



A significant shift in corporate sustainability disclosure

An analysis of the SASB Standards application and related disclosures in Japan



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The establishment of the International Sustainability Standards Board (ISSB) and its forthcoming standards will have a great impact on how companies disclose sustainability-related information and how it can be assessed. These new standards created by the ISSB will provide a new comprehensive global baseline for sustainability-related disclosures.

With the Value Reporting Foundation (VRF) being consolidated under the International Financial Reporting Standards (IFRS) Foundation, which established the new ISSB, the SASB Standards are also being embedded into the development of the ISSB's new standards. In addition, the increasing significance of non-financial information across the board highlights the importance of the SASB Standards and how they will continue to play a central role in the future. We have therefore conducted research on the SASB Standards and their application by Japanese companies, and hope that our findings provide valuable insights that will help you in this shift towards alignment with the new standards.



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It has been more than 20 years since Japanese companies began disclosing non-financial information as part of their annual reports. The multi-stakeholder approach has been center stage of such disclosures for a long time, yet the ecosystem surrounding non-financial information has seen significant changes in the last decade. In particular, the rapid development of ESG investments has propelled the disclosure of non-financial information to investors forward.

Amidst these rapid shifts, we at PwC conducted research on how well the TOPIX 100 meet the requirements of the SASB Standards in their disclosures, to better understand the current state of disclosures in Japan as well as to identify areas of possible improvement. In this report, we elaborate on the results of our research and analyses.

With the disclosure of non-financial information continuously gaining in importance, we hope that these findings may help you in your future endeavors for improving disclosure practices.

A message from the Value Reporting Foundation



Katie Schmitz Eulitt

Director, Investor Relationships;
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It is a great honor to have been asked to provide a few words to accompany the launch of this research. I couldn't agree more with the title of this publication. A significant shift is indeed underway in sustainability disclosure – particularly disclosure for investors. The establishment of the International Sustainability Standards Board (ISSB) in 2021, followed by the publication of exposure drafts of the ISSB's first two IFRS Sustainability Disclosure Standards just four months later, mark the biggest change to accounting standard setting and company disclosure to the capital markets in a generation. SASB Standards are featured prominently in both ISSB exposure drafts which are aimed at establishing a global baseline for sustainability-related disclosure to investors, so the publication of this research is very timely. It is encouraging to see so many companies referencing the disclosure topics and metrics in SASB Standards in their sustainability disclosure already, especially because Japanese translations of SASB Standards were first published in March 2022. We hope that the availability of SASB Standards and ISSB exposure drafts in Japanese will make these materials more accessible to companies in Japan. We also hope that Japanese companies will engage with ISSB to provide feedback on IFRS Sustainability Disclosure Standards now and in the future.

The significant shift in sustainability disclosure that is currently underway is, we believe, a once in a lifetime opportunity to build a more coherent, comprehensive corporate reporting system that is fit for purpose for the 21st century capital markets.



About this report

A significant shift in corporate sustainability disclosure

Since the International Financial Reporting Standards (IFRS) Foundation announced the formation of the International Sustainability Standards Board and the consolidation with the Climate Standards Disclosure Board (CDSB) and the Value Reporting Foundation (VRF) in November 2021, developments have moved fast. Exposure drafts of two proposed standards have already been issued and the upcoming consolidation is only weeks away. These developments will impact sustainability disclosure greatly, and the alignment towards this shift on the corporate side will create many opportunities to advance disclosure practices.

Purpose of this survey

The purpose of this survey is to create a clear picture of the state of disclosure for the TOPIX 100, better understand areas of alignment and identify opportunities to further enhance disclosure practices. Assessing the reports of the TOPIX 100 against the current Sustainability Accounting Standards Board (SASB) Standards provides a crucial snapshot of the state of disclosure. As the SASB's industry-based standards are being embedded into the International Sustainability Standards Board's (ISSB's) standards development process, understanding what areas are already aligned and where there are still opportunities to improve disclosure practices can be a key piece for companies and investors in their shift towards the upcoming ISSB standards.

Research process

We surveyed the public information and reports of the TOPIX 100 companies against 34 industry standards to capture the current state of disclosure in Japan. If provided, we analysed information disclosed in SASB content indexes, but also included any relevant disclosures from a variety of other sources. For our

analysis we focused on three different layers: 1. Application of the SASB Standards, 2. Disclosure on industry specific topics, and 3. Disclosure on accounting metrics, and analysed these through two lenses 1. Sectors and industries, and 2. Dimensions and topics.

1 Application of the SASB Standards

- Are the SASB Standards used for sustainability related disclosure? If yes, how are they applied?
- Are there certain sectors or industries that apply the standards to a greater degree?

2 Disclosure on industry specific topics

- Are the industry specific topics discussed?
- Do issues identified as material align with the industry specific topics? What are the outliers?

3 Disclosure on the accounting metrics

- How does disclosure differ between sectors and industries?
- What areas of disclosure are advanced and where lie the main challenges.
- Why are disclosures for some topics more advanced than for others?



Breakdown by sector and industry



Breakdown by dimension and industry specific topic

The structure of the SASB Standards

Key elements and terms of this research

The following are the central elements of our research on the SASB Standards. Companies were evaluated according to these elements, and the analyses breaks

down the data accordingly. For more details on the SASB Standards please refer to the VRF's official website: <https://www.sasb.org/>

The SASB Standards	The SASB Standards (or SASB Industries Standards) are a large set of standards that identify the subset of environmental, social, and governance issues most relevant to financial performance of individual industries. They are designed to help companies disclose financially-material sustainability information to investors.
Sectors and industries	The SASB Standards include 77 industry specific standards that cover 11 different sectors. 10 out of the 11 sectors, and 34 out of the 77 industries are presented in the TOPIX 100.
Dimensions and topics	The SASB Standards encompass a broad range of sustainability issues, which are divided into 5 dimensions and 26 topics. All of them are present in the relevant industry specific standards of the TOPIX 100.
Accounting metrics	Each SASB Industry Standard includes a variety of accounting metrics that require either specific quantitative data or disclosure on certain discussion points. These accounting metrics align with the dimensions and topics. Additionally, for each accounting metric specific criteria that elaborate what information is needed are provided in the standards.
SASB content indexes	SASB content indexes refer to tables or charts in which companies disclose their responses against the accounting metrics of the relevant standards.



The sectors and industries included in this research (34/77 Industry Standards)

Sectors	Industries
Consumer Goods	<ul style="list-style-type: none"> • Apparel, Accessories & Footwear • Household & Personal Products • Toys & Sporting Goods
Extractives & Minerals Processing	<ul style="list-style-type: none"> • Iron and Steel Producers • Oil & Gas - Refining & Marketing
Financials	<ul style="list-style-type: none"> • Commercial Banks • Investment Banking & Brokerage
Food & Beverage	<ul style="list-style-type: none"> • Alcoholic Beverages • Processed Foods
Health Care	<ul style="list-style-type: none"> • Biotechnology & Pharmaceuticals
Infrastructure	<ul style="list-style-type: none"> • Homebuilders
Resource Transformation	<ul style="list-style-type: none"> • Chemicals • Industrial Machinery and Goods
Services	<ul style="list-style-type: none"> • Leisure Facilities
Technology & Communications	<ul style="list-style-type: none"> • Hardware • Semiconductors • Telecommunication Services
Transport	<ul style="list-style-type: none"> • Airlines • Automobiles
Renewable Resources & Alternative Energy	—



The dimensions and topics included in this research (26/26 topics)

Dimensions	Topics	
Environment	<ul style="list-style-type: none"> • Greenhouse Gas Emissions • Energy Management • Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> • Air Quality • Water & Wastewater Management • Ecological Impacts
Social Capital	<ul style="list-style-type: none"> • Human Rights & Community Relations • Data Security • Product Quality & Safety • Selling Practices & Product Labeling 	<ul style="list-style-type: none"> • Customer Privacy • Access & Affordability • Customer Welfare
Human Capital	<ul style="list-style-type: none"> • Labor Practices • Employee Engagement, Diversity & Inclusion 	<ul style="list-style-type: none"> • Employee Health & Safety
Business Model & Innovation	<ul style="list-style-type: none"> • Product Design & Lifecycle Management • Supply Chain Management • Physical Impacts of Climate Change 	<ul style="list-style-type: none"> • Business Model Resilience • Materials Sourcing & Efficiency
Leadership & Governance	<ul style="list-style-type: none"> • Business Ethics • Management of the Legal & Regulatory Environment • Systemic Risk Management 	<ul style="list-style-type: none"> • Competitive Behavior • Critical Incident Risk Management

What a SASB content index looks like

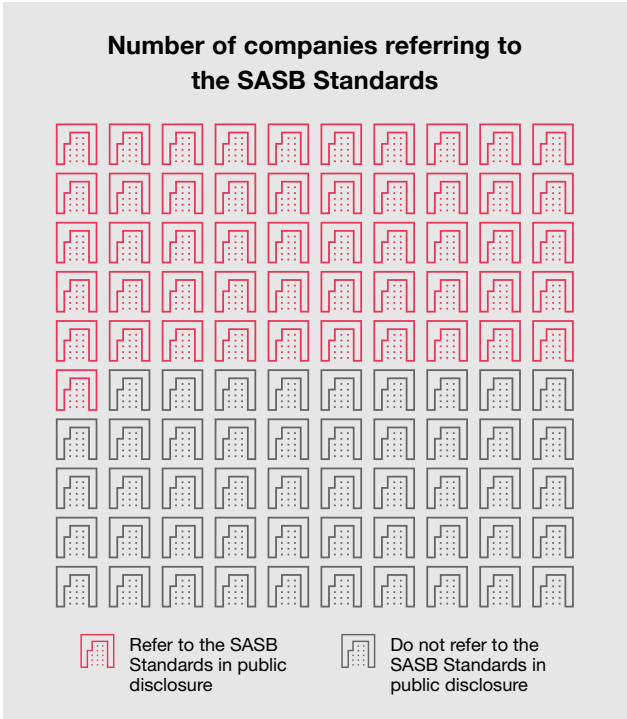
How companies align their disclosure with the SASB Standards can differ. However, one common tool used for disclosure is a SASB content index. These indexes are published on company websites or in their reports and include specific responses or links to relevant information for each applicable accounting metric.

SASB content index			
Topic	Code	Accounting metric	Response
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	—
	RT-CH-110a.2	Discussion 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	—
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	—
—	—		—

Key findings

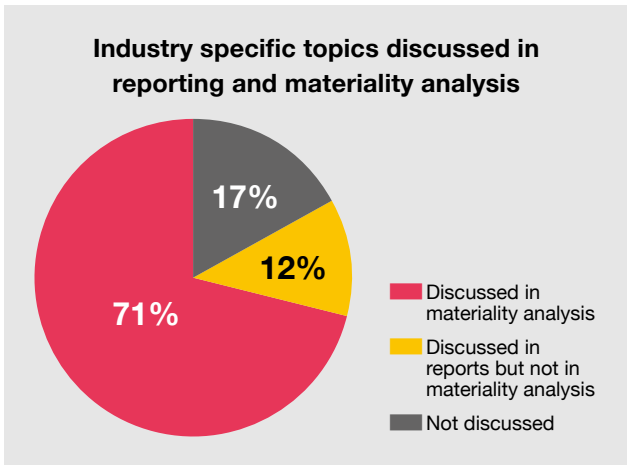
Over half of the TOPIX 100 companies refer to the SASB Standards

51 of the TOPIX 100 companies refer to the SASB Standards. They refer to the standards in their reports, in their materiality analyses or publish a SASB content index. How and to what degree the standards are applied differs by sector and industry.



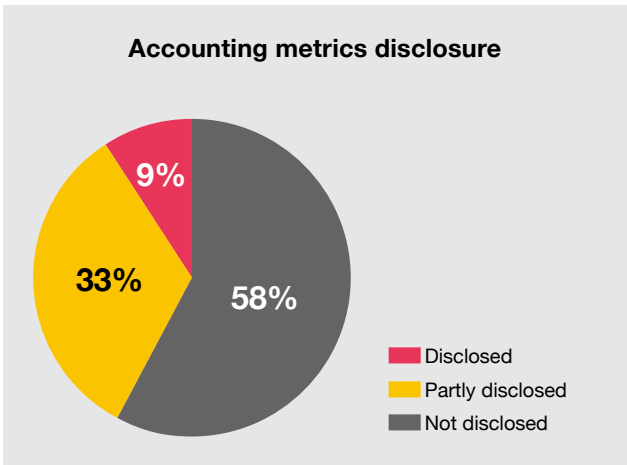
The material issues companies identify greatly align with SASB's industry specific topics

The TOPIX 100 companies mention 83% of all relevant industry specific topics in their reports, and their analyses identify 71% of the industry specific topics as material issues. Not all topics need to be considered material, and developing an individual approach towards materiality under a clear methodology is a vital step towards understanding the internal and external environment. However, the commonality between disclosures and standards suggest a great degree of alignment between the two.



Disclosure on most accounting metrics is still limited, and there is room for improvement

The TOPIX 100 companies fully disclose 9% of all accounting metrics, partially disclose 33% of metrics, and do not disclose the remaining 58%. Results greatly vary among dimensions/topics and sectors/industries. These gaps in disclosure levels can be traced to distinct attributes the metrics have. Reviewing the SASB Standards in areas where disclosure is limited can help companies further improve their current disclosures and smoothen the transition towards the upcoming disclosure standards of the ISSB.



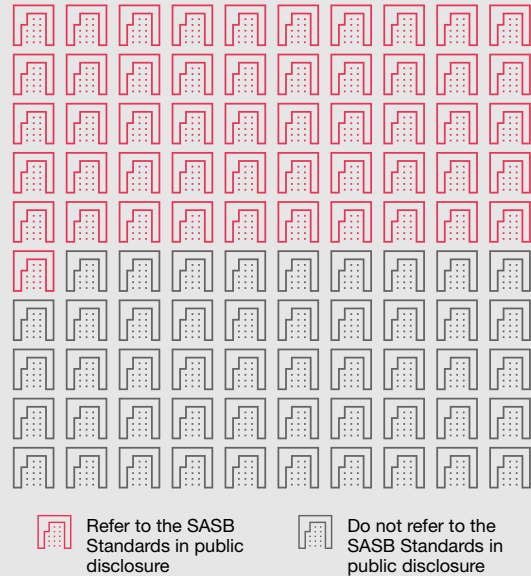
1. Application of the SASB Standards

Reference to the SASB Standards

Out of the 100 surveyed companies, more than half reference SASB in their reporting. This is an indication of the growing interest in Japan towards aligning sustainability related disclosure to the SASB Standards.



Number of companies referring to the SASB Standards (51/100)

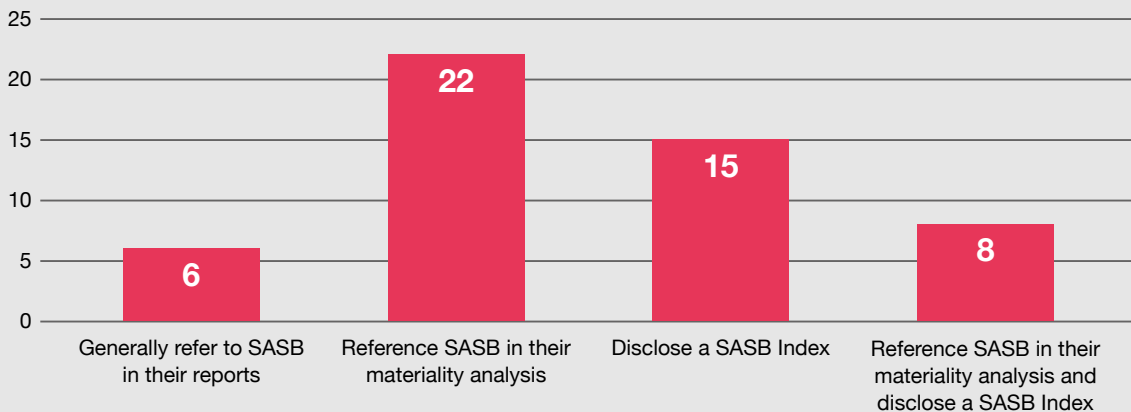


Different applications of the SASB Standards

How the standards are applied differs vastly between companies: from generally referring to them as guidance in reporting, to using the Standards for

identifying critical issues in materiality analyses up to aligning disclosure with the SASB Standards by publishing SASB content indexes.

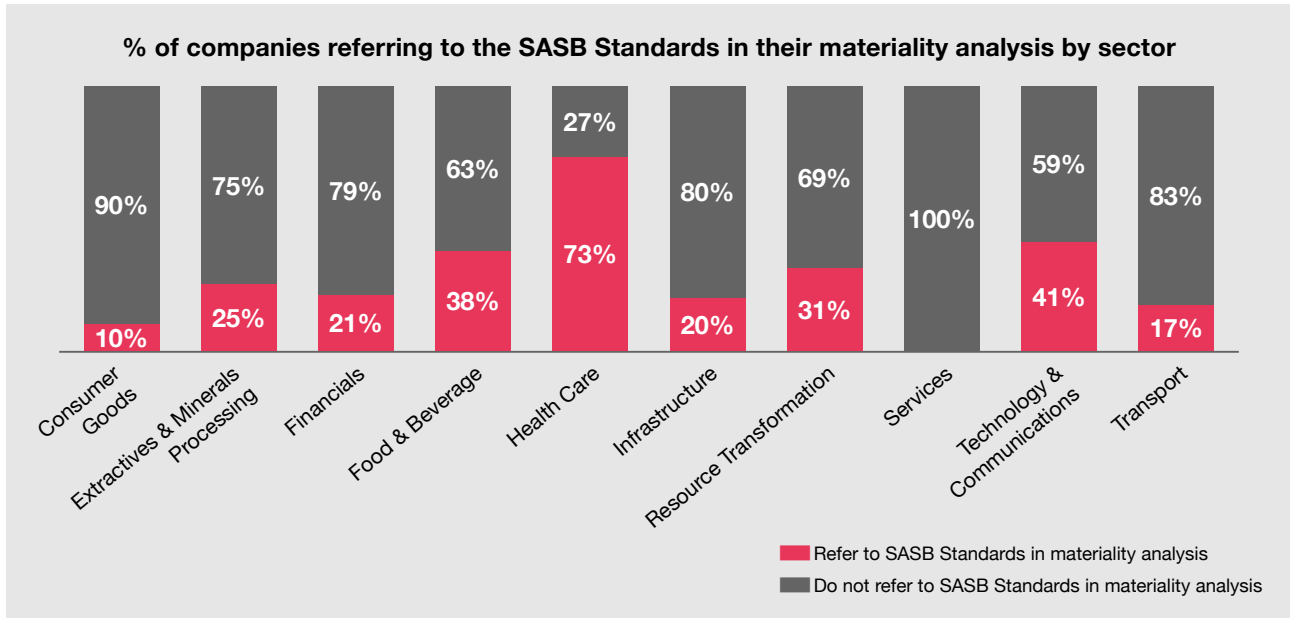
How companies apply the SASB Standards (51 companies)



Reference to the SASB Standards in materiality analyses

The extent of SASB Standard application in materiality analysis varies by sector. The Health Care sector specifically stands out, as more than 2/3 of the

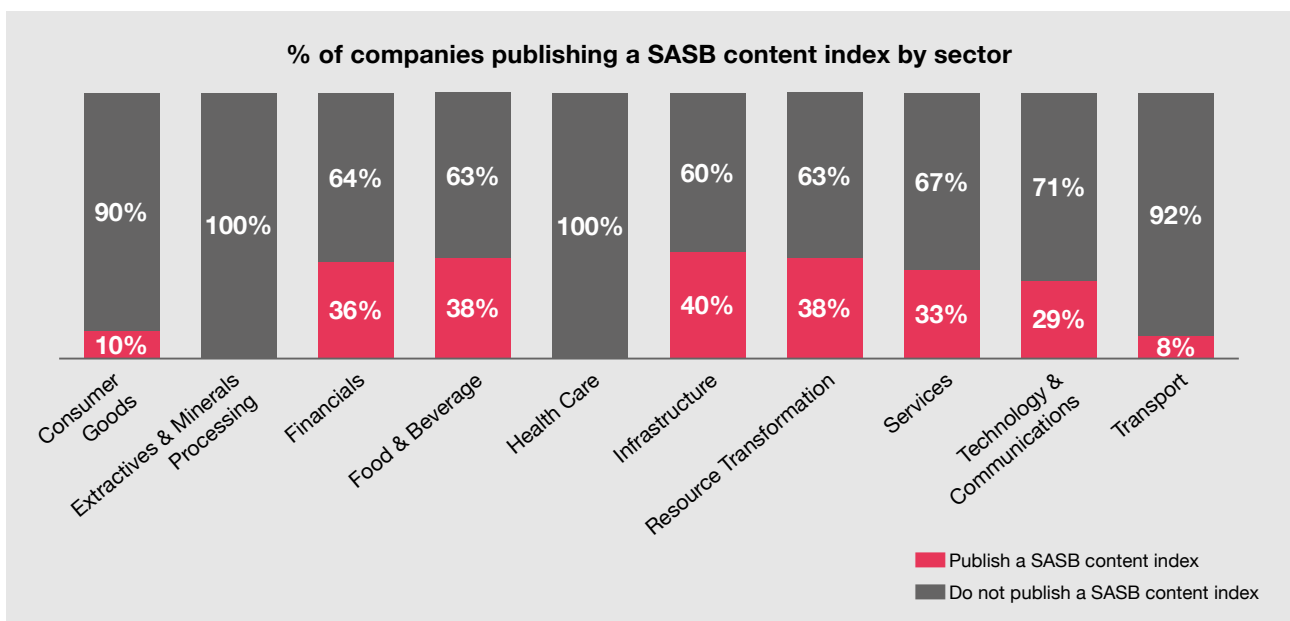
companies within this sector refer to the standards in their analyses.



Disclosure of SASB content indexes

When looking at what percentage of companies disclose a SASB content index by sector, Infrastructure, Food & Beverage, Resource Transformation, Financials and Services have a considerable lead over the other

sectors. In contrast with materiality analyses, companies within the Health Care sector do not publish a SASB content index. This could be connected to the complexity of the accounting metrics for this sector.

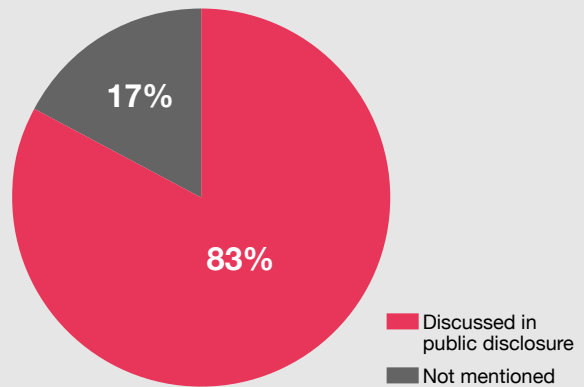


2. Disclosure on the industry specific topics

Discussion of the industry specific topics

SASB's industry-specific standards provide specific topics relevant to each industry. When looking at how many of the relevant industry specific topics are discussed by each TOPIX 100 company, we found that 83% are mentioned in their reports. This also includes companies that do not refer to the SASB Standards, showing a great degree of alignment between the focus points in the SASB Standards and the general disclosure of the TOPIX 100 companies.

% of industry specific topics discussed by the TOPIX 100 companies in their public disclosure

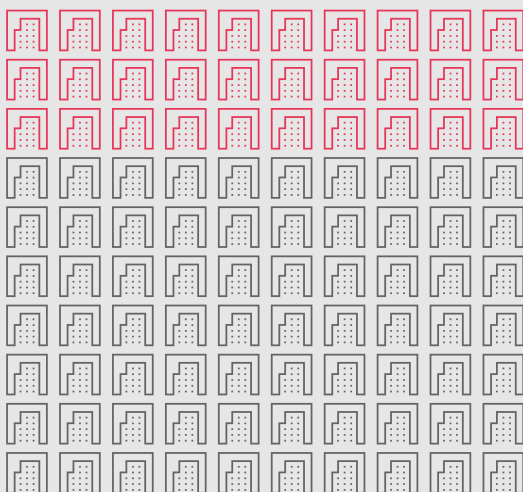


Alignment between materiality analyses and industry specific topics

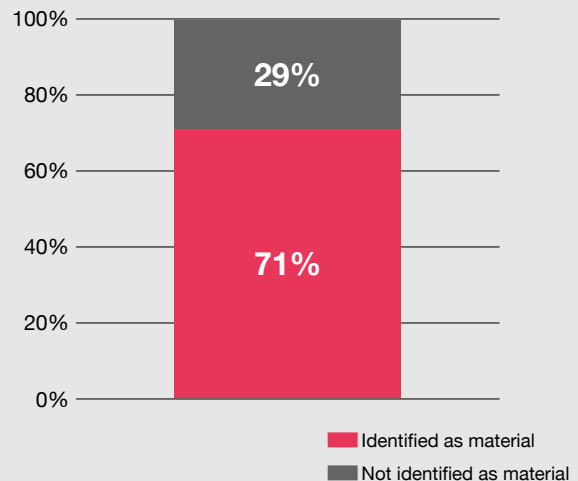
Another angle we included in our survey is the question of alignment between the issues identified by the TOPIX 100 in their individual materiality analyses against those suggested for each specific industry in the SASB Standards.

We found that 71% of all industry specific topics were identified as material. 30% of the TOPIX 100 refer to the SASB Standards in their materiality analysis, meaning that even for companies that do not refer to the Standards, the majority of the topics align.

Number of companies referring to SASB Standards in their materiality analysis (30/100 companies)



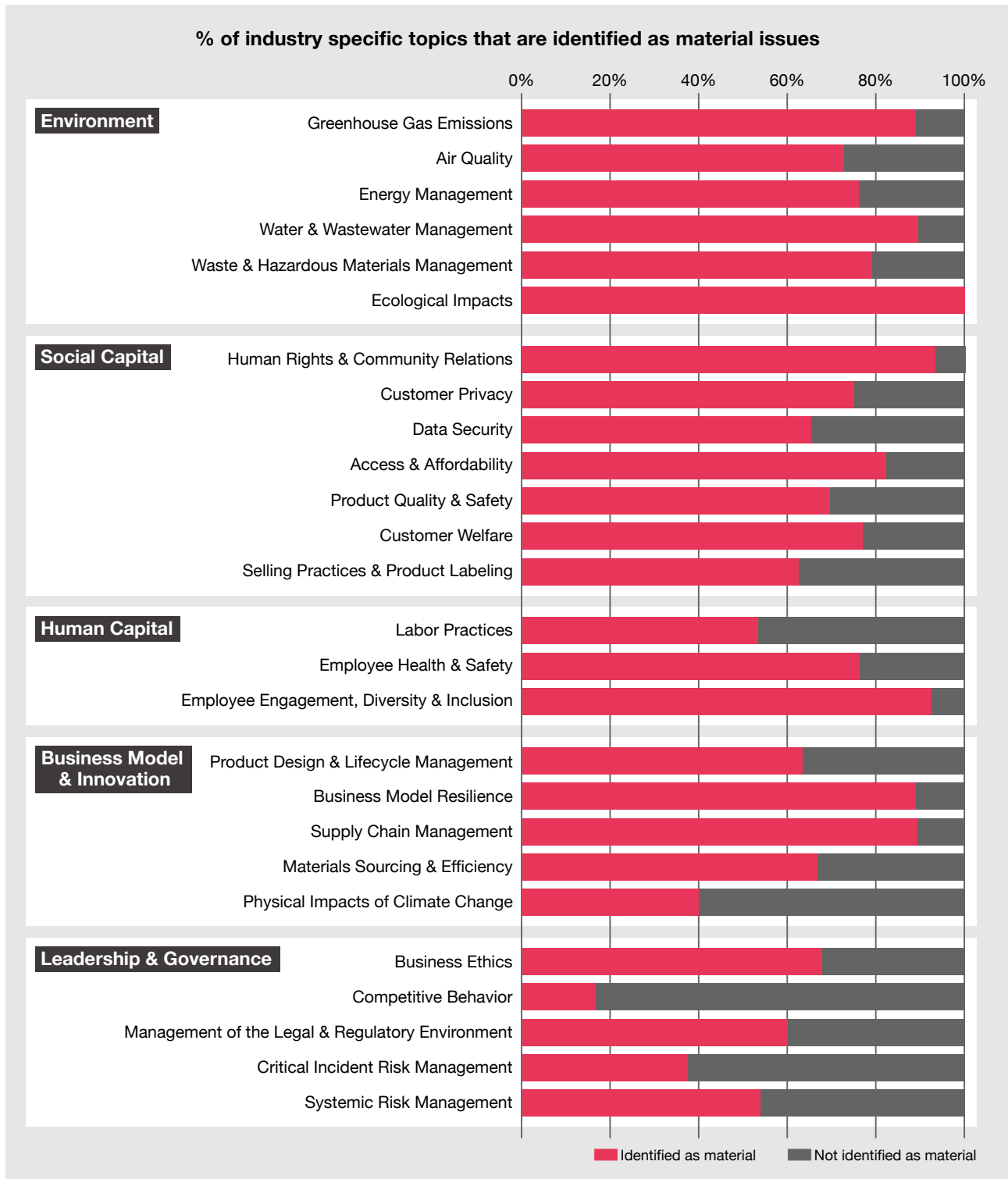
% of industry specific topics identified as material issues



Materiality of the individual industry specific topics

The number of companies that identify an industry specific topic as material varies greatly. In general Environment related topics are more commonly disclosed as material issues, whereas Leadership & Governance related topics appear less or are more broadly referred to

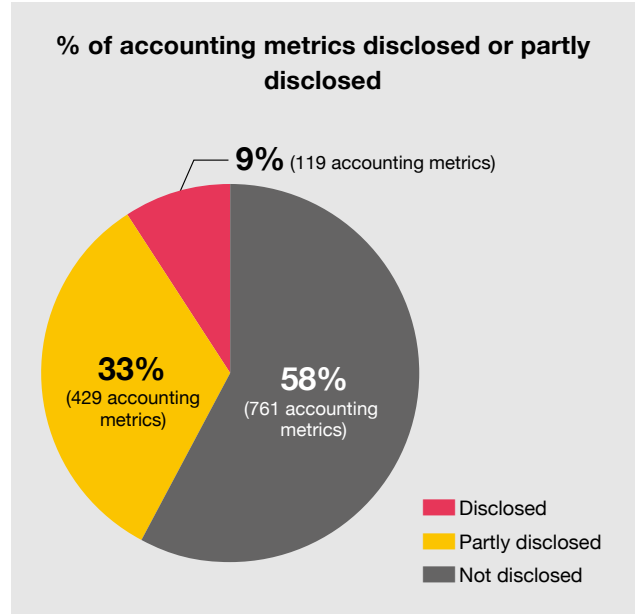
in materiality analyses. The reason some topics appear more than others can also be traced to different definitions of materiality or the scopes of the analysis. Clear definitions and scopes can provide a more coherent picture of how materiality was approached.



3. Disclosure on the accounting metrics

Disclosure on the accounting metrics

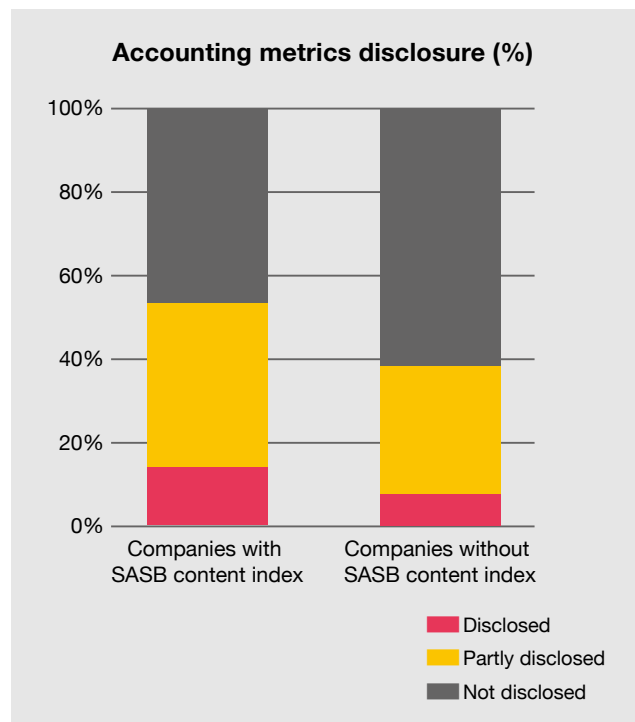
Lastly, we dove a little deeper and looked at the disclosure against specific accounting metrics from each industry standard. All accounting metrics in each industry standard for all of the TOPIX 100 add up to a total of 1,309 possible responses. We found that out of all accounting metrics 91% were not disclosed or only partly disclosed. This result includes companies that do not disclose a SASB content index, or do not refer to the SASB Standards, and therefore should not be viewed as an indicator of performance, but rather a tool for discovering areas where disclosure can be improved. We broke this data down into dimensions/topics and sectors/industries, which reveals certain strengths of the TOPIX 100 and challenges they face in their disclosure.



Using SASB content indexes for effective disclosure against the Standards

Companies that publish a SASB content index disclose considerably more information related to the specific accounting metrics. The 23 companies that disclose a SASB content index have relevant information for more than half of all accounting metrics. Surprisingly, even companies without an index already have relevant information for over 39% of all accounting metrics.

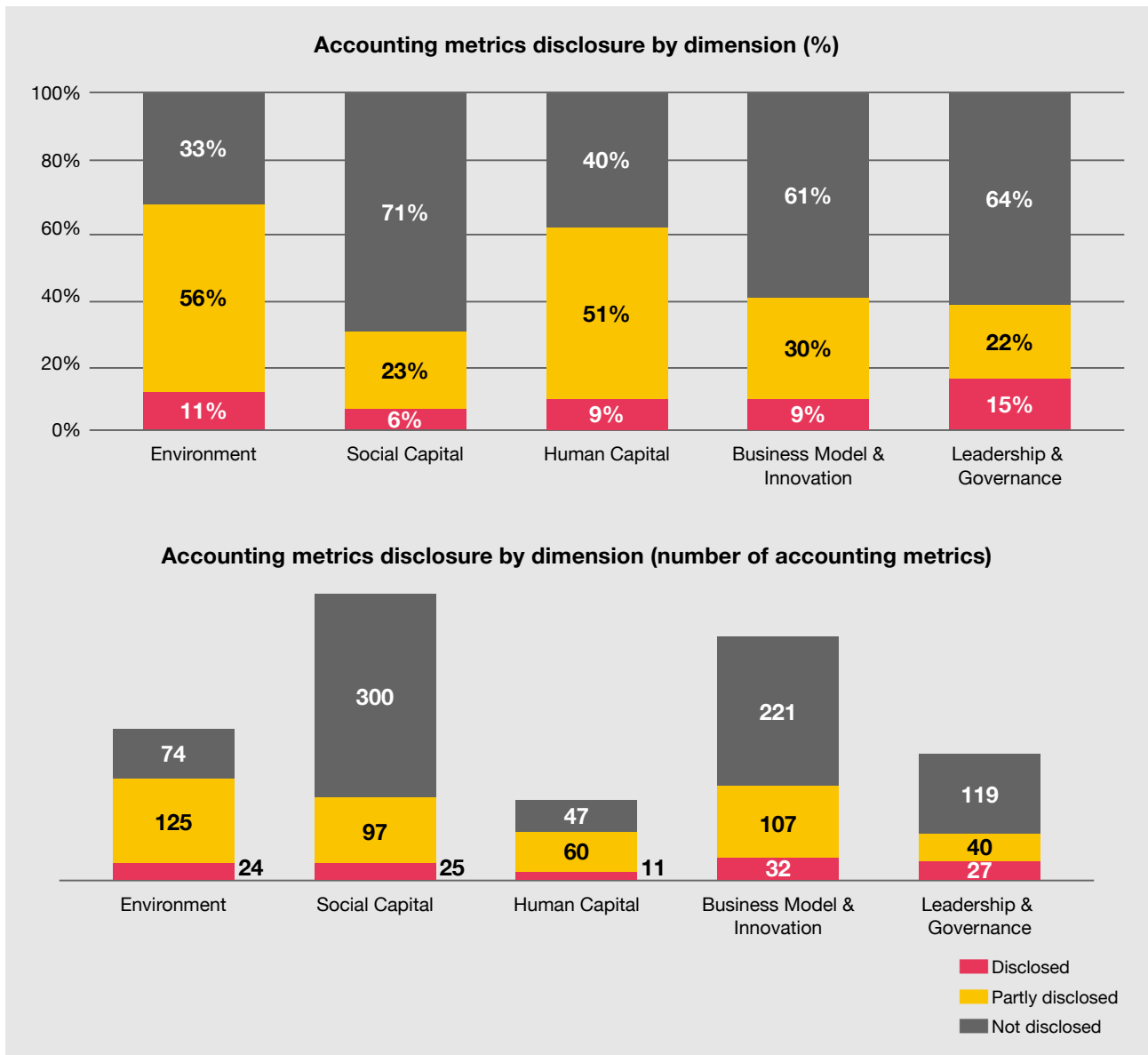
The reason a lot of metrics were evaluated as not disclosed or only partly disclosed is connected to the specific criteria in the industry standards being not met or partially met. If more companies would go into more detail, and clarify in their disclosures what parts are omitted and why, it would help investors greatly in understanding the full picture.



Breaking down the accounting metrics into dimensions

When breaking down disclosure against the accounting metrics by their dimensions, it becomes clear that Environment and Human Capital are the most developed areas. On the other hand, Social Capital and Business Model & Innovation are the dimensions where disclosure is the most limited. This is particularly

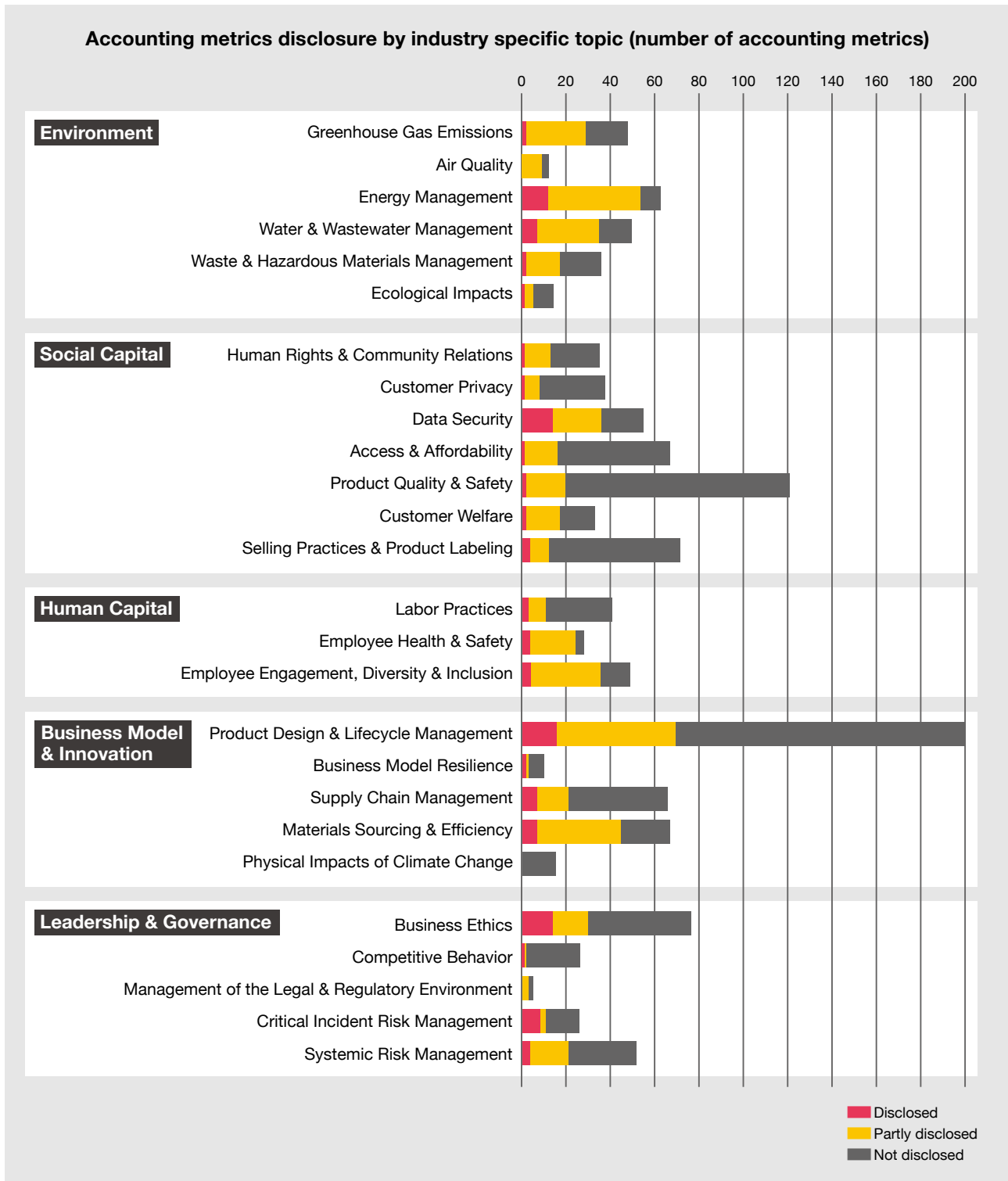
interesting because the number of accounting metrics for Social Capital and Business & Model Innovation is considerably larger, suggesting that these are important yet challenging areas of disclosure for companies in Japan.



Breaking down the accounting metrics into industry specific topics

Further dissecting the disclosure into 26 industry specific topics reveals that Product Design & Lifecycle Management and Product Quality & Safety are the topics that have the most accounting metrics by a large margin and are the main sources for the disclosure

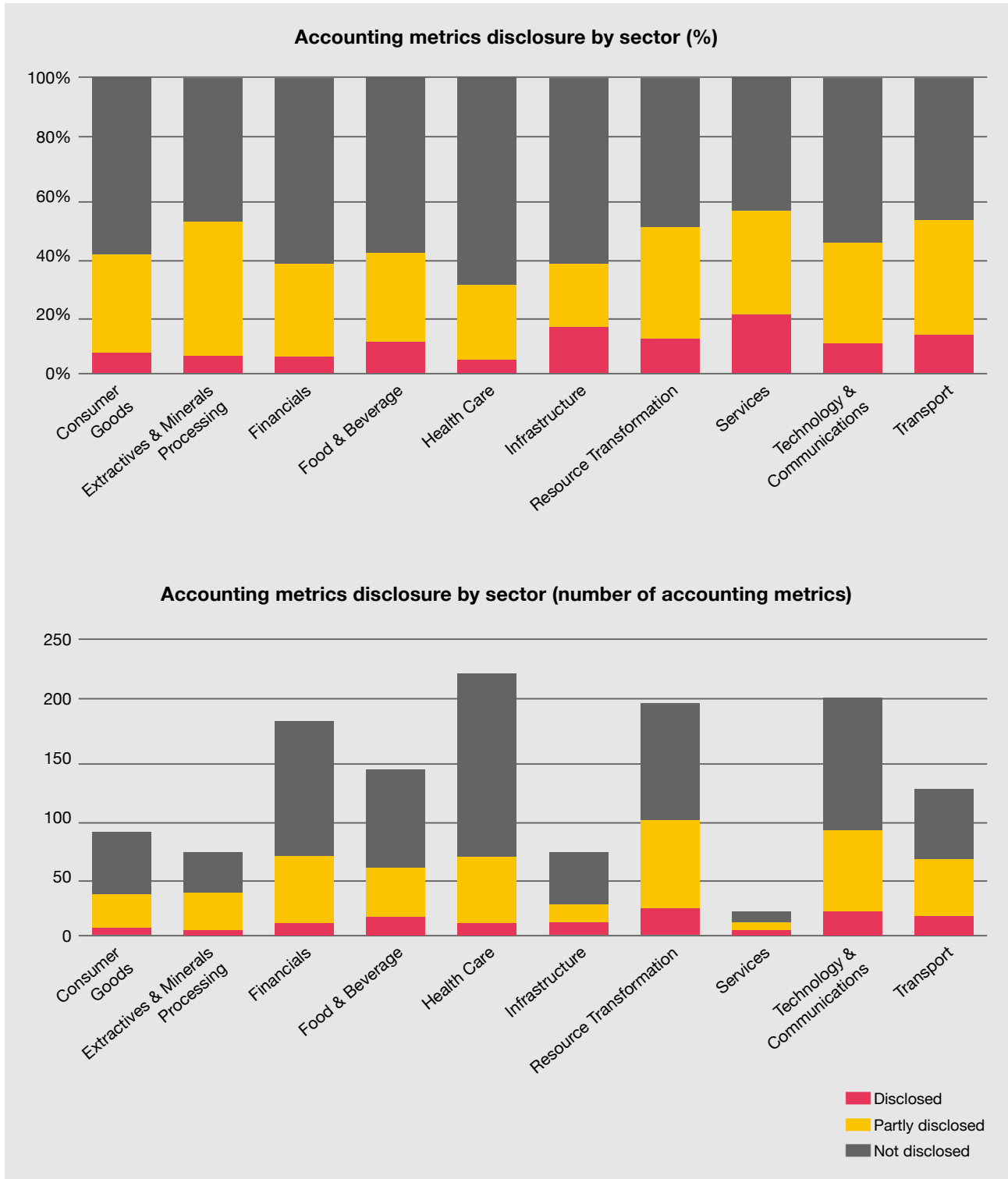
gaps of the abovementioned dimensions. Companies that wish to improve their disclosure in these areas could refer to the SASB Standards to gain insights on a variety of possible KPIs or discussion points.



Breaking down the accounting metrics along the sectors

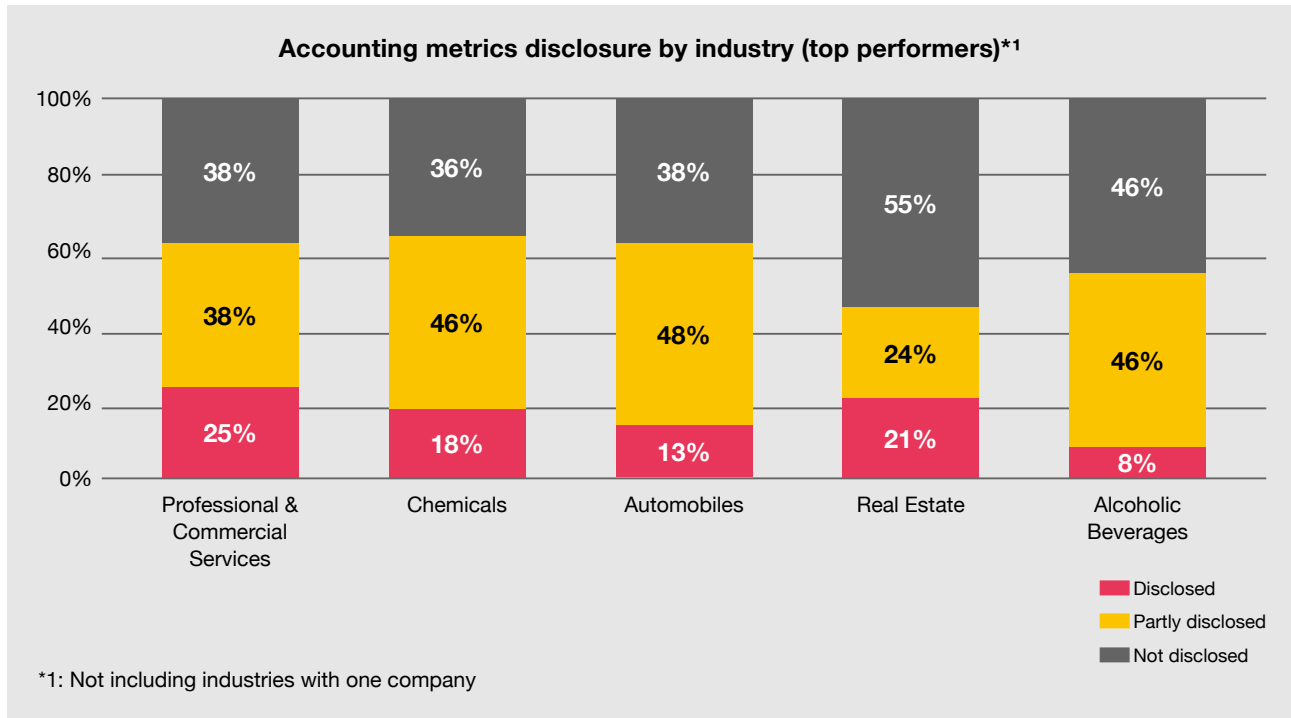
Changing our perspective and looking at the performance between sectors, there aren't any clear standouts in terms of relative disclosure levels. However, as many companies within the TOPIX 100

belong to the sectors of Financials, Health Care, Resource Transformation and Technology & Communication, in total these sectors have a lot of blanks that can be filled.



The top performing industries

Breaking down sectors into industries reveals a greater spectrum of disclosure levels. The top performers averagely disclose relevant information for around half of the accounting metrics, whereas the bottom industries only disclose around a quarter.



Sector/topic cross-analysis

When contrasting the sector disclosure against the topics a few other patterns emerge. Firstly, it is clear that Environment and Human Capital related topics are more disclosed upon, and sectors that have more metrics from those topics are better aligned with the requirements in the SASB Standards. Secondly, even

within certain topics there are great disparities in disclosure between sectors. This can be attributed to accounting metrics being adjusted towards sectors, occasionally making them more complex (e.g. Food & Beverage – Greenhouse Gas Emissions: Gross global Scope 1 emissions from refrigerants).

	Consumer Goods	Extractives & Minerals Processing	Financials	Food & Beverage	Health Care	Infrastructure	Resource Transformation	Services	Technology & Communications	Transport
Greenhouse Gas Emissions	●	●	●	○	●	●	●	●	●	●
Air Quality	●	●	●	●	●	●	●	●	●	○
Energy Management	●	●	●	●	●	●	●	●	●	●
Water & Wastewater Management	●	●	●	●	●	●	●	●	●	●
Waste & Hazardous Materials Management	●	○	●	●	●	●	●	●	●	●
Ecological Impacts	●	●	●	●	●	●	●	●	●	●
Human Rights & Community Relations	●	●	●	●	●	●	●	●	●	●
Customer Privacy	●	●	●	●	●	●	●	●	○	●
Data Security	●	●	●	●	●	●	●	●	●	●
Access & Affordability	●	●	●	●	○	●	●	●	●	●
Product Quality & Safety	○	●	●	○	○	●	○	○	●	●
Customer Welfare	●	●	●	●	●	●	●	●	●	●
Selling Practices & Product Labeling	●	●	○	○	○	●	●	●	●	●
Labor Practices	○	●	●	●	●	●	●	●	●	●
Employee Health & Safety	●	●	●	●	●	●	●	○	●	●
Employee Engagement, Diversity & Inclusion	●	●	●	●	●	●	●	●	●	●
Product Design & Lifecycle Management	●	○	●	●	●	○	○	●	○	●
Business Model Resilience	●	●	●	●	●	●	●	●	●	●
Supply Chain Management	●	●	●	●	●	●	●	●	○	●
Materials Sourcing & Efficiency	●	●	●	●	●	●	●	●	●	●
Physical Impacts of Climate Change	●	●	○	●	●	●	●	●	●	●
Business Ethics	●	●	●	●	●	●	●	●	●	●
Competitive Behavior	●	○	●	●	●	●	●	●	○	○
Management of the Legal & Regulatory Environment	●	●	●	●	●	●	●	●	●	●
Critical Incident Risk Management	●	○	●	●	●	●	●	●	●	●
Systemic Risk Management	●	●	●	●	●	●	●	●	●	●

● 75% or more of the accounting metrics disclosed or partly disclosed
 ● 50% or more, but fewer than 75% of the accounting metrics disclosed or partly disclosed
 ● 25% or more, but fewer than 50% of the accounting metrics disclosed or partly disclosed
 Fewer than 25% of the accounting metrics disclosed or partly disclosed
 ● No applicable accounting metrics

The disparity in disclosure levels among topics

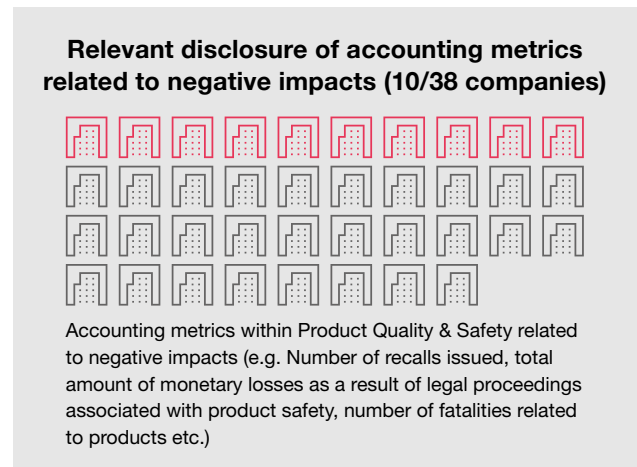
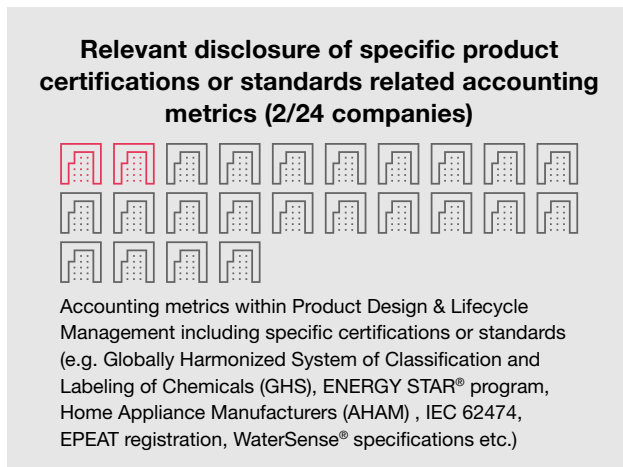
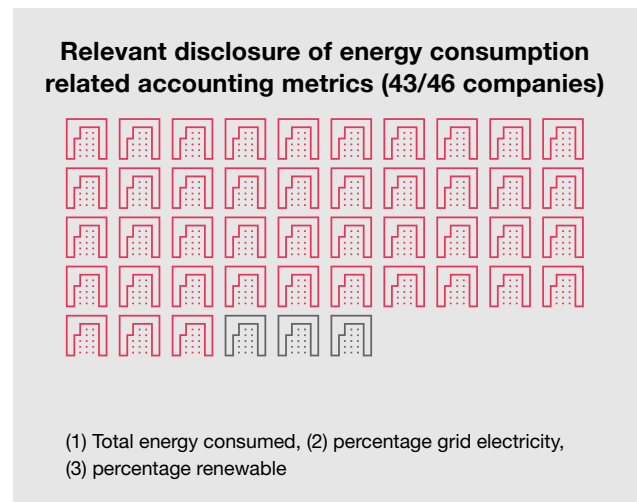
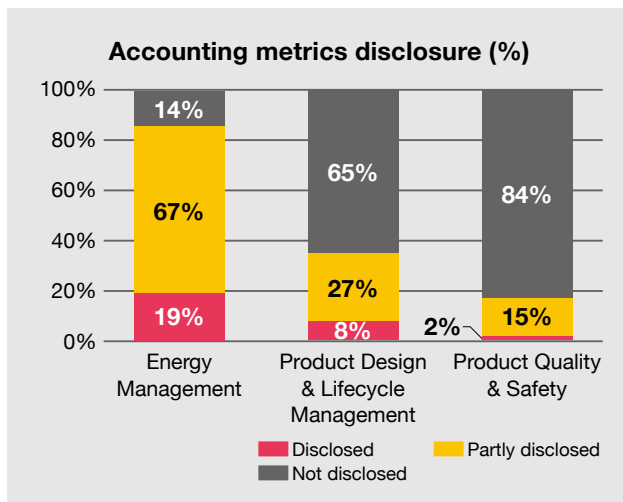
The difference in disclosure among topics can also be connected to the characteristics of accounting metrics and their quantity. For example, Energy Consumption, a prominent indicator in the Environment dimension is generally well disclosed upon. On the other hand the before mentioned Product Design & Lifecycle Management and Product Quality & Safety have limited disclosure.

Through initiatives such as the Task Force on Climate-Related Financial Disclosures (TCFD) or platforms like CDP, Climate Change has become a comparatively advanced field of sustainability related disclosure. Within the topic of Energy Management, a large portion, 73%, of the accounting metrics are connected to energy consumption, grid electricity and renewable energy. 46 out of the TOPIX 100 companies are required to respond to these metrics and 43 have relevant information, signifying how advanced this field is.

On the other hand, disclosure for Product Design & Lifecycle Management and Product Quality & Safety is comparably limited due to other characteristics. 25% of accounting metrics within Product Design & Lifecycle Management are related to specific product certifications or standards. 24 companies are asked to respond to these metrics in their individual standards, yet only two have relevant information.

Moreover, 80% of Product Quality & Safety accounting metrics require information that could be interpreted as negative impact such as monetary losses, number of recalls or fatalities. Here, only ten out of 38 companies have relevant information.

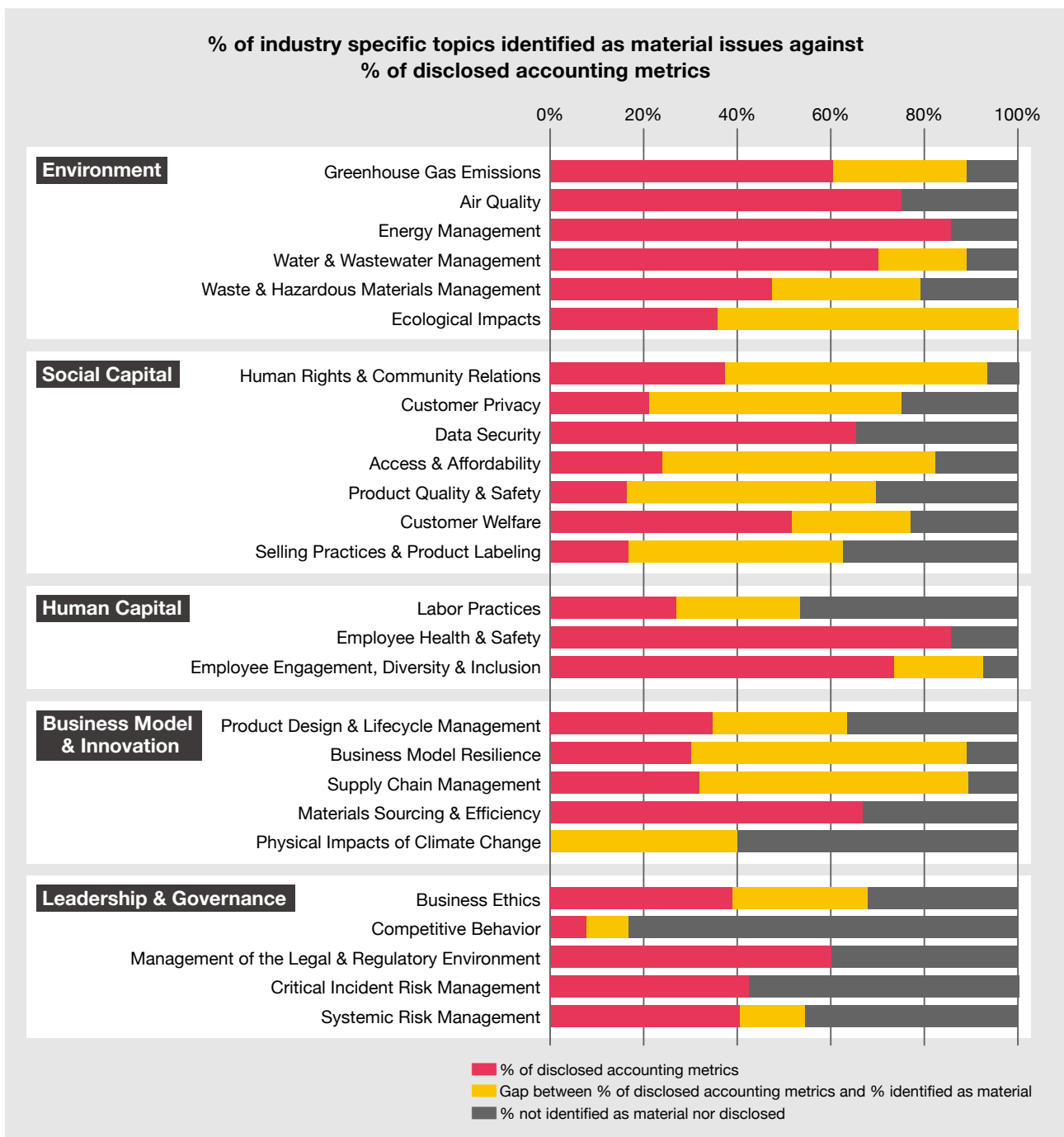
Comparing the already developed disclosure around Energy Consumption against the specific requirements of Product Design & Lifecycle Management and the difficult-to-disclose metrics from Product Quality & Safety provides insight into why there is a disparity in disclosure levels between the topics.



The gaps between materiality and disclosure

Lastly, comparing the percentage of companies that identify a relevant industry specific topic as material with the percentage of accounting metrics disclosed for that same topic reveals the issues that are perceived as important yet still have room for improvement in terms of disclosure. For example Ecological Impacts and Human Rights & Community Relations are topics that most companies regard as material, yet disclosure is still relatively limited. Disclosing the key indicators

and critical information for issues identified as material is a vital step for improving reporting. Including the topics with large gaps below, but also those where disclosure in total is relatively limited (e.g. Product Quality & Safety etc.) and analysing why disclosure is challenging for those specific topics, can help both companies and investors better understand the challenges they will need to address in the future.







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