verifiable, neutral, and distributive. Standardized sustainability metrics that support these characteristics, such as those included in the provisional standards developed by SASB, will help investors more effectively price risk and compare performance. No other sustainability reporting framework provides this benefit.

ANALYZING THE CURRENT STATE OF DISCLOSURE

SASB has analyzed the current state of disclosure on the set of 434 provisional disclosure topics included in each of its industry-specific provisional standards. The analysis, the findings of which are highlighted in this report, identifies and categorizes the disclosure practices of the top 10 companies¹³, by revenue, in each of the 79 industries in SASB's Sustainable Industry Classification System™ (SICS™). Overall, 713 annual SEC filings were analyzed, the majority of which covered disclosure for Fiscal Year 2015.¹⁴

The analysis identified relevant disclosures in the latest available Form 10-K, or in the equivalent sections of the latest available Form 20-F (see "Scope of Analysis" sidebar). It then classified each disclosure based on the following categories:

Note: Generally speaking, disclosure effectiveness tends to improve with specificity. However, sometimes the use of metrics alone is insufficient without context provided by discussion and analysis. This is why many SASB metrics include a combination of both quantitative and qualitative disclosures. As appropriate—and consistent with Rule 12b-20¹⁵—when disclosing information related to a sustainability topic, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported.

- **No Disclosure:** The company does not provide disclosure relevant to the topic under analysis.

¹³ Due to industry composition, the number of companies analyzed for some industries is fewer than ten: Health Care Distributors (7 companies), Security & Commodity Exchanges (4), Rail Transportation (7), Car Rental & Leasing (3), Cruise Lines (3), Tobacco (4), Drug Retailers & Convenience Stores (5), Appliance Manufacturing (9), Toys & Sporting Goods (8), Biofuels (9), Wind Energy (2), Fuel Cells & Industrial Batteries (3), Forestry & Logging (6), and Real Estate Services (9).

¹⁴ The analysis was performed on 692 unique companies; twenty-one companies were analyzed for more than one industry; these companies were considered "representative" for industries that are not their primary SICS industry; most filings were submitted to the SEC in Q1 2016 and are available via EDGAR.

¹⁵ 17 CFR 240.12b-20 - Additional information. "In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made not misleading."

Scope of Analysis

This analysis, performed between May and August of 2016, covers disclosures in the following sections of Forms 10-K and 20-F:

Regulation S-K	10-K	20-F	Section Name
§229.101	1	4B	Business
§229.503(c)	1A	3D	Risk Factors
§229.103	3	8A7	Legal Proceedings
§229.303	7	5	MD&A
§229.305	7A	11	Quantitative and Qualitative Disclosures about Market Risks
§229.1010	8	8	Financial Statements

By the numbers

Disclosure topics in SASB standards: 434

Annual SEC filings analyzed: 713

- 10-K Filers: 597

- 20-F Filers: 116

- **Boilerplate:** The company provides disclosure using generic language that could be applicable to most, if not all, issuers in the industry. Such disclosure, which could apply to any company in the industry, has not been sufficiently tailored to reflect the company's specific and unique circumstances, including, but not limited to, its past performance, future targets, and individual risk/opportunity management strategies. The disclosure, thus, does not provide the reader with sufficient and significant information that would allow for differentiation between the company and most, if not all, of its peers. Boilerplate disclosure may include generic industry-level language, such as descriptions of regulations affecting the company/industry, and/or generic company-level language, such as the use of words like "we," "our company," etc.
- **Company-Tailored Narrative:** The company provides disclosure using specific language which can only be understood in the context of the issuer. Such disclosure has been sufficiently tailored to reflect the company's specific and unique circumstances, including, but not limited to, its past performance, future targets, and individual risk/opportunity management strategies. The disclosure, thus, provides the reader with sufficient and significant information that allows for the differentiation between the company and most, if not all, of its peers. If analyzed outside the context of the company, such disclosure would not be applicable to other issuers. However, such disclosure

may not provide information allowing for quantitative comparisons between companies. (Note: This category includes the qualitative “discussion and analysis” disclosures contained in SASB’s provisional standards.)¹⁶

- **Metrics:** The company provides disclosure using quantitative performance indicators which, by their nature, can only be understood in the context of the issuer. This excludes non-performance figures, such as a company’s goals and/or targets (see “Company-Tailored Narrative”). (Note: This category includes the quantitative metrics contained in SASB’s provisional standards.)

The following excerpts from SEC filings illustrate each category of disclosure. The examples address the topic of water management in the Alcoholic Beverages industry.

BOILERPLATE

“The availability of clean water is a limited resource in many parts of the world, facing unprecedented challenges from climate change and the resulting change in precipitation patterns and frequency of extreme weather, overexploitation, increasing pollution, and poor water management. We have implemented an internal strategy in order to considerably reduce the use of water in our operative plants. However, as demand for water continues to increase around the world, and as water becomes scarcer and the quality of available water deteriorates, we may be affected by increasing production costs or capacity constraints, which could adversely affect our business and results of operations.”

Source: Ambev S.A., Form 20-F for FY ending 30/December/15

COMPANY-TAILORED NARRATIVE¹⁷

“Water is one of the major components of our products, so the quality and quantity of available water is important to our ability to operate our business. If droughts become more common or severe, or if our water supply were interrupted for other reasons, high-quality water could become scarce in some key production regions for our products, including Tennessee, Kentucky, California, Finland, Canada, and Mexico... In fiscal 2014, we set new, more ambitious environmental sustainability goals, focused on... reducing our water use and wastewater discharges per unit of product by 30% by 2023 (versus 2012 baseline year). These goals support our ambition to be a

sustainability leader within our industry, and extend programs beyond our operational borders into the supply chain.”

Source: Brown-Forman Corp., Form 10-K for FY ending 30/April/16

METRICS

“Water is the main ingredient in all of our brands. To sustain production growth and respond to the growing global demand for water, we aim to improve efficiency, minimising our water use, particularly in water-stressed areas ... This year we improved water use efficiency by 10.4% and reduced absolute water withdrawals by 2,876,000 cubic metres. In water-stressed locations, we have reduced water wasted by 33.4%. For example in Brazil, investing in optimising water use at our Paraipaba distillery significantly reduced total water withdrawals in this acutely water-stressed location. At our breweries in Kaasi, Ghana, and at our two sites in Nigeria, water use per litre brewed has improved by 29% and 4% respectively, through improving water management and new ways of working ... Water used for agricultural purposes on land under Diageo’s operational control extends to 622,150 cubic metres and is reported separately from water used in our direct operations. The majority of this irrigation water is in respect of sugar cane.

Water efficiency by region by year (l/l) ^{(i),(ii),(iii)}	2007	2013	2014	2015
North America	6.7	6.5	5.3	5.1
Europe	7.9	6.7	7.0	6.7
Africa	9.6	6.4	5.9	5.5
Latin America and Caribbean	21.9	21.0	20.6	6.9
Asia Pacific	7.0	6.7	5.7	5.7
Diageo (total)	8.6	7.1	6.7	6.0 ^(iv)

- (i) 2007 baseline data and data for each of the intervening years in the period ended 30 June 2014 have been restated in accordance with Diageo’s environmental reporting methodologies.
- (ii) In accordance with Diageo’s environmental reporting methodologies, total water used excludes irrigation water for agricultural purposes on land under the operational control of the company.
- (iii) Figures include [United Spirits Limited] USL.
- (iv) As disclosed on page 29, Diageo total water efficiency by region excluding USL is also 6.0l/l.”

Source: Diageo PLC, Form 20-F for FY ending 30/June/15

¹⁶ In a handful of cases, entries identified as a Provisional D&A Standard might include the use of metrics: e.g. CN0101-03: Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets.

¹⁷ The disclosure example includes quantitative information in the form of company-specific sustainability targets. These types of figures fall outside the scope of the “Metrics” definition, which focuses on actual performance metrics.

The SASB standard for the Alcoholic Beverages industry includes two metrics related to this topic (one quantitative and one qualitative) as follows:

Metric	Category	Unit of Measure	Code
Total water withdrawn and total water consumed, and percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m3), Percentage (%)	CN0202-02
Discussion of water management risks and description of management strategies and practices to mitigate those risks	Discussion and analysis	N/A	CN0202-03

Given that SASB metrics are rigorously developed to provide decision-useful disclosure, and because the use of a market standard is the only way investors will be able to compare performance,¹⁸ it makes sense to differentiate their use from that of non-SASB metrics. Indeed, future editions of this annual analysis will make such a distinction. However, for the purposes of this year's report, SASB chose to combine all metrics (including SASB and non-SASB measures) for two reasons:

- The SASB standards are not yet codified. SASB's existing sustainability accounting standards are provisional, and the organization is currently involved in a process of deep consultation with issuers and investors to better assess (a) the relevance and decision-usefulness of the standards and (b) the feasibility and cost-effectiveness of their implementation. As a result, some of the topics and metrics included in the provisional standards may change slightly as they evolve from provisional status to final codification.

- SASB topics may contain multiple metrics, and each metric may include multiple measurements. Until the standards are codified and their use is fully implemented by corporate issuers, it is difficult to judge decisively what constitutes a disclosure using "SASB metrics" (i.e., Some or all of the metrics included in the topic? Some or all of the measurements included in the metric?). SASB concluded that the value to be gained from identifying "partial" use would not be additive in light of the objectives of this report.

Finally, an important parameter of this analysis is that, with few exceptions,¹⁹ each company is considered in the context of its primary SICs industry. (See last page of the Appendix.) Many companies, of course, operate in multiple industries; for example, through vertical integration within the supply chain or horizontal integration across product and service offerings. For such companies, SASB's analysis of their SEC filings was framed by the disclosure topics included in the sustainability accounting standard for their primary industry, which can be identified using the SICs Look-Up Tool on the SASB website. The analysis of a given firm's disclosure will extend to multiple industries, where appropriate, in future editions of this report, as well as in future iterations of SASB's Disclosure Intelligence Tool (see "SASB's Disclosure Intelligence Tool" sidebar).

¹⁸ Sustainability Accounting Standards Board, Conceptual Framework (April, 2016).

¹⁹ Twenty-one companies were analyzed for more than one industry; these companies were considered "representative" for industries that are not their primary SICs industry (e.g., disclosures from Walt Disney Co. were analyzed for both Media Production & Distribution, its primary SICs industry, and for Leisure Facilities, its secondary industry).

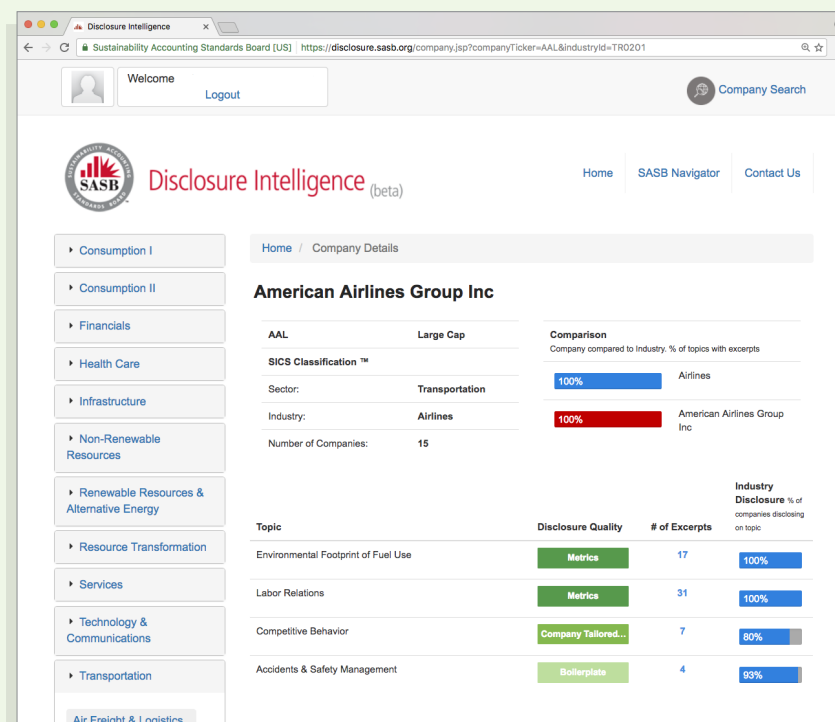
SASB's Disclosure Intelligence Tool

The analysis presented in this report covers sustainability disclosures by the top 10 companies in each of 79 SICs industries, representing about 12 percent of the approximately 5,500 companies listed on the NYSE and Nasdaq exchanges.^{20, 21}

However, using technology to meet the challenge of scale, SASB has also developed an approach that allows it to extend this analysis to all firms publicly listed in the U.S.

SASB's Disclosure Intelligence Tool, which is available in the online SASB Navigator, presents the first comprehensive look at the quality of corporate sustainability disclosures in SEC filings, including Forms 10-K, 20-F, and 40-F.

The tool is the result of work that began in 2015 as an experiment using machine learning to identify and assess information contained in the SEC's Electronic Data Gathering, Analysis and Retrieval (EDGAR) system, which provides investors and the public with free access to more than 21 million corporate filings.



SASB's artificial intelligence (AI) uses the "bag of words" approach to natural language processing and information retrieval. This popular model has been applied to a variety of academic uses and commercial projects, such as email spam filtering. By converting thousands of documents into hundreds of thousands of "bags of words," the model allows SASB to measure various characteristics of sustainability information, both within a given disclosure and across the aggregation of disclosures. For example, SASB can determine the relevance of a given disclosure by comparing its vector space (an algebraic model of the text) to the corresponding SASB topic description. Additionally, SASB can begin to assess the quality of a disclosure by measuring the frequency of certain words to determine their TF-IDF (term frequency/inverse document frequency), a statistical measure that can be used to differently weight certain terms based on the idea that unique words tend to be more powerful or meaningful (i.e., less boilerplate). Finally, SASB can combine the "bags of words" with a smaller set of tagged data to create a semi-supervised learning algorithm that teaches the model to become more effective at classifying information over time.

The result of this ambitious effort is a comprehensive database and analysis of sustainability disclosures, containing millions of excerpts and covering the entire U.S. equity market. The current data set includes the most recent fiscal year, but over time will expand to cover additional years' worth of information. This will better enable investors to not only identify where uncompensated risks and opportunities exist in their portfolios, but to see how trends in disclosure reflect the evolution of a company's, industry's, or sector's approach to specific sustainability issues.

The SASB Navigator, which also includes the SASB standards, industry research, and performance ranges on SASB topics, can be accessed at <http://navigator.sasb.com>.

²⁰ NYSE, Q1 2016 Investor Presentation (June 2016), available at <http://ir.theice.com/~media/Files/Vfce-IR/events-presentations/presentation/1q16-investor-presentation.pdf>.

²¹ Nasdaq website, "NASDAQ Companies," retrieved August 1, 2016, available at <http://www.nasdaq.com/screening/companies-by-industry.aspx?exchange=NASDAQ>.

HOW TO USE THIS REPORT

In the sections that follow, readers will find tables, rankings, and excerpts intended to provide an overview of how public companies are currently reporting material sustainability information in mandatory filings to the SEC. With this analysis, investors will be able to see, for the very first time, where they are or are not making informed decisions with respect to key sustainability topics. In the process, they will develop a more nuanced understanding of the risk-return profile of their holdings.

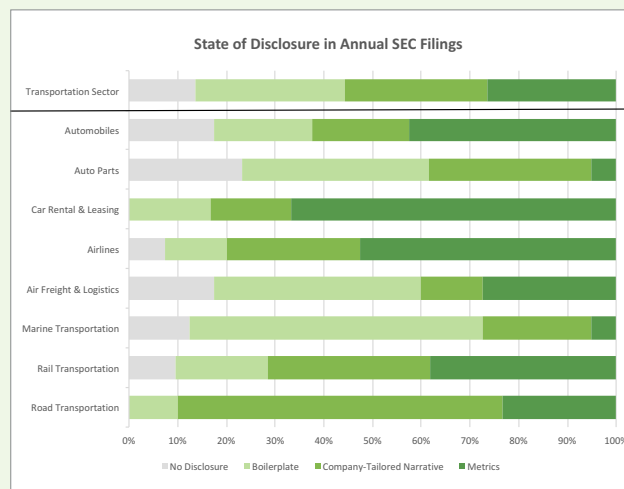
For example, when a given SASB topic is characterized by a preponderance of boilerplate disclosure, or none at all, an investor can assume that any risks or opportunities associated with the topic are not being accurately reflected in company stock prices. Investors who adopt a more fundamental, bottom-up approach to portfolio construction may wish to compare the disclosure practices of specific companies to these industry benchmarks. Further, the prevalence of such low-quality disclosure across all topics within an industry or sector may indicate significant risk exposure for investors, particularly those using a top-down, sector-based approach. (See “Interpreting the Results” sidebar.)

In future annual editions of this report, SASB will track the progress of prevailing disclosure practices, and evaluate not only the use of any metrics but the use of SASB metrics. The latter will be possible once SASB standards have been codified, which is currently on target for use in the 2017 reporting cycle. This year’s analysis will serve as the baseline for future analyses.

Additionally, in using this report and the information it contains, asset owners and managers may wish to consider how they can use their influence to help improve the quality of the material sustainability information being disclosed to the U.S. capital markets. For example:

- Investors might engage with SASB’s sector analysts during the codification process to help improve relevance and decision-usefulness of the standards.
- Investors might encourage their portfolio companies to practice more effective disclosure of material sustainability information by incorporating SASB standards into their SEC filings

Interpreting the Results



- Bar charts represent the percentage of entries analyzed, across all topics in the sector, industry, etc. to fall within each category of disclosure effectiveness.
- Bar charts represent all possible disclosure entries analyzed (i.e., “all topics”), including those for which no disclosure was provided. Note that certain sections of the analysis also refer to “reported topics,” which represents only those entries for which disclosure was provided.

Overview

For all investors, but particularly for those who look at the big picture and take a top-down approach to portfolio construction, this report should provide a variety of insights, including a handful of key, big-picture takeaways.

OVERALL TRENDS

The overall analysis (see Figure 2) shows that 81 percent of entries analyzed, across all sectors and topics, include some sort of disclosure. Indeed, 69 percent of companies reported on at least three-quarters of the sustainability topics included in their industry's SASB standard, and 38 percent provided disclosure on every SASB topic. This is a clear indication that companies have already acknowledged that the majority of the sustainability factors identified in SASB standards are reasonably likely to have material impacts on their business.

Despite this widespread recognition that a company's management—or mismanagement—of sustainability issues can have material impacts, around 19 percent of all possible disclosure entries analyzed contain metrics (less than 24 percent of reported topics). Meanwhile, 43 percent of all entries analyzed (around 53 percent of reported topics) use boilerplate language. This finding demonstrates that many companies are taking a minimally compliant approach to sustainability disclosure. However, boilerplate disclosure may be less compliant than many companies believe.

One popular location for the disclosure of material sustainability information is the Management's Discussion and Analysis (MD&A) section of SEC filings, which requires that companies address known trends, uncertainties, and events that are reasonably likely to have a material impact on the company's financial condition or results of operations. Importantly, SEC interpretive guidance on MD&A disclosure emphasizes that companies should identify and discuss key performance indicators, both financial and non-financial, used to manage the business and that would be material to investors.²² Additionally, boilerplate disclosure may be less legally protective than many companies believe. In fact, based on case law, generic disclosure may increase the risk of Rule 10b-5 claims that the disclosure was materially false or misleading.²³

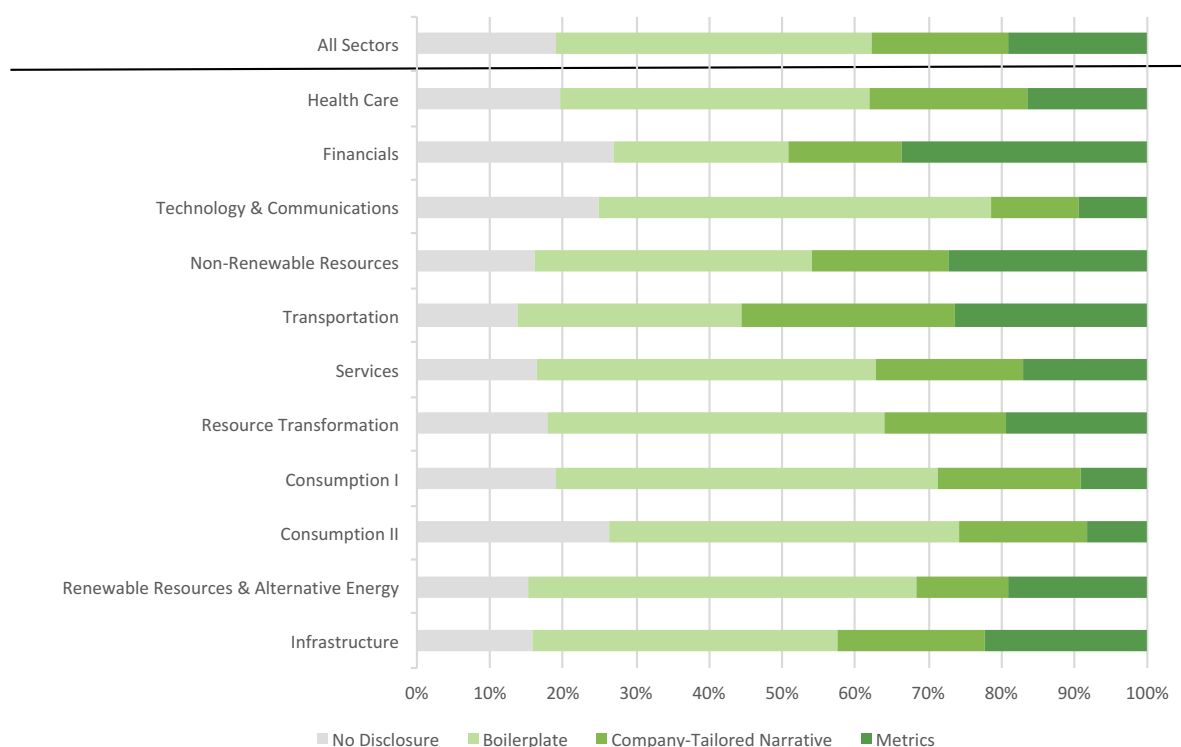
DIFFERENCES AMONG SECTORS AND INDUSTRIES

Although these broad trends apply to nearly every industry across every sector, significant differences were found to exist between (and within) sectors. For example, levels of disclosure varied considerably across industries, as did the use of boilerplate language and metrics. (See Figure 2).

²² SEC Release No. 33-8350 [68 FR 75055] (December 2003).

²³ David M. Loritz et al. v. Exide Technologies et al. No. 2:13-cv-2607-SVW-Ex, General Minutes – Civil (C.D. Cal. August 7, 2014). The court concluded that “boilerplate” disclosures or “vague” or “generic” statements are not sufficient to protect companies from allegations that their environmental compliance disclosures are inadequate.

Figure 2. Sustainability disclosure in SEC filings for FY 2015 (by sector)



Generally speaking, SASB's analysis found that sustainability disclosure tended to be of somewhat higher quality overall in certain industries with business-to-customer (B2C) models (e.g., those in Transportation, Services, and Consumption I), as opposed to business-to-business (B2B) operations further up the value chain (e.g., Resource Transformation, Non-Renewable Resources). This may reflect the importance of brand value to such enterprises, and the susceptibility of intangible assets to impairment from reputational damage.

Even so, the big-picture trends were found to hold across nearly all sectors and industries. Despite a generally higher level of disclosure in B2C industries, the analysis also found boilerplate language to be more common among these types of firms. Other industries, particularly those that are more strictly regulated (e.g., Financials, Non-Renewable Resources) tended to provide fewer but more tailored disclosures.

These trends and others will be covered in greater detail in the following sections of this report, along with a ranked list of all 79 SICs industries and overviews providing key insights into each sector.

DIFFERENCES AMONG SUSTAINABILITY DIMENSIONS

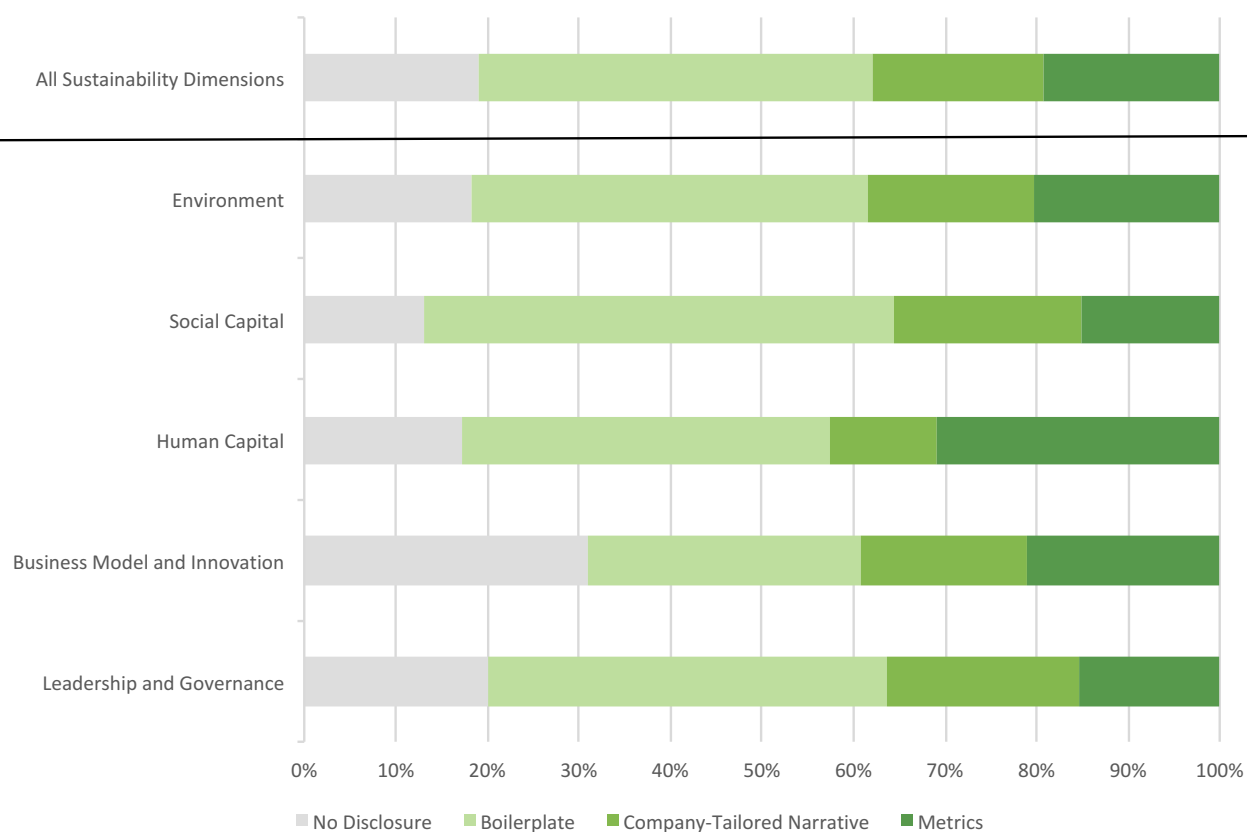
In addition to key differences between topics, industries, and sectors—all of which will be discussed in more detail in later sections of this report—SASB's analysis found interesting patterns (see Figure 3) related to its five broad sustainability dimensions:²⁴

1. Environment
2. Social Capital
3. Human Capital
4. Business Model and Innovation
5. Leadership and Governance

In general, companies most commonly address SASB topics related to social capital (87 percent of entries analyzed provided some form of disclosure), human capital (83 percent), and the environment (82 percent). Meanwhile, they much less frequently address SASB topics related to business model and innovation (69 percent).

²⁴ These five dimensions of sustainability are defined in more detail in SASB's Conceptual Framework, available at <http://www.sasb.org/approach/conceptual-framework/>.

Figure 3. Sustainability disclosure in SEC filings for FY 2015 (by sustainability dimension)



Disclosure on Cross-Cutting Issues

The majority of non-form letters received by the SEC in response to its 2016 Concept Release on Regulation S-K called for improved disclosure of sustainability information. (See "Supporting Improved Disclosure Effectiveness" sidebar.) By far, the most frequently cited issue was climate change, which cuts across 72 of 79 industries.

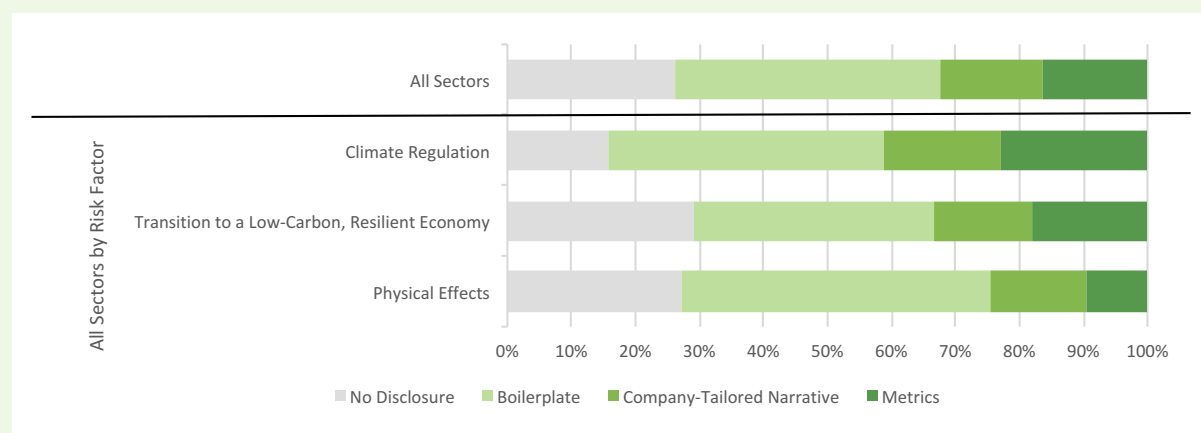
SASB's analysis, presented here, shows that 40 percent of disclosure on climate risk uses boilerplate language and that in 27 percent of possible entries there is no climate risk disclosure at all. (See Figure 4.)

Climate-related risks are broken down into three main categories, according to the SASB Climate Risk Framework:

- Physical Effects:** Climate change has a range of current and projected effects on the physical environment, leading to risks and opportunities for business entities. Disclosures of risks related to physical effects are predominately boilerplate across all sectors, perhaps due to the uncertainty of the probability, magnitude, and timing of the physical impacts of climate risk; a lack of sophisticated modeling; and/or a lack of local and regionally specific risk assessments for companies (which would be necessary to fully understand many physical effects).
- Transition to a Low-Carbon, Resilient Economy:** Transition risks relate to the market-based need to transition to a low-carbon economy, including development of, and investment in, new technologies and services that support this transition. Despite being the most prevalent, transition risks have the least disclosure, with almost 30 percent of entries tagged as "No Disclosure."
- Climate Regulation:** These risks include a range of legal, regulatory, policy, and liability issues associated with climate change, including emissions targets, carbon-pricing schemes, energy and fuel efficiency mandates, restrictions on specific energy sources, incentives and subsidies for certain services and technologies, contingent liabilities, and more. Disclosure of these risks is relatively common, with only 16 percent of entries marked as "No Disclosure." However, the bulk of this disclosure is provided in the form of boilerplate language.

More information on the current state of climate-related disclosure, including an industry-by-industry breakdown, is available in SASB's Climate Risk Technical Bulletin. Future bulletins will address other issues frequently cited in letters to the SEC, including risks related to water and human rights.

Figure 4. State of Disclosure in Annual in SEC Filings SEC Filings on SASB Climate Risk Factors



However, once again, quantity did not necessarily yield quality. Boilerplate language was the most common form of disclosure across all sustainability dimensions. Interestingly, although social capital topics were the most likely to be addressed, they were also the most likely to be disclosed using boilerplate language (59 percent of reported topics) and the least likely to be disclosed using metrics (17 percent of reported topics). Alternatively, disclosure levels for business model and innovation related-topics were relatively lower, but when addressed they tended to be of higher quality (43 percent of available disclosures used boilerplate language, while 31 percent used metrics).

Finally, disclosures related to human capital tended to be of the highest quality, with 37 percent of available disclosures using metrics—much more than was found in other dimensions. These differences are likely due to a combination of factors, including but not limited to the following:

- **Heightened attention to environmental issues:**

Many environmental issues (such as greenhouse gas [GHG] emissions as well as energy, water, and waste management) have become topics of public conversation and increasing regulatory scrutiny. In particular, climate change is widely acknowledged as one of the world's foremost challenges, with international agreements in place to coordinate mitigation and adaptation efforts. Among those efforts, governments have employed a variety of mechanisms, including those that establish a price for carbon emissions (i.e., through a tax or allowance system), those that mandate energy efficiency and/or regulate greenhouse gas emissions, those that restrict or mandate specific energy sources, and those that incentivize and subsidize certain services and technologies. As a result of these developments and because of the SEC's 2010 guidance on climate disclosure, companies may be more likely to address these high-profile issues in their SEC filings, both as an outcome of risk management efforts and as a way to showcase their commitment to issues of sustainability. Nevertheless, companies have much room for improvement in disclosure quality, with more than half of available disclosures using boilerplate language.

- **Public awareness and regulatory scrutiny of human capital issues:**

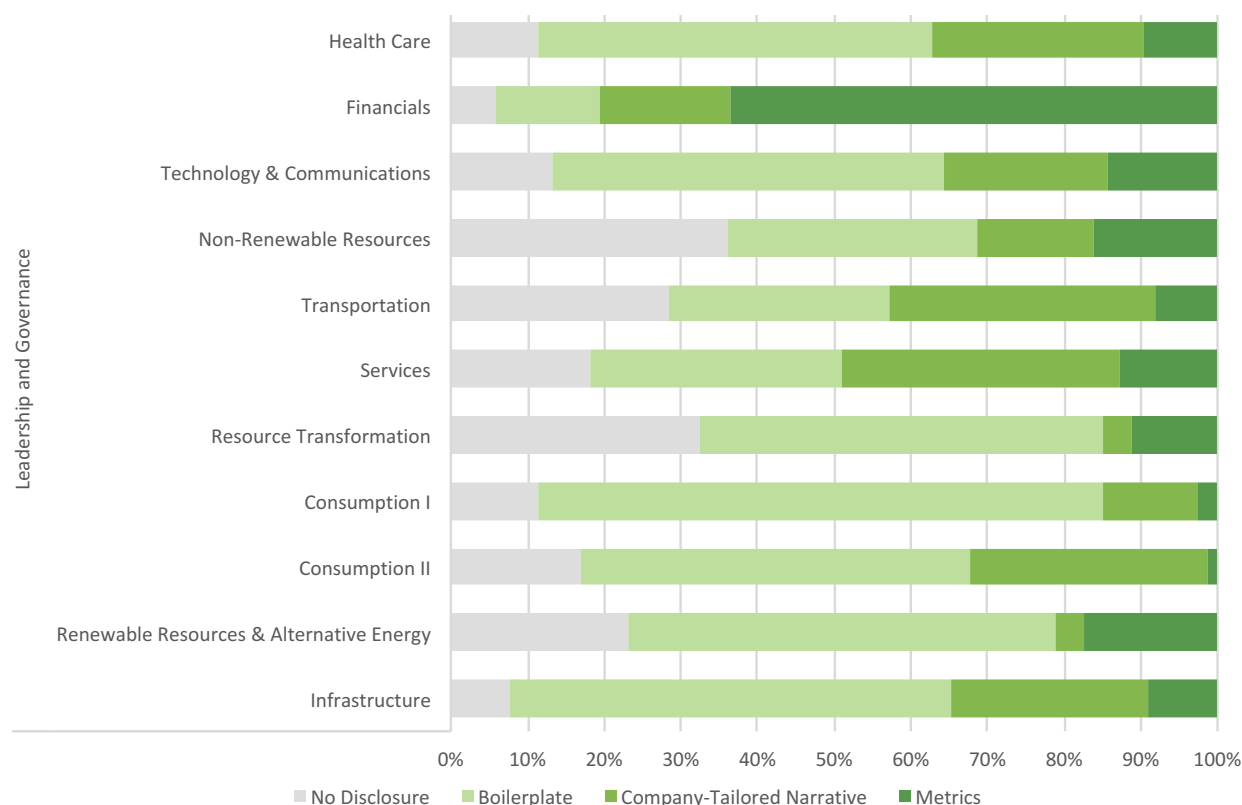
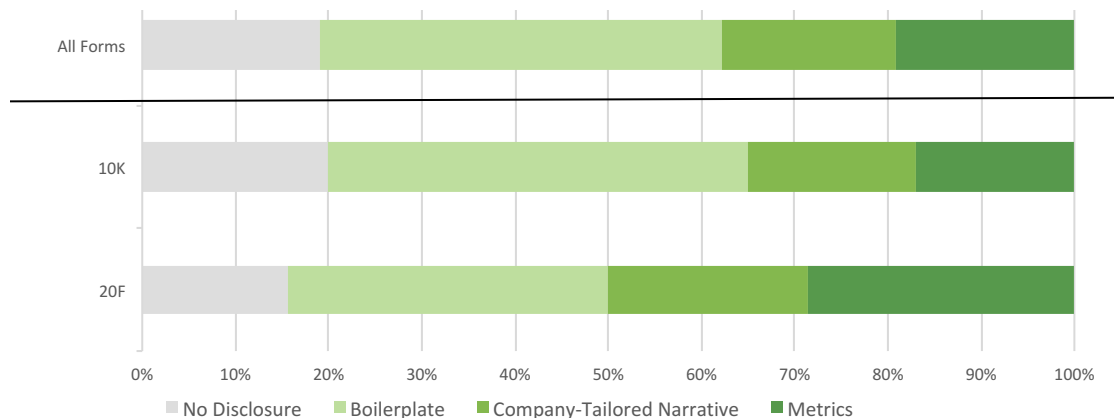
Meanwhile, issues related to human capital—such as labor relations, workforce diversity, employee health and safety, and compensation practices—have become hot-button topics in the media and prime subjects for academic research as economists increasingly focus on rising inequality. Many of these issues are also regulated to varying degrees (e.g., Occupational Safety and Health Administration, Fair Labor Standards Act, etc.), possibly leading to an increased likelihood that companies

will measure, manage, and eventually report their performance on the topic. Disclosures regarding the percentage of active workforce covered under collective bargaining agreements, in particular, tend to be relatively effective. Because this topic spans a variety of industries in the Transportation, Non-Renewable Resources, Infrastructure, and Consumption sectors, it may skew results for the Human Capital dimension.

- **Intangible impacts of social issues:** Of course, many issues related to social capital can also have a high profile (e.g., data security and privacy) or be highly regulated (e.g., product safety, customer welfare). However, these issues also tend to have a less obvious, direct, or immediate connection to financial performance. For example, environmental issues, such as energy or water management, can be readily understood in terms of cost savings from operational efficiencies; while human capital issues, such as employee health and safety, can easily translate to productivity decreases or even work stoppages that can have destructive top-line impacts. Many issues related to social capital, on the other hand, tend to influence public perception of a company and its products or services. While this can sometimes have profound impacts on a firm's brand value or even its social license to operate, the pathway to its financial statements may be less direct or immediate, and firms may, as a result, feel less able to meaningfully measure their performance on such issues. For example, topics related to data security span many industries, and these issues tend to be addressed using boilerplate language, which may skew results for the Social Capital dimension.

- **Incipient nature of business model and innovation issues:** Factors related to business model and innovation are, almost by definition, transformative issues, and therefore disclosure on such topics may be understandably nascent. However, because these topics tend to have obvious, direct, and often dramatic impacts on financial performance, management will be motivated to effectively measure and manage them, resulting in a higher share of disclosures using metrics. For example, although product lifecycle assessment is a relatively new practice, many companies across a variety of industries can easily understand the value of tracking the use of more sustainable inputs, the use-phase efficiency of design improvements, the scale of take-back programs, and/or the economic impact of recycling efforts.

Finally, the quantity and quality of disclosure on leadership and governance topics varies considerably by sector. (See Figure 5 above.) To some degree, this makes intuitive sense. For example,

Figure 5. Leadership & Governance disclosure in SEC filings for FY 2015 (by sector)**Figure 6. Sustainability disclosure in SEC filings for FY 2015 (by type of Form)**

while strong governance is important in every industry, it may receive more attention from investors—not to mention policy-makers—in industries that face systemic risks (Financials), operate in highly regulated markets (Infrastructure), or play a significant role in less competitive markets (Telecommunications). The Financials sector, in particular, stands out for its use of metrics; this is largely due to the fact that the sector relies more heavily than others on traditional financial metrics, many of which are covered by mandatory and voluntary regulatory frameworks, such as stress tests (Dodd-Frank) and liquidity standards (Basel III). Meanwhile, sectors with greater exposure to supply-chain risks (e.g., Consumption, Resource Transformation, and Non-Renewable Resources), which are much less heavily regulated, tend to

be characterized by lower levels of disclosure, more boilerplate language, and fewer metrics.

DIFFERENCES BETWEEN DOMESTIC AND FOREIGN DOMICILED FILERS

The analysis also found considerable differences in disclosure quality between Form 10-K filers and Form 20-F filers. (See Figure 6.)²⁵ In general, foreign private issuers (20-F filers) produced higher-quality disclosure than did domestic issuers. These differences may be due to a variety of factors, including the following:

²⁵ In the future, SASB's analysis will also cover Form 40-Fs filed by Canadian issuers.

- **Differences between 10-K and 20-F requirements:**

Domestic U.S. issuers, are subject to more frequent filings than are foreign private issuers, which may make it more challenging for 10-K filers to incorporate sustainability disclosure into the financial reporting cycle.

- **European regulation on the horizon:** Many foreign corporations listed on U.S. exchanges operate in the European Union, where Directive 2014/95/EU of the European Parliament and the Council of the European Union aims to increase transparency and performance on sustainability matters. Although companies have until 2018 to fully comply, many have likely already begun incorporating these disclosures into their reporting cycle. (See Figure 7.)

- **Governance differences:** Boards of directors at U.S.-based firms tend to hew closely to an interpretation of fiduciary duty that prioritizes maximizing shareholder value. Companies in other parts of the world, particularly in Europe, often consider the interests of a broader group of stakeholders, such as employees and clients. As a result, these companies may be more culturally attuned to their sustainability impacts and more likely to disclose related information.

- **The rise of “integrated reporting”:** Many foreign companies, particularly those in Europe and South Africa, have adopted the practice of producing an

“integrated report,” which communicates how a firm uses all of its resources—both financial and non-financial—to create value over the short, medium, and long term. As a result, these companies may already be addressing many of the SASB topics in their annual reports, which sometimes are incorporated as Exhibits and referenced in certain sections of their Forms 20-F.²⁶

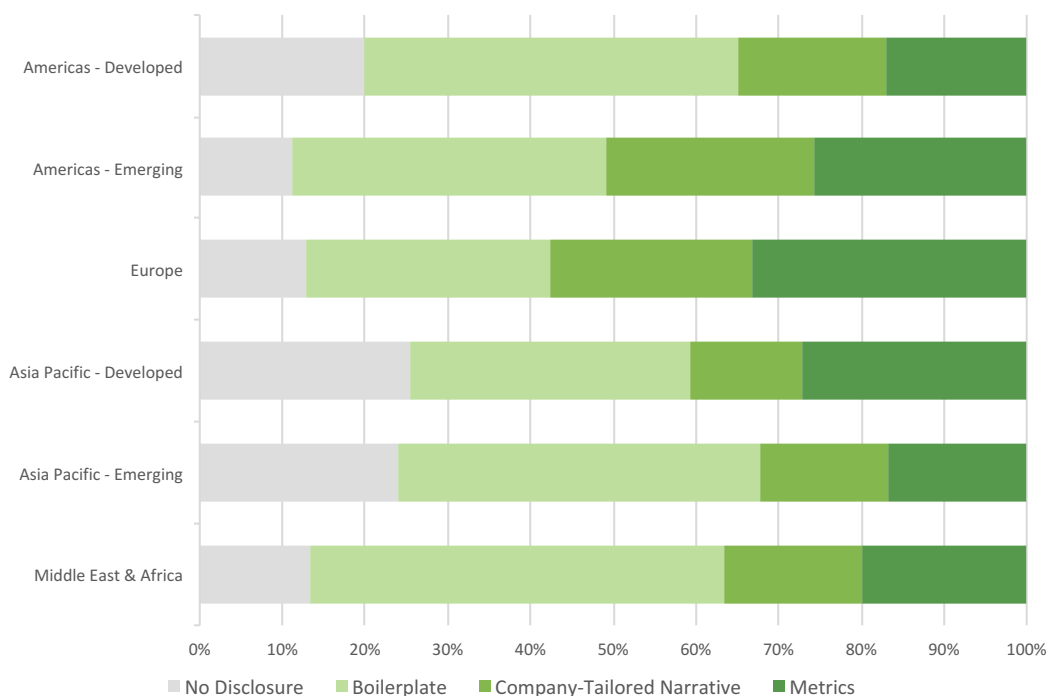
Many of these trends appear to be regional. (See Figure 7.) Most notably, European-domiciled companies tend to outperform those from other regions, possibly a reflection of the strengthening regulations cited above. European firms do best in terms of use of metrics (33 percent of all topics) and rank second in overall levels of disclosure (87 percent) only behind the “Americas – Emerging” region (89 percent).

Meanwhile, companies in the “Americas – Developed” region—basically U.S. companies—perform better than only Asian-domiciled companies in terms of levels of disclosure (80 percent versus 75-76 percent), but lag behind in use of metrics (17 percent versus 17-27 percent of all topics).

Boilerplate language is the most common form of disclosure in all regions except Europe.

²⁶ SASB has signed a memorandum of understanding with the International Integrated Reporting Council, and considers its standards to be a practical implementation of integrated reporting in the context of the U.S. capital markets.

Figure 7. Sustainability disclosure in SEC filings for FY 2015 (by region)



DIFFERENCES BY MARKET CAPITALIZATION

SASB analyzed SEC filings from 713 issuers, including 352 large-cap firms (over \$10 billion), 195 medium-cap firms (\$2-\$10 billion), and 166 small-cap firms (less than \$2 billion).²⁷ No significant differences were found in terms of disclosure levels (all three groups provided some form of disclosure for 80-82 percent of all topics); however, minor variation existed regarding the quality of disclosure. (See Figure 8.)

Previous research has established a positive and significant correlation between a firm's size and the quality of its voluntary (i.e., not line-item) disclosures.²⁸ In line with the findings of

previous researchers, when considering the entire sample of filings, large-cap companies were slightly more likely to use metrics (25 percent of reported topics) and slightly less likely to use boilerplate language (50 percent of reported topics) than were small- and medium-cap issuers (both at 22 percent metrics and 57 percent boilerplate of reported topics).

Interestingly, the analysis suggests that this result is stronger when considering disclosure practices by 20-F filers (See Figure 9.) Large- and medium-cap 20-F filers outperformed other segments in terms of levels of disclosure, both with only 15 percent of entries categorized as "no disclosure" compared with 19-20 percent for all segments of 10-K filers. These companies also outpaced other segments in the use of metrics (33 percent of entries for large-cap 20-F filers and 28 percent of entries for medium-cap 20-F filers, compared with 17 percent and 16 percent levels respectively for large- and medium-cap 10-K filers).

²⁷ Market capitalization figures calculated as of October 2016.

²⁸ Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31(2), 246-271.

Figure 8. Sustainability disclosure in SEC filings for FY 2015 (by market cap)

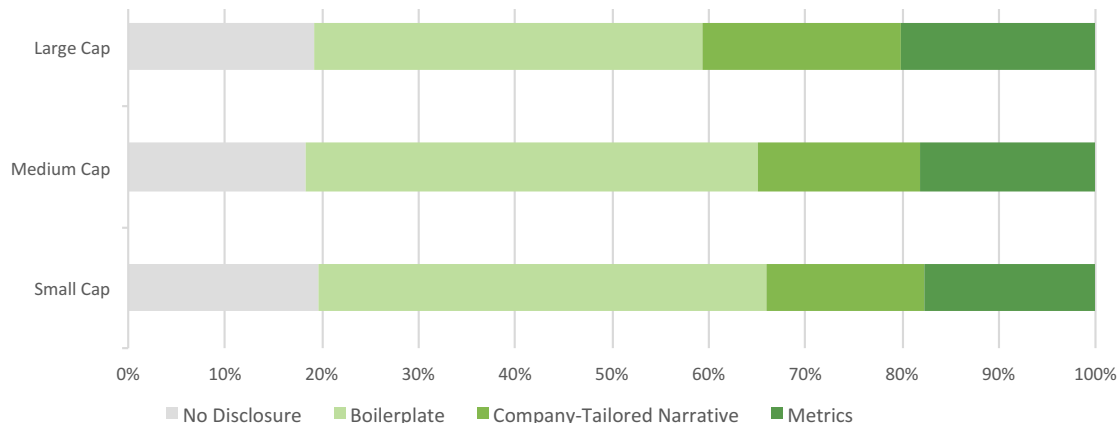
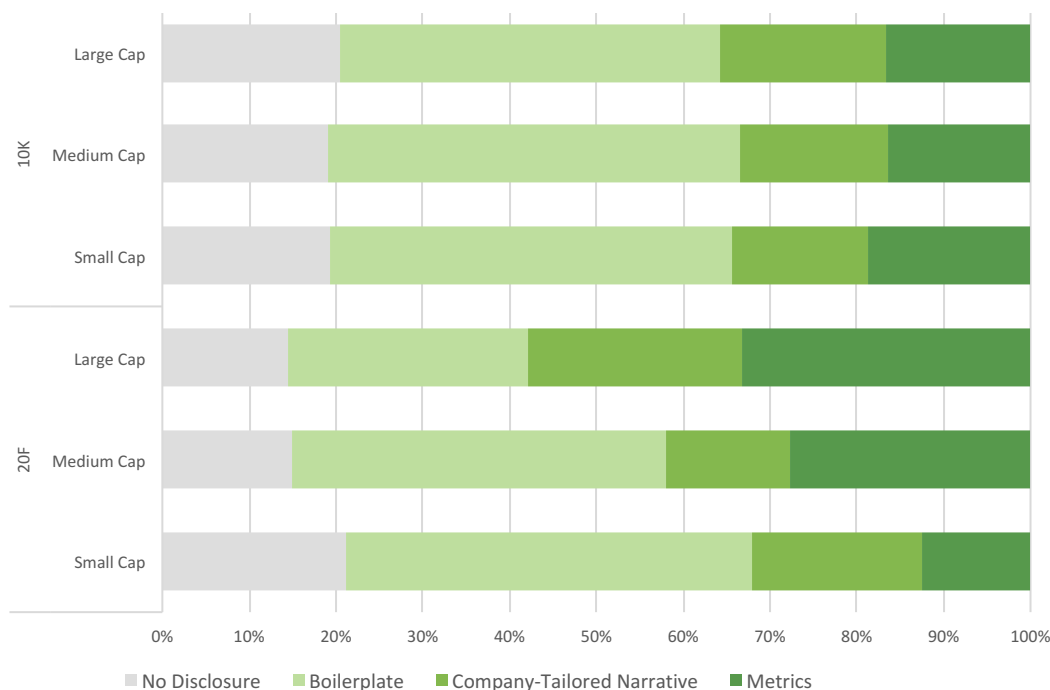


Figure 9. Sustainability disclosure in SEC filings for FY 2015 (by market cap and type of Form)



Sector Overviews

The charts that follow aggregate industry disclosure practices at the sector level. This information can be useful from a “macro” perspective to investors who favor a top-down approach to portfolio construction.

Diversification is the golden rule of investment strategy. However, most equity allocations within portfolios are diversified on the basis of such factors as market capitalization (small, medium, large), valuation (value, growth, blend), and geography (domestic, foreign). Although these factors are valuable, there is evidence that a sector-based approach to asset allocation can lead to more manageable portfolio risk and greater diversification benefits over the long run.²⁹

SASB’s SICs system categorizes industries based on resource intensity and sustainability innovation potential, and these industries are then grouped into sub-sectors and, finally, sectors. By adapting traditional industry classification systems to reflect the unique sustainability profiles of sectors and industries, SICs provides the building blocks for a more precise portfolio construction that takes into account the impact of sustainability on the risk/return and correlation of industries and sectors.

Just as sustainability risks and opportunities differ from one sector to the next, so does the quality of disclosure on these topics. As seen with the Figure 2 (presented earlier), there are a handful

of key, big-picture takeaways. For example, the companies in the Renewable Resources & Alternative Energy sector reliably addressed SASB topics (85 percent of the time), but did so primarily with boilerplate language (63 percent of reported topics). Meanwhile, companies in the Financials sector provided less disclosure overall on SASB topics (73 percent of all topics), however those disclosures tended to be of higher quality than in other sectors (46 percent of reported metrics).

Findings are aggregated at the sector level, with sectors presented in alphabetical order on the pages that follow. Investors can use the information here to do the following:

- Facilitate a deeper understanding of the impact of sustainability-related trends at the sector level, thus enabling better peer-to-peer comparisons in terms of sustainability performance;
- Analyze sector contributions to a portfolio’s risk-return profile;
- Consider how sector-based allocation might enable sustainability-related thematic investment strategies;
- Reduce inter-sector correlation based on uncompensated sustainability risk.

²⁹ Fidelity, “Equity Sectors: Essential Building Blocks for Portfolio Construction,” June 2013.

CONSUMPTION I (FOOD & BEVERAGE)

The sector's sustainability profile is characterized by generally higher levels of impact associated with the environment, along with social capital, both in direct operations and along the supply chain. Except for Household & Personal Products, most industries in the sector showed average levels of reporting on SASB topics (81 percent), with the highly regulated Tobacco industry as the standout both in terms of disclosure levels and quality of information provided. Alcoholic and non-alcoholic beverage manufacturers also showed high levels of disclosure. Nevertheless, the use of boilerplate language was extremely common (52 percent) across most industries. Boilerplate was especially common when addressing the environmental and social impacts of supply chains while non-disclosure was most prevalent for business model and innovation issues. The sector used very few metrics (9 percent).

TOPIC SPOTLIGHT

Food Safety

Food safety-related topics are included in the Provisional Standards for three industries in the sector: i.e., Agricultural Products; Meat, Poultry & Dairy; and Processed Foods. While many companies in these industries have procedures in place to address food quality and safety, the Food and Drug Administration estimates that there are about 48 million cases of foodborne illness in the U.S. every year with roughly 128,000 cases involving

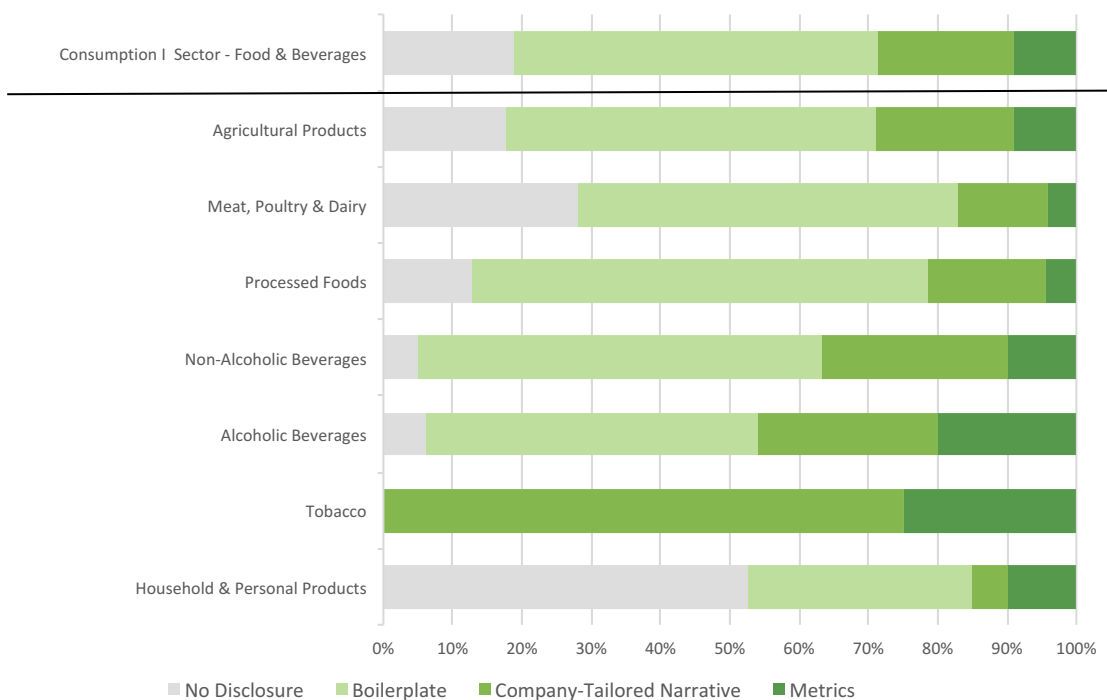
Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	19%	-
Boilerplate	52%	65%
Tailored Narrative	20%	24%
Metrics	9%	11%

hospitalization and more than 3,000 result in death.³⁰ According to analysis of recent recalls, the average food recall costs a company \$30 million, which drops directly to the bottom line, highlighting the direct business risk that recalls pose to companies.³¹ All companies analyzed for these industries recognized the existence of or potential for material impacts related to this topic; however, boilerplate language was used in two-thirds of entries. When available, quantitative disclosure typically took the form of financial impacts due to product recalls. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Processed Foods industry.

30 "Foodborne Illnesses: What You Need to Know," Food and Drug Administration. May 27, 2014; "Worst Foodborne Illness Outbreaks in U.S. History," Health line, February 27, 2013.

31 "The 'hidden' benefit of implementing food chain visibility", PWC. July 2012.

Figure 10. Sustainability disclosure in SEC filings for FY 2015 (Consumption I sector)



Sample Disclosures

Topic: Food Safety

Industry: Processed Foods

SASB METRICS:

- Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate
- Percentage of ingredients sourced from supplier facilities certified to a Global Food Safety Initiative (GFSI) scheme
- Notice of food safety violations received, percentage corrected
- Number of recalls issued, total amount of food product recalled

BOILERPLATE

"Concerns with the safety and quality of food products could cause consumers to avoid certain food products or ingredients. We could be adversely affected if consumers in our principal markets lose confidence in the safety and quality of certain food products or ingredients. Adverse publicity about these types of concerns, whether or not valid, may discourage consumers from buying our products or cause production and delivery disruptions... If our food products become adulterated, misbranded, or mislabeled, we might need to recall those items and may experience product liability claims if consumers are injured. We may need to recall some of our products if they become adulterated, misbranded, or mislabeled. A widespread product recall could result in significant losses due to the costs of a recall, the destruction of product inventory, and lost sales due to the unavailability of product for a period of time. We could also suffer losses from a significant product liability judgment against us. A significant product recall or product liability case could also result in adverse publicity, damage to our reputation, and a loss of consumer confidence in our food products, which could have an adverse effect on our business results and the value of our brands."

Source: General Mills, Inc. Form 10-K for FY ending 29/May/2016.

COMPANY-TAILORED NARRATIVE

"The manufacture and sale of consumer food products is highly regulated. In the United States, our activities are subject to regulation by various government agencies, including the Food and Drug Administration, the Department of Agriculture, the Federal Trade Commission, the Department of Commerce

and the Environmental Protection Agency, as well as various state and local agencies. Similar agencies also regulate our businesses outside of the United States. We believe our Product Excellence Program provides us with an effective product quality and safety program. This program is integral to our global supply chain platform and is intended to ensure that all products we purchase, manufacture and distribute are safe, are of high quality and comply with applicable laws and regulations. Through our Product Excellence Program, we evaluate the supply chain including ingredients, packaging, processes, products, distribution and the environment to determine where product quality and safety controls are necessary. We identify risks and establish controls intended to ensure product quality and safety. Various government agencies and third-party firms as well as our quality assurance staff conduct audits of all facilities that manufacture our products to assure effectiveness and compliance with our program and applicable laws and regulations."

Source: The Hershey Company. Form 10-K for FY ending 31/Dec/2015.

METRICS

"We are also a party to a number of lawsuits and claims arising out of our ongoing business operations. Among these, there are lawsuits, claims, and matters related to the February 2007 recall of our peanut butter products. Among the matters outstanding during fiscal 2016 related to the peanut butter recall was an investigation by the U.S. Attorney's office in Georgia and the Consumer Protection Branch of the Department of Justice into the 2007 recall. Just prior to the end of fiscal 2015, we negotiated a resolution of this matter, which resulted in an executed plea agreement pursuant to which ConAgra Grocery Products will plead guilty to a single misdemeanor violation of the Food, Drug & Cosmetics Act. The plea agreement is subject to court approval. If the plea is accepted by the U.S. District Court for the Middle District of Georgia, the government's investigation into the 2007 recall will conclude and ConAgra Grocery Products will make payments totaling \$11.2 million to the federal government."

Source: ConAgra Foods, Inc. Form 10-K for FY ending 29/May/2016

TOPIC SPOTLIGHT

Health & Nutrition

The topic of Health & Nutrition is included in the SASB Provisional Standards for two industries in the sector: i.e., Processed Foods and Non-Alcoholic Beverages. According to the Centers for Disease Control and Prevention, the estimated annual medical cost of obesity in the U.S. was \$147 billion in 2008 U.S. dollars; the medical costs for people who are obese were \$1,429 higher than those of normal weight.³² In their annual SEC filings, all companies in the analysis recognized the risks and/or opportunities from changing consumer preferences toward healthier,

³² "Adult Obesity Facts," Centers for Disease Control and Prevention, March 28, 2014.

more nutritious products. Moreover, half of disclosure examples analyzed used a company-tailored narrative, typically in the form of an overview of brands offering low-calorie alternatives and/or research and development efforts to achieve a specific reduction in content of certain ingredients such as sodium, added sugars, or saturated fats. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Non-Alcoholic Beverages industry.

Sample Disclosures

Topic: Health & Nutrition

Industry: Non-Alcoholic Beverages

SASB Metrics:

- Revenue from (1) zero- and low-calorie, (2) no-added-sugar, and (3) artificially sweetened beverages
- Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences

BOILERPLATE

"We may not effectively respond to changing consumer preferences, trends, health concerns and other factors. Consumers' preferences can change due to a variety of factors, including the age and ethnic demographics of the population, social trends, negative publicity, economic downturn or other factors. For example, consumers are increasingly concerned about health and wellness, focusing on the caloric intake associated with regular CSDs, the use of artificial sweeteners in diet CSDs and the use of natural, organic or simple ingredients in LRB products. As such, the demand for CSDs has decreased as consumers have shifted towards NCBs, such as water, ready-to-drink teas and sports drinks. If we do not effectively anticipate these trends and changing consumer preferences and quickly develop new products or partner with an allied brand in that category in response, then our sales could suffer. Developing and launching new products can be risky and expensive. We may not be successful in responding to changing markets and consumer preferences, and some of our competitors may be better able to respond to these changes, either of which could negatively affect our business and financial performance."

Source: Dr. Pepper Snapple Group, Inc. Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"Consumer demand continues to shift towards more nutritious products and we are accelerating our efforts to meet this demand by reducing sodium, added sugars and saturated fat in many of our products while continuing to invest in growing our nutrition businesses... In 2015, we continued to refine our beverage, food and snack portfolio to meet changing consumer demands by developing a broader portfolio of product choices, including: launching beverage options that contain no high fructose corn syrup and are made with natural flavors; building on our important nutrition platforms and brands – Quaker (grains), Tropicana (fruits and vegetables), Gatorade (sports nutrition for athletes) and Naked Juice (juices and smoothies); expanding our whole grain products globally; and expanding our portfolio of nutritious products in growing categories, such as dairy, hummus and other refrigerated dips, and baked grain snacks"

Source: PepsiCo, Inc. Form 10-K for FY ending 26/Dec/2015.

METRICS

"In our company we are conscious that weight issues and obesity are worldwide health problems, which need a collective effort for their solution. We believe that neither beverages nor any other product by itself is the direct cause of these problems, as they are complicated issues related to dietary habits and physical activity. However, as industry leaders, we would like to be a part of the solution. That is why we are committed to find, together with public and private institutions of the countries where we operate, a comprehensive solution to this problem. Through innovation, we have developed new products and expanded the availability of low or zero calorie beverages as well as bottled water in different presentations, adapted to consumers' lifestyle. Approximately 40% of our brands are calorie free or low- or non-caloric beverages. In addition, we inform our consumers through front labeling on nutrient composition and caloric content of our beverages. We have been pioneers in the introduction of the Guideline Daily Amounts (GDA), and we perform responsible advertising practices and marketing. We voluntarily adhere to national and international codes of conduct in advertising and marketing, including communications targeted to minors which are developed based on the Responsible Marketing policies and Global School Beverage Guidelines of The Coca-Cola Company, achieving full compliance with all such codes in all of the countries where we operate. Moreover, we actively promote exercise, proper nutrition and healthy habits to promote an energetic balance, demonstrating our commitment to encourage physical activity among consumers. In general, more than 6.1 million people in 2015 benefited from physical activity events we sponsored, and more than 509,000 people in 2015 and 2.5 million people in the period from 2010 to 2015, benefited from our own health and physical activity programs."

Source: Coca-Cola FEMSA, S.A.B. de C.V. Form 20-F for FY ending 31/Dec/2015.

CONSUMPTION II (CONSUMER GOODS & RETAIL)

The sector's sustainability profile is characterized by generally higher levels of impact associated with environmental and social capitals, both in direct operations and along the supply chain. Overall, the sector showed below-average levels of reporting on SASB topics (74 percent). Apparel, accessories, and footwear manufacturers and retailers had higher levels of reporting than other types of companies in the sector. Non-disclosure was most prevalent in the Building Products & Furnishings and Appliance Manufacturing industries and for business innovation-related topics. However, boilerplate language was very common in all industries (48 percent), especially when addressing key sector issues related to data privacy and security, as well as supply chain and sourcing considerations. The sector used fewer metrics than any other (8 percent).

TOPIC SPOTLIGHT

Data privacy and security

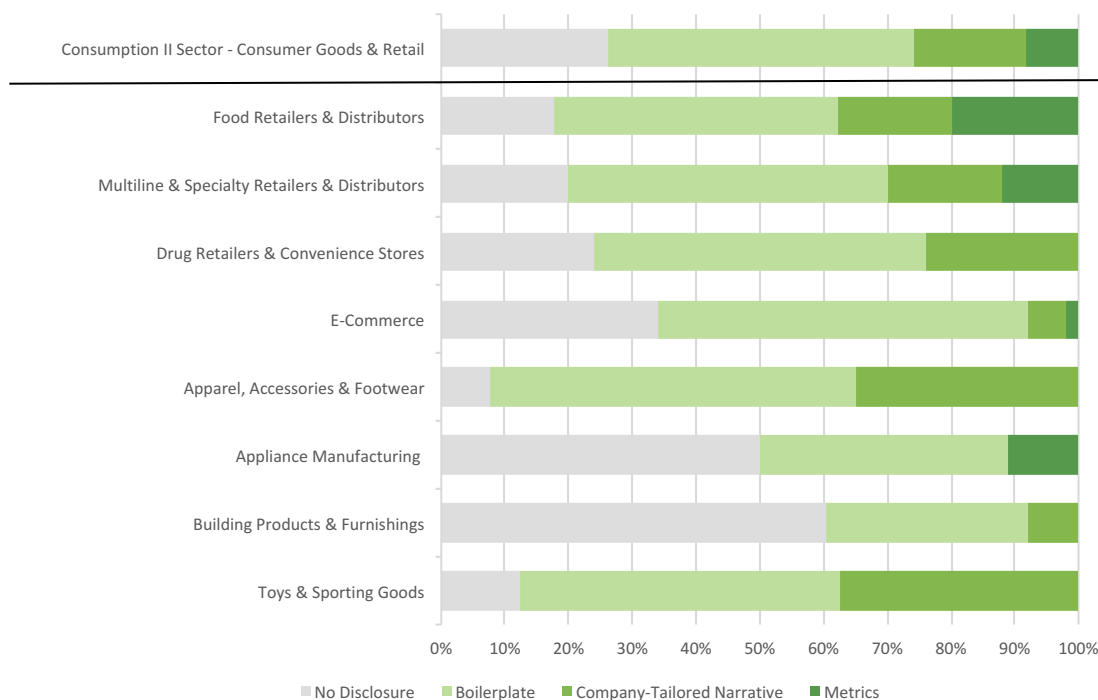
Data privacy and data security-related topics are included in the SASB Provisional Standards for four industries in the sector, in particular, for most industries involved in retailing operations. Research by the Ponemon Institute showed that between 2010 and 2014, the cost of the average data breach (involving 100,000 or fewer records) increased from \$3.8 million to more than \$5.8 million (the research excluded larger data breaches, with more than 100,000 lost records, to avoid skewing the results, as the financial cost is significantly higher). Retailers are particularly

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	26%	-
Boilerplate	48%	65%
Tailored Narrative	17%	24%
Metrics	8%	11%

at risk, as the probability of a material data breach over the next two years is nearly 23 percent, second only to the public sector.³³ Virtually, all companies analyzed provided disclosure on the increasing and more sophisticated nature of cyber-attacks and the risks stemming from mismanaging customer private information. However, more than three-quarters of disclosure examples analyzed used broad, boilerplate narrative to describe these risks. This type of disclosure is most commonly provided by e-commerce and drug retailers. Relatively speaking, multiline and specialty retailers provide more tailored disclosure; this result is likely driven by high-profile data breach cases over the last couple of years. The following excerpts illustrate the differences in disclosure practices on the topic of Data Security for companies in the Multiline & Specialty Retailers & Distributors industry.

33 "2014 Cost of Data Breach Study: United States," Ponemon Institute, May 2014; "Annual Cost of Cyber Crime Study 2010". Ponemon Institute, 2010.

Figure 11. Sustainability disclosure in SEC filings for FY 2015 (Consumption II sector)



Sample Disclosures

Topic: Data Security

Industry: Multiline & Specialty Retailers & Distributors

SASB Metrics:

- Discussion of management approach to identifying and addressing data security risks
- Number of data security breaches, percentage involving customers' personally identifiable information (PII), number of customers affected

BOILERPLATE

"A data breach could result in negative publicity and adversely affect the Company's business or results of operations. The protection of customer, employee, and company data is critical to the Company. The regulatory environment surrounding information security and privacy is increasingly demanding, with the frequent imposition of new and constantly changing requirements across business units. In addition, customers have a high expectation that the Company will adequately protect their personal information from cyber-attack or other security breaches. A significant breach of customer, employee, or company data could attract a substantial amount of media attention, damage the Company's customer relationships and reputation and result in lost sales, fines or lawsuits."

Source: Macy's Inc. Form 10-K for FY ending 30/Jan/2016.

COMPANY-TAILORED NARRATIVE

"If we do not maintain the security of our member and customer, associate or company information, we could damage our reputation, incur substantial additional costs and become subject to litigation... As publicly announced on October 10, 2014, Kmart's information technology team detected on October 9, 2014 that the Kmart store payment data system had been criminally breached beginning in early September 2014, that the payment data systems at Kmart stores were purposely infected with a new form of malware, and that debit and credit card numbers were potentially compromised. The Company is defending a class-action lawsuit in the Northern District of Illinois alleging violations relating to, and harm resulting from this incident."

Source: Sears Holdings Corporation. Form 10-K for FY ending 30/Jan/2016.

METRICS

"The Company has investigated, with the assistance of outside experts, a data security incident involving unauthorized access into the computer systems of PNI Digital Media Ltd ("PNI"), a subsidiary of the Company, which the Company acquired in July 2014... The investigation determined that an unauthorized party entered PNI's systems and was able to deploy malware on some of PNI's servers supporting its clients. The malware was designed to capture data that end users input on the photosites. Some of PNI's affected customers have notified certain of their users of a potential compromise of the users' payment card information and/or other personal information. PNI took prompt steps to contain the incident, including disabling the retailer photosites or online payment transactions for a period while the incident was being investigated, and to further enhance the security of its retailer customers' data. To date the Company has incurred incremental expenses of \$18 million related to the incident... In December 2014, the Company announced that the investigation into its previously announced data security incident had determined that malware deployed by criminals to some point of sale systems at 115 of the Company's more than 1,400 U.S. retail stores may have allowed access to transaction data at those affected stores. As a result, cardholder names, payment card numbers, expiration dates, and card verification codes for approximately 1.16 million payment cards may have been affected... It is reasonably possible that the Company may incur additional expenses or losses in connection with the incident; however, at this time the Company is unable to reasonably estimate any such additional expenses or losses. In addition, the Company maintains network security insurance coverage, which it expects would help mitigate any material financial impact."

Source: Staples Inc. Form 10-K for FY ending 30/Jan/2016

TOPIC SPOTLIGHT

Supply chain management and materials sourcing

Supply chain and sourcing-related topics are included in the SASB Provisional Standards for six industries in the sector; i.e., Food Retailers & Distributors; Multiline and Specialty Retailers & Distributors; Drug Retailers & Convenience Stores; Apparel, Accessories & Footwear; Building Products & Furnishings; and Toys & Sporting Goods. Many companies in these industries are making serious efforts to address changing consumer preferences around environmental, health, and social issues related to product sourcing. A 2014 Nielsen study found that 42 percent of North Americans were willing to pay more for products that had positive social and environmental impacts.³⁴ The majority of companies analyzed recognized the sustainability-related risks and/or opportunities stemming from these topics; however, in more than half of cases, companies used boilerplate language. These disclosures generally took the form of broad statements on increased consumer awareness of sourcing practices and how suppliers are subject to companies' standards of conduct in terms of labor and/or the environment. The following excerpts illustrate the differences in disclosure practices on this topic in the Multiline and Specialty Retailers & Distributors industry.

Sample Disclosures

Topic: Product Sourcing, Packaging, and Marketing

Industry: Multiline and Specialty Retailers & Distributors

SASB Metrics:

- Revenue from products third-party certified to environmental and/or social sustainability standards
- Description of processes to assess and manage risks and/or hazards associated with chemicals in products
- Description of strategies to reduce the environmental impact of packaging

BOILERPLATE

"We may not timely identify or effectively respond to consumer trends, which could negatively affect our relationship with our members, the demand for our products and services, and our market share. It is difficult to consistently and successfully predict the products and services our members will desire. Our success depends, in part, on our ability to identify and respond to trends in demographics and consumer preferences. Failure

to timely identify or effectively respond to changing consumer tastes, preferences (including those relating to sustainability of product sources and animal welfare) and spending patterns could negatively affect our relationship with our members, the demand for our products and services and our market share."

Source: Costco Wholesale, Corp. Form 10-K for FY ending 30/Aug/2015.

COMPANY-TAILORED NARRATIVE

"We are committed to offering a wide selection of national brand-name merchandise complemented by our selection of private brands. In addition, we are dedicated to ensuring the products we sell are sourced in a socially responsible, efficient, and cost effective manner... [W]e continue to focus on helping consumers reduce their energy and water use and their environmental footprint while saving money when they purchase our products and services. We offer a wide selection of environmentally responsible and energy-efficient products for the home, including ENERGY STAR® appliances, WaterSense® labeled toilets, paint with no volatile organic compounds (VOC), and indoor and outdoor LED lighting. Through our in-home sales specialists, we offer customers installation of insulation and energy efficient windows."

Source: Lowe's Companies, Inc. Form 10-K for FY ending 29/Jan/2016.

METRICS

"The Home Depot is committed to sustainable business practices – from the environmental impact of our operations, to our sourcing activities, to our involvement within the communities in which we do business. We believe these efforts continue to be successful in creating value for our customers and shareholders. For example, we offer a growing selection of environmentally-preferred products, which supports sustainability and helps our customers save energy, water and money. Through our Eco Options® Program introduced in 2007, we have created product categories that allow customers to easily identify products that meet specifications for energy efficiency, water conservation, healthy home, clean air and sustainable forestry. As of the end of fiscal 2015, our Eco Options® Program included over 10,000 products. Through this program, we sell ENERGY STAR® certified appliances, LED light bulbs, tankless water heaters and other products that enable our customers to save on their utility bills. We estimate that in fiscal 2015 we helped customers save over \$700 million in electricity costs through sales of ENERGY STAR® certified products and over \$300 million in product costs through ENERGY STAR® rebate programs. We also estimate our customers saved over 70 billion gallons of water resulting in over \$590 million in water bill savings in fiscal 2015 through the sales of our WaterSense®-labeled bath faucets, showerheads, aerators, toilets and irrigation controllers."

Source: The Home Depot, Inc. Form 10-K for FY ending 31/Jan/2016.

³⁴ "Global Consumers Are Willing to Put Their Money Where Their Heart Is When It Comes to Goods and Services from Companies Committed to Social Responsibility," Nielsen, June 17, 2014.

FINANCIALS

The sector's sustainability profile is characterized by generally higher levels of impact associated with leadership and governance topics, along with social capital. Overall, the sector showed below-average levels of reporting on SASB topics (73 percent). Security and commodity exchanges, and consumer and mortgage finance companies outperformed other types of firms in the sector. Non-disclosure was most prevalent for asset managers and insurers. The sector used less boilerplate language (24 percent)—and more metrics (34 percent)—than any other. Metrics were most often applied to governance topics such as managing systemic risk and the legal and regulatory environment.

TOPIC SPOTLIGHT

Integration of sustainability considerations into core operations

Topics focused on the integration of environmental, social, and/or governance risks into core operations, such as credit risk analysis, underwriting, investment management and advisory, are included in the SASB Provisional Standards for four industries in the Financials sector: i.e., Commercial Banks; Investment Banking & Brokerage; Asset Management & Custody Activities; and Insurance. Disclosure levels on these topics were low and mainly driven by lack of disclosure by several investment banks and asset managers. Overall, the use of metrics was also low. When available, quantitative disclosures were commonly provided

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	27%	-
Boilerplate	24%	33%
Tailored Narrative	15%	21%
Metrics	34%	46%

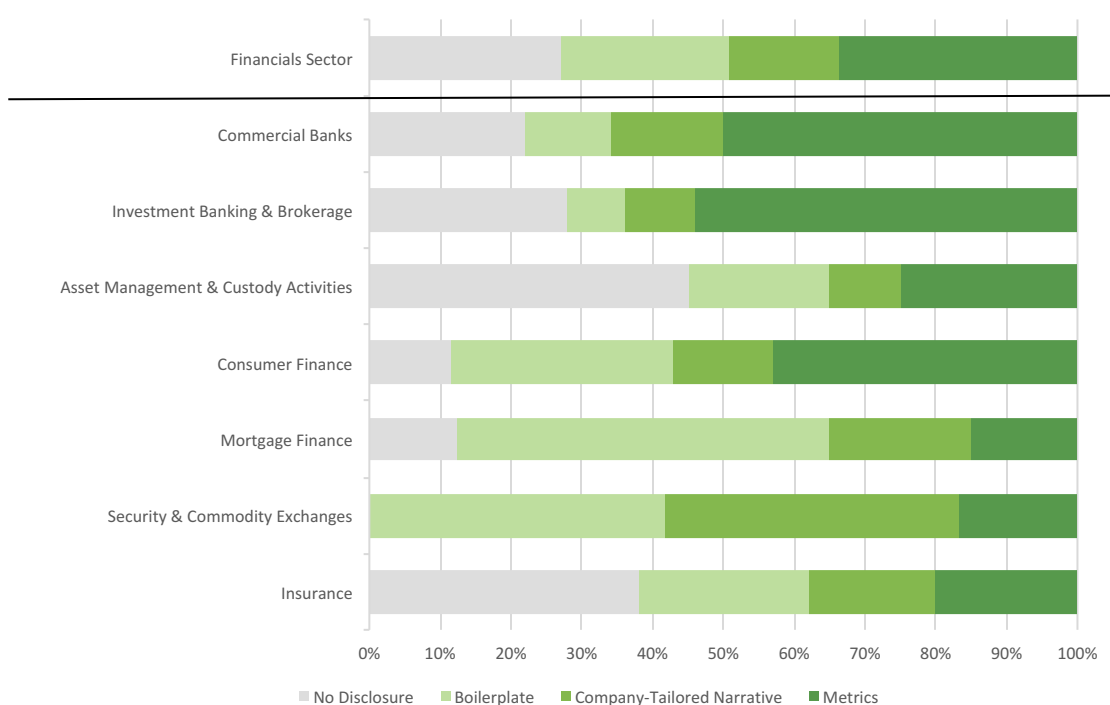
by commercial banks in the form of each company's banking operations related to environmentally sensitive industries—such as extractives—and renewable energy projects. The following excerpts illustrate the differences in disclosure practices on this type of topic.

Sample Disclosures

Topics: Integration of ESG Risk Factors in Credit Risk Analysis; and, Integration of ESG Risk Factors in Investment Management & Advisory

Industries: Commercial Banks; and, Asset Management & Custody Activities

Figure 12. Sustainability disclosure in SEC filings for FY 2015 (Financials sector)



SASB Metrics for the Commercial Banks industry:

- Discussion of how environmental, social, and governance (ESG) factors are integrated into the lending process
- Discussion of credit risk to the loan portfolio presented by climate change, natural resource constraints, human rights concerns, or other broad sustainability trends
- Amount and percentage of lending and project finance that employs: (1) integration of ESG factors, (2) sustainability-themed lending or finance, (3) screening (exclusionary, inclusionary, or benchmarked), and (4) Impact or community lending or finance
- Total loans to companies in the following sectors/ industries: Energy /Oil & Gas, Materials / Basic Materials, Industrials, and Utilities

to address those risks. Over that period, we have created strategies, routines, processes and products, adopted specific policies and adhered to voluntary commitments such as PRI (Principles for Responsible Investments), EP (Equator Principles), CDP (Carbon Disclosure Project), Principles for Sustainable Insurance (PSI) and Global Compact that guide our business and institutional practices. We have developed specific social and environmental guidelines applicable to our lending processes (lending and financing), insurance, investments and suppliers. Our main social and environmental guidelines include: (i) a list of restricted activities (firearms, ammunition and explosives; extraction and production of wood and the production of firewood and charcoal extracted from native forests; fishing activities; extraction and industrialization of asbestos; and abattoirs and beef packaging plants), (ii) a list of prohibited activities (prostitution; illegal use of child labor; and work under conditions similar to slavery), (iii) compliance with environmental licensing, (iv) the inclusion of social and environmental contractual clauses, and (v) specific rules for providing real estate collateral."

Source: Itaú Unibanco Holding S.A. Form 20-F for FY ending 31/Dec/2015. The company is part of the Commercial Banks industry.

BOILERPLATE

"The due diligence process that we undertake in connection with our investments may not reveal all facts that may be relevant in connection with an investment. Before making our investments, we conduct due diligence that we deem reasonable and appropriate based on the facts and circumstances applicable to each investment. The objective of the due diligence process is to identify attractive investment opportunities based on the facts and circumstances surrounding an investment, to identify possible risks associated with that investment and, in the case of private equity investments, to prepare a framework that may be used from the date of an acquisition to drive operational achievement and value creation. When conducting due diligence, we typically evaluate a number of important business, financial, tax, accounting, environmental and legal issues in determining whether or not to proceed with an investment."

Source: KKR & Co. L.P. Form 10-K for FY ending 31/Dec/2015. The company is part of the Asset Management & Custody Activities industry.

COMPANY-TAILORED NARRATIVE

"Our management of social and environmental risk is based on the identification, measurement, mitigation and monitoring of risks. We know that the increasing societal consciousness of the environmental and social challenges we face makes these issues more material to our operations, products and services. By integrating E&S risks and opportunities into our strategy, governance, processes, management policies, products and services, we are creating a virtuous circle that can help society to prosper. In the last 15 years, we developed and participated in various initiatives to reduce environmental and social risks and seize opportunities

METRICS

"Sustainability risks arise from the provision of financial services to companies or projects which indirectly result in unacceptable impacts on people or on the environment. The Risk Function, with input from Global Corporate Sustainability, is mandated to manage these risks globally working through local offices as appropriate. Sustainability Risk Managers have regional or national responsibilities for advising on and managing environmental and social risks... Our sustainability risk policies cover a number of sensitive industries and themes. After we issued new standards in our forestry and agricultural commodities policies in 2014, we took the decision to stop banking more than 160 customers as soon as possible because they did not comply. In 2015, HSBC was recognised as a leader in the Forest 500 ranking of 150 investors' policies on the sustainability of forest commodity supply chains. We also support a transition to certified, sustainable palm oil. Our standards require our palm oil customers to have all their operations certified as sustainable by the end of 2018, and we continue to support them in meeting this goal."

Source: HSBC Holdings PLC. Form 20-F for FY ending 31/Dec/2015. The company is part of the Commercial Banks industry.

TOPIC SPOTLIGHT

Employee Incentives & Risk Taking

The topic of “Employee Incentives & Risk Taking” is included in the SASB Provisional Standards for two industries in the Financials sector: i.e., Investment Banking & Brokerage and Asset Management & Custody Activities. All investment banks and the majority of asset managers analyzed provided disclosure on this front. While the use of metrics was common—particularly in the form of variable compensation practices for material risk takers within the company—the use of boilerplate language was also used in over a quarter of cases. The following excerpts illustrate the differences in disclosure practices on this topic.

Sample Disclosures

Topic: Employee Incentives & Risk Taking

Industry: Investment Banking & Brokerage, and Asset Management & Custody Activities

SASB Metrics for the Investment Banking & Brokerage industry:

- Discussion of variable compensation policies and practices
- Percentage of total compensation that is variable for: (1) executives and (2) all others
- Percentage of variable compensation that is equity for: (1) executives and (2) all others
- Percentage of employee compensation which includes ex post adjustments for: (1) executives and (2) all others
- Number of instances when risk limits were breached and number and percentage by response: (1) position reduced, (2) risk limit temporarily increased, (3) risk limit permanently increased, and (4) other

BOILERPLATE

“The Dodd-Frank Act impacts the manner in which we market our products and services, manage our business and operations, and interact with regulators, all of which could materially impact our results of operations, financial condition and liquidity. Certain provisions of the Dodd-Frank Act that have or may impact our businesses include: the establishment of a fiduciary standard for broker-dealers; regulatory oversight of incentive compensation; the imposition of capital requirements on financial holding companies and to a lesser extent,

greater oversight over derivatives trading; and restrictions on proprietary trading.”

Source: Raymond James Financial, Inc. Form 10-K for FY ending 30/Sep/2015. The company is part of the Investment Banking & Brokerage industry.

COMPANY-TAILORED NARRATIVE

“Our compensation program includes elements that we believe discourage excessive risk-taking and align the compensation of our employees with the long- term performance of the firm. For example, other than certain equity that either immediately vested as part of the grants to all employees or our founders or that were made in exchange for the contribution of assets, in each case in connection with the consummation of the KPE Transaction in October 2009, a significant majority of the equity awards granted to our employees are subject to a multi-year vesting conditions, one- and two-year post-vesting transfer restriction periods, and/or a minimum retained ownership requirement. Because our equity awards have multi-year vesting provisions, the actual amount of compensation realized by the recipient will be tied to the long- term performance of our common units.”

Source: KKR & Co, L.P., Form 10-K for FY ending 31/Dec/2015. The company is part of the Asset Management & Custody Activities industry.

METRICS

“Group Compensation... Material Risk Takers and Controllers [MRTC] include employees who, either individually or as a part of a group, are considered to have a potentially material impact on the Group’s risk profile. The criteria for classifying individuals as MRTC for the Group are approved by the Board upon recommendation by the Compensation and Risk Committees... The 835 employees classified as MRTC were awarded total compensation of CHF 1,396 million for 2015 and total variable incentive compensation of CHF 835 million for 2015, of which CHF 587 million, or 70%, was deferred. MRTC received 50% of their deferred compensation for 2015 in the form of performance share awards or other awards which are subject to performance-based malus provisions.”

Source: Credit Suisse Group AG, Form 20-F for FY ending 31/Dec/2015. The company is part of the Investment Banking & Brokerage industry.

HEALTH CARE

The sector's sustainability profile is characterized by generally higher levels of impact related to social capital, along with leadership and governance. Overall, the sector showed average levels of reporting on SASB topics (81 percent) with hospital and clinical facilities operators providing more disclosure than other types of health care companies. Lack of disclosure was most prevalent for companies participating in the Health Care Distributors industry. However, boilerplate disclosure was common (43 percent), particularly for topics with social and human capital impacts. Some industries, however—particularly Managed Care and Health Care Delivery—also used metrics relatively often (17 percent, sector-wide).

TOPIC SPOTLIGHT

Affordability and pricing transparency

Topics that focus on pricing transparency and the affordability of health care products and services are included in the SASB Provisional Standards for five industries in the sector: i.e., Biotechnology; Pharmaceuticals; Medical Equipment & Supplies; Health Care Delivery; and Managed Care. Recent high-profile cases have increased public and regulatory concerns around this issue; for example, in October 2016, Mylan reached a \$465 million settlement with the Justice Department to resolve questions about whether the Medicaid program overpaid for EpiPen injections.³⁵ Similarly, Valeant Pharmaceuticals International's stock has dropped 90 percent over the past 15 months in part due to public outrage over skyrocketing drug prices and government investigations.³⁶ While the majority of companies analyzed recognized the existence of or potential for material impacts related to these topics, boilerplate language was extensively used. This was particularly true for hospitals and specialized clinics, medical equipment manufacturers, and biotechnology companies. Firms in the Pharmaceutical industry provided the highest level of tailored disclosure, with some companies describing special patient assistance programs. The following excerpts illustrate the differences in disclosure practices on this topic.

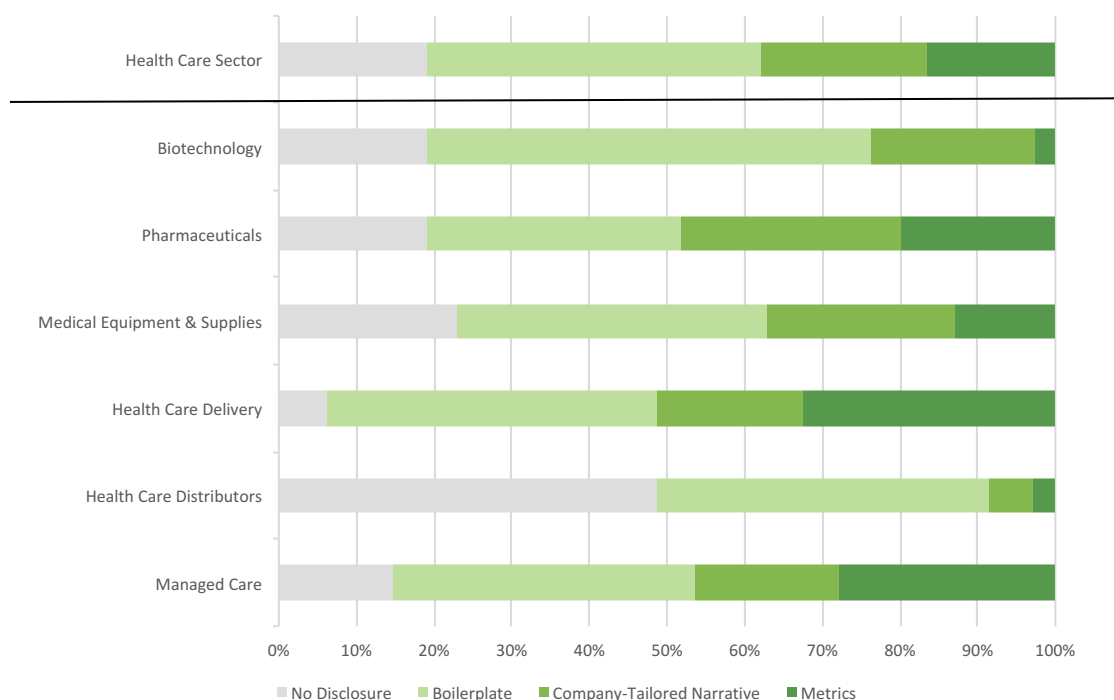
Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	19%	-
Boilerplate	43%	53%
Tailored Narrative	21%	27%
Metrics	17%	21%

tions.³⁵ Similarly, Valeant Pharmaceuticals International's stock has dropped 90 percent over the past 15 months in part due to public outrage over skyrocketing drug prices and government investigations.³⁶ While the majority of companies analyzed recognized the existence of or potential for material impacts related to these topics, boilerplate language was extensively used. This was particularly true for hospitals and specialized clinics, medical equipment manufacturers, and biotechnology companies. Firms in the Pharmaceutical industry provided the highest level of tailored disclosure, with some companies describing special patient assistance programs. The following excerpts illustrate the differences in disclosure practices on this topic.

35 "Mylan to pay \$465 million EpiPen settlement". The Washington Post. October 7, 2016.

36 "Valeant Plunges Again, Warning 'Could Still Be Surprises'" Bloomberg. November 8, 2016.

Figure 13. Sustainability disclosure in SEC filings for FY 2015 (Health Care sector)



Sample Disclosures

Topic: Affordability & Fair Pricing

Industries: Biotechnology; Pharmaceuticals; and, Medical Equipment & Supplies; and, Pharmaceuticals

SASB Metrics for the Biotechnology and Pharmaceuticals industries:

- Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period
- Ratio of weighted average rate of net price increases (for all products) to the annual increase in the U.S. Consumer Price Index

scription and over-the-counter drugs, hospital and professional products) was below the U.S. Consumer Price Index (CPI)."

Source: Johnson & Johnson. Form 10-K for FY ending 3/Jan/2016. The company is part of the Pharmaceuticals industry, but it is also a representative company in the Medical Equipment & Supplies industry.

METRICS

"United States Distribution of Remodulin, Tyvaso, Orenitram, and Unituxin... We have generally increased the price of Tyvaso by 4.9 percent annually, with the last such price increase becoming effective on January 1, 2015. We have not increased the price of Remodulin since 2010. We have also established patient assistance programs in the United States, which provide our treprostinil-based products to eligible uninsured or under-insured patients at no charge. Accredo and Caremark assist us with the administration of these programs."

Source: United Therapeutics Corporation. Form 10-K for FY ending 31/Dec/2015. The company is part of the Biotechnology industry.

BOILERPLATE

"Cost containment measures in the United States and other countries resulting in pricing pressures could have a negative impact on our future operating results: Initiatives sponsored by government agencies, legislative bodies and the private sector to limit the growth of healthcare costs, including price regulation and competitive pricing, are ongoing in markets where we do business. Pricing pressure has also increased due to continued consolidation among healthcare providers, trends toward managed care, the shift towards governments becoming the primary payers of healthcare expenses and government laws and regulations relating to sales and promotion, reimbursement and pricing generally. Reductions in reimbursement levels or coverage for our products or other cost containment measures, including any that reduce medical procedure volumes, could unfavorably affect our future operating results."

Source: Stryker Corporation. Form 10-K for FY ending 11/Feb/2016. The company is part of the Medical Equipment & Supplies industry.

COMPANY-TAILORED NARRATIVE

"The Company is aware that its products are used in an environment where, for more than a decade, policymakers, consumers and businesses have expressed concerns about the rising cost of health care. In response to these concerns, the Company has a long-standing policy of pricing products responsibly. For the period 2005 - 2015, in the United States, the weighted average compound annual growth rate of the Company's net price increases for health care products (pre-

TOPIC SPOTLIGHT

Counterfeit Drugs

The topic of “Counterfeit Drugs” was included in the Provisional Standards for three industries in the sector: i.e., Biotechnology, Pharmaceuticals, and Health Care Distributors. The World Health Organization estimates that the global market for counterfeit drugs has reached \$431 billion, representing one percent of the U.S.’s supply, and ten to 15 percent of the world’s pharmaceuticals market. This issue presents a significant health and safety risk to consumers with an estimated 100,000 annual deaths attributed to substandard or counterfeit drugs worldwide.^{37, 38} Lack of disclosure around the risks posed by counterfeit products was the norm: almost half of companies did not provide disclosure on this front. When available, almost all disclosures analyzed used boilerplate language. The following excerpts illustrate the differences in disclosure practices on this topic in the Pharmaceuticals industry.

Sample Disclosures

Topic: Counterfeit Drugs

Industry: Pharmaceuticals

SASB Metrics:

- Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting
- Description of process for alerting end customers and business partners of potential or known risks associated with counterfeit products
- Number (and description) of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products

BOILERPLATE

“The illegal distribution and sale by third parties of counterfeit versions of our products or stolen products could have a negative impact on our reputation and business. Third parties may illegally distribute and sell counterfeit versions of our products, which do not meet our rigorous manufacturing and testing standards. A patient who receives a counterfeit drug may be at risk for a number of dangerous health consequences. Our reputation and business could suffer harm as a result of counterfeit drugs sold

under our brand name. In addition, thefts of inventory at warehouses, plants or while in-transit, which are then not properly stored and are later sold through unauthorized channels, could adversely impact patient safety, our reputation and our business.”

Source: Bristol-Myers Squibb Company, Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

“Counterfeit medicines pose a risk to patient health and safety because of the conditions under which they are manufactured—often in unregulated, unlicensed, uninspected and unsanitary sites—as well as the lack of regulation of their contents. Failure to mitigate the threat of counterfeit medicines, which is exacerbated by the complexity of the supply chain, could adversely impact our business, by, among other things, causing the loss of patient confidence in the Pfizer name and in the integrity of our medicines, potentially resulting in lost sales, product recalls, and an increased threat of litigation. We undertake significant efforts to counteract the threats associated with counterfeit medicines, including, among other things, working with the FDA and other regulatory authorities and multinational coalitions to combat the counterfeiting of medicines and supporting efforts by law enforcement authorities to prosecute counterfeiters; assessing new and existing technologies to seek to make it more difficult for counterfeiters to copy our products and easier for patients and healthcare providers to distinguish authentic from counterfeit medicines; implementing business practices designed to protect patient health; promoting public policies intended to hinder counterfeiting; working diligently to raise public awareness about the dangers of counterfeit medicines; and working collaboratively with wholesalers, pharmacies, customs offices, and law enforcement agencies to increase inspection coverage, monitor distribution channels, and improve surveillance of distributors and repackagers. No assurance can be given, however, that our efforts and the efforts of others will be entirely successful, and the presence of counterfeit medicines may continue to increase.”

Source: Pfizer, Inc., Form 10-K for FY ending 31/Dec/2015.

METRICS

“Patient and consumer safety... We strive to minimise the risk of counterfeit medicines. In 2015, we extended our end-to-end supply chain serialisation programme, Fingerprint, across 86 packaging lines in more than 18 manufacturing sites. The programme applies unique serial ‘fingerprints’ on products and logs them into a government-managed database, which they can be verified against at any point in the supply chain.”

Source: GlaxoSmithKline PLC, Form 20-F for FY ending 31/Dec/2015.

37 Gena, Somra. “Deadly fake Viagra: Online pharmacies suspected of selling counterfeit drugs”. CNN. August 31, 2015

38 Miller, Henry. “Fake and Flawed Medicines Threaten Us All”. Forbes, 25 Jul 2012

INFRASTRUCTURE

The sector's sustainability profile is characterized by generally higher levels of impact associated with the environment, along with business model and innovation. Overall, the sector showed relatively high levels of reporting on SASB topics (84 percent) with gas and electric utilities leading the way. On the other hand, the real estate industries provided lower levels of disclosure. Boilerplate language was relatively common in all industries (42 percent), including for topics related to the environmental and social impacts of project development and workforce health and safety. The use of metrics was high relative to other sectors (22 percent) but mixed within industries.

TOPIC SPOTLIGHT

Greenhouse Gas Emissions

The topic of "Greenhouse Gas Emissions" is included in the Provisional Standards for two industries in the Infrastructure sector: Electric Utilities and Waste Management. According to the U.S. Environmental Protection Agency (EPA), the electricity generation segment was responsible for 30 percent of total U.S. GHG emissions in 2014.³⁹ In their annual SEC filings, all electricity-generating companies in the analysis recognized the existence of or potential for material impacts related to evolving climate change regulations; moreover, all companies provided

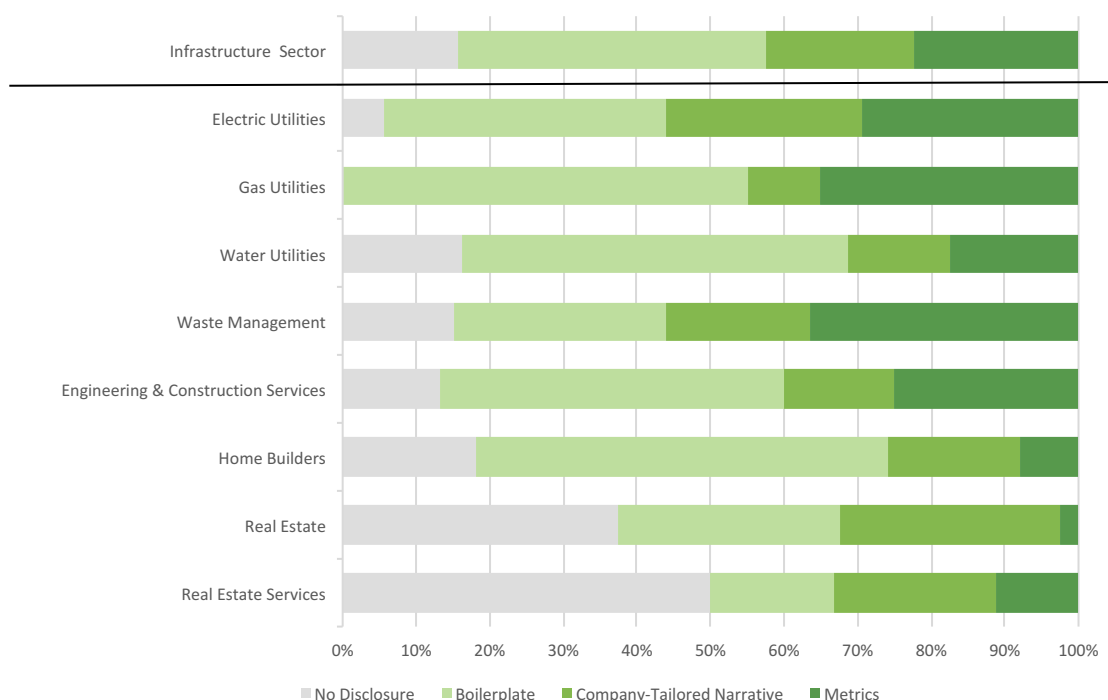
39 "Overview: Sources of Greenhouse Gas Emissions". Environmental Protection Agency. October 2016.

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	16%	-
Boilerplate	42%	50%
Tailored Narrative	20%	24%
Metrics	22%	27%

metrics when describing these risks. Generally, quantitative information was provided either in the form of direct greenhouse gas emissions generated (although differences in reporting methods existed) and/or each company's energy-generation portfolio mix, including their use of renewable resources. On the other hand, not all waste management companies that operate landfills provided narrative on the topic, in spite of the fact that, according to the EPA, 18 percent of methane U.S. emissions are generated by landfills and that methane emissions constitute 9 percent of total U.S. GHG emissions.⁴⁰ When available, disclosure on the topic was mixed between use of boilerplate, company-tailored narrative, and metrics. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Waste Management industry.

40 "Overview of Greenhouse Gases: Methane Emissions," U.S. Environmental Protection Agency. July 2, 2014.

Figure 14. Sustainability disclosure in SEC filings for FY 2015 (Infrastructure sector)



Sample Disclosures

Topic: Greenhouse Gas Emissions

Industry: Waste Management

SASB Metrics:

- (1) Gross global Scope 1 emissions, (2) percentage covered under emissions-limiting regulation, and (3) percentage covered under emissions-reporting regulation
- Total landfill gas generated, percentage flared, percentage used for energy
- Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets.

BOILERPLATE

"The waste and recycling industries are subject to extensive government regulation, and existing or future regulations may adversely affect our current or future operations, increase our costs of operations, or require us to make additional capital expenditures... Environmental advocacy groups and regulatory agencies have been focusing considerable attention on the emissions of greenhouse gases and their potential role in climate change... Additionally, certain states are contemplating air pollution control regulations that are more stringent than existing and proposed federal regulations. Changing environmental regulations could require us or enterprises with which we do business to take any number of actions, including the purchase of emission allowances or installation of additional pollution control technology, and could make some operations less profitable, which could reduce the ability or willingness of our customers to use our services and adversely affect our results of operations."

Source: Quest Resource Holding Corporation. Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"Recent Policy Debate Regarding Climate Change and Renewable Energy. The public and political debate over GHG emissions (principally CO₂ and methane) and their contribution to climate change continues both internationally and domestically. Any resulting regulations could in the future affect our business. As is the case with all combustion, our facilities emit CO₂, however [Energy from Waste] is recognized as creating

net reductions in GHG emissions and is otherwise environmentally beneficial... In October 2015, EPA published two new rules regulating greenhouse gas emissions. The first rule, the Clean Power Plan, regulates existing fossil fuel fired electric generating units. The second regulation sets greenhouse gas emissions standards for new power plants. Our facilities are not regulated entities under either of these rules."

Source: Covanta Holding Corporation. Form 10-K for FY ending 26/Feb/2016.

METRICS

"Our landfill operations emit methane, identified as a GHG. There are a number of legislative and regulatory efforts at the state, regional and federal levels to curtail the emission of GHGs to ameliorate the effect of climate change. Should comprehensive federal climate change legislation be enacted, we expect it could impose costs on our operations that might not be offset by the revenue increases associated with our lower-carbon service options, the materiality of which we cannot predict... We develop, operate and promote projects for the beneficial use of landfill gas through our WM Renewable Energy Program. Landfill gas is produced naturally as waste decomposes in a landfill. The methane component of the landfill gas is a readily available, renewable energy source that can be gathered and used beneficially as an alternative to fossil fuel... At December 31, 2015, we had 136 landfill gas beneficial use projects producing commercial quantities of methane gas at 122 of our solid waste landfills and four third-party landfills. At 108 of these landfills, the processed gas is used to fuel electricity generators. The electricity is then sold to public utilities, municipal utilities or power cooperatives. At 16 landfills, the gas is used at the landfill or delivered by pipeline to industrial customers as a direct substitute for fossil fuels in industrial processes. At 11 landfills, the landfill gas is processed to pipeline-quality natural gas and then sold to natural gas suppliers. At one landfill, the gas is processed into liquefied natural gas and used as vehicle fuel."

Source: Waste Management, Inc. Form 10-K for FY ending 31/Dec/2015.

TOPIC SPOTLIGHT

Resource use efficiency

Topics focused on the efficient use of resources by physical infrastructure—such as residential, non-residential, and commercial buildings; single-family homes; and other types of constructions—and surrounding sustainability-related services are included in the Provisional Standards for four industries in the sector: i.e., Home Builders; Engineering & Construction Services; Real Estate; and Real Estate Services. It is well known that buildings consume significant amounts of energy; for example, according to the Energy Information Administration, 41 percent of total U.S. energy consumption in 2014 took place in residential

and commercial buildings.⁴¹ However, reporting by companies in the aforementioned industries on the risks and/or opportunities presented by the integration of sustainability considerations into project design was lacking in over half of cases analyzed. Relatively speaking and when available, real estate companies and home builders provided more tailored disclosure on this front. Disclosure on the efficient use of energy was more common than on water. The following excerpts illustrate the differences in disclosure practices on this topic in the Real Estate industry.

Sample Disclosures

Topic: Energy Management

Industry: Real Estate Owners, Developers & Investment Trusts

SASB Metrics:

- Energy consumption data coverage as a percentage of floor area, by property subsector
- Total energy consumed by portfolio area with data coverage, percentage grid electricity, and percentage renewable, each by property subsector
- Like-for-like change in energy consumption of portfolio area with data coverage, by property subsector
- Percentage of eligible portfolio that (1) has obtained an energy rating and (2) is certified to ENERGY STAR®, by property subsector
- Description of how building energy management considerations are integrated into property investment analysis and operational strategy

BOILERPLATE

"We may incur significant costs to comply with environmental laws and environmental contamination may impair our ability to lease and/or sell real estate... [W]e may become subject to costs or taxes, or increases therein, associated with natural resource or energy usage (such as a "carbon tax"). These costs or taxes could increase our operating costs and decrease the cash available to pay our obligations or distribute to equity holders."

Source: Vornado Realty Trust, Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"We have a commitment to sustainability and consider the environmental impacts of our business activities. Sustainability and social responsibility are key drivers of our focus on creating the best apartment communities for residents to live, work and play. We have a dedicated in-house team that initiates and applies sustainable practices in all aspects of our business, including investment activities, development, property operations and property management activities. With its high density, multifamily housing is, by its nature, an environmentally friendly property type... When developing and renovating our properties, we strive to reduce energy and water usage by investing in energy saving technology while positively impacting the experience of our residents and the value of our assets. We continue to implement a combination of irrigation, lighting, HVAC and renewable energy improvements at our properties that will reduce energy and water consumption. The Company was named the 2015 Global Residential Sector Leader by the Global Real Estate Sustainability Benchmark ("GRESB") survey... For 2016, we have added an express company-wide goal regarding enhanced sustainability efforts. Employees, including our executives, will have their performance against this goal evaluated as part of our annual performance review process."

Source: Equity Residential, Form 10-K for FY ending 31/Dec/2015.

METRICS

"We incorporate sustainable thinking into many of the areas of our business [including] how we plan, develop and operate our properties... Through our continued use of energy conservation practices, energy efficiency projects, and continuous monitoring and reporting, we have reduced our energy consumption at comparable properties every year since 2003. As a result, excluding new developments and expansions, we have reduced the electricity usage over which we have direct control by 337 million kWhs since 2003. This represents a 32% reduction in electricity usage across a portfolio of comparable properties. Our documented reduction in greenhouse gas emissions resulting from our energy management efforts is 213,741 metric tons of CO₂e. We have been globally recognized for our energy efficiency programs and transparency in disclosure practices... in 2015 we received the highest designation of a Green Star rating from the Global Real Estate Sustainability Benchmark, or GRESB, for the second year."

Source: Simon Property Group, Inc. Form 10-K for FY ending 31/Dec/2015.

⁴¹ "FAQs: How much energy is consumed in residential and commercial buildings in the United States?" Energy Information Administration FAQ. February 22, 2016.

NON-RENEWABLE RESOURCES

The sector's sustainability profile is characterized by generally higher levels of impact associated with the environment, along with leadership and governance. Most industries showed high levels of reporting on SASB topics (84 percent), with companies involved in mining for coal and metals, as well as those involved in the distribution of oil and gas, providing relatively higher levels of disclosure. Overall, the sector's use of boilerplate was below average (38 percent), while use of metrics was slightly above it (27 percent). Quantitative disclosures were most commonly used by companies involved in metal mining operations, and the refining and marketing of oil and gas. Use of metrics tended to address waste management and the health and safety of the workforce. Boilerplate language was generally applied to environmental issues related to air quality and greenhouse gas emissions, as well as water management.

TOPIC SPOTLIGHT

Water management

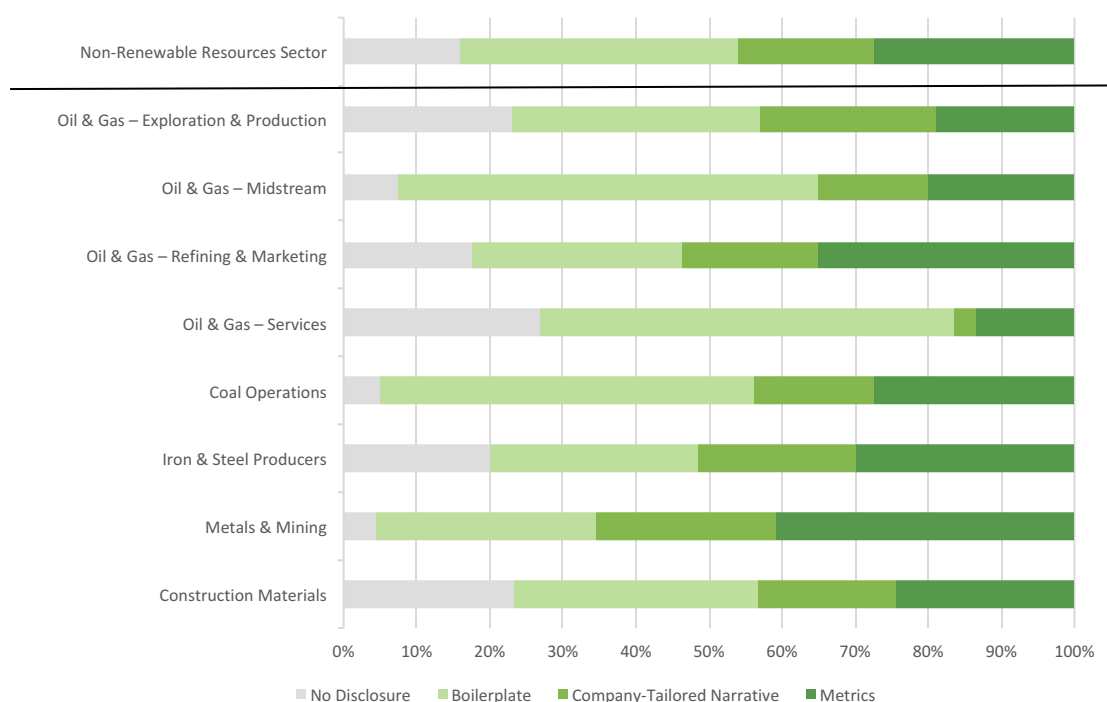
Water-related topics—such as water availability, quality, or both—are included in the Provisional Standards for all industries in the sector. According to MSCI ESG Research, companies involved in coal and metals mining operations, as well as those involved in the exploration, production, refining, and marketing of oil and gas have some of the highest water intensity levels across 130

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	16%	-
Boilerplate	38%	45%
Tailored Narrative	19%	22%
Metrics	27%	33%

sub-industries.⁴² In their annual SEC filings, virtually all companies analyzed, acknowledged the existence of or potential for material impacts related to water issues. Relatively speaking, metal mining companies provided more tailored disclosures on this front. On the other hand, lack of disclosure on water-related risks was typically the norm for the remaining industries in the sector, in particular for iron, steel, and other construction materials manufacturers, as well as for oil and gas services firms. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Metals & Mining industry.

⁴² "ESG Issue Report: Water: Upstream and Downstream Impacts from a Well Running Dry – Executive Summary." MSCI ESG Research. September 2013.

Figure 15. Sustainability disclosure in SEC filings for FY 2015 (Non-Renewable Resources sector)



Sample Disclosures

Topic: Water Management

Industry: Metals & Mining

SASB Metrics:

- Total fresh water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress
- Number of incidents of non-compliance with water-quality permits, standards, and regulations

BOILERPLATE

"We are committed to sustainability, as we cannot grow without taking into account the physical limits of our planet or the well-being of communities in which we operate... We are also committed to reducing the consumption of water in our activities and to use it more efficiently, especially through reuse and recirculation of water. We actively support an open dialogue with our main stakeholders (governments, communities, customers, suppliers, employees and others), because we recognize that only by acting together we can achieve sustainable growth and contribute to social welfare."

Source: Vale S.A. Form 20-F for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"Our mining operations require significant quantities of water for mining, ore processing and related support facilities. Our operations in North and South America and Australia are in areas where water is scarce and competition among users for continuing access to water is significant. Continuous production at our mines is dependent on our ability to maintain our water rights, claims and contracts and to defeat claims adverse to our current water uses in legal proceedings. Although each of our operations currently has sufficient water rights, claims and contracts to cover its operational demands, we cannot predict the potential outcome of pending or future legal proceedings relating to our water rights, claims, contracts and uses. Water shortages may also result from weather or environmental and climate impacts out of the Company's control. For example, the continuation of the below average rainfall or the occurrence of drought in southwest Australia could impact our raw water supply at Boddington. While we incorporated systems to address the impact of dry season as part of our operating plans, we can make no assurances that those systems will be sufficient to address all shortages in water supply, which could result in production and processing

interruptions. The loss of some or all water rights for any of our mines, in whole or in part, or shortages of water to which we have rights could require us to curtail or shut down mining production and could prevent us from pursuing expansion opportunities. Laws and regulations may be introduced in some jurisdictions in which we operate which could limit our access to sufficient water resources in our operations, thus adversely affecting our operations."

Source: Newmont Mining Corporation. Form 10-K for FY ending 31/Dec/2015.

METRICS

"The sustainability of our operations relies on our ability to obtain an appropriate quality and quantity of water, use it responsibly and manage it appropriately, including taking account of natural supply variations... At the operational level, we maintain quantitative water balance models to predict and support the management of water inputs, use and outputs and to enable timely management responses to water-related risks. Where possible, we seek to use lower-quality or recycled water to minimise extraction requirements from higher-quality water resources... We report on our water use publicly, consistent with the Input Output model of the Minerals Council of Australia's Water Accounting Framework (WAF)... Under the WAF, water is categorised as Type 1 (close to drinking water standards), Type 2 (suitable for some purposes), and Type 3 (unsuitable for most purposes). In FY2015, our total water input (water intended for use) was 340,200 megalitres across the Group, with 85 per cent defined as Type 2 or Type 3. Our use of Type 2 and Type 3 water demonstrates our approach to utilising lower-quality water wherever feasible."

Source: BHP Billiton Limited. Form 20-F for FY ending 30/Jun/2015.

TOPIC SPOTLIGHT

Greenhouse Gas Emissions

Excluding the Oil & Gas Services industry, the topic of direct Greenhouse Gas Emissions is included in the SASB Provisional Standards for all industries in the sector. All companies analyzed, except for two of iron and steel-producing companies, provided disclosure on the regulatory risks from climate change-related emissions. In almost two-thirds of cases, however, such disclosure was provided using boilerplate narrative. This type of language was most commonly used by companies in the Coal Operations industry. Quantitative reporting, on the other hand, was relatively more common by companies involved in oil and gas and metal and mining activities. Filers of Form 20-F in these industries tended to use more metrics than 10-K filers. The following excerpts illustrate the differences in disclosure practices on this topic for the Oil & Gas Exploration & Production industry.

Sample Disclosures

Topic: Greenhouse Gas Emissions

Industry: Oil & Gas – Exploration & Production

SASB Metrics:

- Gross global Scope 1 emissions, percentage covered under a regulatory program, percentage by hydrocarbon resource
- Amount of gross global Scope 1 emissions from: (1) combustion, (2) flared hydrocarbons, (3) process emissions, (4) directly vented releases, and (5) fugitive emissions/leaks
- 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

BOILERPLATE

“Climate change initiatives may result in significant operational changes and expenditures, reduced demand for our products and adversely affect our business. We recognize that climate change is a global environmental concern. Continuing political and social attention to the issue of climate change has resulted in both existing and pending international agreements and national, regional or local legislation and regulatory measures to limit greenhouse gas emissions. These agreements and measures may require significant equipment modifications, operational changes, taxes, or purchase of emission credits to reduce emission of greenhouse gases from our operations, which may result in substantial capital expenditures and compliance, operating, maintenance and remediation costs... The imposition and enforcement of stringent greenhouse gas emissions reduction targets could severely and adversely impact the oil and gas industry and significantly reduce the value of our business.”

Source: Hess Corporation. Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

“International accords and underlying regional and national regulations covering greenhouse gas emissions continue to evolve with uncertain timing and outcome, making it difficult to predict their business impact. For many years, the Corporation has taken into account policies established to reduce energy-related greenhouse gas emissions in its long-term Outlook for Energy, which is used as a foundation

for assessing the business environment and business strategies and investments... For purposes of the Outlook for Energy, we continue to assume that governments will enact policies that impose rising costs on energy-related CO₂ emissions, which we assume will reach an implied cost in OECD nations of about \$80 per tonne in 2040. China and other leading non-OECD nations are expected to trail OECD policy initiatives. Nevertheless, as people and nations look for ways to reduce risks of global climate change, they will continue to need practical solutions that do not jeopardize the affordability or reliability of the energy they need. Thus, all practical and economically viable energy sources, both conventional and unconventional, will be needed to continue meeting global energy needs – because of the scale of worldwide energy demand.”

Source: Exxon Mobil Corporation. Form 10-K for FY ending 31/Dec/2015.

METRICS

“Our direct GHG emissions decreased from 76 million tonnes of CO₂ equivalent in 2014 to 72 million in 2015. The level of flaring in our Upstream businesses fell by 8% in 2015 compared with 2014, despite an increase in flaring levels in Malaysia in line with increased oil production in 2015. Our emissions also decreased as a result of divestments (for example, in Nigeria and the Geelong refinery in Australia), a higher level of maintenance shutdowns and the start-up of Quest. These decreases were partially offset by updated Global Warming Potentials (GWPs)... In 2015, we signed up to the World Bank’s “Zero Routine Flaring by 2030” initiative. This is an important initiative to ensure all stakeholders, including governments and companies, work together to address routine flaring. Flaring, or burning off, of gas in our Upstream businesses contributed around 17% to our overall GHG emissions in 2015. The majority of this flaring takes place at facilities where there is no infrastructure to capture the gas produced with oil, known as associated gas. Gas flaring from these operations may rise in coming years if oil production increases before the related gas-gathering equipment is in place. In October 2015, we brought a project on stream to capture gas for reinjection in Malaysia. At the end of 2015, we also brought a project on stream that captures gas from the Majnoon field in Iraq to help supply the domestic market. We expect to further reduce our flaring levels in 2016, as gas gathering facilities that started at the end of 2015 in Malaysia and Iraq reach full capacity.”

Source: Royal Dutch Shell PLC, Form 20-F for FY ending 31/Dec/2015.

RENEWABLE RESOURCES & ALTERNATIVE ENERGY

The sector's sustainability profile is characterized by generally higher levels of impact associated with the environment, along with business model and innovation. Most industries showed average to high levels of reporting on SASB topics (85 percent, sector-wide), with biofuel companies and manufacturers of fuel cells and industrial batteries providing the highest levels of disclosure. However, the use of boilerplate language was extremely common (53 percent), especially for environmental and human capital topics. Overall, the sector's use of metrics was below average (19 percent) with marked differences between industries. Companies in the Pulp & Paper Products industry, for example, tended to measure performance at a significantly higher rate, in particular on energy management and fiber sourcing topics.

TOPIC SPOTLIGHT

Environmental and social impacts of operations and project development

Topics focused on the environmental and social impacts of the projects undertaken by companies in this sector—such as impacts on ecosystems, local communities, and indigenous peoples—are included in the SASB Provisional Standards for three industries: i.e., Solar Energy; Wind Energy; and Forestry & Logging. One third of companies analyzed did not provide disclosure on the different risks that these topics represent. Moreover, when available, virtually all disclosure was provided using boilerplate

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	15%	-
Boilerplate	53%	63%
Tailored Narrative	13%	15%
Metrics	19%	23%

language, mainly in the form of broad statements on regulations protecting endangered species (for solar and wind energy companies) and aboriginal claims to land (for forestry companies). The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Forestry & Logging industry.

Sample Disclosures

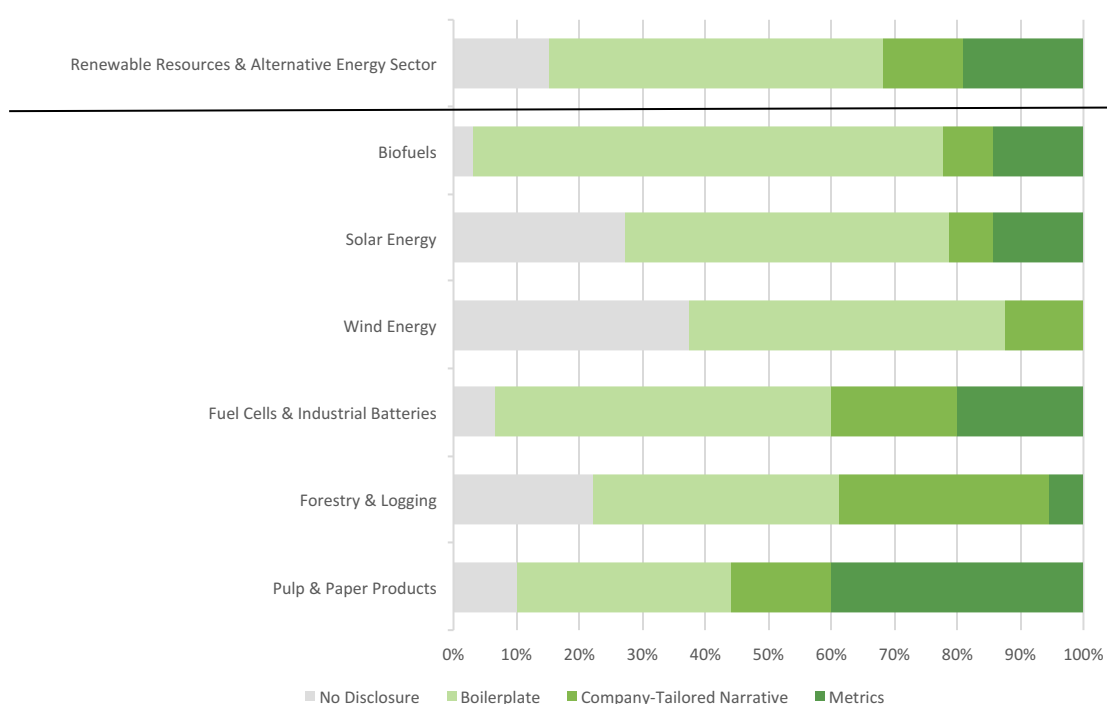
Topic: Rights of Indigenous Peoples

Industry: Forestry & Logging

SASB Metrics:

- Area of forestland in indigenous land
- Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and the local community

Figure 16. Sustainability disclosure in SEC filings for FY 2015 (Renewable Resources & Alternative Energy sector)



BOILERPLATE

"Our manufacturing businesses may have difficulty obtaining wood fiber at favorable prices, or at all. Wood fiber is the principal raw material we use in our business. We use both virgin fiber – wood chips and logs – and recycled fiber – old newspapers, old magazines and sorted office paper – as fiber sources for our pulp, tissue and paper mills. The primary source for wood fiber is timber. Regulatory developments, activist campaigns and litigation advanced by Aboriginal groups or other interested parties have caused, and may cause in the future, significant reductions in the amount of timber available for commercial harvest in Canada."

Source: Resolute Forest Products, Inc. Form 10-K for FY ending 31/Dec/2015. The company is part of the Pulp & Paper Products industry, but it is also a representative company in the Forestry & Logging industry.

COMPANY-TAILORED NARRATIVE

"Many of the Canadian timberlands are subject to the constitutionally protected treaty or common-law rights of aboriginal peoples of Canada... In 2008, [Forest Products Association of Canada] FPAC, of which we are a member, signed a Memorandum of Understanding with the Assembly of First Nations, under which the parties agree to work together to strengthen Canada's forest sector through economic-development initiatives and business investments, strong environmental stewardship and the creation of skill-development opportunities particularly targeted to aboriginal youth... In Canada, 21 member companies of the FPAC, including Weyerhaeuser's Canadian subsidiary, announced in May 2010 the signing of a Canadian Boreal Forest Agreement (CBFA) with nine environmental organizations... CBFA signatories continue to work on management plans with provincial governments, and seek the participation of aboriginal and local communities in advancing the goals of the CBFA. Progress under the CBFA is measured and reported on by an independent auditor."

Source: Weyerhaeuser Company. Form 10-K for FY ending 31/Dec/2015.

METRICS

Disclosure example not available.

TOPIC SPOTLIGHT

Air Quality

The topic of Air Quality is included in the Provisional Standard for two industries in the sector: i.e., Biofuels and Pulp & Paper Products. Disclosure levels on the risks stemming from mismanaging the release of regulated non-GHG air emissions into the environment were high, with virtually all companies analyzed recognizing the existence of or potential for material impacts related to the topic. However, boilerplate language was extensively used, in particular by biofuel companies. Disclosure by firms involved in the manufacturing of paper products was more tailored, generally taking the form of specific capital expenditures made to comply with maximum achievable control technology (MACT) regulations. The following excerpts illustrate the differences in disclosure practices on this topic in the Pulp & Paper industry.

Sample Disclosures

Topic: Air Quality

Industry: Pulp & Paper Products

SASB Metric:

- Air emissions for the following pollutants: NOx (excluding N2O), SOx, volatile organic compounds (VOCs), particulate matter (PM), and hazardous air pollutants (HAPs)

BOILERPLATE

"Our facilities are subject to significant federal, state, local and foreign environmental protection laws with respect to air, water and emissions as well as the disposal of solid waste. We believe that we are operating in substantial compliance with these laws and regularly incur capital and operating expenditures in order to achieve future compliance. However, these laws may change, which could require changes in our practices, additional capital expenditures or loss of carbon credits, and we may discover aspects of our business that are not in compliance. Violation of these laws can result in the imposition of significant fines and remediation costs."

Source: Schweitzer-Mauduit International, Inc., Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"Sustainable performance and development... In 2015, we received extensive North American and global recognition for our sustainability achievements, including 18 awards. Some

of the more noteworthy included... Canada's Clean50 award, which recognized a team of four Resolute employees for their roles in greatly reducing the Company's environmental incidents and greenhouse gas emissions, as well as completing environmental due diligence training, reporting on scope 3 emissions (from the supply chain), and achieving maximum achievable control technology boiler compliance; [and] the Best in Biz silver award for being North America's Most Socially or Environmentally Responsible Company of the Year in recognition of our work to minimize our resource consumption; our efforts to reduce our generation of waste, air emissions and water discharge."

Source: Resolute Forest Products, Inc. Form 10-K for FY ending 31/Dec/2015.

METRICS

"We have incurred and will incur additional material capital costs to comply with upcoming air quality regulations including the U.S. EPA Best Available Retrofit Technology rule (BART; otherwise known as the Regional Haze Rule) and the Boiler Maximum Achievable Control Technology rule (Boiler MACT). These rules require process modifications and/or upgrades of air pollution controls on boilers at two of our facilities. We have begun converting or replacing five coal-fired boilers to natural gas and upgrading site infrastructure to accommodate the new boilers, including connecting to gas supply. The total cost of these projects is estimated at \$85 million to \$90 million, of which \$33.0 million has been incurred through the end of 2015. The balance of the related spending should be substantially completed in 2016."

Source: Glatfelter. Form 10-K for FY ending 31/Dec/2015.

RESOURCE TRANSFORMATION

The sector's sustainability profile is characterized by generally higher levels of impact associated with the environment, along with business model and innovation. Disclosure on these types of issues is relatively more tailored and quantitative than others. Overall, the sector showed average levels of reporting on SASB topics (82 percent), with the Containers & Packaging industry as the standout in terms of both disclosure levels and use of metrics. Electric equipment and chemicals manufacturers also provided relatively high levels of quantitative reporting. Nonetheless, boilerplate disclosure was still common across the sector (46 percent), especially in the Aerospace & Defense industry.

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	18%	-
Boilerplate	46%	56%
Tailored Narrative	17%	20%
Metrics	19%	24%

according to the 2011 U.S. Census Bureau Annual Survey of Manufacturers, the cost of purchased electricity accounted for 2.6 percent and 3.6 percent of the total cost of materials and value added respectively.⁴³

TOPIC SPOTLIGHT

Energy Management

The topic of energy management in manufacturing operations is included in the SASB Provisional Standards for all industries in the Resource Transformation sector. Disclosure levels on the topic are high, in particular for companies involved in the manufacturing of chemicals and containers and packaging products; yet, more than half of available disclosure examples are provided using boilerplate language. The use of broad generic statements to characterize the risks stemming from this topic is more common for aerospace and defense firms and those that manufacture other industrial machinery and goods. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Containers & Packaging industry, where,

Sample Disclosures

Topic: Energy Management

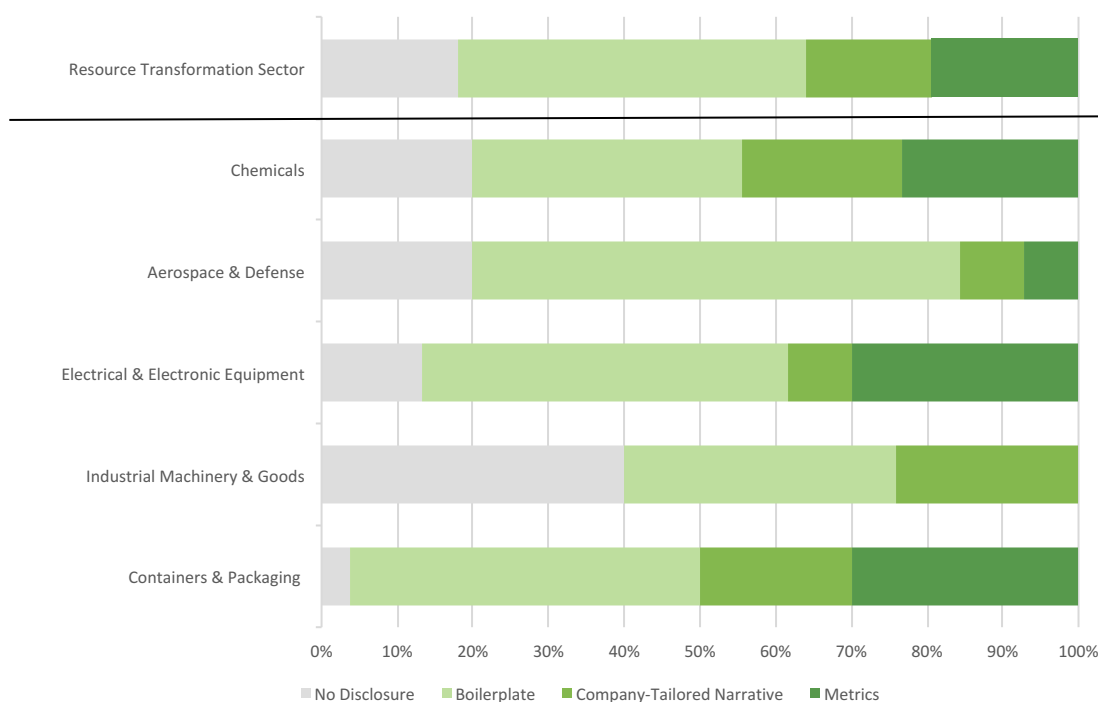
Industry: Containers & Packaging

SASB Metric:

- Total energy consumed, percentage grid electricity, percentage renewable

⁴³ SASB's calculation based on data from the United States Census Bureau, Annual Survey of Manufacturers, 2011. The following NAICS codes were used in the calculation: 32192, 3222, 326111, 326112, 32616, 327213, 33243, 3324.

Figure 17. Sustainability disclosure in SEC filings for FY 2015 (Resource Transformation sector)



BOILERPLATE

"Raw material pricing, availability and allocation by suppliers as well as energy-related costs may negatively impact our results of operations, including our profit margins. We use petrochemical-based raw materials to manufacture many of our products. The prices for these raw materials are cyclical, and increases in market demand or fluctuations in the global trade for petrochemical-based raw materials and energy could increase our costs... If we are unable to minimize the effects of increased raw material costs through sourcing, pricing or other actions, our business, consolidated financial condition or results of operations may be materially adversely affected."

Source: Sealed Air Corporation. Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

Disclosure example not available.

METRICS

"Energy at our packaging mills is obtained through purchased or self-generated fuels and electricity. Fuel sources include natural gas, by-products of the containerboard manufacturing and pulping process (including black liquor and wood waste), purchased wood waste, coal, and oil. Each of our mills self-generates process steam requirements from by-products (black liquor and wood waste), as well as from the various purchased fuels. The process steam is used throughout the production process and also to generate electricity. In 2015, our packaging mills consumed about 59 million MMBTU's of fuel to produce both steam and electricity. Of the 59 million MMBTU's consumed, about 59% was from mill generated by-products, and 41% was from purchased fuels. Of the 41% in purchased fuels, 54% was from natural gas, 32% was from purchased wood waste, and 14% was from coal and other purchased fuels."

Source: Packaging Corporation of America. Form 10-K for FY ending 31/Dec/2015.

TOPIC SPOTLIGHT

Product design for resource efficiency

Topics focused on the innovative design of products to ensure efficient use of natural resources, such as those related to fuel economy, energy efficiency, and sustainable packaging, are included in the SASB Provisional Standards for all industries in the sector.⁴⁴ Increased societal and regulatory emphasis on improved energy and materials efficiency is a key trend that creates business opportunities for companies to develop new markets through innovative product design. According to the International Council of Chemical Associations (ICCA), for example, the Chemicals industry's products enabled between 2.1 and 2.6 units of CO₂ abatement elsewhere in the economy for every unit of CO₂ emitted during chemicals manufacturing. Overall, disclosure levels on these topics are high and most disclosure is tailored to unique company circumstances. In particular, all electrical equipment manufacturers recognize the risks and/or opportunities that arise from product lifecycle impacts; disclosure on this front is typically provided in the form of narrative around specific business segments that focus on the development of energy-efficient products. Similarly, container and packaging manufacturers provide better disclosure than other companies in the sector, sometimes using quantitative information on recycled content used in product design. The following excerpts illustrate the differences in disclosure practices on this topic in the Chemicals industry.

Sample Disclosures

Topic: Product Design for Use-phase Efficiency

Industry: Chemicals

SASB Metric:

- Revenue from products designed for use-phase resource efficiency

BOILERPLATE

"New Business Opportunities. We seek to pursue new business opportunities by developing new and specialized products and technologies... We are seeking a strong position in the technological development of chemicals from renewable resources and/or using production processes that generate fewer emissions by investing in research, development and technological innovation."

Source: Braskem S.A., Form 20-F for FY ending 31/Dec/2015.

⁴⁴ "Innovations for Greenhouse Gas Reductions". International Council of Chemical Associations, July, 2009

COMPANY-TAILORED NARRATIVE

"On April 15, 2015, the Company announced its 2025 Sustainability Goals, the third set of sustainability-related goals since 1995. The 2025 Sustainability Goals include aggressive sustainability targets designed to develop breakthrough product innovations, positively impact the lives of one billion people and deliver \$1 billion in cost savings or new cash flow for the Company by valuing nature in business decisions... Dow was named to the Dow Jones Sustainability Index - the 15th time the Company has received this recognition since the index was launched. This year's announcement ties Dow as the longest-standing representative in the chemical category since the list's inception in 1999."

Source: The Dow Chemical Company. Form 10-K for FY ending 31/Dec/2015.

METRICS

"DuPont Sustainable Solutions, within the company's Safety & Protection segment, is comprised of two business units: clean technologies and consulting solutions. Effective January 1, 2016, the clean technologies business unit will become part of the Industrial Biosciences segment with the focus on working with customers to improve the performance, productivity and sustainability of their products and processes. The company will explore a range of options to maximize the growth of the consulting solutions business unit which effective January 1, 2016 will be reported within Other. Sustainable solutions net sales accounted for about 2 percent of the company's total consolidated net sales for the years ended December 31, 2015, 2014 and 2013, respectively."

Source: E. I. Du Pont de Nemours and Company. Form 10-K for FY ending 31/Dec/2015.

SERVICES

The sector's sustainability profile is characterized by generally higher levels of impact associated with social and human capital, particularly with respect to customer and employee welfare. Overall, most industries showed relatively high levels of reporting on SASB topics (83 percent), with all hotel operators, cruise lines, and education companies providing disclosures on all topics in their respective industries. On the other hand, non-disclosure was more prevalent in the Casinos & Gaming and Advertising & Marketing industries. Boilerplate language was common (46 percent), especially for social and human capital topics. Use of metrics (17 percent) was largely concentrated in the Education industry, where negative publicity and regulatory scrutiny of key topics may influence disclosure rates and quality. Use of metrics was also common in the Cruise Lines industry.

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	17%	-
Boilerplate	46%	56%
Tailored Narrative	20%	24%
Metrics	17%	21%

industry and by occupation, 47 percent are employed in food preparation and serving positions.⁴⁵ In their annual SEC filings, all companies analyzed recognized the existence of or potential for material impacts related to this topic; however, more than half of them provided disclosure on this front using boilerplate language. Broad disclosures of this sort were most commonly used by hotel operators. When available, quantitative information took the form of fines and/or settlements for labor law violations relating to minimum wage requirements, overtime pay, working conditions, etc. Relatively speaking, restaurants used more metrics when providing information on this topic than other companies in the sector. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Restaurants industry.

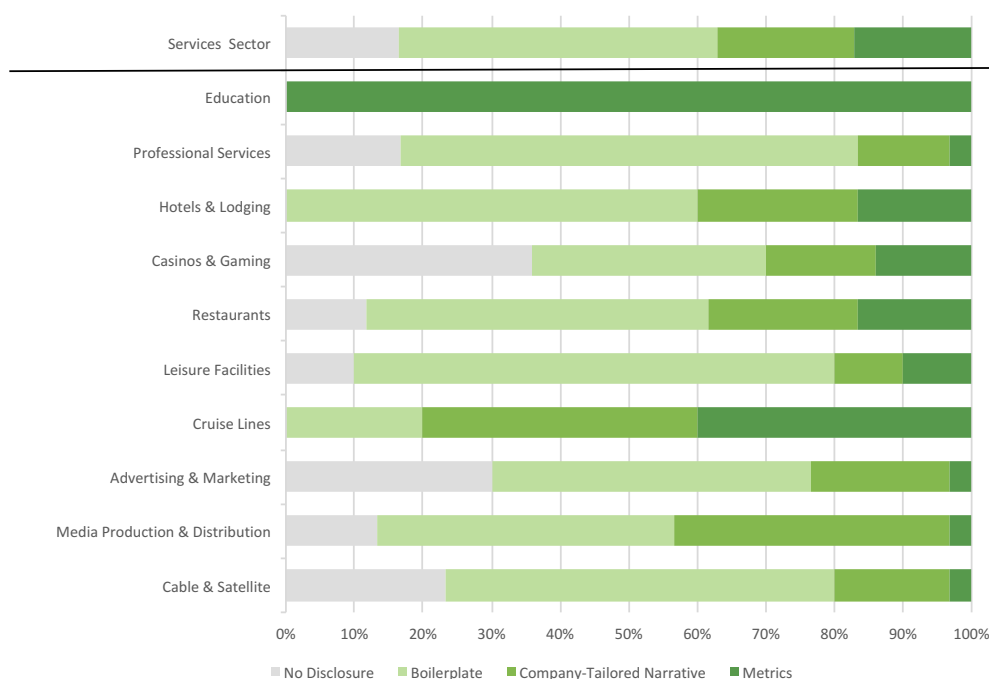
TOPIC SPOTLIGHT

Fair Labor Practices

The topic of Fair Labor Practices is included in the Provisional Standards for three industries in the Services sector: i.e., Hotels & Lodging; Restaurants; and Cruise Lines. In the context of these industries, this topic covers human capital risks stemming from high industry-wide turnover rates, minimum wage rates and fair labor standards. According to the Pew Research Center, there are currently 3.3 million workers in the U.S. who make minimum wage; of those, 55 percent are in the leisure and hospitality

45 "Who Makes Minimum Wage?" Pew Research Center. September, 2014.

Figure 18. Sustainability disclosure in SEC filings for FY 2015 (Services sector)



Sample Disclosures

Topic: Fair Labor Practices

Industry: Restaurants

SASB Metrics:

- (1) Voluntary and (2) involuntary employee turnover rate for restaurant employees
- Average hourly wage for restaurant employees, by region; percentage of employees earning minimum wage
- Amount of legal and regulatory fines and settlements associated with labor law violations
- Amount of tax credit received for hiring through enterprise zone programs

BOILERPLATE

"Our restaurant operations are subject to United States and Canadian federal and state laws governing such matters as minimum wages, working conditions, overtime and tip credits. As federal and state minimum wage rates increase, we may need to increase not only the wages of our minimum wage employees, but also the wages paid to employees at wage rates that are above minimum wage. Labor shortages, increased employee turnover and health care mandates could also increase our labor costs. This in turn could lead us to increase prices which could impact our sales. Conversely, if competitive pressures or other factors prevent us from offsetting increased labor costs by increases in prices, our profitability may decline."

Source: Darden Restaurants, Inc. Form 10-K for FY ending 31/May/2015.

COMPANY-TAILORED NARRATIVE

"On July 2, 2014, a purported class action lawsuit was filed against one of our subsidiaries by Jason Lofstedt, a former employee of one of our subsidiaries. The lawsuit was filed in the California Superior Court, County of Riverside. The complaint alleges, among other things, violations of the California Labor Code, failure to pay overtime, failure to provide meal and rest periods, and violations of California's Unfair Competition Law. The complaint seeks, among other relief, collective and class certification of the lawsuit, unspecified damages, costs and expenses, including attorneys' fees, and such other relief as the Court might find just and proper. In addition, more recently, several other purported class action lawsuits based on similar claims

and seeking similar damages were filed against the subsidiary: on October 30, 2015 in the California Superior Court, County of San Bernardino by Jazmin Dabney, a former subsidiary employee; on November 3, 2015, in the United States District Court, Eastern District of California by Clara Manchester, a former subsidiary employee; and on November 30, 2015 in the California Superior Court, County of Yolo by Tanner Maginnis, a current subsidiary assistant manager."

Source: Panera Bread Company. Form 10-K for FY ending 29/Dec/2015.

METRICS

"In August 2004, certain current and former hourly restaurant team members filed a putative class action lawsuit against us in California Superior Court alleging violations of California labor laws with respect to meal periods and rest breaks, styled as Hohnbaum, et al. v. Brinker Restaurant Corporation, et al. On August 6, 2014, the parties reached a preliminary settlement agreement, which remained subject to court approval, to resolve all claims in exchange for a settlement payment not to exceed \$56.5 million. On December 12, 2014, the court granted final approval of the settlement agreement. In February 2015, we funded the settlement in the amount of \$44.0 million against our previously established reserve. We do not expect any further payments related to this matter."

Source: Brinker International, Inc. Form 10-K for FY ending 24/Jun/15.

TOPIC SPOTLIGHT

Energy Management

Topics related to the efficient use of energy in operations are included in the Provisional Standards for five industries in the Services sector: i.e., Hotels & Lodging; Casinos & Gaming; Restaurants; Leisure Facilities; and Cable & Satellite. Disclosure levels on this topic were especially low for cable and satellite companies and, to a lesser extent, for casinos. On the other hand, virtually all hotel and restaurant-operating companies analyzed provided disclosure on this front. Overall, available disclosures were characterized by a prevalent use of boilerplate language, with generic reporting identified in almost two-thirds of cases. The following excerpts illustrate the differences in disclosure practices on energy (and water) management for companies in the Hotels & Lodging industry, where energy costs comprise between 3 and 6 percent of operating costs.⁴⁶

Sample Disclosures

Topic: Energy & Water Management

Industry: Hotels & Lodging

SASB Metrics:

- Total energy consumed, percentage grid electricity, percentage renewable
- Total water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress

BOILERPLATE

"Macroeconomic and other factors beyond our control that could adversely affect and reduce demand for our products and services include, but are not limited to: ... the physical risks of climate change and/or availability and quality of natural resources, such as a secure and economical supply of water or energy in some locations."

Source: *Starwood Hotels & Resorts Worldwide, Inc., Form 10-K for FY ending 31/Dec/2015.*

COMPANY-TAILORED NARRATIVE

"We take our commitment to protecting the environment seriously. We have collaborated with Audubon International to further the "greening" of our resorts in our North America

segment through the Audubon Green Leaf Eco-Rating Program for Hotels. The Audubon partnership is just one of several programs incorporated into our green initiatives. We have more than 20 years of energy conservation experience that we have put to use in implementing our environmental strategy across all of our segments. This strategy includes further reducing energy and water consumption, expanding our portfolio of green resorts, including LEED (Leadership in Energy & Environmental Design) certification, educating and inspiring associates and guests to support the environment, and embracing innovation."

Source: *Marriott Vacations Worldwide Corporation. Form 10-K for FY ending 1/Jan/2016.*

METRICS

"We take steps to manage our environmental impact in a responsible way. By delivering more environmentally sustainable hotels, we can drive cost efficiencies for owners as well as meet the expectations of all our stakeholders. We achieve this objective through our core environmental initiative: the IHG Green Engage™ system: our group-wide online sustainability programme helps hotels manage the use of energy, carbon, water and waste, and minimise their overall environmental impact..."

Source: *InterContinental Hotels Group PLC. Form 20-F for FY ending 31/Dec/2015*

KPIs	2015 Status	2016 specific priorities
Carbon footprint per occupied room	3.9% reduction in carbon footprint per occupied room (to 31.53 kgCO ₂ e) on a 2012 baseline across our entire estate	<ul style="list-style-type: none"> • Continue to reduce our carbon footprint across our entire estate. • Continue to drive adoption and quality use of the IHG Green Engage system across our entire estate.
Water use per occupied room in water-stressed areas	4.8% reduction in water use per occupied room (by 0.03m ³) on a 2012 baseline in water-stressed areas	<ul style="list-style-type: none"> • Continue to reduce water use across our entire estate, with a particular focus on hotels in water-stressed areas. • Work with the Water Footprint Network to identify actions that hotels can adopt to improve their water stewardship, enabling further reductions in water use.

⁴⁶ Energy efficiency at the heart of sustainable hotels. Siemens. November 2016.

TECHNOLOGY & COMMUNICATIONS

The sector's sustainability profile is characterized by generally higher levels of impact associated with leadership and governance, along with key impacts related to social capital and business model and innovation. Overall, the sector showed below-average levels of reporting on SASB topics (75 percent), but industry differences exist. Software and IT companies, along with Internet media and services firms provided relatively higher levels of disclosure than companies involved in the manufacturing of hardware components and those involved in telecommunications. Boilerplate language was highly prevalent across all industries (54 percent), particularly for social and human capital topics. Sector-wide use of metrics was lower than most other sectors (9 percent).

TOPIC SPOTLIGHT

Supply chain management and materials sourcing

Supply chain and sourcing-related topics are included in the SASB Provisional Standards for three industries in the Technology & Communications sector; i.e., Hardware; Semiconductors; and Electronic Manufacturing Services (EMS) & Original Design Manufacturing (ODM). While over three-quarters of companies analyzed recognized the sustainability-related risks and/or opportunities stemming from the management of environmental and social risks along the supply chain, more than half of them used boilerplate language when reporting on them. The use of

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	25%	-
Boilerplate	54%	71%
Tailored Narrative	12%	16%
Metrics	9%	13%

boilerplate was more common in the Semiconductors industry. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Hardware, and EMS & ODM industries.

Sample Disclosures

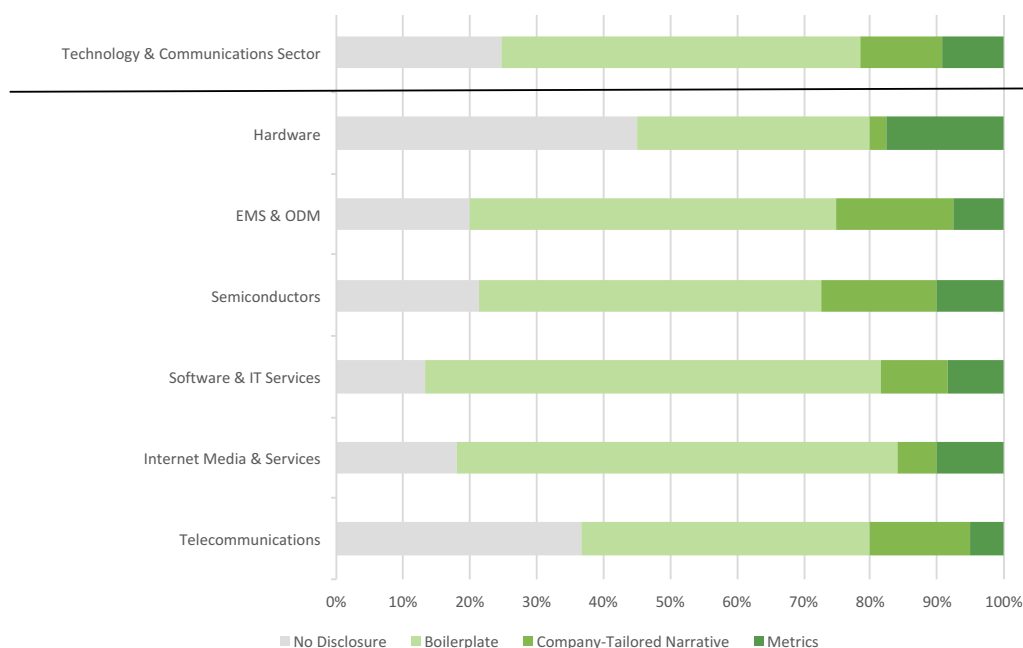
Topic: Supply Chain Management and Materials Sourcing

Industries: Hardware; and EMS & ODM

SASB Metrics for the Hardware industry:

- Percentage of products by revenue that contain critical material
- Percentage of tungsten, tin, tantalum, and gold smelters within the supply chain that are verified conflict-free
- Discussion of the management of risks associated with the use of critical materials and conflict minerals

Figure 19. Sustainability disclosure in SEC filings for FY 2015 (Technology & Communications sector)



- Percentage of suppliers audited in the EICC Validated Audit Process (VAP) or to an equivalent social and environmental responsibility code of conduct
- Suppliers' social and environmental responsibility audit compliance: (1) priority non-conformance rate and associated corrective action rate, and (2) other non-conformances rate and associated corrective action rate.

BOILERPLATE

"Failure to comply with applicable environmental laws and regulations could have a material adverse effect on our business, results of operations and financial condition. The sale and manufacturing of products in certain states and countries may subject us and our suppliers to state, federal and international laws and regulations governing protection of the environment, including those governing discharges of pollutants into the air and water; the management and disposal of hazardous substances and wastes, the cleanup of contaminated sites, restrictions on the presence of certain substances in electronic products and the responsibility for environmentally safe disposal or recycling... We endeavor to ensure that we and our suppliers comply with all applicable environmental laws and regulations, however, compliance may increase our operating costs and otherwise impact future financial results."

Source: Seagate Technology Public Limited Company. Form 10-K for FY ending 1/June/2016. The company is part of the Hardware industry.

COMPANY-TAILORED NARRATIVE

"Flex's CSER framework is based upon the principles, policies, and standards prescribed by the Electronics Industry Citizenship Coalition ("EICC"), a worldwide association of electronics companies committed to promoting an industry code of conduct for global electronics supply chains to improve working and environmental, health and safety conditions as well as other relevant international standards (e.g., ISO 14001). Flex is a founding member of the EICC. Social responsibility is also an area of increasing regulation, with specific regulations such as the California Transparency in Supply Chains Act, the U.S. Federal Acquisition Regulation on Human Trafficking and the U.K. Modern Slavery Act of 2015, all creating new compliance and disclosure obligations for the Company and for our customers. We operate a number of programs, including compliance audits, data collection, training and leadership programs that focus upon driving continuous improvements in social, ethical, and environmental performance throughout all of our global operating units, all in accordance with our Code of Business Conduct and Ethics... The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act"), Section 1502, introduced reporting requirements related to the verification of whether we are directly (or indirectly through suppliers of mate-

rials) purchasing the following minerals: columbite-tantalite;... cassiterite;... gold; wolframite;... or their derivatives; or any other mineral or its derivatives as determined by the Secretary of State associated with financing conflicts in the Democratic Republic of the Congo or an adjoining country. We are working directly with suppliers, industry groups, and customers to comply with the due diligence reporting requirements necessary to comply with this law... We have filed Conflict Minerals reports with the Securities and Exchange Commission (SEC) in accordance with the Dodd-Frank Act."

Source: Flextronics International Ltd. Form 10-K for FY ending 31/March/2016. The company is part of the EMS & ODM industry.

METRICS

"We require all of our suppliers to meet the high ethical, labor and environmental requirements set out in our supplier requirement standards before contracting them. We ensure compliance through regular and robust assessments, and work with suppliers to improve performance where needed. Our in-depth audits of suppliers' labor conditions and environmental management include document reviews, interviews with managers and employees, site visits, and inspections of facilities, production lines and warehouses. In 2015, we conducted 195 audits, of which 16 constituted in-depth audits of labor conditions and environmental management, 24 were audits against our supplier requirements, and 155 suppliers were audited using the EcoVadis scorecards. Additionally, we run training workshops for suppliers operating in high-risk countries. In 2015, we organized online training on climate change, conflict minerals and corporate responsibility, and we arranged face-to-face training workshops for 42 suppliers... We also continued our efforts to ensure our products are conflict-free. In 2015, 83% of the smelters used in our supply chain were validated as conflict-free or were in a validation process at the time. As of 2014, we have published a separate conflict minerals report which provides further information on our due diligence activities in this area."

Source: Nokia Corporation. Form 20-F for FY ending 31/Dec/2015. The company is part of the Hardware industry.

TOPIC SPOTLIGHT

Data Security

The topic of Data Security is included in the Provisional Standards for three industries in the sector: i.e., Software & IT Services; Internet Media & Services; and Telecommunications. According to an HP-sponsored report, the technology and communications sector was among the top five in terms of average annualized cyber-crime-related costs incurred for FY 2013 (around \$10.2 million for communications and \$10.8 million for technology firms).⁴⁷ All companies in the analysis acknowledged risks

47 "2013 Cost of Cyber Crime Study: United States" Ponemon Institute. October 2013.

from the increasing number and more sophisticated nature of cyber-attacks and the potential impact these risks represent to their operations and reputations. However, the use of boilerplate language to describe these risks was overwhelmingly prevalent across all industries, with nine out of 10 companies using this type of disclosure. When available, quantitative reporting typically took the form of metrics on the number of users affected by specific data security breaches. The following excerpts illustrate the differences in disclosure practices on this topic by companies in the several industries in the sector.

Sample Disclosures

Topic: Data Security

Industry: Internet Media & Services, and Telecommunications

SASB Metrics:

- Number of data security breaches and percentage involving customers' personally identifiable information
- Discussion of management approach to identifying and addressing data security risks

BOILERPLATE

"Our products and services involve the storage and transmission of users' and customers' proprietary information, and security breaches expose us to a risk of loss of this information, litigation, and potential liability. We experience cyber-attacks of varying degrees on a regular basis. Our security measures may also be breached due to employee error, malfeasance, system errors or vulnerabilities, or otherwise. Additionally, outside parties may attempt to fraudulently induce employees, users, or customers to disclose sensitive information in order to gain access to our data or our users' or customers' data. Any such breach or unauthorized access could result in significant legal and financial exposure, damage to our reputation, and a loss of confidence in the security of our products and services that could potentially have an adverse effect on our business. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose users and customers."

Source: Alphabet, Inc. Form 10-K for FY ending 31/Dec/2015. The company is part of the Internet Media & Services industry.

COMPANY-TAILORED NARRATIVE

"A successful cyber-attack or internal event could result in us not being able to deliver service to our customers and/or failing to protect their data. This could include a terrorist attack, state sponsored hacking, hacktivists or threats from individuals... This risk could have major customer, financial, reputational and regulatory impact in all markets in which we operate... How do we manage [these risks]? We have a global security strategy that is risk-based and approved by Executive Committee; [w]e have a global security function that sets policies and processes. Security controls are implemented centrally and in local markets, and we have a continuous improvement programme to mitigate the changing threats we face; [w]e manage the risk of malicious attacks on our infrastructure using our global security operations centre that provides 24/7 proactive monitoring of our global infrastructure, responds to incidents and manages recovery from those incidents; applications or infrastructure that store or transmit confidential personal and business voice and data traffic have layers of security control applied; [w]e have an assurance programme that incorporates both internal reviews and reviews of third parties that hold data on our behalf; Vodafone holds internationally recognised certifications for its information security processes; [w]e regularly provide mandatory security and privacy awareness training to Vodafone employees."

Source: Vodafone Group Public Limited Company. Form 20-F for FY ending 31/March/2016. The company is part of the Telecommunications industry.

METRICS

"We are vulnerable to software bugs, computer viruses, break-ins, phishing attacks, employee errors or malfeasance, attempts to overload our servers with denial-of-service or other attacks and similar disruptions from unauthorized use of our computer systems, any of which could lead to interruptions, delays, or website shutdowns, causing loss of critical data or the unauthorized disclosure or use of personally identifiable or confidential information. For example, in June 2012, approximately 6.5 million of our members' encrypted passwords were stolen and published on an unauthorized website. If we experience compromises to our security that result in website performance or availability problems, the complete shutdown of our websites, or the actual or perceived loss or unauthorized disclosure or use of confidential information, such as credit card information, our members or customers may be harmed or lose trust and confidence in us, and decrease the use of our website, mobile applications and services or stop using our services in their entirety, and we would suffer reputational and financial harm."

Source: LinkedIn Corporation. Form 10-K for FY ending 31/Dec/2015. The company is part of the Internet Media & Services industry.

TRANSPORTATION

The sector's sustainability profile is characterized by generally higher levels of impact associated with the environment, along with leadership and governance. Overall, the sector showed the highest levels of reporting on SASB topics (86 percent) with all trucking and car rental companies providing disclosure on all the topics included in their industry's standard. Relatively speaking, the use of boilerplate was low across the sector (31 percent) but it was high for the Marine Transportation industry. On the other hand, use of metrics was high (26 percent), particularly when addressing topics related to fuel use and labor-related issues.

TOPIC SPOTLIGHT

Automobile safety

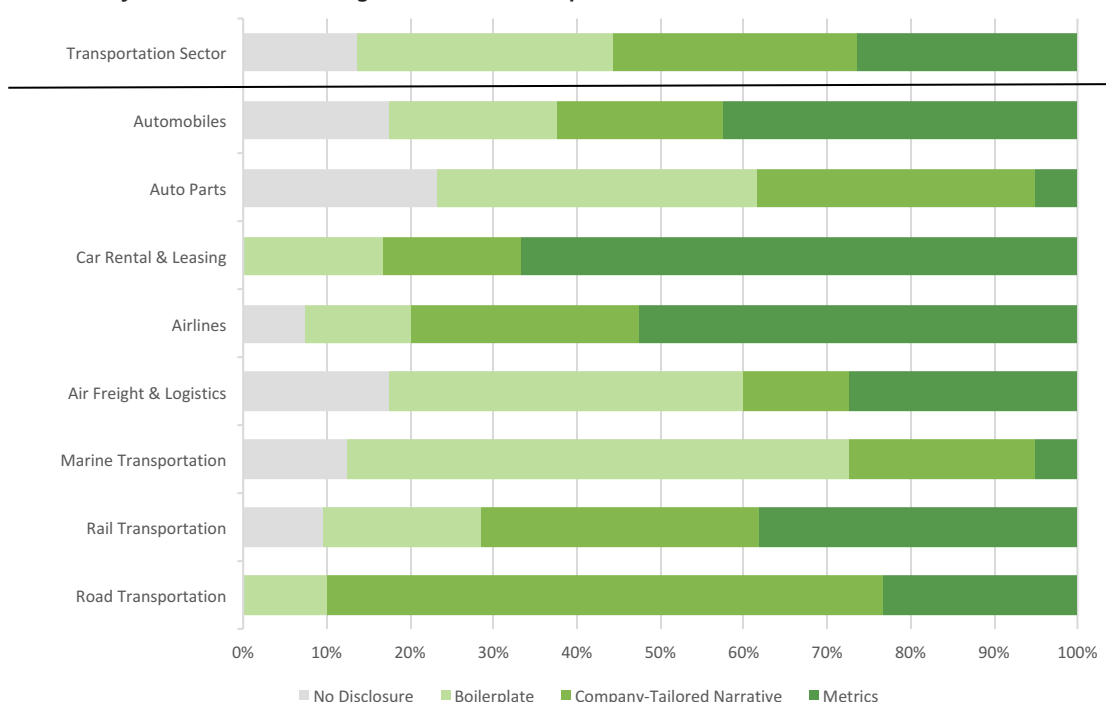
Topics related to the safety of automobiles are included in the SASB Provisional Standards for three industries in the sector: i.e., Automobiles; Auto Parts; and Car Rental & Leasing. Airbags, seat belts, ignition switches, and gas pedals have been behind some of the biggest safety recalls in recent auto history and have caused billions of dollars in repairs, compensation, penalties and other expenses. From 1990 through September 2013, there were 3,303 recalls in the U.S. that affected nearly 385 million vehicles; just between 2012 to 2013, there was an average of one recall

Sector Disclosure Practices		
Type of Disclosure	All Topics	Reported Topics
No Disclosure	14%	-
Boilerplate	31%	36%
Tailored Narrative	29%	34%
Metrics	26%	31%

every two to three days.⁴⁸ All companies analyzed provided disclosure on the impacts to their operations and reputations from product safety-related risks. However, in almost half of cases, companies used boilerplate to describe these risks, particularly in the Auto Parts industry. Disclosure by automobile manufacturers, on the other hand, was relatively more quantitative; the use of metrics normally took the form of number of recalled units and/or the economic costs of vehicle recall campaigns. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Automobiles industry.

⁴⁸ "Despite quality improvements, costly safety issues continue to dog automakers". Automotive News. October 2013.

Figure 20. Sustainability disclosure in SEC filings for FY 2015 (Transportation sector)



Sample Disclosures

Topic: Product Safety

Industry: Automobiles

SASB Metrics:

- Percentage of models rated by NCAP programs with overall 5-star safety rating by region
- Number of safety-related defect complaints percentage investigated
- Number of vehicles recalled

BOILERPLATE

"The discovery of defects in vehicles resulting in delays in new model launches, recall campaigns, or increased warranty costs. Meeting or exceeding many government-mandated safety standards is costly and often technologically challenging, especially where standards may be in tension with the need to reduce vehicle weight in order to meet government-mandated emissions and fuel-economy standards. Government safety standards also require manufacturers to remedy defects related to vehicle safety through safety recall campaigns, and a manufacturer is obligated to recall vehicles if it determines that the vehicles do not comply with a safety standard. In addition, the introduction of new and innovative features and technology to our vehicles could increase the risk of defects or customer dissatisfaction... Should we or government safety regulators determine that a safety or other defect or a noncompliance exists with respect to certain of our vehicles prior to the start of production, the launch of such vehicle could be delayed until such defect is remedied. The costs associated with any protracted delay in new model launches necessary to remedy such defects, or the cost of recall campaigns or warranty costs to remedy such defects in vehicles that have been sold, could be substantial."

Source: Ford Motor Company. Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"We are subject to risks associated with product liability, warranty and recall. We are subject to risks and costs associated with product liability, warranties and recalls. Should we supply defective products, parts, or related after-sales services, we are subject to risks and costs associated with product liability, including negative publicity, which may have a material adverse effect on our business, results of operations and financial condition. Such events could also require us to

expend considerable resources in correcting these problems and could significantly reduce demand for our products. In Fiscal 2015 and the first half of Fiscal 2016, we implemented product recalls for Jaguar Land Rover vehicles sold in North America and China. We may also be subject to class actions or other large scale product liability or other lawsuits in various jurisdictions where we conduct business."

Source: Tata Motors Limited. Form 20-F for FY ending 31/March/2015.

METRICS

"Recall Campaigns. In connection with ongoing comprehensive safety reviews, engineering analysis and our overall commitment to customer satisfaction we have incurred incremental charges for the estimated costs of parts and labor to repair vehicles and provide courtesy transportation for customers with vehicles subject to recalls.... We recorded recall-related charges of \$1.1 billion in the year ended December 31, 2015 including adjustments to prior periods of \$0.3 billion. Adjustments to prior periods relate to changes in estimated costs based on new information including claims emergence and development patterns. There were approximately 12 million vehicles subject to recalls announced in the year ended December 31, 2015."

Source: General Motors Company. Form 10-K for FY ending 31/Dec/2015.

TOPIC SPOTLIGHT

Environmental Footprint of Fuel Use

The topic of Environmental Footprint of Fuel Use is included in the Provisional Standards for five industries in the Transportation sector: i.e., Airlines; Air Freight & Logistics; and Marine, Road, and Rail Transportation. Transportation is a major contributor to GHG emissions, creating regulatory risks for companies owning or operating large transport fleets. According to the EPA, the transportation sector was responsible for 26 percent of total U.S. GHG emissions in 2014.⁴⁹ In their annual SEC filings, nearly all companies in the analysis recognized the existence of or potential for material impacts related to this topic. Moreover, a large share of reporting was provided in the form of metrics, particularly by airlines. Boilerplate language, on the other hand, was extensively used by the shipping industry and to a lesser extent by logistics companies. The following excerpts illustrate the differences in disclosure practices on this topic for companies in the Air Freight & Logistics industry.

⁴⁹ "Overview: Sources of Greenhouse Gas Emissions". Environmental Protection Agency. October 2016. "Overview: Sources of Greenhouse Gas Emissions". Environmental Protection Agency. October 2016.

Sample Disclosures

Topic: Environmental Footprint of Fuel Use

Industry: Air Freight & Logistics

SASB Metrics:

- Gross global Scope 1 emissions
- Description of long- 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, percentage renewable for (1) road transport and (2) air transport
- Air emissions for the following pollutants NO_x, SO_x, and particulate matter (PM)

BOILERPLATE

"Our freight carriers are subject to increasingly stringent laws protecting the environment, including those relating to climate change, which could directly or indirectly have a material adverse effect on our business. Future and existing environmental regulatory requirements in the U.S. and abroad could adversely affect operations and increase operating expenses, which in turn could increase our purchased transportation costs. If we are unable to pass such costs along to our customers, our business could be materially and adversely affected. Even without any new legislation or regulation, increased public concern regarding greenhouse gases emitted by transportation carriers could harm the reputations of companies operating in the transportation logistics industries and shift consumer demand toward more locally sourced products and away from our services."

Source: C.H. Robinson Worldwide, Inc. Form 10-K for FY ending 31/Dec/2015.

COMPANY-TAILORED NARRATIVE

"Concern over climate change, including the impact of global warming, has led to significant federal, state and international legislative and regulatory efforts to limit greenhouse gas ("GHG") emissions. For example, in the past several years, the U.S. Congress has considered various bills that would regulate GHG emissions. While these bills have not yet received sufficient Congressional support for enactment, some form of federal climate change legislation is possible in the future. Even in the absence of such legislation, the Environmental Protection Agency, spurred by judicial interpretation of the

Clean Air Act, may regulate GHG emissions, especially aircraft or diesel engine emissions, and this could impose substantial costs on us. These costs include an increase in the cost of the fuel and other energy we purchase and capital costs associated with updating or replacing our aircraft or vehicles prematurely... We pursue sustainable business practices worldwide through operational efficiency, fleet and fuel advances, facility engineering projects and conservation-enabling technology and service offerings. We help our customers do the same. We consider stakeholder engagement an essential aspect of corporate governance and regularly collaborate with a diverse set of global stakeholders on sustainability issues. Our most material global sustainability issues primarily involve our energy use, emissions and workplace policies... [In 2015, the company] received a Climate Leadership Award for Excellence in Greenhouse Gas Management from the U.S. Environmental Protection Agency."

Source: United Parcel Service, Inc. Form 10-K for FY ending 31/Dec/2015.

METRICS

"In furtherance of our commitment to protecting the environment, we have made significant progress over the last several years in an effort to increase FedEx Express vehicle fuel efficiency 30% from a 2005 baseline by 2020 — we have already reached more than 29% cumulative improvement in fuel economy. Having nearly achieved our goal, the company expects to surpass and then revisit the goal in 2016. We also continue with our goal to reduce aircraft emissions by 30% by 2020 on an emissions per available-ton-mile basis, a goal that we increased from 20% in 2012. We have also established a goal of obtaining 30% of our jet fuel from alternative fuels by the year 2030. These efforts help us continue to reduce our environmental footprint as evidenced in 2014 when we saved 100 million gallons of jet fuel at FedEx Express and avoided more than 976,000 metric tons of carbon emissions — all while our volumes were up."

Source: FedEx Corporation. Form 10-K for FY ending 31/May/2015.

Industry Rankings

Although each industry faces its own unique sustainability challenges, investors can reasonably compare the way in which firms tend to disclose material information on those topics. For example, an auto maker and a bank won't address the same issues in their SEC filings, but understanding which industries tend to apply more rigor to measuring and managing their critical sustainability factors can provide important cues for investors.

The industries listed below (see Table 2) are ranked in terms of disclosure effectiveness, according to the completeness of reporting, the prevalence of boilerplate language, and the use of metrics. (See "Ranking Methodology" sidebar.) These rankings represent the overall effectiveness of the industry as a whole, and are not intended to reflect on the disclosure practices of individual companies.

Levels of disclosure varied widely from one industry to the next, although certain trends emerged. For example, the industries that achieved the highest levels of disclosure on SASB topics tended to be smaller—either in terms of composition (i.e., highly consolidated, with few companies) or in terms of the number of sustainability topics included in their provisional standard. Meanwhile, the industries with lower disclosure levels tended to be heterogeneous, including an unusually diverse mix of companies.

In SASB's analysis, the industries with the most effective sustainability disclosures tended to be customer-facing. For example, the best performing sector overall was Transportation, followed by Services, and Consumption I. (See Table 1.) However, this trend did not hold true across the entire analysis; for example, Consumption II (also, generally speaking, a business-to-customer sector) was the worst performer.

Table 1. Sector-Level Rankings

Sector	Highest Rank	Lowest Rank	Average Rank	Median Rank
Transportation	2	57	25.8	24.0
Services	1	67	32.0	29.0
Consumption I	5	78	34.6	29.0
Infrastructure	4	77	38.4	34.5
Renewable Resources & Alternative Energy	9	70	39.0	38.0
Non-Renewable Resources	11	61	38.0	43.0
Health Care	16	75	46.8	45.5
Resource Transformation	10	72	42.0	48.0
Technology & Communications	32	74	52.8	50.5
Financials	7	73	45.4	53.0
Consumption II	20	79	52.6	55.5

Nevertheless, SASB's analysis also found that boilerplate language was generally more prevalent in customer-facing industries and others with significant reliance on social capital, such as consumer goods, food and beverage, and technology. Meanwhile, disclosure practices in heavily regulated industries, such as Financials, Non-Renewable Resources, and Transportation, tended to more effectively avoid vague, generic disclosures.

Although information quality needs improvement across nearly every SICS industry, investors can assume that the industries with more effective disclosure practices tend to face less unpriced risk than do the industries with less effective practices.

More detailed charts showing the disclosure effectiveness for each topic in each industry are included in the Appendix. Meanwhile, results are aggregated at the sector level and presented along with sample disclosures in the previously discussed Sector Overview sections.

Ranking Methodology

SASB ranks industries according to the overall effectiveness of their sustainability disclosures by systematically considering several key dimensions. These include the following:

- **Disclosure level:** The frequency with which the entries analyzed provided some form of disclosure on SASB's industry-specific topics.
- **Use of metrics:** The frequency with which the entries analyzed provided disclosure using metrics. The more metrics, the better.
- **Use of boilerplate:** The frequency with which the entries analyzed provided disclosure using boilerplate language. The less boilerplate, the better.

Ranking	Industry	% Disclosure	% Metrics	% Boilerplate
1	Education	100.0%	100.0%	0.0%
2	Car Rental & Leasing	100.0%	66.7%	16.7%
3	Cruise Lines	100.0%	40.0%	20.0%
4	Gas Utilities	100.0%	35.0%	55.0%
5	Tobacco	100.0%	25.0%	0.0%
6	Road Transportation	100.0%	23.3%	10.0%
7	Security & Commodity Exchanges	100.0%	16.7%	41.7%
8	Hotels & Lodging	100.0%	16.7%	60.0%
9	Biofuels	96.8%	14.3%	74.6%
10	Containers & Packaging	96.3%	30.0%	46.3%
11	Metals & Mining	95.5%	40.9%	30.0%
12	Non-Alcoholic Beverages	95.0%	10.0%	58.3%
13	Coal Operations	95.0%	27.5%	51.3%
14	Electric Utilities	94.5%	29.4%	38.5%
15	Alcoholic Beverages	94.0%	20.0%	48.0%
16	Health Care Delivery	93.8%	32.5%	42.5%
17	Fuel Cells & Industrial Batteries	93.3%	20.0%	53.3%
18	Airlines	92.5%	52.5%	12.5%
19	Oil & Gas – Midstream	92.5%	20.0%	57.5%
20	Apparel, Accessories & Footwear	92.5%	0.0%	57.5%
21	Rail Transportation	90.5%	38.1%	19.0%
22	Pulp & Paper Products	90.0%	40.0%	34.0%
23	Leisure Facilities	90.0%	10.0%	70.0%
24	Consumer Finance	88.6%	42.9%	31.4%
25	Restaurants	88.3%	16.7%	50.0%
26	Mortgage Finance	87.5%	15.0%	52.5%
27	Marine Transportation	87.5%	5.0%	60.0%
28	Toys & Sporting Goods	87.5%	0.0%	50.0%
29	Processed Foods	87.1%	4.3%	65.7%
30	Electrical & Electronic Equipment	86.7%	30.0%	48.3%
31	Engineering & Construction Services	86.7%	25.0%	46.7%
32	Software & IT Services	86.7%	8.3%	68.3%

Ranking	Industry	% Disclosure	% Metrics	% Boilerplate
33	Media Production & Distribution	86.7%	3.3%	43.3%
34	Waste Management	84.8%	36.4%	28.8%
35	Water Utilities	83.8%	17.5%	52.5%
36	Professional Services	83.3%	3.3%	66.7%
37	Air Freight & Logistics	82.5%	27.5%	42.5%
38	Automobiles	82.5%	42.5%	20.0%
39	Oil & Gas – Refining & Marketing	82.5%	35.0%	28.8%
40	Agricultural Products	82.2%	8.9%	53.3%
41	Food Retailers & Distributors	82.2%	20.0%	44.4%
42	Internet & Media Services	82.0%	10.0%	66.0%
43	Home Builders	82.0%	8.0%	56.0%
44	Managed Care	81.5%	27.8%	35.2%
45	Pharmaceuticals	80.9%	20.0%	32.7%
46	Biotechnology	80.9%	2.7%	57.3%
47	Iron & Steel Producers	80.0%	30.0%	28.6%
48	Chemicals	80.0%	23.3%	35.6%
49	EMS & ODM	80.0%	7.5%	55.0%
50	Aerospace & Defense	80.0%	7.1%	64.3%
51	Multiline & Specialty Retailers & Distributors	80.0%	12.0%	50.0%
52	Semiconductors	78.8%	10.0%	51.3%
53	Commercial Banks	78.0%	50.0%	12.0%
54	Forestry & Logging	77.8%	5.6%	38.9%
55	Medical Equipment & Supplies	77.1%	12.9%	40.0%
56	Oil & Gas – Exploration & Production	77.0%	19.0%	34.0%
57	Auto Parts	76.7%	5.0%	38.3%
58	Construction Materials	76.7%	24.4%	33.3%
59	Cable & Satellite	76.7%	3.3%	56.7%
60	Drug Retailers & Convenience Stores	76.0%	0.0%	52.0%
61	Oil & Gas – Services	73.1%	13.4%	56.7%
62	Solar Energy	72.9%	14.3%	51.4%

Ranking	Industry	% Disclosure	% Metrics	% Boilerplate
63	Meat, Poultry & Dairy	72.0%	4.0%	55.0%
64	Investment Banking & Brokerage	72.0%	54.0%	8.0%
65	Advertising & Marketing	70.0%	3.3%	46.7%
66	E-Commerce	66.0%	2.0%	58.0%
67	Casinos & Gaming	64.0%	14.0%	34.0%
68	Telecommunications	63.3%	5.0%	43.3%
69	Real Estate	62.5%	2.5%	30.0%
70	Wind Energy	62.5%	0.0%	50.0%
71	Insurance	62.0%	20.0%	24.0%
72	Industrial Machinery & Goods	60.0%	0.0%	36.0%
73	Asset Management & Custody Activities	55.0%	25.0%	20.0%
74	Hardware	55.0%	17.5%	35.0%
75	Health Care Distributors	51.4%	2.9%	42.9%
76	Appliance Manufacturing	50.0%	11.1%	38.9%
77	Real Estate Services	50.0%	11.1%	16.7%
78	Household & Personal Products	47.5%	10.0%	32.5%
79	Building Products & Furnishings	39.5%	0.0%	31.6%

Conclusion

In a recent survey, 81 percent of investors said sustainability factors are “very important” or “somewhat important” in making equity investment decisions. However, 92 percent of those investors also said that corporate sustainability disclosure does not enable comparison among peer companies.⁵⁰ When a topic is not effectively disclosed using metrics that can establish a level of performance with respect to peers, but instead is buried underneath vague boilerplate language used to overcompensate for a lack of decision-useful disclosure, then analysts have less certainty about its impact on valuation—and therefore its risk to shareholders.⁵¹

As SASB’s analysis clearly establishes, existing disclosure in SEC filings appears to be addressing a considerable share of key sustainability factors—those identified by SASB as being reasonably likely to have material impacts on the financial condition or operating performance of companies in an industry. However, this disclosure varies dramatically in terms of its quality, even within industries and even on topics that have been widely acknowledged to warrant public disclosure. As investors have stated, improvement is needed.

What can investors do to ensure that their information needs are being met? Direct engagement with portfolio companies is perhaps the most vital step, fostering an open, communicative relationship built on mutual trust, understanding, and alignment of economic interests. Communication with regulators is also important, ensuring that those responsible for market oversight understand investor concerns.

In addition to asking portfolio companies to report material sustainability information using SASB standards, investors can also help establish a market standard for sustainability information in the following ways:

- Participate directly in SASB’s ongoing standards development process, and encourage companies to participate, too, so that outcomes reflect both issuer and investor viewpoints, resulting in standards that are both decision-useful and cost-effective
- Use the [SASB Engagement Guide for Asset Owners & Asset Managers](#), along with the [SASB Standards](#) and [Industry Research Briefs](#), to help guide engagement activities
- Ask your data provider(s) to [incorporate SASB standards](#)
- [Share feedback](#) on the Standards and their use in your organization

When all companies in an industry report comparable, reliable data on the same standardized metrics, investors will be able to view sustainability fundamentals right alongside financial fundamentals and make more informed investment decisions. By standardizing disclosure on the most crucial sustainability factors, SASB helps both companies and their investors more effectively benchmark performance against peers and over time—and, with decision-useful data in hand, allocate their limited resources accordingly.

Useful information is the fuel that drives our markets forward. With sustainability factors now widely acknowledged to present financially material risks and opportunities to businesses, it’s time to more effectively measure, manage, and report performance on these issues. To integrate sustainability considerations efficiently, our capital markets need better than boilerplate.

⁵⁰ PwC, *Investors, corporates, and ESG: bridging the gap* (October 2016).

⁵¹ Ole-Kristian Hope, Danqi Hu, and Hai Lu, *The Benefits of Specific Risk-Factor Disclosures* (working paper, University of Toronto, Feb. 26, 2016).

Additional Resources

Readers of this report may also wish to consult the following SASB resources:

SASB Navigator: This online tool is a comprehensive resource for using SASB standards, analyzing disclosure quality on SASB topics from 4,000+ companies' public filings, examining and benchmarking against industry performance on SASB metrics, accessing evidence of financial impact, and receiving topic alerts to stay informed on emerging evidence. The Navigator provides an ever-expanding base of resources in a convenient, interactive format.

<http://navigator.sasb.org>

SASB Implementation Guide for Companies: This guide provides structure and key considerations for companies seeking to implement sustainability accounting standards within their existing business functions and processes.

<https://library.sasb.org/implementation-guide/>

SASB Engagement Guide for Asset Owners & Managers: This guide offers industry-by-industry guidance on how asset owners and managers can use the SASB standards to inform and enhance their corporate engagement activities.

<https://library.sasb.org/engagement-guide/>

SASB Technical Bulletin on Climate Risk: SASB's Technical Bulletin 2016-01: Climate Risk provides investors with a comprehensive view of climate risk, how and where it is present in a portfolio, an analysis of its industry-specific impacts and their financial implications, and a breakdown of how SEC registrants have addressed—and could more usefully address—material climate risk in their disclosures to investors.

<https://library.sasb.org/climate-risk-technical-bulletin/>

SASB Mock 10-K Library: SASB has prepared Mock 10-Ks to serve as examples of effective disclosure of the Standards in MD&A. SASB will prepare at least 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.

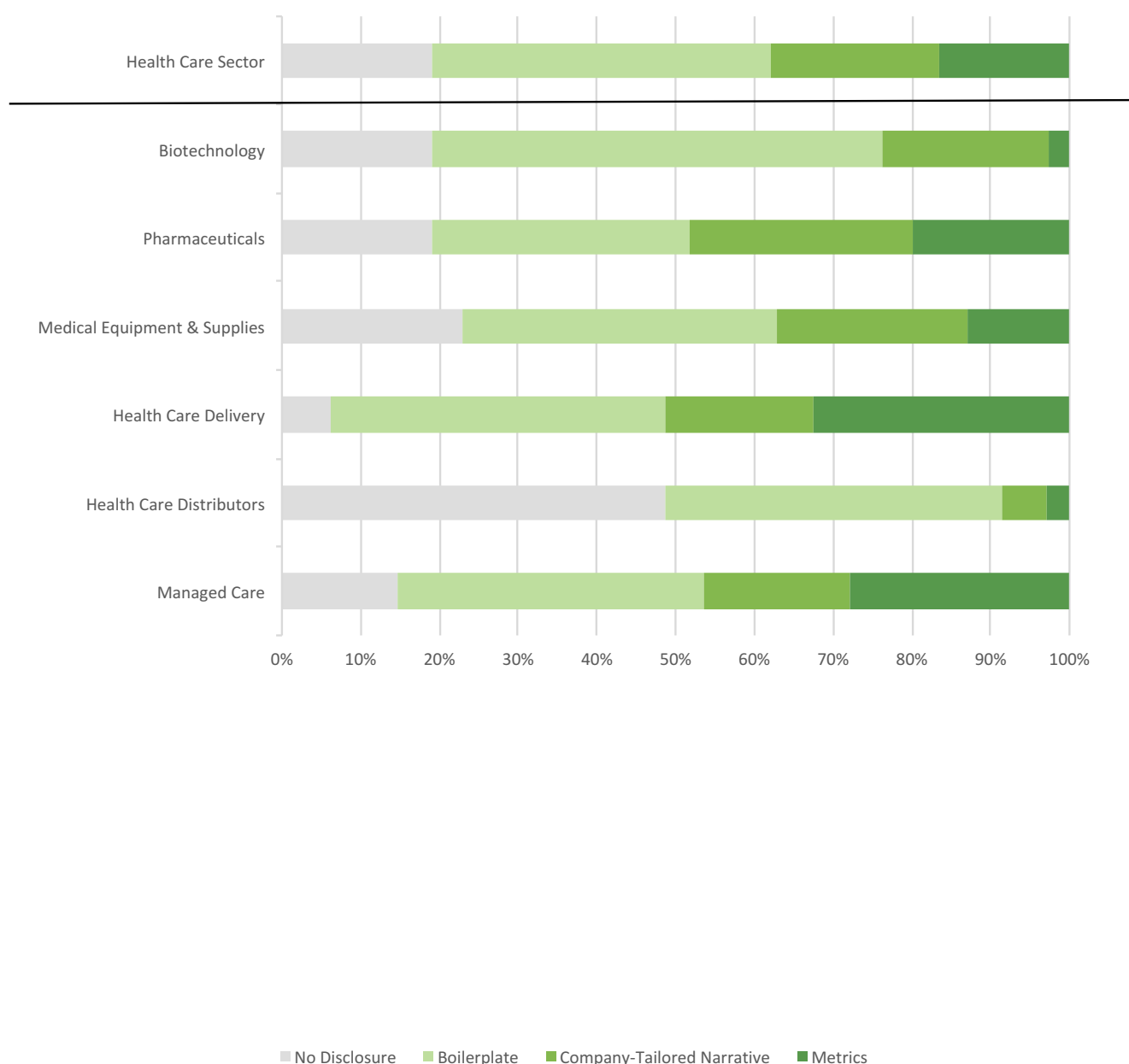
<http://using.sasb.org/mock-10-k-library/>

APPENDIX

DISCLOSURE BY INDUSTRY

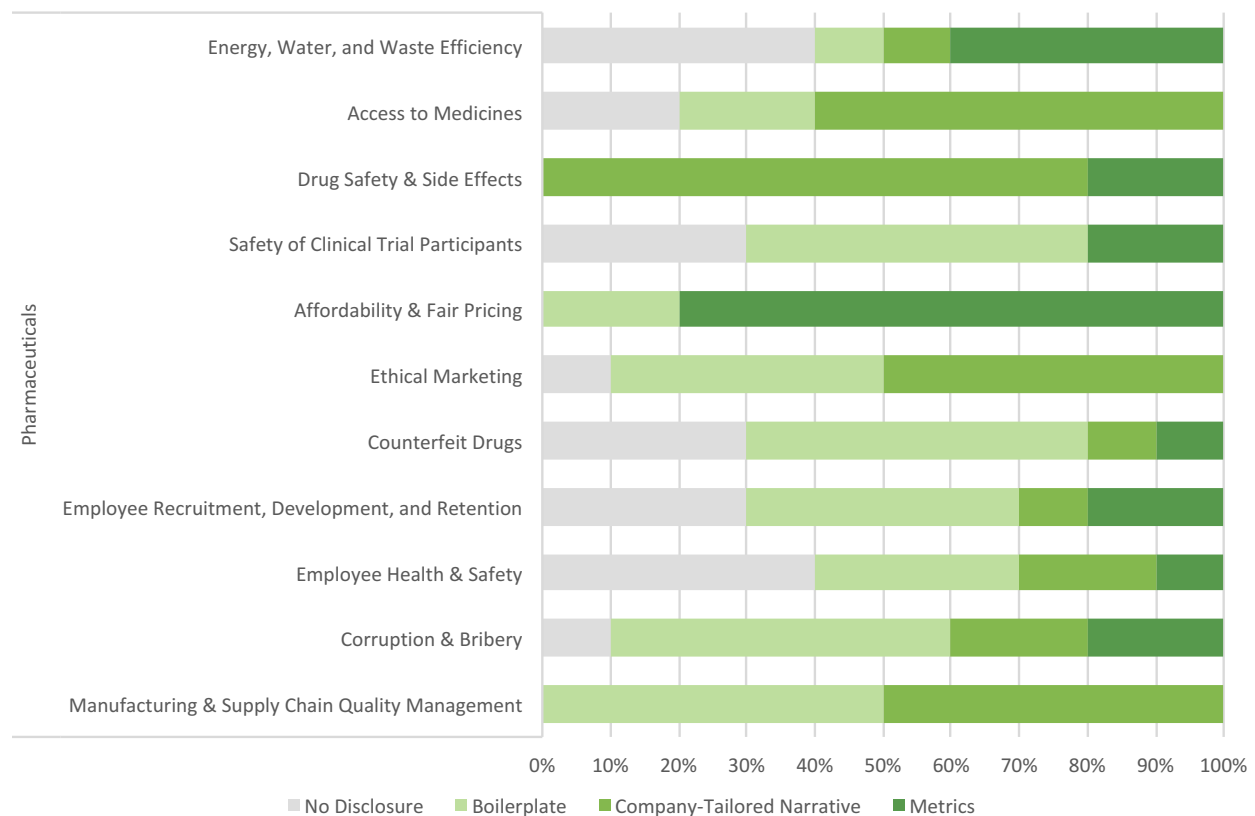
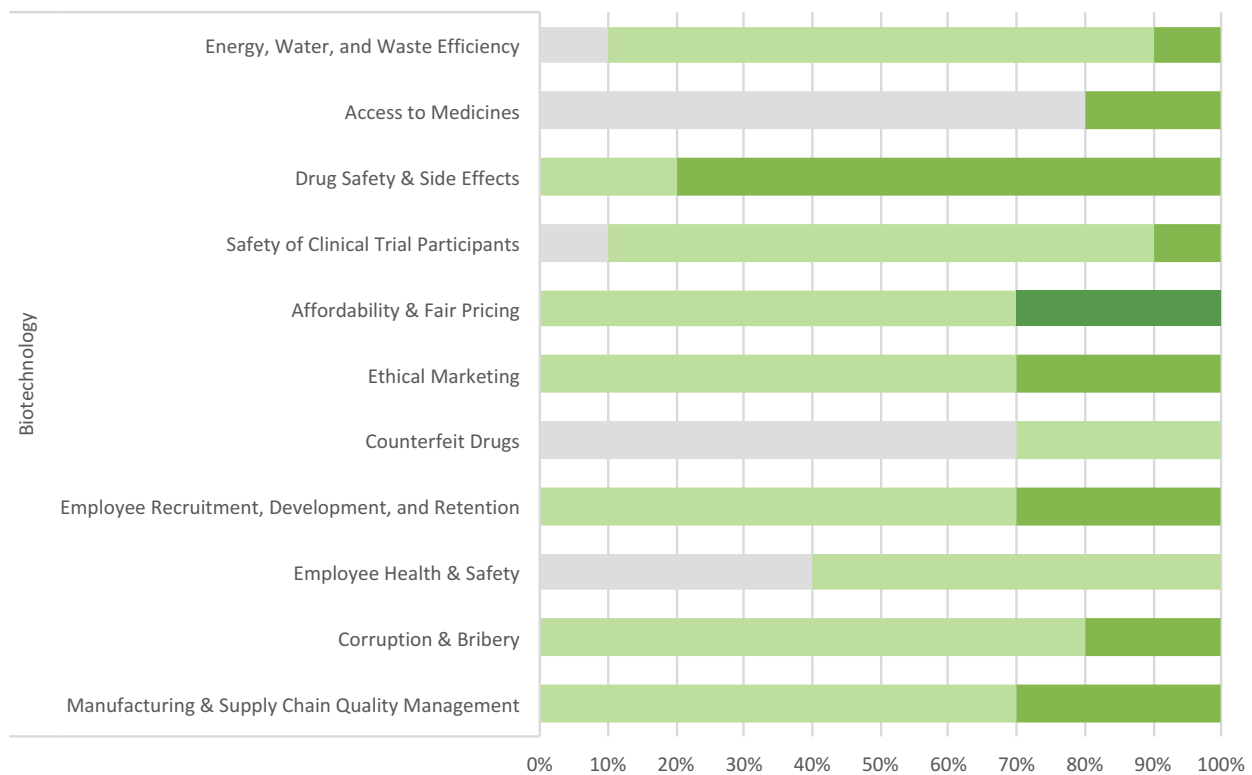
The charts that follow illustrate the effectiveness of current SEC disclosure on every SASB topic in every SICS industry. Readers can use this information to drill down one level deeper on the aggregated information presented previously in the sector-level charts. Note that, unlike the sector-level charts above, the following bar charts represent the percentage of companies (rather than the percentage of entries) providing disclosure on each topic using the different categories of disclosure effectiveness. These sector and industry charts are organized by the sector listing presented in Figure 2.

HEALTH CARE SECTOR OVERVIEW



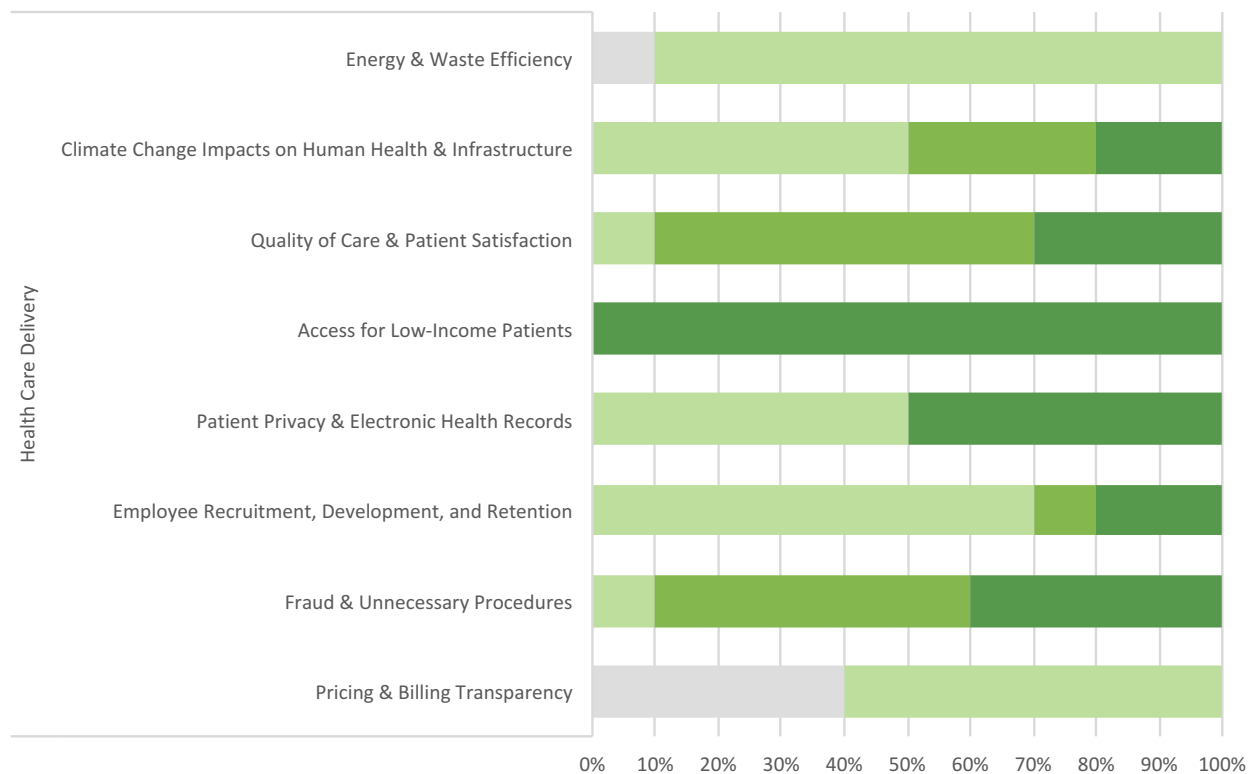
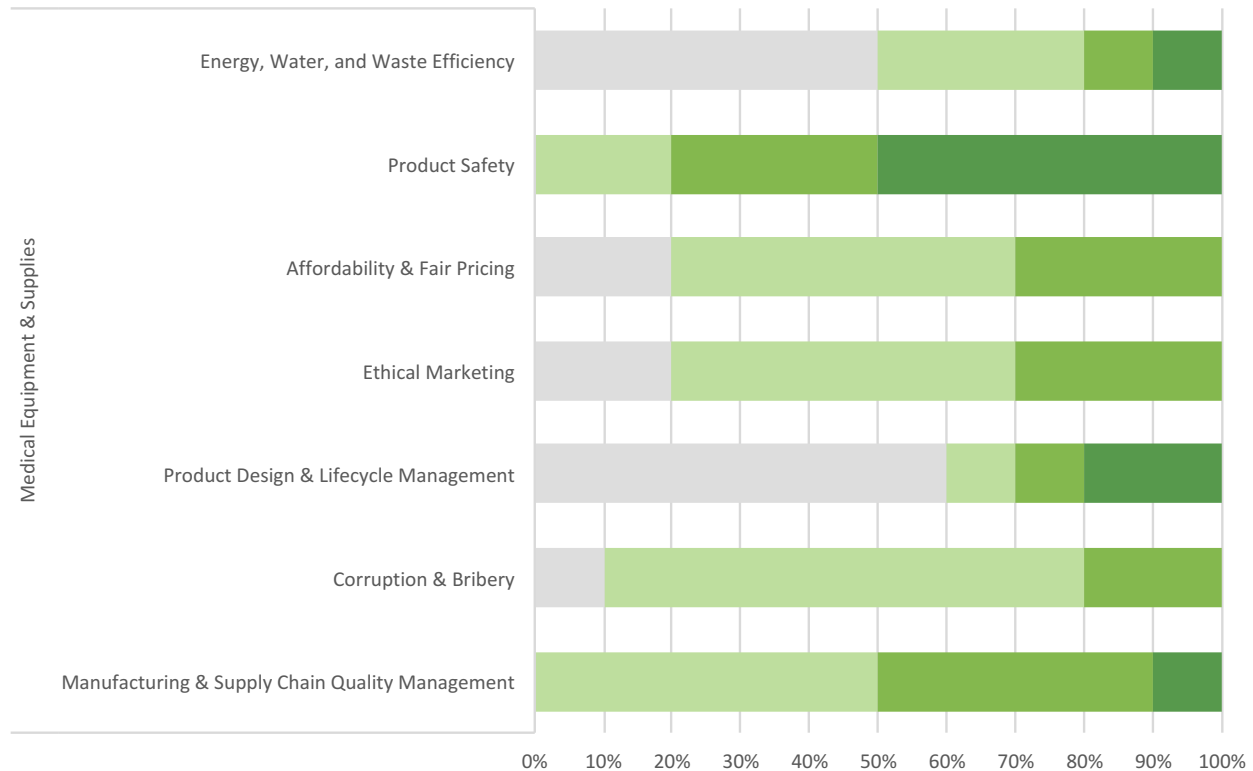
Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICS industry (maximum of 10 companies).

HEALTH CARE SECTOR



Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

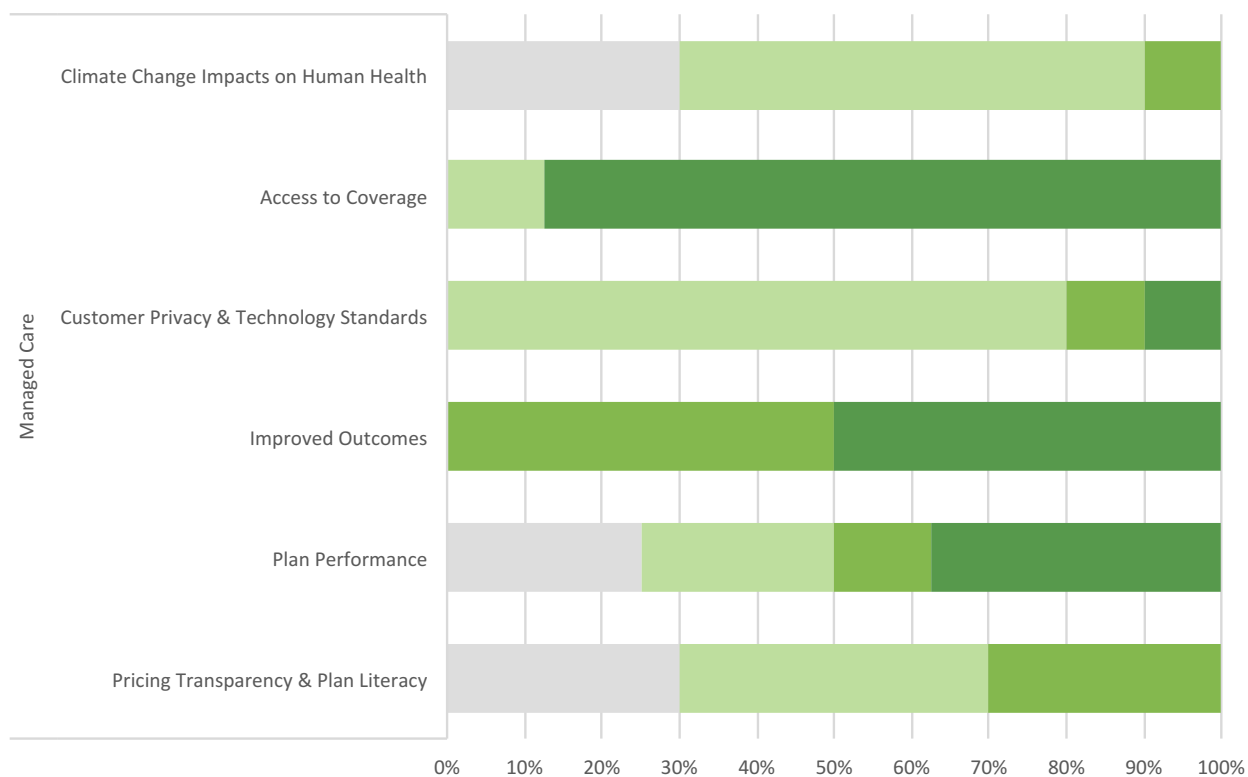
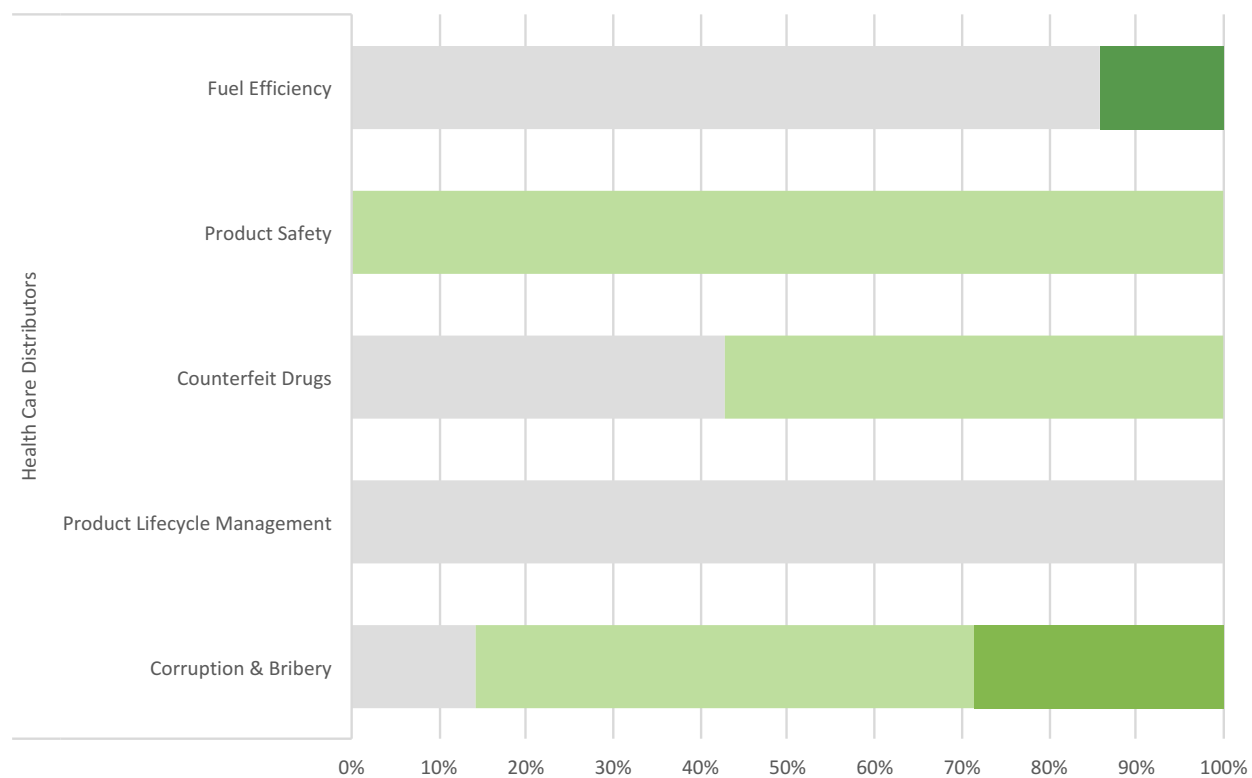
HEALTH CARE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

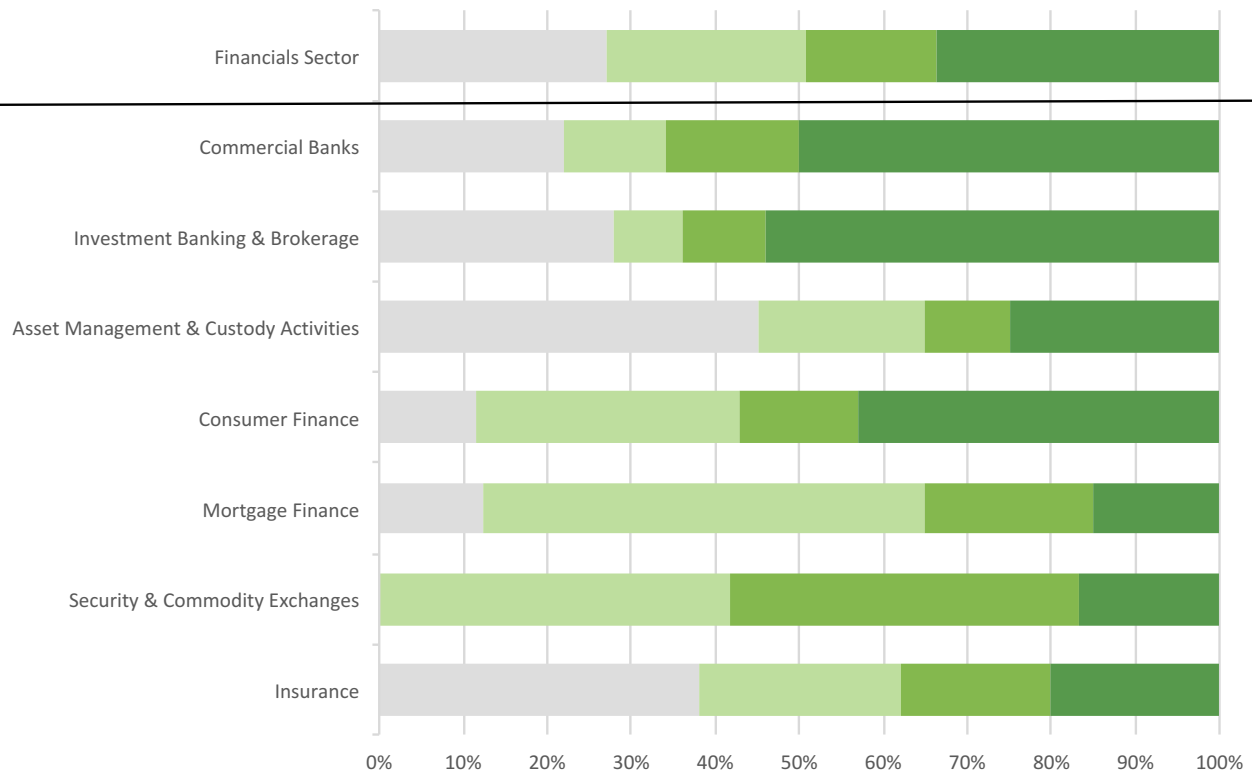
HEALTH CARE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

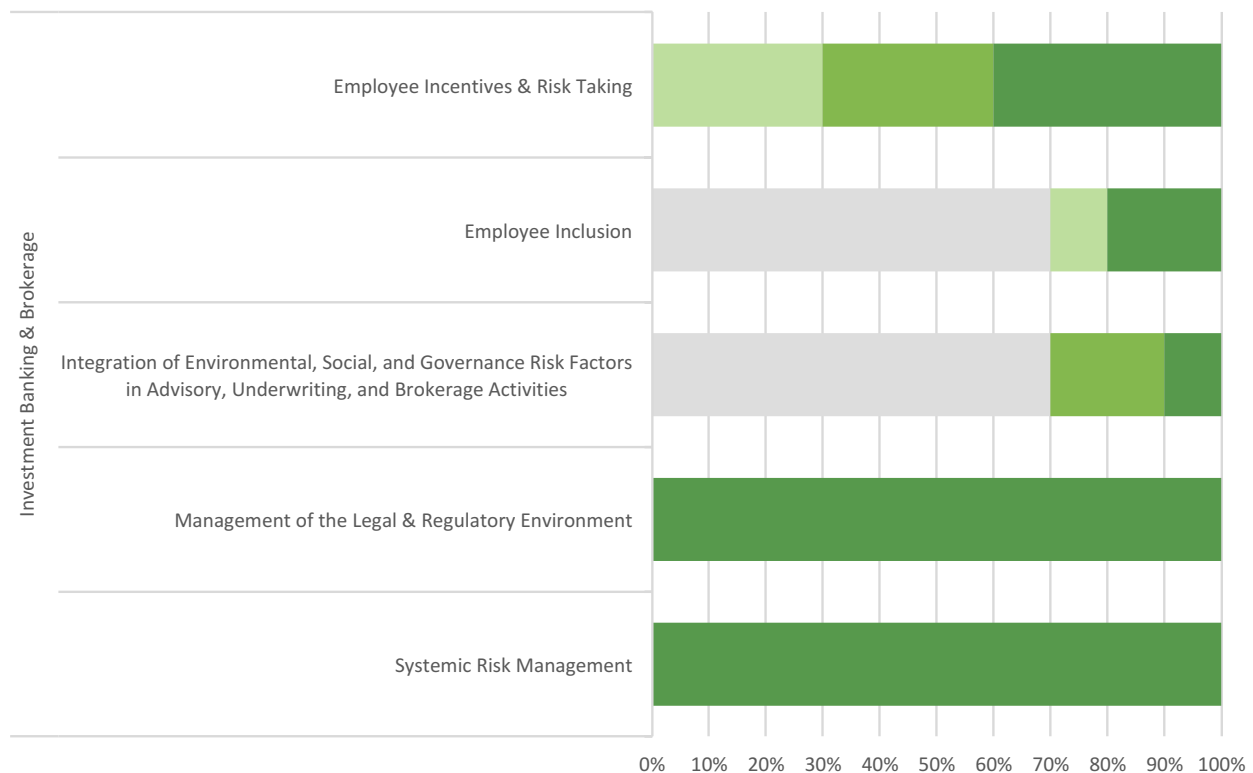
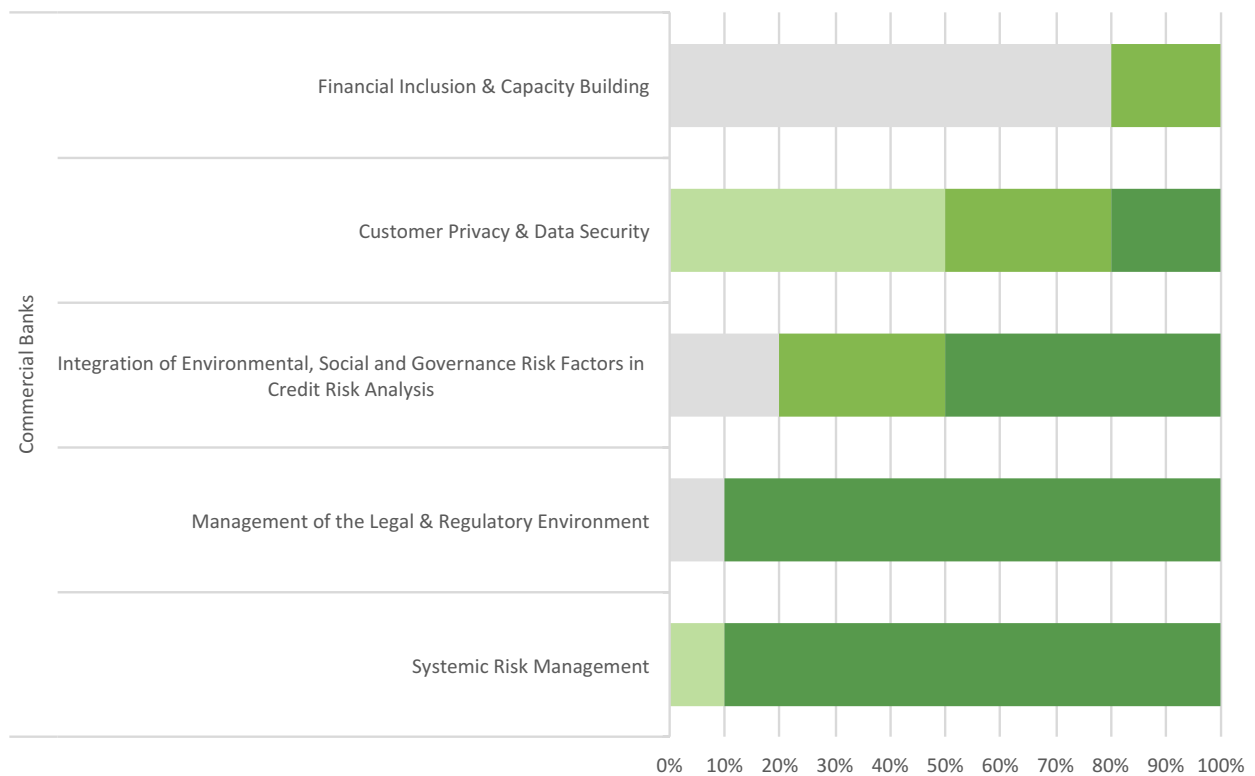
FINANCIALS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

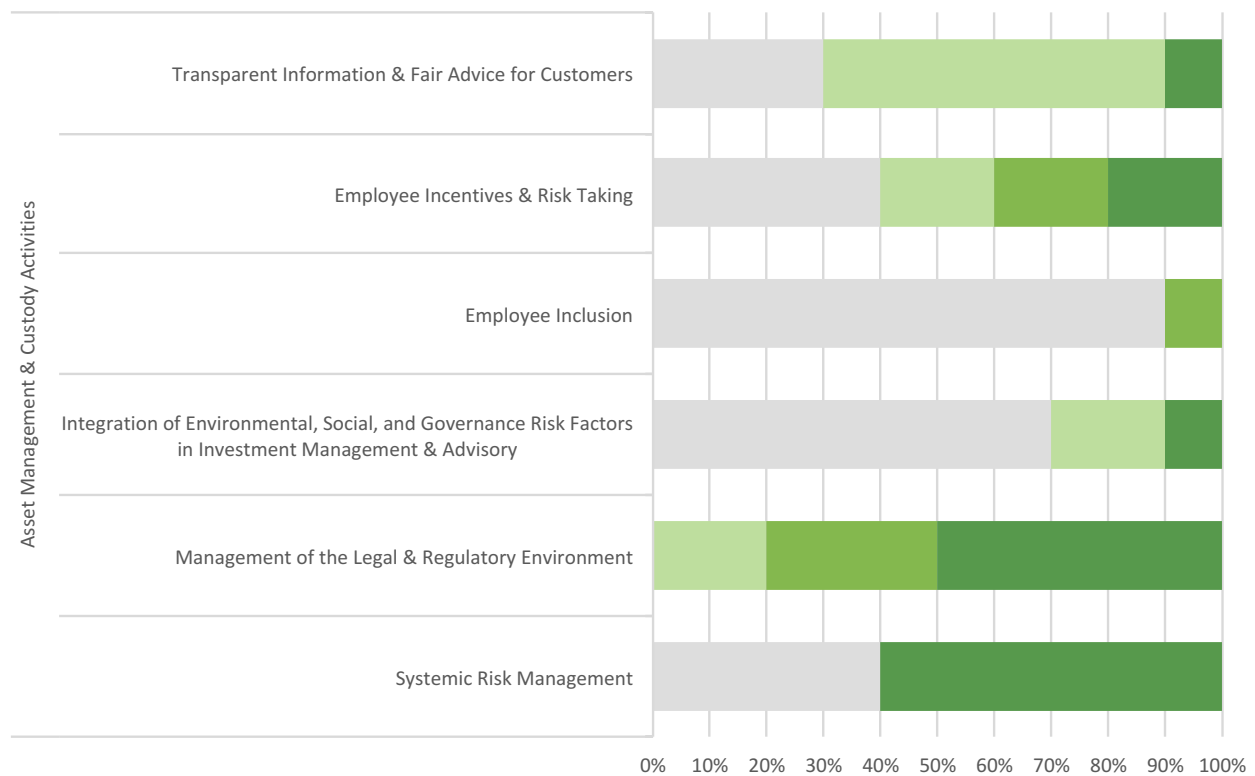
FINANCIALS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

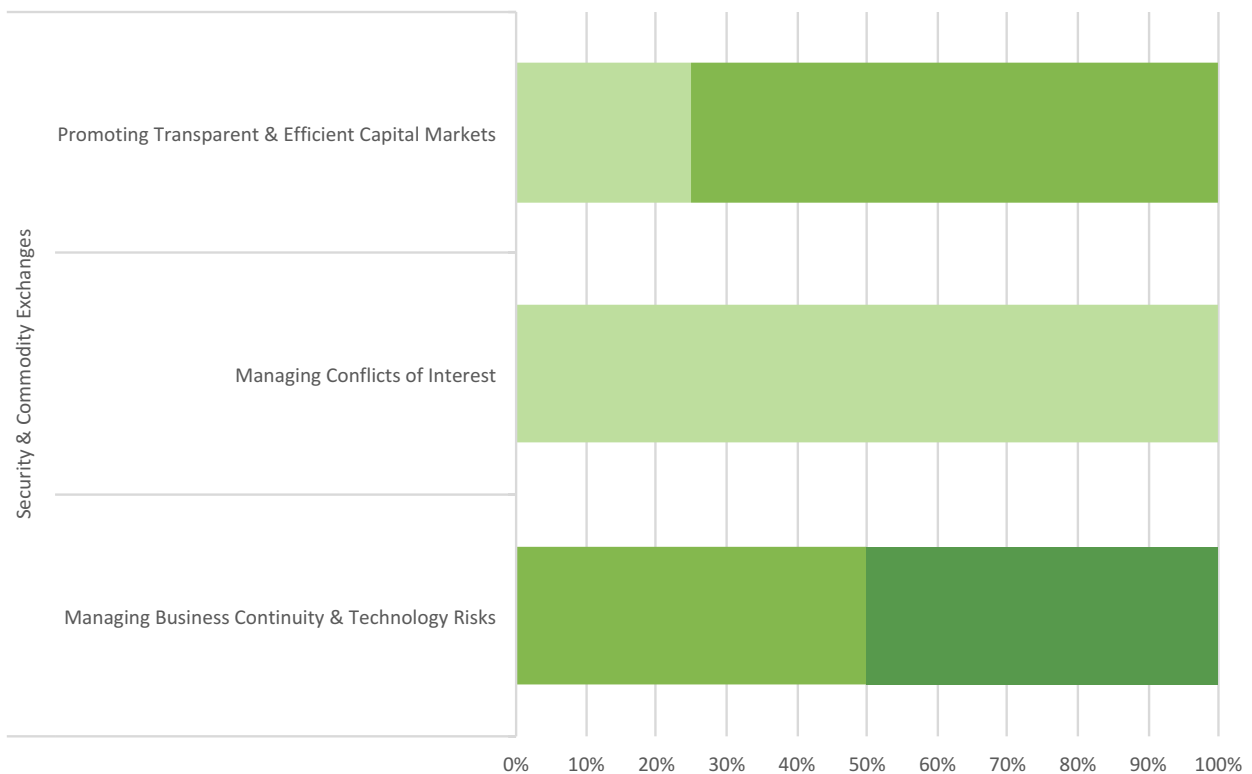
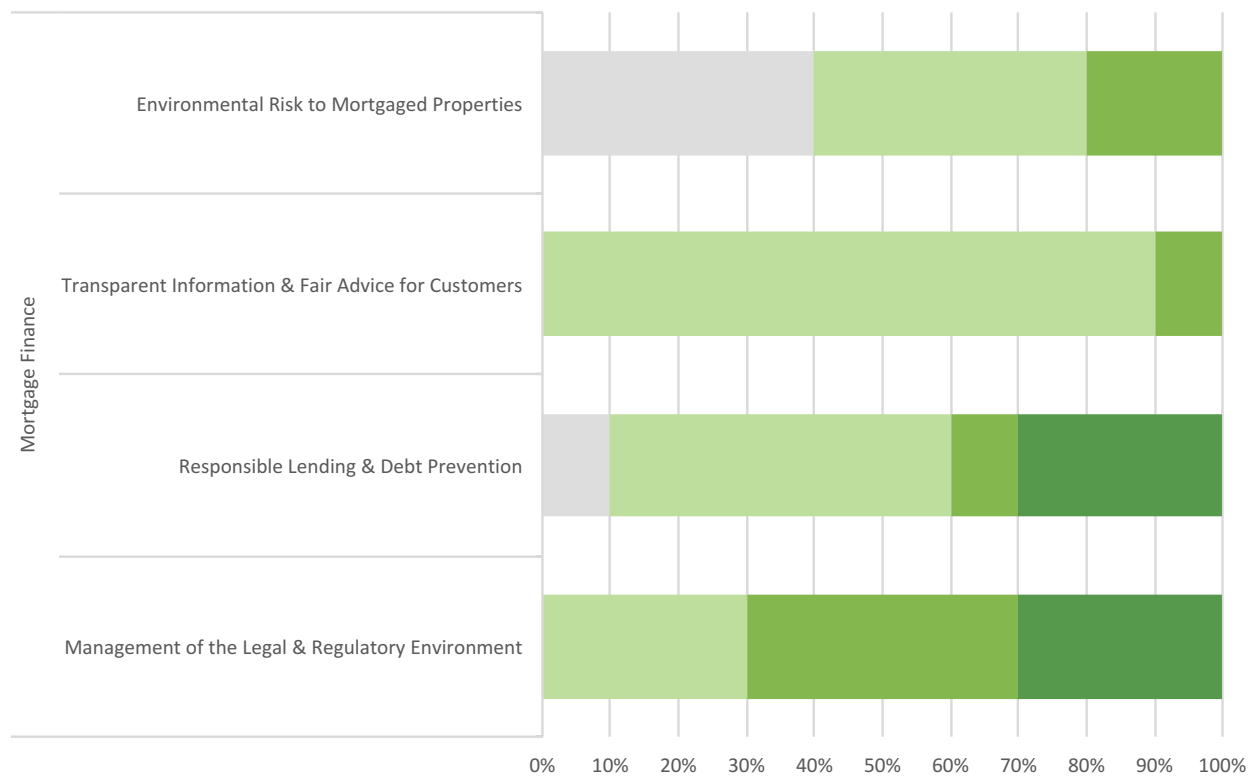
FINANCIALS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

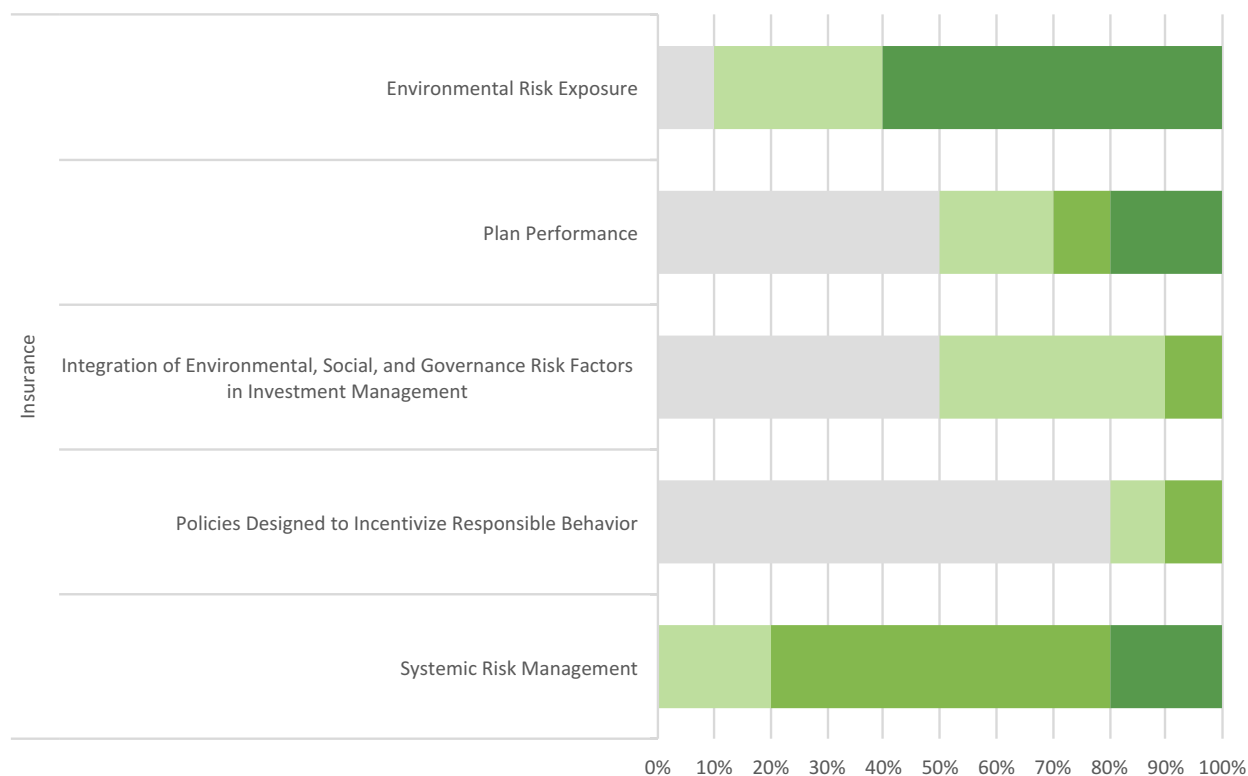
FINANCIALS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

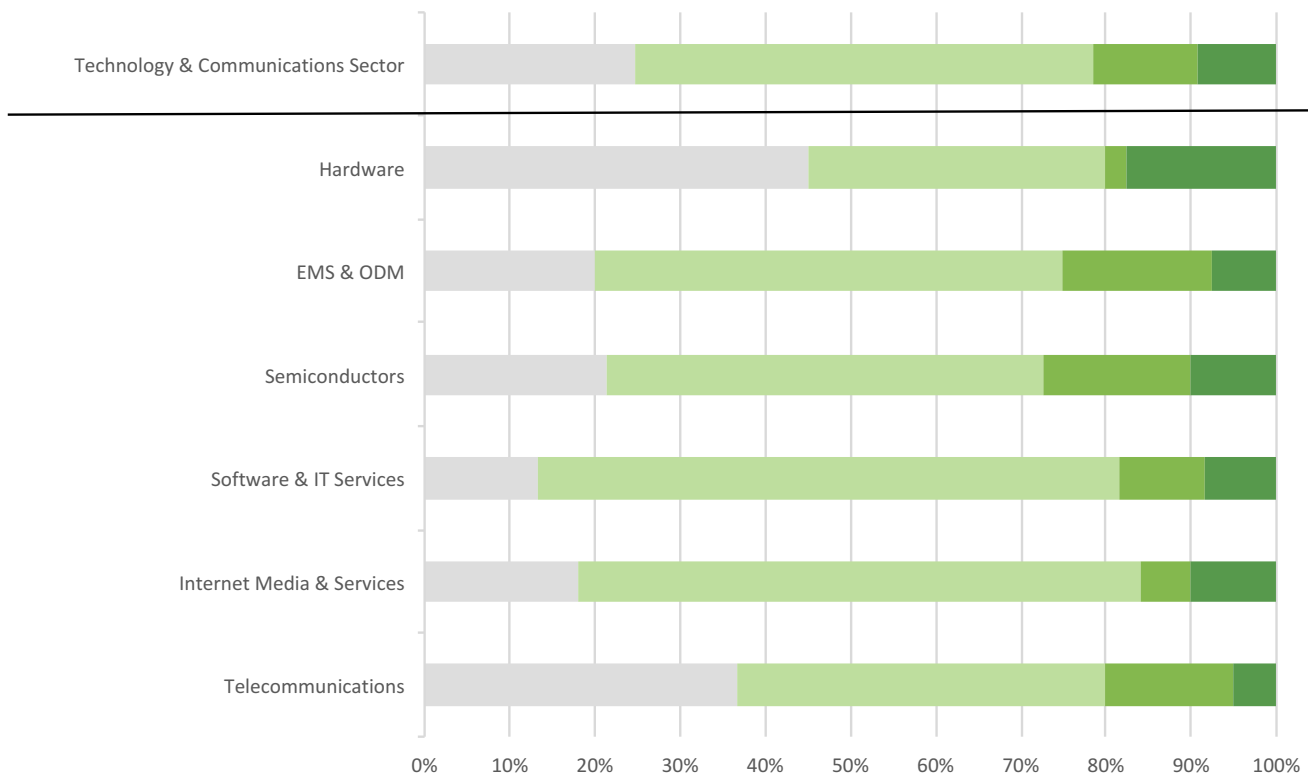
FINANCIALS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

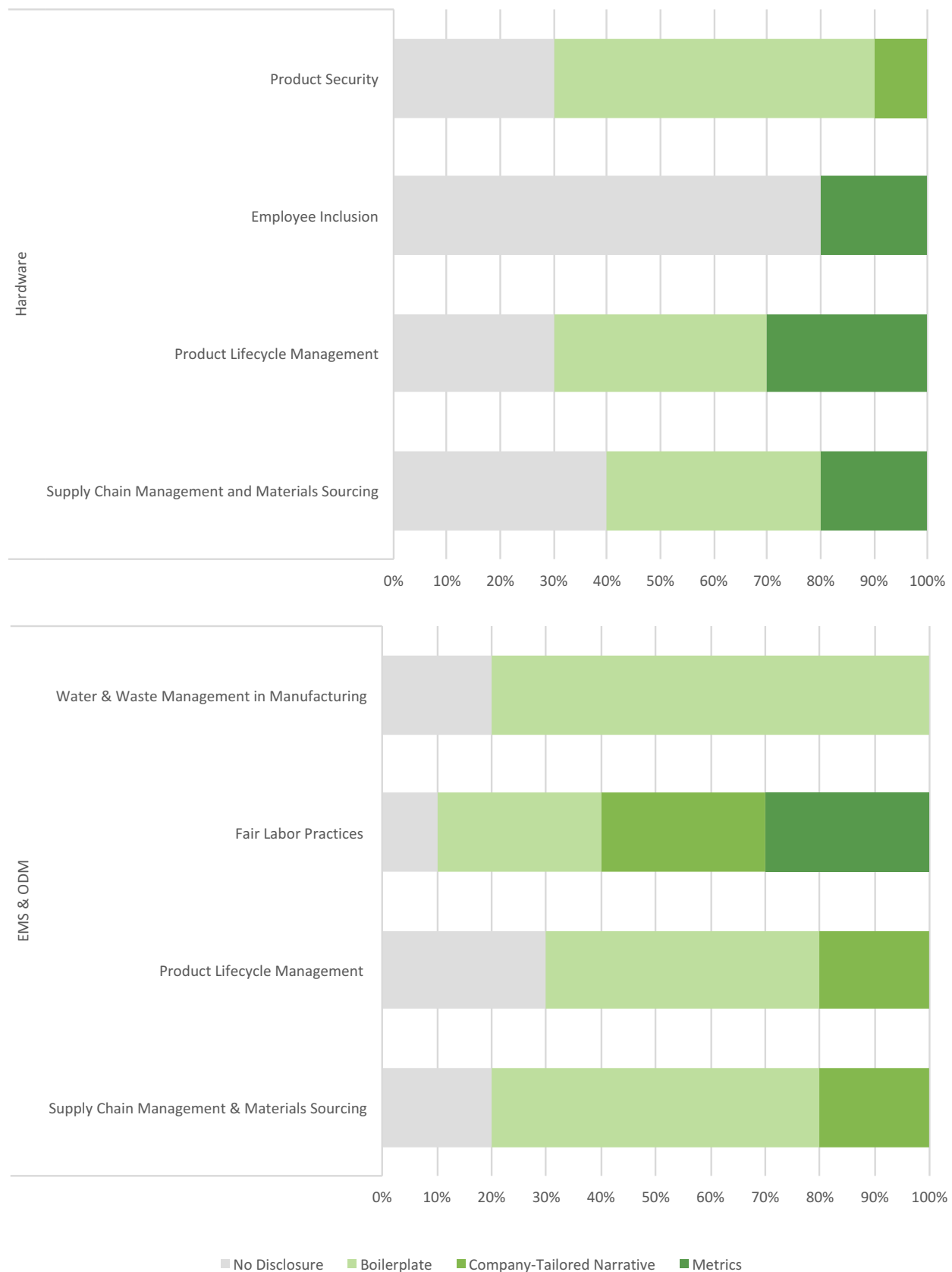
TECHNOLOGY & COMMUNICATIONS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

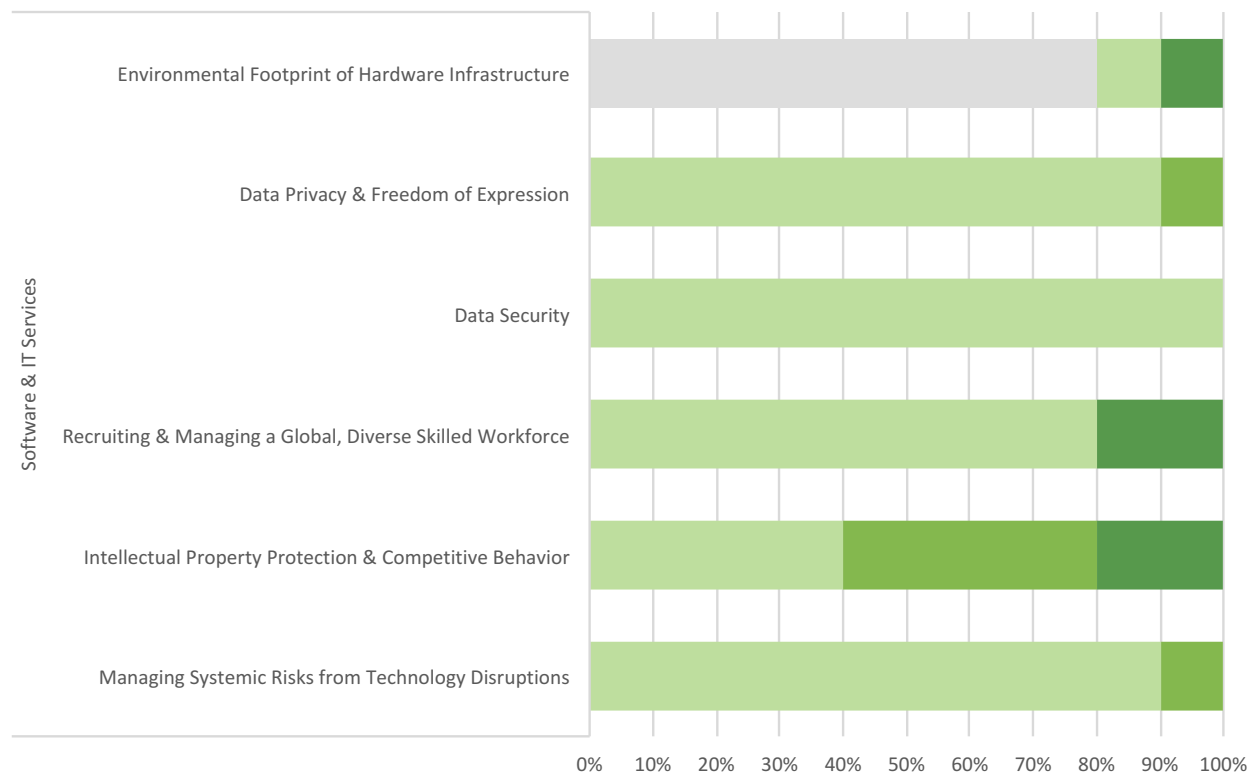
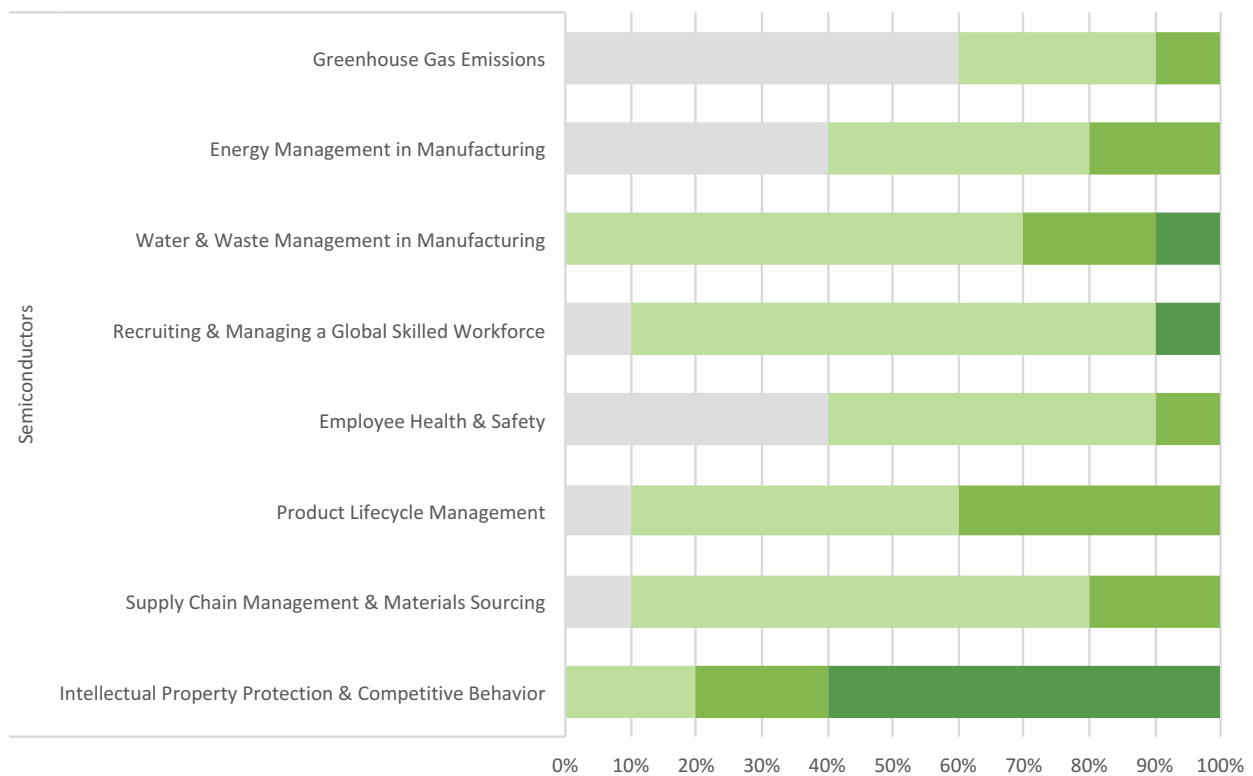
Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

TECHNOLOGY & COMMUNICATIONS SECTOR



Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

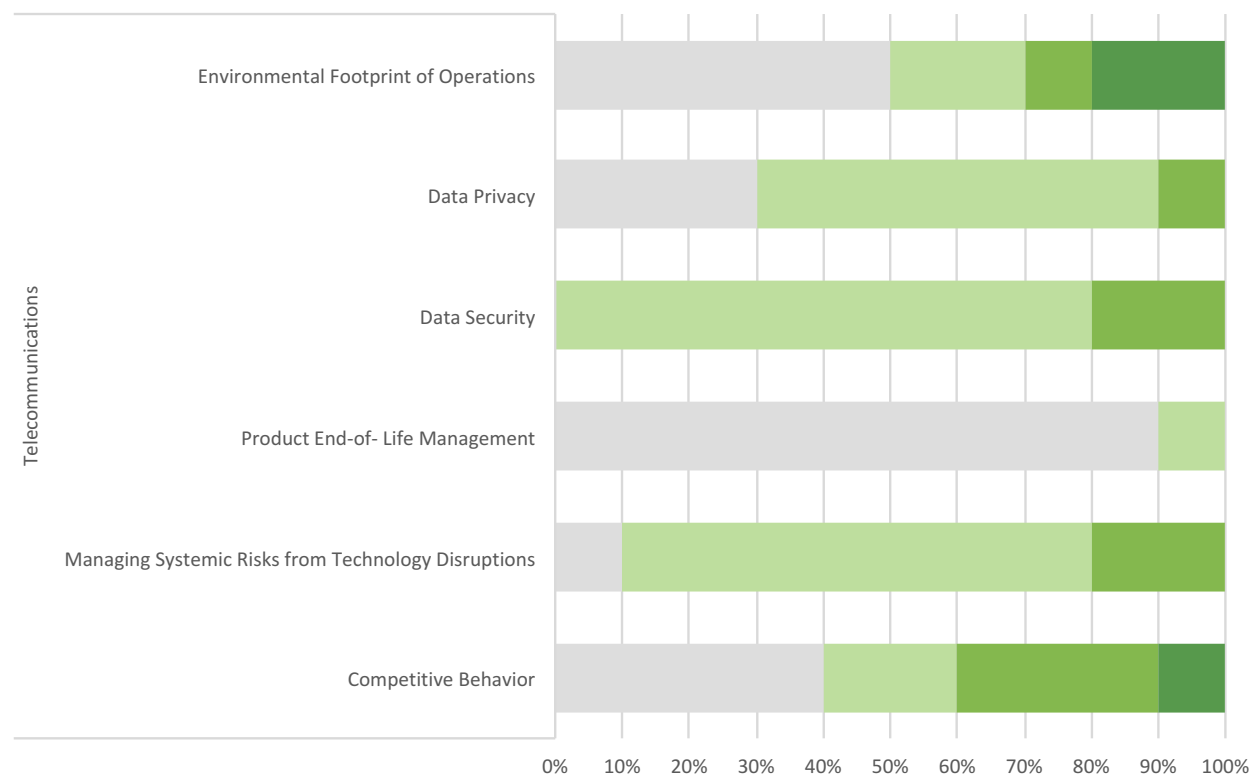
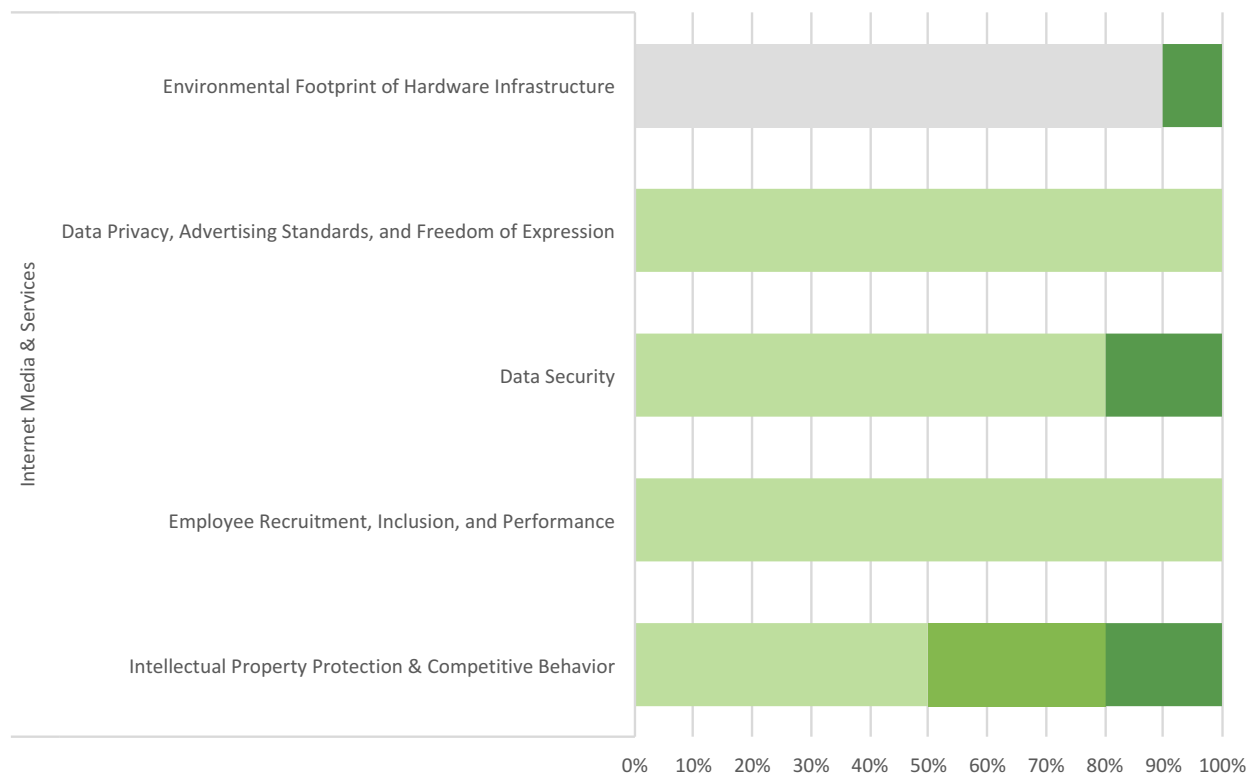
TECHNOLOGY & COMMUNICATIONS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

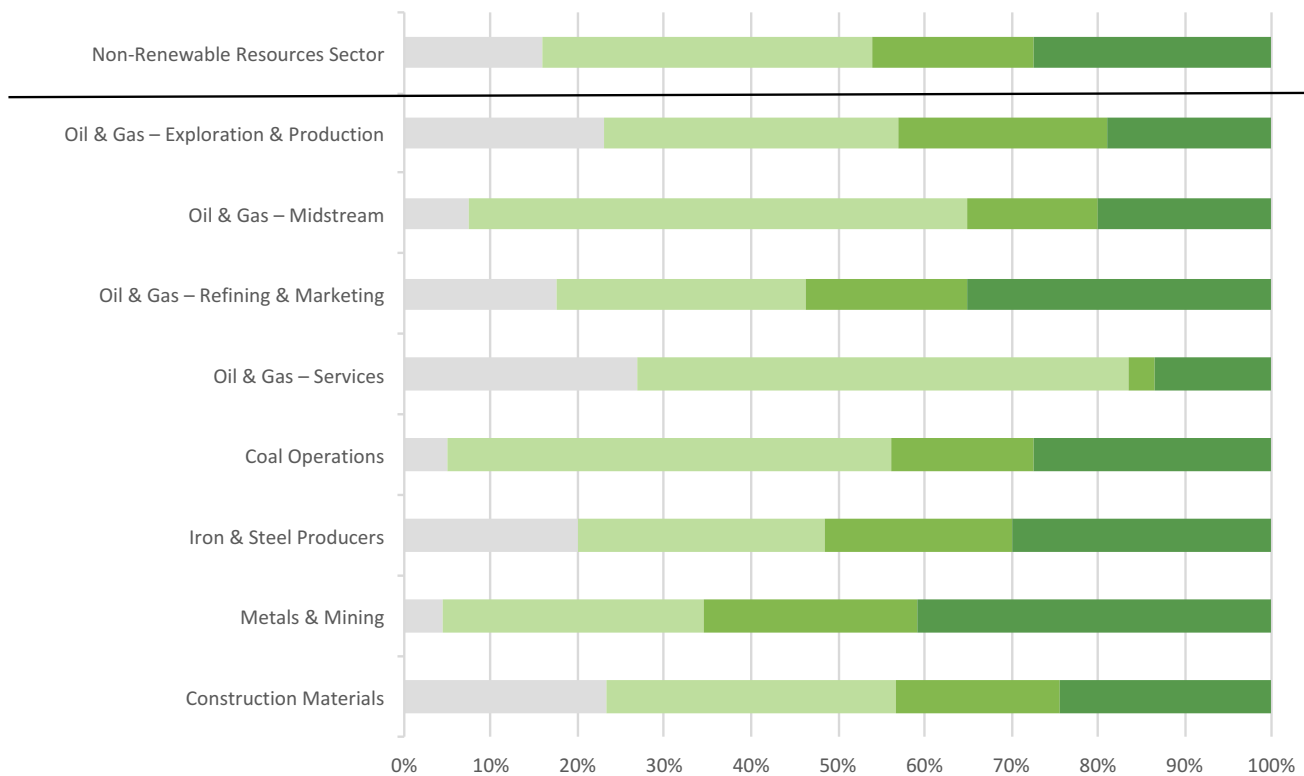
TECHNOLOGY & COMMUNICATIONS SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

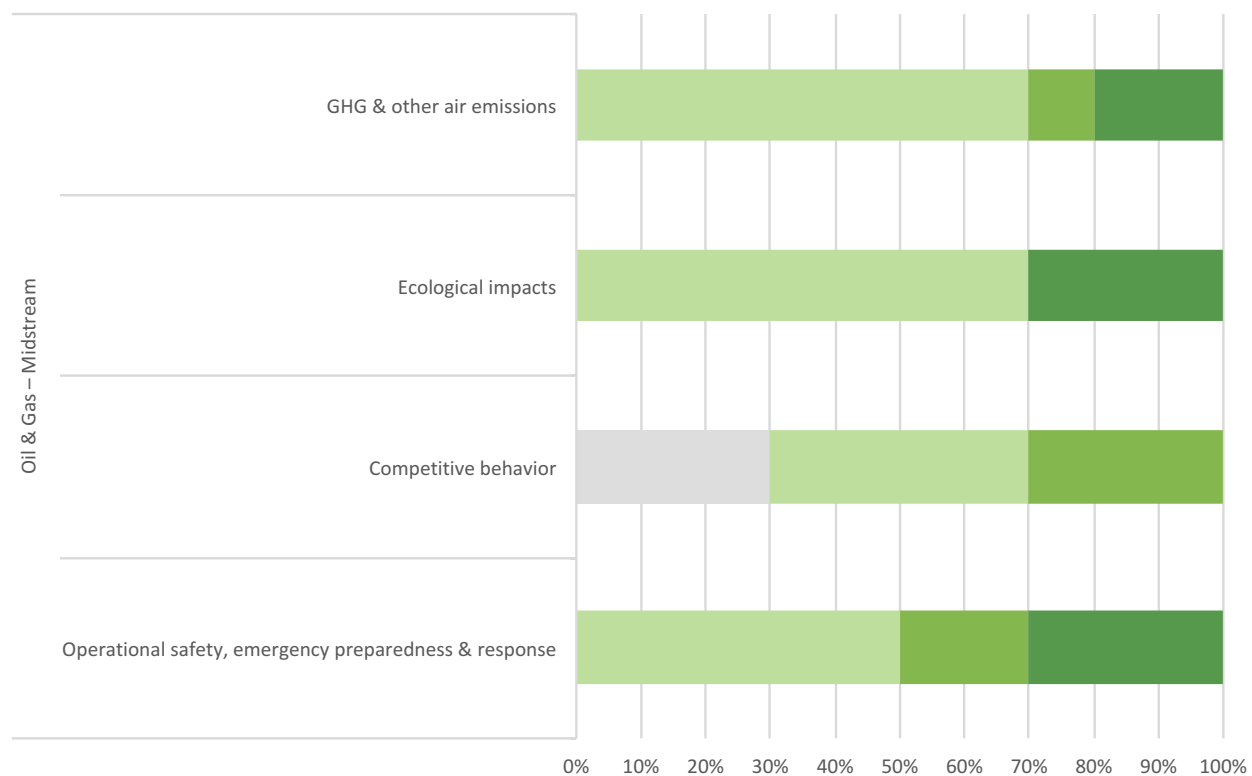
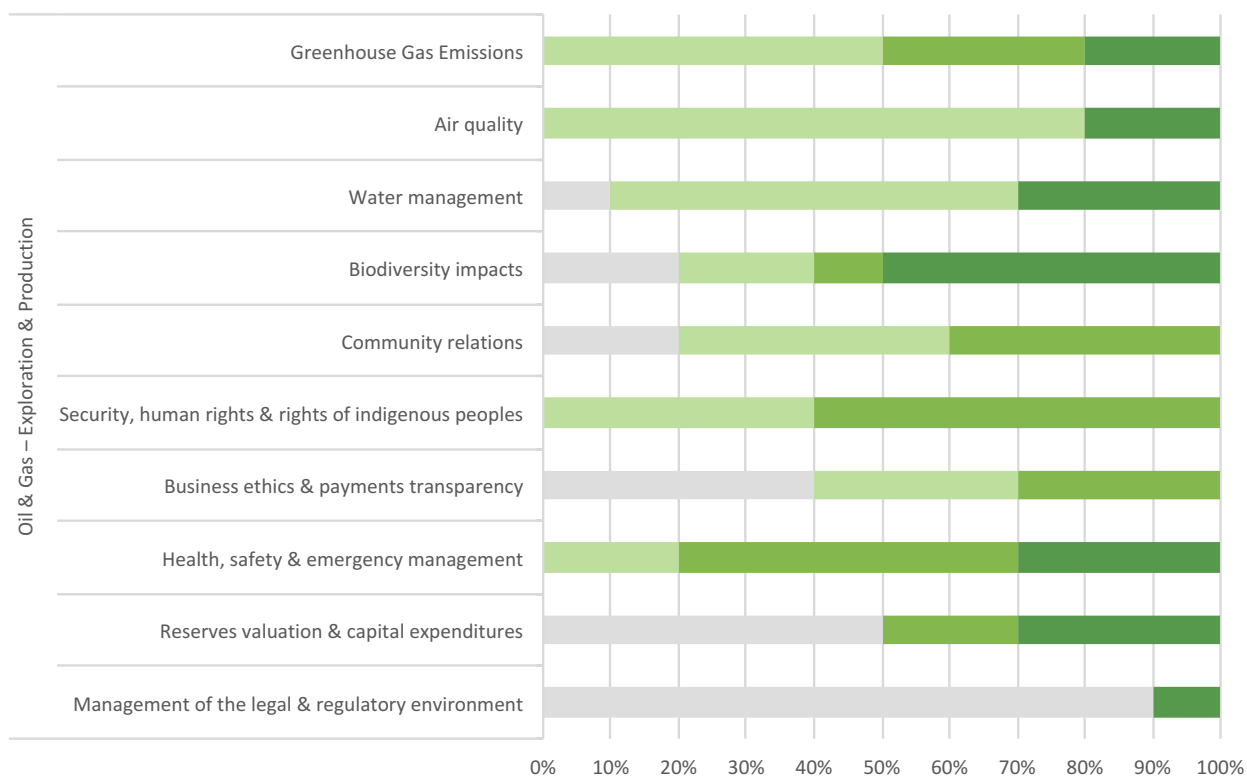
NON-RENEWABLE RESOURCES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

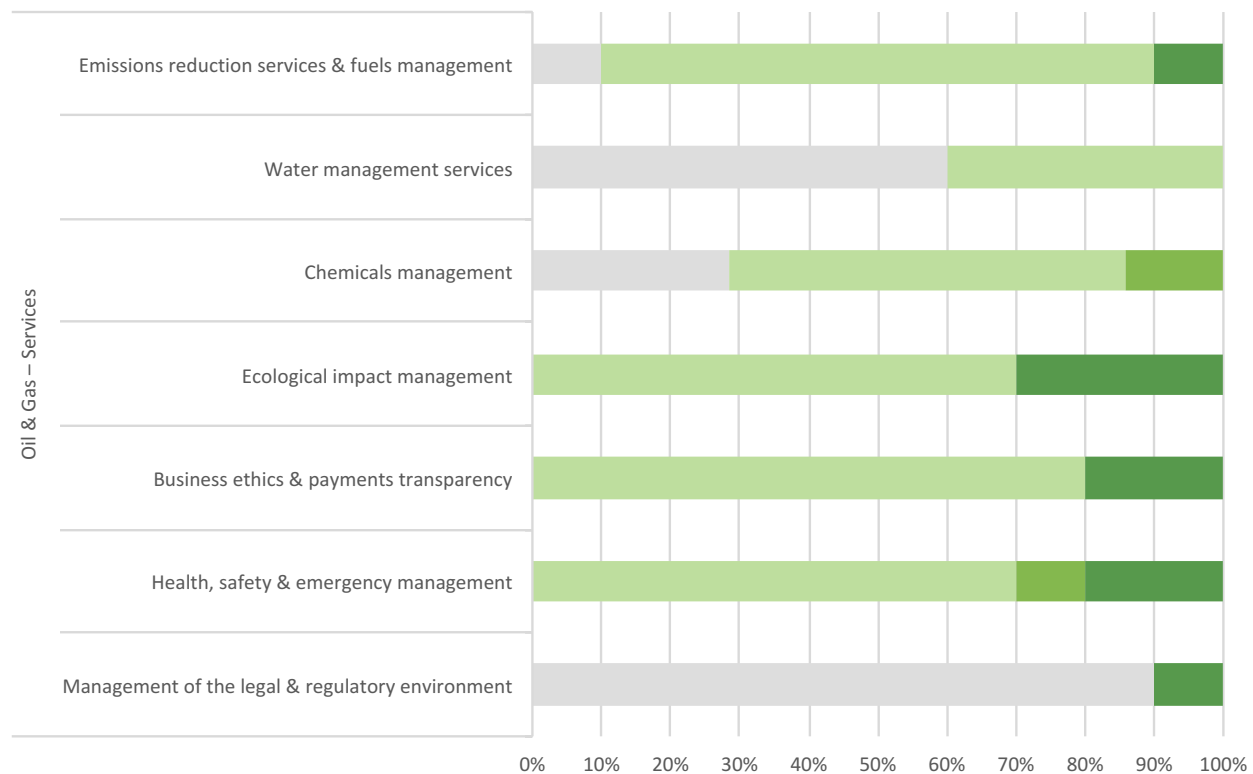
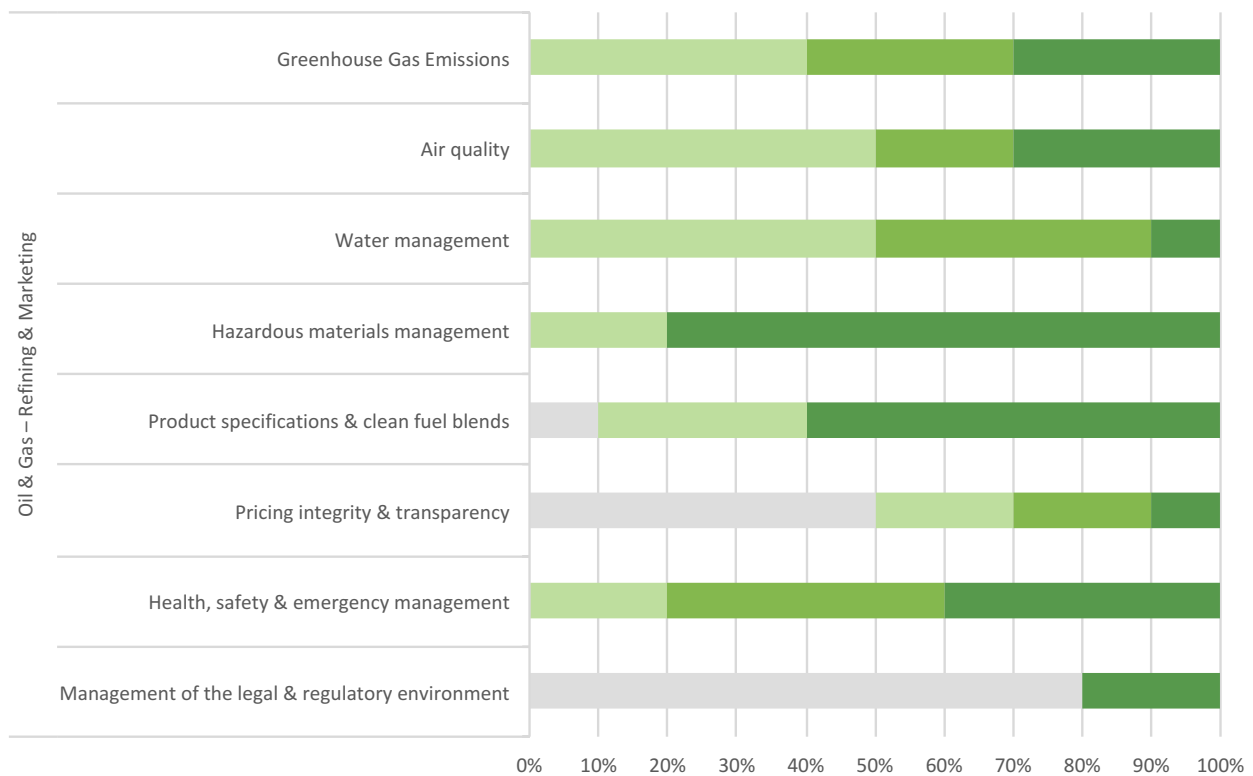
NON-RENEWABLE RESOURCES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

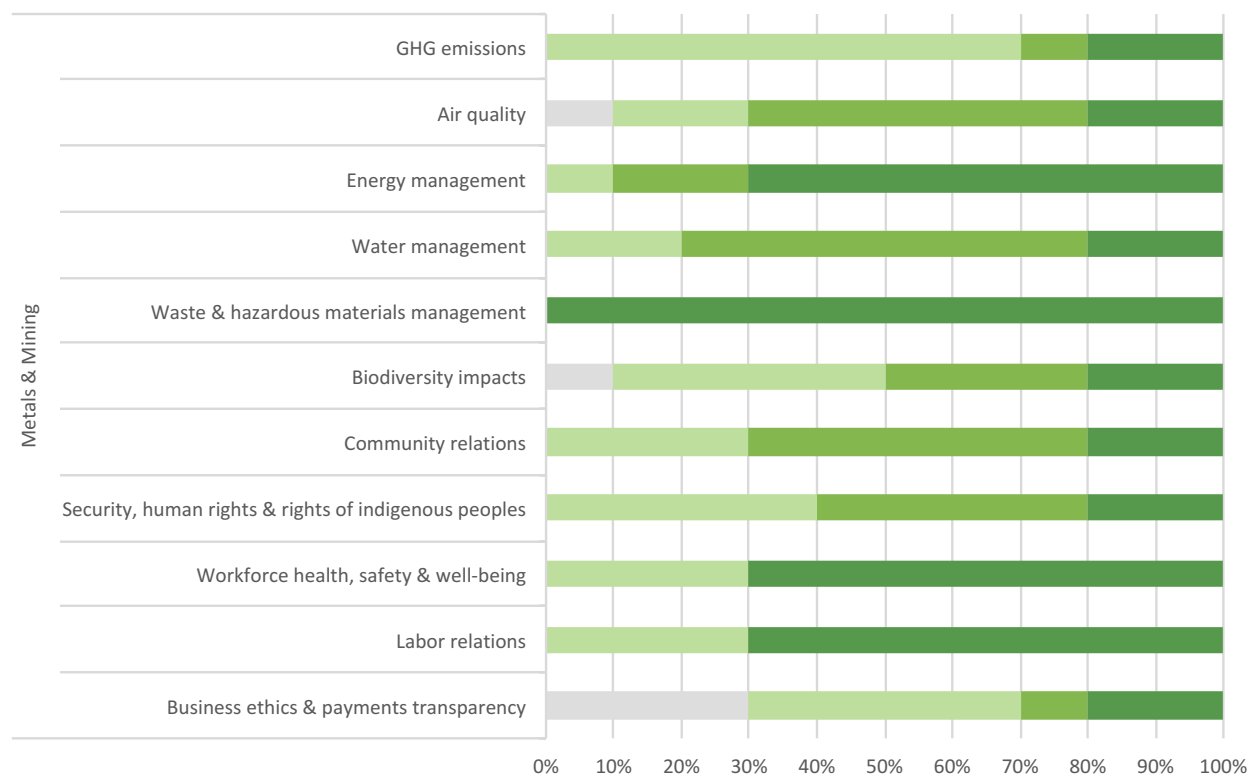
NON-RENEWABLE RESOURCES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

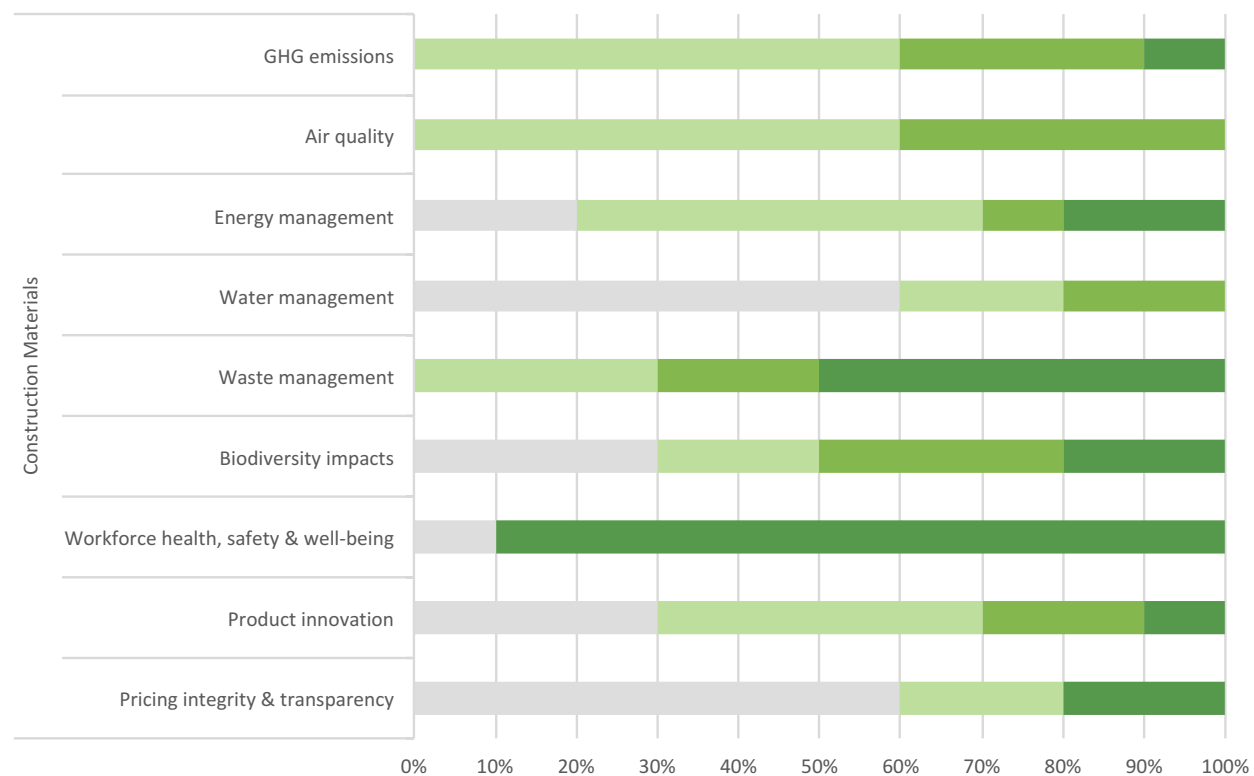
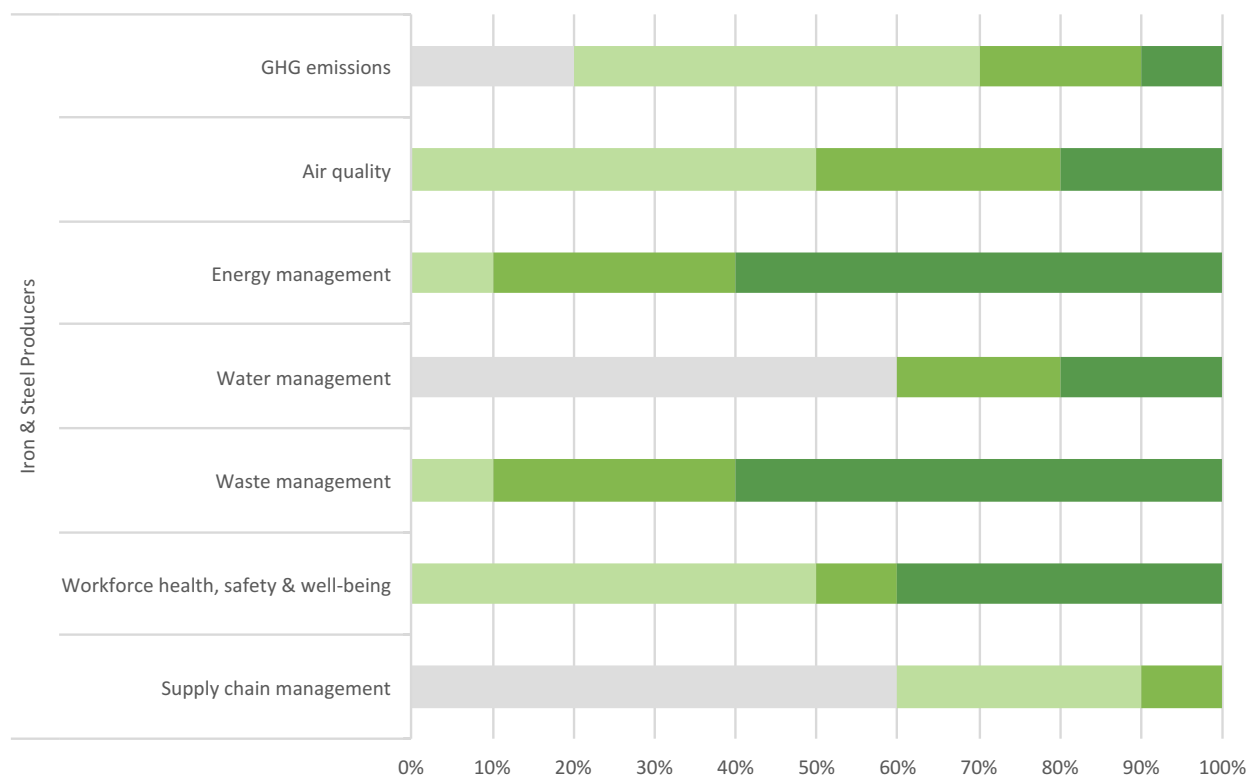
NON-RENEWABLE RESOURCES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

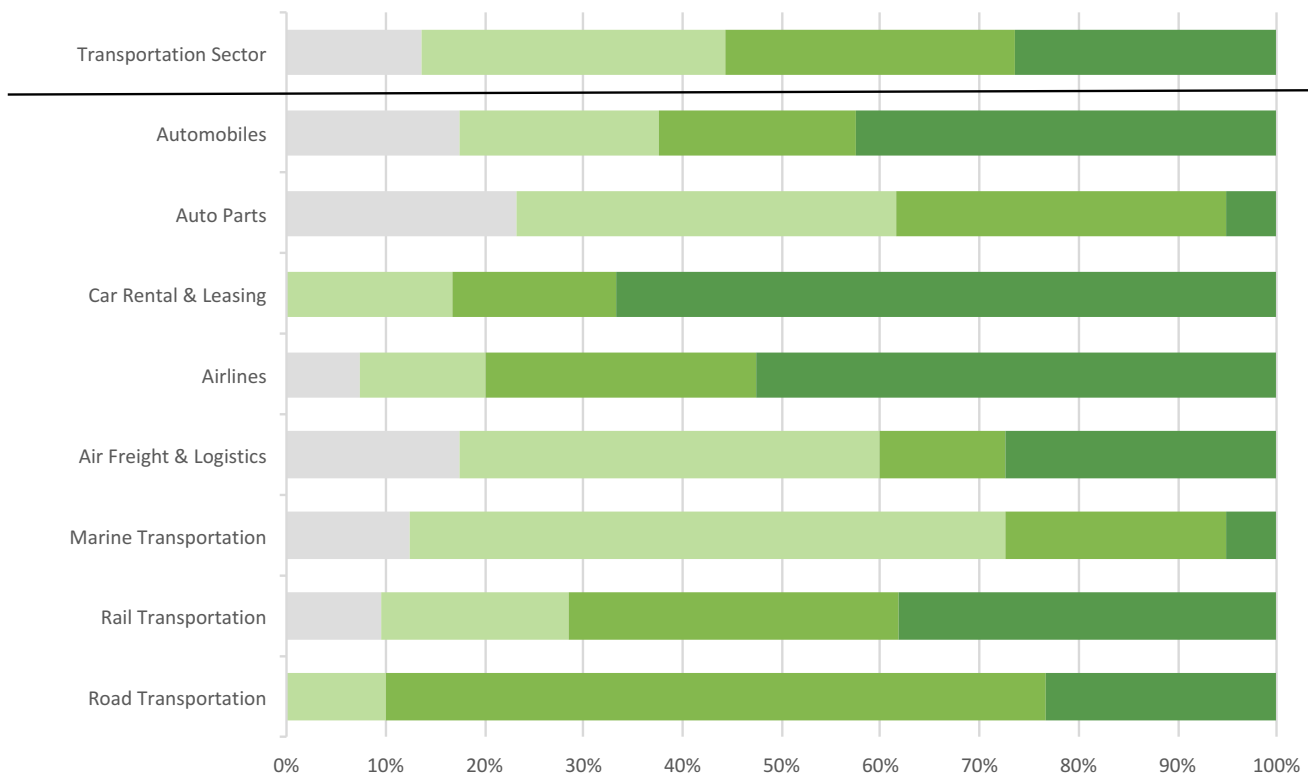
NON-RENEWABLE RESOURCES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

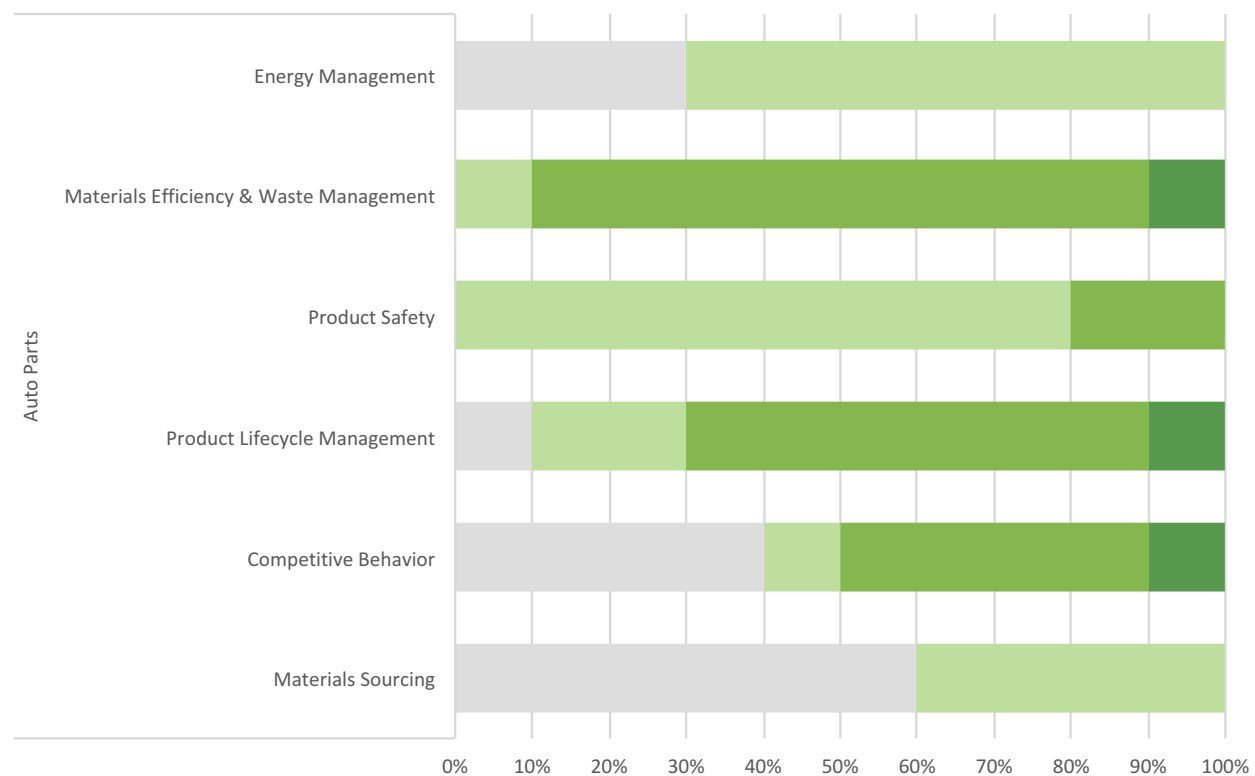
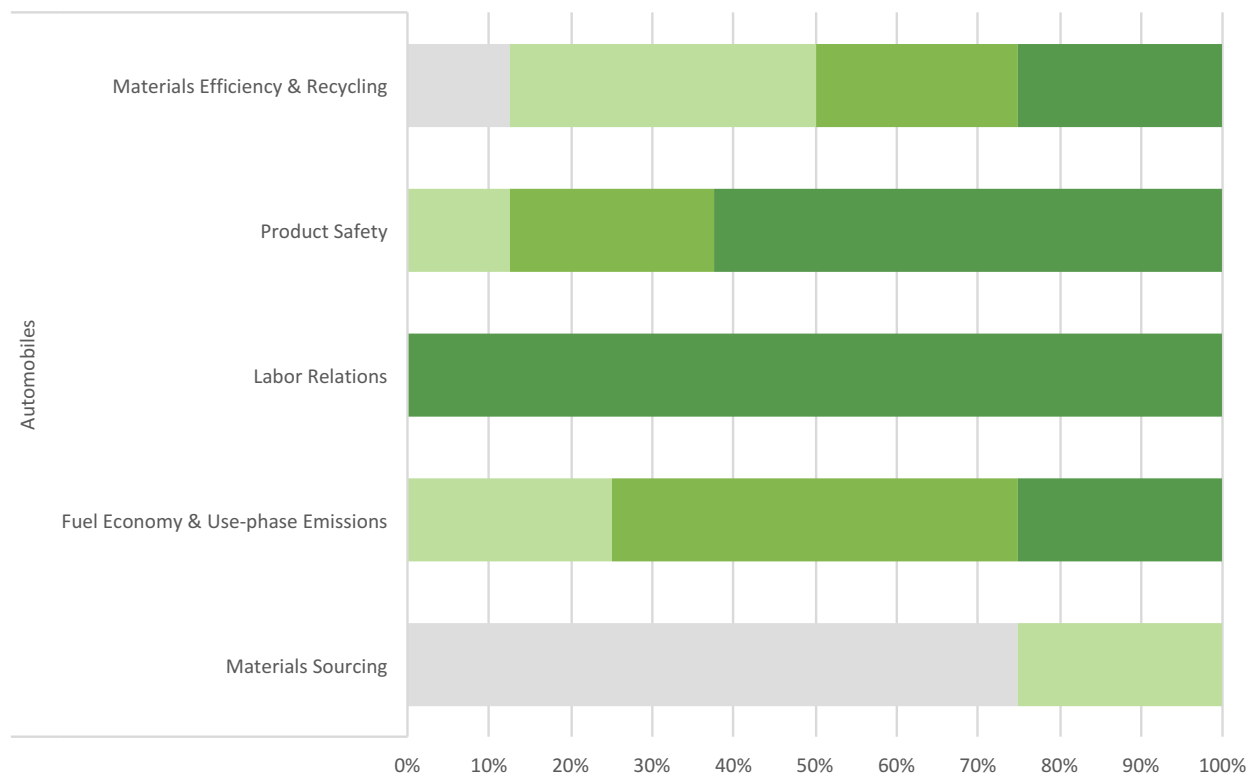
TRANSPORTATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

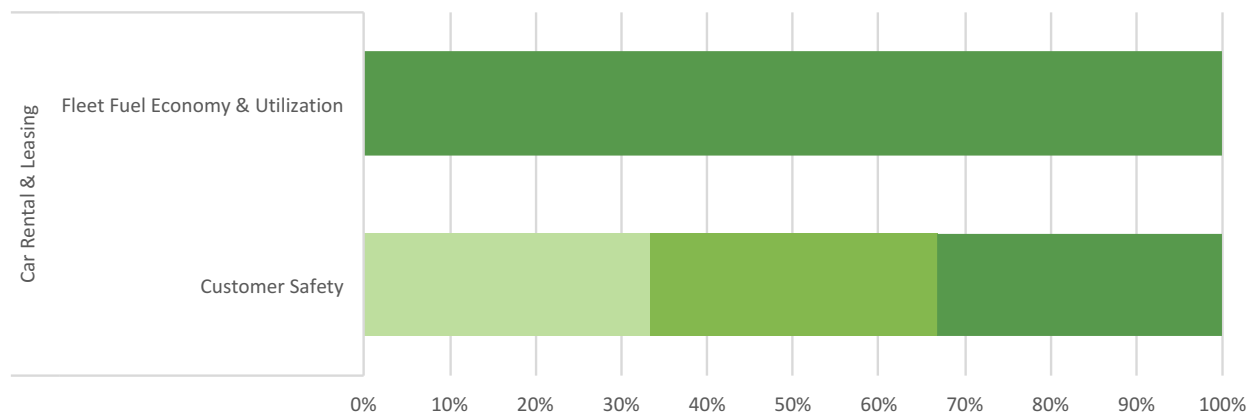
TRANSPORTATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

TRANSPORTATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

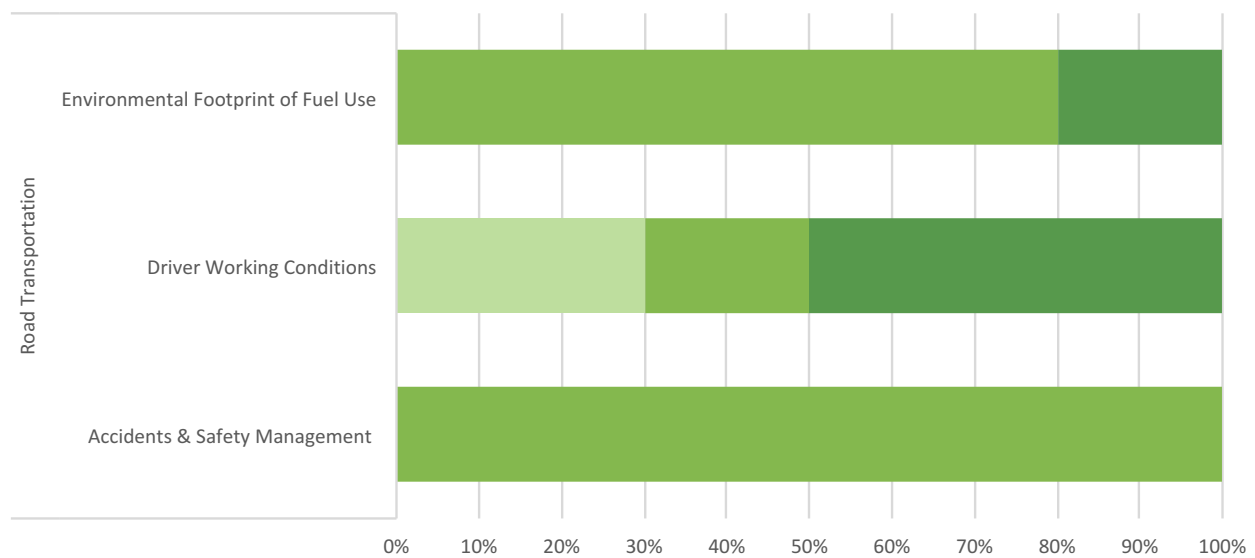
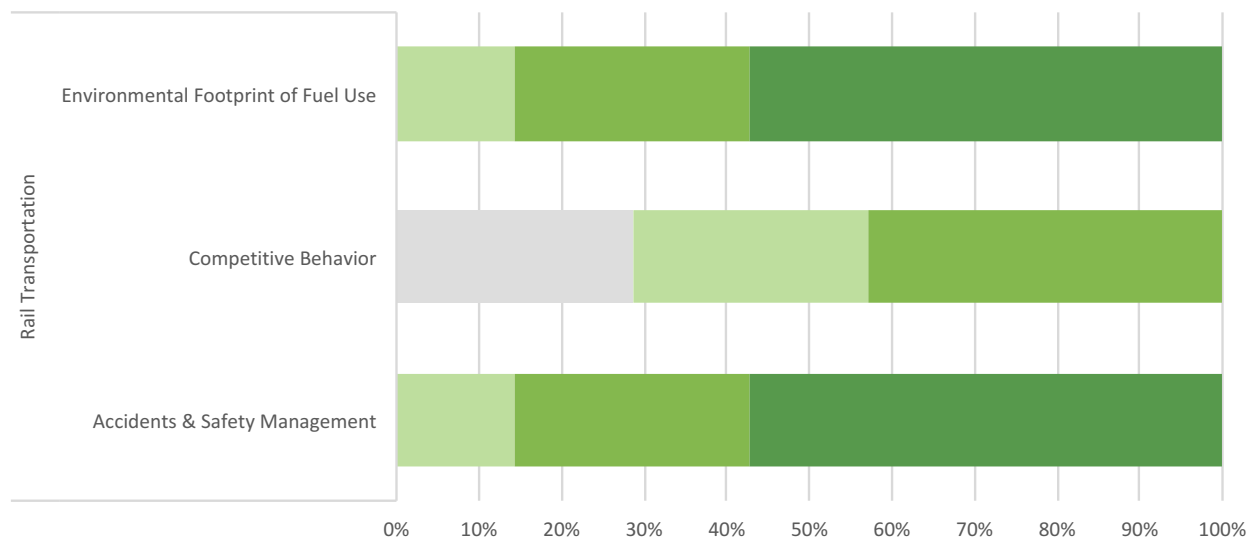
TRANSPORTATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

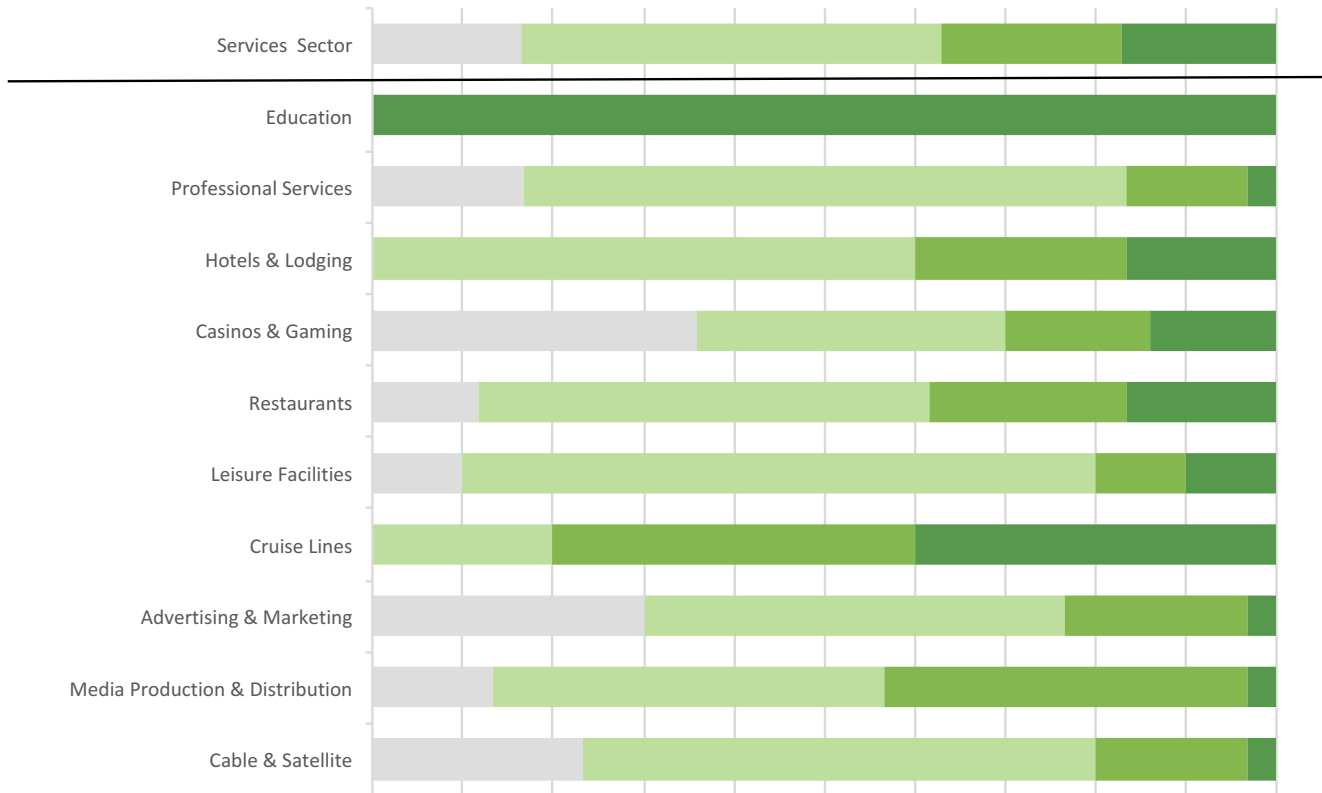
TRANSPORTATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

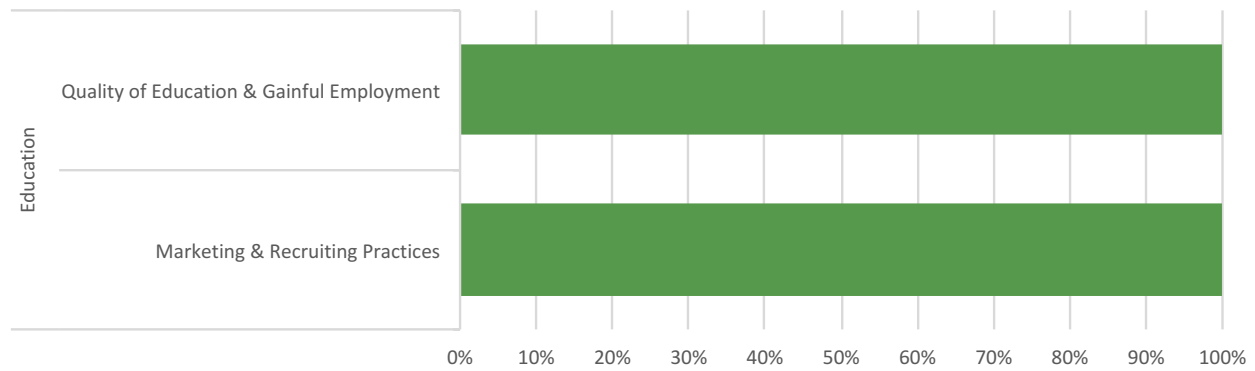
SERVICES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

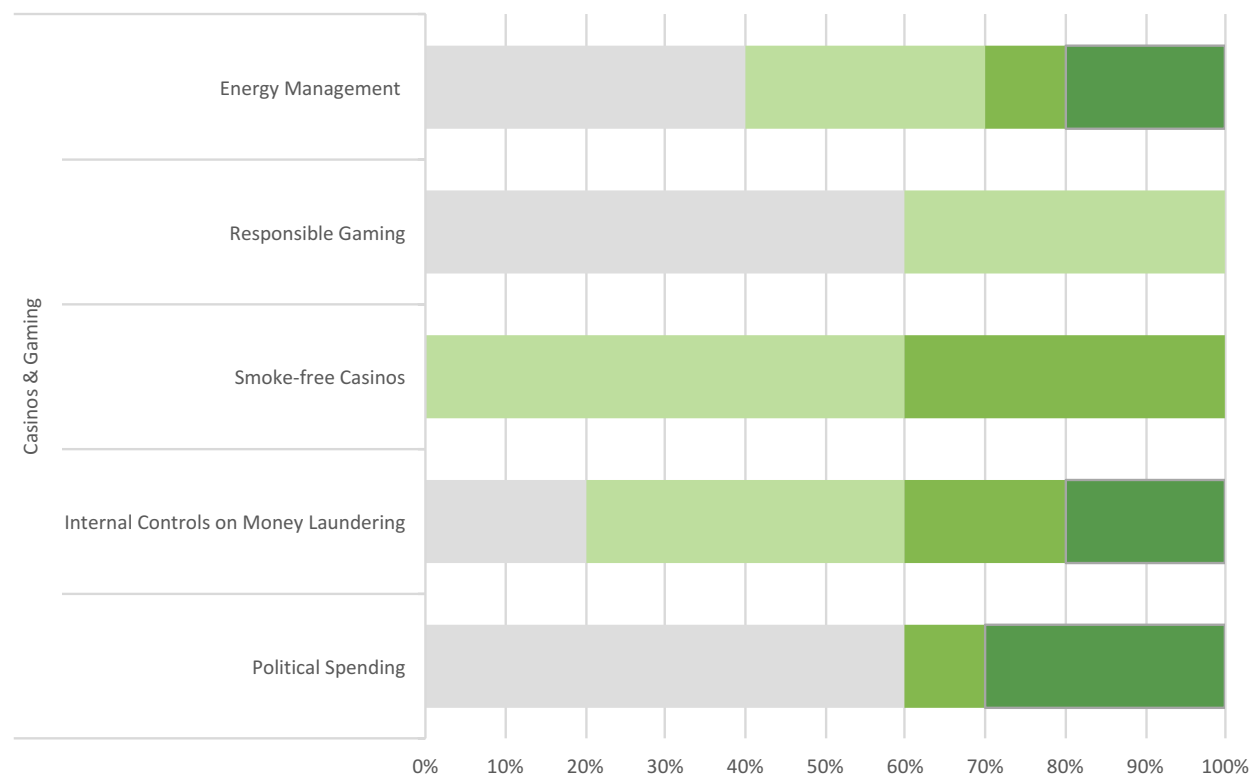
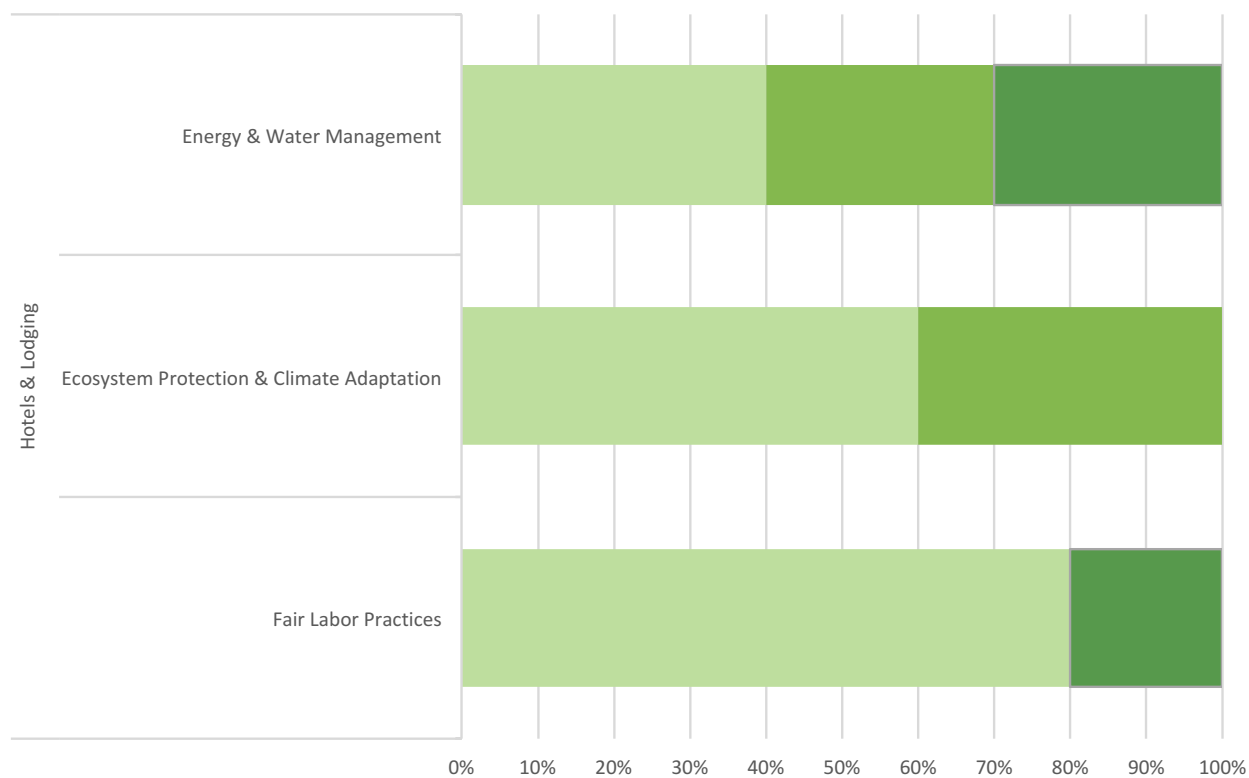
SERVICES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

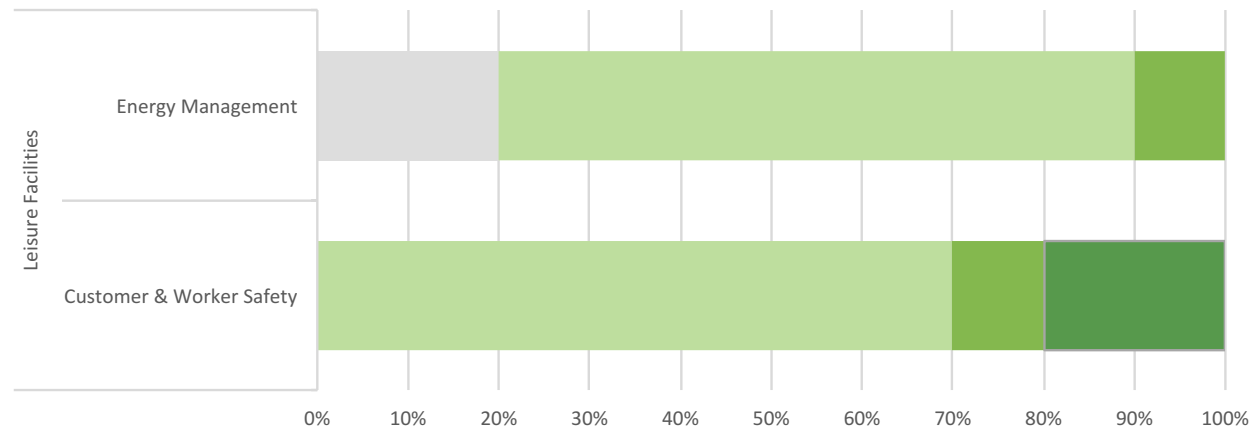
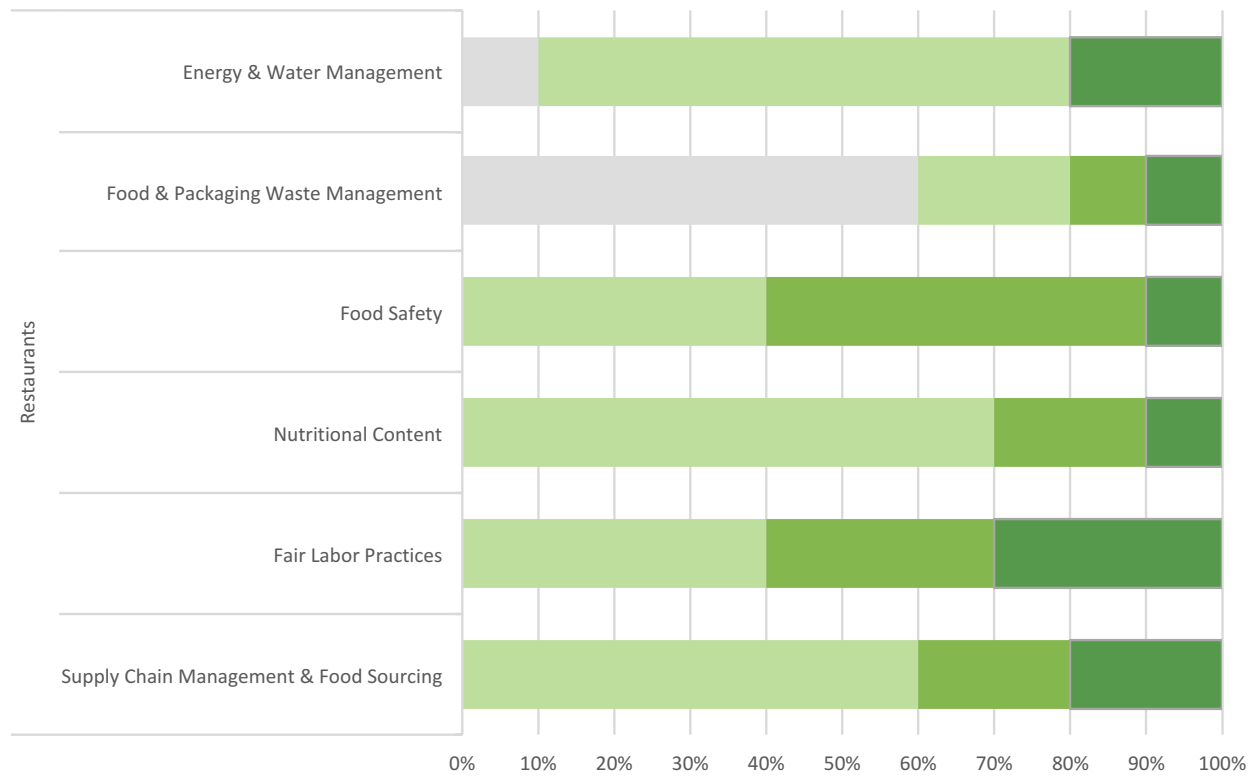
SERVICES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

SERVICES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

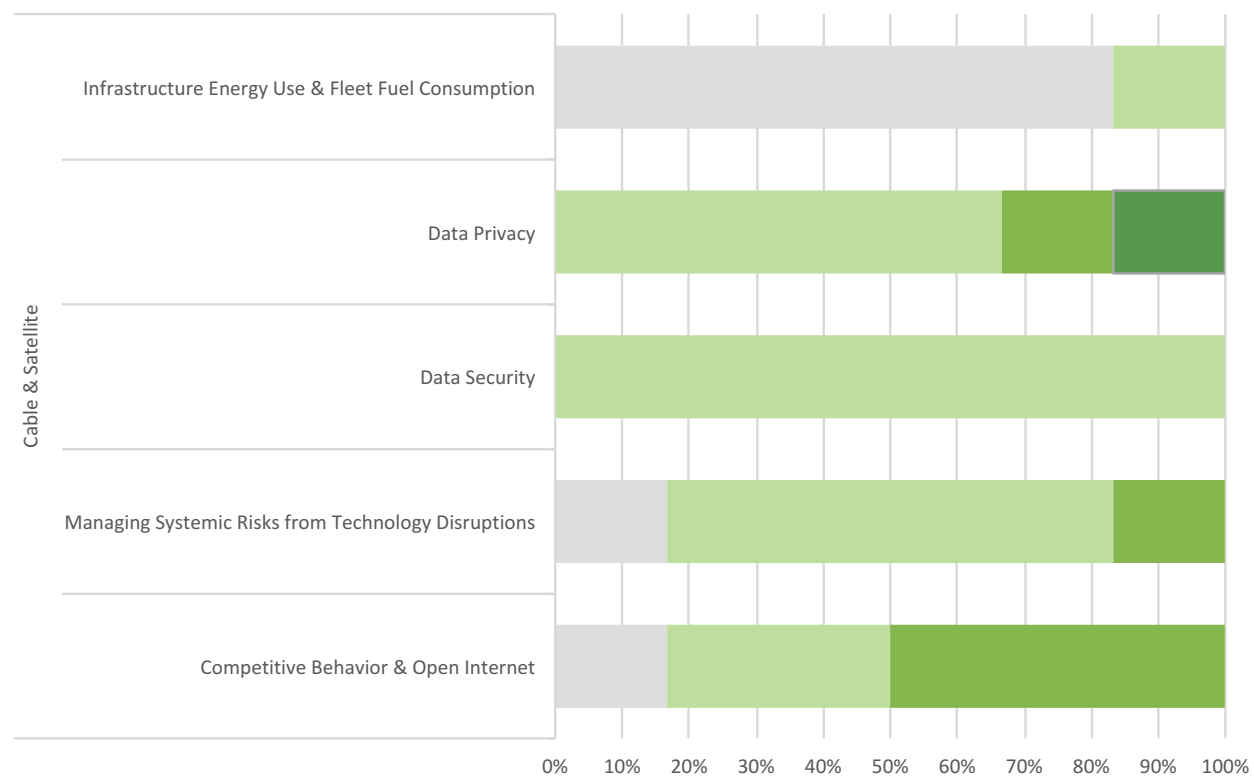
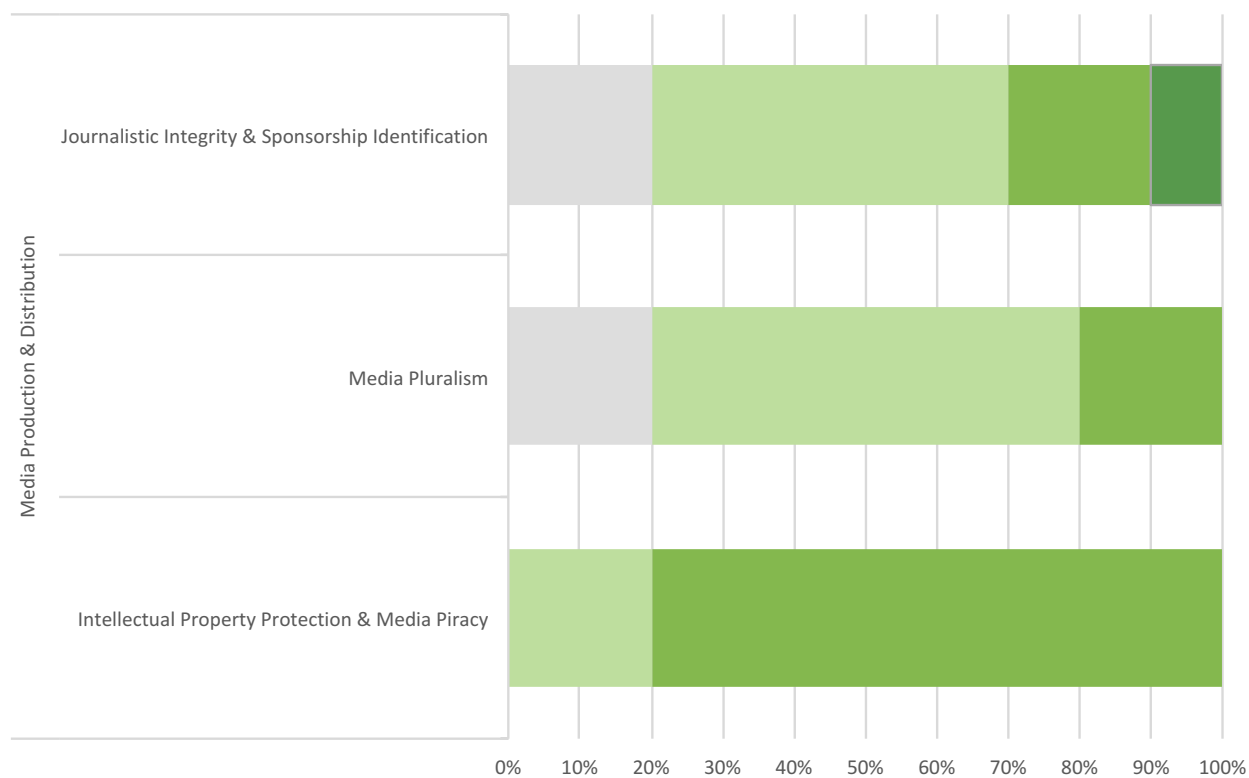
Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

SERVICES SECTOR



Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

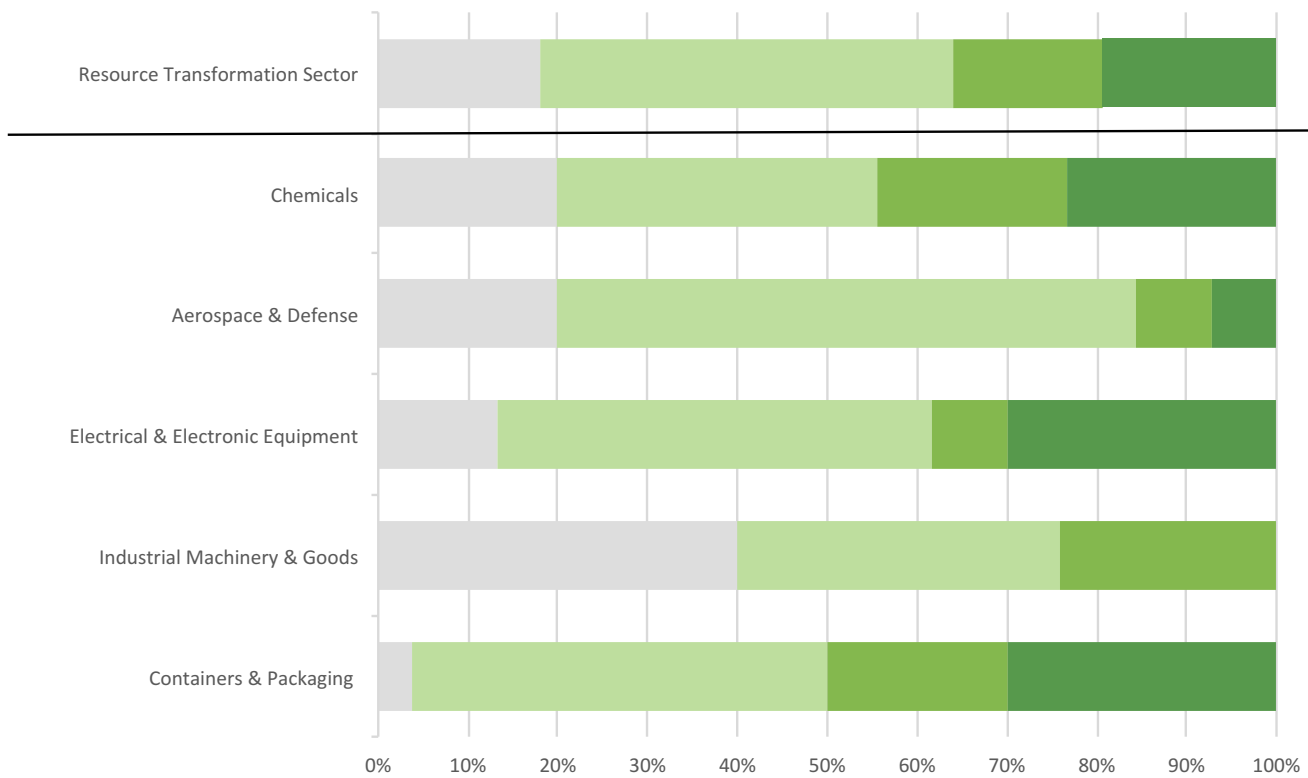
SERVICES SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

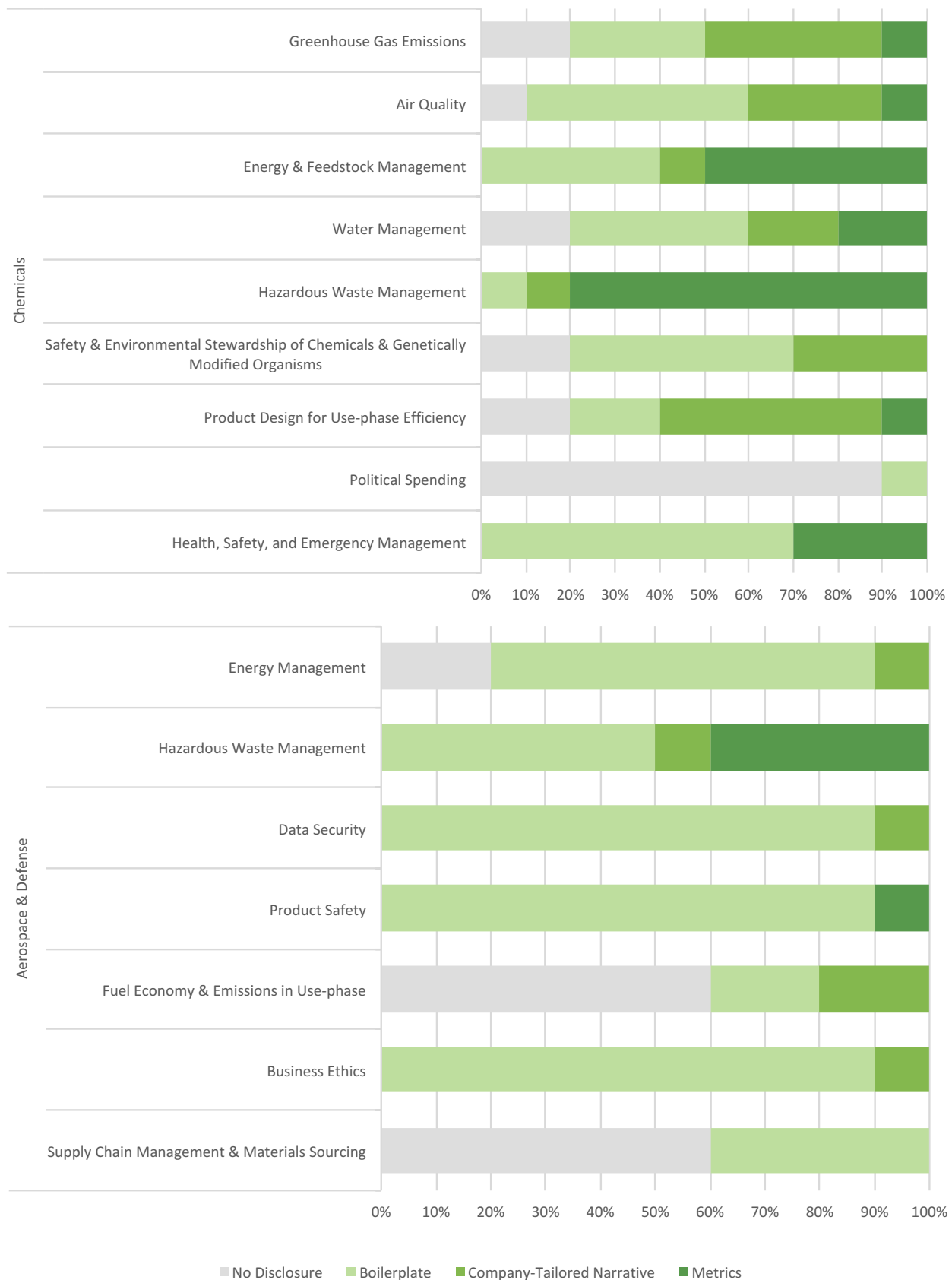
RESOURCE TRANSFORMATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

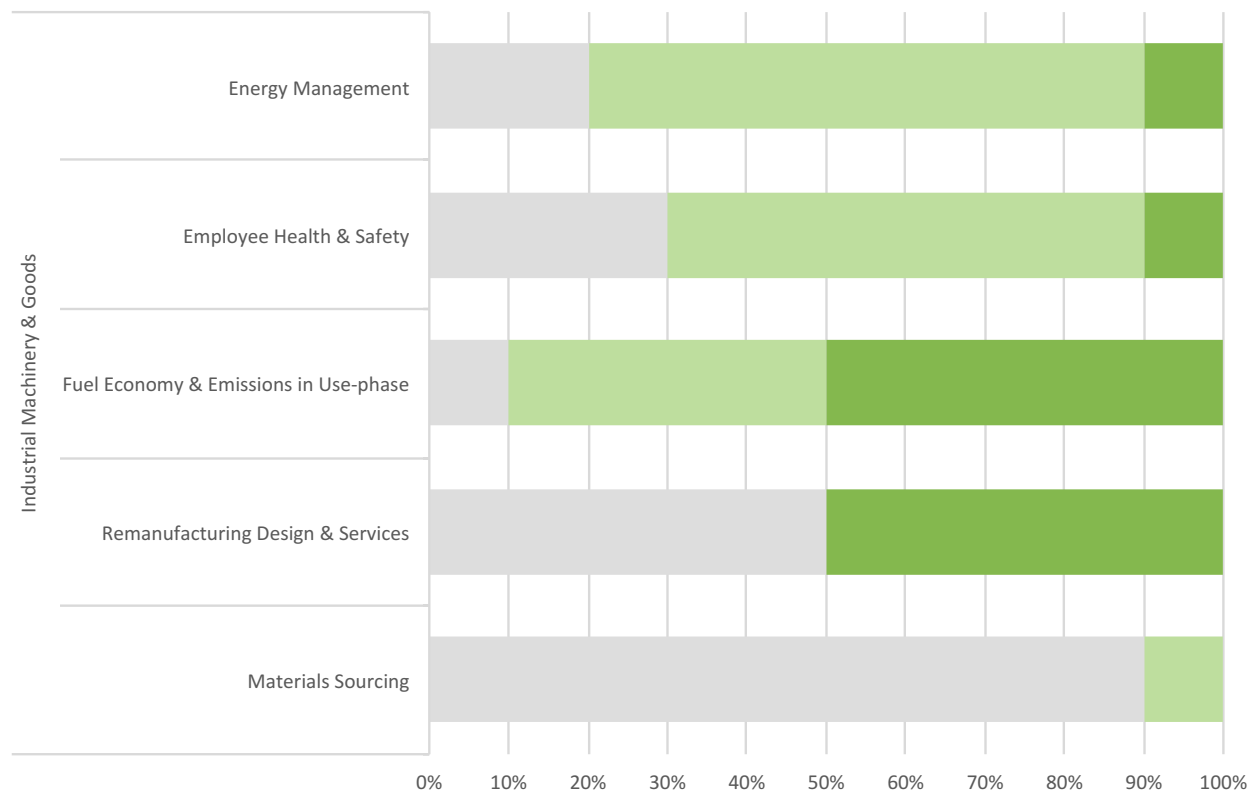
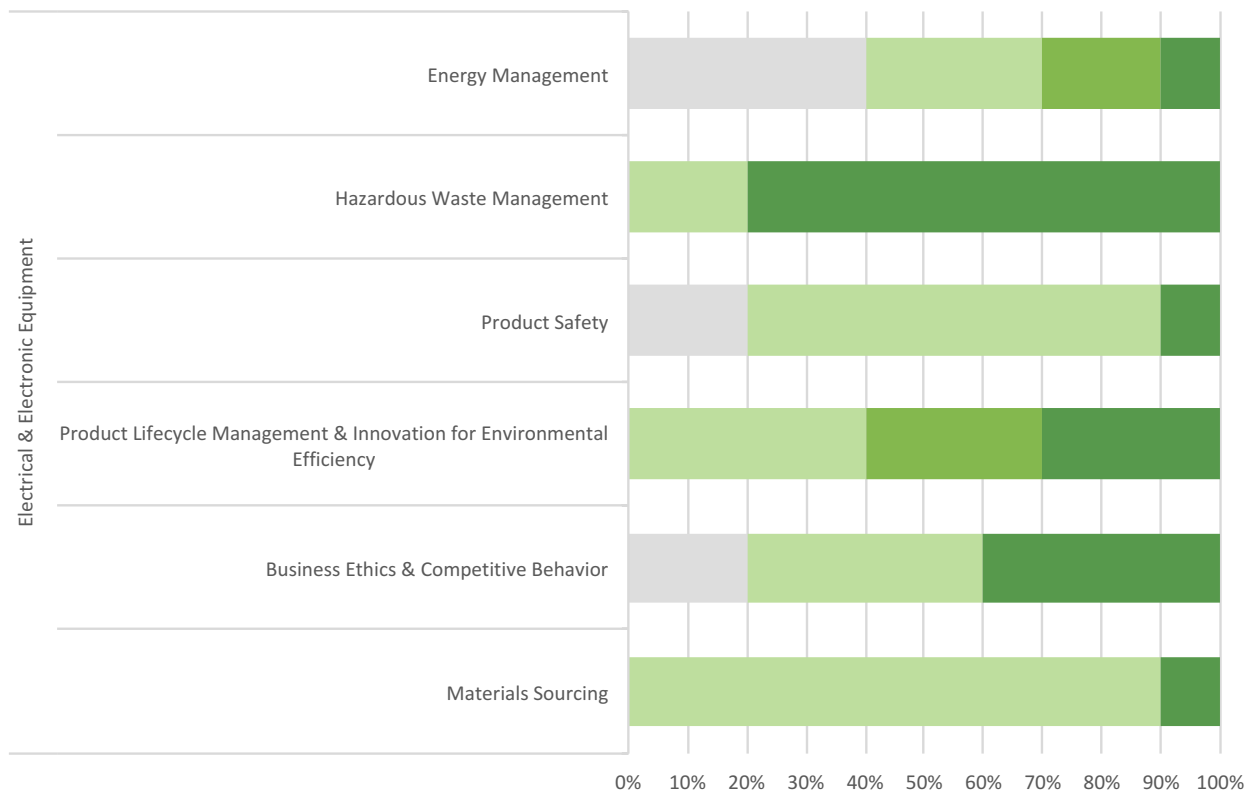
Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

RESOURCE TRANSFORMATION SECTOR



Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

RESOURCE TRANSFORMATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

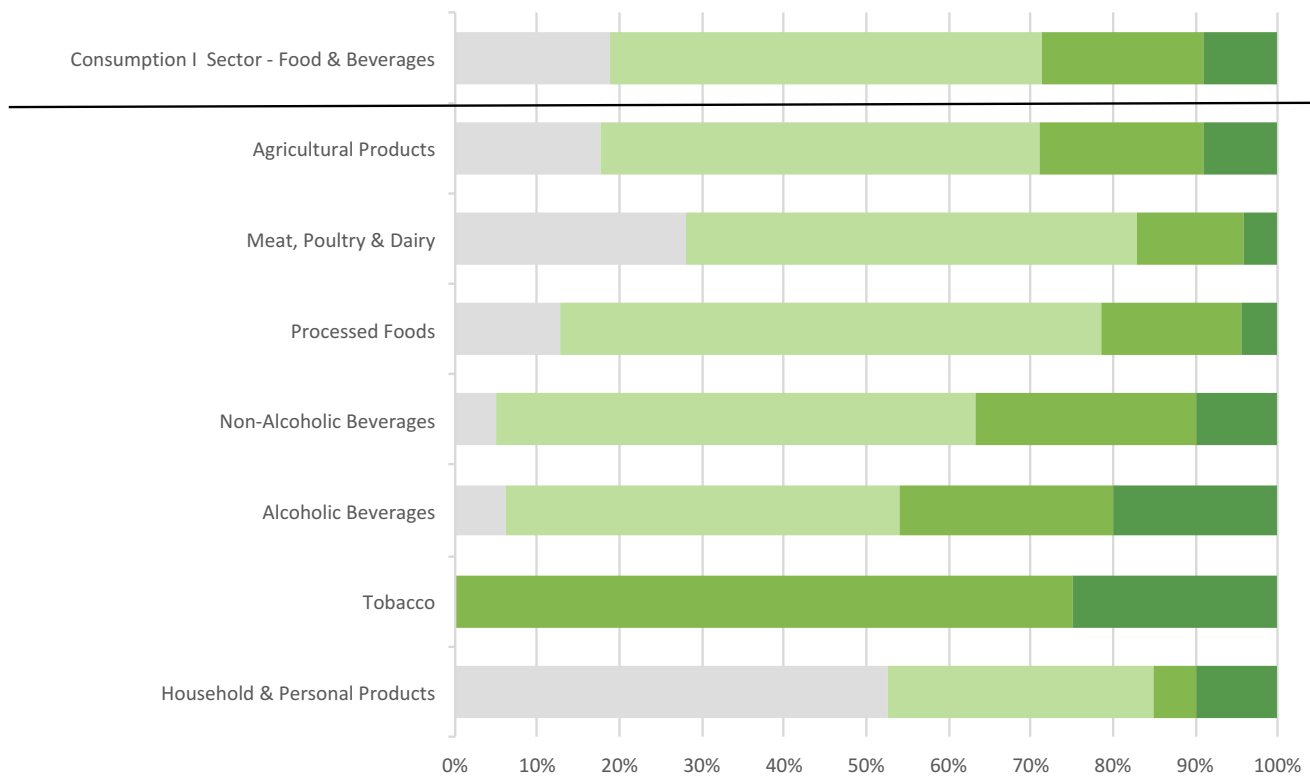
RESOURCE TRANSFORMATION SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

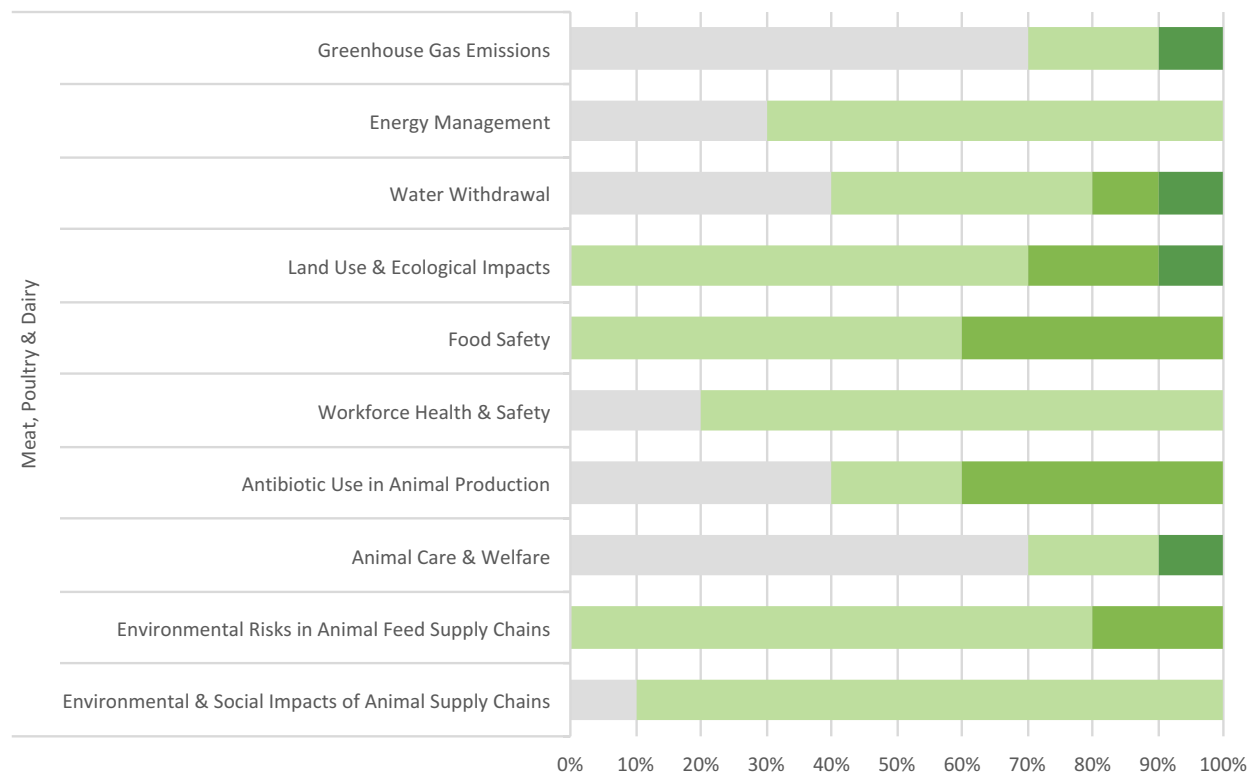
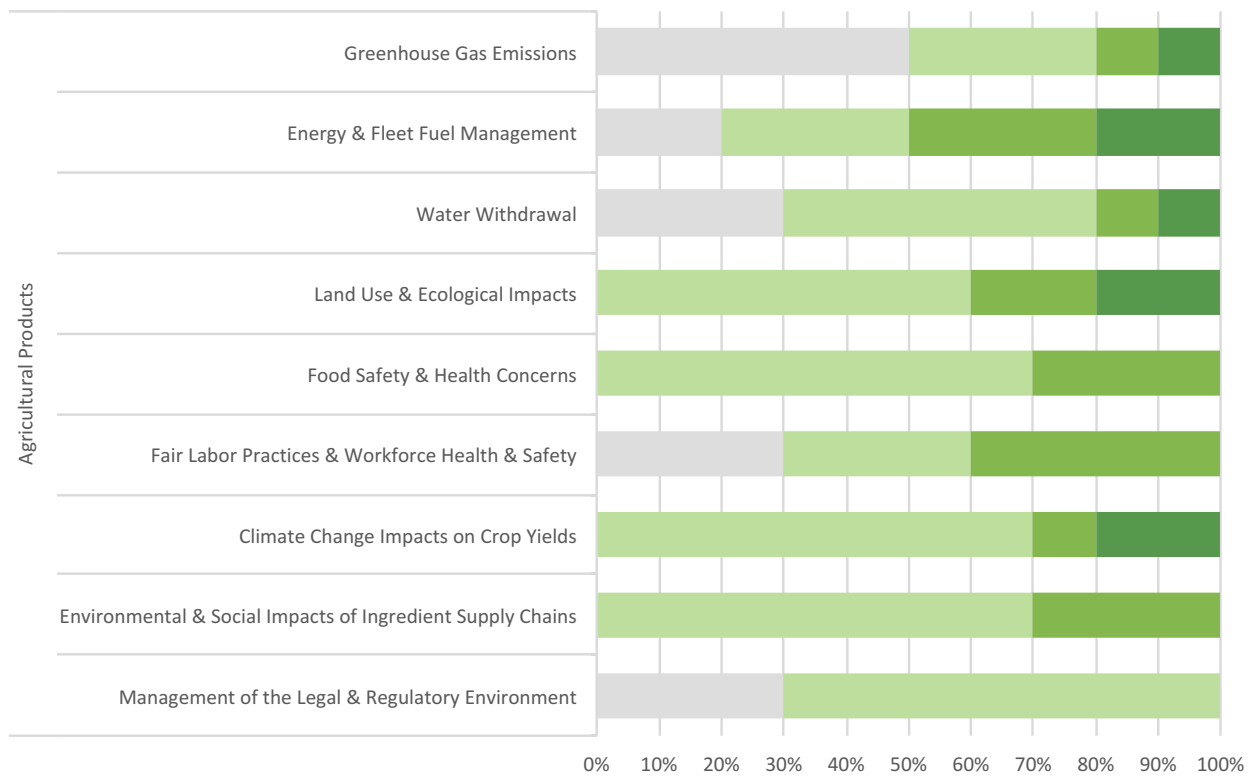
FOOD AND BEVERAGE (CONSUMPTION I) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

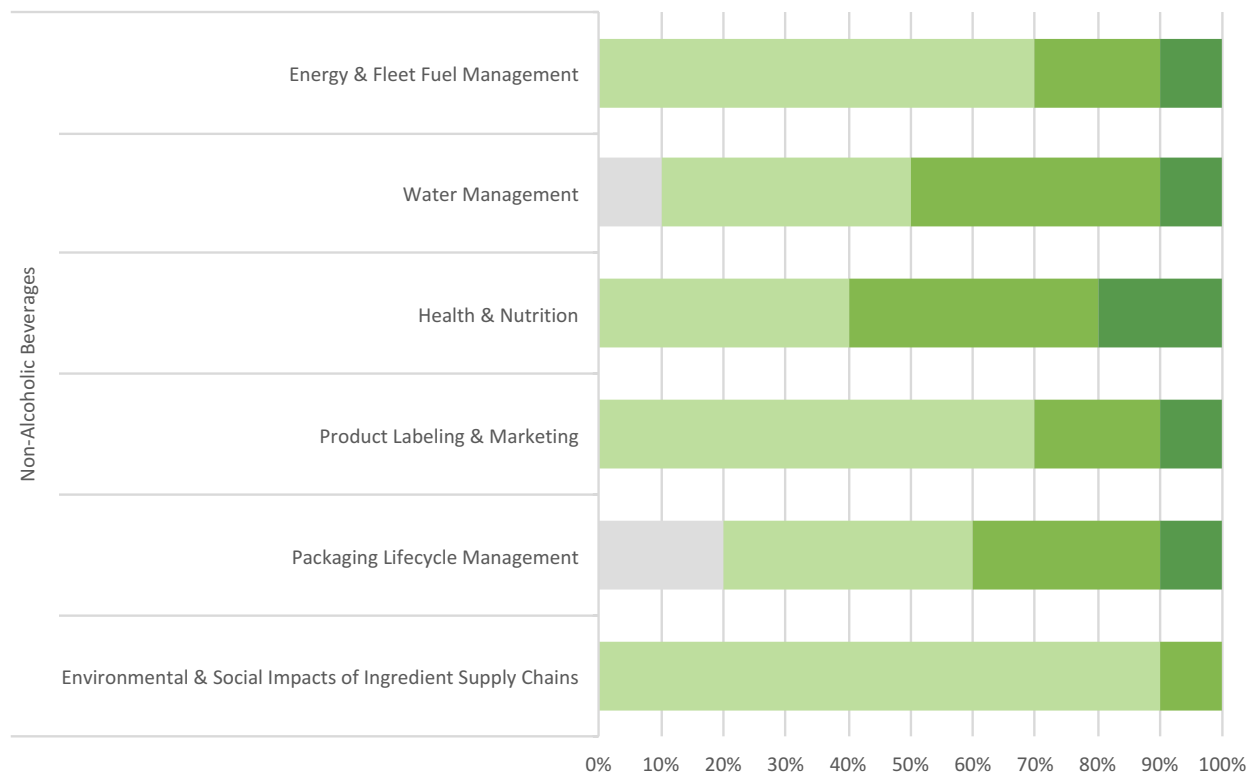
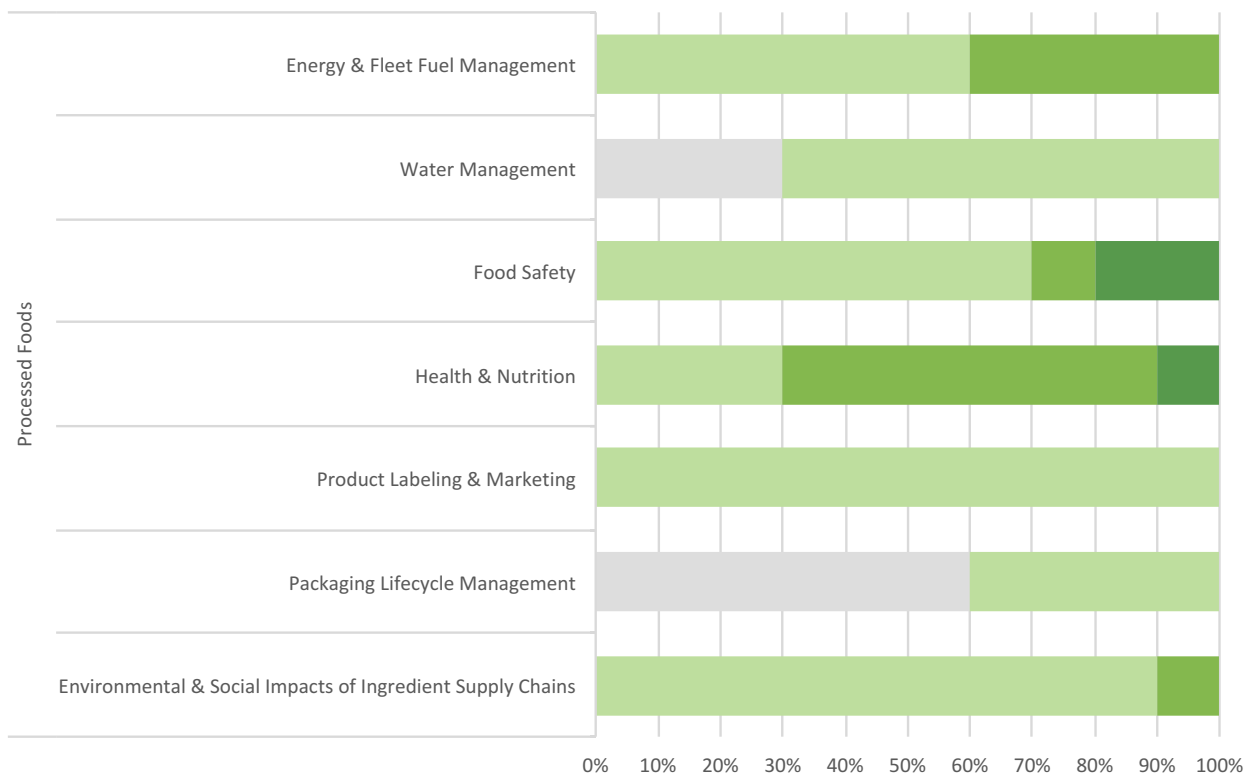
FOOD AND BEVERAGE (CONSUMPTION I) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

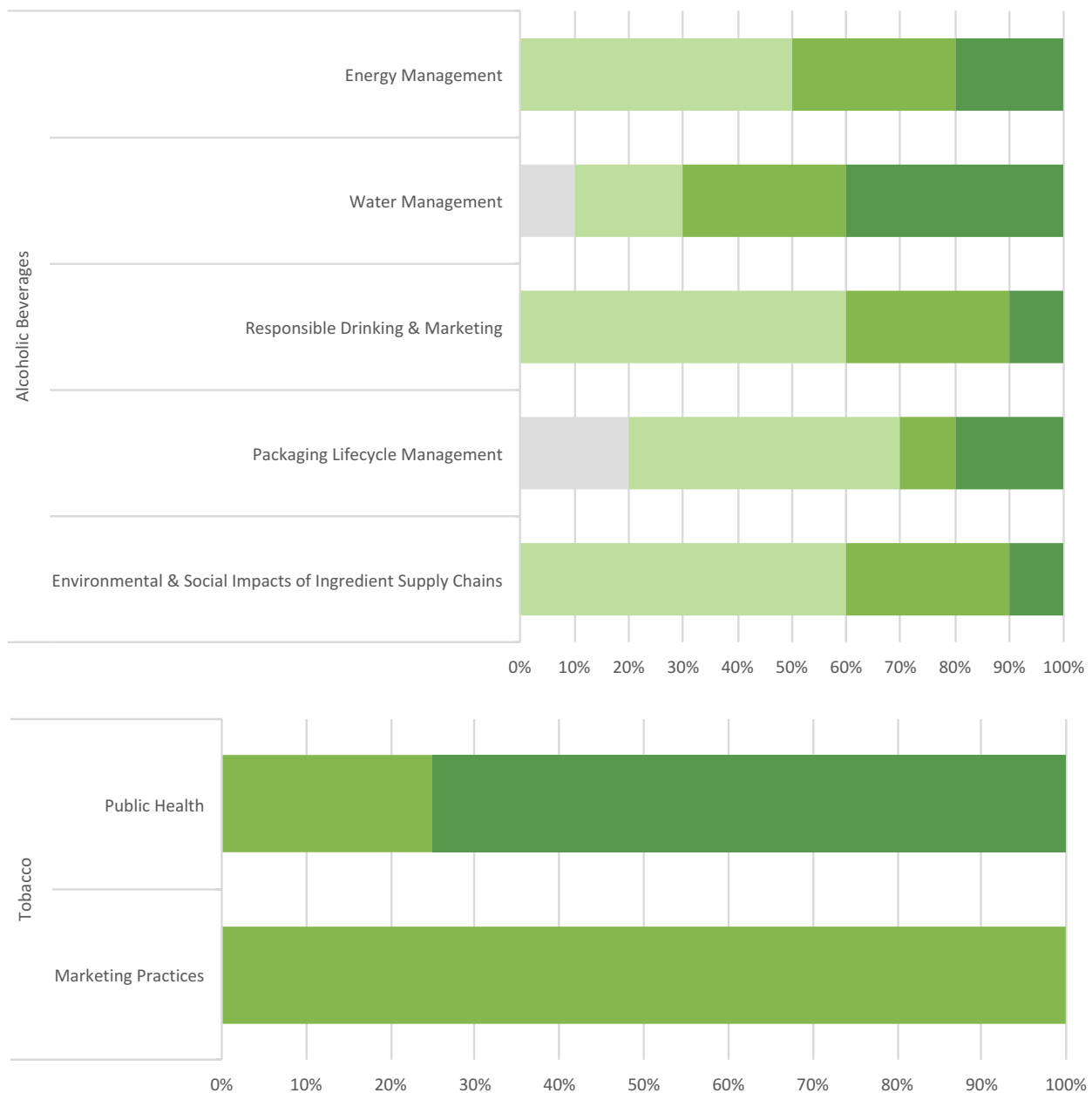
FOOD AND BEVERAGE (CONSUMPTION I) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

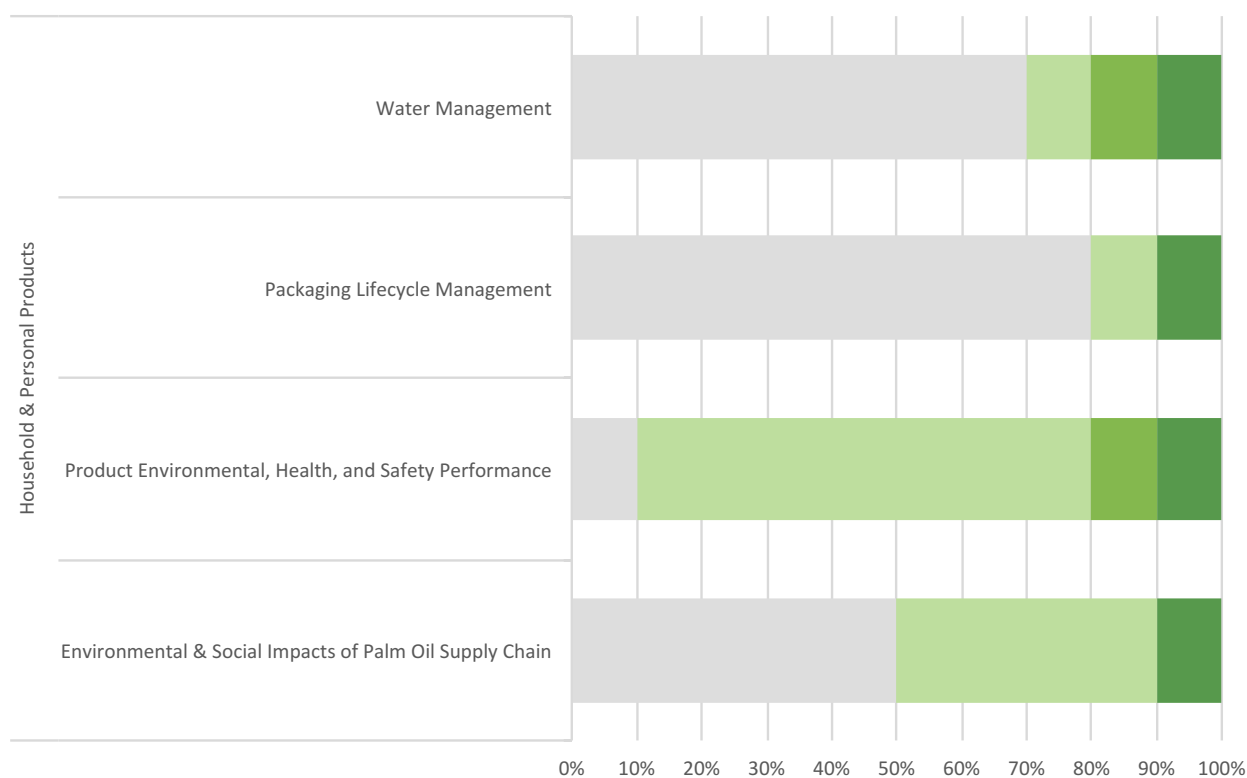
FOOD AND BEVERAGE (CONSUMPTION I) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

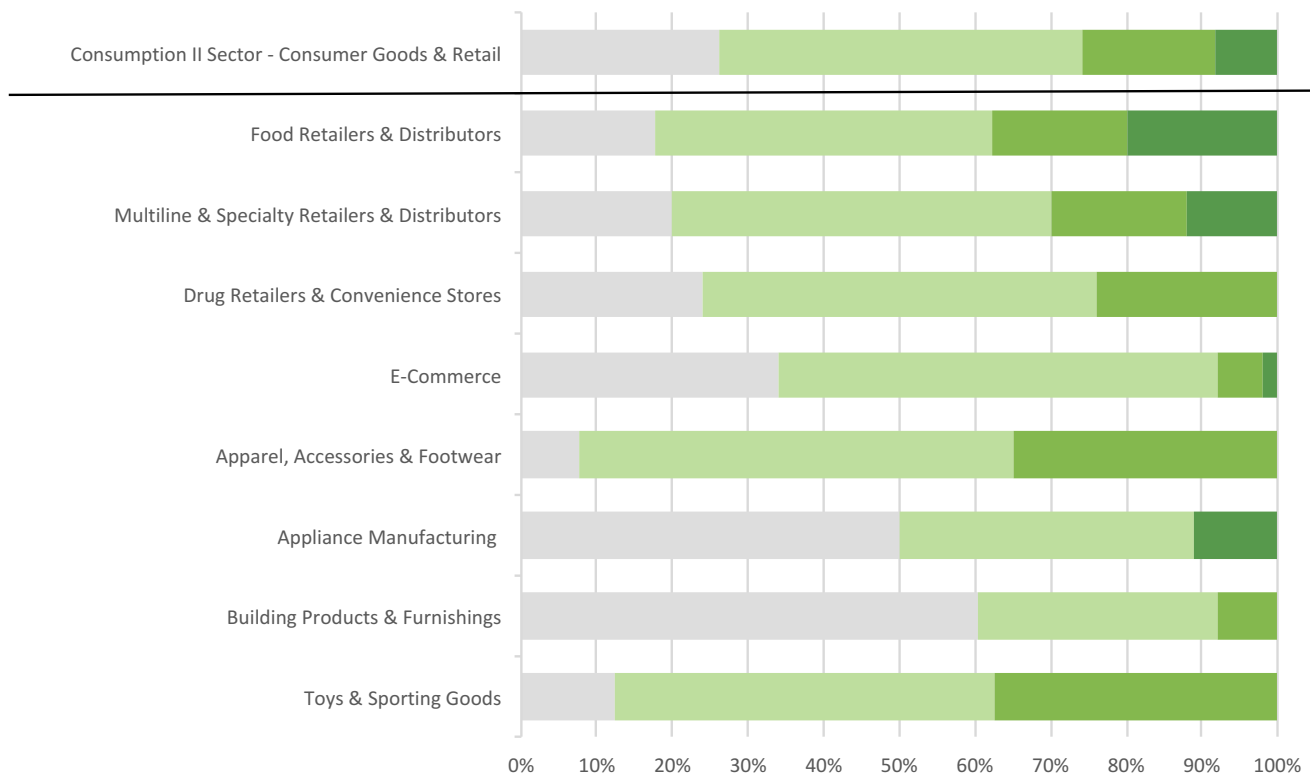
FOOD AND BEVERAGE (CONSUMPTION I) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

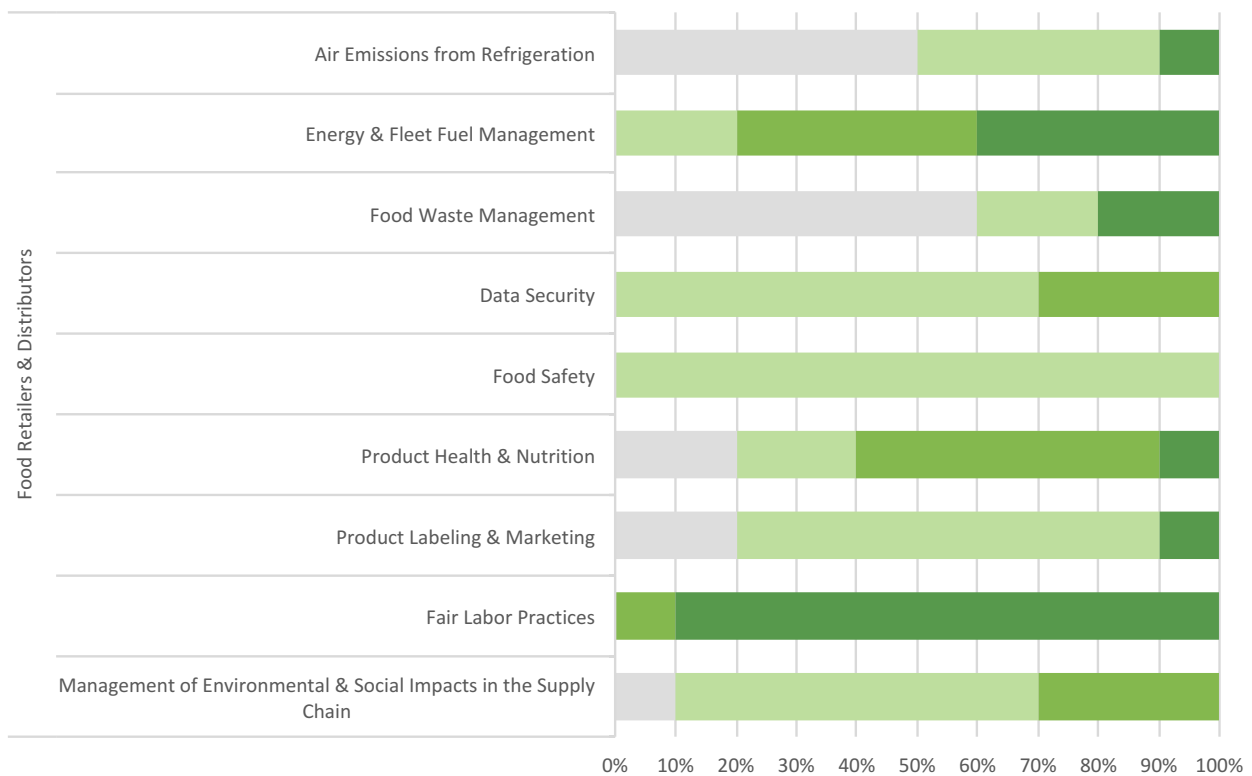
CONSUMER GOODS (CONSUMPTION II) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

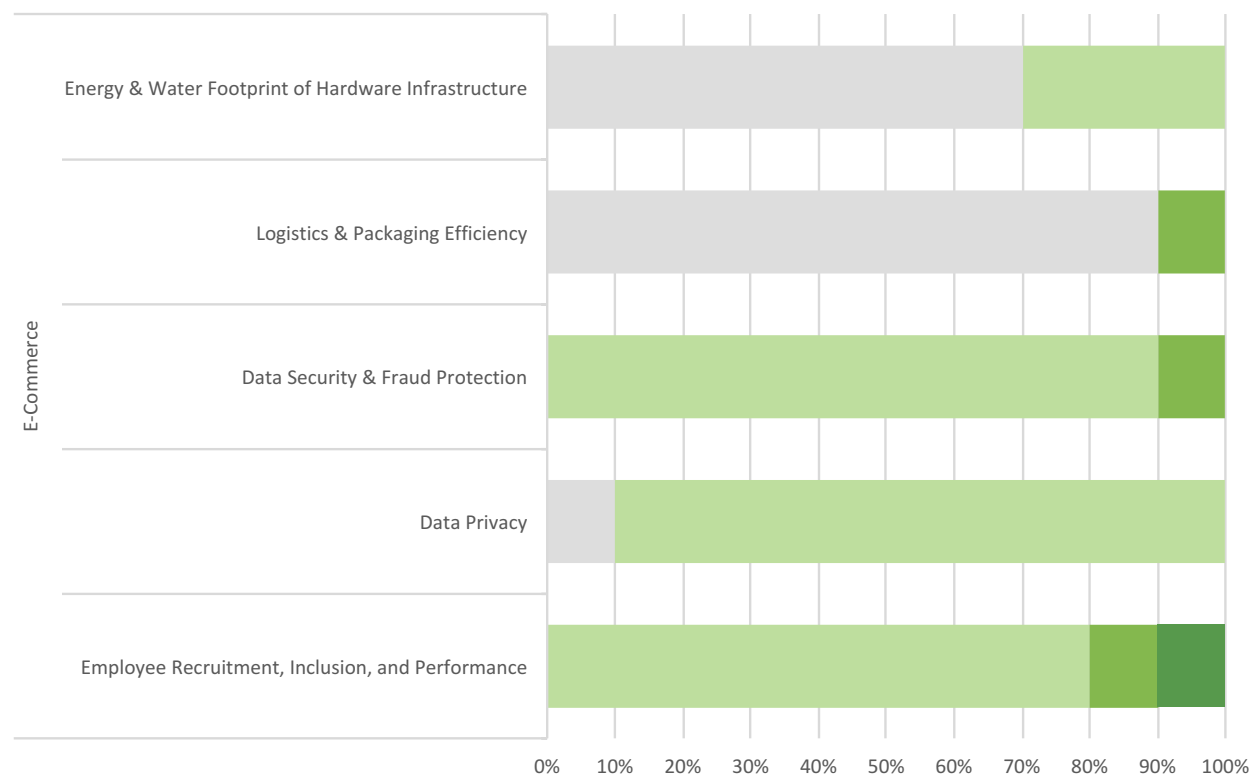
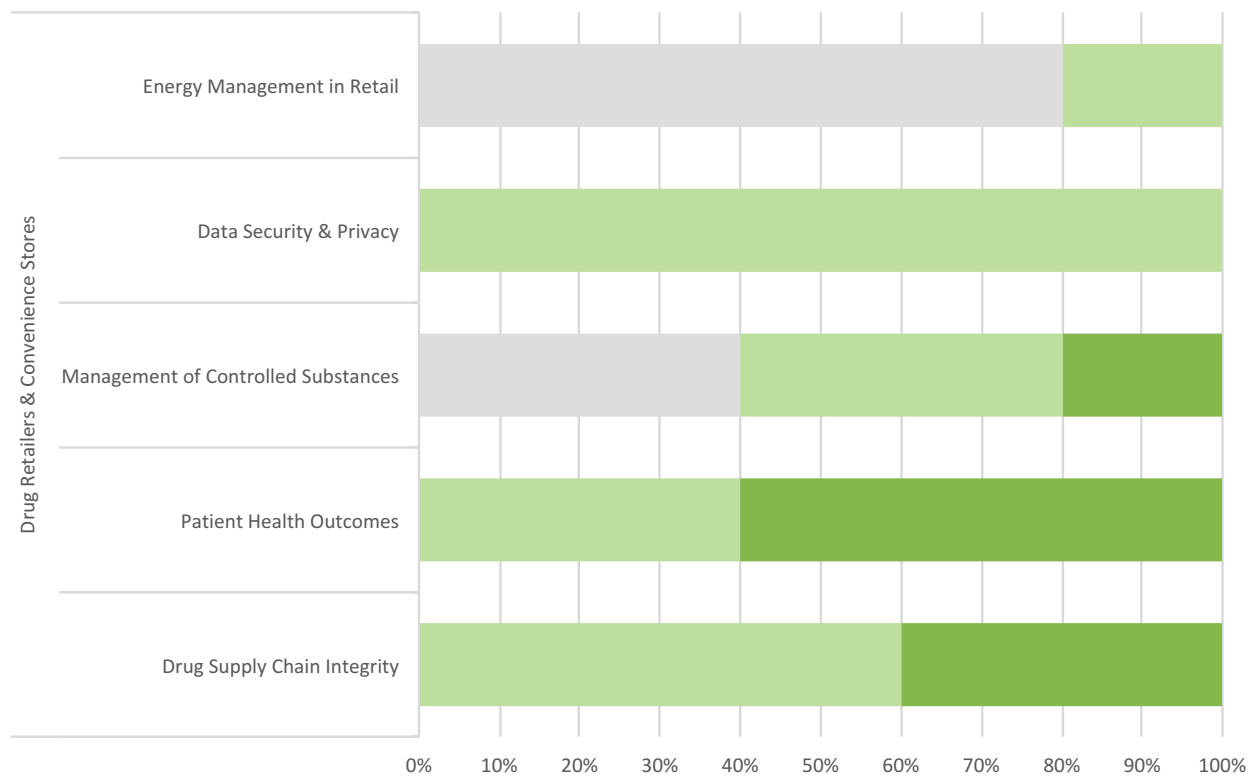
CONSUMER GOODS (CONSUMPTION II) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

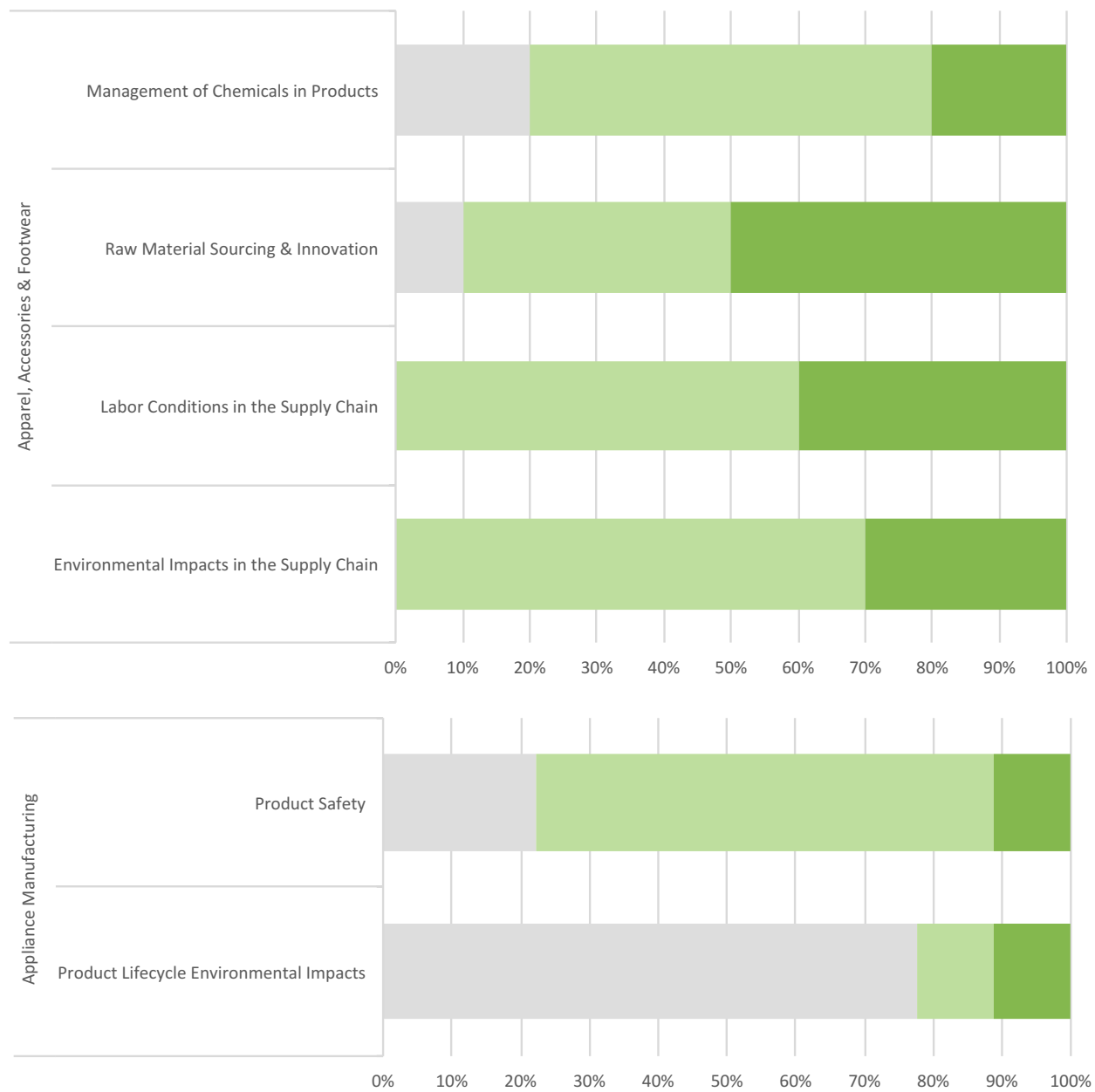
CONSUMER GOODS (CONSUMPTION II) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

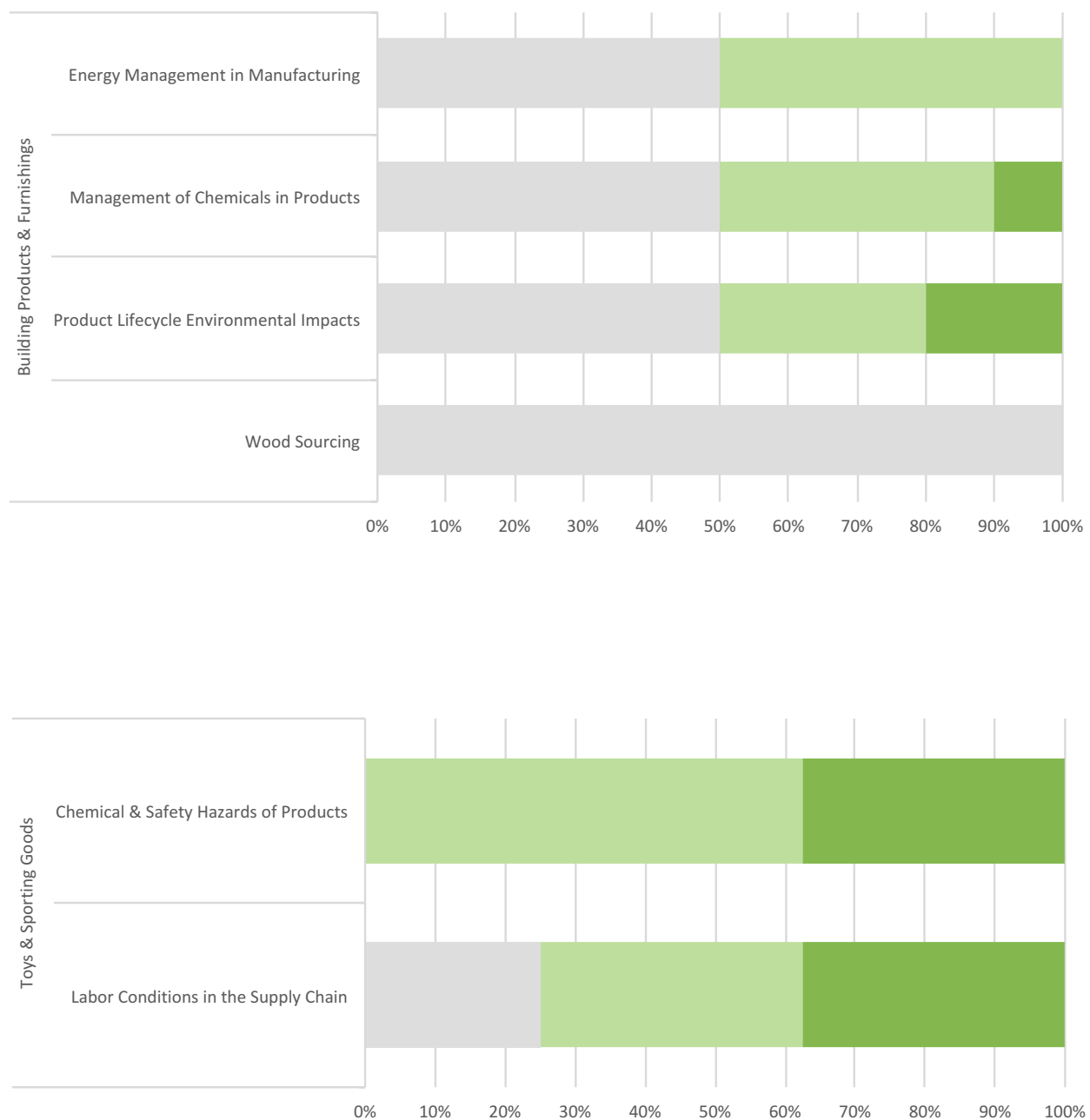
CONSUMER GOODS (CONSUMPTION II) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

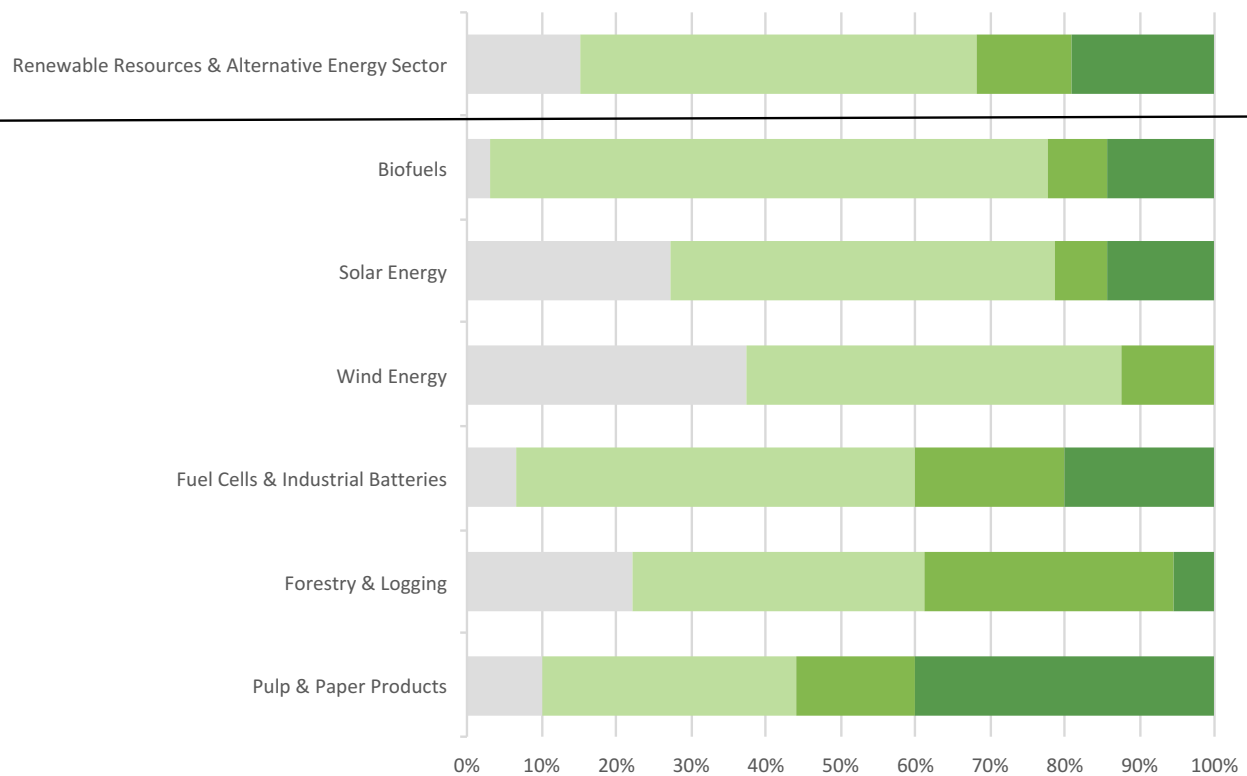
CONSUMER GOODS (CONSUMPTION II) SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

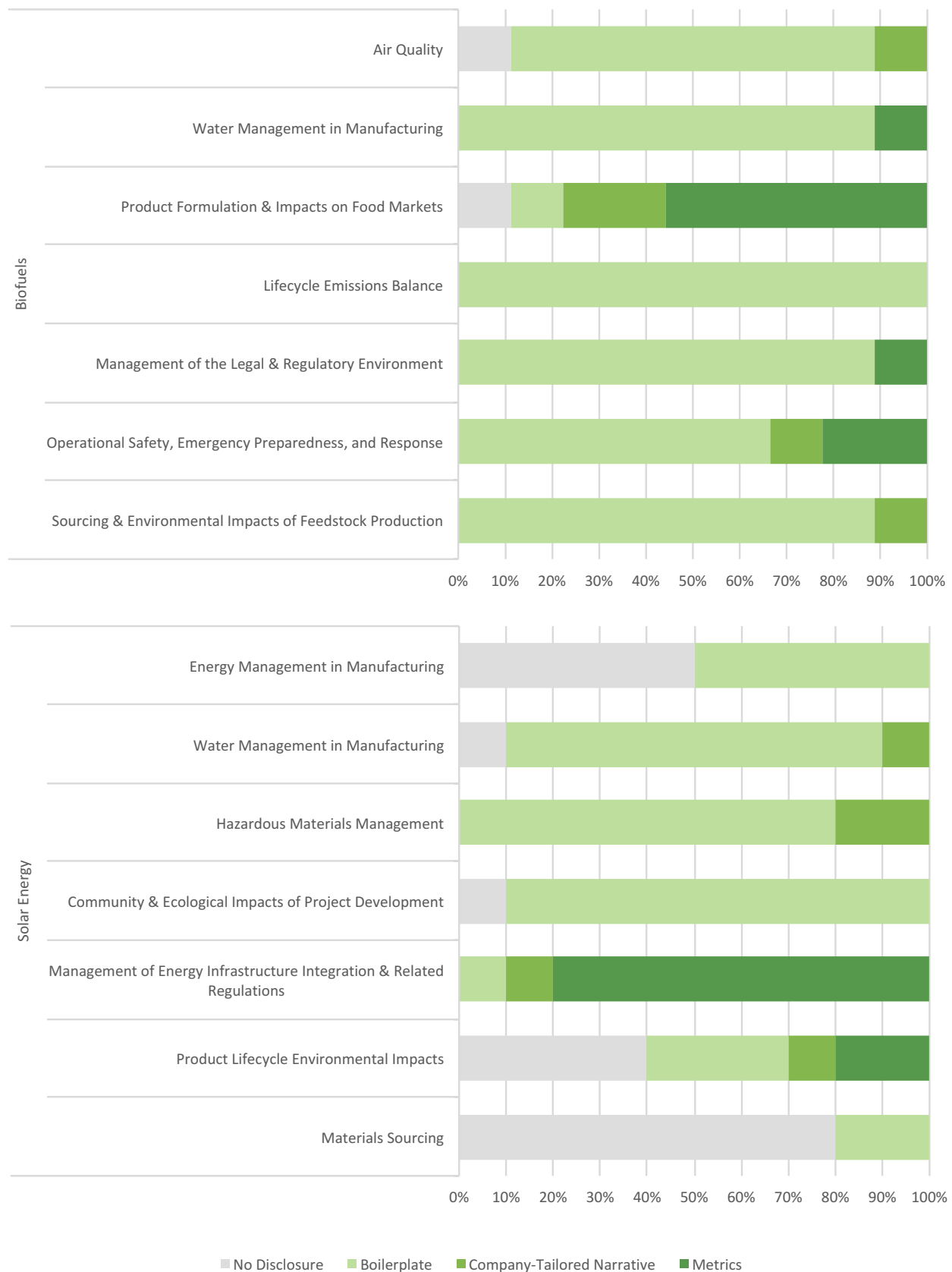
RENEWABLE RESOURCES & ALTERNATIVE ENERGY SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

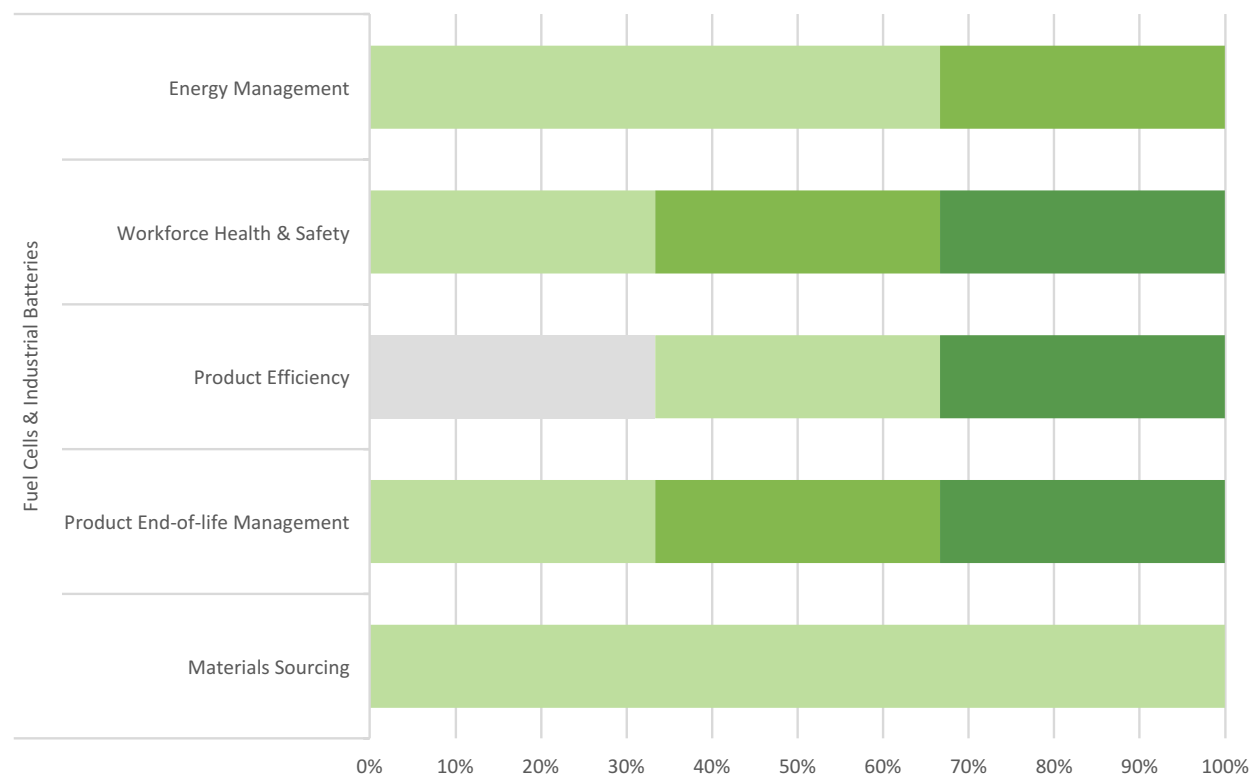
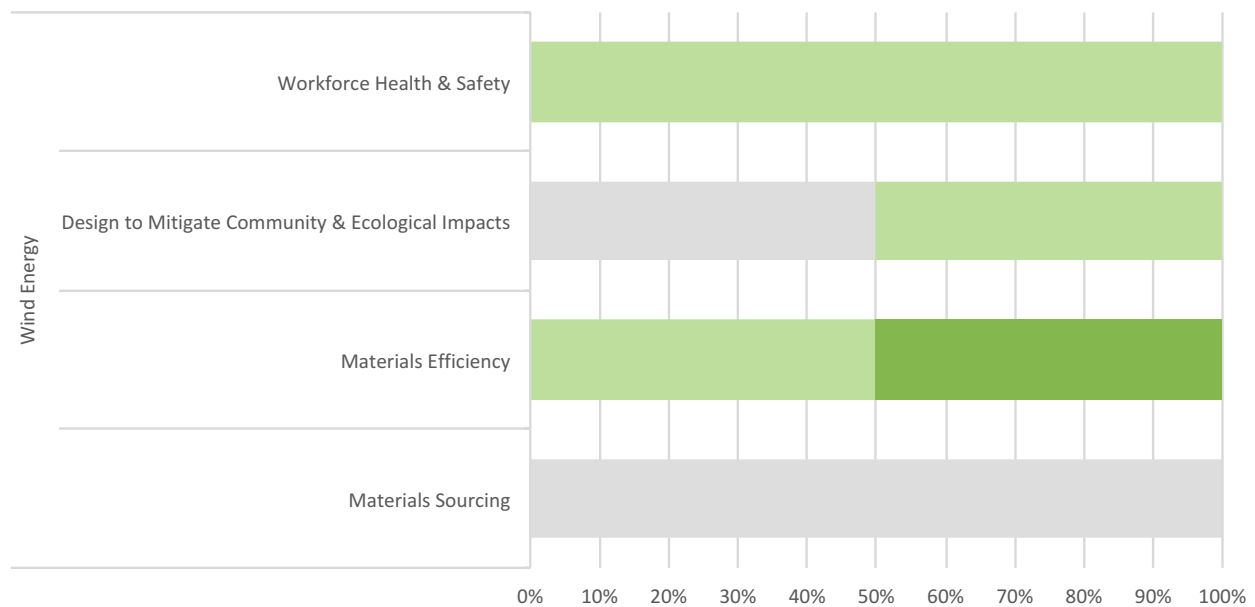
Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

RENEWABLE RESOURCES & ALTERNATIVE ENERGY SECTOR



Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

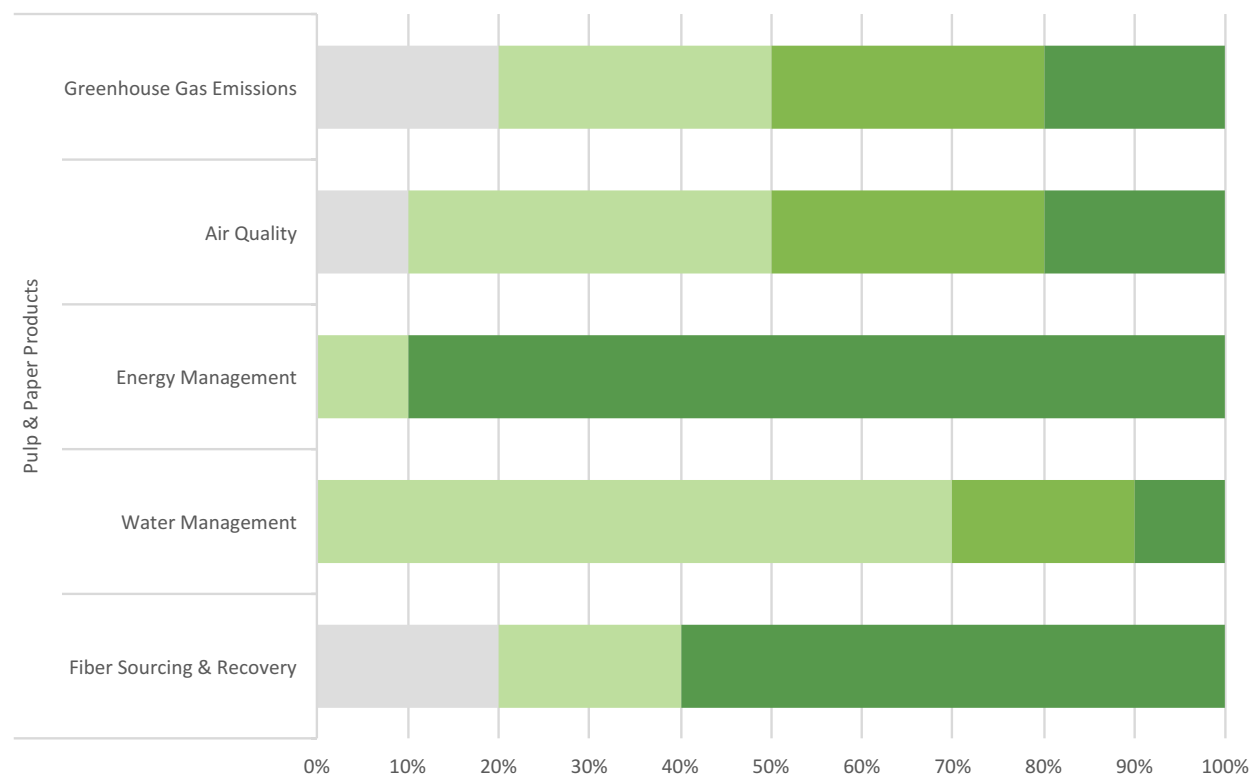
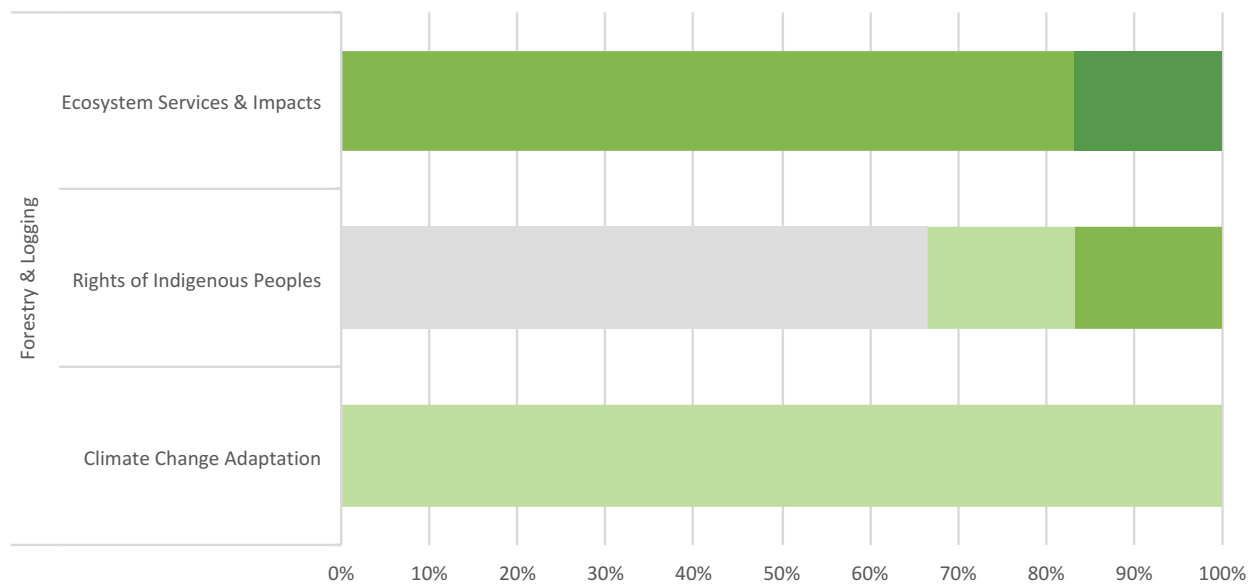
RENEWABLE RESOURCES & ALTERNATIVE ENERGY SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

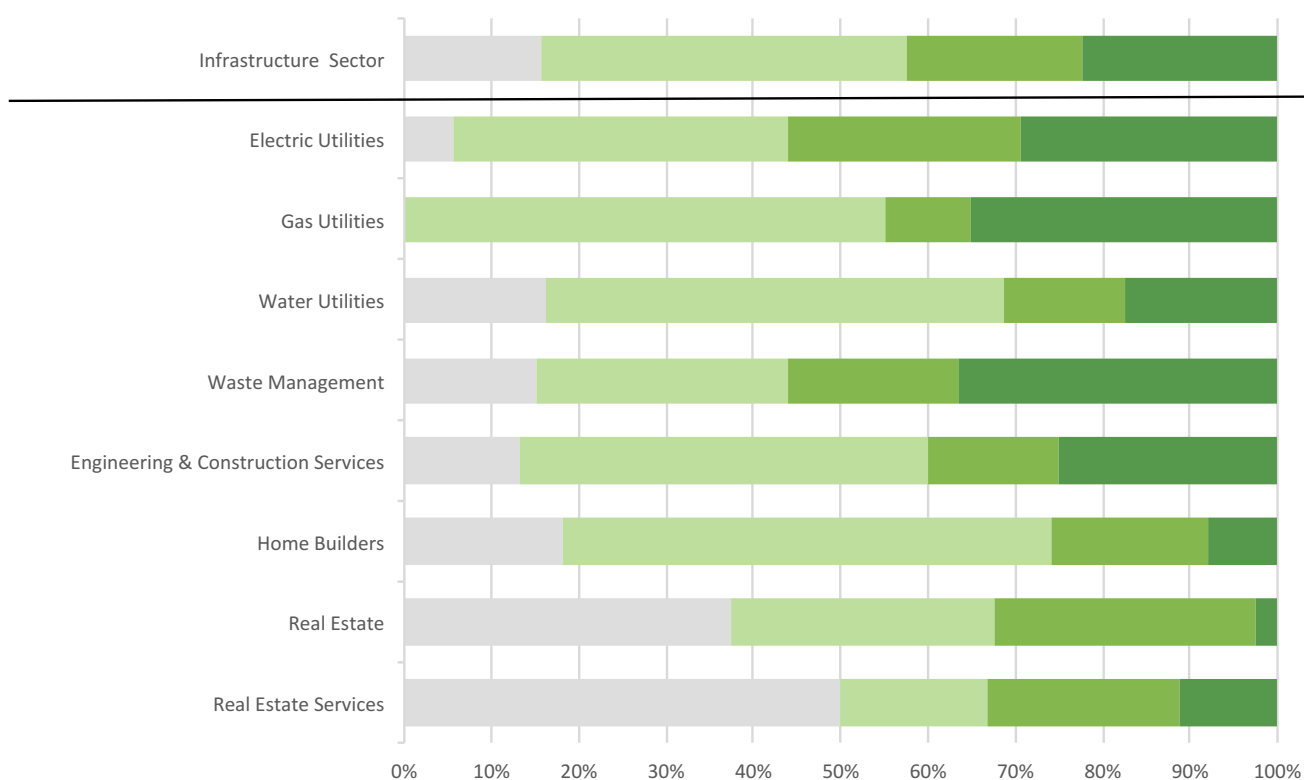
RENEWABLE RESOURCES & ALTERNATIVE ENERGY SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

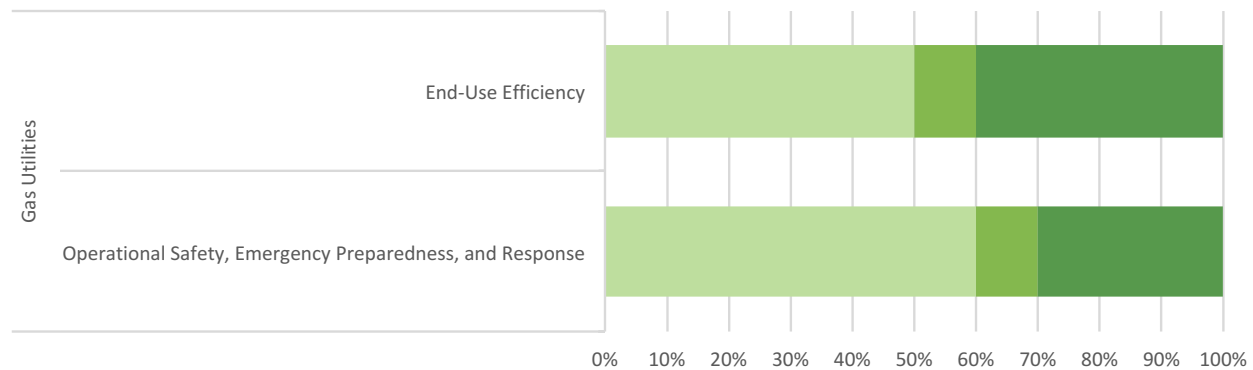
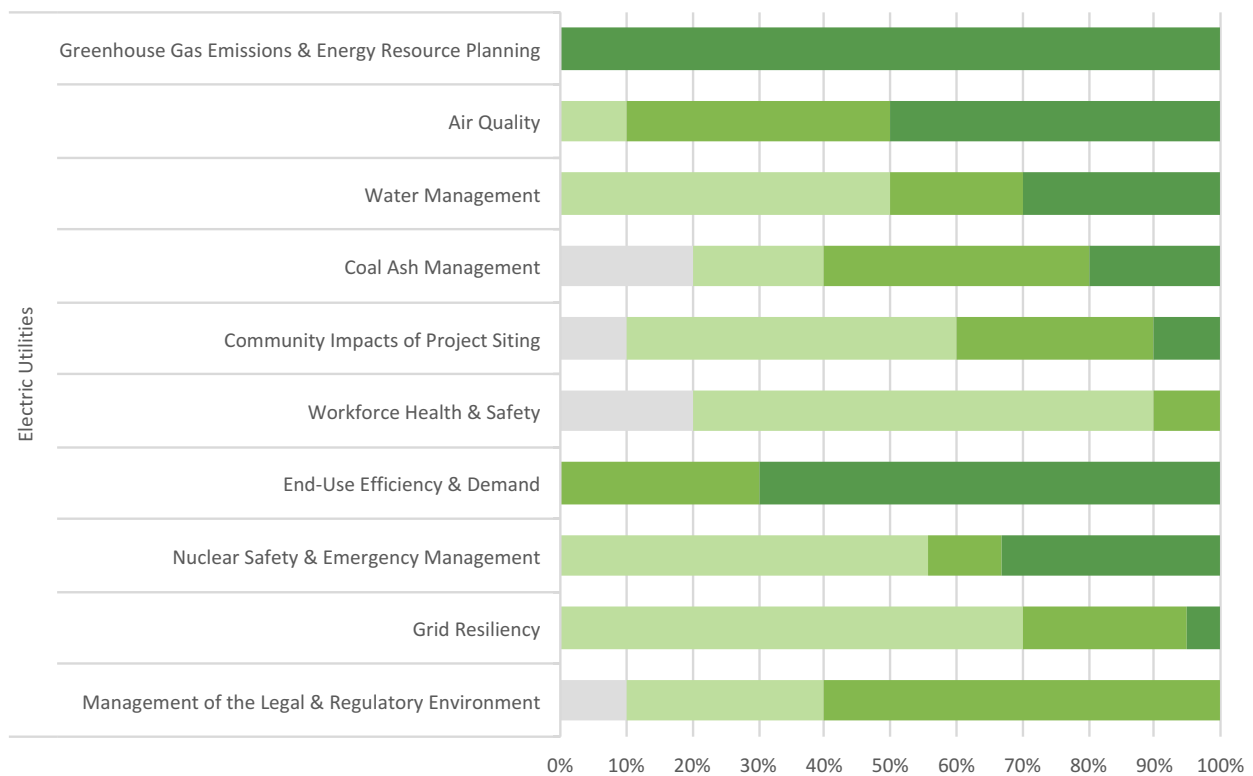
INFRASTRUCTURE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

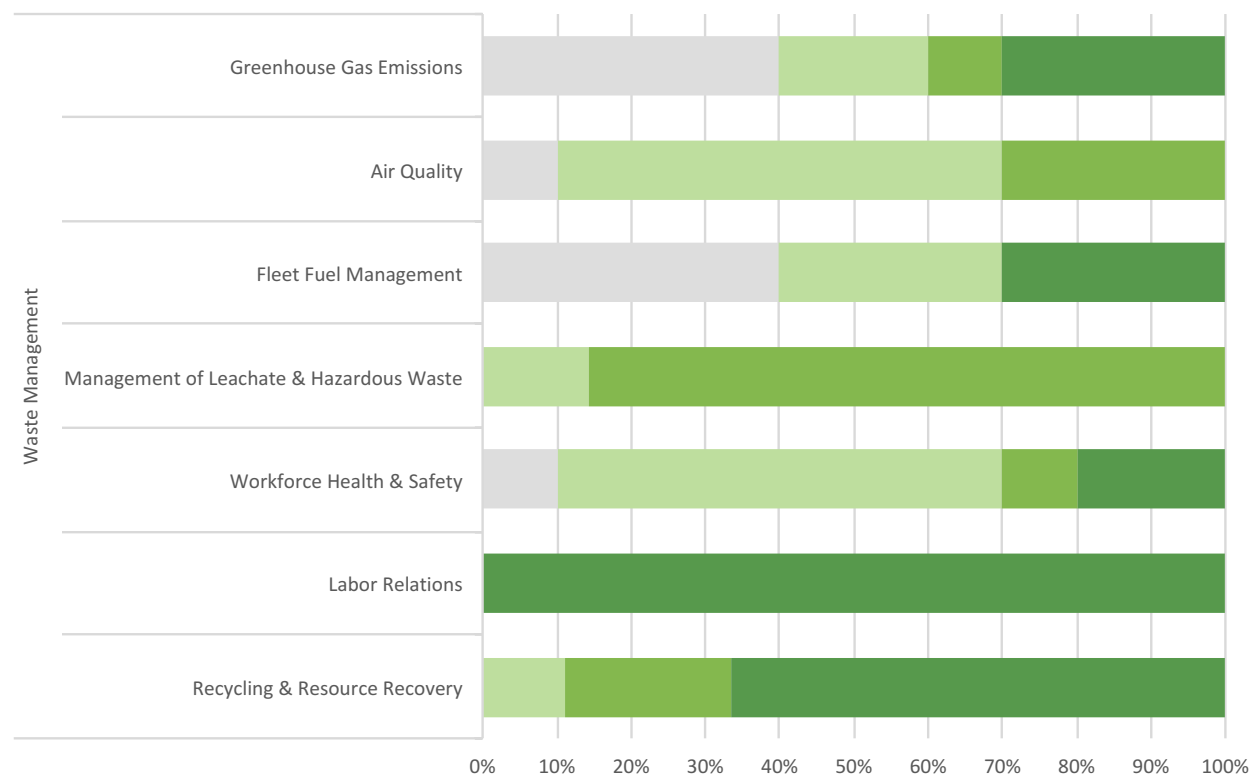
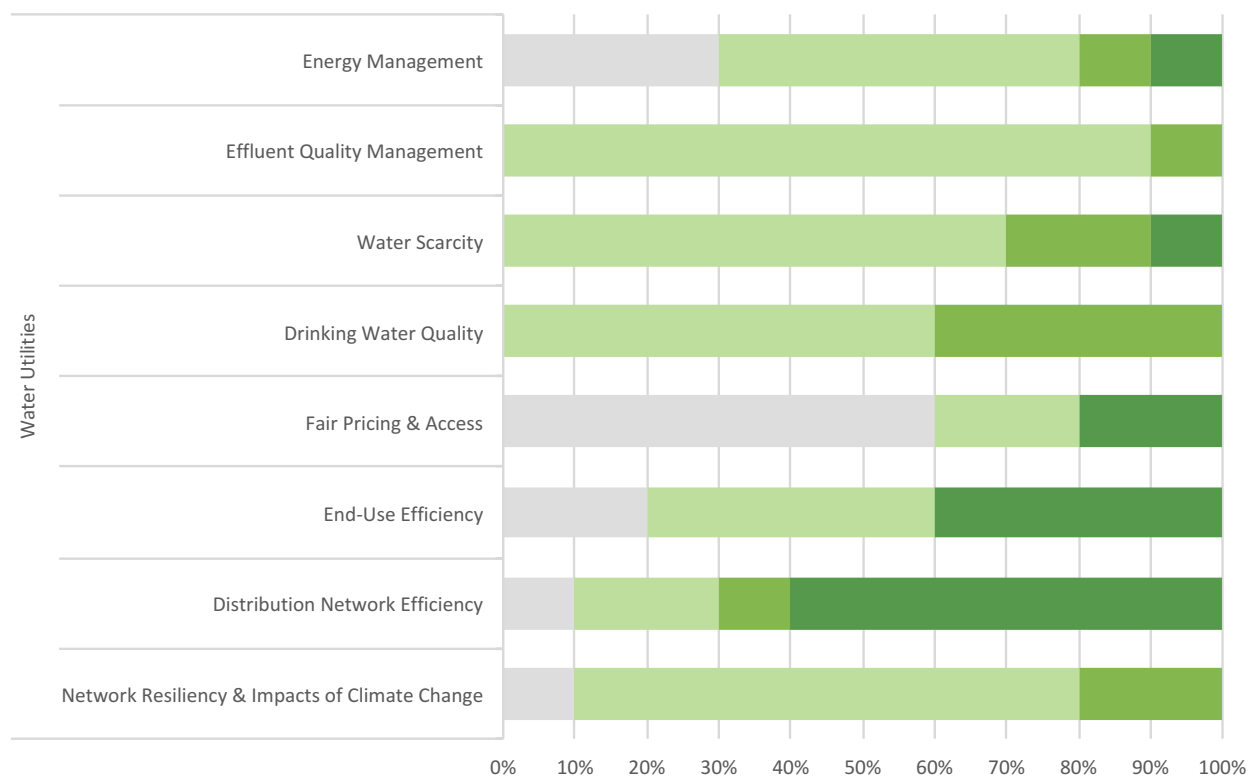
INFRASTRUCTURE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

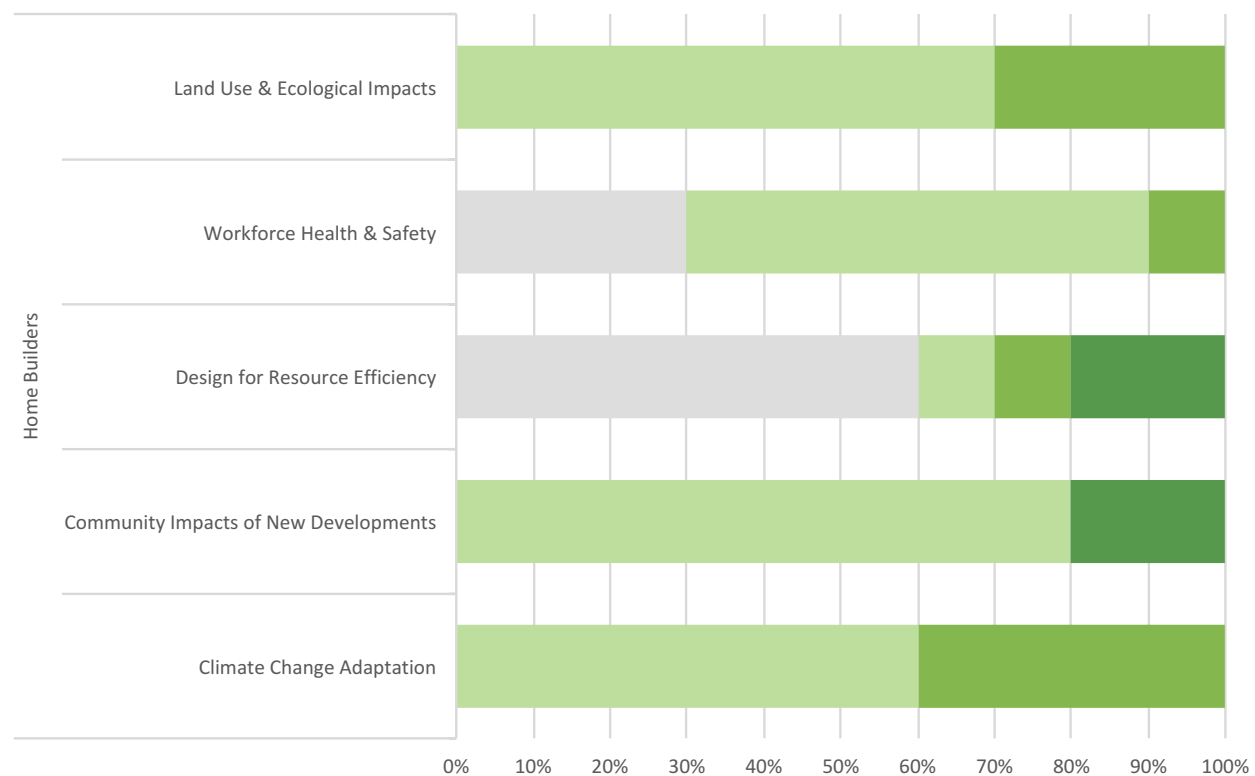
INFRASTRUCTURE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

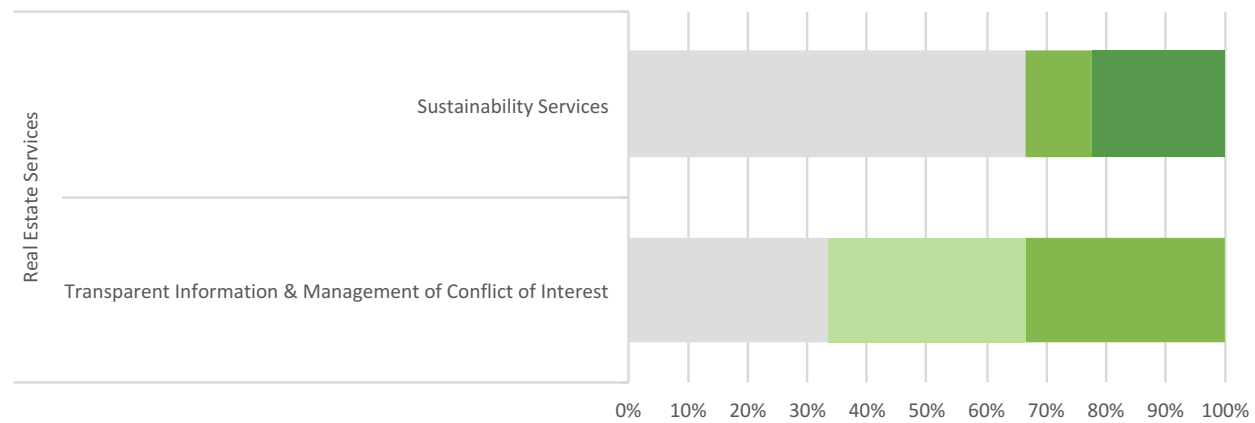
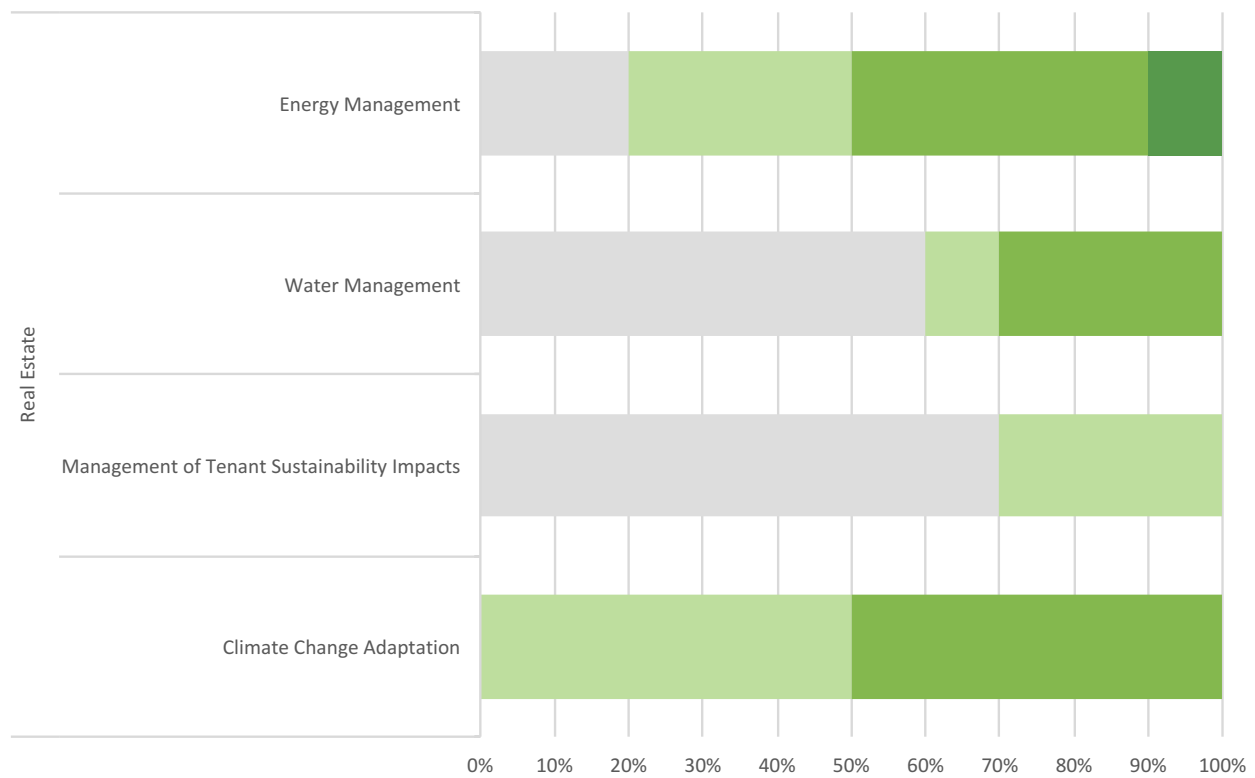
INFRASTRUCTURE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

INFRASTRUCTURE SECTOR



■ No Disclosure ■ Boilerplate ■ Company-Tailored Narrative ■ Metrics

Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e., Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICs industry (maximum of 10 companies).

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



INFRASTRUCTURE

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



SERVICES

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



RESOURCE TRANSFORMATION

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



TECHNOLOGY & COMMUNICATIONS

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



FINANCIALS

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



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



TRANSPORTATION

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



HEALTH CARE

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



RENEWABLE RESOURCES & ALTERNATIVE ENERGY

- › Biofuels
- › Solar Energy
- › Wind Energy
- › Fuel Cells & Industrial Batteries
- › Forestry & Paper



Accounting for a Sustainable Future™

sasb.org (415) 830-9220 1045 Sansome Street Suite 450 San Francisco, CA 94111