EDSG

ESG Disclosure Study Group Report 2022

-Achieving World-Leading Disclosure and Dialogue Standards-

August, 2022
General Incorporation Association of
ESG Disclosure Study Group

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Preface

When we launched the ESG Disclosure Study Group (EDSG) two years ago, one of our main objectives was to publish a report containing concrete proposals for the corporate disclosure of non-financial information. I am delighted that the fruits of our activities have culminated in this discussion paper, and I look forward to receiving comments about our work from both practitioners and experts to help us fine-tune the ideas presented here.

Looking over the manuscripts for this publication, I was reminded of a paper I wrote for the August 2013 issue of the *Securities Analysts Journal* titled "Non-financial Information and Business Results Estimates by Analysts: Focusing on Pharmaceutical Sector." The point I made in that paper is essentially still pertinent today—that analysts (that is, primarily buy-side analysts of institutional investors) assign corporate value in accordance with the information disclosed by each company.

One important job of analysts is to forecast what the balance sheets, income statements, and cash-flow statements of specific businesses are likely to look like in the future. In the pharmaceutical sector, which was the focus of my paper, I noted that analysts were wont to rely heavily on non-financial information to draw up financial estimates. Corporate value, in other words, was assessed largely on the basis of what such non-financial disclosures indicated about the company's future. Usually, the task involved making forecasts of corporate financials 10 or more years down the road, estimating the company's results, and calculating its probable share price. There is no getting around the fact that this was and still is how corporate value is assigned on capital markets.

That said, 20 analysts will likely produce 20 different scenarios for a company's growth curve. And since corporate value will, in the long-term, largely determine the price of a company's shares, the projections of the most discerning analysts can help identify those corporations that will prove to be the best investments.

While there is much talk among our political leaders of embarking on a "new capitalism" to rouse the Japanese economy out of two to three decades of slumber, policy initiatives must be long-sighted and consider what our needs will be 10 or 15 years from now. Investment decisions made from a myopic, fragmentary assessment of corporate ESG initiatives are unlikely to generate gainful returns. The smart, active investor calculates corporate value by taking a long-term view and organically piecing together the various bits of disclosed information.

In my 2013 paper, I listed 18 non-financial disclosure items that analysts consider in assessing pharmaceutical companies. They are (1) management philosophy, (2) business strategy and risks, (3) medium-term goals, (4) short-term performance trends, (5) financial strategy and risks, (6) sales by major product line and region, (7) activities relating to the development of new drugs, (8) environmental policy, (9) compliance (human rights, ethical standards, marketing practices), (10) employee diversity and equality, (11) corporate governance, (12) major shareholders, (13) intellectual property, (14) healthcare-system and drug-regulatory trends, (15) pharmaceutical market trends, (16) innovation, (17) trends among regulatory authorities, and (18) trends among professional societies or NGOs.

I surveyed 6 European and 6 Japanese companies and found that the level of disclosure for virtually all 18 items were more than adequate—even back in 2013—among the 12 firms.

There were discrepancies, of course, in the frequency, breadth, and content of the disclosures, but all in all there was enough information for analysts to make informed decisions. The disclosures were made in a variety of formats—annual reports, CSR and sustainability reports, and websites—but they could generally be accessed with ease. Even if information about a certain drug was unavailable from the manufacturer itself, it could usually be gleaned from data openly provided by various pharmaceutical organizations.

Such non-financial information was absorbed and digested by professional analysts and used to generate assessments of corporate value. Because they tend to follow trends at each company over many years, analysts are able to readily place any new developments in context. Such knowhow has often been privately shared among analysts working for the same institutional investor and compiled into analyst reports offering investment guidance.

The activities described above are those that have long been associated with long-term, active investors. But such skills are, in recent years, increasingly being sought by passive investors as well, since generating returns simply through low-cost operations—without regard to corporate fundamentals—is becoming much more difficult.

The interest in the process of value creation and desire to maximize the market value of shareholdings are shared by active and passive investors alike. We are now entering an era when most institutional investors are keen on assembling teams of "super analysts" to meticulously dissect the value of companies in their portfolios.

And in an age of social informatization, super analysts no longer operate under a veil of secrecy; some investors now openly reveal the companies with whom they are conducting dialogue. This can be expected to result in a more substantive exchange of information and, consequently, in higher value assessments for the Japanese corporate sector as a whole.

Many members of the EDSG are leading consultancies that have closely followed the development of major Japanese corporate groups, institutional investors, and information disclosure trends from a global perspective. Through frank and open discussions among our members, I have gained renewed confidence in the quality of disclosures being made—in a proactive manner, not just out of a sense of obligation—by Japanese companies and have a strong sense that the analytical skills of institutional investors have grown by leaps and bounds over the past few years. The many conflicting viewpoints raised in our meetings have, through our exchange, coalesced into a fuller understanding of the challenges before us.

I believe that Japan can become a global leader of corporate disclosures and am looking forward to continuing and deepening our discussions in the third year of our activities beginning in July 2022.

Tetsuo Kitagawa
Representative Director

1 Introduction

1-1 Background to the Establishment of the ESG Disclosure Study Group

Since the late 1990s, companies have increasingly been required to disclose their various impacts on the economy, environment, and society. This is because these impacts have become too large for various stakeholders to ignore. In 1997, the Global Reporting Initiative (GRI)[1] was established, requiring companies to disclose their economic, environmental, and social impact in the form of sustainability reports, which led many companies to publish such reports.

In 2000, with financial markets no longer able to ignore the impact of climate change on businesses, CDP[2] was launched. CDP uses questionnaires to collect, analyze, and evaluate environmental information from companies, and provides institutional investors (hereinafter referred to as "investors." In particular, if it is limited to institutional investors, it is listed as institutional investors.) with information for use in ESG investments.

In the 2010s, investors, who analyze and invest in companies from a medium- to long-term perspective, became increasingly interested in long-term value creation by companies. In 2010, the International Integrated Reporting Council (IIRC)[3] was established with the objective of encouraging organizations to explain their value-creating capabilities mainly to providers of financial capital (e.g., investors) through integrated reports that organically combine financial and non-financial information and make management strategy visible. In 2013, the International IR Framework was released.

In the United States, against the backdrop of investors' interest in utilizing non-financial information with a large financial impact, the Sustainability Accounting Standards Board (SASB)[4] was established in 2011 to promote disclosure of highly useful and comparable information, and industry-specific standards were published in 2018.

Regarding climate change, the Task Force on Climate-related Financial Disclosures (TCFD)[5] was established by the Financial Stability Board in 2015 from the perspective of financial stability. Its final report was published in 2017, encouraging companies to disclose climate change-related financial information in their major annual reports and other documents in order to promote appropriate investment decisions by investors and others.

In the 2020s, the movement toward standardization and institutionalization of non-financial information disclosure has accelerated. The IFRS Foundation established the International Sustainability Standards Board (ISSB); the IIRC and SASB merged to form the

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[1] GRI (Global Reporting Initiative), https://www.globalreporting.org/
[2] Officially renamed from "Carbon Disclosure Project" in 2013: https://www.cdp.net/en/
[3] In 2021, the IIRC merged with the SASB to form the Value Reporting Foundation (VRF).
[4] In 2021, the SASB merged with the IIRC to form the VRF.
[5] TCFD, https://www.fsb-tcfd.org/

Value Reporting Foundation (VRF)[6]; and the TCFD, Climate Disclosure Standards Board (CDSB),[7] and World Economic Forum (WEF)[8] are taking the lead in setting standards for the disclosure of climate-related and sustainability-related information. In the European Union (EU), the finalization of EU standards based on the Corporate Sustainability Reporting Directive (CSRD) is underway for disclosure starting in January 2023. In the United States, moves to enhance non-financial information disclosure requirements in Securities and Exchange Commission (SEC) rules are accelerating.

In Japan, the Environment Agency published the Environmental Reporting Publication Guidelines in 1997, and many companies began publishing environmental reports. Subsequently, as the GRI Guidelines became more widespread, environmental reports gave way to sustainability reports. Since 2010, an increasing number of companies have issued integrated reports in response to the IIRC's International IR Framework and the Guidance for Collaborative Value Creation issued by the Ministry of Economy, Trade, and Industry (METI) in 2017, which has led to enhanced voluntary disclosure of non-financial information by Japanese companies. In addition, the Corporate Governance Code was revised in 2021 to require companies listed in the Prime and Standard Markets to disclose information on sustainability initiatives. Companies listed in the Prime Market are also required to enhancing the quality and quantity of disclose climate change–related information in their corporate governance reports starting from 2022, and discussions on sustainability information disclosure in securities reports are becoming more active.

Amid these developments globally and also in Japan, discussion has been deepening on how non-financial information should be disclosed in Japan, and calls for Japanese companies and investors to actively communicate information to the rest of the world are growing more insistent. The ESG Information Disclosure Study Group (EDSG) was launched in July 2020 to provide a forum for free and open discussion among listed companies and investors.

1-2 EDSG Vision, Mission, and Values

EDSG does not aim to formulate new guidelines originating in Japan. EDSG's objective is to bring together companies and investors to discuss the current status of and issues around ESG information disclosure and organize these findings to make ESG information disclosure more useful to both companies and investors, and to disseminate the results not only in Japan but also globally while the IFRS Foundation leads a convergence of ESG

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[6] VRF, https://www.valuereportingfoundation.org/
[7] CDSB, https://www.cdsb.net/
[8] WEF, https://www.weforum.org/

information disclosure guidelines. EDSG also aims to provide helpful information to companies that are considering enhancing their ESG information disclosure in the future by introducing the good practices it collects.

In order to achieve these objectives, EDSG conducts its activities in accordance with the following Vision, Mission, and Values.

【Vision】

1-3 Review Methods

EDSG conducted its activities in five phases.

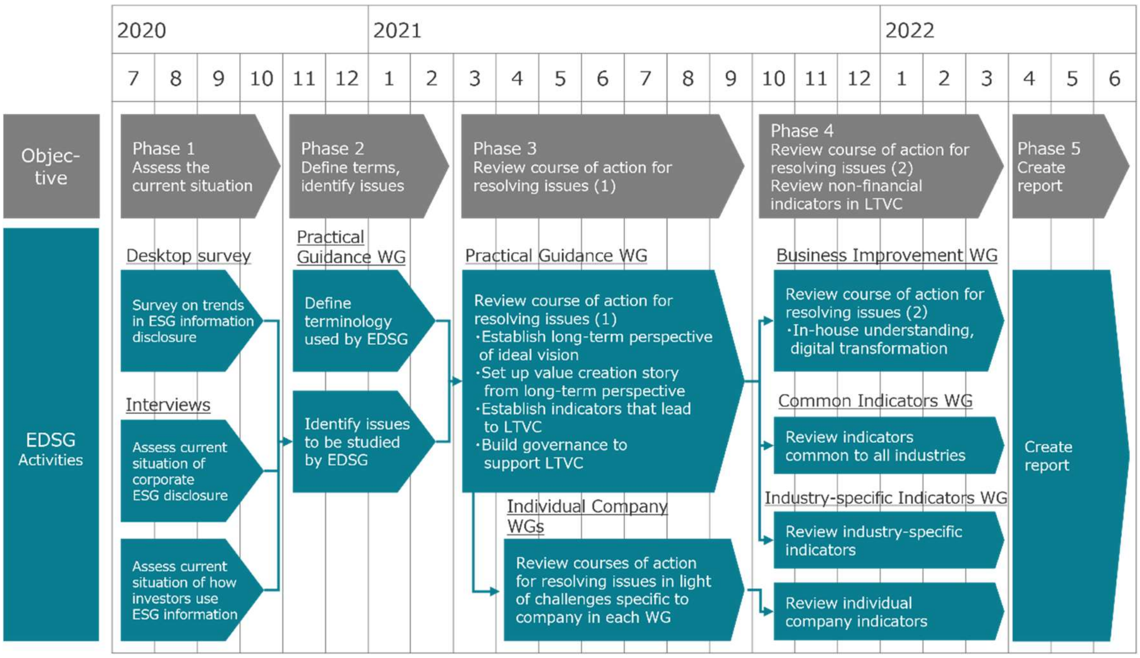
In Phase 1, EDSG assessed the current situation in order to determine the themes to be reviewed. Specifically, EDSG surveyed domestic and international trends in ESG information disclosure and interviewed companies and investors to understand the current state of ESG information disclosure.

In Phase 2, EDSG established working groups to identify issues for review and held discussions with member companies. In addition, since it was found that terminology used in discussions was interpreted differently even among member companies, EDSG surveyed the thinking around key terms and established a clear definition for each.

In Phase 3, EDSG held discussions on each of the issues identified in Phase 2 in order to determine the course of action to be taken to resolve them. EDSG also invited member companies to participate in working groups on a per-company basis to explore courses of action for resolving the issues identified in Phase 2 in light of company-specific challenges.

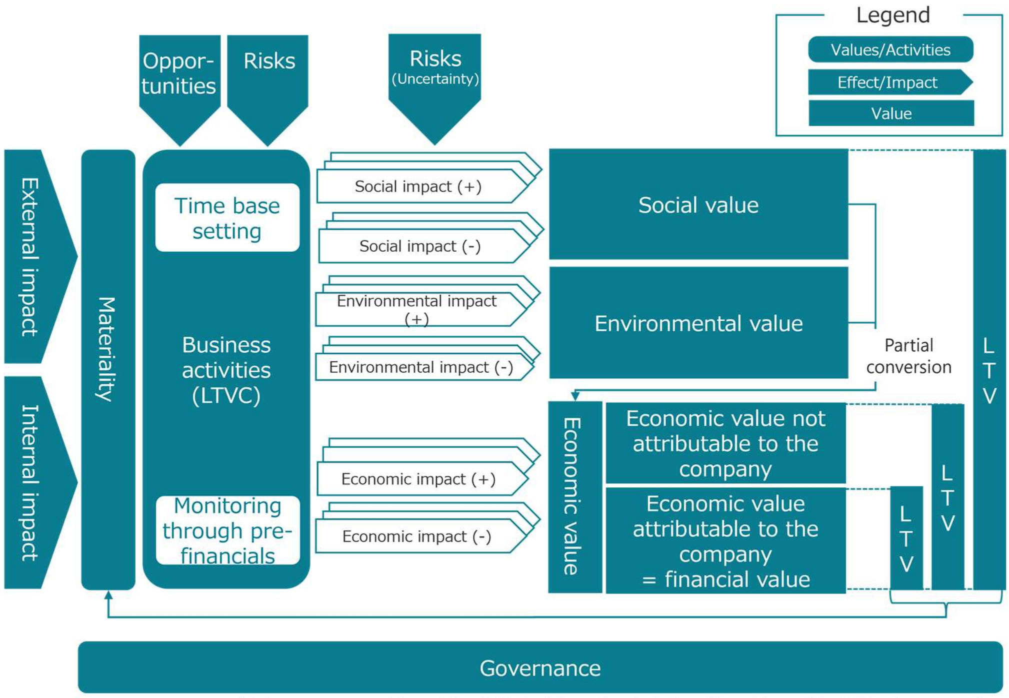
In Phase 4, EDSG established working groups to discuss practical issues for companies when disclosing ESG information. EDSG also established working groups to discuss indicators common to all industries and industry-specific indicators, respectively.

In Phase 5, EDSG created this report based on the discussions held in Phases 1 through 4.



1-4 Definitions of Terms and Concepts Used by EDSG

Based on the activities conducted in Phase 2, EDSG surveyed the thinking around key terms and concepts related to ESG information disclosure and established definitions for each. These definitions are given below.



* The scope considered for LTV is determined at the discretion of individual companies.

(1) Purpose

A company's purpose is defined as its reason for existence and what it aims to accomplish, and can be considered universal rather than limited to a specific time period. Therefore, a company's purpose must answer the questions of why the company should exist in society, what values the company has, and what it aims to accomplish. Although many companies have already established management and corporate philosophies, each company must establish a corporate philosophy system in light of the definition of purpose.

Purpose is the basis on which management and employees act, and it should always be considered in the formulation of long-term visions and strategies.

(2) Corporate Value

Each company's corporate value is clarified and recognized based on that company's approach to the various kinds of value it creates (including social, environmental, economic, and financial value)—i.e., which kinds of value it prioritizes.

Different stakeholders prioritize different elements of corporate value. For example, shareholders and investors generally focus on financial value, while NPOs tend to focus on social and environmental value. There is also a growing awareness among investors of the importance of the interrelationship between financial value and social and environmental value.

The impact of a company's business activities has a value (positive impact) to society, the environment, and the economy as well as imposing a burden (negative impact) on society, the environment, and the economy. It is important to view impact in terms of both of these aspects.

We assume that the main users of corporate reporting, including ESG information, are financial capital providers, including shareholders and investors. Accordingly, our concern is to clarify how the social, environmental, and economic impacts of a company's business activities are linked to its financial impact.

(3) Social Value, Environmental Value, and Economic Value

Social value is the tangible and intangible value that a company provides to stakeholders through its activities, including taxes to governments and municipalities and appropriate remuneration to employees.

Environmental value is the value imparted to the global environment, including non-human ecosystems.

Social and environmental value should be considered with caution, as it is not uncommon for the two to be discussed without distinguishing between them. Whether to include environmental value in social value or to separate the two depends on the company and the perspectives of individual stakeholders.

Economic value refers to (1) the value inherent in so-called intangible assets, such as technology, intellectual property, human capabilities, and relationships of trust with suppliers and customers, which are the source of a company's competitiveness; and (2) value as an economic ripple effect on a wide range of stakeholders resulting from a company's business activities.

(4) Financial Value

Financial value is value that is attributable to the company and leads to financial returns for shareholders and investors through shareholder return and capital market valuation.

There is a global trend toward viewing financial value with a more long-term orientation, and this is our approach as well. From this perspective, financial value approximates economic value in some respects.

Investors, who are positioned as major stakeholders by our issuers, can be considered to represent the views of various stakeholders in light of their knowledge of the capital markets and the diversity of their investment term perspectives and investment policies.

The ultimate goal is to simultaneously create diverse kinds of value through constructive dialogue among stakeholders and the establishment of win-win relationships through corporate management and investor behavior based on a long-term perspective, thereby benefiting the company and its stakeholders, including shareholders and investors.

(5) Non-financial Factors, Intangible Assets, and ESG

The various elements raised from an ESG perspective do not necessarily cover all non-financial factors and intangible assets that actively create corporate value and are a source of corporate competitiveness, such as technology, intellectual property, human capabilities, and relationships of trust with suppliers and customers.

Although there are divergent views globally on whether non-financial factors and intangible assets and ESG are the same thing, **this study group** (as our name indicates) explores effective and efficient ways of disclosing ESG information **as well as addressing non-financial factors and intangible assets that are sources of value and competitiveness as described above, from the perspective of further promoting value creation by member companies.**

(6) Pre-financials

Pre-financials are factors that are not measured as financial figures at the current stage but are connected to future financial returns and risks. Pre-financials can also be a monitoring indicator for a company as it carries out its business activities.

For example, in the case of Japan, CO_2 emissions are not measured as financial figures at this stage, but may be measured as financial figures in the future if a carbon tax or emissions trading is introduced.

In many cases, while pre-financials are not expressed as financial phenomena, they are factored into the financial value of a company through accounting valuations and investor projections and considerations.

With the increasing demand for corporate reporting based on a long-term perspective, it is increasingly important to clarify pre-financials in management strategies and disclose them to stakeholders.

(7) LTV and LTVC

LTV (long-term value) refers to the value of a company from a long-term perspective and reflects a viewpoint based on the materiality of the company. We emphasize an approach in which companies proactively create value based on their own strengths and management environment.

Through its activities, a company creates long-term social, environmental, and economic value, which in turn increases its financial value. Conversely, any negative impacts on social, environmental, or economic value could result in reduced financial value. Social, environmental, and economic value are often closely interrelated.

LTVC (long-term value creation) refers to management actions and business activities undertaken by a company to create LTV based on its own materiality.

(8) Materiality

Materiality refers to a company's priorities from the perspective of realizing its ideal vision (target state with commitment), taking into account its mission, values, and strategy. It indicates the material issues that must be addressed to fill the gap between a company's current situation and its ideal vision, and takes the entire management strategy related to LTV as its scope.

Both backcasting and forecasting approaches are required to identify materiality. Materiality should reflect the philosophy and intent of management.

What is considered a material issue varies from stakeholder to stakeholder. For example, a company's view of which issues are part of its own materiality may differ from the views held by investors and NPO/NGOs. In explaining their own materiality, companies should also be aware of different ideas about materiality from a stakeholder perspective. "Materiality" is also used to mean the criteria for selecting priority action items.

(9) Risk

We consider two kinds of risk: risk that the company is exposed to externally, which can threaten financial value depending on external factors, and risk that the company itself imposes on the outside world, putting stakeholders in danger of experiencing negative impacts due to the company's business activities.

In a broader sense, risk can also refer to degrees of uncertainty. When risk is viewed as uncertainty, it can also lead to business opportunities.

(10) Who Are the Users of Corporate Reporting, Including ESG Information?

Primary audience: Financial capital providers, including shareholders, investors, and creditors

Secondary audience: Diverse stakeholders

This issue has been discussed at the IIRC and in the United Kingdom and elsewhere, and views are now converging on the above. A company is viewed by definition as a social entity (a public institution of society), but in the capital market it reports to its financial capital providers. The weight to be placed on these two aspects varies from company to company, and is also related to materiality.

(11) What Is a Long-term Time Base?

Ten years shall be considered one rough definition of a long-term time base.

Ten years can be viewed as sufficiently long to clarify connections and correlations between financials and pre-financials to a certain extent and identify materiality. However, the meaning of "long-term" should be decided on a case-by-case basis, depending on the type of business and the business category of the company.

2 ESG Information Disclosure Trends

2-1 Principal ESG Information Disclosure Standards Organizations

Since the 1990s, a number of organizations focused on ESG information disclosure have emerged around the world and published various frameworks and standards for ESG information disclosure. There is now an accelerating shift toward convergence among these organizations, but this section lists some of the most prominent at present.

(1) Global Reporting Initiative (GRI)

GRI was established in Boston in 1997 by Ceres, an American environmental NGO, and the Tellus Institute, a think tank dealing with social and environmental issues, in cooperation with United Nations Environment Programme (UNEP). The organization's headquarters are currently in Amsterdam.

GRI's objective is to disclose the economic, environmental, and social impact of organizations through sustainability reports. In 2016, the GRI Standards were published to replace the previous GRI Guidelines. The most recent revision of the standards was in October 2021, when specific standards for the oil and gas sectors were published.

The GRI Standards consist of Universal Standards and Topic Standards. The Universal Standards apply to all companies that issue sustainability reports, while the Topic Standards apply to disclosure on individual material topics, with relevant topics to be identified by the disclosing organization. Material topics (standards for determining importance) are defined as "those that reflect the organization's significant economic, environmental, and social impacts; or that substantively influence the assessments and decisions of stakeholders."

(2) CDP (formerly the Carbon Disclosure Project)

CDP is a non-profit organization established in 2000 in the UK. It collects information on CO_2 emissions and climate change initiatives through questionnaires, and runs a global information disclosure system so that investors, companies, nations, regions, and cities can manage their own environmental impacts.

CDP currently administers three questionnaires, on climate change, water security, and forests. Organizations are scored from A to D based on their responses. To address climate and ecological crises, CDP's new five-year plan will cover a wider range of environmental issues. It is expected to encompass land, oceans, biodiversity, resilience, waste, and food.

(3) Climate Disclosure Standards Board (CDSB)

CDSB was established at the 2007 World Economic Forum (WEF) to create a global framework for climate change information disclosure by companies and to promote the disclosure of climate change information in financial and other reports. The organization's headquarters are in London.

CDSB offers a framework based on climate change information disclosure protocols and standards that are widely used around the world. Its aim is not to create new standards, but to consider climate change information disclosure with a range of organizations.

The CDSB Framework was published in 2015 and revised in 2018. It consists of 7 guiding principles and 12 reporting requirements. The guiding principles are meant to be applied when determining, preparing, and presenting environmental information, while the reporting requirements are designed to encourage standardized disclosure of environmental information that supplements other information in mainstream reports.

(4) International Integrated Reporting Council (IIRC)

IIRC was established in London in 2010 by Accounting for Sustainability (A4S) and GRI. It is a global coalition of regulators, investors, companies, standard setters, accounting professionals, and NGOs.

IIRC published the International IR Framework in 2013 and revised it in 2021. An integrated report is intended to give providers of financial capital insight into (1) the external environment that affects an organization, (2) the resources and relationships (referred to as "capitals" within the Framework) that an organization uses and affects, and (3) how an organization interacts with the external environment and the capitals to create value over the short, medium, and long term. The Framework presents seven Guiding Principles and nine Content Elements to be used in preparing an integrated report. The Guiding Principles underpin the preparation and presentation of the integrated report, and the Content Elements determine categories of information required to be included in the integrated report.

(5) Sustainability Accounting Standards Board (SASB)

SASB is a non-profit organization established in 2011 and based in San Francisco. It was established to help investors make decisions from a medium- and long-term perspective by setting disclosure standards for ESG factors that are expected to have a large financial impact in each industry, thereby enabling comparison of the information disclosed by each company.

The SASB Standards were published in 2018. They are designed to identify the minimum set of sustainability issues that are most likely to affect a company's financial performance in 11 sectors and 77 industries. For each, there are specific disclosure topics and metrics, categories of disclosure topics (quantitative/qualitative), and disclosure units for quantitative topics. Although the disclosure topics and metrics listed in the standards vary by industry, a total of 26 disclosure topics have been established in five categories: "Environment," "Social capital," "Human capital," "Business model innovation," and "Leadership and governance." SASB's original intent was to develop disclosure standards for US companies, but following a significant change in policy it now aims to create disclosure standards for companies around the world.

(6) Task Force on Climate-related Financial Disclosures (TCFD)

TCFD was established in 2015 by the Financial Stability Board at the request of the G20 to develop a voluntary and consistent climate-related financial disclosure methodology, in order to help investors, lenders, and insurance writers assess material risks.

The TCFD published its final report in 2017, in which it recommended that companies disclose the following items connected to climate-related risks and opportunities.

- Governance: The organization's governance around climate-related risks and opportunities
- Strategy: The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning
- Risk management: The processes used by the organization to identify, assess, and manage climate-related risks
- Metrics and targets: The metrics and targets used to assess and manage relevant climate-related risks and opportunities

In October 2021, TCFD's final report was partially revised. Principle revisions included the addition of seven cross-industry climate-related metrics and targets and enhanced disclosure for better comparability.

(7) World Economic Forum (WEF)

WEF is a non-profit organization established in Geneva in 1971 to work on remedying global and regional economic problems by connecting leaders in economic, political, academic, and other fields.

In September 2020, the WEF published a report entitled "Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value

Creation." The core and expanded set of the Stakeholder Capitalization Metrics and disclosures presented in the report can be used by companies to align their reporting of ESG indicator results, as well as to continuously monitor their level of contribution toward achieving the SDGs. These metrics are intentionally aligned with existing standards, such as those published by GRI, CDSB, and SASB, with the short-term goal of accelerating the convergence of indicators among the main private standards organizations and bringing comparability and consistency to the reporting of ESG information disclosure.

(8) European Financial Reporting Advisory Group (EFRAG)[9]

EFRAG was established to promote the development of thinking about European financial reporting and to appropriately advise the European Commission (EC) so that European views would be properly reflected in the International Accounting Standards Board (IASB)'s standard-setting process and related international discussions.

EFRAG participates in the Project Task Force on European sustainability reporting standards (PTF-ESRS), established in September 2020, and plays a central role in the creation of European sustainability reporting standards. A proposal for a Corporate Sustainability Reporting Directive (CSRD) was published by the EC in April 2021, and EFRAG plans to formulate a draft standard by June 2022.

(9) Financial Reporting Council (FRC)[10]

FRC is an independent agency that works to promote investment in the UK by improving corporate governance and corporate disclosure. FRC has established an internal body, the Financial Reporting Lab, which conducts research and study to improve the efficacy of corporate reporting. The lab has members from FRC, accounting firms, investors, and companies. In August 2013, the UK's 2006 Companies Act was amended to require the preparation and disclosure of a "strategic report" as part of annual reports. In June 2014, FRC published guidance to assist companies in preparing their strategic reports. In 2016, the Financial Reporting Lab also published a report on business model reporting to encourage better business model disclosure by UK companies. In 2018, the guidance on strategic reports was revised to reflect the 2016 and 2018 amendments to the Companies Act. In 2021, FRC published a document that outlines a policy aimed at making corporate ESG reporting more effective, which is proving highly influential on ideas of what corporate reporting, including ESG information disclosure, should look like in future.

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[9] EFRAG (European Financial Reporting Advisory Group), https://www.efrag.org/

[10] FRC (Financial Reporting Council), https://www.frc.org.uk/

(10) World Intellectual Capital/Assets Initiative (WICI)[11]

WICI was launched in November 2007. Participants include firms from the private sector, financial analysts, and investors, as well as representatives of government agencies and researchers from universities and other institutions. In 2008, WICI Japan was established as a base for activities in Japan. WICI aims to create a world in which companies recognize the intellectual assets (human, organizational, and relationship) that are the source of their strength, use them in optimal combination with monetary and physical assets, implement management that creates value in a way suited to each company, and have this intellectual asset management appropriately evaluated. WICI has a close relationship with IIRC. They worked together on the development of the International IR Framework and also compiled a background paper on connectivity. WICI developed the WICI Intangibles Reporting Framework in 2016.[12]

2-2 Moves Toward International Standards Convergence

While the ESG information disclosure standards organizations listed above have published various frameworks and standards, there has been growing criticism from both companies and investors that the flood of standards has led to confusion on the ground.

Even before 2020, there were active moves toward convergence involving individual organizations. One example is the establishment of the Corporate Reporting Dialogue (CRD), which was led by IIRC with the participation of CDP, CDSB, GRI, IIRC, SASB, IASB, and other organizations. Another is the TCFD Implementation Guide, which was jointly published by SASB and CDSB. However, the movement toward convergence of international standards began in earnest in 2020.

In July 2020, a collaboration between GRI and SASB was announced and they began considering how to use both standards together. In November 2020, SASB and IIRC announced a merger, and Value Reporting Foundation (VRF) was launched in June 2021. Moreover, CDSB and VRF plan to merge by June 2022.

In September 2020, CDP, CDSB, GRI, IIRC, and SASB announced that they would work together toward a comprehensive corporate reporting system. In December 2020, the five organizations jointly published a document that offered a prototype of a climate-related financial disclosure standard, while examining the potential for establishing a future

[11] WICI (World Intellectual Capital/Assets Initiative), https://www.wici-global.com/

[12] WICI, https://www.wici-global.com/wp-content/uploads/2016/09/WICI-Intangibles-Reporting-Framework_ver-1.0.pdf

comprehensive corporate reporting system.[13] Their objective in publishing this document was to advance their commitment to work with stakeholders, including the International Organization of Securities Commissions (IOSCO), the IFRS Foundation, and countries and regions working to promote corporate reporting, in order to develop a comprehensive system for corporate reporting. The document includes (1) findings on the applicability of IASB's Conceptual Framework for Financial Reporting (the IASB Conceptual Framework) to the development of a sustainability-related financial disclosure standard, (2) a prototype sustainability-related financial reporting standard, and (3) a prototype climate-related financial disclosure standard.

Also in September 2020, the IFRS Foundation published a consultation paper to identify demand from stakeholders in the area of sustainability reporting and ascertain what the Foundation could do in response to that demand. The IFRS Foundation's standard-setting body, IASB, is also a member of CRD. The IFRS Foundation believes that working with the above five bodies can help ensure consistency and reduce complexity in sustainability reporting. It has suggested the creation of a Sustainability Standards Board (SSB) as an option for the IFRS Foundation. In March 2021, the Technical Readiness Working Group (TRWG) was launched in order to create the International Sustainability Standards Board (ISSB). TRWG is composed of members from the IFRS Foundation, CDP, CDSB, IIRC, SASB, TCFD, and WEF, while IOSCO participates as an observer. ISSB was officially launched in November 2021 to coincide with the 26th UN Climate Change Conference of the Parties (COP26). In March 2022, an exposure draft on climate-related disclosures was published, with comments to be canvassed until late July 2022. Additionally, in March 2022 the IFRS Foundation and GRI agreed to coordinate their work programs and standard-setting activities.

Meanwhile, EFRAG announced in July 2021 that it will work together with GRI to prepare the European Sustainability Reporting Standards (ESRS). Based on the concept of double materiality, these standards are designed to provide comparable and highly reliable information on the key sustainability impacts of reporting companies on different stakeholders, as well as the key sustainability risks and opportunities that are important for the value creation of the reporting companies themselves. This way of thinking shares much with GRI. In September 2021, a working paper on a climate standard prototype was published. Working papers for 24 of the total 28 criteria had been published by March 31,

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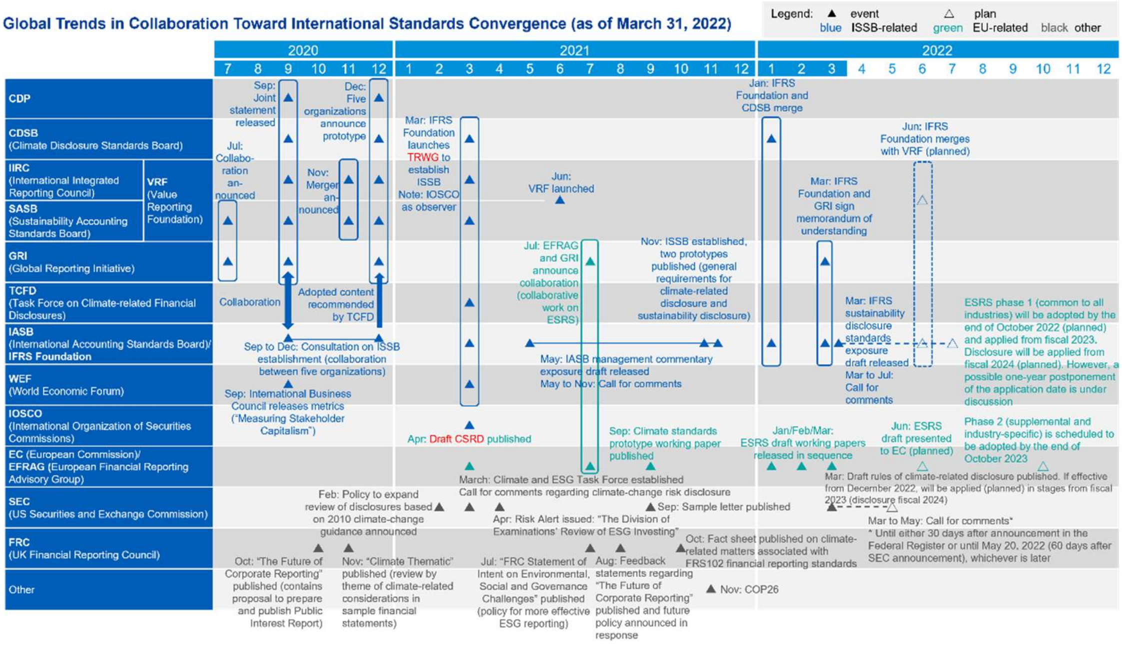
13 "Reporting on enterprise value: Illustrated with a prototype climate-related financial disclosure standard" https://29kjwb3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/Reporting-on-enterprise-value_climate-prototype_Dec20.pdf

2022.

Global Trends in Collaboration Toward International Standards Convergence (as of March 31, 2022)



2-3 Mandatory Disclosure Developments in Global

(1) EU Developments

In April 2021, the EC published the draft CSRD as an amendment to the current Non-Financial Reporting Directive (NFRD). The new regulation is scheduled to be applied from fiscal 2023 and covers all large companies[14] and all companies listed on regulated EU markets (except listed micro-enterprises), which means that Japanese companies with applicable group companies in Europe will need to comply.

The scope of reporting topics is broader than that of the NFRD, including all ESG matters (business model and strategy, targets and progress, the role of the board, materiality analysis, and other topics). Information on reporting topics is to be prepared in accordance with sustainability-related reporting standards, and the concept of double materiality is adopted. The planned report format includes publication as part of the annual report and availability as electronic data (XHTML format). Third-party assurance is also required and will, as a rule, be carried out by the statutory auditor or audit firm in accordance with assurance standards adopted by that country or the EC. Regarding reporting standards related to sustainability, as mentioned above, following the release of a working paper on climate change-related disclosures in September 2021 by EFRAG, by March 31, 2022, working papers for 24 of the total 28 standards had been published.

[14] "Large companies" are defined as those meeting two of the following criteria: 250 or more employees, net assets of 20 million euros, and net sales of 40 million euros.

(2) UK Developments

In the UK, disclosure based on TCFD recommendations is in the process of being made mandatory. In November 2020, HM Treasury announced a five-year roadmap for mandatory disclosure based on TCFD recommendations, aiming for full mandatory disclosure by 2025. In December 2020, the Financial Conduct Authority (FCA) revised its Listing Rules, making TCFD-based disclosures applicable to companies listed on the Premium Main Market of the London Stock Exchange for fiscal years beginning January 1, 2021, or later. This was expanded to include Standard Main Market–listed companies for fiscal years beginning on January 1, 2022, or later. In addition, according to an amendment to the Companies Act, not only listed companies but also UK-registered companies above a certain size will be required to make disclosures based on the TCFD recommendations.

(3) US Developments

There have been no major developments in the disclosure of sustainability issues in the US since 2010 when the US Securities and Exchange Commission (SEC) issued guidance on climate change risk disclosure. In 2020, Regulation S-K was partially amended to require a description of human capital resources to the extent such disclosures would be material to an understanding of the company's business. In March 2021, a public consultation was held with a comment deadline of June 2021, prior to work beginning on the SEC's review of climate-related disclosure rules. In March 2022, a draft rule requiring specific climate-related disclosures was published and is expected to be passed into law during 2022.

2-4 Developments in Japan

In 1997, many Japanese companies voluntarily issued environmental reports based on the Environmental Reporting Publication Guidelines published by what was then the Environment Agency. Later, with widespread adoption of the GRI Guidelines, reporting shifted from environmental reports to CSR reports. Following the publication of the International IR Framework by the IIRC in 2013 and the Guidance for Collaborative Value Creation by the Ministry of Economy, Trade, and Industry in 2017, the number of companies issuing integrated reports gradually increased, with over 700 companies issuing such reports in 2021.[15] Meanwhile, as the results of evaluations by ESG assessment organizations such as FTSE, MSCI, and DJSI have attracted more attention, ESG data books have been prepared, and more ESG information disclosure has been put on websites in order to respond to ESG assessment bodies.

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[15] "2021 Trends in Integrated Reporting to Support Sustainable Growth in Japan 2021" (in Japanese only), Corporate Value Reporting Lab: http://cvrl-net.com/archive/pdf/list2021_202202.pdf

With ESG information disclosure rising in importance, the revised Corporate Governance Code released in 2021 now requires companies to formulate a basic policy on sustainability and disclose their efforts. Meanwhile, Prime Market–listed companies on the Tokyo Stock Exchange are required to improve the quality and quantity of their climate change-related disclosures based on the TCFD or an equivalent international framework. The revised Code also calls on companies to provide understandable and specific information on investments in human capital and intellectual properties while being conscious of consistency with their own management strategies and issues. The trend toward enhanced disclosure of non-financial information is expected to grow even stronger.

The Working Group on Corporate Disclosure of the Financial System Council of Japan's Financial Services Agency is currently discussing sustainability information disclosure in securities reports. The final results are likely to depend on moves taken by ISSB, but mandatory disclosure of non-financial information in Japan

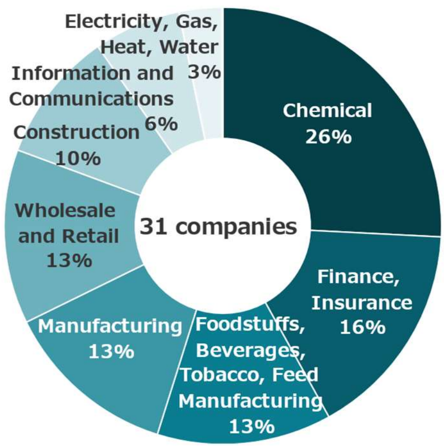
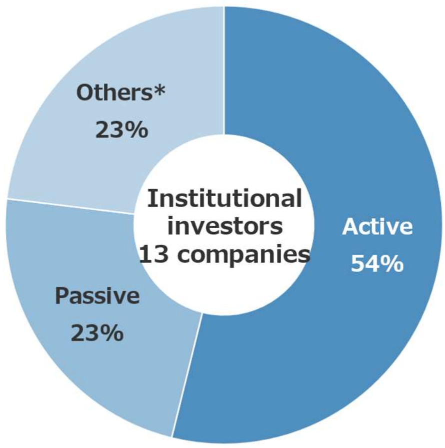
3 Understanding the Current State of ESG Information Disclosure

After organizing the macro level, including trends in system disclosure in all countries, we sought to understand the current situation at the micro level based on the practical perspectives of companies and investors, and we prepared data for consideration when resolving practical issues. Specifically, we conducted interviews with companies and investors.

3-1 Current State as Revealed in Interviews with Companies and Institutional Investors

(1) Interview Summary

We conducted interviews with 31 companies and 13 institutional investors in order to understand the reality of ESG information disclosure.

<table>
<tr><td>Period</td><td colspan="2">From August 27, 2020 to October 15, 2020</td></tr>
<tr><td rowspan="3">Interviewees</td><td>Companies</td><td>Institutional investors</td></tr>
<tr><td>Randomly selected companies engaged with advanced ESG disclosure to cover a representative sample of industries</td><td>Randomly selected institutional investors engaged with advanced ESG disclosure while bearing in mind their attributes</td></tr>
<tr><td>
</td><td>

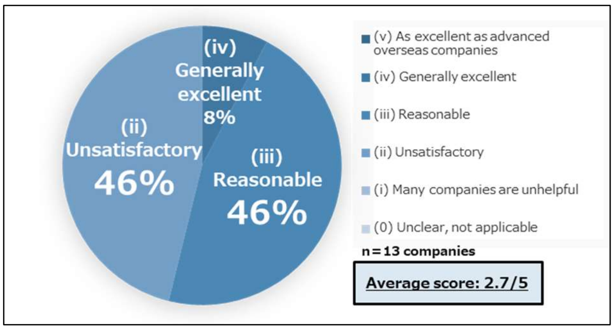
* Responses vary by fund</td></tr>
</table>

(2) Interview Results

(i) Value Creation Process

(a) Institutional Investors

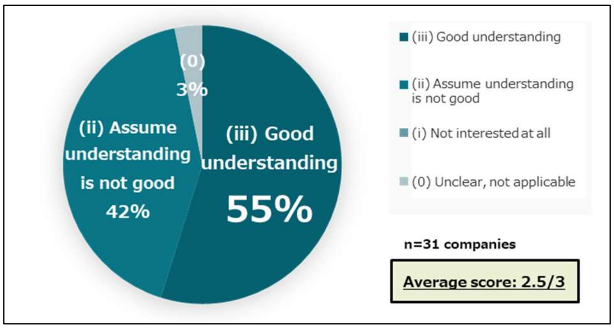
When we asked institutional investors to rate disclosures related to corporate long-term value creation (LTVC), a total of 54% of the investors responded "Generally excellent" or "Reasonable."



With regard to companies with an excellent record of disclosure, many institutional investors appreciate the disclosure of LTVC for reference during interactions with institutional investors, but they also point to increasing polarization between companies that can discuss LTVC in their own words and those that cannot.

(b) Companies

When we asked companies about disclosure and whether institutional investors have sufficient understanding of LTVC at their companies, 55% responded that investors have good understanding.

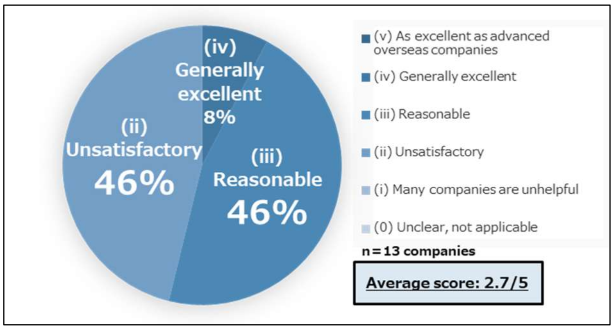


On the one hand, the process of having issues identified through interaction with institutional investors makes companies feel that they are understood, but, on the other hand, they also realize that the presence of points of concern means that they have not reached the required disclosure level. Thus, they recognize the need to improve disclosure.

(ii) Materiality

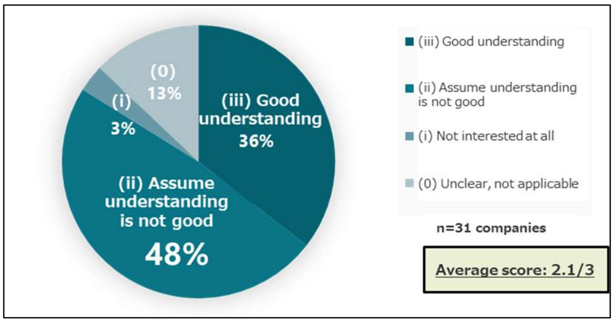
(a) Institutional Investors

When we asked institutional investors to rate materiality in ESG/sustainability activities at companies, a total of 54% of investors responded "Generally excellent" or "Reasonable," which is a higher percentage than investors who responded "Unsatisfactory."



However, looking at individual comments made by institutional investors, they identified many points for improvement such as "Some companies have no processes for reviewing materiality," "Their objective is to identify materiality, and there is no disclosure of efforts to address such materiality," or "There are many materiality topics, but they are not narrowed down."

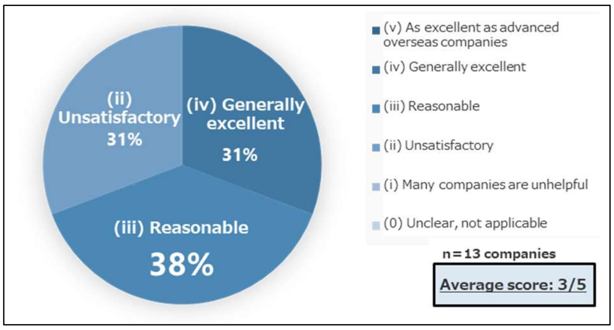
(b) Companies



When we asked companies whether ESG investors have adequate understanding of materiality at their companies, 48% responded "We assume understanding is not good." This accounted for the highest percentage among the responses. Comments by companies included "Communication is skewed toward specific themes making it difficult to discuss corporate value and materiality," "We talk about ESG, but in our experience there is hardly any discussion of materiality," or "Investors have never actively asked us about materiality so we assume there is no interest." There is a perception gap between companies and institutional investors.

(iii) LTVC Story

(a) Institutional Investors



When we asked institutional investors to rate LTVC story disclosure in the integrated reports of companies, a large number of investors, 69% in total, responded "Generally excellent" or "Reasonable," giving positive recognition.

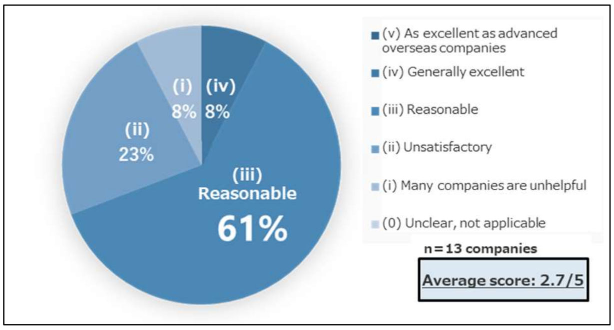
But there is still room for improvement. Many investors said "It is commendable that companies are strategically disclosing non-financial information, but the relationship between continued business growth and increased profitability should be presented more clearly," "Some companies only enumerate priority CSR issues that contribute to society, but it is unclear how they tie in with corporate strategy or improved corporate value," or "There are few cases where the sense of a story is complete."

(b) Companies

When we asked companies for their opinions on assessments of LTVC disclosure by institutional investors, the comments included “At present, the figures/KPI disclosed by our company are neither directly linked to improving sustainable corporate value, nor do they clearly present a medium-term value creation story,” “We are still unable to engage with storytelling and we are aware that investors do not understand us,” “Investors are not interested in us because we do not share sufficient information (the corporate value creation process and materiality are not clearly presented),” or “Due to the wide range of our business, we have a sense that investors do not understand us at all unless we provide comprehensive explanations.” Companies had the same issue perception as institutional investors, realizing that LTVC is not communicated to investors.

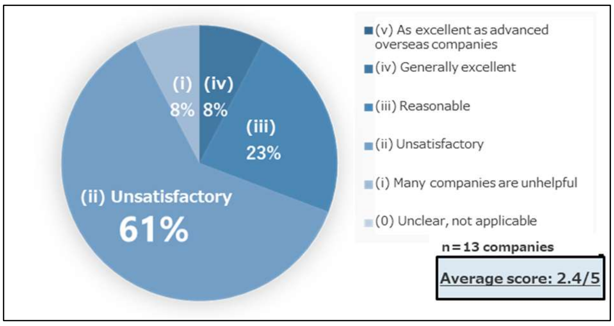
(iv) ESG Topics According to Business Characteristics

(a) Institutional Investors



When we asked if companies carry out appropriate ESG information disclosure in line with business characteristics, a large number of investors, 69% in total, responded “Generally excellent” or “Reasonable.”

Although there is a real sense that ESG disclosure is improving based on interaction with investors, many comments asked for complete disclosure of what is important for the business, financial, and corporate activities at the company. For example, “We still see many cases of across-the-board disclosures that are not related to business characteristics,” or “They are extremely concerned about the ratings of the ESG rating agencies, and disclosure is barely commensurate with business characteristics.”

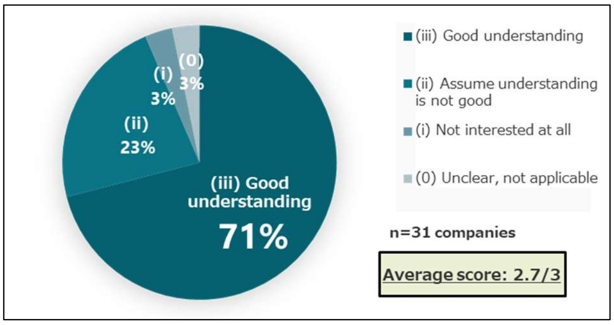


Next, when we asked if companies set appropriate KPI for ESG items in line with business characteristics, and properly evaluate the results, 61% of investors responded with “Unsatisfactory.”

Investors are broadly aware of issues such as correspondence with business strategy, establishing KPIs, evaluation processes after establishing KPIs, and inclusion of KPI evaluations in remuneration for officers. Comments include “Some companies do not disclose KPI at all,” “We have the impression that the period to achieve targets is too short at many companies, and that there are few cases where the plan-do-check-act (PDCA) cycle is properly implemented,” “Companies present material ESG issues and KPI, but commitment from the management is not clear,” “We have no idea how inability to achieve KPI targets will impact the company,” “Few companies link KPI to officer remuneration,” or “Many companies present correspondence between materiality and KPI in tabular form, but thought-through correspondence between KPI and business strategy is unclear or vague at many companies.”

(b) Companies

When we asked companies whether ESG investors have adequate understanding of which ESG items are important to them, 71% of companies responded that understanding is good.



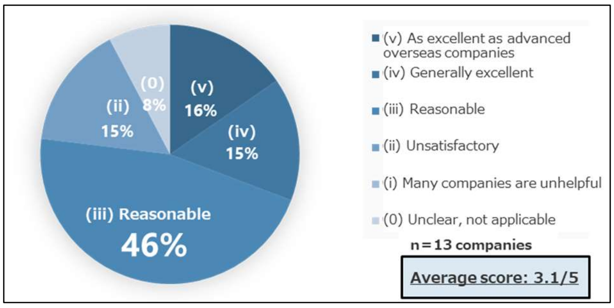
When interacting with institutional investors, some companies commented that the impression is that institutional investors already have a good understanding of industry characteristics, and that they understand important ESG items.

Although institutional investors evaluate ESG information disclosure by companies to some degree, some companies feel that there are issues around unsatisfactory disclosure of KPIs and progress after setting KPIs.

(v) Detailed ESG Disclosure in the Disclosure Media

(a) Institutional Investors

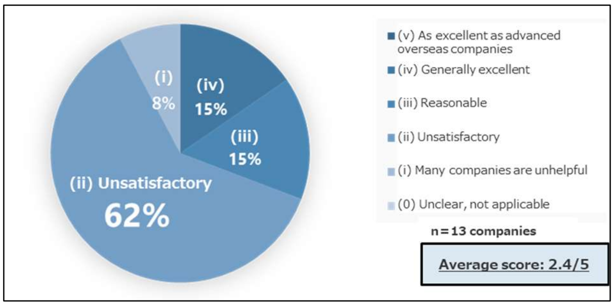
When we asked investors to evaluate the usability of the data in the company disclosure media in terms of its comprehensiveness, accuracy, and abundance, 16% responded “As excellent as advanced overseas companies,” 15% said “Generally excellent,” and 46% said “Reasonable,” giving remarkable recognition.



But even though many investors rate the comprehensive content and data as useful, comments like “There are cases where there is only a list of data, so there is a need to be aware of the distinction from the website and integrated report as well as storytelling that involves vision and strategy." This suggests that companies need to consider the roles of different disclosure media.

(vi) Sustainability Governance

(a) Institutional Investors



When we asked institutional investors how they rate sustainability governance at companies when evaluating investment in ESG activities, 62% responded with "Unsatisfactory."

Investors are aware of many issues around sustainability governance. For example, "Many companies have set up advisory ESG committees to the board of directors, but we often see that the roles and functions are unclear," "There are many cases where we don't know the extent of the CEO's commitment," "Even if an ESG committee exists, we often see that the committee chair is an officer who is not a top executive," or "Mechanisms for effective sustainability governance are insufficient. Initiatives such as inclusion of ESG activities in officer remuneration schemes, or appointing external directors with expertise to the board of directors are necessary."

(vii) Information Collection Systems

(a) Companies

When we asked companies about the issues around collecting information for disclosure, and to describe what they think and why, they made the following comments.

To start with, many companies are aware of the low level of understanding within the company as indicated by their comments. For example, "Since ESG is not applied to the management strategy or business strategy, requests for ESG information disclosure is not met with understanding in every department," or "We need to take the time to convince businesses and business management departments of the importance of information disclosure." The challenge is to persuade the party that provides information of the importance of disclosure.

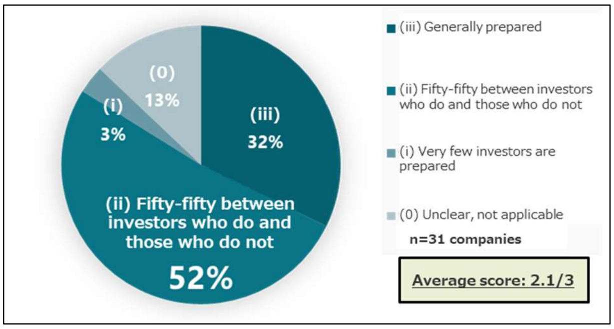
Next, many companies requested systematized data collection. For example, "Since the data is diverse and we have to collect information promptly and accurately, we need to build a tool-based aggregation system" or "Even if we extract ESG activities and results for each department, the accuracy of the reports is not fully checked, so we would like to set up a mechanism for collecting information automatically." There were also concerns about the challenge of collecting timely information on initiatives. “At present, the person responsible for producing disclosure materials collects information by interviewing the departments, but there are issues around the freshness of the information.”

Lastly, regarding the scope of collecting information, many companies are aware of the difficulties with collecting information that includes overseas businesses. Respondents said “It is difficult to collect information as the departments concerned are diverse and scattered around the world,” or “There are often requests for company-wide data, but we respond with annotated data collected only in Japan.” In particular, respondents commented “Where personnel-related information is concerned, the mindset is to look at stand-alone companies, so it is extremely difficult to collect information on a consolidated basis.”

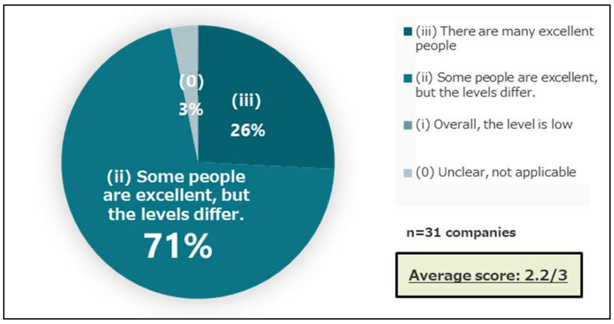
(viii) ESG Investors’ Ability to Rate Long-Term Corporate Value

(a) Companies

When we asked companies whether they think ESG investors have the ability to rate corporate value in the long term, 52% of the companies responded “It’s fifty-fifty between investors who do and those who do not.” Respondents commented that there is no constructive dialog with a medium to long-term perspective. “Some investors only confirm activities that reduce risk, while the perspective of other investors is linked to medium to long-term financial value,” “Some investors read and understand the integrated report, but there are also cases where investors are not able to provide you with a different perspective,” or “There is an extremely wide perception gap between management with a long-term perspective and investors with a short-term perspective.”



Next, when we asked companies to evaluate the level of knowledge of ESG analysts working for ESG investors, 71% responded “Some people are excellent, but the levels differ.” It is possible that differences in analysts’ levels of knowledge are linked to differences in evaluation from the viewpoint of the companies. For example, “Some analysts provide advice from a long-term perspective, while others approach the interaction out of a sense of obligation to cover ESG topics,” “Some analysts ask piercing questions, while others go through their checklists,”



"Some analysts are fully prepared, while others simply ask about what is written in past disclosure materials."

(ix) Disclosure on Digital Transformation (DX)

We also asked institutional investors and companies to comment on DX in ESG information disclosure, in particular, the use of AI. Institutional investors commented that using AI would complement the research, but the possibility of evaluation that is not based on human judgment means that it is necessary to think about how to understand and use AI. Meanwhile, companies commented that using a template for information disclosure would reduce the burden of disclosure practices assuming the reader is AI. They also said that it would be necessary to thoroughly identify and examine the negative aspects of using AI.

(3) Current Situation Emerging from the Interviews

As a result of the interviews, we identified the following six issues when companies implement ESG information disclosure.

(i) Describing the LTVC Story

The following problem areas were identified when describing the LTVC.

i. Companies lack confidence in LTVC expression.
ii. Concerning materiality, there are perception gaps between companies and institutional investors. Many institutional investors are aware that materiality is not narrowed down based on business relevance.
iii. Many companies do not show what connects materiality to KPI.
iv. There is a problematic gap between a company's own business domain and industry-specific requirements indicated by international frameworks.

(ii) Polarized Initiatives

From the perspective of institutional investors, ESG initiatives and the standard of disclosure are polarized at companies.

(iii) Mismatched Perspectives on Dialog

It is possible that dialogs with a medium to long-term perspective solicited by companies are not constructive due to differences with the levels at institutional investors.

(iv) Effective Systems for Collecting Information

No globally consolidated system or mechanism (systematization etc.) has been structured to efficiently collect basic information for a wide variety of disclosures.

(v) Commitment from Top Management/In-House Involvement

i. Management's lack of commitment and sustainability governance with regard to long-term goals

ii. Institutional investors also sense that there is a lack of involvement at operational departments.

iii. Companies also feel that there are challenges around improving internal understanding, which is a prerequisite for involving operational departments.

(vi) DX

The digitization of disclosure such as the use of AI to evaluate corporate disclosure is a challenge for the future.

3-2 Issues Emerging from Discussions at EDSG

Based on the survey of trends in ESG information disclosure and interviews with companies and investors, EDSG discussed the challenges involved in ESG information disclosure. As a result, we identified the following ten issues.

(1) No Coordination Between Long-Term Ideal Vision and Medium-Term Management Plan

When telling the LTVC story, it is not enough to simply present the ideal vision, companies must coordinate the story with the medium-term management plan in the sense of what, specifically, they are doing now to realize the ideal vision.

However, it is unclear what elements should be considered when exploring the ideal vision for a highly uncertain long term. It is also difficult to identify future business models that will deliver LTVC.

These days, the focus is on the importance of purpose and values. Companies are required to present a consistent LTVC story by talking about an ideal vision based on purpose and values and to use backcasting to formulate a medium-term management plan to show how they will realize the vision.

(2) Materiality as a Differentiating Feature Not Established

Materiality is also an important element in the LTVC story. In some cases, companies have unclear policies regarding what factors to consider when identifying materiality or the number of material issues, or how to express materiality. As a result, the unique nature of the company is not visible in materiality.

(3) ESG Perspectives Not Incorporated in the Resource Allocation Policy

It is important to have an ESG perspective when delivering LTVC. When thinking about the LTVC story, it is also essential to consider how to allocate company management resources to value creation with an ESG perspective. However, few companies disclose how they allocate management resources with a view to realizing LTVC. Many companies do not incorporate ESG perspectives when reviewing their portfolios with a view to the future (long term).

(4) Important Management Resources for LTVC Not Specified

When explaining the LTVC story, it is extremely important to identify key management resources to realize the story. However, many companies have not identified the management resources that influence long-term value because of a lack of clarity around how to consider and explain the management resources linked to the competitiveness of their business in the past, and the strengths that will sustain the business into the future.

(5) Non-financial, Pre-financial Indicators and Target Values Not Established

It is preferable to establish non-financial and pre-financial indicators and target values to present a more concrete story when explaining the LTVC story. However, many companies do not clearly distinguish between input, output, and outcome linked to long-term value. The distinction between output and outcome is particularly problematic. Lack of clarity about the relationship between financial and non-financial/pre-financial is also a factor behind the failure to establish indicators and target values.

(6) How Non-financial Information Is Linked to Financial Impact Not Shown

Companies need to explain how their non-financial information is linked to financial impact in order for investors to be able to use non-financial information to make investment decisions. However, it is sometimes unclear how non-financial information is related to management, and there is often a lack of clarity on the financial impact.

(7) Lack of Dialog with Stakeholders Directly Linked to Long-Term Value of the Company

It is extremely important for companies to explain their LTVC story to institutional investors with a long-term perspective. However, it is difficult to determine who those investors are. Even if a company has been able to identify these investors, there is not necessarily enough dialog to build effective relationships with investors. There are also cases where the outcome of the dialog is not sufficiently incorporated into management practices.

(8) Lack of Awareness of ESG Perspectives in Management Ranks and Operational Departments

It is par for the course that management ranks and operational departments should recognize the importance of ESG perspectives in the LTVC story. However, if the system for cooperation between management, operational departments, and sustainability departments is incomplete, it is difficult for management and the company as a whole to commit to full awareness of ESG perspectives.

(9) Difficult to Collect Information Needed for In-House Disclosure

As ESG information becomes increasingly important, it is necessary to build systems and mechanisms for collecting information in a timely manner inside companies. However, few companies have built information collection systems similar to those for financial information, and many companies are struggling to collect information. It is, of course, important to optimize the information collection process, but companies hesitate because they have not examined appropriate disclosure methods or consolidated disclosure items. It is also difficult to determine policies for dealing with AI-based evaluations in the future.

(10) No Comparable Information Disclosure for Investors

For investors, the disclosed ESG information should preferably be comparable. However, in practice, investors have different ideas about how to use ESG information.

4 Courses of Action for Resolving Issues

The majority of the ten issues with ESG information disclosure that were identified in the discussions with companies and investors relate to the long-term value creation (LTVC) story. We have therefore positioned the corporate LTVC story as the most important theme when improving the quality of ESG information disclosure. We have organized measures to solve issues concerning the LTVC story with references to examples among leading companies.

4-1 Establishing Ideal Vision with Long-Term Perspective

(1) Courses of Action for Resolving Issues

Companies are expected to establish a long-term ideal vision based on their own purpose (the meaning of their existence) and stakeholder expectations. Therefore, companies need to satisfy three conditions.

(i) Establishing Purpose/Clarifying Interpretation

Many companies have already established their purpose in the form of a management philosophy, among other practices. However, sometimes companies and stakeholders do not have a shared understanding of purpose. Therefore, it is important to present an interpretation of the purpose. Since the purpose must also be reviewed to suit the times, however, it is also important to update the interpretation.

(ii) Time Frames for Long-Term Perspective

Time frames for long-term perspective vary depending on the business model and other factors, and cannot be uniformly set as x number of years. Companies need to set time frames for long-term perspective while considering what sort of time frame important investors and other stakeholders have in mind.

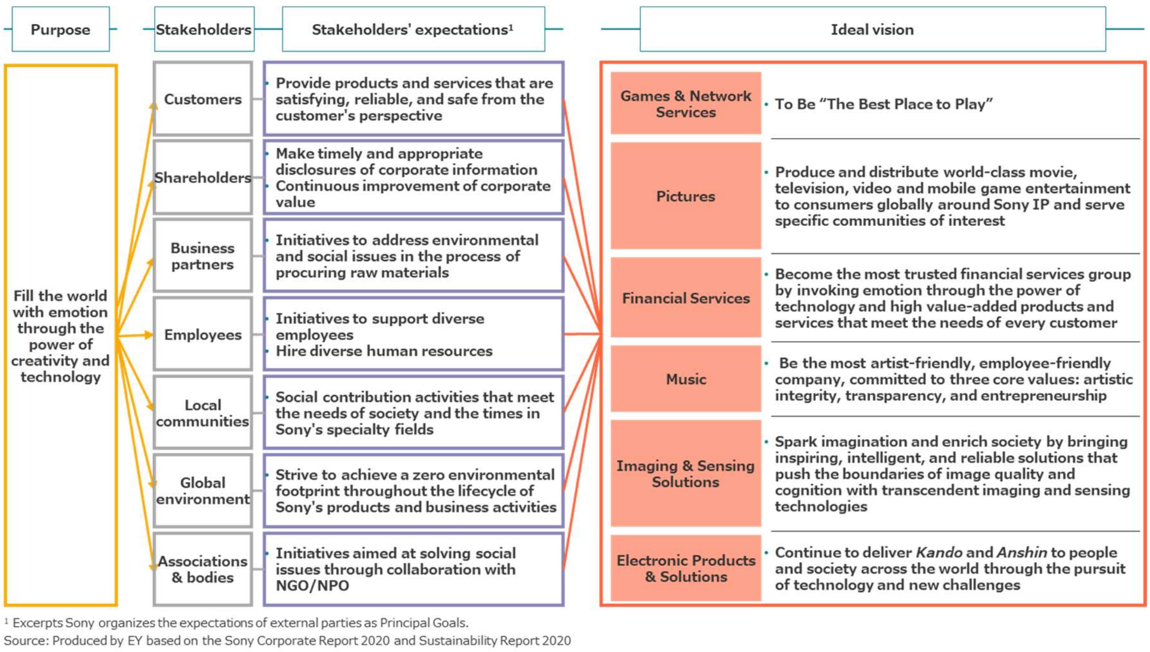
(iii) Understanding Stakeholder Expectations

Renewed recognition and understanding of the expectations of different stakeholders, including shareholders, employees, business partners, and the local community, are required to establish an ideal vision with a long-term perspective. It is also important to specify which stakeholders are important to the company, and to understand matters of concern and interest to those stakeholders. Consequently, stakeholder engagement is important, and companies must regularly engage with stakeholders to understand their expectations.

(2) Excellent Practice (Sony)

In January 2019, Sony re-established its purpose as “Fill the world with emotion through the power of creativity and technology.” At a time when Sony was developing a variety of businesses, the purpose was to establish “what Sony stands for” to enable all businesses to advance along the same vector toward the ideal vision with a long-term perspective. In the process of reaffirming “the something” that is the basis for the entire business, its identity and values, and the ideas of its founder, the purpose expresses the idea that “technology is the basis for all of Sony’s varied businesses, creativity moves people, and Sony wants to create emotion in all areas.”

In addition, Sony views stakeholder issues as linked to stronger foundations for the Sony Group management with each business unit establishing its own ideal vision to achieve the purpose.



(Source: Created by EDSG based on Sony *"Corporate Report 2020"* and *"Sustainability Report 2020"*)

Sony also explains value creation for each of its business units. The image below outlines the Games & Networks Services. The ideal vision is “To Be the Best Place to Play” and the values created are “Enriching people’s hearts through the delivery of emotional experiences” and “Helping creators realize their dreams.”

Game & Network Services

Business Vision

To Be "The Best Place to Play"

Value Created

1

Enriching people's hearts through the delivery of emotional experiences

Providing "The Best Place to Play," where new, fulfilling experiences and diverse forms of communication become possible. Creating fields where users and creators can connect and interact.

2

Helping creators realize their dreams

Platforms that provide creators with an environment that enables them to fully share their creative vision and innovation with the world.

Business Strengths

- 25 years of steady investment and company acquisitions has led to a portfolio of leading global game development studios and flagship franchises that consistently delivers original content IP to users around the world
- Brand power of PlayStation cultivated through the accumulation of user trust and the sharing of technology and know-how with creators
- Establishment of loyal game communities that connect users and creators
- End-to-end planning and development capabilities that bring together devices, technologies and business models, and global sales capabilities

Notable Social and Technological Changes

- Increasing demand for content and innovation in how people connect through networks
- Diversification in how games are enjoyed and content is accessed
- Enhancement of software accessibility functions
- Evolution of hardware, cloud computing, etc., and spread of open innovation
- Competition with players from other industries in building ecosystems and establishing platforms
- Growing amount of data and evolution of data analytics
- Importance of new engagement style that fits users in new normal world

Material Topics in the Foundation for Creating Value

- Information security: Reliable management and operation of one of the world's leading game ecosystems and network platforms
- Responsible supply chain: Addressing environmental and human rights risks in the context of global supply chains
- Product quality and customer service: Enhancing customer experience for a wide range of users, as well as ease of use and accessibility
- Environment: Improving energy efficiency in hardware and across all network services; expectations for public awareness activities that utilize user touchpoints

Note: Regarding "Technology" and "Employees," please refer to pages 34 and 38, respectively.

Key Performance Indicators of Business

• PS4 Hardware units sold globally	112.1 million units[1]
• PSN Monthly Active Users	113 million users[2]
• PS Plus paid subscribers	45.0 million subscribers[1]
• PS Now	2.2 million subscribers[3]

1. As of June 30, 2020
2. As of June, 2020. Estimated active users based on SIE research
3. As of April 30, 2020

Main Operating Companies

Sony Interactive Entertainment LLC, Sony Interactive Entertainment Inc., Sony Interactive Entertainment Europe Limited

(Souse: *Sony Coreporate Report 2020*)

(3) Investor Understanding of Ideal Vision and opinion with a Long-Term Perspective

(i) Is Individuality Shown in the Purpose, Which Is the Basis for the Ideal Vision with a Long-Term Perspective?

- The purpose is semi-permanent in the sense of what it means for society, while vision is perceived as the medium to long-term direction. When making long-term investments (for example, ten years), investors must first understand what will not change at the company. If investors understand the basis for the things that do not change, the strengths, and what difficulties the company has overcome when the environment changed in the past, with a long enough time frame, the investor perspective will be that the company will overcome similar difficulties in the future.
- Since the elements that make up the purpose are part of day-to-day activities, the purpose will probably be systematic if the company expresses the elements accurately and comes up with a strategy. If companies express what they have achieved and what they value, the purpose will have originality and they will avoid a situation where you can't tell one company from another even when you look at the purpose.
- The good point about the Sony purpose is that it is immediately recognizable as Sony. Creativity and technology accurately express not only what Sony wants to do in the future, but what they have done in the past. It is also linked to the ideal vision for the future. Even if the management changes, the expectation is that business operations will revolve around this purpose.

- If the business has a past history of continuous growth, there is no particular need to shout about its purpose. A purpose is needed at times when the company has to change directions. When the world changes, the purpose is increasingly important as it indicates where the company is heading, what kind of organization it is, and whether it has cohesive power. Sony probably needed to emphasize its purpose as it shifted from its hardware origins to software and changed its approach to users.
- There are too many instances where there are no clear answers. For example, trade friction, human rights issues, environmental issues, and so on. Given the lack of correct answers, companies still need to come up with a unique response, and investors must make an effort to understand the thinking behind the response. This is another reason why it is important to understand the purpose.

(ii) Context and opinion for Establishing Purpose

- When establishing a purpose, it is important to understand the process of getting there and why. When looking at future trends while unraveling the past, it is good to understand the selection process and to exchange thoughts with important stakeholders.

(4) Corporate Solutions

(i) Context for Ideal Vision with a Long-Term Perspective

- Despite an ideal vision being discussed with a long-term perspective, some companies fail to clearly state it. Corporate philosophy and company policy form the background, but after clearly explaining these things, it is also necessary to reiterate the reasons for the company's existence.
- Today, when values are changing as never before and external factors must be considered, it is necessary to redefine values in various domains.

(ii) The Relationship Between Vision with a Long-Term Perspective and Corporate Philosophy

- It is necessary to clarify the relationship between the ideal vision with a long-term perspective and corporate philosophy, purpose, and so on, when calling for stakeholder understanding.

(iii) In-house Assimilation of the Ideal Vision with a Long-Term Perspective

- It is useful for senior management to engage in direct dialogue about the purpose and the ideal vision with a long-term perspective to ensure in-house assimilation.

(5) Verification at the EDSG Individual Company Working Group

(i) KDDI

KDDI has added the new KDDI's DNA page to its 2021 Sustainability Report, where the company describes its philosophy since it was founded with the aim of solving social issues.[16] The report indicates that KDDI aims to be "the company the customer can feel closest to/ the company that continues to produce excitement/ the company that contributes to the sustainable growth of society," and that KDDI continues its initiatives to solve social issues and aims "to achieve a truly connected society" as described in the KDDI Group Mission Statement through business activities based on the KDDI Group Philosophy and the KDDI Code of Conduct, which are instilled into all employees.

As for future issues, the company needs to present a concrete image of the aims. To do so, it is important to clarify the vision based on the mission statement, to once again reflect on the purpose and DNA of the company, and to analyze the role the company will (is expected to) fulfill in the future. If the company is able to formulate a new medium-term management plan based on a redefined and concrete ideal vision with a long-term perspective, we believe they will also be able to formulate a value creation story that is accessible to stakeholders. (For more detail, see Appendix 3)

(Source: *KDDI Sustainability Report 2021*)

(ii) Idemitsu Kosan

Idemitsu Kosan recognizes the problems with the linkage between the ideal vision with a long-term perspective and the explanations in the integrated report. Therefore, the company is making efforts to indicate its ideal vision (future image) and the processes of

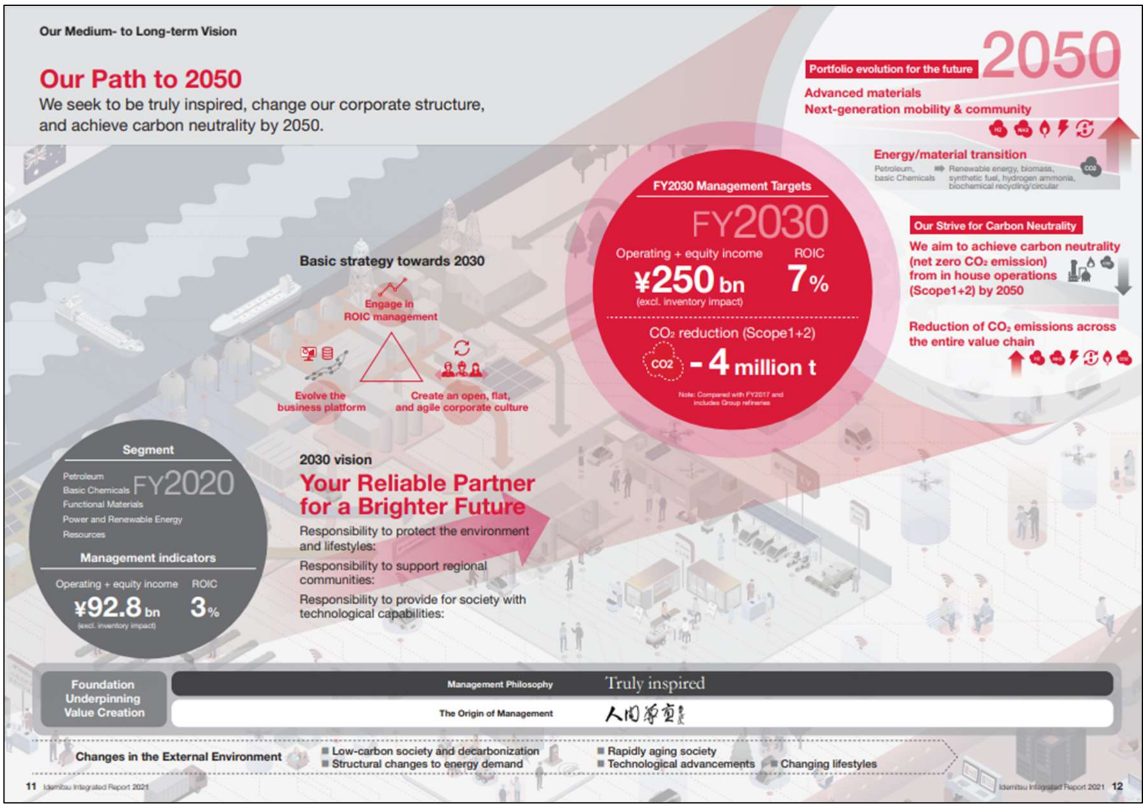
[16] *KDDI Sustainability Report 2021*
[report2021.pdf (kddi.com)](report2021.pdf)

getting there, and to indicate the connections between management philosophy, vision, materiality, and strategy in the value creation process. As a result, the *Idemitsu Integrated Report 2021*, published in 2021, discloses its aims (vision) for the medium and long term.[17]

Idemitsu has adopted, "We seek to be truly inspired, change our corporate structure, and achieve carbon neutrality by 2050" as its path toward 2050. As well as indicating that the company will convert its portfolio and take on the challenge of carbon neutrality by 2050, Idemitsu also presents the basic strategy towards 2030 and the 2030 vision.

Investors made the following comments about the content of the disclosure.

- Disclosing the image for the future, target values, and the process (including the 2030 vision) has made the information very accessible and has deepened my understanding. Disclosing the future conversion of the business portfolio has advanced my understanding even more.
- The transition road map toward carbon neutrality based on the business environment up to 2050 is very easy to understand. In the future, we will be able to confirm with increasing accuracy to what degree resources will be invested from the perspectives of financial strategy and R&D, how resources will be procured, the effectiveness and links with trends in technology developments.



(Source: *Idemitsu Integrated Report 2021*)

[17] *Idemitsu Integrated Report 2021*
[Idemitsu Integrated Report 2021 / Idemitsu Kosan Global sustainability site]

(6) Summary

When establishing an ideal vision with a long-term perspective, it is important to establish the purpose that will become its basis, and to clarify the interpretation. As well as flagging up the point of whether the purpose expresses the individuality of the company, investors also ask for explanations of the context of the purpose. Investors also demand clear links between purpose and strategy by depicting the ideal vision starting from the purpose and backcasting to draw up a strategy.

Meanwhile, companies understand the importance of purpose, and as long as the corporate vision is synonymous with purpose all is well, but if it is not, they find it difficult to establish a purpose. Purpose is also an abstract word, and since the scope is both broad and vague, how to go about in-house assimilation of purpose is an issue for the future. Aiming for in-house assimilation through direct dialogue between managers and employees, or visualizing the value creation story, including purpose, vision, and mission, some companies are making efforts to achieve in-house assimilation by sharing with all employees.

4-2 Formulating the LTVC Story

4-2-1 Identification of Materiality

(1) Courses of Action for Resolving Issues

When identifying materiality, it is essential to identify materiality that are unique to the company from a long-term perspective. Therefore, companies need to satisfy two conditions.

(i) Clarify the Definition of Company Materiality

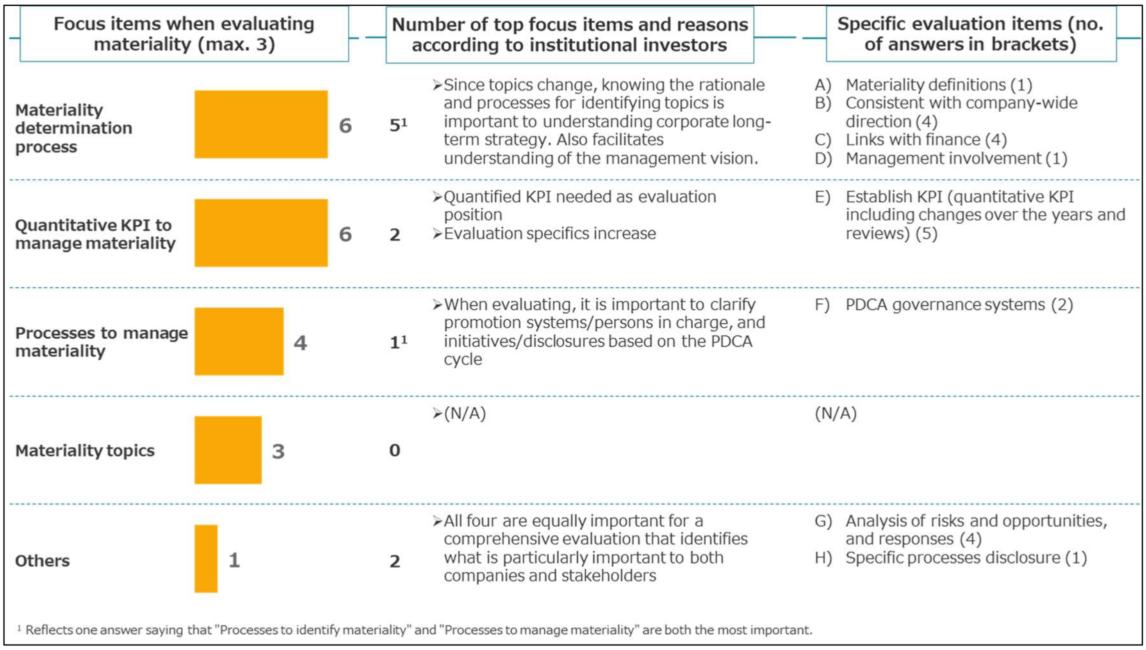
Materiality is broadly divided into two approaches: one where companies are influenced by key stakeholders and one where companies influence key stakeholders. Where the Task Force on Climate-related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB) are concerned, the intent is primarily for companies to identify influences from key stakeholders as materiality. The intent of the Global Reporting Initiative (GRI) is primarily to identify the impact companies have on key stakeholders as materiality. On the other hand, the International Integrated Reporting Council (IIRC) views value as having two aspects, the value created for the organization and the value created for the other party, so both approaches are intended to capture materiality.

Regarding materiality, EDSG takes the view that when companies explain their materiality, they must also be aware of the differences in materiality depending on the stakeholder, and we organize the influences of both sides as identifying the intended materiality.

If this approach is adopted, the point for companies is to identify important stakeholders. To identify key stakeholders, it is important to consider which stakeholders are essential to realizing the company’s long-term value creation story. Identifying stakeholders as specifically as possible is key to identifying unique materiality at the company.

(ii) Explaining the Materiality Identification Process

The following results have been extracted from a questionnaire asking investors participating in the EDSG what they emphasize when evaluating materiality.



The results of the survey inform us that many investors focus on the process of identifying materiality, and the quantitative KPI that manage materiality, rather than the materiality process itself.

Investors focus on the process of identifying materiality because topics change and it is important to know the rationale and processes for identification to understand the long-term strategy and management vision. Among the reasons given for the focus on quantitative KPI that manage materiality were that quantified KPI are necessary as a position for evaluation and that they increase the specificity of evaluation.

Generally speaking, the following steps are part of the process of identifying materiality.

STEP 1. Identifying Issues

It is necessary to identify issues while taking account of the time frame, and to consider opinions of identified stakeholders, internal factors such as the relationship between the business model and strategy, and external factors such as where the company's business is located. Generally, a longlist of issues is created based on mega trends, existing frameworks including international frameworks, and information obtained from external parties. The issues are then narrowed down via discussions in-house and with stakeholders to create a shortlist.

STEP 2. Identifying and Disclosing Materiality

Materiality is identified and disclosed after the management committee and the board of directors have discussed and approved material issues that reflect in-house and stakeholder opinions.

STEP 3. Monitoring and Reviewing Materiality

Identified materiality is incorporated into specific initiatives, which necessitates setting targets and managing progress. In addition, regular exchanges of opinion with stakeholders are reflected in timely reviews of materiality.

(2) Excellent Practice (Nabtesco)

The *Nabtesco Value Report 2020*[18] is an excellent example of a clear definition of materiality and disclosure that is consistent with the company-wide direction.

Through internal discussion and dialogue with investors, Nabtesco has defined materiality as "material issues to be addressed from a long-term viewpoint for the achievement of the long-term vision" based on the three perspectives of relevance to purpose, corporate philosophy, and long-term vision; unique features that help differentiate the company; and compatibility between financial value and social value.

The three pillars that comprise management materiality at Nabtesco are measures to improve financial performance, measures to enhance management foundation, and measures to achieve the long-term vision. The company explains that these measures will reduce capital costs. The measures to improve financial performance include achieving the revenue targets, distributing managerial resources efficiently, and continuing to improve capital efficiency. The measures to enhance the management foundations include ESG items that have a major impact on financial issues (increased effectiveness of management entities, measures to counter climate change, solutions for social challenges through business, a resilient supply chain), and ESG items that drive sustainability power (management transparency, environmental management, pursue safety, comfort and a sense of security, respect diversity and varied expertise in the workplace, work style reforms, and engagement with the local community). The measures to achieve the long-term vision are to acquire next-generation technologies and create new businesses, foster smart manufacturing, and strengthen global bases.

Nabtesco materiality is unique in the sense that the aim is to maximize the value offered to stakeholders while maintaining profitable growth based on balancing corporate and

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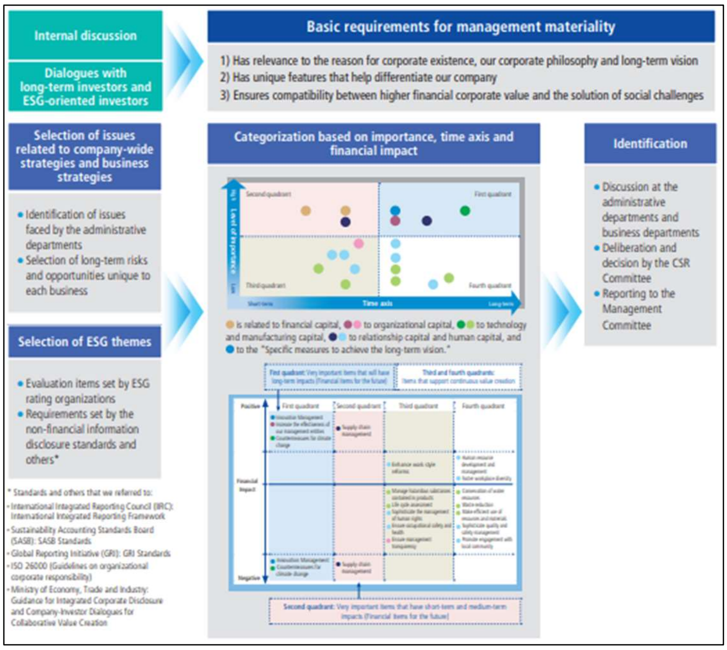
[18] *Nabtesco Value Report 2020*
Integrated Reports | Integrated Reports | Sustainability - Nabtesco Corporation (disclosure.site)

social value creation with a long-term perspective by linking financial and non-financial aspects within management materiality. The following is the process Nabtesco uses to identify materiality.

The process of identifying materiality in Nabtesco is as follows. Nabtesco identifies company-wide strategy issues and business strategy issues from perspectives on problem awareness at administrative departments and long-term risks and opportunities unique to each business. The selection of ESG themes is based on evaluation items set by the ESG rating organizations, the IIRC framework, the SASB standard, the GRI standard, ISO26000 (Guidelines on organizational corporate responsibility), value creation guidance and other frameworks and standards for disclosure of non-financial information.

In terms of evaluating issues, the company has set three criteria: importance, time axis, and financial impact. The issues are organized into a matrix of four quadrants according to level of importance and urgency on the time axis. They are also sorted according to positive or negative financial impact.

The first quadrant is about matters of high importance with long-term impact (future financial issues). The second quadrant is about matters of high importance with a short or mid-term impact (future financial issues). The third and fourth quadrants contain items that support continuous value creation.



(Source: *Nabtesco Value Report 2020*)

Materiality is finalized through discussions at the administrative departments and business departments, and deliberations and decisions at the CSR Committee before a report is sent to the Management Committee.

Each identified management materiality is provided with directions for action. Regarding measures to enhance the management foundation, the achievements for FY2020 and the targets for FY2021 are also presented. Going forward, the company plans to clarify specific effective measures and KPI in line with management materiality in the process of formulating the next medium-term management plan.

		Management Materiality	Achievements in 2020	Targets for FY2021		Major Impacts on Our Corporate Activities / Strategies		Major SDGs of Relevance
General Category	ESG Category	Major Initiatives and Related Pages				Negative Impacts	Positive Impacts	
ESG items having a major impact on financial issues	Governance (G)	Increase the effectiveness of our management entities ▶ P.67	• Increased the ratios of outside directors and female directors	• Increase the management efficiency of the Board of Directors		As a result of slow decision-making by the Board of Directors, • opportunities to increase corporate value are lost.	As a result of faster decision-making, • corporate value can be maintained or improved.	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17
	Environment (E)	Countermeasures for climate change ▶ P.75	• Achieved the CO_2 emissions reduction targets in Japan • Received the highest rating from CDP in three fields (climate change, water security and supplier engagement leaderboard)	• Make preparations toward the 1.5 degrees Celsius target • Set a target for the introduction of renewable energy		As a result of the realization of natural disaster risks and energy risks, • business operations are disrupted. As a result of the strengthening of climate change-related laws and regulations, including the introduction of carbon taxes, • financial cost increases.	As a result of preventing natural disaster risks and energy risks, • business operations can be secured. • financial risks can be reduced. As a result of selling products with high environmental performance, • business opportunities increase.	
	Society (S)	Deliver solutions for social challenges through business ▶ P.79	• Developed environment-friendly products • Fostered the management of hazardous substances contained in products • Conducted life cycle assessment (LCA) activities	• Promote environment- and safety-conscious design and development		As a result of the lack of meeting of customer and social needs, • competitiveness in the product market declines.	As a result of the provision of products that provide safety, comfort and a sense of security, • trust of customers is gained. As a result of the contribution to solving social issues through business operations, • competitiveness in the product market is improved.	
		Build a resilient supply chain ▶ P.81	• Revised the CSR-Oriented Procurement Policy • Announced the Declaration of Partnership Building	• Raise awareness of the revised CSR-Oriented Procurement Policy • Identify suppliers' environment- and human rights-related risks • Encourage suppliers to set environmental targets		As a result of the realization of procurement risks, • supply of raw materials and components is suspended. As a result of the interruption or suspension of business operations, • financial cost increases.	As a result of controlling procurement risks, • raw materials and components are procured sustainably. As a result of securing highly qualified suppliers, • competitiveness in the product market is improved.	
ESG items that drive sustainability power	Governance (G)	Ensure management transparency ▶ P.85	• Established a comprehensive risk management system • Conducted compliance training across the Group • Identified management materiality	• Expand the activity scope of the Risk Management Committee • Expand the internal reporting system • Enhance the disclosure of non-financial information in line with the long-term vision and management materiality		As a result of functional deficiency of corporate governance, • corporate value is damaged. As a result of the realization of risks and breaches of compliance, • business operations are interrupted or suspended; or • financial cost increases. As a result of the decline in trust of stakeholders, • competitiveness decreases; or • reputation is damaged.	As a result of the reinforcement of the global compliance system, • corporate value can be maintained or improved. As a result of cooperation with stakeholders and development of relationships of trust, • business operations can be continued and business opportunities can be generated; or • talented people can be secured; or • reputation can be maintained or improved.	
	Environment (E)	Foster environmental management ▶ P.91	• Achieved zero waste landfill	• Set a medium-term target for waste reduction • Enhance the system to manage risks related to chemical substances used in products		Due to the lack of the contribution to solving environmental issues, • reputation is damaged; or • trust of customer declines	As a result of the contribution to solving environmental issues, • reputation is maintained and improved; or • business operations can be continued and business opportunities can be generated	
	Society (S)	Pursue safety, comfort and a sense of security ▶ P.93	• Reduced the rate of high-level stress individuals	• Encourage more plants to obtain occupational safety and health certification		As a result of deficiencies, accidents, etc., involving products, • business operations are interrupted/suspended or financial loss is incurred; or • financial cost increases. As a result of the lack of meeting of customer and social needs, • competitiveness in the product market declines. As a result of labor issues or labor accidents, • productivity declines.	As a result of the provision of products that provide safety, comfort and a sense of security, • trust of customers is gained. As a result of the pursuit of customer needs, • in-house technologies are enhanced, or human resources are developed. As a result of the realization of safe and pleasant working environments, • productivity is enhanced.	
		Respect diversity and various expertise in the workplace ▶ P.95	• Enhanced human rights management	• Make a commitment to promoting diversity and conduct awareness-raising activities • Foster career planning training		Due to the lack of ability to develop human resources and the lack of diversity, • organizational power and loyalty of employees decrease. As a result of the realization of human rights and corruption risks, • reputation is damaged.	As a result of the acquisition and development of capable and versatile human resources, • organizational capabilities and loyalty of employees improve. As a result of preventing human rights and corruption risks, • reputation is maintained and improved.	
		Enhance work style reforms ▶ P.97	• Achieved the target for reducing average number of overtime hours worked • Fostered remote work	• Clearly state the policy on health and productivity management • Implement measures to prevent the aggravation of medical conditions		As a result of the deteriorations of employees' health, • their QOL decreases, which in turn weakens their motivation to work. • financial cost increases. As a result of failing to provide diverse work style options, • the efficiency of operational systems decreases, leading to a drop in productivity; or • competitiveness in the employment market decreases.	As a result of promoting employees' health, • their QOL increases, which in turn increases their motivation for work. • financial cost decreases. As a result of providing diverse work style options, • operational efficiency increases, which in turn increases productivity. • competitiveness in the employment market increases.	
		Promote engagement with local community ▶ P.100	• Donated attendant controlled wheelchairs	• Promote community investment		As a result of sluggish local economy/society, • the product market shrinks and employment opportunities are lost.	As a result of the development of trust with and contribution to the local community, • reputation is maintained and improved; or • the product market expands and employment opportunities are gained.	
Specific measures to achieve the long-term vision		Acquire next-generation technologies and create new businesses Foster smart manufacturing Strengthen global bases	• Implemented two investment projects through deployment of CVC • Fostered further automation • Accelerated logistics reforms	• Enhance human resource base for next-generation technologies • Acquire new technologies through deployment of CVC • Build a foundation for next-generation manufacturing and foster further automation • Empower regional headquarters outside Japan		As a result of failing to create new businesses, • the growth of the company becomes stagnant. As a result of becoming outdated in terms of productivity and environmental measures, • competitiveness in production decreases. As a result of failing to have more global bases, • business opportunities are lost overseas.	As a result of succeeding in creating a new business, • the company can achieve profitable growth. As a result of realizing smart manufacturing, • the company can become overwhelmingly competitive. As a result of promoting localization, • overseas business opportunities increase.	

(Source: *Nabtesco Value Report 2020*)

(3) Points and opinions for Investors to Understand Materiality

(i) Consistent with Overall Direction

- From the perspective of identifying and evaluating materiality, the focus is on consistency with purpose, what the management values, and whether the target has been sufficiently narrowed down, including priority allocation of management resources. If an across-the-board approach is used, resources are scattered and there is a chance that results will fall short, but narrowing down identified targets contributes to expanding social value and resolving corporate issues. Whether or not there is a story connected to improving corporate value is linked to analysis and corporate evaluation.
- Materiality itself changes with the passage of time, but it does not change frequently. In short, materiality is determined by clarity of priorities and the weighting of purpose and corporate strategy, sources of corporate value, value contribution to stakeholders, and resource allocation. Weighting should be finely adjusted, and things that are no longer relevant to materiality should be reviewed. However, the reasons for a company's existence and matters that are core to value provision do not change that much in a medium to long-term time frame. Clarifying these matters enable us to determine materiality.

- Responding to changes in the business environment is important. It is also important to understand the external and internal environments when identifying materiality, and to incorporate it into specific businesses at the company. In the case of Nabtesco, materiality is disclosed and firmly incorporated into the company strategy. Thus, specificity is linked to differentiated materiality.
- Materiality should be considered based on what the company wants to do. It is good to have a process for understanding what businesses are necessary for the company to reach its aspirations, and for uncovering the materiality and elements necessary to grow the businesses. In terms of ESG, looking at what the company wants to do in relation to its aspirations is also linked to uncovering and identifying issues. Linking to actual businesses and disclosing not only capital expenditure, but also environmental considerations, achieves a comprehensive approach. There is no need for special responses or to think about ESG in isolation.

(ii) Viability of Materiality

- The viability of responses to identified materiality is an extremely important point as excellent strategies and measures have no meaning if they cannot be implemented. It is good if the integrated report facilitates understanding of whether specific measures and targets have been established in relation to identified materiality, and whether the plan-do-check-act (PDCA) cycle revolves around KPI.
- To the extent that a company discloses the actual content of discussions, such as the opinions of company directors and outside directors, or the content of what was discussed, it is possible to understand the developments leading up to implementation of the published measures and targets. Investors look at what people are thinking, how they are engaging with the company, and to what extent their aspirations are shared and become established within the company.
- On the other hand, to guarantee viability in a rapidly changing environment, it is necessary to have the flexibility to respond ad-hoc to anything that can be decided on-site. Where there is a top-down structure, investors focus on the board of directors, and try to find out to how much is shared and filtered down to the relevant staff in business departments, and what kinds of conversations are taking place in the organization.
- Discussions among the board of directors and outside directors, and internal communication among managers are often confirmed through dialogue. Recently, many companies set KPIs that are directly linked to materiality, but when investors ask managers why they are important, or what is lacking or sufficient relative to progress, the response is immediate if management thinks the point is important, but if not, the response will be brief. This kind of approach also facilitates understanding the degree of involvement on the management side.
- If the materiality is set correctly, it can be treated in the same way as financial information. If the issue is important, it is possible to set quantitative goals and KPIs, and it is possible to grasp the progress.

- If materiality is correctly established, it can be treated in the same way as financial information. If the issues are important, it is possible to set quantitative goals and KPIs, which also facilitates progress monitoring. Regardless of risk and opportunities, if the material issues are likely to create financial impact in the long term, they can be treated like financial information.
- When specifying materiality, the concept of backcasting often includes long-term perspectives. On the other hand, there are cases of calling attention to the achievement of KPI targets and establishing materiality as an extension of measures that have already started, but this does not facilitate evaluation of materiality in the true sense. Consequently, it is necessary to blend forecasting and backcasting to identify materiality that contributes to the value creation story in the medium and long term. Investors emphasize what is important, not the level of achievement. Investors believe that viability will increase depending on the level of involvement and seriousness of management ranks, departments responsible for sustainability, and business departments at companies.
- In the case of Nabtesco, the company is making efforts to involve managers through the necessary processes. In terms of long-term initiatives, the processes and sense of unity at the company are extremely important, but investors also look at viability.

(iii) Evaluating Management Vision Through Materiality

- Materiality is extremely useful when looking at how companies work from a long-term perspective in an external environment that changes from one moment to the next. As mentioned earlier, materiality changes with the passage of time, but since the changes are not frequent, it is important to evaluate the management vision that can be seen from the rationale and process for identification. Consequently, management involvement in the identification of materiality is extremely important.
- From the viewpoint of investors, it is not easy to understand whether management participation is sufficient or not. It is sometimes possible to understand what is really happening by engaging with the company president or outside directors, but this route is by no means open to all investors. In such circumstances, the point is to disclose materiality in the integrated report.
- Materiality does not change frequently, but conversely, when it does, the reasons are of great interest. Therefore, it is important for investors to ascertain why management has changed materiality.

(iv) Other

- Rather than viewing materiality as a target for differentiation, it is more important that the issues around sustainable improvement of corporate value are convincing. It is more important to be able to accurately establish issues than to express advantages. In addition to pointing out the links to the strategy, a differentiated strategy is excellent from an investor perspective. Rather than simply breaking down the KPI, it is more effective to use a technique like the KPI tree to dig down into the smallest detail as the strategy takes shape.

- Value is created when capital, which is the source of the value creation process, circulates. For the process to operate properly, materiality is defined as anything that has an important impact on the process. KPIs are not based on bringing out individualism, but on how to put which resources to use, and what factors have an important impact (materiality). Seen in this light, KPIs will ultimately differ from one company to another.

(4) Corporate Solutions and opinons

(i) Differentiating Materiality

- There is some debate about the quantity of materiality, but more is not necessarily better. Companies should be serious about working on anything that has been identified as materiality, so it is necessary to keep the numbers down while taking account of the ability to respond.
- The positioning of management materiality in the Nabtesco framework is impressive. The approach feels fresh from a corporate standpoint because KPIs are not found within materiality. It focuses on the kinds of outcomes the business model resources will deliver.
- One approach to differentiation is to identify materiality by carefully considering what is important based on the purpose and the corporate philosophy.

(ii) Involving the Management Ranks

- Sustainability is at the core of company management with a newly established post for a Chief Sustainability Officer (CSO). Sustainability initiatives and KPI are also reported to the board of directors for discussion. Therefore, the system involves and promotes management in the normal flow of business. Since materiality was identified quite a long time ago, we believe a review is necessary, but under the system described above, materiality is scheduled for review.

(5) Verification at the EDSG Individual Company Working Group

(i) Asahi Group Holdings

Asahi Group Holdings have made some improvements to the model for corporate value enhancement disclosed in the *Asahi Group Integrated Rreport 2020*.[19] When we asked investors to comment on whether the integration of sustainability and management was adequately expressed, they made the following points.

- Materiality is not included among the components in the model for corporate value enhancement.
- It is difficult to understand how Asahi Group Holdings perceives sustainability unless they indicate how materiality contributes to enhancing corporate value in their integrated reports.

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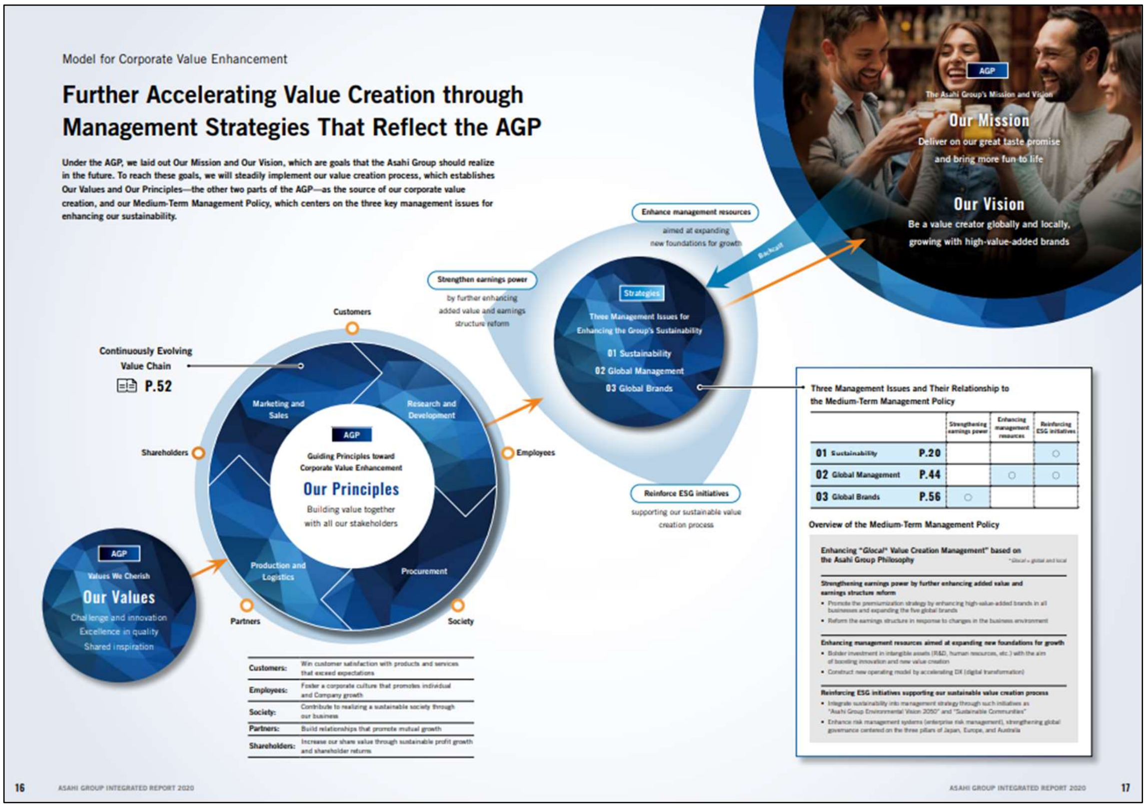
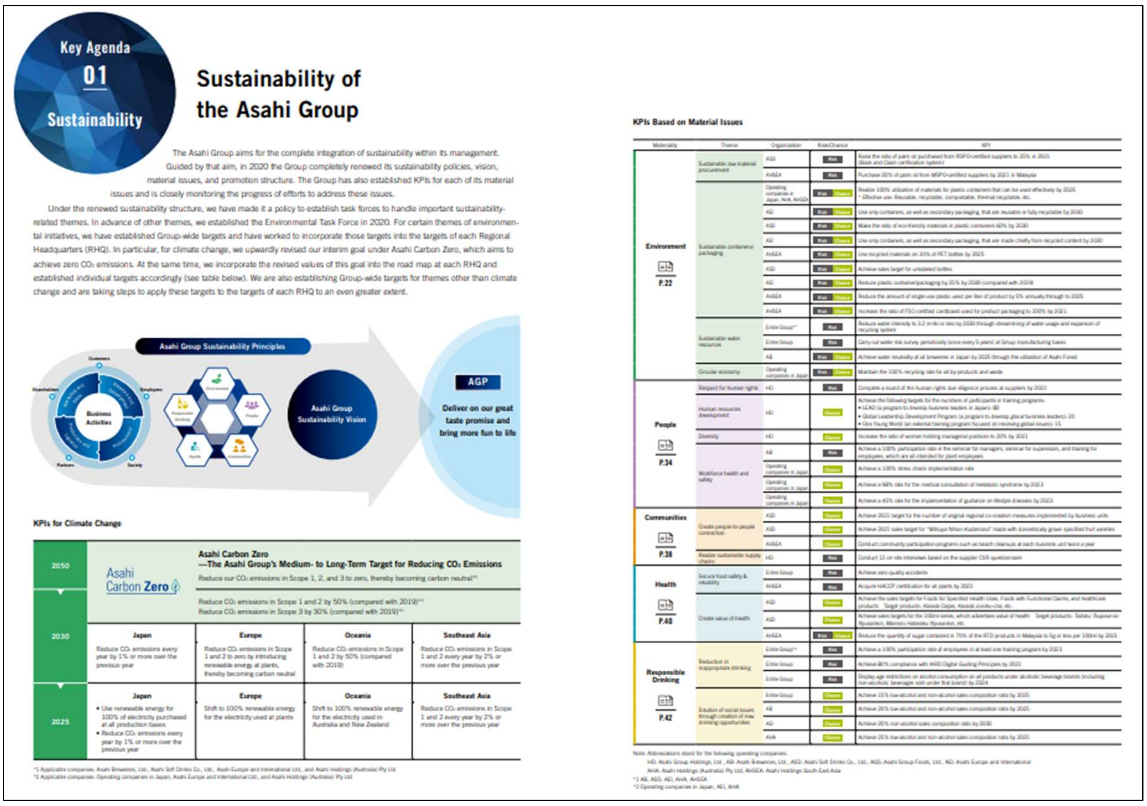
[19] *Asahi Group Integrated Report 2020*
Integrated Report | ASAHI GROUP HOLDINGS (asahigroup-holdings.com)

- Need revision from the perspective of what corporate value means to Asahi Group Holdings, and what KPIs are directly linked to it.



(Source: *Asahi Group Integrated Report 2020*)

As investors point out, Asahi Group Holdings discloses materiality and KPI on the sustainability pages as shown below, but not in the model for enhancing corporate value. Aiming to fully integrate sustainability and management, the company is exploring how to make the most of positioning materiality in the corporate enhancement model in the 2021 integrated report.



(Source: *Asahi Group Integrated Report 2020*)

(ii) Hitachi

Based on the Strategic Focus Area disclosed in the *Hitachi Integrated Report 2021*[20] published in September 2021, Hitachi has worked to identify materiality based on feedback from experts and stakeholders while taking into account the direction of the next mid-term management plan.

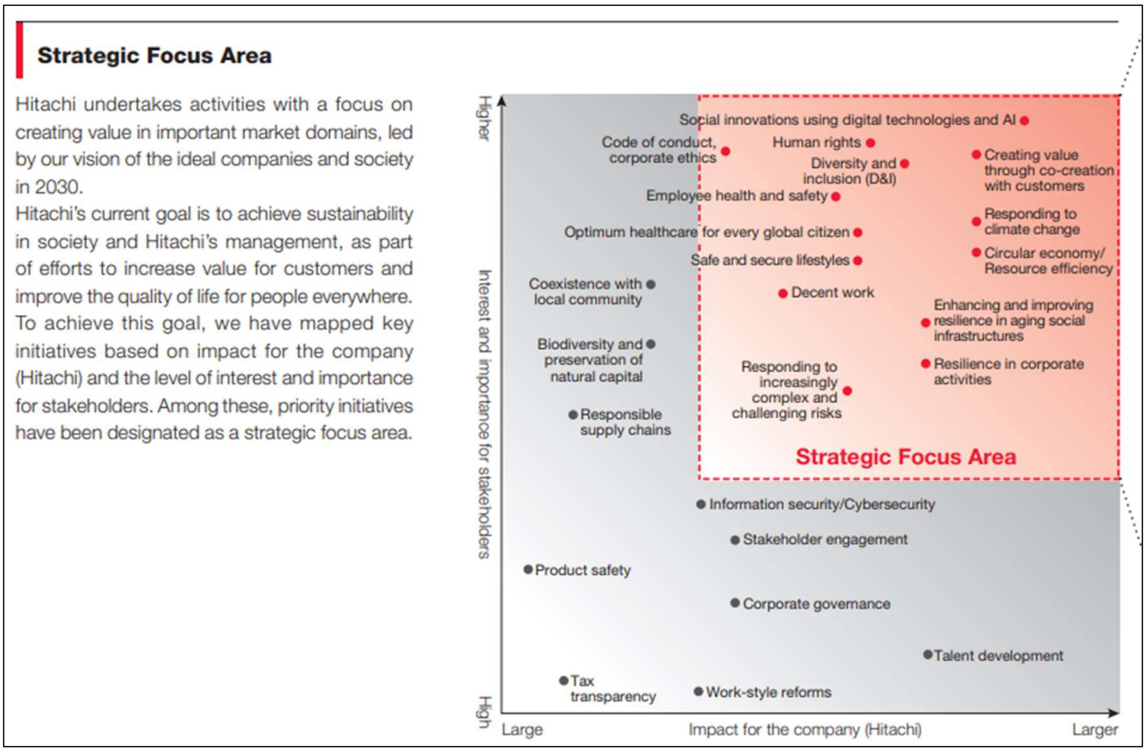
To start with, a survey questionnaire was sent to stakeholders and the importance of the proposed materiality items was evaluated. A number of specific points of concern and advice such as positioning within the management, sense of balance, and wording were also captured from the field for free comments. Suggestions for topics that should be included were also received. After receiving the results of the questionnaire, issues with a focus on business were reorganized, and a tentative revision of the first version of materiality was produced.

The next step was a dialogue with experts based on the tentative revision of the first version of materiality. Based on the views of the experts, the materiality list was integrated

[20] *Hitachi Integrated Report 2021*
[IR Library : Investor Relations : Hitachi Global]

into several categories, and a second tentative version of materiality was produced by revising classifications to fit the story.

A dialogue with stakeholders in Europe was held in mid-November 2021. Going forward, Hitachi plans to consider adding materiality to the next mid-term management plan and disclosure in the integrated report for the next fiscal year.



(Source: *Hitachi Integrated Report 2021*)

(6) Summary

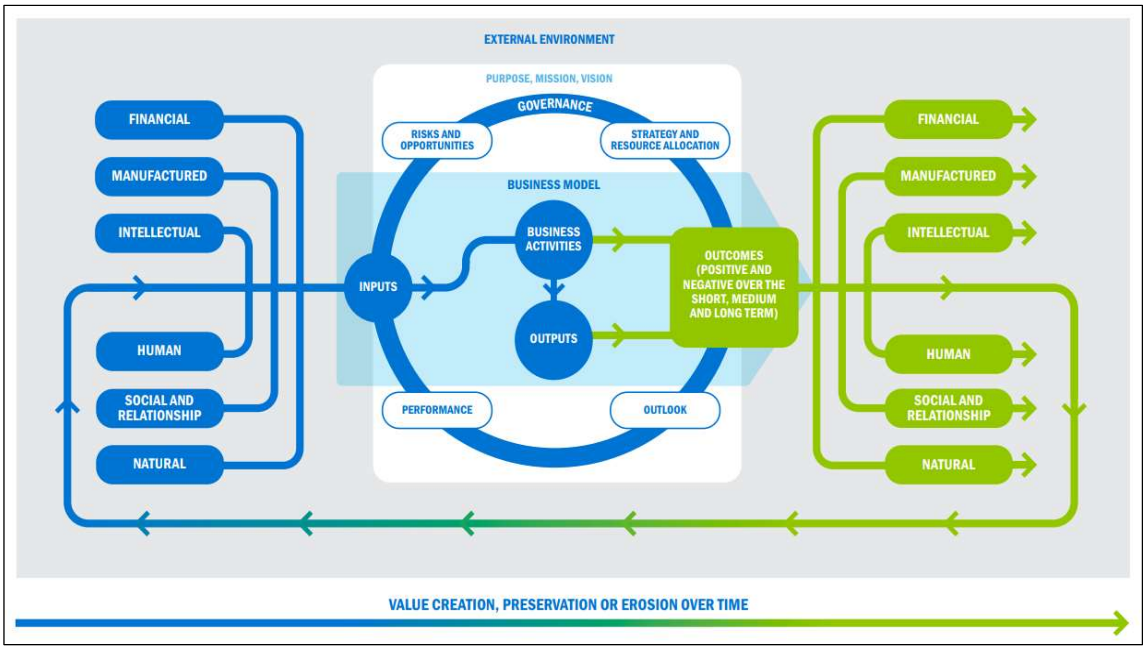
Investors believe that materiality identified by companies should be consistent with purpose and management strategy. They pay particular attention to the process that leads to identification, and viability as the ability to respond to materiality. The following are the three points for evaluating materiality identified by a company. Firstly, whether or not materiality is consistent with the overall company direction. Secondly, is the vision of the management visible in the rationale and processes for identifying materiality? Thirdly, to what degree is management committed to the identified materiality and the responses, and are they incorporated into the workplace?

On the other hand, companies try to identify their own unique materiality from a long-term perspective, but there are issues around how to involve management in the identification process. It is necessary to create a mechanism for management to participate in identifying materiality by, for example, including KPIs related to materiality in reports to the board of directors, or by having regular discussions at the management level.

4-2-2 Formulating the LTVC Story

The value creation process is based on the IIRC framework and the Guidance for Collaborative Value Creation developed by the Ministry of Economy, Trade, and Industry (METI).

In the IIRC framework, value creation is defined as "the process that results in increases, decreases or transformations of the capitals caused by the organization's business activities and outputs," and the value creation process visualizes relationships between the elements that should be presented in the integrated report.[21]



(Source: IIRC International <IR> Framework)

The METI collaborative value guidance identifies six elements as constituting corporate value. They are values, business model, sustainability/growth, strategy, performance and KPIs, and governance. In addition, seeing that the value creation process is unique at each company, the guidance points out the importance of organizing the value creation process by selecting what is important for the company's business model and strategy while considering connectivity between items rather than perceiving the items and descriptions in the guidance as formal and fixed.[22]

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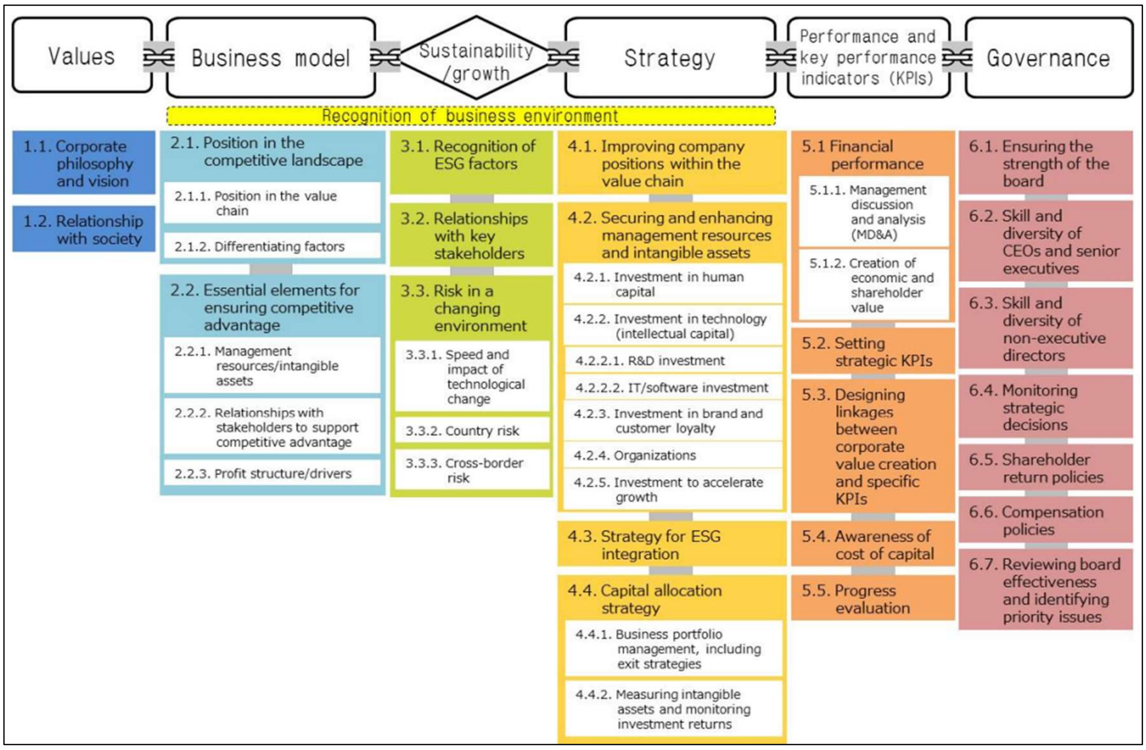
[21] VRF International <IR> Framework
[InternationalIntegratedReportingFramework.pdf (valuereportingfoundation.org)]

[22] Ministry of Economy, Trade, and, Industry, Guidance for Collaborative Value Creation (Japanses only)
[Guidance.pdf (meti.go.jp)]



(Source: Ministry of Economy, Trade, and Industry, *Guidance for Collaborative Value Creation*)

(1) Courses of Action for Resolving Issues

Companies need to satisfy following conditions when setting up the value creation process.

(i) Specify Management Resources Connected to the Sources of Present and Future Competitive Advantage

To establish the value creation process, it is important to first identify the key management resources (including intangible assets) that are the source of the company's competitive edge. In doing so, companies need to identify the management resources (both tangible and intangible assets) that are considered of future importance for achieving the ideal vision with a long-term perspective.

(ii) Clarify Outcomes Created Through Value Creation with a Long-Term Perspective

Clarify the kinds of outcomes that the outputs (goods and services) generated by the company's business model and competitive advantage can create through value creation with a long-term perspective.

(iii) Organize and Visualize the Content of the Value Creation Process

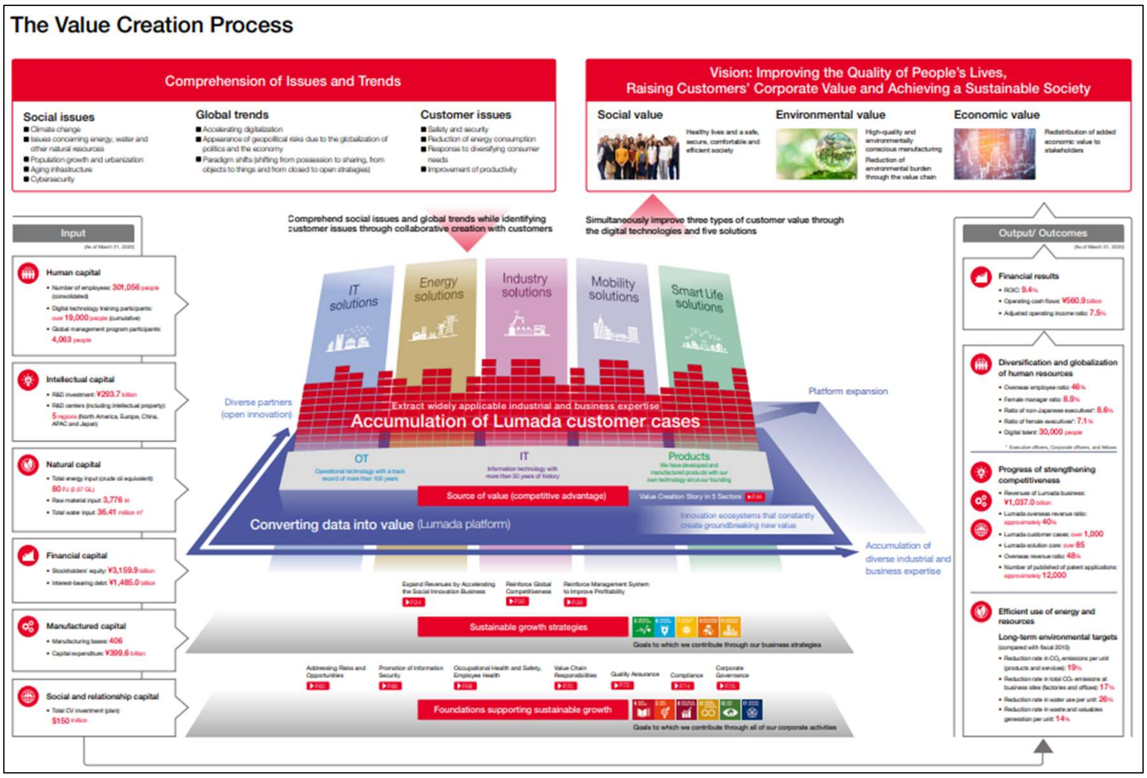
Organize and visualize the content of the value creation process such as inputs, outputs, and outcomes.

(2) Excellent Practice (Hitachi)

The *Hitachi Integrated Report 2020*[23] is excellent for the clarity of its value creation story disclosure.

Hitachi discloses the following as its value creation process. To start with, they identify social issues, customer issues, and global trends, and set out their vision as Improving the quality of people's lives, raising customers' corporate value, and achieving a sustainable society. Next, they explain that Hitachi improves three customer values (social value, environmental value, economic value) simultaneously. Then, they explain the input (human capital, intellectual capital, natural capital, financial capital, manufactured capital, social and relationship capital) invested into business activities in quantitative terms. They also explain their aim to deliver digital technologies and five solutions based on sustainable growth strategies and foundations supporting sustainable growth. In addition, they present improvements in corporate value (financial results, diversification and globalization of human resources, progress of strengthening competitiveness, efficient use of energy and resources) as quantitative output.

[23] *Hitachi Integrated Report 2020*
IR Library : Investor Relations : Hitachi Global



(Source: *Hitachi Integrated Report 2020*)

Hitachi has developed an LTVC story based on this value creation process. The following are four features.

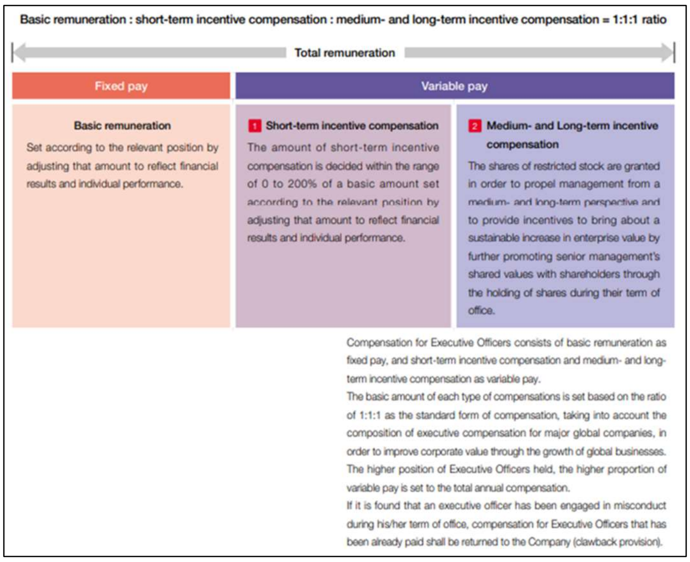
<u>(i) Relationship Between Finance Department and Solutions to Social Issues</u>

The CFO message views strategic investment in fields that facilitate solutions to social and environmental problems as linked to value creation in the medium to long terms and refers to support at the financial department for the simultaneous pursuit of economic values, social values, and environmental values with an eye to non-financial value and relationships.

(Source: *Hitachi Integrated Report 2020*)

(ii) Medium- to Long-Term Incentive Remuneration

Compensation to executive officers at Hitachi consists of basic remuneration, which is fixed pay, short-term incentive compensation and medium and long-term incentive compensation, which are both variable pay. It is noteworthy that the proportion of variable pay, including medium and long-term incentive compensation, is higher for the upper ranks of executive officers, who conceivably have a greater influence on the value creation story.

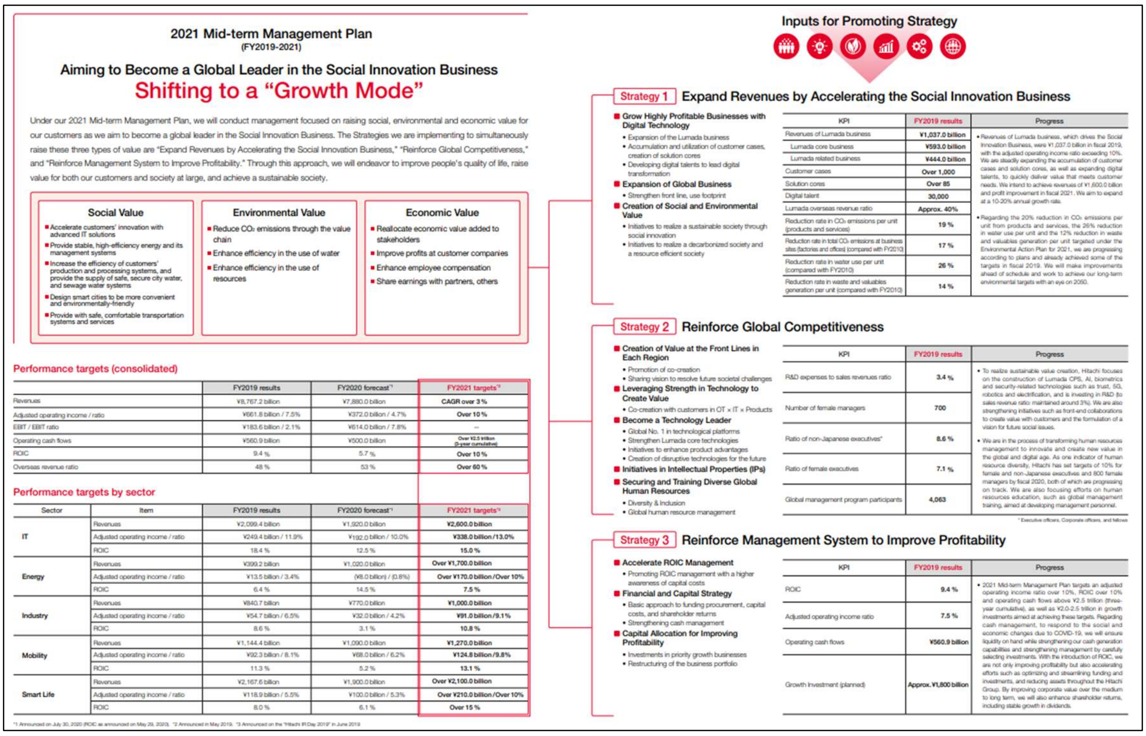


(Source: *Hitachi Integrated Report 2020*)

(iii) Explaining the Strategy for Improving Three Values

According to the 2021 Mid-term Management Plan, Hitachi is aiming to become a global leader in the social innovation business with management focusing on improving social, environmental, and economic value for their customers. As well as setting performance targets on a consolidated basis and for each sector, Hitachi identifies three pillars for the strategy to simultaneously improve these three values. The three pillars are to expand revenue by accelerating the social innovation business, to reinforce global competitiveness, and to reinforce the management system to improve profitability.

Then they present specific initiatives linked to each pillar of the strategy, establish KPIs to manage the progress of each initiative, even referring to performance and future outlook as part of the progress of the mid-term management plan. Hitachi also explains how each of the initiatives linked to the strategies contributes to improving value, which makes the value creation story for the Hitachi Group easy to understand.



KPI	FY2019 results	Progress
Revenues of Lumada business	¥1,037.0 billion	• Revenues of Lumada business, which drives the Social Innovation Business, were ¥1,037.0 billion in fiscal 2019, with the adjusted operating income ratio exceeding 10%. We are steadily expanding the accumulation of customer cases and solution cores, as well as expanding digital talents, to quickly deliver value that meets customer needs. We intend to achieve revenues of ¥1,600.0 billion and profit improvement in fiscal 2021. We aim to expand at a 10-20% annual growth rate.
Lumada core business	¥593.0 billion	
Lumada related business	¥444.0 billion	
Customer cases	Over 1,000	
Solution cores	Over 85	
Digital talent	30,000	
Lumada overseas revenue ratio	Approx. 40%	
Reduction rate in CO_2 emissions per unit (products and services)	19 %	• Regarding the 20% reduction in CO_2 emissions per unit from products and services, the 26% reduction in water use per unit and the 12% reduction in waste and valuables generation per unit targeted under the Environmental Action Plan for 2021, we are progressing according to plans and already achieved some of the targets in fiscal 2019. We will make improvements ahead of schedule and work to achieve our long-term environmental targets with an eye on 2050.
Reduction rate in total CO_2 emissions at business sites (factories and offices) (compared with FY2010)	17 %	
Reduction rate in water use per unit (compared with FY2010)	26 %	
Reduction rate in waste and valuables generation per unit (compared with FY2010)	14 %	

KPI	FY2019 results	Progress
R&D expenses to sales revenues ratio	3.4 %	• To realize sustainable value creation, Hitachi focuses on the construction of Lumada CPS, AI, biometrics and security-related technologies such as trust, 5G, robotics and electrification, and is investing in R&D (to sales revenue ratio maintained around 3%).
Number of female managers	700	
Ratio of non-Japanese executives*	8.6 %	
Ratio of female executives	7.1 %	
Global management program participants	4,063	

* Executive officers, Corporate officers, and fellows

KPI	FY2019 results	Progress
ROIC	9.4 %	
Adjusted operating income ratio	7.5 %	
Operating cash flows	¥560.9 billion	
Growth Investment (planned)	Approx. ¥1,800 billion	

Performance targets (consolidated)

	FY2019 results	FY2020 forecast*1	FY2021 targets*3
Revenues	¥8,767.2 billion	¥7,880.0 billion	CAGR over 3 %
Adjusted operating income / ratio	¥661.8 billion / 7.5%	¥372.0 billion / 4.7%	Over 10 %
EBIT / EBIT ratio	¥183.6 billion / 2.1%	¥614.0 billion / 7.8%	–
Operating cash flows	¥560.9 billion	¥500.0 billion	Over ¥2.5 trillion (3-year cumulative)
ROIC	9.4 %	5.7 %	Over 10 %
Overseas revenue ratio	48 %	53 %	Over 60 %

Performance targets by sector

Sector	Item	FY2019 results	FY2020 forecast*1	FY2021 targets*2
IT	Revenues	¥2,099.4 billion	¥1,920.0 billion	¥2,600.0 billion
	Adjusted operating income / ratio	¥249.4 billion / 11.9%	¥192.0 billion / 10.0%	¥338.0 billion / 13.0%
	ROIC	18.4 %	12.5 %	15.0 %
Energy	Revenues	¥399.2 billion	¥1,020.0 billion	Over ¥1,700.0 billion
	Adjusted operating income / ratio	¥13.5 billion / 3.4%	(¥8.0 billion) / (0.8%)	Over ¥170.0 billion / Over 10%
	ROIC	6.4 %	14.5 %	7.5 %
Industry	Revenues	¥840.7 billion	¥770.0 billion	¥1,000.0 billion
	Adjusted operating income / ratio	¥54.7 billion / 6.5%	¥32.0 billion / 4.2%	¥91.0 billion / 9.1%
	ROIC	8.6 %	3.1 %	10.8 %
Mobility	Revenues	¥1,144.4 billion	¥1,090.0 billion	¥1,270.0 billion
	Adjusted operating income / ratio	¥92.3 billion / 8.1%	¥68.0 billion / 6.2%	¥124.8 billion / 9.8%
	ROIC	11.3 %	5.2 %	13.1 %
Smart Life	Revenues	¥2,167.6 billion	¥1,900.0 billion	Over ¥2,100.0 billion
	Adjusted operating income / ratio	¥118.9 billion / 5.5%	¥100.0 billion / 5.3%	Over ¥210.0 billion / Over 10%
	ROIC	8.0 %	6.1 %	Over 15 %

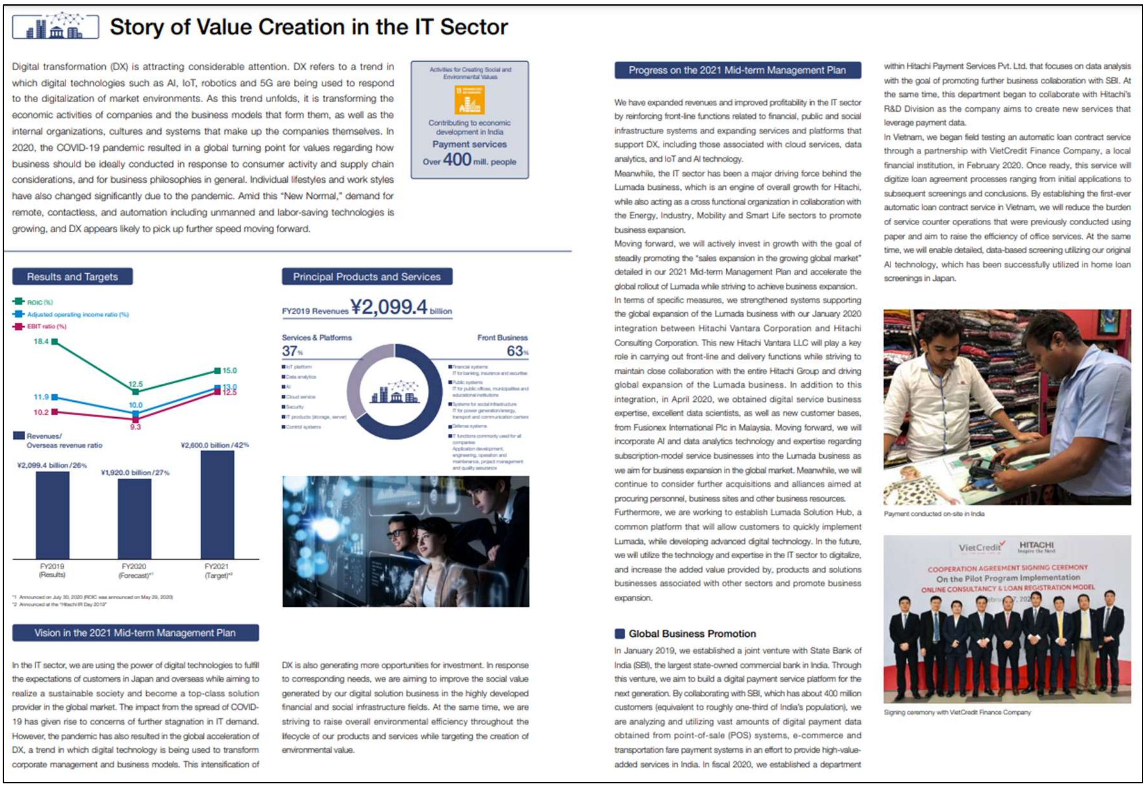
*1 Announced on July 30, 2020 (ROIC as announced on May 29, 2020). *2 Announced in May 2019. *3 Announced on the "Hitachi IR Day 2019" in June 2019

(Source: *Hitachi Integrated Report 2020*)

(iv) Value Creation Story by Sector

The report outlines the ideal vision for each of Hitachi's five sectors, and uses the format of the value creation story to explain how the business model for each sector contributes to achieving the ideal vision.

Specifically, Hitachi starts by explaining the external environment for the IT sector, painting an image of the future for a sector where digital transformation (DX) is accelerating more than ever, and sets specific quantitative targets from the perspective of the Sustainable Development Goals (SDGs). As well as presenting the breakdown of sales of the principal products and services in the IT sector, the report also suggests results and targets using ROIC, adjusted operating income ratio, and EBIT ratio as the financial indicators. The Hitachi vision for its IT sector in the 2021 Mid-term Management Plan is to use the power of digital technologies to fulfill the expectations of customers in Japan and overseas while aiming to realize a sustainable society and become a top-class solution provider in the global market. By explaining specific initiatives as part of the progress of the 2021 Mid-term Management Plan, Hitachi is also trying to communicate certainty about achieving the 2021 Mid-term Management Plan.



Story of Value Creation in the IT Sector

Digital transformation (DX) is attracting considerable attention. DX refers to a trend in which digital technologies such as AI, IoT, robotics and 5G are being used to respond to the digitalization of market environments. As this trend unfolds, it is transforming the economic activities of companies and the business models that form them, as well as the internal organizations, cultures and systems that make up the companies themselves. In 2020, the COVID-19 pandemic resulted in a global turning point for values regarding how business should be ideally conducted in response to consumer activity and supply chain considerations, and for business philosophies in general. Individual lifestyles and work styles have also changed significantly due to the pandemic. Amid this "New Normal," demand for remote, contactless, and automation including unmanned and labor-saving technologies is growing, and DX appears likely to pick up further speed moving forward.

Activities for Creating Social and Environmental Values
Contributing to economic development in India
Payment services
Over 400 mill. people

Results and Targets

*1 Announced on July 30, 2020 (ROIC was announced on May 29, 2020)
*2 Announced at the "Hitachi IR Day 2019"

Principal Products and Services

Vision in the 2021 Mid-term Management Plan

In the IT sector, we are using the power of digital technologies to fulfill the expectations of customers in Japan and overseas while aiming to realize a sustainable society and become a top-class solution provider in the global market. The impact from the spread of COVID-19 has given rise to concerns of further stagnation in IT demand. However, the pandemic has also resulted in the global acceleration of DX, a trend in which digital technology is being used to transform corporate management and business models. This intensification of DX is also generating more opportunities for investment. In response to corresponding needs, we are aiming to improve the social value generated by our digital solution business in the highly developed financial and social infrastructure fields. At the same time, we are striving to raise overall environmental efficiency throughout the lifecycle of our products and services while targeting the creation of environmental value.

Progress on the 2021 Mid-term Management Plan

We have expanded revenues and improved profitability in the IT sector by reinforcing front-line functions related to financial, public and social infrastructure systems and expanding services and platforms that support DX, including those associated with cloud services, data analytics, and IoT and AI technology.
Meanwhile, the IT sector has been a major driving force behind the Lumada business, which is an engine of overall growth for Hitachi, while also acting as a cross functional organization in collaboration with the Energy, Industry, Mobility and Smart Life sectors to promote business expansion.
Moving forward, we will actively invest in growth with the goal of steadily promoting the "sales expansion in the growing global market" detailed in our 2021 Mid-term Management Plan and accelerate the global rollout of Lumada while striving to achieve business expansion.
In terms of specific measures, we strengthened systems supporting the global expansion of the Lumada business with our January 2020 integration between Hitachi Vantara Corporation and Hitachi Consulting Corporation. This new Hitachi Vantara LLC will play a key role in carrying out front-line and delivery functions while striving to maintain close collaboration with the entire Hitachi Group and driving global expansion of the Lumada business. In addition to this integration, in April 2020, we obtained digital service business expertise, excellent data scientists, as well as new customer bases, from Fusionex International Plc in Malaysia. Moving forward, we will incorporate AI and data analytics technology and expertise regarding subscription-model service businesses into the Lumada business as we aim for business expansion in the global market. Meanwhile, we will continue to consider further acquisitions and alliances aimed at procuring personnel, business sites and other business resources.
Furthermore, we are working to establish Lumada Solution Hub, a common platform that will allow customers to quickly implement Lumada, while developing advanced digital technology. In the future, we will utilize the technology and expertise in the IT sector to digitalize, and increase the added value provided by, products and solutions businesses associated with other sectors and promote business expansion.

Global Business Promotion

In January 2019, we established a joint venture with State Bank of India (SBI), the largest state-owned commercial bank in India. Through this venture, we aim to build a digital payment service platform for the next generation. By collaborating with SBI, which has about 400 million customers (equivalent to roughly one-third of India's population), we are analyzing and utilizing vast amounts of digital payment data obtained from point-of-sale (POS) systems, e-commerce and transportation fare payment systems in an effort to provide high-value-added services in India. In fiscal 2020, we established a department within Hitachi Payment Services Pvt. Ltd. that focuses on data analysis with the goal of promoting further business collaboration with SBI. At the same time, this department began to collaborate with Hitachi's R&D Division as the company aims to create new services that leverage payment data.
In Vietnam, we began field testing an automatic loan contract service through a partnership with VietCredit Finance Company, a local financial institution, in February 2020. Once ready, this service will digitize loan agreement processes ranging from initial applications to subsequent screenings and conclusions. By establishing the first-ever automatic loan contract service in Vietnam, we will reduce the burden of service counter operations that were previously conducted using paper and aim to raise the efficiency of office services. At the same time, we will enable detailed, data-based screening utilizing our original AI technology, which has been successfully utilized in home loan screenings in Japan.

Payment conducted on-site in India

Signing ceremony with VietCredit Finance Company

(Source: *Hitachi Integrated Report 2020*)

(3) Points and opinions for Investors to Understand the LTVC Process

Investors participating in the EDSG cite connectivity between the elements that make up the LTVC process and explanations that communicate the level of feasibility of the LTVC story among their evaluation points. Investors made the following points regarding understanding the LTVC process at Hitachi, our example of excellent practice.

(i) Connectivity

- Connectivity is important for the LTVC process. It is essential to consider how to associate the elements of the LTVC process to create the story. How to express connectivity is a very difficult problem, but it is an important factor in determining how effective the value creation story is.
- With the corporate philosophy, purpose, and long-term vision as the starting point, we look at whether indicators and governance for ensuring long-term strategies and effectiveness are organized as consistent LTVC processes. When a company is creating value, we believe it is easy to win sympathy with an integrated report that tells the story about what the company values and considers important.

(ii) Level of Feasibility

- It is great that Hitachi sets a KPI for each specific initiative aimed at realizing the LTVC process. The hurdles to presenting non-financial indicators in quantitative terms are still high at some companies, but even if the indicators are qualitative, they are interesting because they contain hints about where management is placing its focus.
- From the investor perspective, there is appreciation for an LTVC process that simultaneously realizes enhanced social, environmental, and economic value, as demonstrated by Hitachi. However, the added value is reduced when economic value shrinks, so the company will no longer be sustainable if this continues for five to ten years. From an investor viewpoint, it is important that increasing economic value is included in the process.
- Investors understand that the future outlook of the LTVC process is highly uncertain, but they are interested in feasibility. They also believe that it is important to speak with awareness of the past, present, and future to create a sense of conviction around feasibility. It is possible to gain a sense of conviction around feasibility if the value creation process is organized with time frames in mind. For example, how did the company create value in the past? As a result, what are its present strengths? Using these strengths, what kind of value creation does the company aim for in the future?

(4) Corporate Solutions and opinios

When a company establishes the LTVC process, we know that they have understood the clear and unique value of their company, connectivity, and how to communicate in a way that is accessible. The following are descriptions of some approaches as a company.

(i) Clear and Unique Value of the Company

- To explain the unique value of the company in the LTVC process, it is important to base the process on purpose. When applying the specifics of the strategy, it is also necessary to use language that people within the company find accessible.
- In the Hitachi example, the three values are economic values, social values, and environmental values, but we believe that defining values and establishing the LTVC process will identify the unique values of any company.
- Any company that has survived until the present had its own unique value from the start, so it is important to first visualize the LTVC process from the past to the present. In addition, if a company explores its vision in the medium to long term, and depicts a value creation story that invests in short-term R&D and human capital to achieve that vision, the outcome will probably be their own unique LTVC story.

(ii) Connectivity

- Explaining the LTVC process is easy when only one business is involved, but if there are multiple businesses, the complexity makes for difficult explanations. In the

Hitachi case study, the LTVC story is explained by sector. Explaining the LTVC story for each business after going over the LTVC story for the whole corporate group is a helpful example of one way to present a company that comprises multiple businesses.

- According to some stakeholders, the connections to strategy were fragmented and difficult to understand in earlier integrated reports where sustainability was a separate section. Therefore, the LTVC process is organized and described in a way that shows awareness of the connections between content.

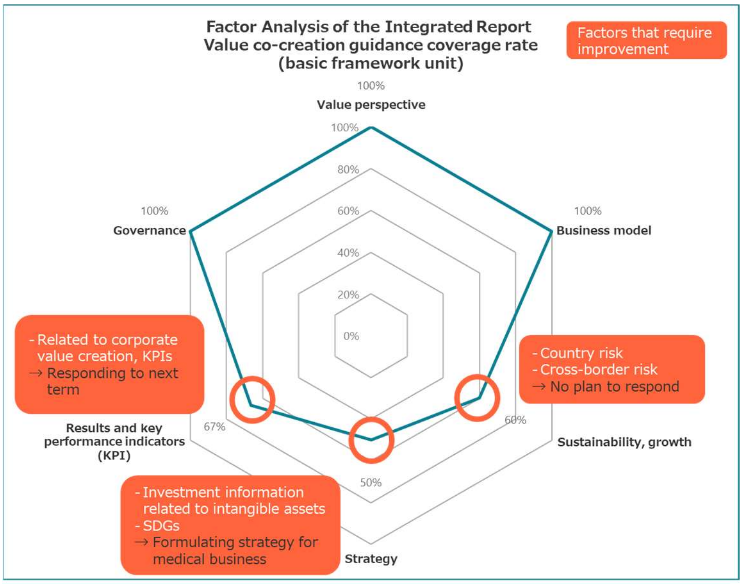
(iii) Accessible Communication

- To make the LTVC process persuasive, it is necessary to provide substantial explanations of what the company will do to make it reality. For example, when explaining about human capital, we would like to see companies consider the kind of human capital they need, and the measures they will take to secure them.
- The CEO message is another way to explain the LTVC process while keeping connectivity in mind. Since the CEO message is from the management, the LTVC process will sound more convincing.

(5) Verification at the EDSG Individual Company Working Group

(i) Olympus

Based on its purpose of "Making people's lives healthier, safer, and more fulfilling," Olympus explains its strengths and strategies in concise and accessible language in the *Olympus Integrated Report 2021*.[24] For the first time, Olympus also visualizes and publishes a value creation model for delivering on the social outcome of providing value to patients, countries, and society through its customers. By depicting the value creation model with its purpose and strengths as the starting point, Olympus is able to differentiate itself from other companies and to emphasize its competitive advantage. As a model for presenting the corporate value of Olympus, the overall feedback is that it is highly convincing.



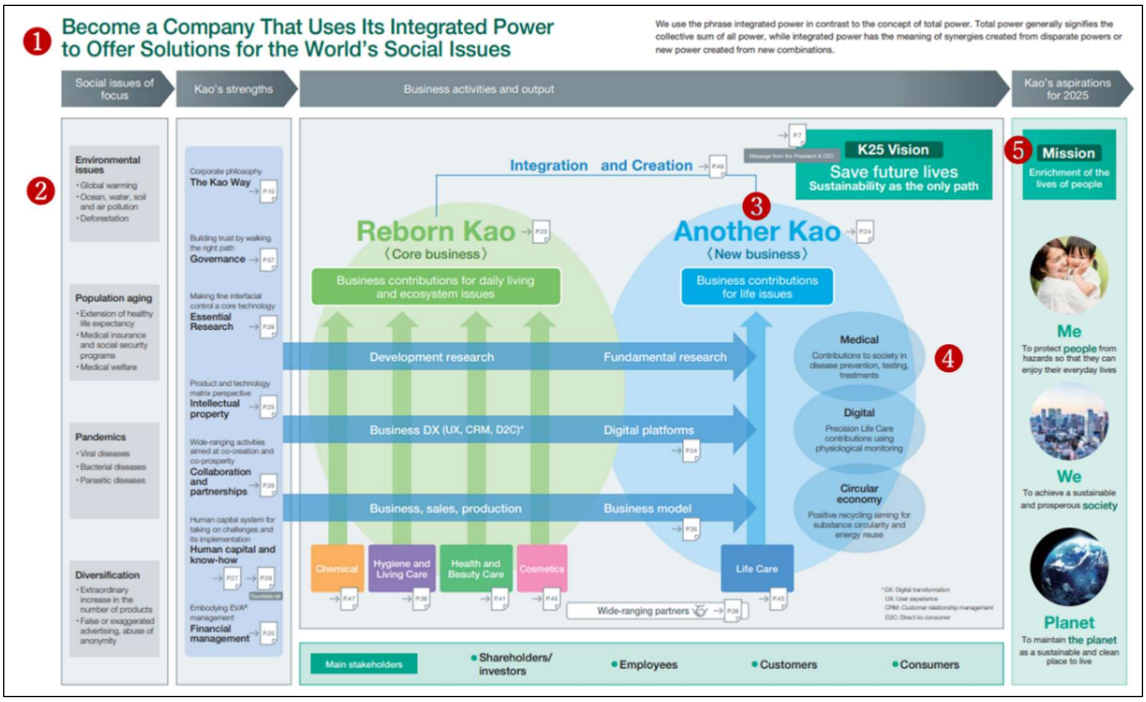
[24] *Olympus Integrated Report 2021*
[Fiscal Year Ended Mar. 31, 2021 : Integrated Report : OLYMPUS (olympus-global.com)](olympus-global.com)

Since the LTVC story and the LTVC processes are presented via integrated reports and other disclosure media, to explain the value creation story throughout the integrated report, Olympus used the METI collaborative value guidance to identify excesses or deficiencies in the elements of the integrated report after it was published in 2021. As a result, issues were identified in the three areas of sustainability and growth, strategy, and results and KPIs as shown on the right. Olympus considering improving these issues in the future.

(ii) Kao

Kao identified issues by interviewing investors and companies that had reviewed the *Kao Integrated Report* 2021[25] in advance.

With regard to the formulation of the LTVC story, which includes the LTVC process, the feedback from interviews with investors and companies suggested that there was a lack of clarity around establishing an axis worthy of Kao to connect explanations and form the basis for the story. Therefore, Kao decided to organize the disclosure items and to establish a core theme and a bold story that runs through the whole.



(Source: *Kao Integrated Report 2021*)

The following are five improvements to the Kao vision of the business as a whole.

(1) Revise and establish a core theme

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[25] *Kao Integrated Report 2021*
Kao | Integrated Report/Annual Report

(2) Aim for materiality that is consistent with the sustainability data book. Important materiality is explained in the integrated report with links to more details in the data book.
(3) Amend uncertainty around the definition of Another Kao
(4) Describe financial and non-financial outcomes
(5) Describe the mission as one for the long term

Kao is aware of these points and they will be reflected in the production of the integrated report for the next fiscal year.

(6) Summary

Broadly speaking, investors evaluate the LTVC process from two aspects. Firstly, there is the connectivity aspect. They evaluate whether the things companies consider important for value creation are organically connected and discussed in the LTVC process. Secondly, there is the level of feasibility. Investors evaluate the specificity of the LTVC process and management commitment.

Companies, on the other hand, have three approaches. First, to explain how they will create unique value revolving around the corporate philosophy and purpose. Second, to explain how past management led to the current business model, and to bring consistency to the relationship between long-term vision and improved economic and social values. Third, to present an overall image of the LTVC process in the CEO's message and to communicate detailed explanations in accessible language through business models and other elements.

4-3 Setting Indicators Linked to LTVC

(1) Understanding Indicators Linked to LTVC

(i) Understanding Indicators in International Frameworks and Regulations

Several international frameworks and regulations have been published by different bodies. The table below sets out the objectives and contexts for the international frameworks and regulations. The frameworks and regulations reference each other in some areas, but the content is not necessarily consistent due to differences in context and objectives. As a result, the indicators also differ.

	Context and Objectives
CSRD	Encourage companies to improve disclosure of sustainability information and to provide reliable and comparable sustainability information to financial institutions, investors, and more generally.
TCFD	Devised to encourage companies to provide efficient disclosure of climate-related financial information that is consistent, comparable, reliable, and clear to encourage investors to make appropriate investment decisions.
GRI	Disclose shared information about organizations, and their economic, environmental, and social impact in the form of sustainability reports.
VRF	To make disclosure information comparable by setting disclosure standards for ESG factors that have a high financial impact in each industry, and to contribute to appropriate decision-making by investors.
WEF	During consultations with more than 200 companies, investors, and other experts, universal ESG standards across industries were identified in the course of organizing existing standards, and published as a set of 21 core indicators.
WFE[26]	The affiliated clearing houses have published a set of reference indicators to encourage listed companies to disclose ESG information.
WICI	Explain the most important principles and definitions related to reporting important intangible management resources (organizational capital, human capital, relationship capital) and clarify the structure of reports from the perspective of demonstrating long-term business sustainability.

The themes indicated by the framework and regulations are summarized in 18 points in the table below. Moves to standardize non-financial information disclosure are currently underway, but as of the time of writing, only the Corporate Sustainability Reporting Directive (CSRD) refers to legally binding themes. Therefore, the table summarizes themes set by the majority of the other frameworks while referencing the CSRD themes.

Many frameworks deal with general ESG themes although some, for example, TCFD and the World Intellectual Capital/Assets Initiative (WICI), present indicators with a focus on specific themes. There are also some frameworks that deal with industry-specific themes, for example, the Value Reporting Foundation (VRF, formerly SASB), but many handle themes that are shared across industries. Therefore, the ESDG is treating the 18 themes listed in the table as themes shared across industries.

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[26] Established in 1961. Exchanges and clearing houses (CCPs) around the world are affiliatedwith the World Federation of Exchanges (WFE).

Theme	CSRD	TCFD	GRI	VRF	WEF	WFE	WICI
GHG emissions	✔	✔	✔	✔	✔	✔	
Impact of climate change	✔	✔	✔	✔	✔		
Air quality	✔		✔	✔	✔		
Energy management	✔	✔	✔	✔		✔	
Water and effluent management	✔		✔	✔	✔	✔	
Waste and hazardous waste	✔		✔	✔	✔		
Impact on biodiversity	✔		✔	✔	✔		
Human rights	✔		✔	✔	✔	✔	
Local communities	✔		✔	✔	✔	✔	
Product quality and product safety			✔	✔			✔
Labor practices	✔		✔	✔	✔	✔	
Employee health and safety	✔		✔	✔	✔	✔	
Human resources development	✔		✔	✔	✔		✔
Diversity	✔		✔	✔	✔	✔	✔
Supply chain management	✔		✔	✔		✔	
Corporate governance			✔		✔	✔	✔
Business ethics	✔		✔	✔	✔	✔	
Stakeholder engagement	✔		✔		✔		

Generally speaking, companies refer to the TCFD, the GRI, and the VRF among these frameworks and regulations. In the Corporate Governance Code, discussed below, the TCFD is sometimes referred to as climate change-related disclosure, and measures are focused on companies listed on the Prime Market. GRI is widely acknowledged as the standard for ESG information disclosure, and many companies refer to this framework when producing sustainability reports. Many companies also refer to the VRF international framework for integrated reporting when they produce the integrated report. An increasing number of companies also refer to the SASB standard for industry-specific ESG information disclosure.

(ii) Understanding Indicators in Domestic Frameworks

The Corporate Governance Code (CGC) and the collaborative value creation guidance from METI are domestic frameworks for indicators. The CGC summarizes the most important principles that contribute to implementing effective corporate governance. The effective adoption of these practices contributes to developing the company, investors, and ultimately the economy as a whole through independent measures to improve sustainable growth and corporate value in the medium to long term at each company.

Collaborative value creation guidance, on the other hand, was scrutinized by a study group examining policies to promote sustainable corporate value enhancement and medium- to long-term investment as part of corporate governance reform. It was written as a guide for companies and investors to jointly create sustainable value and to deepen mutual understanding through information disclosure and dialogue. It is a basic framework for improving the quality of information disclosure and dialogue. The framework is expected to provide guidance for companies and investors to engage independently and flexibly with the items rather than viewing each item as fixed. Concerning performance and key performance indicators (KPI), the guidance says that it is useful to set company-specific KPI in addition to KPI related to value creation for the company as a whole (ROE, ROIC etc.). The CGC is not legally binding, but listed companies are required to "comply or explain." Although the collaborative value creation guidance is optional, many companies refer to the guidance when producing integrated reports.

(iii) Frameworks Used by Investors

The following is the result of asking investors (8 companies) about the frameworks they use and their reasons for doing so.

	Frameworks in Use	Reasons for Use
Investor A	- SASB, collaborative value creation guidance	- Because it is a shared language that links companies and investors, and it is organized in a systematic and integrated manner.
Investor B	- TCFD, CGC - ISO26000[27], GRI, SASB	- Many themes that are shared across all industries. Important for determining the ability of companies to create long-term value.

[27] ISO26000: An international standard relating to social responsibility published by the International Standardization Organization (ISO) in November 2010.

		- Considered the standard for ESG information disclosure criteria.
Investor C	- IIRC, collaborative value creation guidance, CGC	- Companies have a strong tendency to focus on these frameworks.
Investor D	- SASB, IIRC, WICI	- Feel sympathetic toward an attitude that considers the investor’s perspective.
Investor E	- SASB	- Formulated with an investor perspective.
Investor F	- CGC, collaborative value creation guidance	- Created with Japanese companies in mind.
Investor G	- None	- We do not use frameworks or indicator lists as material for evaluating LTVC at companies.
Investor H	- None	- Under consideration

(iv) Understanding Indicators Reviewed at EDSG

We summarized the themes presented in the international frameworks and regulations as 18 points shared across industries. Focusing on indicators that apply to themes shared across industries, we examined the points where the indicators differ depending on the type of industry or the ideal vision of individual companies.

Companies decide which indicators to apply and disclose at their own discretion, but if investors do not know the evaluation criteria for adopting the indicators, they cannot understand why a company discloses these indicators. Therefore, companies need to explain how they interpret specific indicators and why they disclose these indicators.

There are two methods of explaining the reasons a company adopts indicators.

One method is to explain the reasons for considering a specific indicator important or not. With this approach, companies often list the indicators required by international frameworks in a comparison table, and explain the reasons for and against the disclosure of each indicator. By explaining the reasons individually, it is possible to clearly communicate the company’s thinking with regard to each indicator. This method of explanation is often applied to indicators stipulated in regulations (hard law), which makes it easy to analyze companies by drawing comparisons with other companies. However, it is difficult to apply this method to company-specific indicators.

The other method of explanation is to determine importance from the perspective of whether an indicator is linked to LTVC or not. This approach is easy for investors to understand since indicators that are necessary to explain the LTVC story are applied. On the other hand, there is a high likelihood that individual companies will use company-specific indicators, so there are issues from the perspective of comparability. This method is often applied to explain indicators stipulated in soft law frameworks.

Indicators have a variety of uses such as understanding the current situation, or drawing comparisons between companies. At EDSG, we focus on establishing indicators that are linked to LTVC. Indicators can be classified as indicators common to all industries, industry-specific indicators, and individual company indicators. The following table summarizes our understanding.

	Understanding
Indicators common to all industries	These indicators are linked to protecting the value of companies in all industries. They can be converted to indicators that increase corporate value in the long term. However, even if an indicator is currently viewed as protecting value, indicators common to all industries also change as society changes over time.
Industry-specific indicators	These indicators are linked to protecting the value of companies in a specific industry. They can be converted to indicators that increase corporate value in the long term. However, even if an indicator is currently viewed as protecting value, industry-specific indicators also change as society changes over time.
Individual company indicators	These indicators are set independently by companies to differentiate themselves from other companies. In many cases, they are set while bearing in mind that they will increase corporate value in the long term.

(2) Courses of Action for Resolving Issues

The matters necessary for setting indicators linked to LTVC are outlined below.

(i) Setting Indicators and Goals Linked to LTVC

When establishing indicators, it is necessary to recognize whether each indicator corresponds to inputs, outputs, or outcomes.

In the IIRC, the input is the resources needed for business activities and six types of capital (financial, manufacturing, human, intellectual, social-related, and natural capital). For example, in terms of financial capital, indicators include capital investment, R&D expenses, and other investment funds. In case of manufacturing capital, it could be the number of manufacturing locations, and in terms of intellectual capital, the number of patent rights.

Outputs are the outcomes of activities, organizational products and services, by-products, and waste. For example, the number of products or quantities of waste for disposal.

Outcomes refer to fluctuations in capital as a result of activities. For example, in case of automobile manufacturing, sales and operating income, improved brand and customer satisfaction, and air pollution.

(ii) Scope of Indicators

Companies are required to establish the scope of indicators. For example, are they company-wide indicators, or indicators that correspond to specific areas or departments? Some indicators are more useful on a consolidated basis, while other indicators are useful if they are broken down and disclosed by country or by business facility.

For example, when looking at CO_2 emissions, a useful indicator is to examine the impact of company-wide CO_2 emissions on value creation for the company, and to compare with other companies. When considering the impact of national policies and regulations, such as the introduction of carbon tax, on corporate value creation, CO_2 emissions divided by country is an even more useful indicator.

Indicators for themes that have an impact inside a business location or on the surrounding area, such as effluent management and air quality, are useful when aggregated by business location, but there are also indicators where aggregation on a consolidated basis makes little sense.

Some topics such as labor practices and employee health and safety, systems and ways of thinking for which differ from one country or region to another, can be aggregated by country or region, but aggregating on a consolidated basis is difficult.

(iii) Regular Monitoring and Progress Disclosure

It is necessary to regularly manage progress with indicators, to identify causes if the targets are not achieved, and to take measures to improve the situation. It is also necessary to disclose progress and to communicate with stakeholders.

(iv) Where to Explain Indicators

Since non-financial indicators complement the LTVC story, consistent disclosure in integrated reports or other disclosure media is expected.

To make the LTVC story accessible, there are seven conceivable patterns for how to describe non-financial indicators and what they are linked to.

a. Message from senior management
b. LTVC process
c. Materiality
d. Policy and strategy explanations
e. Non-financial highlights
f. Detailed data sets
g. GRI/SASB comparison table etc.

We have drawn no conclusions about which pattern is the best, but the table below sets out some opinions on what to watch out for in each situation.

Investor opinions	· To link non-financial indicators to LTVC, it is important to first provide an overview of initiatives across the whole company. Consequently, the statements in the message from senior management (a.) are extremely important. However, they are meaningless unless they link to purpose, management strategy, business strategy, enthusiasm among senior managers etc. · If the focus is on the LTVC story, descriptions related to the LTVC process (b.) or descriptions in the explanations of policy and strategy (d.) feel accessible. · Although descriptions in the non-financial highlights (e.), detailed data sets (f.), or GRI/SASB comparison tables (g.) are useful for investors to understand the company, we get a strong impression that this is mostly about managing the progress of corporate ESG activities. · Indicators mentioned in the message from senior management are perceived as the most important indicators for the company. The focus is on the degree of consistency with the LTVC story, and any discrepancy between the indicators mentioned in the message from senior management and the indicators in the explanations of specific initiatives. · The reality is that we seldom see GRI/SASB comparison tables (g.). However, they are important when ESG information vendors and others group indicators together. · When we look at non-financial information, we believe that anything discussed in the materiality section is a non-financial indicator. Considering the LTVC story, it would be good if non-financial information could be explained in the LTVC process (b.) and materiality (c.) sections. If disclosure is important for areas where granularity is fine, it is also good to summarize it in the detailed data sets (f.) section. We think the positioning of explanations changes depending on how non-financial information is positioned and discussed. · The LTVC story is the main position. This story is not completed instantly, rather, companies should think about how to explain it and bring various non-financial indicators into the explanation. If the explanations are insufficient, the aim should be to improve the story through interaction. It's not a matter of one being superior and the other subordinate. Financial indicators are inappropriate when explaining the LTVC story. Since the story is long-term, explanations should mainly focus on non-financial perspectives.
Company opinions	· We think the LTVC process (b.) is the pattern for explanations. However, detailed KPIs are not necessary because the main point is to communicate how to create corporate value in the LTVC process. It is important to have an explanation in the message from senior management (a.) because related matters are communicated in the message from senior management. We have been unable to clearly communicate how to define materiality, but we think an explanation in the materiality section (c.) is important because we aim to integrate sustainability and management and we perceive

	materiality in sustainability as an important must-do topic for management . · Specifically, non-financial indicators are discussed in the policy and strategy explanations (d.). While talking about strategies, we present additional information in the sections on non-financial highlights (e.) and detailed data sets (f.), such as changes in the indicators, or how we determine which specific indicators to aim for. As a future pattern for engagement, we would like to convey a more concrete image by also talking about what we want to achieve as a company in the message from senior management. If materiality has been determined, we think it is easy to understand the story of establishing KPI as specific steps associated with materiality. · We mainly disclose the message from senior management (a.), the LTVC process (b.), materiality (c.), and non-financial highlights (e.). We would like to tie disclosure in with the future story, but at the moment we often disclose indicators for past performance. We are sometimes asked by people in our company why we disclose non-financial information in the section on materiality, and we are worried because we cannot logically explain materiality and the indicators we should disclose. We are wondering what indicators are linked to the story, and what indicators are suitable for materiality. · Our value creation story describes the diversity of our human resources ten years into the future, and we are considering whether such expressions deserve investor evaluation. We are not convinced by qualitative writing, and we think that it's insufficient if it's not tied in with numbers.

(v) How to Explain Indicators

How to explain non-financial indicators is an issue when explaining/understanding the LTVC story. The following are six conceivable ways to present non-financial indicators.

a. Disclosure for the whole group (consolidated basis)
b. Disclosure in a grid by country, region, or industry
c. Historical data, forecast/results comparison
d. Supplementary explanations of indicators
e. Criteria that conform with definition of non-financial information
f. Others

Investor opinions	· The differences in the use of non-financial indicators are probably due to management approaches. With passive management, comparability and clarity is ensured when industry-wide sections are disclosed according to the GRI or other standards. With active management, the focus is on both comprehensiveness and individuality since individual companies are targeted. The earnings forecast is also factored in so both opportunities and risks are weighted. Companies try to use a common framework for disclosure, but we believe it is advisable to pay attention to the materiality and KPIs that are important for each company. · Since financial indicators are disclosed on a consolidated basis, it would be ideal to disclose non-financial indicators on a consolidated

	basis as well, but companies have told us on many occasions that it is difficult. · Should be decided based on circumstances at the company and management discretion; we are not demanding that the company use a grid or always disclose consolidated data. We believe that ultimately, the discussion should move forward based on its importance for the company, and the discretion of senior management. · To facilitate constructive discussions, it is important for companies to think things through carefully and to decide the scope. For example, when considering disclosure of HR development, is it proper to do so on a consolidated, or an individual basis, or maybe both are necessary. If improving diversity in Japan is the key, then KPI measurements are done on a stand-alone basis, and so on.
Company opinions	· We think that consolidated disclosure for the group is tough. Disclosure is time-consuming because we need to promote support for the main subsidiaries while simultaneously widening the scope. · Concerning disclosure of non-financial indicators by region, what regions are important will differ from one company to another. For a company that doesn't do business in China, it makes no sense to go out on a limb about numbers in China. You always need to keep in mind what's important to the company. · GHG emissions are now part of the value chain, rather than a consolidated issue, and we sometimes hear from investors that they want as broad a disclosure as possible. Meanwhile, we have no choice but to disclose initiatives to reinvigorate corporate culture or employee engagement as part of the S (Social). Or we have to provide a degree of qualitative explanation in the message from top management. · It is a fact that there are practical limits, but it is important to consider whether your company is excluded from analysis in a relative comparison. Since disclosure at global companies is advanced, Japanese companies are sometimes omitted from analysis from the perspective of global investors. It is important to make sure companies are not at a disadvantage due to a lack of information in a side-by-side comparison. · Non-financial information can be divided into two categories. Firstly, the normative standard or prescribed performance. Secondly, data on initiatives geared toward promoting the purpose of the company, or improvised performance. With regard to the former, ease of understanding and consistency with norms based on investor intentions are important, and disclosure is on a consolidated basis and over time. In the case of the latter, it is important to combine data with the story, but the problem is that this intent was not communicated when disclosing progress with materiality KPI. It is important to explain why a particular KPI was chosen based on the strategy and what each business does. · It would be easy to disclose what is expected on a consolidated basis if the minimum disclosure requirements were set out in guidelines, etc.

4-4 Building Governance to Support LTVC

(1) Courses of Action for Resolving Issues

Governance supports LTVC. It is not enough to formally fulfill the requirements of the Corporate Governance Code. Rather, the following three points must be met.

(i) Capabilities and Composition of the Board of Directors

Companies must evade or minimize potential risks and maximize opportunities on the market. Therefore, the board of directors should have a diverse membership, including members with ESG-related knowledge. Opportunities for training should be made available as needed. It is also necessary to clarify the jurisdiction and scope of involvement by the board of directors, specific committees, and responsible departments, and to establish the roles and responsibilities of board members and committees.

(ii) Clarify Supervisory, Reporting, Implementation Processes

The board of directors is obliged to supervise ESG performance for the company as a whole, and needs to confirm whether appropriate solutions have been found for the most important ESG issues. Therefore, the board of directors must work closely with management to decide what kind of information (non-financial indicators, progress with ESG initiatives etc.) should be reported to the board.

(iii) Evaluating Effectiveness and Validity of the Board of Directors

Each year the board should analyze and evaluate its effectiveness as a whole, taking into consideration self-evaluations of each director. A summary of the results should be disclosed.

(2) Points and opinions for Investors to Understand Governance

We conducted a survey of investors participating in the EDSG on the disclosure topics they find important from the governance perspective of delivering LTVC, and their reasons. The results are outlined in the table below.

Topics[28]	Number of responses	Reasons
Board of directors (and audit committee) structure	8	· To communicate and share diverse opinions to facilitate decisions on

[28] The topics are mainly CSRD disclosure requirements.

		achieving the ideal vision, and to confirm whether the skill spectrum allows for this · Involvement in growth and sustainability across all future company activities
Board of directors (and audit committee) roles	6	· To influence future value trends · To understand what the company thinks about the roles of the board of directors, the skills needed to satisfy the roles, and methods of recruiting suitable human resources to get closer to the ideal vision
Internal control and risk management mechanisms	4	· To understand the thinking on internal control and risk management to get closer to the ideal vision · To determine effectiveness based on mechanisms, systems, operational flow Involves stakeholder interests directly
Organizational climate	4	· The organizational climate influences the thinking, behavior, and emotions of the human resources in the organization, and influences corporate value either temporarily or for the long term To understand how the organizational climate influences the ideal vision
Impact of lobbying on policies	1	· Contributes to improved transparency of governance, which is important for LTVC (disclosure of low importance in Japan)
Information about relationships with business partners	1	· To understand the reasons why business partners are important stakeholders for achieving the ideal vision (however, disclosure is not required because the information is also a trade secret)
Remuneration policy for executives and directors	8	· Is it connected to long-term and sustainable growth, or an incentive to respond to ESG issues, or are they in the same boat as shareholders? · Is remuneration excessive compared to business performance, or is the stock diluted because of excessive stock-based compensation?
Policy for appointing/dismissing directors	5	· To confirm if directors have the skills and qualities to achieve short-term and medium-term business plans and to deliver the long-term vision, and as a result, flexibly eliminate risks that would emerge if the directors did not have these skills and qualities. · To confirm consistency with the management policy
Responses required of the board of directors to fulfill its role	1	· To understand what the company is doing to resolve important issues in-house
Training content for directors and auditors	2	· To perceive effectiveness based on training content

		· Because it is important for directors and auditors to have a broad knowledge base
Analyze and evaluate effectiveness at the board of directors	6	· Based on the analysis and evaluation results, to confirm what the issues are according to the board, and how plans to improve the issues will lead to future growth · Important for LTVC (adequate disclosure is scarce despite the emphasis on this point)
Corporate philosophy	4	· To understand the offensive aspects, which indicate what the company is aiming for in terms of future value creation, and the defensive aspects, which form the foundation · To understand the reasons the company exists, and the relationship with the ideal vision
Dialogue with shareholders and responses to shareholder feedback	5	· To relate to enhancement and improvement of initiatives

In addition, investor focus is on (1) whether the board of directors is composed of members who contribute to LTVC, (2) whether external directors enhance the effectiveness of governance, and (3) whether the information disclosed forms a basis for dialogue.

(i) Composition of Board of Directors Contributing to LTVC

- It is important to clarify the scope of the role of the board of directors. Skills, composition of external directors, functions of the board of directors (monitoring style, or executive style?) also change depending on the scope of the board of directors role. Even so, the substance, not the appearance, is important.
- We look at the governance format. The skills of the participating directors, and whether they are actually functioning, are important. Since this point is unclear if there are no public interviews, and difficult to understand when you are on the outside looking, disclosure of items that provide an overview of what was discussed and what the conclusions were would be good. It is important to disclose not only the format of risk preparation and committee functions, but how they actually function.

(ii) External Directors Enhancing Governance Effectiveness

- External director composition and membership is important. We place great importance on the skills and career background of external directors in connection with materiality and business strategy. There are differences depending on the role of the board of directors, but in case of a monitoring board, external directors do not need to go into the details of each topic of discussion. Rather, the focus should be on the ability to make decisions based on common sense as managers.

- As a premise, we understand that there are limits to evaluating effectiveness from outside, and that it is not possible to learn details from disclosure. Therefore, we think it is realistic to speculate about points that are not discernible from the outside by asking companies to enhance disclosure of the overall image, including external directors, skill matrices, or the big ideas behind external director appointments. But, if you come across statements in comments by external directors that show awareness of issues or raise problems, you can dig deeper when engaging with the company. We think it is difficult to ask companies to disclose such details, but some clues would be extremely useful.

(iii) Disclosure Linked to Dialogue

- To confirm the effectiveness of governance, we look at interviews with external directors in the integrated report, and at investor briefing sessions where external directors participate and provide explanations. In addition, we make complex judgments based on the content of discussions between expert analysts and external directors.
- It is difficult to understand governance effectiveness based on disclosure information alone. It is important for investors to pick out information from the disclosures that can be used for engagement, and on this basis, to communicate what they require, and hear directly from the company.
- It is possible to enhance certainty about governance effectiveness if the disclosure says as much as possible about the experience of the people on the board of directors, or what the board has discussed. Such information makes it easy to understand what is happening in the company, and can be used as a hook to ask about the situation in conversation with the company.
- Companies highlight what they can do and their strong points, but many of them do not actively include any issues in their disclosures. We think it is important to link to growth while deepening discussions based on disclosures because not writing anything may be perceived as lack of awareness. Conversely, we think it is difficult to find the right way to express issues.
- Investors are easily convinced if each company explains their own thoughts on governance. From the investor side, it is not essential to say that a specific format must be used. What is important is effectiveness. If the integrated report provides straightforward explanations of the issues and how to make improvements, we believe the individuality of the company is conveyed to people on the outside.

(3) Corporate Solutions and opinions

(i) Clarify the Mechanisms That Strengthen Effective Governance

- Disclose effective use of the PDCA cycle by disclosing evaluations of effectiveness and directors, and third-party opinions based on how issues recognized in the previous fiscal year were resolved in the current fiscal year.

- Companies try to link a part of executive remuneration to long-term, sustainable growth. However, it is extremely difficult to determine which specific ESG topic to evaluate, and which indicator to use.

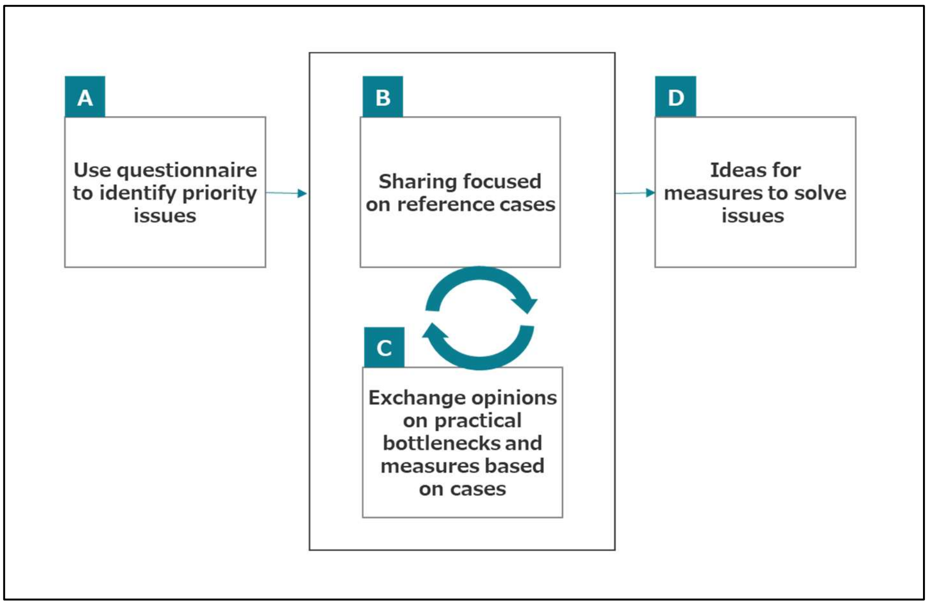
(ii) Explain Reasons for Appointing Committee Members

- If someone is appointed to a committee for the first time, indicate the skill set required to be on the committee, and the achievements of the persons concerned.
- Consider disclosing the reasons for dismissing a committee member to demonstrate effective governance.

4-5 In-House Understanding and DX

(1) Review Approach

We conducted a survey of companies participating in EDSG regarding issues with disclosure and production of integrated reports etc. Based on the results, we have identified the issues we would like to prioritize. Next, we explored ideas for problem-solving, and discussed solutions and approaches to resolving the issues based on reference cases related to the issues that were identified.



(2) Organizing the Issues

We conducted a survey of companies that participated in ESDG as issuers to identify which issues to prioritize in the ESG information disclosure task. Responses were received from 19 companies. The results are outlined in the table below. At EDSG, we identified the three issues that were mentioned most often as the issues to prioritize, and we explored approaches to problem-solving based on case studies of well-developed initiatives that have addressed these issues.

1. Inability to clearly explain the need for ESG information disclosure to in-house stakeholders
2. Uniform data formatting and definition
3. Make the data collection process more efficient

Issues to Prioritize

Make the data collection process more efficient (Collect at same time/level as financial information etc.)	53%
Inability to clearly explain the need for ESG information disclosure to in-house stakeholders	37%
Uniform data formatting and definition (Data is not global etc.)	32%
Insufficient response (governance etc.) to initiatives required by global standards	26%
Secure/improve information probability	21%
Ascertain stakeholders (investors etc.) for priority engagement	11%
Lack of clarity on dialogue to facilitate building effective relations with stakeholders. (How to disclose negative information, enforce the comply-or-explain mechanism etc.)	11%
Use/incorporate the outcome of dialogue with stakeholders in management	11%
Insufficient awareness of ESG information disclosure among management and other upper ranks in the company	5%
Other*1	11%

Note: Respondents: 19 companies (up to 3 answers per company)
*1 Other includes mainly:
- Collaboration and coordination with a wide variety of departments (strengthen communication, centralize sustainability information, operate efficiently etc.).
- Keyword searches and AI utilization at ESG rating bodies.
- Select media and develop disclosure media to match the target stakeholders.

(3) Responses to the Inability to Clearly Explain the Need for ESG Information Disclosure to In-House Stakeholders

We believe that the inability to clearly explain the need for ESG information disclosure to in-house stakeholders is closely connected to the degree of understanding of ESG management within the company. Here, we will introduce examples of activities at three companies to raise awareness of ESG management and improve cooperation with data collection.

(i) Sekisui House: In-House Penetration Measures from the Employee Perspective

Current Activities

At Sekisui House, the participation of all employees is one of the drivers to promote ESG management, and the company emphasizes that all employees should take ownership of the issue of ESG management. However, promoting understanding of basic content is problematic as some employees lack opportunities to develop understanding of ESG management and materiality. As an initiative to develop understanding of ESG, Sekisui House produces a guide to reading the integrated report for employees, and implements e-learning about materiality aimed at all employees.

The focus is on the employee perspective when producing the guide to reading the integrated report. Since it is difficult for the sales department to find the time to read the materials, the company uses a video format that can be viewed in a short time. The feedback for the initial 13-minute guide produced in 2020 was that the viewing time was too long. Taking account of this feedback, the company shortened the video for the 2021 version to about five minutes by focusing on the value creation process. They also took care to use plain language that all employees would find easy to understand. The video production was not outsourced, but all tasks including producing slides, and voice-over based on the scenario were assigned in-house. The video reflected opinions from the operating level, and was completed in less than two weeks.

Since the integrated report is positioned as information for investors that is disseminated outside the company, employees had previously shown little interest in it, but the number of employees taking an interest has increased with the shared guide to reading. Although the company still has to measure the effect on implementation, the feedback from employees has been positive (easy to understand etc.), and the company plans to continue the initiative.

Future Initiatives

The biggest challenge when instilling ESG in the company is to encourage employees to take ownership of ESG. Although this initiative has led to an increase in the number of employees taking an interest in ESG, there are still issues around measuring ownership. For example, it is easy to understand how eco-friendly products and other sustainability activities are directly linked to the business, but there may not be a direct link between the business and the social domain, so it is difficult to deepen understanding on this point.

It has only been two or three years since Sekisui House launched its ESG management initiatives, and we feel that many things still need to be addressed. So far, Sekisui House has focused on spreading the message to employees, but we believe it will be necessary to provide input to and involve management in the future.

Opinions of Companies

- We are not educating employees in materiality or how to read the integrated report, and we feel it is difficult to obtain the understanding and cooperation of the business department. We would like to explore ways to bring in this kind of education at our company. After the report is published, the team that publishes the integrated report collects feedback from institutional investors, or considers policies for the next fiscal year, so there is not enough time to investigate and implement measures for spreading the message in-house.

- We select particularly important sections of the report to share with employees in Japan and abroad, but the texts are not widely read, so we feel a video could be effective.
- Assuming that the steps toward in-house penetration are to get people interested, followed by empathy, action, and sharing, we can use workshops to measure interest, questionnaires to measure empathy, project performance to understand action, and lateral deployment to understand sharing.

(ii) AGC: Promote In-House Understanding Through the Production of the Integrated Report

Current Activities

At AGC, the Sustainability Division in the Corporate Planning General Division, the Environment, Occupational Health & Safety and Quality (EHSQ) General Division, and the Corporate Communications & Investor Relations Office form a secretariat for producing the integrated report in collaboration with all business divisions.

AGC started to produce its integrated report in 2019. The company has promoted a three-year plan by focusing on setting sustainability goals for the medium-term management plan starting in 2021. Firstly, the current Sustainability Division was set up within the organization that formulates policies and management planning across the whole company. In addition, with a company-wide top-down policy as the starting point, all measures were developed in stages and in step with the organizational culture to fully incorporate sustainability management in business operations.

Specifically, AGC mapped the SDGs in 2018. In 2019, the company analyzed trends in social issues, and identified important opportunities and risks for the business. In 2020, sustainability systems, goals, and progress were factored into the business strategy dialogue between management and the in-house companies, and the sustainability goals were incorporated into the business strategy. The medium-term management plan published in 2021 established promoting sustainability management as a key strategy.

In parallel with this, the company took steps to spread the message to employees. They published a series of columns on the SDGs, and posted videos promoting environmental awareness on the group website. By November 2021, the videos had been viewed 8000 times. In addition to a series introducing sustainability initiatives in the group newsletter, AGC is also raising awareness using paper media, such as a special issue on sustainability.

Aiming to encourage independent behavior, AGC is stepping up dialogue between management and employees, and have continued to organize these sessions online since the COVID-19 pandemic.

To spread awareness of sustainability management to each division, AGC plans to produce and develop a group newsletter to instill the 2022 integrated report in addition to conventional initiatives to raise awareness.

Future Initiatives

AGC has created a communication book to spread knowledge of sustainability management to all employees. It has been used for a range of activities to raise awareness, and has formed the basis for dialogue that senior management has with managers and employees.

At a time when sales declined for four years in a row, AGC managers took the initiative to create opportunities to engage in dialogue with employees in order to change the corporate culture. From there, young employees started to plan residential camp-style events to discuss business objectives for AGC, and invited the CEO to join them. This is how AGC created a corporate culture where it is easy for young people to speak up, and where young employees with a high level of awareness are acting on their own initiative to promote activities that spread awareness of sustainable management within the company.

The idea behind publishing a group newsletter to spread awareness of the integrated report planned for fiscal 2022 is to encourage people in the group, not only external stakeholders, to read the integrated report with the objective of deepening understanding of their responsibilities and the need to engage with sustainability and the future direction of the AGC group, and to reaffirm the new value they want to create. The objective is to communicate the kind of content the company presents to external parties, and to leverage this in the day-to-day business.

Video promoting environmental awareness posted on the website

<u>**Opinions of Companies**</u>

- AGC is looking at producing an integrated report for internal use to encourage people within the company, not only outsiders, to read the integrated report with the aim of reaffirming new value, and deepening internal understanding of sustainability. The case study was very insightful.
- The commitment to allowing employees to carry out sustainability initiatives of their own accord during working hours is a very interesting point as it broadens lateral networks within the company, and links to activities that indirectly benefit business operations.

(iii) Ajinomoto: Raise Awareness of Cooperation with Data Collection

<u>**Current Activities**</u>

Concerning ESG information disclosure, Ajinomoto is making efforts to improve the sense of cooperation among the persons responsible for collecting data at each department, in particular, the process of collecting environmental data. In the past, some departments were cautious about cooperating with environmental data collection out of concern about the impact on short-term business profits. Since the deadline for the goals set out in the Ajinomoto Group vision is 2030, the tendency to postpone action because of the lengthy time frame was also an issue.

For the former issue, Ajinomoto is fostering awareness of how to convert ESG initiatives into opportunities through acknowledgement at the Ajinomoto Group Shared Value awards, and by sharing examples that have provided opportunities to improve business profits.

In addition, senior managers at each business axis and regional axis with a strong impact at the operational level participate in the Sustainability Committee, which takes the lead on executing sustainability initiatives. As a result, Ajinomoto creates the power to drive sustainability initiatives in operational organizations (production organizations, overseas corporations), and hosts briefing sessions to share the environmental impact situation for each business and region, and to incorporate the issues and solutions in the annual planning.

Even if the medium-term goal is to reduce the environmental load by 50% by 2030, these briefing sessions facilitate the launch of specific initiatives by, for example, sharing data to suggest reductions are also necessary by 2025.

Opinions of Companies

- We have organized briefings at the operational level to involve the parties concerned. At the briefings, the actual explanations have gone well since the importance of disclosing environmental data is also understood at the operational level. On the other hand, we found that it is also necessary to improve the level of knowledge of the people doing the input.
- Since we are concerned about how our company is viewed from outside, and how we stand compared to other companies, we are gradually raising awareness of the importance of sustainability initiatives and information disclosure by regularly engaging with the departments concerned as pseudo-investors.

(iv) Summary

The three companies introduced here have come up with their own plans to get employees to take ownership of sustainability management, such as employee education, involvement in activities to create integrated reports or promote sustainability, or mechanisms to raise motivation. Specifically, the following are four points to take away.

- Ease of accessing information (videos without time restraints, use of e-learning)
- Ease of understanding (simple explanations)
- Take ownership (Link ESG to your own work and daily life. Create empathy)
- Create environment for spontaneous activities (understand managers, secure time for activities)

It takes time for ESG management to sink in, but these steady initiatives will ultimately promote understanding of the need for ESG information disclosure, which is both the key to making operations more efficient, and linked to reinforcing the management foundation to deliver the LTVC story.

(4) Responses to Uniform Data Formatting and Definition

Collecting accurate and high-quality information from all group companies in a timely manner is a requirement for making the task of collecting data for ESG information disclosure more efficient. The key to doing this is uniform data formatting and definition of data. Below, we introduce Hitachi's approach to human resources information.

(i) Hitachi: Using Global Shared Data Based on Advancing HR-tech Introduction

Current Activities

Hitachi is promoting digital HR based on the 2021 Human Resources Strategy formulated on the basis of the 2021 Mid-term Management Plan. Since fiscal 2012, Hitachi has been preparing the foundations for global human resources management, and built a global HR database to understand human resources across the group. In fiscal 2015, Hitachi introduced an integrated platform for human resources management as a mechanism to consolidate the policies for global human resource management previously introduced. The platform's scope has gradually expanded, and the current aim is to improve the visibility of human resources and to clarify the reporting line for 350,000 employees globally.

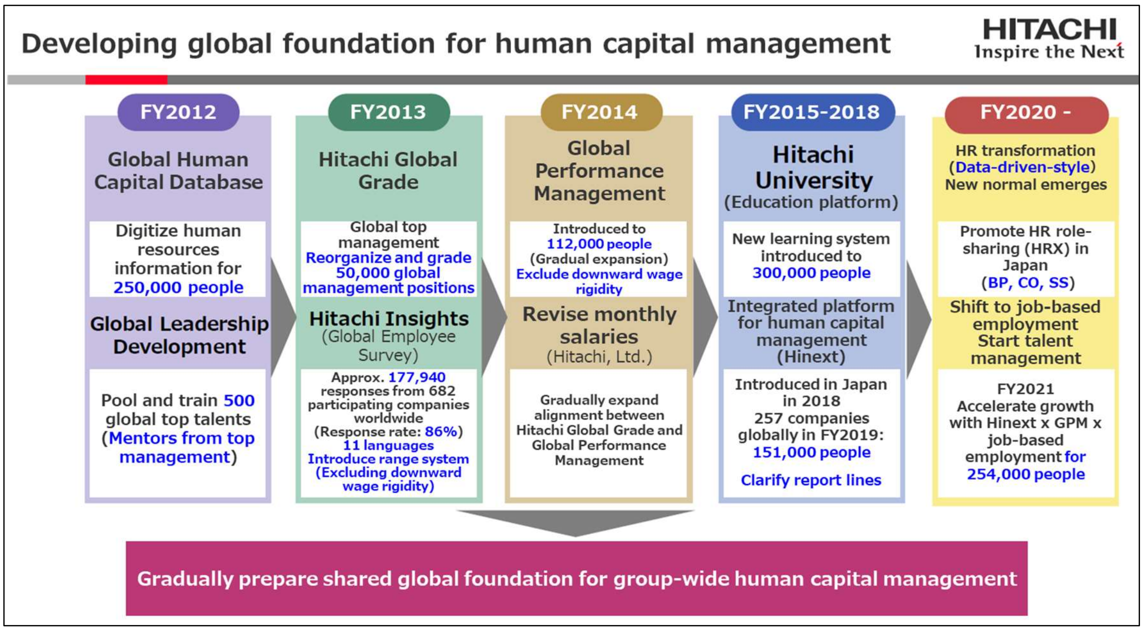
The HR department for the IT sector at Hitachi is working to quantify awareness of employee productivity and how people feel they fit with their assigned positions by implementing Hitachi People Analytics (HPA), an intra-departmental personalized survey that is focused on visualizing awareness of human resources, and aimed at continuous growth for the organization and its people. As a result, the correlation between awareness of productivity and performance has been clarified. As evidence of such data has accumulated, applications within the company have expanded, and an increasing number of departments have been implementing HPA for several years.

When HPA was first introduced, some employees expressed negative opinions, claiming nobody would respond to a personalized survey, and that sharing the results with superiors was unthinkable, but there was an increase in positive comments after the survey was implemented. For example, "It was a powerful communication tool during the COVID-19 pandemic," or "This initiative is needed to open up the company." In addition to using quantitative fixed-point observations to verify the effects of specific personnel measures, it is possible to understand changes in the state of the organization by drawing comparisons over time.

This data is important from the perspective of ESG information disclosure, and both the data and the initiative are covered in the sustainability report.

Future Initiatives

Hitachi has been conducting the anonymous Hitachi Insights global survey since 2013, and it is a survey that is focused on evaluating the organizational culture at the company and the management ranks from the employee perspective. Since the data is aggregated at the level of individual organizations, it is difficult to grasp the actual situation when the results are calculated as average values. This has presented difficulties when linking the survey results to next steps, so Hitachi started to develop personalized surveys. By committing to personalized surveys, the message from the company that “we want to fully understand each employee, and to maximize your strengths” made an impression on the employees. This was another advantage of personalized surveys, which led to culture change. The survey has become embedded as the effect and value of in-house personalized employee surveys has been recognized. The scope of data application is expanding and new trends are also emerging. For example, when there are major changes to the company organization, managers can retroactively request information about new subordinates from previous managers.



(Source: Hitachi documentation)

Opinions of Companies

- We recognize that quantitative KPIs for measuring the effectiveness of human resources investment need to be defined as ROIs if we consider human resources to be assets, but we are currently discussing them internally. There are various ways of thinking about evaluation axes and evaluation indexes, and it is recognized that how to define them is ultimately a matter of "decision".

- We were considering showing the quantitative KPI of human resources investment in monetary terms, but since the idea of paying salaries including self-investment costs is different between overseas and domestic, the way of thinking about education costs is different, so this axis is reexamined. I decided to do it.
- Regarding human resources investment, we gave up because there is education that can be taken free of charge, and it is difficult to make an accurate evaluation by simple monetary conversion. As the next candidate, we are considering focusing on time.

(ii) Summary

The Hitachi case study involves human capital, and issues such as persuading in-house employees, and data collection proved extremely difficult. With regard to uniform formatting and definition of data, the key to success was to create a track record in one department, not to suddenly roll it out across the company. That is, one approach to persuading in-house employees is to start by creating a minor success, and to build on this to gain sympathy within the company. With data collection, the point is to consider the merits of data providers. Tracking individuals creates a negative image of being managed, but the company solved the problem by demonstrating in advance that the reason was meticulous care for each individual. Since there are limits to human agency when handling large amounts of data, another important point was that the company looked at using information systems from an early stage.

(5) Responses to Making the Data Collection Process More Efficient

(i) Ajinomoto

Current Activities

Ajinomoto uses the human resources system, and the Ajinomoto Group Communication System for Environment and Safety (ACSES) to manage non-financial information. The structure is such that data entered at each office in Japan or at local subsidiaries overseas is absorbed into their respective systems. The data collected in these non-financial systems is kept to the minimum necessary, but since many items need inputting, input errors occur easily, and the burden of data checking has increased. In addition, different local systems are used at each overseas subsidiary, so the non-financial information is dispersed.

To deal with these problems, Ajinomoto is exploring the introduction of a new system to collect a wide range of non-financial information. The company aims to formulate and execute sustainability strategies based on real-time data to (1) deliver consolidated non-financial information (consolidate wide-ranging information), (2) visualize information (manage data on a dashboard), (3) improve speed and accuracy through automation (including linking to existing systems).

At present, the company is in the process of defining requirements and selecting vendors to introduce the new system, but data input/output is wide-ranging, the list of requirements is expanding, and data linkage to local subsidiaries is proving problematic.

Future Initiatives

At a minimum, Ajinomoto wants the potential new system to meet the GRI standard for information disclosure to external parties. Ajinomoto plans to collect the non-financial information needed to formulate strategy even if the items have not been requested by external parties. Since information disclosed to external parties is fluid, the system needs to have some flexibility.

A task force with members from all departments has formed a team to explore and introduce the new system. The task force is also in charge of defining the requirements. An operational team has been formed within the task force, but the Sustainability Development Department will be the main driver.

Opinions of Companies

- Collecting non-financial data is often done manually. We have built a global system to collect environmental data. In the past, in-house systems were individually optimized, and we feel that total optimization is an issue. We believe that the timing for the medium-term management plan will be a good opportunity for a review. We are currently in the process of formulating the medium-term management plan, and building a company-wide system is one of the key issues.
- We have a unified system for the environment and HR departments, so we can handle basic disclosure. However, we believe that the scope for human capital disclosure, in particular, will broaden in the future, so we expect to face challenges in defining requirements, such as the extent to which the system can be used, or the possibility that society may demand more than we can disclose.
- From the perspective of information accuracy, it is important to prevent input errors. We have a mechanism that issues alerts for possible data input errors, but since the alerts may be ignored by the person inputting data, the data collector also needs to be more sensitive to oddities in the data.

(ii) Summary

Few companies have built data collection systems, and many companies are also struggling to collect data. Some examples of measures to implement accurate and efficient data collection include motivating frontline departments, participation by business managers, and improving the input data sensitivity of the person inputting data.

Since non-financial information is fluid, it is difficult to pinpoint the items. Companies are asked to use their own discretion to decide what data should be aggregated based on the data needed to explain the LTVC story, or the data required by international frameworks, laws and regulations. Systematization is a promising method of making data collection more efficient.

(6) Summary

<u>Opinions of Companies</u>

After the four company presentations, member companies made the following comments.

- At our company, management is also regularly involved in committees, but we try to move the discussions beyond simply sharing the social situation to what is required of each department, and what initiatives the company needs to take. We felt that it was necessary to involve employees in dialogue, rather than unilaterally handing down decisions.
- Awareness differs since the management and the business departments are exposed to different information. Raising management awareness was an issue at our company until a few years ago, but now we are extremely motivated. The issue for the future will be how to provide input to employees.
- If you are a manager, you have many points of contact outside the company, and you recognize the importance of looking at trends in society, but incorporating this into the business departments requires action from within the company.
- We feel that working toward in-house penetration is a particularly difficult point. Measuring the effect of in-house penetration policies is important for setting goals and understanding progress, but there are still difficult problems. For example, how to quantify the outcome of questionnaires.
- We feel that a presence on the ground and tackling one issue at a time is, ultimately, a shortcut to creating a corporate culture.
- At our company, the promotion committee meets quarterly for in-depth discussions about employee autonomy. The case study is about having employees take ownership and become accustomed to ESG management. These issues are certainly shared by all member companies.

<u>Insights Gained from the Company Case Studies and Relevant Departments</u>

The table below summarizes the insights gained from the four company case studies. It is clear that many measures tend to involve several departments.

Issues to Prioritize		Insights Gained	Main Relevant Departments *				
			Management	Sustainability	IR	Business	Others
Inability to clearly explain the need for ESG information disclosure to in-house stakeholders	1	(ii) Use in-house integrated reports and spend time promoting communication between top management and employees to encourage penetration	✓		✓	✓	
	2	(ii) Endeavor to create a corporate culture where employees find it easy to voluntarily speak up	✓		✓	✓	
	3	(i) Planning and preparing measures while keeping feasibility in mind (role-sharing that considers member characteristics, choice of outsourcing or in-house production)		✓	✓		
	4	(i) Design effectiveness measurements to match the aims of in-house penetration policies		✓	✓	✓	
	5	(i Develop measures that take account of stakeholder (employee) standpoints		✓	✓	✓	
	6	(i) (iv) Start small from one department, expand and execute measures while accumulating case studies		✓	✓	✓	✓
	7	(ii) Ask business departments to voluntarily consider sustainability targets rather than having them imposed by management		✓	✓	✓	
	8	(iv) Mission for controlling officers, concurrent posts etc.	✓				
	9	(iii) Develop measures to involve employees through commitment by top executives	✓			✓	

Uniform data formatting and definition	10	(i) Use standards of official bodies (ISO etc.)		✓			
	11	(iv) Collect data by using information systems		✓			✓
Make the data collection process more efficient	12	(iii) Plan and execute while recognizing that introducing systems takes time and a budget		✓			
	13	(iii) Design optimized system based on cooperation with existing in-house systems		✓			✓
	14	(iii) Think of ways to motivate the person inputting data for information provision (e.g., comparison between departments facilitates understanding your own progress)		✓		✓	
	15	(iv) Consider merits of data providers (empathize with each individual)		✓		✓	

* Main Relevant Departments: Management, Sustainability (Sustainability Development Department), and Other (HR, financial, IT departments etc.)
Note: Case studies: (i) Sekisui House, (ii) AGC, (iii) Ajinomoto, (iv) Hitachi,

As a result of exploring leads on how to effectively and efficiently handle information disclosure from the perspective of businesspersons, we found that where topics such as in-house understanding of information disclosure and responses to DX are concerned, many companies share issues such as where to start, and what methods to use.

As for where to start, one idea is to start by providing a space where managers with limited time to spare can learn about sustainability (ESG) with the aim of consolidating intentions within the company. ESG information disclosure and sustainability management are indivisible, so it is necessary for the whole company to work together to increase long-term corporate value.

Next issue is what methods to use. In terms of environmental themes that require information disclosure, there is a tendency to emphasize issues such as biodiversity and conserving the water environment in addition to carbon neutrality, so the workload of corporate disclosure departments is increasing with every year. Since there are limits to what disclosure departments and sustainability departments can accomplish on their own, it is essential to move forward in cooperation with parties inside and outside the company. Above all, it is important to cooperate with business departments as the long-term corporate value improves when business departments take ownership of the issues. The promotion systems and information systems must have flexibility and scalability since the key ESG themes required in the future will vary with each company.

5 Non-financial Indicators in Long-Term Value Creation

Every company has its own unique long-term value creation (LTVC) story. This is why the indicators required to explain the story need to be set by the company itself. That being said, while there are some non-financial indicators that a company may have in common with other companies, such as those that are considered important for all industries, or those that have significance across a certain industry, there will also be indicators that exist to describe an individual company's unique situation. All of these are important indicators for illustrating a company's value creation story, and when a company uses them, it can further enhance investor understanding by explaining why they are being used and how they should be understood.

While indicators should ideally be quantitative, qualitative indicators are also acceptable if something is difficult to quantify. What is important is that a convincing explanation of LTVC is provided. When considering indicators it is a good idea to give consideration to their connection to financial impact.

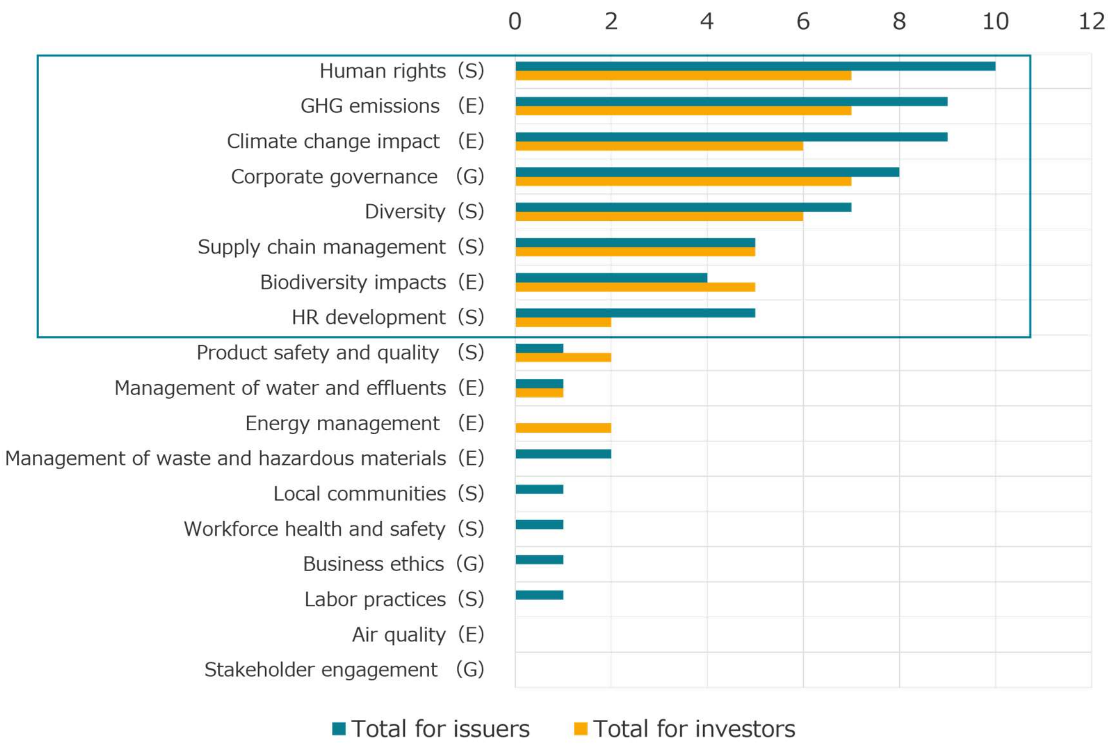
To deliver on an LTVC story it is imperative for both the company itself and its investors to deepen their understanding of the various types of indicators. Here these are classified into indicators common to all industries, industry-specific indicators, and individual company indicators, which are discussed from the perspectives of both companies and investors.

5-1 Indicators Common to All Industries

	Perceptions
Indicators common to all industries	・Indicators that are linked to protecting value for companies in all industries, with some that can be converted to amplify long-term corporate value. ・However, even if indicators are considered to protect value at the present point in time, which indicators are considered common to all industries also change with the passage of time and social changes.

(1) Deciding Specific Themes for Consideration

In order to select specific themes for consideration, starting from a list of 18 themes common to all industries, the ESG Disclosure Study Group (EDSG) used a questionnaire to drill down these themes to a final total of eight. The questionnaire first set non-financial indicators for each common theme, based on the Global Reporting Initiative (GRI) theme, and companies and investors were asked to respond about the themes common to all companies that they have been paying particular attention to over the next three years, and the necessary indicators . The results are set out in the table below.



(2) Environment

In the category of environment, the following themes were considered: (i) GHG emissions and climate change impact, and (ii) biodiversity impacts.

(i) GHG Emissions and Climate Change Impact

The table below lists the GRI disclosure items relating to GHG emissions and climate change impact and their respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
GHG emissions	305-1 Direct (Scope 1) GHG emissions	a. Gross direct (Scope 1) GHG emissions in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.
	305-2 Energy indirect (Scope 2) GHG emissions	a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent. c. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.
	305-3 Other indirect (Scope 3) GHG emissions	a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO_2 equivalent. b. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent. d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. e. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. g. Standards, methodologies, assumptions, and/or calculation tools used.
	305-4 GHG emissions intensity	a. GHG emissions intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.
	305-5 Reduction of GHG emissions	a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Base year or baseline, including the rationale for choosing it. d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). e. Standards, methodologies, assumptions, and/or calculation tools used.
Climate change	201-2 Financial implications and other risks and opportunities due to climate change	a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: i. a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii. a description of the impact associated with the risk or opportunity; iii. the financial implications of the risk or opportunity before action is taken; iv. the methods used to manage the risk or opportunity; v. the costs of actions taken to manage the risk or opportunity

Discussions on this theme were held based on these reporting requirements, and the following opinions were voiced.

Investor opinions	• Climate change presents both risks and opportunities (which differ depending on the industry concerned). • When assessing from a risk perspective, it is usual to look at risks (lowered corporate value) relating to raw materials, emissions reductions and transition to carbon neutrality. As corporate value can be enhanced if costs can be absorbed it is important to disclose such processes as part of the corporate story, which will come to be evaluated as an opportunity over the long term. When evaluating opportunities, the tendency is to look at technological skills

	relating to decarbonization. If effective decarbonization technologies could be commercialized, this would serve to enhance corporate value. ・ It is preferable to disclose milestones for GHG reductions, setting dates such as 2030 or 2050. ・ The first thing that we want to know in any scenario is the financial impact, or in other words the impact on sales and profitability. ・ From perspectives such as business continuity and crisis management, it is also important to explain how the various risks that exist within the supply chain are being managed. ・ Although GRI disclosure items provide a source of reference, that does not mean we want all companies to make disclosures about all items. This is because the material topics will change depending on the business model or industry. It is necessary to put the impact that climate change is anticipated to have on an individual company's business into the context of the Task Force on Climate-related Financial Disclosures (TCFD) framework. ・ Depending on individual company circumstances it may or may not be possible to quantify financial impact, but without understanding the financial impact when a risk materializes it is difficult to make a positive assessment. Ultimately quantitative disclosure is the preferred option. ・ The overriding impression is that Japanese companies provide scant information about their governance initiatives. Given the importance of the board of directors grasping climate-related risks and opportunities and incorporating these into corporate strategy, greater disclosure about the board's commitment would be ideal, such as on the board's degree of involvement, and how monitoring systems are actually structured (more than merely stating that "reports are received").
Company opinions	・ Our disclosures are based on the TCFD framework, and are focused on the disclosure of information relating to governance and risk management. ・ We do not simply follow the items as set out in the TCFD final report, but rather compile a structure that facilitates the

	dissemination of our story, including recording the indicators and targets that need to be recorded in a strategic manner. ・ We are considering the compilation of a roadmap to the formulation and achievement of long-term goals based on the GHG Protocol. ・ Financial impact is difficult to quantify and therefore quantitative disclosures are not currently provided. ・ Although we recognize there are many opportunities, it is difficult to measure opportunities quantitatively or to identify what kind of business or operations would contribute to the environment. Environmentally friendly products each have their own distinct lifecycles, and it is very costly to aggregate these. We are considering what kind of KPIs would be most appropriate to enhance corporate value (In response, investors commented that in addition to listing up the number of products and sales information, one idea would be to explain the allocation status of management resources, such as R&D expenses).

The TCFD recommendations are the de facto standard for disclosure on climate change-related matters. However, investors point out that among the four core elements recommended for disclosure in the TCFD recommendations, information from Japanese companies is particularly lacking in terms of governance (involvement of the board of directors) and strategy (quantification of financial impact). In the area of governance, Japanese companies should increase disclosure of how the board is involved in climate change-related initiatives (status of commitment), more than merely stating that reports are received by the board. In terms of the quantification of financial impact, while this is something that investors are keen to see, the current reality is that quantification is extremely challenging for companies. Responses to this could include the following: disclosing figures that are subsequently broadened in an incremental approach, starting from areas where it is possible to respond and where impact will be greatest, or explaining why quantification is not feasible at the current point.

As a measure that would contribute to a company's own value creation, when explaining climate change responses from a long-term perspective it could be effective to formulate and disclose long-term goals, and a roadmap or milestones. In addition, from the perspective of risk management, companies are also required to explain how they are managing risk in their overall supply chains.

(ii) Biodiversity Impacts

The table below lists the GRI disclosure items relating to biodiversity impacts and their respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Bio-diversity	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	a. For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information: i. Geographic location; ii. Subsurface and underground land that may be owned, leased, or managed by the organization; iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas; iv. Type of operation (office, manufacturing or production, or extractive); v. Size of operational site in km^2 (or another unit, if appropriate); vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem); vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation).
	304-2 Significant impacts of activities, products, and services on biodiversity	a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following: i. Construction or use of manufacturing plants, mines, and transport infrastructure; ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources); iii. Introduction of invasive species, pests, and pathogens; iv. Reduction of species; v. Habitat conversion; vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level). b. Significant direct and indirect positive and negative impacts with reference to the following: i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts.
	304-3 Habitats protected or restored	a. Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals. b. Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures. c. Status of each area based on its condition at the close of the reporting period. d. Standards, methodologies, and assumptions used.
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk: i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern

Discussions on this theme were held based on these reporting requirements, and the following opinions were voiced.

Investor opinions	• There is a strong tendency to perceive biodiversity as a risk. However, it is being viewed as an opportunity by companies that are creating new businesses, and by companies that are able to utilize resources that have not previously been considered to be of value. • We recognize biodiversity as a hot topic on the agenda for discussion, but there are as yet no global standards, and specific measures are still only at the stage of being considered (further debate is required on what indicators financial institutions should look at).

	• We recognize that basically this is a theme that is organized within the same framework as TCFD, and the GRI indicators are considered to be no more than a reference. Climate change also impacts natural capital, and there is a possibility that it could be placed within the overarching framework of the Taskforce on Nature-related Financial Disclosures (TNFD). Currently, however, climate change and biodiversity are reported separately, and it would be easier for investors to understand if their mutual interrelationship were to be reported. • Qualitative information on governance is considered to be the most important common indicator of biodiversity. Companies need to disclose what impact their business is having on biodiversity, how management is involved in addressing that impact, and what decisions are being made. When reporting it is important to include not just the individual company, but to consider the wider value chain. • As this is a highly specialist area, we recognize that it would be beneficial to incorporate a third-party assessment. • As initiatives in this area are likely to be more advanced outside Japan, if there is a higher degree of priority in those businesses, then it would be useful to disclose information in the regions concerned. • In project finance, the financial impact of biodiversity is viewed as part of the environmental assessment.
Company opinions	• Biodiversity is handled as natural capital in the value creation process. • Biodiversity impacts are identified throughout the value chain, and the main disclosure items are the risks and measures that are being taken. • Disclosures currently only introduce measures relating to biodiversity and we have yet to go deeper into the impact and risks for biodiversity. • Although we use the GRI indicators as a reference, we have set our own environmental indicators to minimize environmental burden.

	• Given that overseas an important indicator for biodiversity is "no net loss," we recognized that one option we have is to aim for neutrality with respect to natural capital. • It is necessary to focus not just on recovery of biodiversity, but also give consideration to regeneration initiatives, which is something frontrunner companies are doing. • In comparison with climate change, there is a perception that biodiversity impacts are something that build up locally. A future challenge will be to find methods of expression relating to such issues as the concept of footprint and business-specific disclosure.

With regard to biodiversity-related reporting, both investors and companies recognize that, fundamentally, disclosure is to be advanced in accordance with TNFD, a framework similar to the TCFD recommendations. However, as investors still do not have sufficient accumulated knowledge on the issue, how biodiversity-related issues will be assessed in the future is a matter that is still under consideration. Companies also recognize the need to respond to TNFD in the future, but are still searching for ways to respond at the working level (e.g., not CSR-like activities, but rather specific risk and opportunity analysis, goal setting, and linkage to value creation, etc.).

While there are some aspects of biodiversity that may be considered opportunities, it is anticipated that the main inclination is to perceive biodiversity-related matters as a risk. Although biodiversity impacts vary according to industry, one area where biodiversity-related disclosure should use common indicators is governance. This is why individual companies are required to first understand the degree of impact and the degree of dependence of their business activities, and then disclose what kind of decisions have been made in response.

It is currently the case that companies are, while referring to existing indicators, identifying biodiversity impacts in the value chain and setting their own environmental indicators. Looking ahead, in addition to maintaining a perspective on recovery of biodiversity, in order to realize "nature positive" and "no net loss," companies will be required to engage in proactive efforts not only for the maintenance and conservation of biodiversity, but also towards its recovery.

(2) People

In the category of people, the following themes were considered: (i) human rights (including supply chain management), (ii) diversity, and (iii) human resources development. The use of human capital, particularly the combination of capabilities, hiring including experienced personnel, and the use of outside personnel, was not necessarily fully considered in this study, and there is further potential for further discussion in the future.

(i) Human Rights (Including Supply Chain Management)

The table below lists the GRI disclosure items relating to human rights and their respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Human rights	408-1 Operations and suppliers at significant risk for incidents of child labor	a. Operations and suppliers considered to have significant risk for incidents of: i. child labor; ii. young workers exposed to hazardous work. b. Operations and suppliers considered to have significant risk for incidents of child labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. c. Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labor.
	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.
	410-1 Security personnel trained in human rights policies or procedures	a. Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security. b. Whether training requirements also apply to third-party organizations providing security personnel.
	412-1 Operations that have been subject to human rights reviews or impact assessments	a. Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country.
	412-2 Employee training on human rights policies or procedures	a. Total number of hours in the reporting period devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations. b. Percentage of employees trained during the reporting period in human rights policies or procedures concerning aspects of human rights that are relevant to operations.
	412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	a. Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening. b. The definition used for 'significant investment agreements'.
	406-1 Incidents of discrimination and corrective actions taken	a. Total number of incidents of discrimination during the reporting period. b. Status of the incidents and actions taken with reference to the following: i. Incident reviewed by the organization; ii. Remediation plans being implemented; iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes; iv. Incident no longer subject to action.

Discussions on this theme were held based on these reporting requirements, and the following opinions were voiced.

Investor opinions	• Human rights is viewed from a risk perspective. • We would like to see and understand what human rights-related risks are recognized on the management side, and the means (structures) in place to respond to such risks. We would also want to see how a company responded to the previous year's issues, and

	if there were any human rights violations, what progress has been made to improve the situation. ・ In addition to disclosures on human rights policies, human rights impact assessments, and human rights due diligence processes, it would help investors to understand that a company is respecting human rights by also going as far to include post-monitoring results in disclosures. ・ Also with regard to globally-recognized human rights KPIs (e.g., items in Principal Adverse Impact (PAI) statements in the EU), it is important for Japanese companies to get up to speed and work to make disclosures that are in line with the rest of the world. ・ Human rights is a theme that is often raised of late, but is one about which investors have insufficient accumulated knowledge. We are at the stage of exploring best practices for preferred disclosure methods, through dialogue with companies. ・ In terms of grievance mechanisms, we are aware that few companies have any such mechanisms in place currently. We expect initiatives and disclosure in this area in the future. ・ Mapping that sets out a company's recognition about where in the supply chain human rights-related risks are highest would make the issue easier to understand. The method of mapping itself would demonstrate a company's concept and approach to human rights and would be an important piece of non-financial information. ・ "Human rights and diversity" is positioned as an important ESG topic. Related keywords include: equality, equal opportunities, inclusion, and diversity. ・ The provision of services and products based on a supply chain that is fully human rights compliant could lead to enhanced brand value through the incorporation of ethical products.
Company opinions	・ The reality is that this theme is still not recognized as a key driver for LTVC. ・ Although we want to link human rights to LTVC, as yet only modest results are being reported. ・ Although we could set a goal of having every employee take human rights-related training, we are concerned whether such superficial goals would be sufficient. We are engaged in constant

	deliberations about what is truly necessary in order to reduce human rights-related risks. We also feel that it is very difficult to find the right wording when making disclosures about such matters. • We recognize this theme to be one that requires a diligent, rather than progressive approach. It is important to respond fully to society's demands in this regard. • Another future challenge and one that has yet to be disclosed is a policy in the event that a severely negative impact on business occurs.

Investors basically evaluate companies' initiatives on human rights from a risk perspective. However, it can be inferred from the opinions of companies that they are searching for ways to express themselves in their disclosures. In addition, diversity, which will be discussed later, has been attracting attention as a keyword related to human rights.

(ii) Diversity

The table below lists the GRI disclosure items relating to diversity and their respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Employ-ment and diversity	102-8 Information on employees and other workers	a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees. e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries). f. An explanation of how the data have been compiled, including any assumptions made.
	401-1 New employee hires and employee turnover	a. Total number and rate of new employee hires during the reporting period, by age group, gender and region. b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.
	405-1 Diversity of governance bodies and employees	a. Percentage of individuals within the organization's governance bodies in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups). b. Percentage of employees per employee category in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).
	405-2 Ratio of basic salary and remuneration of women to men	a. Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation. b. The definition used for 'significant locations of operation'.

Discussions on this theme were held based on these reporting requirements, and the following opinions were voiced.

Investor opinions	• Diversity is basically viewed as an opportunity.

	• It is not enough to describe diversity in quantitative information alone. Rather, it is important to provide qualitative information to underpin the quantitative data, including addressing why diversity is important, what goals are and their current status (actions and issues). In addition, all required quantitative data should be disclosed. • It is important to provide explanations about how diversity-related measures will lead to LTVC. • Commitment on the part of top management is also crucial. • Diversity priorities will change depending on the type of business and the region where business takes place, therefore it would be preferable to also disclose quantitative data that describes what initiatives are being implemented and where (e.g., classified by segment, etc.). • Although the importance of diversity may vary depending on the situation in which the company finds itself, in the case of a company engaged in global business, it would also be preferable at the very least to monitor global developments and remain in step with such developments in reporting. • Given that human capital investment is something that by its very nature takes time, this is a theme that is assessed over time. • For Japanese companies, it is important to separate disclosures by operations in and outside Japan.
Company opinions	• Information on the purpose of diversity and diversity-related goals is more important than quantitative information. • It is difficult to explain how promoting diversity will link to LTVC. • It is difficult to collect quantitative information and in particular cross-company information, including subsidiaries. • Given different priorities and challenges depending on country and region, it is difficult to set uniform targets globally. • Given that diversity covers a variety of areas not limited to gender, but also including the employment of differently abled people and LGBTQ+-related topics, etc., we are still exploring the extent to which information should be disclosed. • By tackling diversity we have been able to secure outstanding human resources who share our vision.

Investors expect it important for companies to provide not only quantitative information in isolation, but to provide qualitative information that underpins the quantitative figures, such as the relationship between corporate strategy and diversity. They also place importance on explaining how diversity-related measures lead to LTVC. Given that diversity priorities will change depending on the type of business and the region where business takes place, investors also require quantitative information to be disclosed in aggregated units that are relevant for the situation of the company in question, such as by region, etc.

Although companies do feel the necessity to report the items pointed out by investors, opinions were also voiced that due to the difficulty in explaining how the promotion of diversity will lead to LTVC and issues that differ by country and region, it is difficult to engage in group-wide activities and to collect information.

(iii) Human Resources Development

The table below lists the GRI disclosure items relating to human resources development and their respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Human resources develop-ment	404-1 Average hours of training per year per employee	a. Average hours of training that the organization's employees have undertaken during the reporting period, by: i. gender; ii. employee category
	404-2 Programs for upgrading employee skills and transition assistance programs	a. Type and scope of programs implemented, and assistance provided to upgrade employee skills. b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.
	404-3 Percentage of employees receiving regular performance and career development reviews	a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.

Discussions on this theme were held based on these reporting requirements, and the following opinions were voiced.

Investor opinions	• Human resources development is basically viewed as an opportunity. • It is important to report not only quantitative information, but also to present a story that comprises qualitative information, including the company's ideal vision, the image of human resources required to realize that vision, policies for developing such human

	resources, and the actual measures that are being conducted, together with progress status and any issues arising. ・ It is also important to explain how human resources development measures will lead to LTVC. ・ We want to know the overall structures through which and how broadly the company communicates and disseminates not only knowledge but also corporate philosophy, overall management strategy, and its vision to its employees. ・ It would also be useful to disclose discussions in the board of directors relating to human resources development (e.g., human resource portfolios, response measures if there are gaps between the current situation and the ideal vision, and methods for reviewing human resources development measures if they need to be revised). ・ A useful explanation method would be to demonstrate the connection between human resources development and top management succession plans or the board skills matrix. ・ In addition to human resources development measures themselves, it is also important to explain about employee engagement and how measures are linked to employee satisfaction. ・ It would also be beneficial to disseminate the ideas top management has about human resources development. ・ Given that the image of required human resources will vary according to business content and region, it would also be useful to disclose information not just on a consolidated basis, but also on a segmentalized basis. ・ As an alternative indicator for ROI on human resources investment, it would also be useful to report on the financial amount invested in human resources (including target of investment and details) and the effect of such investment. ・ As the effects of human resources development require time to materialize, it would be preferable to report quantitative information over time.
Company opinions	・ We have not been able to create a qualitative narrative about such points as the significance of the quantitative information we

	disclose. We have also not yet explained sufficiently in disclosures about how human resources development links to LTVC. • It is difficult to collect data comprehensively, including information held at group companies and even data that is held in departments other than the personnel department at company headquarters, and it is also difficult to calculate quantitatively the effect of human resources development. • We have come to understand that the effect of human resources development has been to increase performance as employee engagement increases in line with understanding and awareness of a company's purpose, and we are focusing our reporting based on that point.

As background to the quantitative information that is provided, investors want companies to present a qualitative narrative, including such information as the ideal vision of the company and the image for required human resources. Investors also believe that it would be a good idea to report on management commitment to and degree of involvement in human resources development, and to demonstrate links to succession plans and board skill matrices.

Although companies find it difficult to quantify the effect of human resources development measures, they do want to incorporate qualitative information in some form to present how human resources development links to a company's LTVC.

(3) Governance

Twenty indicators relating to corporate governance have been set under the GRI.

EDSG classified these various items into the following three themes for discussion by investors and companies from their respective standpoints: (i) roles and responsibilities required of the board of directors to deliver LTVC, (ii) risk management by the board of the directors, and (iii) corporate governance structures.

(i) Roles and Responsibilities Required of the Board of Directors to Deliver LTVC

The table below lists the GRI disclosure items relating to the role and responsibilities of the board of directors required to deliver LTVC, and the respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Roles and responsibilities required of the board of directors to deliver LTVC	102-20 Executive-level responsibility for economic, environmental, and social topics	a. Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body.
	102-21 Consulting stakeholders on economic, environmental, and social topics	a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.
	102-26 Role of highest governance body in setting purpose, values, and strategy	a. Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.
	102-29 Identifying and managing economic, environmental, and social impacts	a. Highest governance body's role in identifying and managing economic, environmental, and social topics and their impacts, risks, and opportunities – including its role in the implementation of due diligence processes. b. Whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental, and social topics and their impacts, risks, and opportunities.
	102-31 Review of economic, environmental, and social topics	a. Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities.
	102-32 Highest governance body's role in sustainability reporting	a. The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.

Discussions among investors and companies on this theme were held based on these reporting requirements, and the following opinions were voiced.

Investor opinions	• If disclosures included information on the kind of discussions that are taking place within the board, it would create a sense of realism. • The key point is how the board is monitoring value creation processes. What we want to see is the basic concept on governance. • We are looking at the functions the board is taking on in the LTVC process and in what areas (we of course understand that the board cannot do everything). Companies should set out their ideal vision, how that vision would serve to create value, and how that value is being created, as part of the responsibility of the board. • It is also important to understand what roles the board is taking on (e.g., management, monitoring, etc.) and the actual level of engagement in agenda items and time spent on these. • What is being reported is important, rather than simply increasing the number of items covered in integrated reports. Reporting on all the GRI items is too detailed.
Company opinions	• In ESG discussions the items considered and approved by the business execution team are being monitored. In addition, the

	content of discussions is being reported, in combination with ESG and financial information. ・ In order to explain the board's roles and responsibilities we disclose the agenda items raised at board meetings (at a general level). ・ Although we are endeavoring to coalesce our various responses into one coherent explanation, including disclosures in the integrated report on the details of discussions and reports, as well as the opinions of external directors, there are still ways we could improve in terms of linking together non-financial indicators and value creation. ・ We need to clarify what skills directors have and whether they are able to supervise or execute operations. This is a topic that is being discussed internally. We feel that one challenge is that there was not a situation in which the selection criteria for directors were made clearly transparent.

Investors require the roles and responsibilities performed by the board to deliver a company's LTVC to be clearly articulated. Roles will change depending on whether the board places precedence on executive functions or on monitoring functions. Companies should firstly set out clearly their basic concept of governance and explain the functions of their board of directors. The next priority is to organize the skills of the directors who make up the board from the perspective of creating long-term value for the company, and explain that the company appoints directors who possess the requisite skills. Investors also believe that being able to confirm what is being discussed by the board is useful in assessing its effectiveness.

Among investors there are some who think that the reporting requirements are too detailed. These people do not believe that a company that does not provide detailed information about all reporting requirements is failing to fulfil its accountability.

(ii) Risk Management by the Board of Directors

The table below lists the GRI disclosure items relating to risk management by the board of directors and their respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Risk manage-ment	102-30 Effectiveness of risk management processes	a. Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental, and social topics.
	102-33 Communicating critical concerns	a. Process for communicating critical concerns to the highest governance body.
	102-34 Nature and total number of critical concerns	a. Total number and nature of critical concerns that were communicated to the highest governance body. b. Mechanism(s) used to address and resolve critical concerns.

Based on these reporting requirements discussions on this theme were subdivided into "risk identification," "risk management," and " response to items of critical concern," and the following opinions were voiced.

Risk Identification	
Investor opinions	• In addition to the identified risks themselves, it would be a good idea to explain the reasons and processes for identification. • Identifying risk requires not just a short-term perspective, but also a long-term perspective. • It would be a good idea to provide explanations about internal risk communication mechanisms that are used to identify risks (mechanisms for receiving risk information from each business entity, and in particular to flag risks that have a high probability of materializing). • Given the likelihood that companies' priorities relating to risk will change in line with annual changes in the business environment, it would be useful to understand the details of discussions on risk priorities. • It would be a good idea to provide explanations not just about risks, but also about visible threats, countermeasures, and the opportunities that lie behind the risks. • One way could be to devise methods of disclosure that correspond to the level of risk (e.g., including high-risk items in the top management message).
Company opinions	• Currently there is insufficient reporting on long-term risks, the basis for risk identification, and disclosure corresponding to the level of risk.

	・ For newly-identified risks, it is particularly difficult to choose appropriate wording for reporting on the basis for risk identification and countermeasures. ・ In a committee that is chaired by the president who exerts executive control, among the risks identified by each business entity, those that are likely to have a particularly large impact are identified, assessed, and analyzed, with findings referred to or reported to the board.
Risk Management	
Investor opinions	・ Based on risk perceptions in the workplace, we want to know how the process leading to specification of critical risks is tiered, structured, and whether it is functioning. Reporting on actual case studies would also be useful. ・ In order to demonstrate the effectiveness of risk management processes, it would be a good idea to report over the course of successive years, rather than just on a single year, for items such as responses to identified risks, current initiatives and issues arising, and the progress status overall. ・ Disclosing the extent to which ESG-related items and materiality are discussed in board meetings would provide an indication of the degree to which the company is actually engaged in such issues. ・ Disclosing the observations made by external directors helps to demonstrate the involvement of the external directors.
Company opinions	・ In order to demonstrate the effectiveness of risk management it is important to provide more explanations about specific solutions, issues, and the status of improvements. ・ Currently, there is insufficient reporting about such matters as what the company is actually doing to address risk, what specific topics are being discussed within the company, and the allocation of time by the board to risk-related matters. Furthermore, there is insufficient reporting that is based on the clear identification of the roles of directors and executive officers. ・ Although we recognize the need to ensure the active involvement of external directors, this is not being sufficiently implemented currently.
Response to Items of Critical Concern	

Investor opinion	• We want to know specific details about whether risks have materialized, and if so, what the response policy has been, together with the response status, and structures designed to prevent recurrence.
Company opinion	• In terms of structures to prevent recurrence, at present we only cite such measures as internal education and training, so it is necessary to report specific measures.

Investors would like to see disclosures about the risks that are discussed by the board of directors, and the decisions made by the board about the effectiveness of risk management processes. Accordingly, it is important for companies to explain carefully about whether reports to the board being made through appropriate processes about risks that are recognized in the workplace are resulting in the identification of high-impact risks, whether the processes themselves are functioning, and also how the board functions in response to items of critical concern (about materializing risks), without simply leaving recurrence prevention measures to those in the workplace. Investors also expect reference to be made to the active involvement of external directors.

(iii) Corporate Governance Structures

The table below lists the GRI disclosure items relating to corporate governance structures designed to promote LTVC, and the respective reporting requirements.

Theme	Indicator Common to All Industries (B) (GRI Disclosure Item)	Reporting Requirements
Corporate governance structures	102-18 Governance structure	a. Governance structure of the organization, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.
	102-19 Delegating authority	a. Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.
	102-22 Composition of the highest governance body and its committees	a. Composition of the highest governance body and its committees by: i. executive or non-executive; ii. independence; iii. tenure on the governance body; iv. number of each individual's other significant positions and commitments, and the nature of the commitments; v. gender; vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation.
	102-23 Chair of the highest governance body	a. Whether the chair of the highest governance body is also an executive officer in the organization. b. If the chair is also an executive officer, describe his or her function within the organization's management and the reasons for this arrangement.
	102-25 Conflicts of interest	a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed. b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum: i. Cross-board membership; ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures.
	102-28 Evaluating the highest governance body's performance	a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. d. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics, including, as a minimum, changes in membership and organizational practice.

Based on these reporting requirements discussions on this theme were subdivided into "structures," and "designation and compensation," and the following opinions were voiced.

Structures	
Investor opinions	・ It does not matter that corporate governance structures differ from company to company. What is important are qualitative aspects such as how structures function and how their form is being leveraged. When disclosing information it is necessary to bring together the formative and qualitative aspects and emphasize them in an easy-to-understand manner. ・ It is important to explain not just the "How" but also the "Why" and the "What." Given that the form of governance will change according to the growth stage of a company, while a monitoring format is preferable in principle, any absence thereof is not a cause for criticism in general.
Company opinions	・ We report about not only about the corporate governance structures themselves, but the background to their formulation. ・ Disclosure of specific activities relating to corporate governance over the past one year, the kind of reports the board has received and how it has monitored the situation are all items that are included in the message from the chair of the board of directors.
Designation and Compensation	
Investor opinions	・ Due in part to the revisions made to Japan's Corporate Governance Code, the number of companies disclosing a skill matrix for board members has increased, but investors want to see these matrices submitted together with an explanation about why they were formulated. ・ Information such as the number of directors concurrently serving as executive officers, or the composition and number of external directors (percentage of the total number) should ideally be disclosed.
Company opinions	・ Questions about whether to link director's compensation to ESG targets and whether such target-linked compensation should only apply to certain directors have yet to be resolved, and we recognize these as outstanding issues.

	・ With regard to compensation structures, we have received comments from investors that details of external monitoring should be disclosed.

Investors understand that the form of governance changes depending on the growth stage of a company. Also, investors do not mind that corporate governance structures differ from company to company. What they prioritize are qualitative aspects, such as how the corporate governance structures that are selected by various companies are functioning, and whether they are functioning with the roles and responsibilities of the established institutions and committees clearly articulated. Therefore, in their disclosures companies should not just provide perfunctory explanations about structures, but also share information in a readily understandable manner about why a certain structure was selected and how it is functioning, combined with an assessment of the structure's effectiveness.

Although the revisions to the Corporate Governance Code have prompted an increase in the number of companies disclosing skill matrices, it appears that in some cases skills are considered as an afterthought as a reason for selection. It is imperative to explain why particular skills and knowledge are required of various directors to support the governance structure. Some companies have just started to tackle the issue of reflecting sustainability items in compensation structures. In order to ensure transparency and objectivity in compensation decision-making processes, the promotion and disclosure of tangible measures that can provide a solid base (e.g., CO_2 emissions reductions, etc.) is a prerequisite.

(4) Ideal Indicators Common to All Industries

Having considered environment, people and governance from among the 18 items common to all industries, we have devised suggestions based on the following three perspectives.

(i) Non-financial Indicators Leading to LTVC

Not all of the indicators set by the international framework are necessarily useful. Companies should adopt appropriate indicators based on industry and regulatory developments. Moreover, given the possibility that the relative importance of themes may change in the future, it is essential to remain alert to the latest trends in non-financial indicators, industry trends, and changes in the business environment for individual companies.

(ii) Disclosure Methods for Non-financial Indicators to Promote Investor Understanding

Among the common indicators to all industries, those necessary to explain the company's LTVC story should be adopted. In order to enhance investor understanding it is important to explain why particular indicators have been adopted and how they should be interpreted. In such cases it is also important to be mindful of contents that investors could use to compare value creation processes at different companies. In order to explain the progress of measures it is advisable to combine both quantitative and qualitative information.

Although the disclosure of non-financial indicators on a consolidated basis is preferable from the perspective of company evaluation, it may be extremely challenging to make comprehensive disclosures about all items. A certain degree of discretion could therefore be permitted in terms of selecting what areas it is possible to disclose, and what is considered important for the company. In such cases, however, it is important to provide careful explanations about the scope of aggregated information.

(iii) Linkage to Long-term Value Creation Story

Top management must present a consistent message about the future vision the company aspires to achieve, and the LTVC story that will deliver on that vision, from both financial and non-financial perspectives. An LTVC story is unique to a particular company, and in order to explain it, non-financial factors should be woven into the narrative, and appropriate indicators set by which progress can be confirmed.

5-2 Industry-Specific Indicators

Industry-specific indicators	• Indicators that are linked to protecting value for companies in the same industry, with some that can be converted to amplify long-term corporate value. • However, even if indicators are considered to protect value at the present point in time, indicators that are industry-specific also change with the passage of time and social changes.

(1) Review Method for Industry-Specific Indicators

The following approach was used in the review of industry-specific indicators.

<u>Step 1 (Selection of target industries)</u>

Solicit requests from member companies, and select five industries for review by the industry-specific indicator working groups.

Step 2 (Setting of indicators for the target industries)

Identify the SASB industries that correspond to the target industries and set accounting metrics and activity metrics in each of the sustainability disclosure topics as the non-financial indicators for the target industries.

Step 3 (Review of industry-specific indicators)

At an industry-specific indicator working group in which investors and companies participate, discuss the industry-specific indicators organized in Step 2 from the following perspectives.

- What are the sustainability disclosure topics emphasized in the relevant industry?
- What information is useful for each sustainability (≒ no financial) disclosure topic?

The EDSG selected five industries: construction materials, chemicals, commercial banks, pharmaceuticals, and automobiles. We decided to review construction materials and chemicals in the same working group and formed four working groups.

The companies participating in each of the industry-specific indicator working groups are as follows.

Industry	No.	Name of Participating Members (in No Particular Order)	Attribute	
			Issuer	Institutional Investor
Construction materials/ chemicals	1	Idemitsu Kosan Co., Ltd.	✓	
	2	AGC Inc.	✓	
	3	SMBC Nikko Securities Inc.		✓
	4	Sumitomo Mitsui Trust Asset Management Co., Ltd.		✓
	5	Taiju Life Insurance Company Limited		✓
Commercial banks	1	Mitsubishi UFJ Financial Group, Inc.	✓	
	2	Sumitomo Mitsui Banking Corporation	✓	
	3	Mizuho Financial Group, Inc.	✓	
	4	Sumitomo Mitsui Trust Bank, Limited	✓	
	5	Shinsei Bank, Limited	✓	
	6	Goldman Sachs Japan Co., Ltd.		✓
	7	Goldman Sachs Asset Management Co., Ltd.		✓
	8	Sumitomo Mitsui DS Asset Management Company, Limited		✓
	9	Mitsubishi UFJ Trust and Banking Corporation		✓
	10	Asset Management One Co., Ltd.		✓
	11	Nippon Life Insurance Company		✓
Pharmaceuticals	1	Daiichi Sankyo Co., Ltd.	✓	
	2	Takeda Pharmaceutical Company Limited	✓	
	3	Sysmex Corporation	✓	
	4	Santen Pharmaceutical Co., Ltd.	✓	
	5	Shionogi & Co., Ltd.	✓	
	6	Goldman Sachs Japan Co., Ltd.		✓
	7	Resona Asset Management Co., Ltd.		✓
	8	Goldman Sachs Asset Management Co., Ltd.		✓
	9	Asset Management One Co., Ltd.		✓
Automobiles	1	Nissan Motor Co., Ltd.	✓	
	2	Honda Motor Co., Ltd.	✓	
	3	Toyota Motor Corporation	✓	
	4	SMBC Nikko Securities Inc.		✓
	5	Sumitomo Mitsui Trust Asset Management Co., Ltd.		✓
	6	Nippon Life Insurance Company		✓
	7	Goldman Sachs Japan Co., Ltd.		✓
	8	Resona Asset Management Co., Ltd.		✓
	9	Taiju Life Insurance Company Limited		✓
	10	Goldman Sachs Asset Management Co., Ltd.		✓

(The names of the companies above are for public disclosure only.)

(2) Construction Materials

(i) Appropriateness of Disclosure Topics

The disclosure topics highlighted for construction materials in the SASB Standards are as follows.

Dimension	General Issue Category	Disclosure Topic Construction Materials
Environment	**GHG emissions**	**Greenhouse gas emissions**
	Air quality	**Air quality**
	Energy management	**Energy management**
	Water and wastewater management	**Water management**
	Waste and hazardous materials management	**Waste management**
	Ecological impacts	**Biodiversity impacts**
Social capital	Human rights and community relations	–
	Customer privacy	–
	Data security	–
	Access and affordability	–
	Product quality and safety	–
	Customer welfare	–
	Selling practices and product labelling	–
Human capital	Labor practices	–
	Employee health and safety	**Workforce health & safety**
	Employee engagement, diversity & inclusion	–
Business model and innovation	**Product design and lifecycle management**	**Product innovation**
	Business model resilience	–
	Supply chain management	–
	Materials sourcing and efficiency	–
	Physical impacts of climate change	–
Leadership and governance	Business ethics	–
	Competitive behavior	**Pricing integrity & transparency**
	Management of the legal and regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	–

We consider the disclosure topics identified in the SASB Standards to be appropriate. However, some commented that individual companies should make the final decision on whether to make disclosures for each topic. In addition, investors commented that if a company decides not to disclose a topic, the reason for non-disclosure should also be stated.

(ii) Review of Accounting Metrics for Each Disclosure Topic

(a) Environment

Greenhouse gas emissions

The accounting metrics for greenhouse gas emissions are as shown in the table below.

Disclosure Topic	Accounting Metrics
Greenhouse gas emissions	• Gross global Scope 1 emissions (t/CO_2-e), percentage covered under emissions-limiting regulations • 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

We consider the accounting metrics for greenhouse gas emissions per se to be appropriate, given that the industry has very high emissions during manufacturing. However, there is some unease about the limitation of disclosure for greenhouse gas emissions of Scope 1 only, and additional disclosure is considered necessary on the following points.

- Gross Scope 2 and 3 emissions
- GHG emissions intensity
- Financial impacts based on carbon pricing, etc.

Construction materials is an industry that also consumes large amounts of electricity and emits greenhouse gases throughout its supply chain. Therefore, disclosure of Scope 2 and 3 is important. In addition, it can be said that the financial impact of the industry is not small compared to other industries. Consequently, efforts are required to also disclose financial impacts based on carbon pricing. Regarding GHG emissions intensity, some investors expressed the view that disclosure of GHG emissions intensity would be desirable for use as a reference when comparing companies in the same industry.

Energy management

The accounting metrics for energy management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Energy management	• Disclose the following: (1) Total energy consumed (GJ) (2) Percentage grid electricity (3) Percentage alternative (4) Percentage renewable

We consider the accounting metrics for energy management per se to be appropriate, given that the industry has very high energy consumption during manufacturing. However, the disclosure should be addressed in the same context as discussion of GHG emissions, rather than separately. Some commented that it is important for disclosure to include energy strategy, and that, when doing so, the financial impact on energy costs, investments, and so on should also be disclosed.

Air quality

The accounting metrics for air quality are as shown in the table below.

Disclosure Topic	Accounting Metrics
Air quality	• Air emissions of the following pollutants: (1) NOx (excluding N_2O) (tons) (2) SOx (tons) (3) Particulate matter (PM10) (tons) (4) Dioxins/furans (tons) (5) Volatile organic compounds (VOCs) (tons) (6) Polycyclic aromatic hydrocarbons (PAHs) (tons) (7) Heavy metals (tons)

We consider the accounting metrics for air quality per se to be appropriate when atmospheric emissions are disclosed with pollution control measures in place, since more air pollutants are generated in the manufacturing stage than in other industries. Investors view air quality mainly as a health hazard to local residents and a risk of ecological destruction at manufacturing sites. Therefore, in order to confirm the existence of risk, it is necessary to explain the status of compliance with laws, regulations, and voluntary controls in each country for each site.

Water management

The accounting metrics for water management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Water management	• Disclose the following: (1) Total fresh water withdrawn (m^3) (2) Percentage recycled (3) Percentage in regions with High or Extremely High Baseline Water Stress

We consider the accounting metrics for water management per se to be appropriate, since more water is used in the manufacturing stage than in other industries. In relation to water, although water stress such as drought is important, the risk of flooding is also important in the context of climate change. The existence of sites with the potential for flooding and the countermeasures should also be disclosed.

Waste management

The accounting metrics for waste management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Waste management	• Disclose the following: - Amount of waste generated (tons) - Percentage hazardous - Percentage recycled

We consider the accounting metrics for waste management to be appropriate since more waste is generated in the manufacturing stage than in other industries. However, the definition of waste can differ from country to country and region to region, so it is necessary to explain the definition being used for tabulation.

Investors also expressed the opinion that while there is still a focus on the risk aspects of waste, it is important to also consider the opportunity aspects as the circular economy is attracting more attention.

Biodiversity impacts

The accounting metrics for biodiversity impacts are as shown in the table below.

Disclosure Topic	Accounting Metrics
Biodiversity impacts	• Description of environmental management policies and practices for active sites • Terrestrial acreage disturbed; percentage of impacted area restored

While it is currently difficult to determine whether biodiversity impacts are significant compared to other industries, we consider the accounting metrics per se to be useful. In addition, operational plans and their progress, as well as related costs, must be explained, and disclosure in line with the TNFD framework will be required in the future. Moreover, even if a company does not engage in mining operations itself, biodiversity impacts need to be addressed and explained across the entire supply chain.

(b) Human Capital

Workforce health & safety

The accounting metrics for workforce health and safety are as shown in the table below.

Disclosure Topic	Accounting Metrics
Workforce health & safety	• (1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) fulltime employees and (b) contract employees • Number of reported cases of silicosis Note: Disclosure shall include a discussion of efforts to minimize workers' exposure to crystalline silica

We consider the accounting metrics for workforce health and safety per se to be useful because the occupational risks in the manufacturing stage are not small compared to other industries. In addition, not only the company's own employees, but also those of partner companies, should be included in the reporting scope, and any changes in actual results should be disclosed with the background and the financial impact of any related litigation, etc. Since the concept of frequency rates and other indicators differs from country to country and region to region, an explanation of the definitions of the indicators used for occupational safety is needed.

(c) Business Model and Innovation

Product innovation

The accounting metrics for product innovation are as shown in the table below.

Disclosure Topic	Accounting Metrics
Product innovation	• Percentage of products that qualify for credits in sustainable building design and construction certifications (percentage by annual sales revenue) • Total addressable market (reporting currency) and share of market (percentage) for products that reduce energy, water, and/or material impacts during usage and/or production

Product innovation is an important topic as it is in other industries, and we consider the accounting metrics per se to be useful. In addition to the metrics, we believe it is necessary to explain environmentally friendly products as defined by the company and progress against the product development plan. However, companies expressed the view that there are many challenges in collecting information, which would make such disclosure difficult.

(d) Leadership and Governance

Pricing integrity & transparency

The accounting metrics for pricing integrity and transparency are as shown in the table below.

Disclosure Topic	Accounting Metrics
Pricing integrity & transparency	• Total amount of monetary losses (reporting currency) as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities Note: The entity shall briefly describe the nature (e.g., judgment or order issued after trial, settlement, guilty plea, deferred prosecution agreement, non-prosecution agreement) and context (e.g., cartel activities, price fixing, and anti-trust) of all monetary losses as a result of legal proceedings.

Pricing integrity and transparency is an important topic as it is in other industries, and we consider the accounting metrics per se to be useful. In addition to the metrics, we consider it necessary to explain preventive measures (systems and mechanisms, initiatives, and effectiveness) and efforts to prevent recurrence of any inappropriate actions.

(iii) Summary

Although the SASB Standards accounting metrics for construction materials are useful per se, we have put together the following three perspectives in terms of the ideal form for disclosure that would be more meaningful for Japanese companies.

(a) Ideal **Form and Methods of Presentation for Non-financial Disclosure**

Accounting metrics should be disclosed after determining their importance for the company in terms of their position in demonstrating the reliability of the corporate story and strategy.

In addition, it was suggested that the following methods of presentation would be useful in the disclosure of accounting metrics.

- Results should be presented not only for the reporting year but also for changes over time.
- Disclosure by site is more useful for some of the accounting metrics, including those for air quality, water management, and workforce health and safety.
- There are different definitions and standards depending on the country and the region for some of the accounting metrics, and these should be clearly stated.
- With regard to workforce health and safety at manufacturing sites, consideration should be given to expanding the boundary to include partner companies operating at the same manufacturing site.

We also discussed the need to ensure the reliability of data, but it was classified as task for the future.

(b) LTVC Perspective

Among the disclosure topics in construction materials, only product innovation took the LTVC perspective.

In addition to this, the working group suggested that it would be useful to be able to provide additional explanation of the opportunity aspect, since the following disclosure topics are also important from the LTVC perspective.

<u>Water management and waste management</u>

Discussion of opportunity aspects from the perspective of the circular economy

Biodiversity impacts

Discussion of opportunity aspects using the TNFD framework planned for publication in the future (however, there are practical challenges in measuring the impact and incorporating it into corporate assessment)

(c) Risk Perspective

Since many of the accounting metrics themselves are indicators of actual results for the reporting year, it is necessary to explain what the actual figures mean, e.g., the status of compliance with laws and regulations and voluntary controls in each country.

From the perspective of avoiding risk, it would be useful to disclose additional information on the following.

- Financial impacts and related costs
- Risk management targets and plans, and their progress
- Factor analysis of changes over time (both positive and negative)
- Disclosure on an intensity basis

(3) Chemicals

(i) Appropriateness of Disclosure Topics

The disclosure topics highlighted for chemicals in the SASB Standards are as follows.

Dimension	General Issue Category	Disclosure Topic
		Chemicals
Environment	**GHG emissions**	**Greenhouse gas emissions**
	Air quality	**Air quality**
	Energy management	**Energy management**
	Water and wastewater management	**Water management**
	Waste and hazardous materials management	**Hazardous waste management**
	Ecological impacts	–
Social capital	**Human rights and community relations**	**Community relations**
	Customer privacy	–
	Data security	–
	Access and affordability	–
	Product quality and safety	–
	Customer welfare	–
	Selling practices and product labelling	–
Human capital	Labor practices	–
	Employee health and safety	**Workforce health & safety**
	Employee engagement, diversity & inclusion	–
Business model and innovation	**Product design and lifecycle management**	**Product design for use-phase efficiency**
		Safety & environmental stewardship of chemicals
		Genetically modified organisms
	Business model resilience	–
	Supply chain management	–
	Materials sourcing and efficiency	–
	Physical impacts of climate change	–
Leadership and governance	Business ethics	–
	Competitive behavior	–
	Management of the legal and regulatory environment	**Management of the legal & regulatory environment**
	Critical incident risk management	**Operational safety, emergency preparedness & response**
	Systemic risk management	–

We consider the disclosure topics identified in the SASB Standards to be appropriate. However, some commented that individual companies should make the final decision on whether to make disclosures for each topic. In addition, investors commented that if a company decides not to disclose a topic, the reason for non-disclosure should also be stated.

(ii) Review of Accounting Metrics for Each Disclosure Topic

(a) Environment

Greenhouse gas emissions

The accounting metrics for greenhouse gas emissions are as shown in the table below.

Disclosure Topic	Accounting Metrics
Greenhouse gas emissions	• Gross global Scope 1 emissions (t/CO_2-e), percentage covered under emissions-limiting regulations • 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

We consider the accounting metrics for greenhouse gas emissions per se to be appropriate, given that the industry has very high emissions during manufacturing. However, there is some unease about the limitation of disclosure for greenhouse gas emissions to Scope 1 emissions only, and additional disclosure is considered necessary on the following points.

- Gross Scope 2 and 3 emissions
- GHG emissions intensity
- Financial impacts based on carbon pricing, etc.

Chemicals is an industry that also consumes large amounts of electricity and emits greenhouse gases throughout its supply chain. Therefore, disclosure of Scope 2 and 3 is important. In addition, it can be said that the financial impact of the industry is not small compared to other industries. Consequently, efforts are also required to disclose financial impacts based on carbon pricing. Regarding GHG emissions intensity, some investors expressed the view that disclosure of GHG emissions intensity would be desirable for use as a reference when comparing companies in the same industry.

Energy management

The accounting metrics for energy management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Energy management	• Disclose the following: (1) Total energy consumed (GJ) (2) Percentage grid electricity (3) Percentage renewable (4) Total self-generated energy (GJ) Note: The entity shall discuss its efforts to reduce energy consumption and/or improve energy efficiency throughout the production processes.

We consider the accounting metrics for energy management per se to be appropriate, given that the industry has very high energy consumption during manufacturing. However, the disclosure should be addressed in the same context as discussion of GHG emissions, rather than separately. Some commented that it is important for disclosure to include energy strategy, and that, in doing so, the financial impact on energy costs, investments, and so on should also be disclosed.

Air quality

The accounting metrics for air quality are as shown in the table below.

Disclosure Topic	Accounting Metrics
Air quality	• Air emissions of the following pollutants: (1) NO_X (excluding N_2O) (tons) (2) SO_X (tons) (3) Volatile organic compounds (VOCs) (tons) (4) Hazardous air pollutants (HAPs) (tons)

We consider the accounting metrics for air quality per se to be appropriate when atmospheric emissions are disclosed with pollution control measures in place, since more air pollutants are generated in the manufacturing stage than in other industries. Investors see air quality mainly as posing risks as a health hazard to local residents and a cause of ecological destruction in and around manufacturing sites. Therefore, in order to confirm the existence of risk, it is necessary to explain the status of compliance with laws, regulations, and voluntary controls in each country for each site.

Water management

The accounting metrics for water management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Water management	• Disclose the following: (1) Total water withdrawn (m^3), percentage of each in regions with High or Extremely High Baseline Water Stress (2) Total water consumed (m^3), percentage of each in regions with High or Extremely High Baseline Water Stress • Number of incidents of non-compliance associated with water quality permits, standards, and regulations • Description of water management risks and discussion of strategies and practices to mitigate those risks

We consider the accounting metrics for water management per se to be appropriate, since more water is used in the manufacturing stage than in other industries. In relation to water, although water stress such as drought is important, the risk of flooding is also important in the context of climate change, and the existence of sites with the potential for flooding and the countermeasures should also be disclosed.

For water quality, as with air quality, it is also necessary to provide an explanation of the status of compliance with each country's laws, regulations, and voluntary controls for each site.

Hazardous waste management

The accounting metrics for hazardous waste management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Hazardous waste management	• Disclose the following: -Amount of hazardous waste generated (tons) -Percentage recycled Note: The entity shall disclose the legal or regulatory framework(s) used to define hazardous waste and recycled hazardous waste, and the amounts of waste defined in accordance with each applicable framework.

We consider the accounting metrics for hazardous waste management to be appropriate since the industry generates more hazardous waste in the manufacturing stage than other industries. However, the definition of hazardous waste differs from country to country and region to region, and it is necessary to explain the definition being used for tabulation.

(b) Social Capital

Community relations

The accounting metrics for community relations are as shown in the table below.

Disclosure Topic	Accounting Metrics
Community relations	• Discussion of engagement processes to manage risks and opportunities associated with community interests

We consider the accounting metrics per se to be useful, as community relations are more important than in other industries because the industry handles substances that affect air and water quality, such as chemicals.

In addition to regular engagement with the community, discussion of the approach to building relationships with the community and initiatives (including specific initiatives at the regional and site level) is needed. Discussion of community contribution initiatives are also useful, as this can lead to an assessment that there is little downside risk even though they do not contribute directly to corporate value.

(c) Human Capital

Health & safety

The accounting metrics for workforce health and safety are as shown in the table below.

Disclosure Topic	Accounting Metrics
Workforce health & safety	• (1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b)contract employees • Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks

We consider the accounting metrics for workforce health and safety per se to be useful because the occupational risks in the manufacturing stage are not small compared to other industries. In addition, not only the company's own employees, but also those of partner companies, should be included in the reporting scope, and any changes in actual results should be disclosed with discussion of the background and the financial impact of any related litigation, etc. Since the concept of frequency rates and other indicators differs from country to country and region to region, an explanation of the definitions of the indicators used for occupational safety is needed.

(d) Business Model and Innovation

Product design for use-phase efficiency

The accounting metrics for product design for use-phase efficiency are as shown in the table below.

Disclosure Topic	Accounting Metrics
Product design for use-phase efficiency	• Revenue from products designed for use-phase resource efficiency (reporting currency)

Product design for use-phase efficiency is an important topic, since the industry is responsible for upstream processes in the value chain with a significant impact on industry as a whole, so we consider the accounting metrics per se to be useful. In addition to the metrics, we believe it is necessary to explain environmentally friendly products as defined by the company and progress against the product development plan. From the perspective of the circular economy, it is also useful to discuss environmental contribution over the entire lifecycle, not only in the use phase.

Safety & environmental stewardship of chemicals

The accounting metrics for safety and environmental stewardship of chemicals are as shown in the table below.

Disclosure Topic	Accounting Metrics
Safety & environmental stewardship of chemicals	• Disclose the following: (1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances (percentage by revenue) (2) Percentage of such products that have undergone a hazard assessment • Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact

We consider the accounting metrics for safety and environmental stewardship of chemicals per se to be useful, as the industry is conscious of impacts on health and the environment and develops products that do not use hazardous substances. Based on the assumption of compliance with laws and regulations, in addition to discussions on the development of alternative substances, discussion of initiatives to further reduce environmental impact are useful from the perspective of risk control.

Genetically modified organisms

Disclosure Topic	Accounting Metrics
Genetically modified organisms	• Percentage of products by revenue that contain genetically modified organisms (GMOs)

The accounting metrics for genetically modified organisms are as shown in the table on the right.

Some companies are working on the development of genetically modified organisms and some are not, so there was some discussion as to whether it is a necessary topic for the chemicals industry. However, we consider the accounting metrics per se to be useful. Some commented that it is necessary for each company to clarify its basic policy on its development of genetically modified organisms. In addition, there was a comment that it would be useful to have supplementary explanations of this metric from the perspective of opportunities (e.g., genetically modified organisms that are resistant to environmental change).

(e) Leadership and Governance

Management of the legal & regulatory environment

The accounting metrics for management of the legal and regulatory environment are as shown in the table below.

Disclosure Topic	Accounting Metrics
Management of the legal & regulatory environment	• Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry

As an industry, management of the legal and regulatory environment can be described as an important topic with a high potential for impacting health and the environment, and we also consider this accounting metric per se to be useful. From a risk perspective, it would be useful to discuss not only the corporate position, but also efforts through industry associations and the initiatives of individual companies.

Operational safety, emergency preparedness & response

The accounting metrics for operational safety, emergency preparedness and response are as shown in the table below.

Disclosure Topic	Accounting Metrics
Operational safety, emergency preparedness & response	• Disclose the following: - Process Safety Incidents Count (PSIC) - Process Safety Total Incident Rate (PSTIR) - Process Safety Incident Severity Rate (PSISR) Note: The entity shall describe incidents with a severity rating of 1 or 2, including their root cause, outcomes, and corrective actions implemented in response. • Number of transport incidents Note: The entity shall describe significant transport incidents, including their root causes, outcomes, and corrective actions implemented in response.

We consider the accounting metrics for operational safety, emergency preparedness and response per se to be useful for the disclosure of accident-related indicators, as the need to give special attention to safety is an industry characteristic. In addition, it is important to disclose not only the results for the reporting year, but also the trends in the relevant metrics over time. It is also necessary to discuss initiatives for ensuring safety and the approach taken in the event of an accident.

(iii) Summary

Although the SASB Standards accounting metrics for chemicals are useful per se, we have put together the following three perspectives in terms of the ideal form for disclosure that would be meaningful for Japanese companies.

(a) Ideal Form and Methods of Presentation for Non-financial Disclosure

Accounting metrics should be disclosed after determining their importance for the company in terms of their position in demonstrating the reliability of the corporate story and strategy.

In addition, it was suggested that the following methods of presentation would be useful in the disclosure of accounting metrics.

- Results should be presented not only for the reporting year but also for changes over time.
- Disclosure by site is more useful for some of the accounting metrics, including those for air quality, water management, and workforce health and safety.
- There are different definitions and standards depending on the country and the region for some of the accounting metrics, and these should be clearly stated.
- With regard to workforce health and safety at manufacturing sites, consideration should be given to expanding the boundary to include partner companies operating at the same manufacturing site.
- There is a wide range of products in the chemicals industry, so discussion that links each metric with activity metrics (production volume by major product segment) would be effective (e.g., percentage of environmentally friendly products accounted for by major product segments).

The need to ensure the reliability of data was also discussed, but was classified as task for the future.

(b) LTVC Perspective

Of the topics for chemicals, product design for use-phase efficiency and genetically modified organisms were the ones that took the LTVC perspective.

In addition to this, the working group suggested that it would be useful to be able to provide additional explanation of the opportunity aspect, since the following disclosure topics are also important from the LTVC perspective.

Water management and waste management

Discussion of opportunity aspects from the perspective of the circular economy

(c) Risk Perspective

Since many of the accounting metrics themselves are indicators of actual results for the reporting year, it is necessary to explain what the actual figures mean, e.g., the status of compliance with laws and regulations and voluntary controls in each country.

From the perspective of avoiding risk, it would be useful to disclose additional information on the following.

- Financial impacts and related costs
- Risk management targets and plans, and their progress
- Factor analysis of changes over time (both positive and negative)
- Disclosure on an intensity basis

(4) Commercial Banks

(i) Appropriateness of Disclosure Topics

The disclosure topics highlighted for commercial banks in the SASB Standards are as follows.

Dimension	General Issue Category	Disclosure Topic
		Commercial Banks
Environment	GHG emissions	–
	Air quality	–
	Energy management	–
	Water and wastewater management	–
	Waste and hazardous materials management	–
	Ecological impacts	–
Social capital	Human rights and community relations	–
	Customer privacy	–
	Data security	**Data security**
	Access and affordability	**Financial inclusion & capacity building**
	Product quality and safety	–
	Customer welfare	–
	Selling practices and product labelling	–
Human capital	Labor practices	–
	Employee health and safety	–
	Employee engagement, diversity & Inclusion	–
Business model and innovation	**Product design and lifecycle management**	**Incorporation of environmental, social, and governance factors in credit analysis**
	Business model resilience	–
	Supply chain management	–
	Materials sourcing and efficiency	–
	Physical impacts of climate change	–
Leadership and governance	**Business ethics**	**Business ethics**
	Competitive behavior	**–**
	Management of the legal and regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	**Systemic risk management**

We consider the disclosure topics identified in the SASB Standards to be appropriate. However, both investors and companies agreed that some of the content does not match the actual situation at commercial banks whose business activities are primarily in Japan. Investors also expressed the view that disclosure of the perceived current status for each topic (when the content does not match the actual situation in Japan, discussion of such perception) and the status of responses would help their understanding. Greenhouse gas emissions, human rights, and human capital were identified as important topics were classified as topics of common importance to all industries, rather than being industry-specific.

(ii) Review of Accounting Metrics for Each Disclosure Topic

(a) Social Capital

Data security

The accounting metrics for data security are as shown in the table below.

Disclosure Topic	Accounting Metrics
Data security	• Disclose the following: (1) Number of data breaches (2) Percentage involving personally identifiable information (PII) (3) Number of account holders affected Note: Disclosure shall include a description of corrective actions implemented in response to data breaches. • Description of approach to identifying and addressing data security risks (Discussion and analysis)

With regard to the accounting metrics for data security, we consider the disclosure of qualitative descriptions about how risks are identified and addressed to be useful. However, companies indicated that it is difficult to disclose quantitative information, such as the number of data breaches. The reasons given for this were that the definition in the accounting metrics and the perspective from which investors make evaluations are unclear, and that for financial institutions, for whom trust is important, the disclosure of quantitative information could cause anxiety among the public, and there is a risk of the figures being used out of context (including concerns about reputational damage).

In this respect, investors expressed the view that qualitative information showing the status and evaluation of risk management and the tendency of risk events to occur would also be useful.

Investors also commented that, in understanding the topic, it would be useful to disclose information on addressing digitalization (from the perspective of strengthening competitiveness), resilience as social infrastructure, and response after the occurrence of an incident.

Financial inclusion & capacity building

The accounting metrics for financial inclusion and capacity building are as shown in the table below.

Disclosure Topic	Accounting Metrics
Financial inclusion & capacity building	• (1) Number and (2) amount of loans outstanding qualified to programs designed to promote small business and community development Note: Disclosure shall include a description of how the entity's results of the Community Reinvestment Act (CRA) Examinations are integrated into its financial inclusion and capacity building strategy. • (1) Number and (2) amount of past due and nonaccrual loans qualified to programs designed to promote small business and community development • Number of no-cost retail checking accounts provided to previously unbanked or underbanked customers • Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers Note: Disclosure shall include a description of financial literacy initiatives.

The opinion was expressed that while financial inclusion is important from the perspective of creating opportunities, there is a need to review the information to be disclosed in line with the actual situation in Japan in terms of the accounting metrics themselves. However, companies had the view that while qualitative discussions are possible, it is difficult to disclose quantitative information, and that many initiatives have limited earnings impact in the first place, so it is difficult to know what disclosure is useful for investors. On the other hand, investors expressed the opinion that recognition of new revenue opportunities and discussion of specific initiatives for achieving differentiation, treating the solution of social issues such as improving accessibility for minorities (e.g., people with disabilities, indigenous peoples and women entrepreneurs) as market opportunities, will lead to positive evaluations.

(b) Business Model and Innovation

Incorporation of environmental, social, and governance factors in credit analysis

The accounting metrics for incorporation of environmental, social, and governance factors into credit analysis are as shown in the table below.

Disclosure Topic	Accounting Metrics
Incorporation of environmental, social, and governance factors in credit analysis	• Commercial and industrial credit exposure, by industry (Quantitative) • Description of approach to incorporation of environmental, social, and governance (ESG) factors in credit analysis (Discussion and analysis)

The accounting metrics for incorporation of environmental, social, and governance factors into credit analysis per se are useful. However, the belief was expressed that there is a need for further enhancement of disclosure. Investors specifically mentioned divestment policies and quantitative information on coal-related assets, indicating sectors and scope, and both investors and companies specifically mentioned disclosure of investment and loan portfolios related to climate change.

(c) Leadership and Governance

Business ethics

The accounting metrics for business ethics are as shown in the table below.

Disclosure Topic	Accounting Metrics
Business ethics	• Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations (Quantitative) Note: The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses. • Description of whistleblower policies and procedures (Discussion and analysis)

We consider the accounting metrics for business ethics per se to be useful. In addition, investors expressed the view that efforts to instill the importance of corporate ethics in employees and disclosure of the number of whistleblowing reports (indicating that the whistleblowing system is functioning) would be useful, while companies suggested it would be useful also to disclose the reasons for whistleblowing initiatives and the status of issues and improvements

Systemic risk management

The accounting metrics for systemic risk management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Systemic risk management	• Global Systemically Important Bank (G-SIB) score, by category (Quantitative) Note: The entity shall describe whether the Global Systemically Important Bank (G-SIB) score is calculated by the entity or obtained from regulatory authorities and whether the entity is required to report the underlying data to the regulators. • Description of approach to incorporation of results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy, and other business activities (Discussion and analysis)

The accounting metrics for systemic risk management per se are useful. In addition, investors expressed the need for discussion that leads to an understanding of capital adequacy guarantees. Both investors and companies also expressed the need for enhanced discussion and analysis of stress testing and credit risk, including environmental and social factors.

(iii) Summary

Although the SASB Standards accounting metrics for commercial banks are useful per se, we have put together the following three perspectives in terms of the ideal form for disclosure that would be more meaningful for Japanese companies.

(a) Ideal Form and Methods of Presentation for Non-financial Disclosure

Accounting metrics should be disclosed after determining their importance for the company in terms of their position in demonstrating the reliability of the corporate story and strategy.

In addition, it was suggested that the following methods of presentation would be useful in the disclosure of accounting metrics.

- Disclose using percentages
- Clearly specify the criteria and thresholds for accounting metrics
- Disclose information in accordance with the disclosure requirements for each initiative, such as TCFD, etc.

(b) LTVC Perspective

Of the topics for commercial banks, financial inclusion and capacity building and incorporation of environment, social and governance factors into credit analysis were the topics that took the LTVC perspective. However, as many of the accounting metrics for financial inclusion and capacity building are based on U.S. assumptions, there is a need for discussion related to recognition of new revenue opportunities that is more in line with the actual situation in Japan.

In addition to this, the working group suggested that it would be useful to be able to provide additional explanation of the opportunity aspect, since the following disclosure topics are also important from the LTVC perspective.

Incorporation of environmental, social, and governance factors in credit analysis

Divestment policy, investment and loan portfolios related to climate changes, and coal-related assets.

Data security

Addressing digitalization (perspective of strengthening competitiveness)

(c) Risk Perspective

Quantitative metrics are not necessarily required, but qualitative discussion of the effectiveness of risk management and governance systems (e.g., status of development and improvement, evaluation, etc.) and trends in the occurrence of risk events is also useful.

From the perspective of avoiding risk, it would be useful to disclose additional information on the following.

- Initiatives to promote awareness among employees

(5) Pharmaceuticals

(ii) Appropriateness of Disclosure Topics

The disclosure topics highlighted for pharmaceuticals in the SASB Standards are as follows.

Dimension	General Issue Category	Disclosure Topic Pharmaceuticals
Environment	GHG emissions	–
	Air quality	–
	Energy management	–
	Water and wastewater management	–
	Waste and hazardous materials management	–
	Ecological impacts	–
Social capital	**Human rights and community relations**	**Safety of clinical trial participants**
	Customer privacy	–
	Data security	–
	Access and affordability	**Access to medicines** **Affordability & pricing**
	Product quality and safety	**Drug safety**
	Customer welfare	**Counterfeit drugs**
	Selling practices and product labeling	**Ethical marketing**
Human capital	Labor practices	–
	Employee health and safety	–
	Employee engagement, diversity & inclusion	**Employee recruitment, development & retention**
Business model and innovation	Product design and lifecycle management	–
	Business model resilience	–
	Supply chain management	**Supply chain management**
	Materials sourcing and efficiency	–
	Physical impacts of climate change	–
Leadership and governance	**Business ethics**	**Business ethics**
	Competitive behavior	–
	Management of the legal and regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	–

Among the disclosure topics identified in the SASB Standards, the following three topics, although important, were considered to have little financial impact in Japan.

(a) Safety of Clinical Trial Participants

Investors expressed the view that, in the U.S., there is a high likelihood that problems with trial participants will lead to lawsuits and other financial consequences. However, in

Japan, the financial consequences are not necessarily as great. Companies also commented that while this topic is not the most important, animal welfare is frequently asked about, and they make proactive disclosures. However, there are many regulations, and individual companies do not have a great deal of control.

(b) Access to Medicines

Investors expressed the view that while this topic is very important for companies with operations in emerging countries, its importance for companies varies depending on the regions where they engage in business. Therefore, for companies with operations in Japan only, the topic is of low importance.

(c) Affordability & Pricing

Companies commented that metrics which evaluate price reductions based on the assumption of high drug prices, as in the U.S., are not suitable for Japanese companies, since prescription drug prices are set and revised by the government and many generic drugs are available in Japan. In addition, the pharmaceutical industry has been taking measures against counterfeit drugs for some time now, as in the disclosure topic of counterfeit drugs. For companies selling original products, it is important to provide high-quality drugs on a lasting basis, and price is an important factor in achieving this. Companies would like to see an evaluation of the enduring value of the pharmaceutical industry that takes the long term into account, but they feel uncomfortable with this topic as the industry is being judged on the basis of short-term indicators.

Greenhouse gas emissions, ecological impacts, and employee health and safety were identified as important topics by the working group, but were classified as topics of common importance to all industries, rather than being industry-specific.

(ii) Review of Accounting Metrics for Each Disclosure Topic

(a) Social Capital

<u>Drug safety</u>

The accounting metrics for drug safety are as shown in the table below.

Disclosure Topic	Accounting Metrics
Drug safety	• List of products (drugs and therapeutic biological products associated with the entity) listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database • Number of fatalities associated with products (drugs and therapeutic biological products associated with the entity) as reported in the FDA Adverse Event Reporting System • Number of recalls issued, total units recalled • Total amount of (unused) product accepted for takeback, reuse, or disposal (tons) • Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP)[1] (or regional equivalent), by type[2] Note: The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the enforcement actions. 1 U.S. standards for control of manufacturing processes and quality control for pharmaceuticals. 2 Form 483s, warning letters, seizures, recalls, and consent decrees.

We consider the accounting metrics for drug safety per se to be effective. Appropriate disclosure of these metrics is required in accordance with regulations. In addition, the following disclosure methods and information are useful for understanding of the topic.

- Disclosure in chronological order (even when deficiencies occur, dialogue about whether the cause is due to a structural or a temporary problem is possible)
- Disclosure of the status of development and improvement of risk management and governance structures. Discussion of any points of differentiation from other companies
- Disclosure of information based on regulatory authorities in major markets, not just the FDA
- Qualitative descriptions of mechanisms to prevent improper manufacturing

Investors expressed the view that disclosure of qualitative descriptions of mechanisms to prevent improper manufacturing, the last point, is necessary based on recent events at Japanese pharmaceutical companies.

In disclosing accounting metrics, companies expressed the view that there is a heavy burden of disclosure in terms of setting and disclosing reliability indicators and the total amount of product recalled due to the detailed definition of metrics and the man-hours required to collect data.

<u>Counterfeit drugs</u>

The accounting metrics for counterfeit drugs are as shown in the table below.

Disclosure Topic	Accounting Metrics
Counterfeit drugs	• Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting • Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products • Number of actions (provision of information or evidence) that led to raids, seizure, arrests, and/or filing of criminal charges (by regulatory authorities or law enforcement agencies) related to counterfeit products

We concluded the accounting metrics for counterfeit drugs per se to be useful. Providing appropriate disclosure in accordance with regulations, as well as discussing the company's innovations and initiatives, is of use. While the accounting metrics for counterfeit drugs have a strong risk aspect, disclosure about efforts to control copycat products in order to protect patients from counterfeit drugs is also useful from the perspective of enhancing brand value. However, the importance of the topic varies from company to company depending on the percentage of counterfeit drugs they face and the degree of risk.

In addition, the following disclosure methods and information are useful for understanding of the topic.

- Implementation of risk assessment on the potential for counterfeiting a company’s pharmaceutical products and disclosure of information collection systems (e.g., participation in initiatives such as The Principles for Sustainable Insurance (PSI)) (because although the risk of counterfeiting in Japan is relatively low, supply chain monitoring in Japan tends to be weak compared to global monitoring)
- Disclosure of monitoring efforts (whether manufacturing standards are met) for generic drug companies (if intellectual property is released in low and middle income countries)
- Disclosure of efforts to prevent counterfeit drugs in low and middle income countries (because counterfeit drugs tend to be more common in low and middle income countries)

Ethical marketing

The accounting metrics for ethical marketing are as shown in the table below.

Disclosure Topic	Accounting Metrics
Ethical marketing	• Total amount of monetary losses as a result of legal proceedings associated with false marketing claims Note: The entity shall briefly describe the nature (e.g., judgement or order issued after trial, settlement, guilty plea, deferred prosecution agreement, or non-prosecution agreement) and context (e.g., off-label promotion) of monetary losses, and any corrective actions (e.g., specific changes in operations, management, processes, products, business partners, training, or technology) taken as a result of the monetary losses. • Description of code of ethics governing promotion of off-label use of products (definition and/or what is considered off-label use)

We concluded the accounting metrics for ethical marketing per se to be useful. In addition, the following disclosure methods and information are useful for understanding of the topic.

- Policy, initiatives, and governance structures (for deepening the understanding of ethical values)
- In terms of preventive mechanisms, the percentage of employees who receive ethics training, and design of performance-based remuneration (whether the design

evaluates ethical behavior in addition to sales or whether sales and evaluation are separated)

- Status of compliance with the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) Code of Practice and initiatives to raise awareness of the code

(b) Human Capital

Employee recruitment, development & retention

The accounting metrics for employee recruitment, development and retention are as shown in the table below.

Disclosure Topic	Accounting Metrics
Employee recruitment, development & retention	• Discussion of talent recruitment and retention efforts for scientists and research and development personnel • (1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) midlevel managers, (c) professionals, and (d) all others

Although the accounting metrics for employee recruitment, development and retention per se are useful, we consider the current metrics alone to be insufficient. Discussion is required not only for scientists and research and development personnel but also for overall human resource strategy, training, and diversity. The view was expressed by companies that discussion of retention for key research and development personnel, although difficult to disclose, could lead to an increase in corporate value, while investors suggested that it should not be disclosed because such information is a source of competitive advantage.

In addition, the following disclosure methods and information are useful for understanding of the topic.

- Disclosure of historical data and qualitative discussion of the background to changes in trends (regardless of whether turnover is high or low)
- Points that can be emphasized in terms of employee loyalty (e.g., results of engagement surveys, long-term employment framework in Japan, etc.). For engagement surveys, not only the overall score should be disclosed, but also a time-series disclosure of the purpose and required skills, which will make it easier to understand the relationship with the turnover rate.
- Number/percentage of people who are aware of issues (e.g., female senior managers in Japan, female/foreign national/mid-career hire middle managers, etc.)
- As a category of aggregate data, it is useful to disclose data for Japan separately from data for the rest of the world.

- The turnover rate of high performers and the hiring period for open positions to determine if the company is experiencing any hiring difficulties.

It was also pointed out that uniform global disclosure of turnover rate is difficult because of differences in employment environments.

(c) Business Model and Innovation

Supply chain management

The accounting metrics for supply chain management are as shown in the table below.

Disclosure Topic	Accounting Metrics
Supply chain management	• Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third-party audit programs for integrity of supply chain and ingredients

In terms of the accounting metrics for supply chain management, we consider information on certification to be useful from the perspective of information efficiency. However, the supply chain management perspective should not only include Rx-360 but also sustainable procurement (e.g., PSCI). In addition, although the scope of the supply chain needs to be taken more broadly, the extent to which it should be covered needs to be examined, and the following issues were presented.

- The definition of Tier 1 is an issue, as there are cases where trading companies act as intermediaries. It is also difficult to conduct supplier surveys that trace the procurement of raw materials, so it is necessary to consider the question of how far back to cover the supply chain.
- Since it is difficult for individual companies to take action, industry-wide initiatives are desirable (e.g., development of third-party reporting systems in the supply chain).

Investors also indicated that disclosure of opportunity aspects would be useful for understanding the topic.

(d) Leadership and Governance

Business ethics

The accounting metrics for business ethics are as shown in the table below.

Disclosure Topic	Accounting Metrics
Business ethics	• Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery Note: The entity shall briefly describe the nature (e.g., judgement or order issued after trial, settlement, guilty plea, deferred prosecution agreement, or non-prosecution agreement) and context (e.g., kickbacks or fraud) of monetary losses, and any corrective actions (e.g., specific changes in operations, management, processes, products, business partners, training, or technology) taken as a result of the monetary losses. • Description of code of ethics governing interactions with health care professionals

We concluded the accounting metrics for business ethics per se to be useful. In addition, the following disclosure methods and information are useful in understanding the topic.

- Governance structure for observing business ethics
- Training initiatives for observing business ethics and the number of people who attend training, etc.
- In terms of demonstrating effectiveness, for example, the number of compliance problem reports and the results of surveys of healthcare professionals regarding procurement policies

In addition, companies expressed the view that not only the number of compliance problem reports as a quantitative value, but also the classification of the contents and the kind of communication conducted, are important.

(iii) Summary

Although useful in understanding the disclosure topic from the perspective of compliance, it was considered that the accounting metrics in the SASB Standards are mostly short-term oriented metrics, and few of them facilitate medium- to long-term evaluation of corporate value. We have put together the following three perspectives in terms of the ideal form for disclosure that would be more meaningful for Japanese companies.

(a) Ideal Form and Methods of Presentation for Non-financial Indicators

It is important that accounting metrics are selected in line with the policies and measures that individual companies consider to be important.

On that basis, it was agreed that the following presentation methods would be useful when reporting metrics.

- Results should be presented not only for the reporting year but also for changes over time (even when deficiencies occur, dialogue about whether the cause is due to a structural or a temporary problem is possible)
- Qualitative discussion of the background to changes in trends

- Disclose data for Japan and the rest of the world separately
- Discussion of a broader scope and perspective of disclosure, not limited to the provisions of the SASB Standards

With regard to the regions subject to disclosure, not only Japan and the U.S., but also regions in which the company conducts operations and focus regions, should be included. Disclosure should be enhanced according to the country or region in which the company operates, including not only U.S. regulatory authorities but also regulatory authorities in the major markets in terms of responding to requests for disclosure. However, the scope of the supply chain to be covered should be determined by balancing the utility of the information with the difficulty of collecting it.

(b) LTVC Perspective

Counterfeit drugs was the only one of the disclosure topics for pharmaceuticals that took the LTVC perspective.

In addition to this, the working group suggested that it would be useful to be able to provide additional explanation of the opportunity aspect, since the following disclosure topics are also important from the LTVC perspective.

<u>Affordability & pricing</u>
Possession of pricing power

<u>Employee recruitment, development & retention</u>
Discussion of employee loyalty

(c) Risk Perspective

Since many of the accounting metrics themselves are indicators of actual results for the reporting year, it is necessary to explain what the actual figures mean, e.g., the status of compliance with laws and regulations and voluntary controls in each country.

From the perspective of avoiding risk, it would be useful to disclose additional information on the following.

- Disclose the status of development and improvement of risk management and governance structures. Discuss any points of differentiation from other companies.

(6) Automobiles

(i) Appropriateness of Disclosure Topics

The disclosure topics highlighted for automobiles by the SASB Standards are as follows.

Dimension	General Issue Category	Disclosure Topics
		Automobiles
Environment	GHG emissions	–
	Air quality	–
	Energy management	–
	Water and wastewater management	–
	Waste and hazardous materials management	–
	Ecological impacts	–
Social capital	Human rights and community relations	–
	Customer privacy	–
	Data security	–
	Access and affordability	–
	Product quality and safety	**Product safety**
	Customer welfare	–
	Selling practices and product labelling	–
Human capital	**Labor practices**	**Labor practices**
	Employee health and safety	–
	Employee engagement, diversity & inclusion	–
Business model and innovation	**Product design and lifecycle management**	**Fuel economy & use-phase emissions**
	Business model resilience	–
	Supply chain management	–
	Materials sourcing and efficiency	**Materials sourcing**
		Materials efficiency & recycling
	Physical impacts of climate change	–
Leadership and governance	Business ethics	–
	Competitive behavior	–
	Management of the legal and regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	–

We concluded the disclosure topics identified in the SASB Standards to be appropriate. However, some commented that individual companies should make the final decision on whether to make disclosures for each topic. In addition, investors commented that if a company decides not to disclose a topic, the reason for non-disclosure should also be stated.

In addition to the disclosure topics identified for automobiles, the three topics of physical impacts of climate change, employee health and safety, and supply chain management were mentioned as important. However, they were classified as topics of common importance to all industries, rather than industry-specific. On the other hand, it was decided to review customer privacy/data security separately as a topic of medium- to long-term importance for companies in the industry. In addition, investors pointed out that "just transition," including reskilling for human capital, is expected to be an important theme in the future, but it was not included in this review as it is a topic that requires more discussion.

(ii) Review of Accounting Metrics for Each Disclosure Topic

(a) Social Capital

Product Safety

The accounting metrics for product safety are as shown in the table below.

Disclosure Topic	Accounting Metrics
Product safety	• Percentage of vehicle models rated by NCAP programs with an overall 5-star safety rating,[1, 2] by region[3] 1 The number of vehicles models that are rated by an NCAP program with an overall 5-star rating divided by the total number of vehicle models that are rated by an NCAP program. 2 The entity may discuss advanced crash avoidance technologies and features that are not considered as part of NCAP ratings (e.g., electronic stability control, lane departure warning, and forward collision warning, etc.) 3 See the following page for details. • Number of safety-related defect complaints,[4] percentage investigated 4 See the following page for details. • Number of vehicles recalled Note: Disclosure shall include a discussion of notable recalls, such as those that affected a significant number of vehicles of one model or those related to a serious injury or fatality.

We concluded the accounting metrics for product safety per se to be useful. The concept of safety should be discussed from the perspective of the future vision, and product safety in particular should be discussed based on presentation of the company's concept of safety, not limited to the metrics. (For example, it is necessary to include data security in the concept of safety in addition to more concrete aspects of safety.) There is also a need to disclose qualitative background information rather than quantitative information only.

In addition, the following disclosure methods and information are useful for understanding of the topic.

- Disclosure of approaches, policies, and indicators for how the metrics will be developed in the future
- Disclosure of the financial impact and year-to-year and percentage information for the number of complaints and the number of vehicles recalled
- Number and percentage of vehicle models that incorporate safety features
- Safety training and other initiatives

Companies stated that they face the following questions and issues in making disclosures.

・ What information would be useful for countries that have not introduced NCAP?
・ It is doubtful whether the percentage investigated is a useful indicator as companies always respond to findings by regulatory authorities.

Investors also suggested that it would be useful to disclose the number of traffic accidents involving the company's vehicles over time, as many companies have set a goal of zero traffic accidents. However, companies indicated that it would be difficult to disclose the number of accidents in a uniform manner, as there are many different factors involved in accidents.

(b) Human Capital

Labor practices

The accounting metrics for labor practices are as shown in the table below.

Disclosure Topic	Accounting Metrics
Labor practices	• Percentage of active workforce covered under collective bargaining agreements • (1) Number of work stoppages and (2) total days idle Note: Disclosure shall include a description of the reason for each work stoppage, impact on operations, and any corrective actions taken.

We concluded the accounting metrics for labor practices per se to be useful. From a medium- to long-term perspective, it is important to build sound labor relations and to demonstrate that there is dialogue between management and employees. This topic should also be emphasized from a governance perspective. As human rights have been recognized as a global issue and the topic is of high interest to multiple stakeholders from the perspective of social impact, in any discussion it is desirable to be aware of differences between users of information and to bear in mind governance and risks in terms of the impact on corporate value.

In addition, the following disclosure methods and information are useful for understanding of the topic.

・ Impact on production activities (decrease in production volume and related costs, etc.)
・ Discussion of development of governance structure that manages production overall, including the supply chain, and can identify the location of risks
・ Information on human rights due diligence efforts and results, reskilling, etc., from a long-term perspective with an eye on future investment
・ Indicators on monitoring related to labor practices to prevent human rights problems (e.g., average overtime hours, employee satisfaction, etc.)

- Qualitative discussion of response to insecure employment (fixed-term workers, contract employees, etc.) and the differences with regular employment, etc. and discussion of quantitative control items
- Discussion of risk awareness and initiatives to mitigate risk (if there are regions or labor-management relations under close monitoring)
- Approach and policy for sound labor relations (as labor-management relations also change with the external environment, classification is important first)

Companies stated that they face the following issues in making disclosures.

- When discussing impacts on production activities, it is difficult to delineate materiality according to impact on profitability as production delays of a few days can be recovered in some cases. In addition, labor-management relations differ from country to country, making it difficult to provide a comprehensive discussion on a global basis, and there is a need to discuss the question of which regions to cover and the importance (e.g., sites with a large number of employees, etc.)
- Engagement between management and employees requires not only top-down, but also bottom-up mechanisms to raise the issues.

(c) Business Model and Innovation

<u>Fuel economy & use-phase emissions</u>

The accounting metrics for fuel economy and use-phase emissions are as shown in the table below.

Disclosure Topic	Accounting Metrics
Fuel economy & use-phase emissions	• Sales-weighted average passenger fleet fuel economy, by region[1] 1 The average fuel economy of passenger and light-duty vehicle fleet, weighted for the footprint of vehicles sold, by geographic region. • Number of (1) zero emission vehicles (ZEV),[2] (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold 2 ZEVs are vehicles driven only by an electric motor powered by advanced-technology batteries or a hydrogen fuel cell, and have no tailpipe emissions over their entire lifetime under any and all possible operational modes and conditions. • Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities

We concluded the accounting metrics for fuel economy and use-phase emissions per se to be useful. However, some commented that, while fuel economy information is useful in the short term because it allows for comparison with other companies, it is not useful in medium- to long-term evaluation.

Some commented that the following disclosure methods and information would be useful for understanding of the topic.

- Disclosure of sales-weighted average fuel economy by vehicle segment (vehicle weight) over time (existence of improvements) and strategies and initiatives to improve average fuel economy

- Discussion of the company's life cycle assessment (LCA) approach in conjunction with strategies for managing vehicle fuel economy and emission risks/opportunities
- CO_2 emissions of vehicles sold (estimates acceptable) and how CO_2 emissions reductions will be achieved in the sale of new vehicles
- CO_2 emissions reduction targets and technology roadmap, CO_2 emissions reduction results
- Electric technologies that contribute to improved fuel economy, not only (1) ZEVs, (2) hybrid vehicles, and (3) plug-in hybrid vehicles

Companies stated that they face the following issues in making disclosures.

- Milestones have been set for achieving carbon neutrality, but future sales volume is hard to forecast.
- It is difficult to respond as it is unclear what kind of disclosure will be required in the future for carbon neutrality (e.g., powertrain strategy, CO_2 emissions, fuel economy, and electricity costs.)

Materials sourcing

The accounting metrics for materials sourcing are as shown in the table below.

Disclosure Topic	Accounting Metrics
Materials sourcing	• Description of the management of risks[1] associated with the use of critical materials[2] 1 A strategic approach to managing risks associated with the use of critical materials in products, including physical limits on availability and access, changes in price, and regulatory and reputational risks. 2 A critical material is defined as a material that is both essential in use and subject to supply restriction. (This definition is derived from the U.S. National Research Council of the National Academies' Minerals, Critical Minerals, and the U.S. Economy.) Specific examples: Antimony, cobalt, fluorspar, gallium, germanium, graphite, tantalum, platinum group metals (platinum, palladium, etc.), rare earth elements (yttrium, scandium, lanthanum, etc.)

We concluded the accounting metrics for materials sourcing per se to be useful. Some commented that Japanese companies are highly dependent on foreign countries for rare earth elements and other resources, and that, because of the high level of risk, adequate disclosure from a risk perspective is desirable, but that, from an opportunity perspective, excessive disclosure may result in a loss of competitive advantage and should be considered carefully.

Some commented that the following disclosure methods and information would be useful for understanding of the topic.

- Discussion of opportunity aspects (if there are any points to be emphasized from a strategic perspective)
- Qualitative discussion, including policy, governance, and innovation, etc.
- Efforts to reduce risk (improvement of research and development structure, etc.)

- Disclosure that separates sourcing risks into two patterns: sourcing risks due to material shortages (e.g., semiconductors), and sourcing risks due to human rights problems (e.g., conflict minerals)

Issuer perceptions of the challenges in making disclosures and investor thoughts regarding those were also presented.

- Disclosure is essential, but it is necessary to continue addressing the question of how far back in the supply chain needs to be checked. In response to this, investors expressed the opinion that although the direct scope of responsibility is primary suppliers, there is a need to make efforts to understand the value chain by requesting primary suppliers to provide traceability of secondary suppliers.
- In disclosure material, risks are discussed as part of supply chain initiatives to deal with conflict minerals, while opportunities are discussed in the development and environment areas, so the discussion of the topic is scattered in different sections of a report. In response to this, investors expressed the opinion that discussion from the perspectives of both risks and opportunities is important, and there is no need to describe risks and opportunities together.

Materials efficiency & recycling

The accounting metrics for materials efficiency and recycling are as shown in the table below.

Disclosure Topic	Accounting Metrics
Materials efficiency & recycling	• Total amount of waste from manufacturing, percentage recycled Note: Disclosure shall include the percentage of waste generated from manufacturing operations that was recycled. • Weight of end-of-life material recovered; percentage recycled • Average recyclability of vehicles sold Note: Disclosure shall include a description of the entity's approach to optimizing vehicle recycling and recovery rates.

We concluded the accounting metrics for materials efficiency and recycling per se to be useful. Since the topic is of high interest to multiple stakeholders from the perspective of social impact, discussion (including medium- to long-term targets and goals, and KPIs to measure progress) that incorporates the value creation perspective into the value creation story with an awareness of the differences between information users is desirable.

In addition, the following disclosure methods and information are useful for understanding of the topic.

- Information on battery recycling (increasingly important in the future)
- Discussion including indicators from the perspective of how the recycling rate will be increased, how decreasing energy inputs and increasing the recycling rate will be

balanced, and the development of easy-to-recycle products, as well as the reasons the indicators are important to the company

- Percentage of virgin materials used and related initiatives (manufacturing that does not depend on newly-mined resources will become increasingly important)
- Disclosure over time (improvement in quantitative values) and information on new products with low environmental impact
- Recognition and approach to cost performance (In the past, disclosures were often made in response to regulations, but as the importance of reducing environmental impact increases in purchaser decision-making, recycling initiatives can be evaluated in terms of opportunities. In addition, presentation of cost performance is useful for communicating a positive attitude toward initiatives.)

Companies stated that they face the following issues in making disclosures.

- Quantitative discussion of recycling of sold vehicles is difficult due to issues with tracking sold vehicles.
- Sustainability reports discuss various efforts in recycling, reuse, resale and refabrication, but do not tell a story. This is recognized as an issue for the future.

(d) Additional Topic Reviewed

Customer privacy/data security

Customer privacy/data security was not covered in the transportation sector, which includes the automobile industry. Therefore, it was decided to review useful accounting metrics for the automobile industry by referring to the accounting metrics for four industries in the technology and communications sector (hardware, internet media and services, software and IT services, and telecommunication services) in which data security was identified as material and which have an affinity with the products and services in the automobile industry. The accounting metrics included in the review are as shown in the table below.

Disclosure Topic	Accounting Metrics
Customer privacy/data security	• Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards • (1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected

In terms of the accounting metrics for customer privacy/data security, companies expressed the view that the need from investors is understandable and there are no concerns about the metrics themselves. Investors also commented that the accounting metrics per se are useful, but that issues specific to the automobile industry need to be covered.

Investors also expressed the opinion that it would be useful to clarify the perception of risk and opportunity regarding data security and to present relevant accounting metrics. In contrast, companies commented that discussion related to the ”safety area” needs to be reviewed in the future

(iii) Summary

Although the SASB Standards accounting metrics per se are useful, we have put together the following three perspectives in terms of the ideal form for disclosure that would be more meaningful for Japanese companies.

(a) Ideal Form and Methods of Presentation for Non-financial Indicators

Quantitative metrics need to be presented as a supporting element for the qualitative information in the discussion of background information such as the future vision, approach, policies, strategies, and initiatives for the disclosure topic. When reporting accounting metrics, it was suggested the following presentation methods also would be useful, if necessary.

- KPIs in the relevant disclosure topic
- Presentation with trends over time (discussion of whether there is improvement)
- Presentation of information as a percentage or number of cases per units to improve comparability
- Presentation by vehicle segment

(b) LTVC Perspective

While there is a wide range of accounting metrics expected by various stakeholders to be disclosed in terms of social impact, there is a need to discuss information that is relevant from the LTVC perspective. Of the topics for automobiles, “fuel economy & use-phase emissions (but only short-term evaluation),” “materials sourcing,” and “materials efficiency & recycling” took the LTVC perspective.

In addition to this, the working group suggested that it would be useful to be able to provide additional explanation of the opportunity aspect, since the following disclosure topics are also important from the LTVC perspective.

Product safety

Concept of product safety at the company (discussion of differentiation from other companies)

Materials efficiency & recycling

Approach to cost performance (whether benefits of initiatives exceed costs)

(c) Risk Perspective

Since many of the accounting metrics themselves are indicators of actual results for the reporting year, it is necessary to explain what the actual figures mean, e.g., the status of compliance with laws and regulations and voluntary controls in each country.

From the perspective of avoiding risk, it would be useful to disclose additional information on the following.

- Financial impacts and related costs
- From the perspective of risk avoidance, targets, plans, progress, and monitoring indicators

(7) Conclusion

The foregoing sections are the results of the discussions in each of the industry-specific working groups for construction materials, chemicals, commercial banks, pharmaceuticals, and automobiles. The following three perspectives summarize the ideal method for more meaningful disclosure of industry-specific indicators that were clarified through the discussions in these working groups.

(i) Consideration of the Ideal Form for More Meaningful Disclosure

Corporate reporting and dialogue that contribute to LTVC require both companies and investors to be aware of and understand the industry-specific material topics and the relevant non-financial indicators. Therefore, the SASB industry-specific standards are useful as a starting point for discussion. However, since the SASB industry-specific standards have a strong risk aspect, it is desirable from the LTVC perspective to discuss not only the risk aspect but also the opportunity aspect when discussing industry-specific material topics and non-financial indicators.

(ii) Industry-Specific Sustainability Disclosure Topics

It was confirmed that the SASB industry-specific sustainability disclosure topics are all important from the LTVC perspective. However, some of the SASB industry-specific topics have been identified assuming the U.S. situation, and some of them have little financial impact for Japan and other regions. Therefore, consideration should be given to the region in which the company operates. The working groups also identified new topics that were recognized as having significant financial impact, in addition to the SASB industry-specific topics. In considering industry-specific topics, it is necessary to take into account changes in the business environment and industry trends, as well the region in which the company operates.

(iii) Selection of Industry-Specific Non-financial Indicators

Although there is a wide range of non-financial indicators for which important stakeholders for an industry expect disclosure, companies are required to select and set non-financial indicators that are important from the LTVC perspective. If the metrics for the SASB industry-specific sustainability disclosure topics are necessary to discuss the LTVC of the company, there is a need to discuss the reasons for disclosure and the method of interpretation, as well as demonstrating the connection with LTVC. In doing so, it is important to devise and disclose presentation methods in line with the company's value creation story and business model in order to deepen investors’ understanding of LTVC.

Due to the perspective, for comparison with other companies in the same industry, it is necessary to ensure comparability by presenting the selected non-financial indicators to be disclosed by the company in terms of intensity, etc. In addition, while many of the SASB industry-specific metrics for non-financial indicators from a risk perspective focus on actual results, it is important from the LTVC perspective to discuss not only actual results but also the fact that risks are properly managed. For example, non-financial indicators related to air and water quality can provide useful information by explaining not only actual results, but also compliance with national laws and regulations and voluntary controls. Companies are required to provide investors with easy-to-understand explanations, while including qualitative information depending on the non-financial indicators they disclose.

5-3 Individual Company Indicators

Individual company indicators	・These are indicators that the individual company sets independently in order to differentiate itself from other companies. ・In many cases, the indicators are set with an awareness that they will lead to an increase in corporate value over the long term.

The LTVC story that a company tells is unique to the company, and individual company indicators must also be set as they are needed to explain the story. This section discusses individual company indicators based on the cases of the Ajinomoto Group and Tokyo Electric Power Company Holdings, which participated in the individual company working group.

(1) Demonstration in the WG of individual companies in the working group

(i) Ajinomoto Group

In its *Integrated Report 2021*,[29] the Ajinomoto Group considers human resources to be important for realizing LTVC and discloses its efforts to strengthen human resources. In doing so, the report sets and discusses quantitative as well as qualitative indicators to deepen understanding of the story for strengthening human resources.

(Source: *Ajinomoto Group Integrated Report 2021*)

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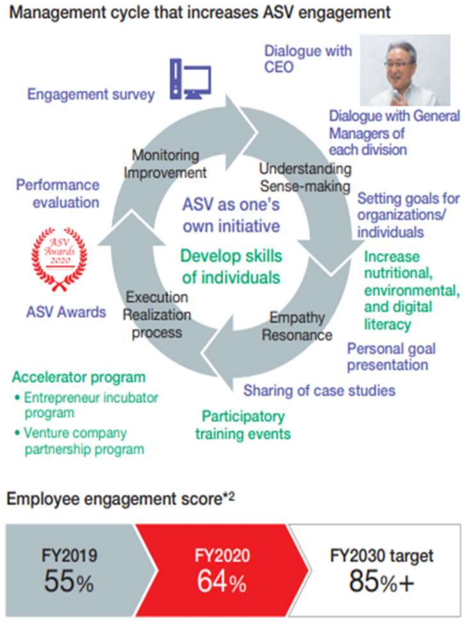
29 *Ajinomoto Group Integrated Report 2021*
[Integrated Report 2021_en_A4.pdf (ajinomoto.com)]

To fulfill its vision, the Ajinomoto Group is increasing investment in its human resources to transform into a highly productive, issue-solving organization. In Phase 1 (fiscal 2020–2022) of the Medium-Term Management Plan, the Group is increasing investment in human resources by around 2.5 times the amount spent during fiscal 2017–2019. It has established productivity per employee as an indicator for monitoring the success of initiatives, and has also defined employee engagement, diversity and inclusion, and work style as the three pillars for boosting productivity.



(Source: *Ajinomoto Group Integrated Report 2021*)

Of these three pillars, the Group considers increasing the engagement of employees in creating customer value is indispensable to enhancing its corporate value. The Group sets organizational and individual goals of solving issues together with customers and standardizes the plan-do-check-act (PDCA) cycle of management. (See figure on right.)

In fiscal 2020, dialogue meetings were held 53 times between the CEO and employees across all Ajinomoto Co., Inc. organizations and 75 times between General Managers of business or corporate divisions and employees of Ajinomoto Co., Inc. and major group companies in Japan. These dialogues increased communication and provided opportunities to explain the CEO's intentions for the Group's "transformation" and deepened employee understanding of the 2020–2025 Medium-Term Management Plan and management policy. As a result, the dialogues also increased employee motivation to create customer value. The personal goal presentations held at all Ajinomoto Co., Inc. organizations generated much positive feedback from the presenters, with many saying it helped them to clarify the significance of their work and their customers. The engagement survey conducted after these events recorded 64% of all Group employees implementing "ASV as one's own initiative," in other words, those actively pursuing the Ajinomoto Group Creating Shared Value (ASV) initiative in their own daily work to fulfill the vision, marking an increase of nine percentage points from the previous year.

With regard to such efforts and disclosure, investors commented that they appreciate that they can sense the Ajinomoto Group's unique story in the strong focus on employee engagement. On the other hand, there were various opinions asking for improvements. These included showing how the ROIC tree analysis is connected to employee engagement and, although the development of innovative human resources is mentioned, saying more about how they will be developed within the company.

For the future, the Ajinomoto Group needs to disclose more about its approach to ensure stakeholders feel confident that its efforts to strengthen human resources will lead to LTVC. To this end, it will share the results of this dialogue with the Human Resources Department, and it is said that discussions will begin.

(ii) Tokyo Electric Power Company Holdings

After announcing its management plan for the next ten years (the Fourth Comprehensive Special Management Plan), Tokyo Electric Power Company (TEPCO) Holdings published *Integrated Report 2020–2021*,[30] disclosing its value creation story from a long-term perspective linked to the Mission, Vision, and Values that make up its Corporate Philosophy. As part of this, the Group considered initiatives related to electric vehicles that contribute in the Society aspect of ESG, with the SDGs as the starting point, and incorporated them into the integrated report as opportunities to create new value creation. In 2019, TEPCO Holdings voiced support for the EV100 initiative and is promoting transformation in the vehicles used in business operations with the aim of using 100% electric vehicles by fiscal 2030. As "mobile storage batteries," electric vehiclesare expected to provide new value to society in the form of disaster preparedness, and TEPCO Holdings expects them to have a useful social impact. In the report, TEPCO Holdings set a long-term goal for the EV100 Project (100% replacement of business vehicles with electric vehicles by fiscal 2030), and at the same time, disclosed the results of a quantitative evaluation of the social impact of the project using IRIS+. Specifically, the evaluation calculated the estimated cumulative effect of direct and indirect CO_2 emission reductions and gasoline use reductions by 2030.

This disclosure promoted understanding of the LTVC story because the information quantified in the social impact assessment matched the new Corporate Philosophy which is "Develop the future of energy, deliver a comfortable life." Focusing on EV100, visualizing the CO_2 reduction effect and showing the cumulative effect by 2030 also made it easier to

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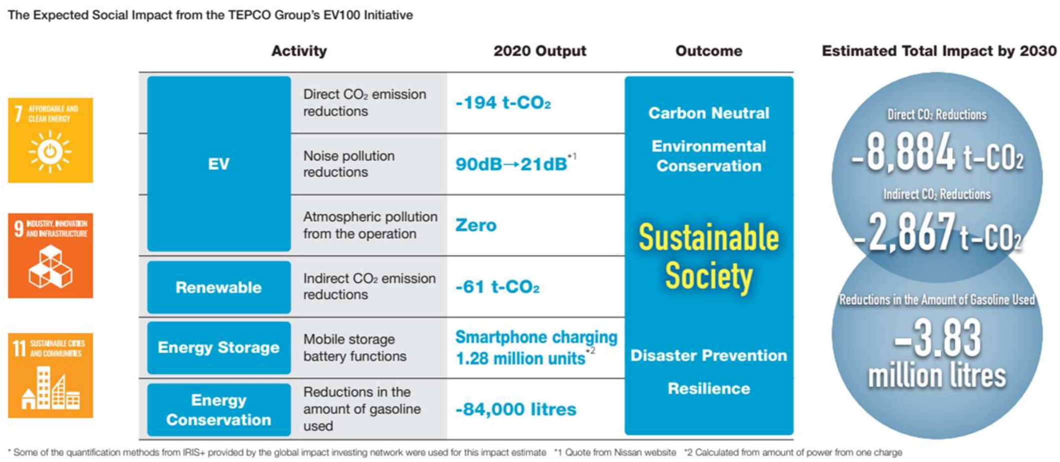
[30] *TEPCO Holdings Integrated Report 2020–2021*
TP20-21EN_web.pdf (tepco.co.jp/en)

visualize the reduction figures on other pages of the integrated report, and allowed disclosure of specific information that readers could easily understand as EV100 outputs, such as noise pollution reductions, gasoline use reduction, and "smartphone charging of 1.28 million units." In addition, the fact that the EV100-promoting bodies within the company were able to confirm the significance, meaning, and effects of their own business activities in the course of the quantitative evaluation of social impact contributed to the



(Source: *TEPCO Holdings Integrated Report 2020–2021*)

improvement of motivation.Although the quantification of social impact received a positive evaluation to a certain
degree, the following issues were raised: expansion of projects to be covered (large-scale projects to be implemented in cooperation with society and customers, and more material initiatives), and a financial valuation of the social impact assessment to strengthen the overall linkage between the ideal vision, the value creation story, materiality, and the long-term goals.

(2) Summary

Companies are required to specify indicators for use in assessing their unique approach to value creation in order to show how they can deliver on their LTVC story. In doing so, companies are expected to select indicators with reference to indicators common to all industries and industry-specific indicators that are commonly recognized by investors, but if these types of indicators cannot fully explain the value creation story, companies are expected to set their own indicators. However, since indicators set independently by a company may be unfamiliar to external stakeholders, it is unlikely that they will be easy to understand if only the indicators and their values are disclosed. If a company sets indicators to help people understand its efforts to deliver on its LTVC story, it is desirable to discuss the thinking and assumptions that led to the setting of the indicators, as well as the way the indicators are viewed, all in a way that is easy to understand. The Ajinomoto Group and TEPCO Holdings have established unique indicators in discussing the strengthening of human resources and the replacement of business vehicles with electric vehicles, respectively, and both are good examples that clearly explain the thinking and assumptions that led to their establishment and the way in which the indicators are viewed.

6 Recommendations on the Ideal Form for Non-financial Information Disclosure

6-1 Positioning of These Recommendations

Non-financial information disclosure should be useful in informing investors' investment decisions and encouraging dialogue between companies and investors. However, the sheer diversity of investment management approaches taken by investors makes it difficult to reduce the ways non-financial information is used to just a single method.

While non-financial information might on the one hand be used by investors seeking to illuminate future declines in financial value (risks), there will also be investors using this information to focus on future increases in financial value (opportunities). In general, investors' management approaches can be categorized into either passive or active management, but even among those investors who choose to adopt a passive approach and not research individual stocks, there are those who focus on enhancing corporate value through a process of dialogue and engagement with companies, showing an interest in how the company will deliver on its long-term value creation (LTVC) story. This means that while in general it is not possible to categorize the way in which non-financial information is used by looking at investors' management approaches alone, there is undoubtedly a strong tendency for active investors to take a greater interest in how a company will deliver on its LTVC story. Similarly, on the corporate side, while there may be some companies that place emphasis on gauging their position vis-à-vis other companies through comparisons of non-financial information and chronological comparisons, there are also companies that seek to utilize non-financial information adeptly and incorporate it into management strategy, with a view to delivering on their unique LTVC story.

The mission of EDSG is to contribute to creating a mechanism that realizes the sustainable development of society in keeping with the LTVC of companies themselves. To date we have discussed the current status and challenges for the disclosure of non-financial information and debated the ways in which to make disclosure of greater benefit to both companies and investors alike. Increasing uncertainty in the business environment is making it even more difficult for companies to make long-term projections. Even so, companies are required to grow sustainably, and it is of ever-growing importance for companies to have some kind of a compass to chart a path to the vision they seek to achieve. Setting out clearly a company's LTVC story not only demonstrates to investors the path a company intends to take; the story can also be used to nurture shared understanding among employees about the company's direction, thereby acting as a compass for all stakeholders to come together to deliver on the value creation story. When disclosing non-financial information, it is important to maintain a balance between non-financial information that serves as a common language among stakeholders, including investors, and non-financial information that is unique to individual companies. In its discussions, EDSG focused on the non-financial information necessary for companies to clarify their LTVC story and for investors and other stakeholders to understand it, and these recommendations are also based on such a perspective.

Recommendations are set out for companies, investors and standard-setting bodies, all of which are considered to be stakeholders of particular importance when constructing approaches to corporate disclosure from a starting point that seeks to clarify and enhance understanding of a company's LTVC story.

6-2 Recommendations for Companies

(1) Companies are required to explain their own unique LTVC story

All companies aim to achieve LTVC, but the path to success is different for each and every company. As a starting point for a company's purpose and responses to stakeholder expectations, companies need to set out their ideal vision (target state with commitment) and explain their LTVC story based on their own specific circumstances, including such aspects as a business model, competitive superiority and the sources of such superiority.

(2) Companies should express clearly in their own words what kind of value they are focusing on

Through its activities, a company creates long-term social, environmental, and economic value, which in turn increases its financial value. Conversely, any negative impacts on social, environmental, or economic value could result in reduced financial value. Companies are expected to constantly appraise and consider just what kinds of value they are focusing on in their journey to create value, and express clearly in their own words what this value is.

(3) Materiality should be specified in accordance with the values that each company prioritizes, taking into account the impact on the company and also the impact on key stakeholders

When seeking to deliver LTVC, it is necessary for companies to specify materiality in order to select priority action items. As noted in (2) above, what a company perceives as materiality will also impact the way in which it prioritizes value. When specifying materiality, a company should consider the impact on the company itself and also the impact on stakeholders who are considered important by the company, based on the value that it prioritizes.

(4) Companies should make clear the impact specified materiality will have on value creation

Companies need to identify in their value creation story the kinds of risks and opportunities they perceive for the materiality that they have identified and how materiality impacts value creation. While such impacts should be based on quantitative information, it is preferable to organically integrate both quantitative and qualitative aspects as appropriate in explanations so that numerical information will not be used out of context.

(5) When a company sets its own indicators for delivering on its LTVC story, it is required to provide readily understandable explanations about the concepts underpinning the indicators, and also to describe how to view them

The indicators that companies set for delivering on their LTVC story should be set by the companies themselves, to serve as keys to the company's own unique approach to value creation. In the process of setting these indicators, companies should select and set items that are specific to the company, while also taking into account indicators that are common to all industries and industry-specific indicators, which are commonly recognized by investors. Although companies should select and set indicators as necessary themselves, in order to gain the understanding of investors with regard to the selection and setting of indicators, it is important to provide readily understandable explanations about the concepts underpinning the indicators, and also describe how to view them. It is also important to set out any medium- to long-term goals as they relate to the indicators and to report regularly on the status of these goals after they have been disclosed.

(6) If a company chooses not to use indicators that are commonly recognized by investors to describe its journey to deliver on its LTVC story, then it should also explain the reasons it did not do so

Among the indicators that companies select and set for delivering on their LTVC story, those that are commonly recognized by investors make it easier to compare simple figures across companies. However, the selecting and setting of indicators is done by the companies themselves and while some may select and disclose indicators that are recognized by investors, others may choose not to do so. In such cases, companies should provide readily understandable explanations to investors about the reasons for not setting indicators. A relatively large number of investors tend to focus on the indicators that are commonly recognizable, meaning that it is necessary to also be aware of the potential impact of choosing not to set such indicators.

(7) Companies should engage in active dialogue with investors about the ideal form for non-financial information, and work to understand and disclose the non-financial information that investors consider necessary

Companies should engage in active dialogue with investors in order to understand what type of non-financial information investors require. Realizing the disclosure of non-financial information that is convincing for both companies and investors alike is expected to lead to beneficial engagement with investors, and also enhance the likelihood of the company achieving LTVC.

6-3 Recommendations for Investors

(1) Investors are required to understand the unique LTVC stories that each company has formulated

The value creation stories that companies formulate are unique to each individual company and investors need to understand these value creation stories. The key to understanding a company's LTVC story is the company's purpose. It is therefore necessary for investors to start from a company's purpose and seek to understand the kind of value-creation story it is seeking to depict.

(2) After having first understood the criteria by which a company specifies its materiality, investors should assess whether and how addressing such materiality will contribute to the realization of a company's LTVC story

Materiality is a company's priorities from the perspective of realizing its ideal vision, taking into account its purpose, defined value, and strategic viewpoint. In order to understand the materiality specified by a company, it is necessary to understand the criteria by which priorities are selected. Having first confirmed what the company's specific targets are for its specified materiality and how it intends to achieve these targets, investors are required to make an evaluation from the perspective of how and if tackling such materiality will contribute to the realization of the company's LTVC story.

(3) If using indicators selected and set by companies, it is important for investors not to use the indicators alone in isolation, but rather to use them after first understanding

the concepts and thought processes behind their selection and setting as described by the company, as well as the company's description of how to view them

The indicators that companies select and set in order to deliver on their LTVC story have been deemed necessary by the company itself and set accordingly. Therefore, when using indicators selected and set by companies, investors should not merely use the indicators in isolation, but should use them after first understanding the concepts and thought processes behind their selection and how the company believes they should be viewed. For example, the turnover rate used in reference to human capital will have varying significance depending on how human capital is perceived in the context of fulfilling a company's LTVC story. Investors should not simply compare high or low turnover rates, but should use the figures provided after understanding the thinking behind the company's selection and setting of the turnover rate and the way it should be viewed as an indicator.

(4) In the case where companies have not chosen any indicators that are commonly recognized by investors, then investors should first seek out the reasons why such indicators have not been selected before evaluating the company

When a company specifies materiality in order to deliver on its LTVC story, it is a possibility that it will not select indicators that are commonly recognized by investors, after having determined that such indicators do not correspond to the company's materiality. In such cases investors should not just judge a company on the basis of the indicators that have not been set, but should instead first seek out the reasons why such indicators were not selected in the first place before evaluating the company.

(5) Investors should explain how they use companies' non-financial information

The sheer diversity of investment management approaches taken by investors means that it is difficult to reduce the ways non-financial information is used to just a single method. For example, non-financial information might on the one hand be used by investors seeking to illuminate future declines in financial value (risks), whereas there will also be investors using the same information to focus on future increases in financial value (opportunities). Many companies are concerned about what non-financial information to disclose and explain to investors, and whether it will contribute to appropriate investment decisions and the realization of dialogue. Accordingly, investors should first clarify their approaches to using non-financial information in the context of their own investment policies and explain how they are using companies' non-financial information.

(6) Investors should enhance their capacity to study non-financial information

In order also to accurately reflect non-financial information into investment decisions and dialogues, investors need to enhance their capacity to study non-financial information in a manner consistent with their own ideas on the use of non-financial information and the way they use non-financial information. There may be cases in which investors use the evaluation results of ESG evaluation bodies when researching the non-financial information of companies, and in such cases investors should use such data responsibly themselves, after having first understood the evaluation items and evaluation criteria of the ESG evaluation body.

6-4 Recommendations for Standard-Setting Bodies

(1) The setting of disclosure criteria for a LTVC story based on integrated thinking as a standard for linking financial and non-financial information disclosure standards is necessary for corporate disclosure standards overall

It is difficult to use non-financial information alone as the basis for investment decisions and dialogue, and linking such information with financial information serves to make it more useful. It is generally considered that non-financial information impacts financial information over an extended time frame, and therefore non-financial information could be useful in clarifying corporate value by integrating it with explanations of financial information in the context of a company's LTVC story.

Accordingly, the setting of disclosure criteria for an LTVC story based on integrated thinking as a standard for linking financial and non-financial information disclosure standards is necessary for corporate disclosure standards overall.

(2) Non-financial information disclosure standards should be set while considering whether there will be any impact on a company's financial value

As a source of corporate information, non-financial information is incredibly broad and varied and different information will be of interest to different stakeholders. While some people hold the view that non-financial information should be disclosed with all of a company's important stakeholders in mind, when setting standards for disclosure of non-financial information, these should relate to information that ultimately impacts the financial value of the company, while taking into due consideration the significant impact that corporate activities have on the environment and society. At such times, investors and other stakeholders should fully consider that corporate value is determined based on the value that a company will create in the future. Standards should therefore be set that focus on disclosing not just the company's (financial) value as an outcome in itself, but also the substance of its unique value creation, which is the key to its value.

(3) When setting standards for disclosure of non-financial information, disclosure standards are needed that enable companies to take the initiative in determining the information to be disclosed, while maintaining objectivity in the application of the standards so as not to fall into the trap of formulaic disclosure

Companies take the initiative in specifying materiality for themselves in order to deliver on their LTVC story. This specified materiality is unique to each individual company, and the non-financial information required to explain it includes non-financial information that is unique to the company, as well as non-financial information that is commonly recognized by investors.

Accordingly, when setting standards for disclosure of non-financial information, in addition to not falling into the trap of formulaic disclosure, nothing should be done that would obstruct the disclosure of a company's unique non-financial information.

To that end, it should be for a company itself to decide about whether to disclose non-financial information stipulated in standards, and whether to disclose non-financial information that is unique to the company. It is therefore necessary to stipulate clearly in standards that in their disclosures companies need to explain in a readily understandable manner the ideas behind the disclosure and the contents of the disclosure, or explain the reasons why disclosures are not being made.

Appendix 1 List of indicators common to all industries

The table below shows the correspondence between the 18 common themes set by EDSG for all industries and the reporting requirements of GRI.

			(Reference) GRI	
Classification	**Common theme for all industries**	**Indicators common to all industries (GRI disclosure items)**	NO.	**REQUIREMENTS**
Environment	1 GHG emissions	Direct (Scope 1) GHG emissions	305-1	a. Gross direct (Scope 1) GHG emissions in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.

Environment	1 GHG emissions	Energy indirect (Scope 2) GHG emissions	305-2	a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent. c. If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.
Environment	1 GHG emissions	Other indirect (Scope 3) GHG emissions	305-3	a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO2 equivalent. b. If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. c. Biogenic CO2 emissions in metric tons of CO2equivalent. d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. e. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. g. Standards, methodologies, assumptions, and/or calculation tools used.

Environment	1 GHG emissions	GHG emissions intensity	305-4	a. GHG emissions intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.
Environment	1 GHG emissions	Reduction of GHG emissions	305-5	a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO2 equivalent. b. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. c. Base year or baseline, including the rationale for choosing it. d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). e. Standards, methodologies, assumptions, and/or calculation tools used.
Environment	2 Impact of climate change	Financial implications and other risks and opportunities due to climate change	201-2	a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: i. a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii. a description of the impact associated with the risk or opportunity; iii. the financial implications of the risk or opportunity before action is taken; iv. the methods used to manage the risk or opportunity; v. the costs of actions taken to manage the risk or opportunity.
Environment	3 Air quality	Emissions of ozone-depleting substances (ODS)	305-6	a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent. b. Substances included in the calculation. c. Source of the emission factors used. d. Standards, methodologies, assumptions, and/or calculation tools used.

Environment	3 Air quality	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	305-7	a. Significant air emissions, in kilograms or multiples, for each of the following: i. NOx ii. SOx iii. Persistent organic pollutants (POP) iv. Volatile organic compounds (VOC) v. Hazardous air pollutants (HAP) vi. Particulate matter (PM) vii. Other standard categories of air emissions identified in relevant regulations b. Source of the emission factors used. c. Standards, methodologies, assumptions, and/or calculation tools used.
Environment	4 Energy management	Energy consumption within the organization	302-1	a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used. b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used. c. In joules, watt-hours or multiples, the total: i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption d. In joules, watt-hours or multiples, the total: i. electricity sold ii. heating sold iii. cooling sold iv. steam sold e. Total energy consumption within the organization, in joules or multiples. f. Standards, methodologies, assumptions, and/or calculation tools used. g. Source of the conversion factors used.

Environment	4 Energy management	Energy consumption outside of the organization	302-2	a. Energy consumption outside of the organization, in joules or multiples. b. Standards, methodologies, assumptions, and/or calculation tools used. c. Source of the conversion factors used.
Environment	4 Energy management	Energy intensity	302-3	a. Energy intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all. d. Whether the ratio uses energy consumption within the organization, outside of it, or both.
Environment	4 Energy management	Reduction of energy consumption	302-4	a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples. b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all. c. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. d. Standards, methodologies, assumptions, and/or calculation tools used.
Environment	4 Energy management	Reductions in energy requirements of products and services	302-5	a. Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples. b. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. c. Standards, methodologies, assumptions, and/or calculation tools used.

Environment	5 Water and drainage management	Interactions with water as a shared resource	303-1	a. A description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts the organization has caused or contributed to, or that are directly linked to its operations, products, or services by its business relationships (e.g., impacts caused by runoff). b. A description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used. c. A description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts. d. An explanation of the process for setting any water-related goals and targets that are part of the organization's approach to managing water and effluents, and how they relate to public policy and the local context of each area with water stress.
Environment	5 Water and drainage management	Management of water discharge-related impacts	303-2	a. A description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including: i. how standards for facilities operating in locations with no local discharge requirements were determined; ii. any internally developed water quality standards or guidelines; iii. any sector-specific standards considered; iv. whether the profile of the receiving waterbody was considered.

Environment	5 Water and drainage management	Water withdrawal	303-3	a. Total water withdrawal from all areas in megaliters, and a breakdown of this total by the following sources, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Produced water; v. Third-party water. b. Total water withdrawal from all areas with water stress in megaliters, and a breakdown of this total by the following sources, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Produced water; v. Third-party water, and a breakdown of this total by the withdrawal sources listed in i-iv. c. A breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megaliters by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Environment	5 Water and drainage management	Water discharge	303-4	a. Total water discharge to all areas in megaliters, and a breakdown of this total by the following types of destination, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Third-party water, and the volume of this total sent for use to other organizations, if applicable. b. A breakdown of total water discharge to all areas in megaliters by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). c. Total water discharge to all areas with water stress in megaliters, and a breakdown of this total by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). d. Priority substances of concern for which discharges are treated, including: i. how priority substances of concern were defined, and any international standard, authoritative list, or criteria used; ii. the approach for setting discharge limits for priority substances of concern; iii. number of incidents of non-compliance with discharge limits. e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Environment	5 Water and drainage management	Water consumption	303-5	a. Total water consumption from all areas in megaliters. b. Total water consumption from all areas with water stress in megaliters. c. Change in water storage in megaliters, if water storage has been identified as having a significant water-related impact. d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used, including whether the information is calculated, estimated, modeled, or sourced from direct measurements, and the approach taken for this, such as the use of any sector-specific factors.
Environment	6 Waste and hazardous substance management	Materials used by weight or volume	301-1	a. Total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period, by: i. non-renewable materials used; ii. renewable materials used.
Environment	6 Waste and hazardous substance management	Recycled input materials used	301-2	a. Percentage of recycled input materials used to manufacture the organization's primary products and services.
Environment	6 Waste and hazardous substance management	Reclaimed products and their packaging materials	301-3	a. Percentage of reclaimed products and their packaging materials for each product category. b. How the data for this disclosure have been collected.
Environment	6 Waste and hazardous substance management	Waste generation and significant waste-related impacts	306-1	a. For the organization's significant actual and potential waste-related impacts, a description of: i. the inputs, activities, and outputs that lead or could lead to these impacts; ii. whether these impacts relate to waste generated in the organization's own activities or to waste generated upstream or downstream in its value chain.

Environment	6 Waste and hazardous substance management	Management of significant waste-related impacts	306-2	a. Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated. b. If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations. c. The processes used to collect and monitor waste-related data.
Environment	6 Waste and hazardous substance management	Waste generated	306-3	a. Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste. b. Contextual information necessary to understand the data and how the data has been compiled.
Environment	6 Waste and hazardous substance management	Waste diverted from disposal	306-4	a Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste. b. Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations: i. Preparation for reuse; ii. Recycling; iii. Other recovery operations. c. Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations: i. Preparation for reuse; ii. Recycling; iii. Other recovery operations. d. For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal: i. onsite; ii. offsite. e. Contextual information necessary to understand the data and how the data has been compiled.

Environment	6 Waste and hazardous substance management	Waste directed to disposal	306-5	a. Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste. b. Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations: i. Incineration (with energy recovery); ii. Incineration (without energy recovery); iii. Landfilling; iv. Other disposal operations. c. Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations: i. Incineration (with energy recovery); ii. Incineration (without energy recovery); iii. Landfilling; iv. Other disposal operations. d. or each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal: i. onsite; ii. offsite. e. Contextual information necessary to understand the data and how the data has been compiled.

Environment	7 Biodiversity impact	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	304-1	a. For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information: i. Geographic location; ii. Subsurface and underground land that may be owned, leased, or managed by the organization; iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas; iv. Type of operation (office, manufacturing or production, or extractive); v. Size of operational site in km2 (or another unit, if appropriate); vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem); vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation).
Environment	7 Biodiversity impact	Significant impacts of activities, products, and services on biodiversity	304-2	a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following: i. Construction or use of manufacturing plants, mines, and transport infrastructure; ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources); iii. Introduction of invasive species, pests, and pathogens; iv. Reduction of species; v. Habitat conversion; vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level). b. Significant direct and indirect positive and negative impacts with reference to the following: i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts.

Environment	7 Biodiversity impact	Habitats protected or restored	304-3	a. Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals. b. Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures. c. Status of each area based on its condition at the close of the reporting period. d. Standards, methodologies, and assumptions used.
Environment	7 Biodiversity impact	IUCN Red List species and national conservation list species with habitats in areas affected by operations	304-4	a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk: i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern
Social	8 Human rights	Operations and suppliers at significant risk for incidents of child labor	408-1	a. Operations and suppliers considered to have significant risk for incidents of: i. child labor; ii. young workers exposed to hazardous work. b. Operations and suppliers considered to have significant risk for incidents of child labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. c. Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labor.
Social	8 Human rights	Operations and suppliers at significant risk for incidents of forced or compulsory labor	409-1	a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.

Social	8 Human rights	Incidents of discrimination and corrective actions taken	406-1	a. Total number of incidents of discrimination during the reporting period. b. Status of the incidents and actions taken with reference to the following: i. Incident reviewed by the organization; ii. Remediation plans being implemented; iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes; iv. Incident no longer subject to action.
Social	8 Human rights	Security personnel trained in human rights policies or procedures	410-1	a. Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security. b. Whether training requirements also apply to third-party organizations providing security personnel.
Social	8 Human rights	Operations that have been subject to human rights reviews or impact assessments	412-1	a. Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country.
Social	8 Human rights	Employee training on human rights policies or procedures	412-2	a. Total number of hours in the reporting period devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations. b. Percentage of employees trained during the reporting period in human rights policies or procedures concerning aspects of human rights that are relevant to operations.
Social	8 Human rights	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	412-3	a. Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening. b. The definition used for 'significant investment agreement

Social	9 Local communities	Proportion of senior management hired from the local community	202-2	a. Percentage of senior management at significant locations of operation that are hired from the local community. b. The definition used for 'senior management'. c. The organization's geographical definition of 'local'. d. The definition used for 'significant locations of operation'.
Social	9 Local communities	Infrastructure investments and services supported	203-1	a. Extent of development of significant infrastructure investments and services supported. b. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant. c. Whether these investments and services are commercial, in-kind, or pro bono engagements.
Social	9 Local communities	Proportion of spending on local suppliers	204-1	a. Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally). b. The organization's geographical definition of 'local'. c. The definition used for 'significant locations of operation'.
Social	9 Local communities	Incidents of violations involving rights of indigenous peoples	411-1	a. Total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period. b. Status of the incidents and actions taken with reference to the following: i. Incident reviewed by the organization; ii. Remediation plans being implemented; iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes; iv. Incident no longer subject to action.

Social	9 Local communities	Operations with local community engagement, impact assessments, and development programs	413-1	a. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of: i. social impact assessments, including gender impact assessments, based on participatory processes; ii. environmental impact assessments and ongoing monitoring; iii. public disclosure of results of environmental and social impact assessments; iv. local community development programs based on local communities' needs; v. stakeholder engagement plans based on stakeholder mapping; vi. broad based local community consultation committees and processes that include vulnerable groups; vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts; viii. formal local community grievance processes.
Social	9 Local communities	Operations with significant actual and potential negative impacts on local communities	413-2	a. Operations with significant actual and potential negative impacts on local communities, including: i. the location of the operations; ii. the significant actual and potential negative impacts of operations.
Social	10 Product quality and product safety	Assessment of the health and safety impacts of product and service categories	416-1	a. Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.

Social	10 Product quality and product safety	Incidents of non-compliance concerning the health and safety impacts of products and services	416-2	a. Total number of incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services within the reporting period, by: i. incidents of non-compliance with regulations resulting in a fine or penalty; ii. incidents of non-compliance with regulations resulting in a warning; iii. incidents of non-compliance with voluntary codes. b. If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.
Social	11 Labor practices	Annual total compensation ratio	102-38	a. Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.
Social	11 Labor practices	Percentage increase in annual total compensation ratio	102-39	a. Ratio of the percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.
Social	11 Labor practices	Collective bargaining agreements	102-41	a. Percentage of total employees covered by collective bargaining agreements.

Social	11 Labor practices	Defined benefit plan obligations and other retirement plans	201-3	a. If the plan's liabilities are met by the organization's general resources, the estimated value of those liabilities. b. If a separate fund exists to pay the plan's pension liabilities: i. the extent to which the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them; ii. the basis on which that estimate has been arrived at; iii. when that estimate was made. c. If a fund set up to pay the plan's pension liabilities is not fully covered, explain the strategy, if any, adopted by the employer to work towards full coverage, and the timescale, if any, by which the employer hopes to achieve full coverage. d. Percentage of salary contributed by employee or employer. e. Level of participation in retirement plans, such as participation in mandatory or voluntary schemes, regional, or country-based schemes, or those with financial impact.
Social	11 Labor practices	Ratios of standard entry level wage by gender compared to local minimum wage	202-1	a. When a significant proportion of employees are compensated based on wages subject to minimum wage rules, report the relevant ratio of the entry level wage by gender at significant locations of operation to the minimum wage. b. When a significant proportion of other workers (excluding employees) performing the organization's activities are compensated based on wages subject to minimum wage rules, describe the actions taken to determine whether these workers are paid above the minimum wage. c. Whether a local minimum wage is absent or variable at significant locations of operation, by gender. In circumstances in which different minimums can be used as a reference, report which minimum wage is being used. d. The definition used for 'significant locations of operation'.

Social	11 Labor practices	Benefits provided to full-time employees that are not provided to temporary or parttime employees	401-2	a. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: i. life insurance; ii. health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii. others. b. The definition used for 'significant locations of operation'.
Social	11 Labor practices	Parental leave	401-3	a. Total number of employees that were entitled to parental leave, by gender. b. Total number of employees that took parental leave, by gender. c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender. d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender. e. Return to work and retention rates of employees that took parental leave, by gender.
Social	11 Labor practices	Minimum notice periods regarding operational changes	402-1	a. Minimum number of weeks' notice typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them. b. For organizations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.

Social	11 Labor practices	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	407-1	a. Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organization in the reporting period intended to support rights to exercise freedom of association and collective bargaining.
Social	12 Employee safety and health	Occupational health and safety management system	403-1	a. A statement of whether an occupational health and safety management system has been implemented, including whether: i. the system has been implemented because of legal requirements and, if so, a list of the requirements; ii. the system has been implemented based on recognized risk management and/or management system standards/guidelines and, if so, a list of the standards/guidelines. b. A description of the scope of workers, activities, and workplaces covered by the occupational health and safety management system, and an explanation of whether and, if so, why any workers, activities, or workplaces are not covered.

Social	12 Employee safety and health	Work-related ill health	403-10	a. For all employees: i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health. b. For all workers who are not employees but whose work and/or workplace is controlled by the organization: i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health. c. The work-related hazards that pose a risk of ill health, including: i. how these hazards have been determined; ii. which of these hazards have caused or contributed to cases of ill health during the reporting period; iii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. d. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Social	12 Employee safety and health	Hazard identification, risk assessment, and incident investigation	403-2	a. A description of the processes used to identify work-related hazards and assess risks on a routine and non-routine basis, and to apply the hierarchy of controls in order to eliminate hazards and minimize risks, including: i. how the organization ensures the quality of these processes, including the competency of persons who carry them out; ii. how the results of these processes are used to evaluate and continually improve the occupational health and safety management system. b. A description of the processes for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals. c. A description of the policies and processes for workers to remove themselves from work situations that they believe could cause injury or ill health, and an explanation of how workers are protected against reprisals. d. A description of the processes used to investigate work-related incidents, including the processes to identify hazards and assess risks relating to the incidents, to determine corrective actions using the hierarchy of controls, and to determine improvements needed in the occupational health and safety management system.
Social	12 Employee safety and health	Occupational health services	403-3	a. A description of the occupational health services' functions that contribute to the identification and elimination of hazards and minimization of risks, and an explanation of how the organization ensures the quality of these services and facilitates workers' access to them.
Social	12 Employee safety and health	Worker participation, consultation, and communication on occupational health and safety	403-4	a. A description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system, and for providing access to and communicating relevant information on occupational health and safety to workers. b. Where formal joint management-worker health and safety committees exist, a description of their responsibilities, meeting frequency, decision-making authority, and whether and, if so, why any workers are not represented by these committees.

Social	12 Employee safety and health	Worker training on occupational health and safety	403-5	a. A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.
Social	12 Employee safety and health	Promotion of worker health	403-6	a. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided. b. A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.
Social	12 Employee safety and health	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	403-7	a. A description of the organization's approach to preventing or mitigating significant negative occupational health and safety impacts that are directly linked to its operations, products, or services by its business relationships, and the related hazards and risks.

Social	12 Employee safety and health	Workers covered by an occupational health and safety management system	403-8	a. If the organization has implemented an occupational health and safety management system based on legal requirements and/or recognized standards/guidelines: i. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system; ii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited; iii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party. b. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. c. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Social	12 Employee safety and health	Work-related injuries	403-9	a. For all employees: i. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of high-consequence work-related injuries (excluding fatalities); iii. The number and rate of recordable work-related injuries; iv. The main types of work-related injury; v. The number of hours worked. b. For all workers who are not employees but whose work and/or workplace is controlled by the organization: i. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of high-consequence work-related injuries (excluding fatalities); iii. The number and rate of recordable work-related injuries; iv. The main types of work-related injury; v. The number of hours worked. c. The work-related hazards that pose a risk of high-consequence injury, including: i. how these hazards have been determined; ii. which of these hazards have caused or contributed to high-consequence injuries during the reporting period; iii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. d. Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls. e. Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked. f. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. g. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Social	13 Human resources development	Average hours of training per year per employee	404-1	a. Average hours of training that the organization's employees have undertaken during the reporting period, by: i. gender; ii. employee category.
Social	13 Human resources development	Programs for upgrading employee skills and transition assistance programs	404-2	a. Type and scope of programs implemented and assistance provided to upgrade employee skills. b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.
Social	13 Human resources development	Percentage of employees receiving regular performance and career development reviews	404-3	a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.
Social	14 Diversity	Information on employees and other workers	102-8	a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees. e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries). f. An explanation of how the data have been compiled, including any assumptions made.
Social	14 Diversity	New employee hires and employee turnover	401-1	a. Total number and rate of new employee hires during the reporting period, by age group, gender and region. b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.

Social	14 Diversity	Diversity of governance bodies and employees	405-1	a. Percentage of individuals within the organization's governance bodies in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups). b. Percentage of employees per employee category in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).
Social	14 Diversity	Ratio of basic salary and remuneration of women to men	405-2	a. Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation. b. The definition used for 'significant locations of operation'.
Social	15 Supply chain management	Significant changes to the organization and its supply chain	102-10	a. Significant changes to the organization's size, structure, ownership, or supply chain, including: i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions; ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations); iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination.
Social	15 Supply chain management	Supply chain	102-9	a. A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products, and services.
Social	15 Supply chain management	New suppliers that were screened using environmental criteria	308-1	a. Percentage of new suppliers that were screened using environmental criteria.

Social	15 Supply chain management	Negative environmental impacts in the supply chain and actions taken	308-2	a. Number of suppliers assessed for environmental impacts. b. Number of suppliers identified as having significant actual and potential negative environmental impacts. c. Significant actual and potential negative environmental impacts identified in the supply chain. d. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment. e. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.
Social	15 Supply chain management	New suppliers that were screened using social criteria	414-1	a. Percentage of new suppliers that were screened using social criteria.
Social	15 Supply chain management	Negative social impacts in the supply chain and actions taken	414-2	a. Number of suppliers assessed for social impacts. b. Number of suppliers identified as having significant actual and potential negative social impacts. c. Significant actual and potential negative social impacts identified in the supply chain. d. Percentage of suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment. e. Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment, and why.
Governance	16 Corporate Governance	Governance structure	102-18	a. Governance structure of the organization, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.
Governance	16 Corporate Governance	Delegating authority	102-19	a. Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.

Governance	16 Corporate Governance	Executive-level responsibility for economic, environmental, and social topics	102-20	a. Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body.
Governance	16 Corporate Governance	Consulting stakeholders on economic, environmental, and social topics	102-21	a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.
Governance	16 Corporate Governance	Composition of the highest governance body and its committees	102-22	a. Composition of the highest governance body and its committees by: i. executive or non-executive; ii. independence; iii. tenure on the governance body; iv. number of each individual's other significant positions and commitments, and the nature of the commitments; v. gender; vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation.
Governance	16 Corporate Governance	Chair of the highest governance body	102-23	a. Whether the chair of the highest governance body is also an executive officer in the organization. b. If the chair is also an executive officer, describe his or her function within the organization's management and the reasons for this arrangement.

Governance	16 Corporate Governance	Nominating and selecting the highest governance body	102-24	a. Nomination and selection processes for the highest governance body and its committees. b. Criteria used for nominating and selecting highest governance body members, including whether and how: i. stakeholders (including shareholders) are involved; ii. diversity is considered; iii. independence is considered; iv. expertise and experience relating to economic, environmental, and social topics are considered.
Governance	16 Corporate Governance	Conflicts of interest	102-25	a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed. b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum: i. Cross-board membership; ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures.
Governance	16 Corporate Governance	Role of highest governance body in setting purpose, values, and strategy	102-26	a. Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.
Governance	16 Corporate Governance	Collective knowledge of highest governance body	102-27	a. Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.
Governance	16 Corporate Governance	Evaluating the highest governance body's performance	102-28	a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. d. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics, including, as a minimum, changes in membership and organizational practice.

Governance	16 Corporate Governance	Identifying and managing economic, environmental, and social impacts	102-29	a. Highest governance body's role in identifying and managing economic, environmental, and social topics and their impacts, risks, and opportunities – including its role in the implementation of due diligence processes. b. Whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental, and social topics and their impacts, risks, and opportunities.
Governance	16 Corporate Governance	Effectiveness of risk management processes	102-30	a. Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental, and social topics.
Governance	16 Corporate Governance	Review of economic, environmental, and social topics	102-31	a. Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities.
Governance	16 Corporate Governance	Highest governance body's role in sustainability reporting	102-32	a. The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.
Governance	16 Corporate Governance	Communicating critical concerns	102-33	a. Process for communicating critical concerns to the highest governance body.
Governance	16 Corporate Governance	Nature and total number of critical concerns	102-34	a. Total number and nature of critical concerns that were communicated to the highest governance body. b. Mechanism(s) used to address and resolve critical concerns.

Governance	16 Corporate Governance	Remuneration policies	102-35	a. Remuneration policies for the highest governance body and senior executives for the following types of remuneration: i. Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares; ii. Sign-on bonuses or recruitment incentive payments; iii. Termination payments; iv. Clawbacks; v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees. b. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental, and social topics.
Governance	16 Corporate Governance	Process for determining remuneration	102-36	a. Process for determining remuneration. b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management. c. Any other relationships that the remuneration consultants have with the organization.
Governance	16 Corporate Governance	Stakeholders' involvement in remuneration	102-37	a. How stakeholders' views are sought and taken into account regarding remuneration. b. If applicable, the results of votes on remuneration policies and proposals.
Governance	17 Business Ethics	Mechanisms for advice and concerns about ethics	102-17	a. A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behavior, and organizational integrity; ii. reporting concerns about unethical or unlawful behavior, and organizational integrity.
Governance	17 Business Ethics	Operations assessed for risks related to corruption	205-1	a. Total number and percentage of operations assessed for risks related to corruption. b. Significant risks related to corruption identified through the risk assessment.

Governance	17 Business Ethics	Communication and training about anti-corruption policies and procedures	205-2	a. Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to, broken down by region. b. Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to, broken down by employee category and region. c. Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region. Describe if the organization's anti-corruption policies and procedures have been communicated to any other persons or organizations. d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region. e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.
Governance	17 Business Ethics	Confirmed incidents of corruption and actions taken	205-3	a. Total number and nature of confirmed incidents of corruption. b. Total number of confirmed incidents in which employees were dismissed or disciplined for corruption. c. Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption. d. Public legal cases regarding corruption brought against the organization or its employees during the reporting period and the outcomes of such cases.
Governance	17 Business Ethics	Political contributions	415-1	a. Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient/beneficiary. b. If applicable, how the monetary value of in-kind contributions was estimated.
Governance	18 Stakeholder Engagement	List of stakeholder groups	102-40	a. A list of stakeholder groups engaged by the organization.

Governance	18 Stakeholder Engagement	Identifying and selecting stakeholders	102-42	a. The basis for identifying and selecting stakeholders with whom to engage.
Governance	18 Stakeholder Engagement	Approach to stakeholder engagement	102-43	a. The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.
Governance	18 Stakeholder Engagement	Key topics and concerns raised	102-44	a. Key topics and concerns that have been raised through stakeholder engagement, including: i. how the organization has responded to those key topics and concerns, including through its reporting; ii. the stakeholder groups that raised each of the key topics and concerns.

Appendix 2 Summary of the Industry-specific Indicators WG's Review Results

1. Construction Materials

(1) Categories Added After Review

Legend ■: Item that investors placed additional importance on
●: Item that companies placed additional importance on

Dimension	SASB General Issue Category	SASB Disclosure Topic
Environment	**Greenhouse gas (GHG) emissions**	**Greenhouse gas (GHG) emissions**
	Air quality	**Air quality**
	Energy management	**Energy management**
	Water & wastewater management	**Water management**
	Waste & hazardous materials management	**Waste management**
	Ecological impact	**Impact on biodiversity**
Social capital	**Human rights & community relations**	■ ●
	Customer privacy	–
	Data security	–
	Access & affordability	–
	Product quality & safety	■ ●
	Customer welfare	–
	Selling practices & product labeling	–
Human capital	Labor practices	–
	Occupational health & safety	**Employee health & safety**
	Employee engagement, diversity & inclusion	■ ●
Business model & innovation	**Product design & lifecycle management**	**Product innovation**
	Business model resilience	–
	Supply chain management	■
	Materials sourcing & efficiency	–
	Physical impact of climate change	–
Leadership & governance	Business ethics	–
	Competitive behavior	**Pricing integrity & transparency**
	Management of the legal & regulatory environment	■
	Critical incident risk management	–
	Systemic risk management	–

(2) Review Results of Accounting Metrics for Each Disclosure Topic

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Greenhouse gas (GHG) emissions	• Total Scope 1 emissions (t/CO_2-e), percentage covered under emissions regulations (%) • 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	● **The following items must also be disclosed.** - **Total Scope 2, 3 emissions** - **GHG emission intensity** - **Financial impact based on carbon pricing and other factors**
Energy management	• Disclosure of the following: - (1) Total energy consumed (GJ) - (2) Percentage grid electricity (%) - (3) Percentage from alternative energy (%) - (4) Percentage from renewable sources (%)	● **These disclosures should not be separated from the description of GHG emissions. They should be presented in the same context.** ● **Energy strategy must be disclosed together with these disclosures. It is better to also include financial impact, such as impact on energy costs or investments.**
Air quality	• Air emissions of the following pollutants: - (1) NO_x (excluding N_2O) (t) - (2) SOx (t) - (3) Particulate matter (PM10) (t) - (4) Dioxin/furan (t) - (5) Volatile organic compounds (VOC) (t) - (6) Polycyclic aromatic hydrocarbon (PAH) (t) - (7) Heavy metals (t)	● **To provide confirmation of whether a risk exists or not, it is necessary to describe the status of compliance with applicable laws and regulations in the specific countries and the self-imposed regulations at each business location.**

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Water management	• Disclosure of the following: - (1) Total freshwater withdrawn (m^3) - (2) Percentage recycled (%) - (3) Percentage in regions with high or extremely high baseline water stress	● **Regarding water, droughts, and other water stress are essential factors to consider. However, flood risk must also be considered in relation to climate change, and the flood risks to business locations or absence thereof, countermeasures, and other related information should also be disclosed.**
Waste management	• Disclosure of the following: - Amount of waste generated (t) - Percentage of hazardous waste (%) - Percentage recycled (%)	● **The definition of waste used in calculations must be described.** ● **As before, waste is drawing attention in terms of risk. However, it is also important to consider waste as an opportunity from the perspective of recycling resources.**
Impact on biodiversity	• Description of environmental management policies and practices for active operations • Terrestrial acreage disturbed and percentage of impacted area restored (%)	● **Description of implementation plans, progress, and relevant costs is also necessary, and it will be required to enhance disclosures to be in line with the TNFD framework in the future.** ● **If the company does not mine directly, it is necessary to describe efforts throughout the supply chain.**
Employee health and safety	• Disclosure of the following metrics concerning (a) regular employees and (b) contract employees: - (1) Total recordable incident rate (TRIR) (%) - (2) Near miss frequency rate (NMFR) (%) • Number of reported cases of silicosis (number)	● **Affiliated companies should also be included as subjects for reporting, and if any figures change, the description of the background behind the change and the financial impact of related lawsuits and other matters should be disclosed.** ● **Since the definition of leave differs depending on the region, it is necessary to give an explanation that takes this into consideration.**
Product innovation	• Percentage of products that qualify for credits in sustainable building design and construction certifications (% by annual sales) • Total addressable market (reporting currency) and share of market (%) for products that reduce (negative) impact on energy, water, and/or materials during usage and/or production	● **It is necessary to describe the definition of eco-friendly products and the progress made with plans.**
Pricing integrity & transparency	• Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities (reporting currency)	● **The accounting metric itself is deemed useful.** ● **Additionally, preventive measures (system, mechanism, efforts, and effectiveness) and recurrence prevention measures must also be described.**

2. Chemicals

(1) Categories Added After Review

Legend ■: Item that investors additionally prioritized ●: Item that issuers additionally prioritized

Dimension	SASB General Issue Category	SASB Disclosure Topic
Environment	**Greenhouse gas (GHG) emissions**	**Greenhouse gas (GHG) emissions**
	Air quality	**Air quality**
	Energy management	**Energy management**
	Water & wastewater management	**Water management**
	Waste & hazardous materials management	**Hazardous waste management**
	Ecological impact	●
Social capital	**Human rights & community relations**	**Community relations**
	Customer privacy	–
	Data security	–
	Access & affordability	–
	Product quality & safety	■ ●
	Customer welfare	–
	Selling practices & product labeling	–
Human capital	Labor practices	–
	Occupational health & safety	**Employee health & safety**
	Employee engagement, diversity & inclusion	■ ●
Business model & innovation	**Product design & lifecycle management**	**Product design with efficiency during usage considered**
		Safety & environmental stewardship of chemicals
		Genetically modified organisms
	Business model resilience	–
	Supply chain management	■
	Materials sourcing & efficiency	–
	Physical impact of climate change	–
Leadership & governance	Business ethics	–
	Competitive behavior	–
	Management of the legal & regulatory environment	**Management of the legal & regulatory environment**
	Critical incident risk management	**Operational safety and preparation and other measures for emergencies**
	Systemic risk management	–

(2) Review Results of Accounting Metrics for Each Disclosure Topic

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Greenhouse gas (GHG) emissions	• Total Scope 1 emissions (t/CO2-e), percentage covered under emissions regulations (%) • 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	● **The following items must also be disclosed.** - **Gross Scope 2, 3 emissions** - **GHG emission intensity** - **Financial impact based on carbon pricing and other factors**
Energy management	• Disclosure of the following: - (1) Total energy consumed (GJ) - (2) Percentage grid electricity (%) - (3) Percentage renewable (%) - (4) Total self-generated energy (GJ)	● **These disclosures should not be separated from the description of GHG emissions. They should be presented in the same context.** ● **Energy strategy must be disclosed together with these disclosures. It is better to also include financial impact, such as impact on energy costs or investments.**
Air quality	• Air emissions of the following pollutants: - (1) NOx (excluding N2O) (t) - (2) SOx (t) - (3) Volatile organic compounds (VOC) (t) - (4) Hazardous air pollutants (HAPs) (t)	● **These disclosure items are viewed mainly from the perspective of risks at manufacturing bases. Therefore, to provide confirmation of risk or absence thereof, it is necessary to describe the status of compliance with the applicable laws and regulations in the specific countries and the self-imposed regulations at each business location.**

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Water management	• Disclosure of the following: - (1) Total water withdrawn (m^3), and percentage of total water withdrawn in regions with high or extremely high baseline water stress (%) - (2) Total water consumed (m^3), and percentage of total water consumed in regions with high or extremely high baseline water stress (%) • Number of incidents of non-compliance associated with water quality permits, standards, and regulations • Description of water management risks and discussion of strategies and practices to mitigate those risks	**● Regarding water, droughts, and other water stress are essential factors to consider. However, flood risk must also be considered in relation to climate change, and the flood risks to business locations or absence thereof, countermeasures, and other related information should also be disclosed.** **● As with air quality, for water quality it is required that the status of compliance with the applicable laws and regulations in the specific countries and the self-imposed regulations at each business location be disclosed.**
Hazardous waste management	• Disclosure of the following: - Hazardous waste generated (t) - Percentage recycled (%)	**● The definition of hazardous waste used in calculations must be described.**
Community relations	• Discussion of engagement processes to manage risks and opportunities associated with community interests	**● In addition to regular engagements with communities, it is necessary to describe the ideas and initiatives regarding the development of relationships with communities (including detailed initiatives on a regional/business location basis).** **● Descriptions of the initiatives related to contribution to regions might not directly contribute to corporate value but they are useful because they will support the evaluation that there is little downside risk.**
Employee health & safety	• Disclosure of the following metrics concerning (a) regular employees and (b) contract employees: - (1) Total recordable incident rate (TRIR) (%) - (2) Near miss frequency rate (NMFR) (%) • Number of reported cases of silicosis (number)	**● Affiliated companies should also be included as subjects for reporting, and if any figures change, the description of the background behind the change and the financial impact of related lawsuits and other matters should be disclosed.** **● Since the definition of leave differs depending on the region, it is necessary to give an explanation that takes this into consideration.**
Product design with efficiency during usage considered	• Revenue from products with resource efficiency during usage considered (reporting currency)	**● It is necessary to describe the definition of eco-friendly products and the progress made with plans.** **● From the perspective of a circular economy, description of environmental contributions throughout the lifecycle, as well as during usage, is also useful.**
Safety & environmental stewardship of chemicals	• Disclosure of the following: - (1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances (% by revenue) - (2) Percentage of these products that have undergone a hazard assessment (%) • Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	**● Based on the premise of compliance with laws and regulations, it is useful to describe efforts to further reduce environmental impact in terms of risk mitigation.**
Genetically modified organisms	• Percentage of products by revenue that contain genetically modified organisms (GMOs) (% by revenue)	**● Supplementary explanations from the perspective of opportunities are useful (e.g., disaster-resistant GMOs).**
Management of the legal & regulatory environment	• Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	**● From a risk perspective, it is also useful to describe the efforts of individual companies and industry groups.**
Operational safety and preparation and other measures for emergencies	• Disclosure of the following: - Process safety incidents count (PSIC) (number) - Process safety total incident rate (PSTIR) (%) - Process safety incident severity rate (PSISR) (%) • Number of transport incidents (number)	**● Changes in the metrics, efforts to ensure safety, and approach to measures in the event of an incident must also be described.**

3. Commercial Banks

(1) Categories Added After Review

Legend ■: Item that investors additionally prioritized ●: Item that issuers additionally prioritized

Dimension	SASB General Issue Category	SASB Disclosure Topic
Environment	**Greenhouse gas (GHG) emissions**	■ ●
	Air quality	–
	Energy management	–
	Water & wastewater management	–
	Waste & hazardous materials management	–
	Ecological impact	–
Social capital	**Human rights & community relations**	■ ●
	Customer privacy	–
	Data security	**Data security**
	Access & affordability	**Financial inclusion & capacity building**
	Product quality & safety	–
	Customer welfare	–
	Selling practices & product labeling	–
Human capital	**Labor practices**	–
	Occupational health & safety	–
	Employee engagement, diversity & inclusion	■ ●
Business model & innovation	**Product design & lifecycle management**	**Incorporation of environmental, social, and governance (ESG) factors in credit analysis**
	Business model resilience	–
	Supply chain management	–
	Materials sourcing & efficiency	–
	Physical impact of climate change	–
Leadership & governance	**Business ethics**	**Corporate ethics**
	Competitive behavior	–
	Management of the legal & regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	**Systemic risk management**

(2) Review Results of Accounting Metrics for Each Disclosure Topic

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Data security	• Disclosure of the following: (1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of account holders affected • Description of approach to identifying and addressing data security risks (discussion and analysis)	● **Disclosure of qualitative description related to identifying and addressing data security risks** is deemed **useful.** ● Companies indicated that it was difficult to **disclose quantitative information such as the number of data breaches**, but investors suggested that **qualitative information indicating the status and evaluation of risk management and the potential of risk occurrence would also be useful**. ● The following information is also useful for understanding this topic. - Digitalization measures (from the perspective of increasing competitiveness) - Resilience as social infrastructure - Responses in the event of a scandal
Financial inclusion & capacity building	• (1) Number and (2) amount of loans outstanding qualified to programs designed to promote small business and community development • Number and amount of past due and nonaccrual loans qualified to programs designed to promote small business and community development • Number of no-cost retail checking accounts provided to previously unbanked or underbanked customers • Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers	● Financial inclusion is important from the perspective of creating opportunities, but the accounting metrics themselves **must be presented with alternative information in line with the actual situation in Japan**. ● With respect to the presentation of alternative information, the following opinions were given. - As the initiatives vary depending on the country/region, qualitative description is possible but disclosure of quantitative information is difficult. - As there are many initiatives with a limited impact on revenues, it is necessary to consider what description will be useful as alternative information. - **A positive evaluation can be expected from the description of the approach to differentiating the company based on the idea that addressing social issues is a market opportunity, and the description of recognition of new profit-making opportunities and detailed initiatives**, such as improving accessibility for minorities (e.g., people with disabilities, indigenous peoples, and female entrepreneurs). ● The following information is also useful for understanding this topic. - Description of the link between the starting point (why improving such access is important) and business strategy - Responses in accordance with the definition of financial inclusion, basic strategy, past record, and impact on corporate value (especially overseas businesses) - Quantitative information (with focus on cost-effectiveness) regarding the link between investment/cost and return

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Incorporation of ESG factors in credit analysis	• Commercial and industrial credit risk, by industry (quantitative index) • Description of approach to incorporation of ESG factors in credit analysis (discussion and analysis)	● The following information is also useful for understanding this topic. - Disclosure of information concerning not only climate change but related themes (such as human rights and natural capital) - Divestment policy (after disclosure of the area and range) - Disclosure in line with initiatives (such as TCFD recommendations, ISSB's IFRS Sustainability Disclosure Standards, Net-zero Banking Alliance (NZBA), and TNFD framework) - Portfolios of climate change-related investees and borrowers and quantitative information of coal-related assets
Corporate ethics	• Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations (quantitative index) • Description of whistleblower policies and procedures (discussion and analysis)	● The following information is also useful for understanding this topic. - Efforts to ensure employees understand the significance of corporate ethics - Description that enables investors to evaluate the effectiveness, such as personnel evaluation systems, in addition to training - Amount of internal reporting (which indicates that the internal reporting system is working) - Reason for encouraging whistleblowing, and the challenges and the status of improvements
Systemic risk management	• Global systemically important bank (G-SIB) score, by category (quantitative index) • Description of approach to the incorporation of the results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy, and other business activities (discussion and analysis)	● The following information is also useful for understanding this topic. - Description that contributes to understanding collateral for capital adequacy - Improvement of stress tests including the environment and society as well as discussion and analysis on credit
Activity metrics	• (1) Number and (2) value of checking and savings accounts by segment: (a) personal and (b) small business • (1) Number and (2) value of loans by segment: (a) personal, (b) small business, and (c) corporate	● Longer-term corporate value will be led by improving disclosure concerning **the degree of impact the activity metrics contribute to** (the degree of contribution the actual activities make to ESG). ● These figures alone are insufficient as useful information. **Opportunities and risks that each company has recognized must be disclosed together.** ● In addition to ESG issues, the financial industry also faces economic issues (such as income gaps). Given this, **it is useful if there is a description concerning the recognition of risks and opportunities by segment.**

4. Pharmaceutical

(1) Categories Added After Review

Legend ■ : Item that investors additionally prioritized ● : Item that issuers additionally prioritized

Dimension	SASB General Issue Category	SASB Disclosure Topic
Environment	**Greenhouse gas (GHG) emissions**	●
	Air quality	–
	Energy management	–
	Water & wastewater management	–
	Waste & hazardous materials management	–
	Ecological impact	●
Social capital	**Human rights & community relations**	**Safety of clinical trial participants**
	Customer privacy	●
	Data security	●
	Access & affordability	**Access to medicine**
		Affordability & pricing
	Product quality & safety	**Drug safety**
	Customer welfare	**Counterfeit drugs**
	Selling practices & product labeling	**Ethical marketing**
Human capital	Labor practices	–
	Occupational health & safety	●
	Employee engagement, diversity & inclusion	**Employee recruitment, development & retention**
Business model & innovation	Product design & lifecycle management	–
	Business model resilience	–
	Supply chain management	**Supply chain management**
	Materials sourcing & efficiency	–
	Physical impact of climate change	–
Leadership & governance	**Business ethics**	**Business ethics**
	Competitive behavior	–
	Management of the legal & regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	–

(2) Review Results of Accounting Metrics for Each Disclosure Topic

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Safety of clinical trial participants	• Discussion of management processes ensuring quality and patient safety during clinical trials by region of the world • Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI) • Total monetary losses as a result of legal proceedings associated with clinical trials in developing countries	● **This information is useful for understanding the status of compliance but is not useful for evaluating medium- to long-term corporate value.** ● In understanding this topic, **if there is an industry consensus that disclosure items stipulated by regulations, etc. are necessary and sufficient, further excessive disclosure is not useful.** ● Note that, in these disclosures, to comply with regulations, **it is necessary to disclose the information requested by the FDA as well as other major regulatory authorities** (e.g., Pharmaceuticals and Medical Devices Agency (PMDA), European Medicines Agency (EMA), and other authorities). ● Quantitative information indicating that the safety of the company's clinical trials exceeds the industry average is useful.
Access to medicine	• Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine (AtM) Index • List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	● **The importance of this topic depends on each company's strategy**, which ultimately is a judgment by the company. (This topic is very important especially in emerging markets, but **less important in the Japanese market**.) ● For understanding this topic, it is also useful to disclose the following information. - Initiatives that contribute to improving access to health care that include, but are not limited to the priority diseases, priority countries, and medicines targeted by the AtM Index - Qualified products other than the WHO prequalified products - Ensuring access to medicine in the countries where clinical trials were conducted (provided that insufficient access to medicine in these countries has been recognized as an issue) - Strategies and KPIs for improving access to medicine

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Affordability & pricing	• 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 • Disclosure of the following items (1) and (2) across the U.S. product portfolio: - (1) Percentage change in annual average list price (compared to previous year, %) - (2) Percentage change in annual average net price (compared to previous year, %)[2] • Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year (and product name)	● **Drug price information is useful for evaluating short-term business performance, but not useful for evaluating medium- and long-term corporate value.** ● As drug pricing systems vary from country to country, ultimately each company needs to determine whether this topic is important. **(This topic is not important in the Japanese market.)** ● The following information is useful as alternatives to these accounting metrics. - Number of countries/patients that were covered by tiered pricing - Metrics for low- and middle-income countries (not only the U.S.) - Description of affordable drug pricing based on the health economics of developed countries (Note that it is difficult to disclose this in detail.) - (Regardless of sustainability factors) Information on the presence/absence of pricing power is important
Drug safety	• List of products (company's own medicines/biological products) listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database • Number of fatalities associated with products (company's own medicines/biological products) as reported in the FDA Adverse Event Reporting System • Number of recalls issued, total units recalled • Total amount of (unused) product accepted for takeback, reuse, or disposal (t) • Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type	● **Proper disclosure in compliance with regulations is required.** ● To understand this topic, the following disclosure methods and information are useful. - Disclosure in chronological order (which, if inadequate, enables dialogue over whether it is due to some structural problem or temporary) - The status of risk management and governance systems, the improvement of risk management and governance systems, and points of differentiation - Information requested by the FDA as well as the supervisory authorities in major markets - Qualitative description of the mechanism to prevent improper manufacturing ● The following issues at the time of disclosure were also presented. - Setting and disclosing KPIs associated with credibility - The total amount of product accepted for takeback imposes a large disclosure burden, as it requires a detailed definition of metrics and considerable time for the collection of data
Counterfeit drugs	• Description of methods and technologies used to preserve the traceability of products throughout the supply chain and prevent counterfeiting • Discussion of processes for alerting customers and business partners to potential or known risks associated with counterfeit products • Number of actions that led to raids, seizures, arrests, and/or the filing of criminal charges related to counterfeit products (by regulatory authorities/law enforcement officials) (such as the provision of information and evidence and other similar actions)	● **In addition to conducting proper disclosure in compliance with regulations, it is useful to describe the company's ingenuity and initiatives.** ● Although the risk aspect is strong, **disclosing counterfeit prevention initiatives to protect patients from counterfeit drugs is useful from the perspective of enhancing brand value.** ● **Depending on the percentage of counterfeit drugs and the degree of risk, the importance of this topic varies from company to company.** ● To understand this topic, the following disclosure methods and information are useful. - Implementation of assessments regarding the counterfeiting risks related to the company's products, and information gathering systems (such as participation in the Principles for Sustainable Insurance (PSI) and other initiatives) (Although the counterfeiting risk is relatively low, this information is useful because the surveillance of supply chains is weaker in Japan than it is globally.) - (When making patents licensable for low- and middle-income countries) Efforts to monitor generic product companies (ensuring that manufacturing standards are met) - Initiatives for preventing the counterfeiting of drugs in low- and middle-income countries (because many counterfeit drugs exist in these countries)

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Ethical marketing	• Total monetary losses as a result of legal proceedings associated with false marketing claims • Description of the code of ethics governing the promotion of the off-label use of products (definition and concept of off-label use)	● To understand this topic, the following disclosure methods and information are useful. - Policies, initiatives, and governance system (to deepen the understanding of ethical standards) - As a prevention structure, employees' attendance rate for ethical training, and design of evaluation and remuneration (whether the design enables the evaluation of sales as well as ethical activities, or whether sales and evaluation are separated) - Compliance status to the codes of International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), and initiatives to promulgate these codes
Employee recruitment, development & retention	• Discussion of talent recruitment and retention efforts for scientists and research and development personnel • (1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid-level managers, (c) professionals, and (d) all others	● It is believed that **the accounting metrics themselves are useful but presenting only current metrics is insufficient. It is also necessary to describe not just the scientists and R&D personnel but also the training and diversity of all human resources and the entire human resource strategy.** ● While the issuers indicated **the retention status of key R&D personnel** would be difficult to disclose but **could help enhance corporate value**, the investors suggested it would be **better to not disclose this information as it is a source of competitiveness.** ● To understand this topic, the following disclosure methods and information are useful. - Disclosure over time and qualitative description as the background behind the change of trends (It is not important whether the turnover rates are high or low.) - Strengths in terms of employee loyalty (e.g., engagement survey results, mechanism for long-term employment in Japan, etc.) - Engagement surveys should be disclosed not only with overall scores but also with the purpose and necessary skills in chronological order, which will make it easier to understand the relationship with turnover rates. - Number and percentage of the groups whose issues are recognized (e.g., female senior managers in Japan, female/foreign/mid-career mid-level managers, and others) - It will be useful if Japanese and global situations are disclosed separately. - The turnover rate of high performers and the job opening period for determining whether the company is having difficulty in recruitment. ● The following issues at the time of disclosure were also presented. - As employment situations vary, it is difficult to disclose turnover rates on a global scale in the same manner.
Supply chain management	• Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third-party audit programs for the integrity of the supply chain and ingredients	● For supply chain management, not only the Rx-360 but also **a sustainable procurement perspective is necessary** (e.g., Pharmaceutical Supply Chain Initiative (PSCI)). ● **It is also necessary to widen the scope considered for supply chains, but the extent of this expansion must be considered.** For this reason, the following issues were presented. - The definition of Tier I is an issue as trading houses serve as intermediaries in some cases. As it is also difficult to investigate suppliers down to materials sourcing, the extent of the scope must be considered. - Industry-level efforts are desirable, as it is difficult to take action on the individual-company level (e.g., the development of a third-party reporting system for supply chains and other approaches). ● In order to understand the topic, **the investors** indicated it would be useful if information **on the aspect of opportunities was also disclosed**.

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Business ethics	• Total monetary losses as a result of legal proceedings associated with corruption and bribery • Description of the code of ethics governing interactions with health care professionals	● To understand this topic, the following disclosure methods and information are useful. - Governance system used for compliance related to business ethics - Training initiatives for compliance related to business ethics, number of people attending training, etc. For example, the number of compliance reports and results of procurement policy-related surveys targeting health care professionals are also useful from the perspective of showing effectiveness. - Note that it is important that the metrics have been selected in line with the policies and measures that the company prioritizes. - Regarding the number of compliance reports, not only quantitative values but also the categories of the content and the communication methods are important.
Activity metrics	• Number of patients treated • Number of drugs in portfolio and in research and development (Phases 1-3)	● These metrics are **useful regarding the aspect of opportunities, as they contribute to creating value for the extension of healthy life expectancy.** ● As the number of patients is dependent on the statistical population (chronic disease vs. rare disease), **disclosure with the percentage** against the parameter is more fair.
Customer privacy & data security	• Percentage of patient records that are Electronic Health Records (EHR) that meet meaningful use requirements • Description of policies and practices to ensure that customers' protected health information (PHI) records and other personally identifiable information (PII) are protected • (1) Number of data breaches, (2) percentage involving (a) personally identifiable information (PII) only and (b) protected health information (PHI), (3) number of customers affected in each category, (a) PII only and (b) PHI • Total monetary losses as a result of legal proceedings associated with data security and privacy	● The medical equipment industry handles patient data, which means that data security is very important, but useful disclosure methods have not been reviewed yet. ● As this topic is related to the protection of personal information, it is very important for pharmacies and other similar companies, but **not so important for major pharmaceutical companies**. ● For research on human-derived materials, **personal information is handled with caution, but is not particularly important as an item handled in the SASB accounting metrics.** ● **It will be useful if the digital transformation (DX) efforts of the entire supply chain can be quantified** (e.g., digitalization of clinical trial information and reduction of paper consumption, percentage of app usage, etc.).

6. Automotive

(1) Categories Added After Review

Legend ■ : Item that investors placed additional importance on
● : Item that issuers placed additional importance on

Dimension	SASB General Issue Category	SASB Disclosure Topic
Environment	Greenhouse gas (GHG) emissions	–
	Air quality	–
	Energy management	–
	Water & wastewater management	–
	Waste & hazardous materials management	–
	Ecological impact	–
Social capital	Human rights & community relations	–
	Customer privacy	**■ (from the perspective of connectivity)**
	Data security	**■ (from the perspective of connectivity)**
	Access & affordability	–
	Product quality & safety	**Product safety**
	Customer welfare	–
	Selling practices & product labeling	–
Human capital	**Labor practices**	**Labor practices**
	Occupational health & safety	**■**
	Employee engagement, diversity & inclusion	–
Business model & innovation	**Product design & lifecycle management**	**Fuel economy and use-phase emissions**
	Business model resilience	–
	Supply chain management	**■ ●**
	Materials sourcing & efficiency	**Materials sourcing**
		Materials efficiency and recycling
	Physical impact of climate change	**■**
Leadership & governance	Business ethics	–
	Competitive behavior	–
	Management of the legal & regulatory environment	–
	Critical incident risk management	–
	Systemic risk management	–
Other		**■ ● (from the perspective of a just transition: e.g., reskilling and other efforts)**

(2) Review Results of Accounting Metrics for Each Disclosure Topic

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Product safety	• Percentage of vehicle models rated by NCAP programs with an overall 5-star safety rating (by region) • Number of safety-related defect complaints (claims), percentage investigated • Number of vehicles recalled	● **Regarding the concept of safety, the company's own concept of safety must be indicated from the perspective of its future ideal vision, and then product safety that includes, but is not limited to, these metrics must be described.** (For example, data security as well as hardware must be included in the concept of safety.) ● **Quantitative information and also qualitative background information must be disclosed.** ● To understand this topic, the following disclosure methods and information are also useful. - Targets of these metrics in the future: concepts, policies, and KPIs - Disclosure of the number of complaints and number of vehicles recalled by financial impact, over time and by percentage - Number and percentage of vehicle models incorporating safety functions - Initiatives such as safety training ● The following questions and issues at the time of disclosure were also presented. - What information is useful if the country has not adopted the New Car Assessment Program (NCAP)? - It is debatable whether the percentage investigated is a useful indicator, as each company responds to warnings from supervisory authorities without fail. - The investors suggested that, as many companies set the target of achieving zero traffic accidents, it would also be useful to disclose over time the number of traffic accidents that have involved the company's automobiles. However, the issuers indicated it would be difficult to disclose this information in a uniform manner as the causes of accidents vary.

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Fuel economy and use-phase emissions	• Sales-weighted average passenger fleet fuel economy (by region) • Number of (1) zero emission vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold • Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities	● It was suggested that information on fuel economy would be useful, as it would be comparable across companies in the short term, but it would **not be useful for evaluating medium- and long-term corporate value**. ● To understand this topic, the following disclosure methods and information are also useful. - Regarding sales-weighted average fuel economy, disclosure by vehicle segment (vehicle weight) and over time (whether there were improvements) and strategies and initiatives for improving average fuel economy - Description of the company's thinking regarding lifecycle assessment (LCA), in combination with its strategy for managing fleet fuel economy and emissions risks and opportunities - CO_2 emissions of vehicles sold (estimates are also possible) and approach to reducing CO_2 emissions from new vehicles sold - CO_2 emissions reduction targets, technology roadmaps, and CO_2 emissions reduction effects - Electrification technology that contributes to improving fuel economy, which includes, but is not limited to, (1) ZEV, (2) HV, and (3) PHV ● The following issues at the time of disclosure were also presented. - A calculation method that enables a Scope 3 comparison must be developed. - Although the milestone toward carbon neutrality have been set, it is difficult to predict the number of vehicles sold in the future. - Companies are struggling to take action, as it is uncertain what kind of disclosures regarding carbon neutrality will be required in the future (e.g., power train strategy, CO_2 emissions, fuel economy and economy in electric power consumption). - Disclosures that are comparable is necessary.
Labor practices	• Percentage of the active workforce covered under collective bargaining agreements • (1) Number of work stoppages and (2) total days idle	● From a medium- and long-term perspective, it has been deemed **important to show that an environment where sound labor-management relations have been established and that employees are able to engage in dialogue with management, and it was suggested that this topic should also be prioritized from the perspective of governance.** ● As human rights are now recognized as a global issue, this topic is attracting a lot of attention from diverse stakeholders in light of the social impact of the issue. Therefore, **it is desirable that attention be paid to differences between information users and the provision of explanations from the perspective of impact with governance and risk locations in mind.** ● To understand this topic, the following disclosure methods and information are also useful. - Impact on manufacturing (such as the reduction in the number of vehicles manufactured and related costs) - Explanation showing that the entire manufacturing process, including the supply chains, has been managed and a governance system that enables the identification of risk locations has been established. - From a long-term perspective, the efforts and results of human rights due diligence, and information with an awareness of future investments for efforts such as reskilling - Monitoring indicators associated with labor practices for preventing human rights issues (e.g., average overtime hours, employees' satisfaction levels, and others) - Qualitative description of the company's response to unstable employment (such as fixed-term work and contract employees) and matters such as their differences from regular employees, and quantitative description of management items - Description of risk awareness and initiatives for preventing risks from occurring (if there are regions/labor-management relations that are closely monitored) - In addition to SASB risk awareness (reduction of revenue due to prolonged strikes), any company-specific risks/opportunities that should be recognized - Concept and policies regarding sound labor-management relations (As labor-management relations change with the external environment, it is important to organize the information first.) ● The following issues at the time of disclosure were also presented. - In describing the impact on manufacturing, a several day delay in production can be recovered in some cases and it is therefore difficult to draw a line regarding the importance of the impact on profitability. In addition, as labor-management relations vary from country to country, it is difficult to provide descriptions comprehensively on a global scale. It is necessary to discuss the specific region to explain it and its importance (e.g., locations with greater numbers of employees and other characteristics). - For management/labor engagement, it is important for communication to be both top-down and also bottom-up.

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Materials sourcing	• Explanation of management of risks associated with the use of critical materials	● Many companies heavily rely on materials such as rare earth minerals from overseas, which entail high risks. Therefore, it was suggested that **sufficient disclosure from a risk perspective is desirable but special attention is necessary as excessive disclosure from the perspective of opportunities may reduce competitiveness.** ● To understand this topic, the following disclosure methods and information are also useful. - Explanation from the perspective of opportunities (if there are any strengths to present strategically) - Qualitative description of policies, governance, ingenuity, etc. - Risk mitigation (development of R&D systems and other efforts) - Disclosure separated by two patterns: Procurement risks due to materials shortages (e.g., semiconductors), and procurement risks due to human rights issues (e.g., conflict minerals) ● Regarding disclosure, the issuers' awareness of issues and the investors' views toward it were expressed. - Disclosure is mandatory but it is necessary to continue to promote efforts for determining the scope for examining supply chains. ⇒ The extent of direct responsibility is primary suppliers, but efforts must be made to understand value chains by requesting traceability from secondary suppliers. - The explanations of this topic have been distributed in many places. In terms of risks, actions regarding conflict minerals have been explained in supply chain management efforts and opportunities have been described in the area of development and the environment. ⇒ It is important to explain this topic from risk and opportunity perspectives, but it is unnecessary to describe them together.
Materials efficiency and recycling	• Total amount of waste from manufacturing, percentage recycled • Weight of end-of-life material recovered, percentage recycled • Average recyclability of vehicles sold	● As this topic attracts significant interest from diverse stakeholders inlight of its social impact, **it is desirable that attention is paid to the differences between the information users and that explanations from the perspective of creating value are provided, including value creation stories (also using medium- and long-term targets/goals and KPIs to measure progress).** ● To understand this topic, the following disclosure methods and information are also useful. - Information about battery recycling (which will be increasingly important in the future) - An explanation including indicators from the perspectives of the approach to increasing recycling rates, approach to reducing the amount of energy input while increasing recycling rates and the development of easily recyclable products, and the reasons why these indicators are important to the company - Efforts associated with the usage rate of virgin materials (Manufacturing independent of newly extracted resources will be increasingly important in the future.) - Disclosure over time (quantitative improvement) and information on new products with low environmental burdens - Awareness and thinking regarding cost-effectiveness (Previously there were many disclosures regarding compliance with regulations. However, once the reduction of environmental impact becomes more important in purchasers' decision-making, initiatives for recycling can be evaluated from the aspect of opportunities. In addition, the presentation of cost-effectiveness will be useful for communicating a positive attitude toward these initiatives.) ● The following issues at the time of disclosure were also presented. - Regarding the recycling of vehicles sold, there is an issue in tracking the vehicles sold, making qualitative explanations difficult. - Although sustainability reports introduce various initiatives regarding recycling, reuse, resale, and remanufacturing, these initiatives are not explained in a story, which has been recognized as an area for improvement in the future.
Activity metrics	• Number of vehicles manufactured • Number of vehicles sold	● From the perspective of creating medium- and long-term value, it is useful if the company indicates **its forecasts and responses regarding the number of vehicles manufactured and sold** based on the operating environment (market needs, trends in regulations, and the economy).

Disclosure Topic	SASB Accounting Metrics	Study Group's Review Results
Customer privacy & data security	• Explanation of approaches for identifying and addressing data security risks (including the use of third-party cybersecurity standards) • (1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected	● **The use of** the technology & communications industry's accounting metrics **in the automotive industry is deemed useful**. Note that this must be supplemented with information regarding issues specific to the automotive industry. ● It makes sense that there is a need from investors. These metrics themselves do not sound strange. ● **The personnel and department in charge of data security must be clarified.** ● **It is useful to clarify the company's awareness of risks and opportunities related to data security and to disclose relevant metrics.** ● Explanations that include information about secure areas must be reviewed in the future.

Appendix 3 Summary of Per-company Working Groups' Results

Order in the Description	Companies Participating in Per-company Working Groups
1	Asahi Group Holdings, Ltd.
2	Tokyo Electric Power Company Holdings, Inc.
3	KDDI Corporation
4	Ajinomoto Co., Inc.
5	Idemitsu Kosan Co., Ltd.
6	SOMPO Holdings, Inc.
7	Hitachi, Ltd.
8	Kao Corporation
9	Sekisui House, Ltd.
10	AGC Inc.
11	Olympus Corporation

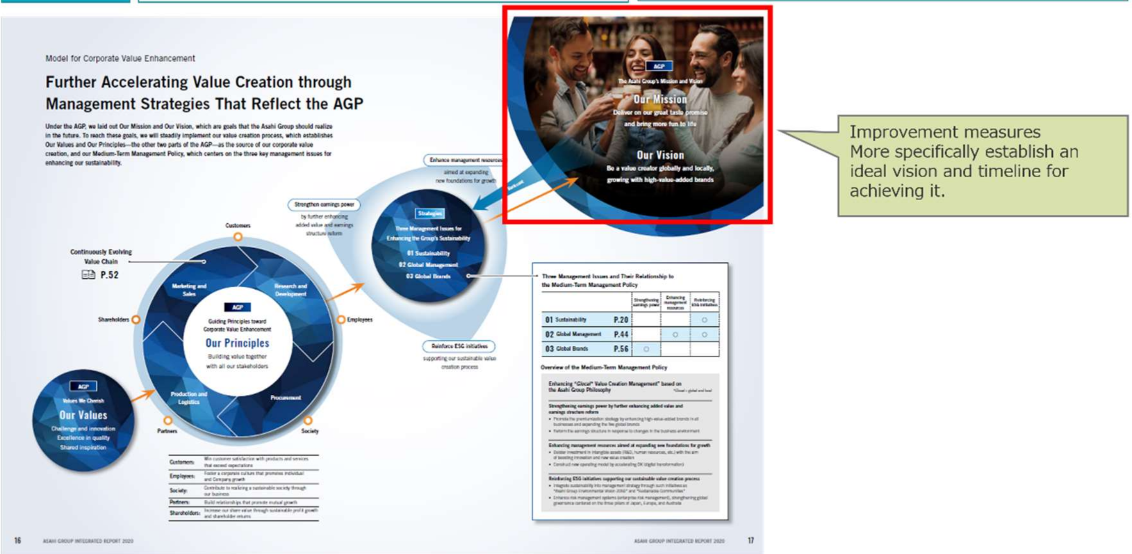
(1) Asahi Group Holdings, Ltd.

Purpose	• Improve the value creation process chart • Identify and improve substandard factors in terms of the integration of sustainability and business management • Identify and improve materiality, KPIs and other substandard factors in sustainability management
Current issues	• Failure to connect the ideal vision to the Medium-term Management Plan • Failure to specify important factors for the creation of LTV • Failure to establish non-financial and pre-financial indicators and targets • Failure to show how the non-financial factors financially impact the company
Verification method	• Obtain feedback from cooperators regarding this year's report and, based on the feedback, revise the report • Again obtain feedback on the revision, refine it and ensure that next year's report reflect this feedback
Schedule	(see below)
Cooperators	Operating agencies and advisory bodies

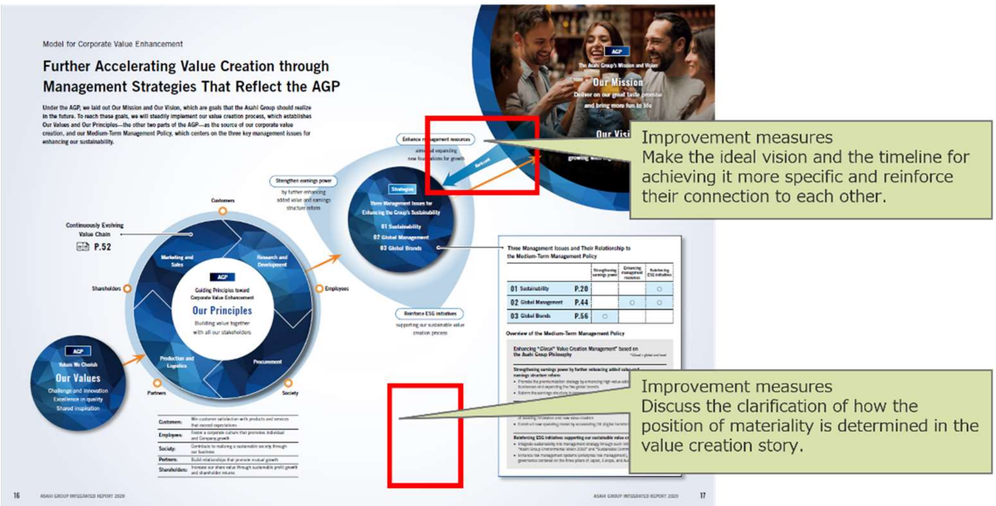
Schedule

What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Select cooperators						○								
Determine questions (agenda)						○	○							
Coordinate interview dates								○						
Cooperators' review										○	○			
Create a draft based on the review											○	○	○	
Verification														○

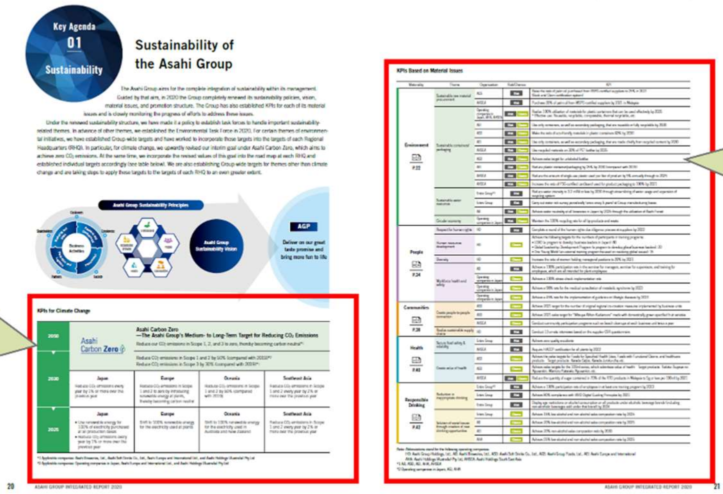
Common issues	Problems identified by company-level working groups	Improvement of issues
Establishing an ideal vision from a long-term perspective	• The company establishes its ideal vision guided by the mission and vision stated in the Asahi Group Philosophy. But this is too universal and should be more specific. • The timeline is unclear.	• Describe an ideal vision and the timeline for achieving it more specifically while basing the vision and timeline on the Asahi Group Philosophy. The company should express its unique process for value creation in this way.



Common issues	Problems identified by company-level working groups	Improvement of issues
Formulate a value creation story from a long-term perspective	• The connection between the Asahi Group Philosophy and the company's strategy is thin. • Failure to incorporate materiality	• Connect with the Asahi Group Philosophy, ideal vision and strategy based on the timeline and clearly communicate value creation from the company's perspective.



Common issues	Problems identified by company-level working groups	Improvement of issues
Set goals and indicators from a long-term perspective	• The company fails to explain the KPIs that are directly linked to corporate value • Large differences in granularity • Too many KPIs	• Making it easier to see which KPIs are directly linked to the increase of corporate value should communicate messages with good stories that are easy to understand.

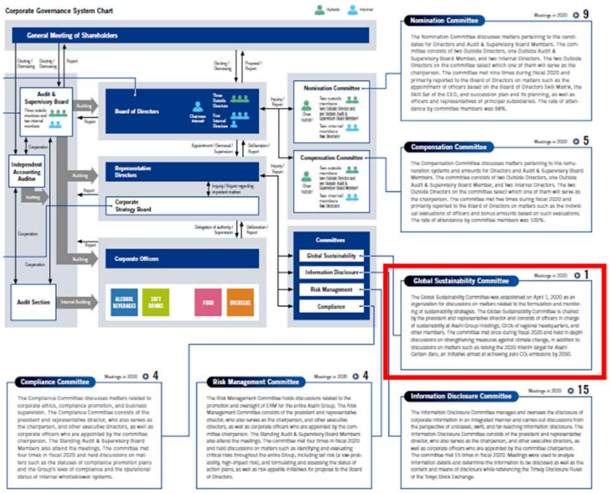


Improvement measures
Organize the KPIs that are directly connected to the increase of value and their milestones in a way that is easy to understand.

Improvement measures
Carefully select KPIs in line with the story being told

Common issues	Problems identified by company-level working groups
Establish governance development and purpose implementation capabilities	• None (The development of a governance system for the promotion of sustainability has been completed for the time being. To our understanding, the question is how to implement it effectively in the future. This is why it is not included in the company-level working groups' agendas.)

Reference: Development of sustainable governance and detailed report on the governance system



<table>
<tr><th>Common issues</th><th>Problems identified by company-level working groups</th><th>Improvement of issues</th></tr>
<tr><td rowspan="3">Disclosure and engagement</td><td>• Integrated report: Should be more specifically targeted
• Sustainability disclosure as a whole: The stories that cannot be fully communicated in the integrated report should be disclosed using another medium in an easy-to-understand manner.</td><td>• Integrated report: Review disclosures (especially KPIs) with more focus on long-term investors, the main target of the report.
• Sustainability disclosure as a whole: Use different media to find ways to disclose information that includes good stories.</td></tr>
<tr><th colspan="2">Improvement of issues</th></tr>
<tr><td colspan="2">• Clarify the targets for each type of media, such as integrated reports and websites (e.g. institutional investors, ESG evaluation agencies) and ensure the targets' needs are reflected in disclosures.</td></tr>
<tr><td>Other improvements</td><td colspan="2">• Feedback from the cooperators was summarized before being shared and discussed within the integrated report production team and the sustainability division. In this way, the feedback was utilized as a very productive tool for dialog inside the company.

• Feedback from many cooperators was positive. They said that they would stay engaged beyond the boundaries of the ESG Disclosure Study Group. We would like to continue to cherish these relationships even after the EDSG.</td></tr>
<tr><td>Future issues</td><td colspan="2">• The cooperators extensively shared their opinions regarding specific topics as well as the disclosures as a whole. They also shared many insights regarding TCFD disclosure. Going forward, they will be evaluated and discussed within the company.</td></tr>
</table>

(2) Tokyo Electric Power Company Holdings, Inc.

Purpose	• Integrated report on “S” • Concerning the report on the “S” of “ESG”, which is leaning toward simple data disclosure and CSR, fire prevention and other factors unique to the company should be connected with the corporate value creation story to enable the evolution of the integrated report.
Current issues	• The biggest problem is a failure to show how non-financial factors financially impact the company. The quantification of effects for financial impact analysis is far from satisfactory. This needs to be improved.
Verification method	• Improve the efforts in the domain of “S,” which are currently leaning toward CSR, so that they can be used as content that can be connected with the corporate value creation story and presented in the integrated report. • Conduct a questionnaire survey of financial stakeholders and other respondents to see if the content created contributes to the corporate value creation story.
Schedule	(see table below)
Cooperators	･Operating institutions, evaluation institutions, advisory bodies, etc.

Schedule

What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Organize the way the working group operates, share roles and discuss direction		○												
Perform a benchmark company analysis and versatility check		○	○											
Select the project			○											
Quantify the impact				○	○	○								
Discuss and design presentation				○	○	○	○	○	○					
Conduct review and *kaizen* verification										○	○	○	○	○

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• Among the value creation keywords stated in the Vision part of the company’s Corporate Philosophy, the company fails to impressively tell disaster prevention and other value creation stories related to S: Society.	• Focus on EVs which contribute to the creation of new value in terms of disaster prevention, etc. in the domain of S: Society. Create appealing content regarding related efforts and ensure it is reflected in the integrated report.
Formulate a value creation story from a long-term perspective	• As the announcement of the management plan for the next decade (the fourth comprehensive special business plan) has been delayed, the value creation story from a long-term perspective has already been formulated but is yet undisclosed.	• Publish the integrated report simultaneously with the announcement of the fourth comprehensive special business plan. Disclose the value creation story from a long-term perspective linked to the Mission, Vision, and Values in the company’s Corporate Philosophy. • In this context, think about the EV-related efforts that contribute to the domain of S: Society with the SDGs as a starting point. Insert them into the integrated report as content for the creation of new value.
Set goals and indicators from a long-term perspective	• The company has been able to set an EV-related quantifiable goal. However, it has failed to quantify the impact of business on society which is drawing attention in Europe and other regions today.	• Begin EV-related efforts with the quantification of the socially positive impact of related accomplishments such as the reduction of CO_2 emissions and gasoline consumption, the quietness of vehicles and zero air pollution while driving.
Establish governance development and purpose implementation capabilities	• The company lacks capabilities and knowledge to quantify the impact of business on society.	• Use the IRIS+ method to quantify social impact. • Quantify the social impact of the company’s EV100 project.
Disclosure and engagement	• The company has neither disclosed information about the quantification of the impact of business on society nor implemented any engagement regarding this.	• Implement the above solutions and ensure they are reflected in the integrated report and that the quantification of the impact of business on society is disclosed. • Push forward with meaningful engagement based on that.

Output

- In the integrated report, the officer in charge of ESG (the person responsible for the EV business) shares stories about the company's contribution to the SDGs through business operations.

SDGs for Business

Through its business activities the TEPCO Group is contributing to achieving sustainable development goals (SDGs) to make the world sustainable by 2030. While quickly developing business to meet diversified social demands, such as SDGs, the TEPCO Group must also create profits throughout the entire Group to maintain sustainable operation. Therefore, along with strategically managing the TEPCO Group's resources, the Marketing Department established in April 2020 is creating strategies for the entire Group and quickly making decisions through the analysis of objective data pertaining to the TEPCO Group and the market obtained through engagement with stakeholders and employees in the field.

In addition to being Chief Marketing Officer (CMO) and Executive ESG Officer, I am also in charge of developing new businesses such as electric vehicles, storage batteries, real estate, and overseas projects. By leveraging the TEPCO Group's strengths, we not only forecast growth over the mid to long-term in these fields of business, but we will also provide services that lead to actual solutions to problems that must be solved in order to achieve SDGs. In addition to these mid/long-term issues, such as SDGs, the TEPCO Group, which manages power infrastructure, must also provide stable services amidst some natural disasters and the current Covid-19 pandemic. While fulfilling our social responsibility as an energy provider, the TEPCO Group shall also provide further added value in the form of goods and services that exceed the expectations of our customers based on the needs of society and our clients, and improve corporate value.

Momoko Nagasaki

Momoko Nagasaki

Managing Executive Officer,
Chief Marketing Officer, ESG Officer

Output

- The integrated report explains the EV-related business for the achievement of both the growth of business and contribution to the achievement of the SDGs.
- Set a long-term goal for the EV100 Project (making 100% of professional-use vehicles EVs by FY2030) promoted by the company and disclose the results of the quantification of social impact using IRIS+.
- The relationship between the ubiquitization of EVs and the reduction of CO2 emissions is described based on a TCFD scenario analysis.

Social Impact

In 2019, the TEPCO Group became the first energy operator in Japan to voice support for the EV100 initiative and was the first to promote company vehicle-related reforms in order to achieve carbon neutrality. At current time, we aim to have replaced 50% of our approximate 3,800 work vehicles (excluding emergency and special construction vehicles) with electric vehicles by FY2025, and to have replaced 100% of our company vehicles with electric vehicles by FY2030. As "mobile storage batteries" electric vehicles are expected to provide new value to society in the form of disaster prevention, and we expect them to have a useful social impact. The TEPCO Group is not only promoting internal reforms, but also social reforms through our business as we contribute to achieving 2030 SDGs and the creation of a carbon neutral society by 2050.

In June 2021, the TEPCO Group announced that it had acquired a Green Power Certificate for the power needed to run electric vehicles. As a result, 100% of the power needed to run electric vehicles will come from renewable energies, thereby reducing CO_2 emissions from EV to basically zero.

Green Power

The Expected Social Impact from the TEPCO Group's EV100 Initiative

Activity		2020 Output	Outcome
EV	Direct CO_2 emission reductions	-194 t-CO_2	Carbon Neutral
	Noise pollution reductions	90dB→21dB[*1]	Environmental Conservation
	Atmospheric pollution from the operation	Zero	Sustainable Society
Renewable	Indirect CO_2 emission reductions	-61 t-CO_2	
Energy Storage	Mobile storage battery functions	Smartphone charging 1.28 million units[*2]	Disaster Prevention
Energy Conservation	Reductions in the amount of gasoline used	-84,000 litres	Resilience

Estimated Total Impact by 2030

Direct CO_2 Reductions -8,884 t-CO_2

Indirect CO_2 Reductions -2,867 t-CO_2

Reductions in the Amount of Gasoline Used -3.83 million litres

* Some of the quantification methods from IRIS+ provided by the global impact investing network were used for this impact estimate *1 Quote from Nissan website *2 Calculated from amount of power from one charge

Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• The integrated report helped deepen financial stakeholders understanding that the company's operations, which include EV-related operations and social infrastructure, have a significant impact on society, and deepen their understanding of the Mission and Vision (ideal vision) of an electric power company.
	Formulate a value creation story from a long-term perspective	• The company demonstrated its eagerness to create social value by showing specific examples of the quantification and visualization of social impact. This is effective as a corporate value creation story. • The information quantified by the social impact evaluation matched "Develop the future of energy, deliver a comfortable life," a statement in the new Corporate Philosophy. This facilitated the understanding of the LTVC story. • The company's ability to explain improved through the rebuilding of quantification-based stories such as the energy shift from petroleum to electricity that mobility depends upon.
	Set goals and indicators from a long-term perspective	• With a focus on EV100, the effects of CO_2 emissions reductions were visualized and their cumulative effect up to 2030 were shown. This makes it easier to numerically imagine the amount of the reductions described on other pages of the integrated report. • For use as the results of EV100, the company disclosed specific information that was easy for readers to understand. Examples are the reduction of noise and gasoline consumption and the statement, "equivalent to charging 1.28 million smartphones," among others.
	Establish governance development and purpose implementation capabilities	• The company disclosed TCFD analyses regarding actions to address climate change, one of the materiality items, before presenting the content of efforts originating with the SDGs. This clarified the purpose of the core companies and increased understanding of governance to put the purpose into practice. • The company demonstrated its progressiveness by quantifying social impact regarding carbon neutrality and disaster prevention.
Other improvements		• In the process of quantifying social impact, the internal company organization promoting EV100 reviewed the significance, meaning and effect of its business activities. This helped increase motivation.
Future issues		• The quantification of social impact received a certain amount of praise, but we also heard voices wanting an expansion of the projects (e.g. large projects involving united efforts with society and customers, more material efforts). • The content should be improved in a way that strengthens the connections between the ideal vision, value creation story, materiality, long-term goals and everything else. It should be narratively described and organized and easier for readers to understand. • Increase the financial value of the social impact evaluation.

(3) KDDI Corporation

Purpose	• Discuss the value creation story (KDDI's business strategies and creation of value for society) • Review non-financial KPIs ⇨ After summarizing the above, ensure they are disseminated internally to management and the business divisions and disclose reports (September 2022)
Current issues	• ESG perspectives not incorporated in the resource allocation policy • Failure to specify important factors for the creation of LTV • Failure to set non-financial and pre-financial indicators and target values • Failure to show how non-financial factors financially impact the company
Verification method	• April to August: Ask the cooperators to review the draft, gather comments, and verify the status of improvement. • September and after: Continue the discussion to enable the comments from the working group review to be reflected in the next fiscal year's disclosures.
Schedule	(see table below)
Cooperators	Operating agencies

Schedule

What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Formulate a draft of the value creation process	○	○												
Review by the cooperators			○						○					
Organize and implement revisions				○	○	○	○	○		○	○			
Verify improvements												○		

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• Failure to present a specific image of the ideal vision (the goal of the KDDI Group Philosophy)	• Clarify a mission-based vision. • Reflect on the reason for the company's existence and its DNA and analyze the roles the company is expected to play in the future.
Formulate a value creation story from a long-term perspective	• What does it take to prove the purpose? • The connections between materiality and the business model is unclear. • The management resources which give the company its competitive advantage need to be specified. • It is based on the perspective of the business operator and is hard for readers to understand.	• Clarify through the business model how the company can create unique value. • A story should mainly consist of materiality and purposes.
Set goals and indicators from a long-term perspective	• Failure to establish them backward from ideal vision • Organize the relationships between output and outcomes.	• Formulate the next Mid-term Management Strategy backward from the 2030 vision. • Discuss KPIs by assuming that they are intended to achieve outcomes that would lead to value creation.
Establish governance development and purpose implementation capabilities	(Not discussed by the company-level working group)	• Standardize staff awareness within the company so that they can speak about value creation in their own words.
Disclosure and engagement	(Not discussed by the company-level working group)	• Know the information that should be disclosed in dialogue with investors. Verify the validity of the disclosures through post-disclosure dialogue.

Output	- Revise the value creation process in FY2022 after the formulation of the new Mid-term Management Strategy for FY2022 and after and the accompanying revision of the new materiality and sustainability goals. - As shown in the image below, a KDDI's DNA page has been added to Sustainability Report 2021 and describes the company's philosophy which dates back to its founding. Its goal is the resolution of social issues. - The Sustainability Committee met in September 2021 and March 2022 to discuss the new materiality and sustainability goals based on the new Mid-term Management Strategy. ⇒ It was disclosed to the public in May 2022.

Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• Review the new Mid-term Management Strategy and materiality based on the Mission, Vision, and Value (completed as of May 2022).
	Formulate a value creation story from a long-term perspective	• Establish a provisional value creation story for the achievement of sustainability management (underway as of May 2022).
	Set goals and indicators from a long-term perspective	• Verify how the sustainability goals set in accordance with the new materiality will influence the company's corporate value (completed as of May 2022).
	Establish governance development and purpose implementation capabilities	• Build a system where specific divisions display leadership throughout the company in pursuit of sustainability management (the Sustainability Management Division was established in April 2022).
	Disclosure and engagement	• Increase and improve the disclosure of non-financial information based on dialogue with investors (underway as of May 2022). • Interview stakeholders to formulate new materiality (completed as of May 2022).
Other improvements	• Enable all board members including the outside directors to discuss materiality and sustainability goals to achieve sustainability management (completed as of May 2022).	
Future issues	• Establish quantitative targets for the 2030 vision (social, environmental, and financial value). • Formulate a consistent value creation story with a focus on purposes and materiality. • Verify the transition of non-financial KPIs, a component of the value creation story, to pre-financial affairs.	

(4) Ajinomoto Co., Inc.

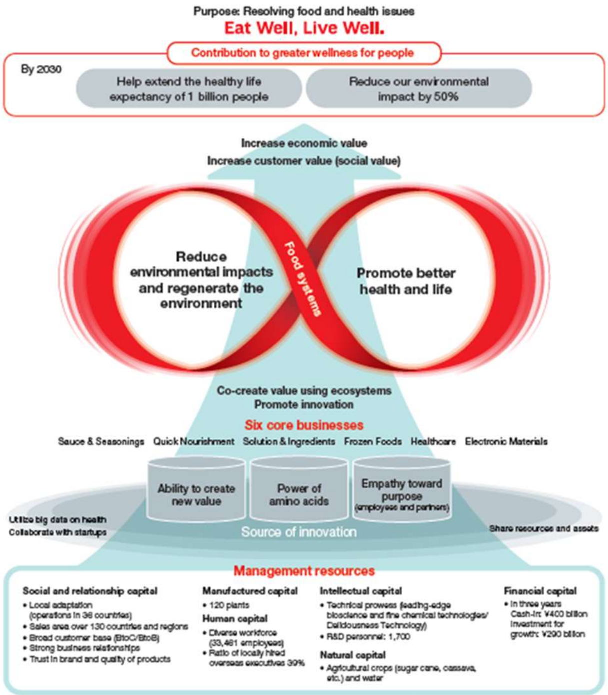
Purpose	Ensure the effectiveness of communication with stakeholders using integrated reports.
Current issues	(iii) (Failure to establish materiality as a differentiation factor) (v) (Failure to specify important factors for the creation of LTV) (vii) (Failure to show how non-financial factors financially impact the company)
Verification method	Present the intention, ideal vision, materiality, and value creation model to be published in this fiscal year's integrated report. Interview the operating agency and clarify the improvements needed for the future.
Schedule	(see below)
Cooperators	Nine operating agencies

Schedule

What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Formulate a value creation model	○	○	○	○	○	○								
Publish the online version of the integrated report										○				
Conduct an in-house review based on guidance from the working group for practical affairs										○	○			
Review by cooperators												○	○	
Summarize and share improvements within the company													○	○

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• Needs more explanation of ASV itself. • Failure to organize Mission, Vision, Value, etc. • ASV and the philosophy system also need to be published in the integrated report.	• To be discussed in next fiscal year's integrated report. • Discuss the need for and timing of revisions. • Connected to the above.
Formulate a value creation story from a long-term perspective	• Connection between materiality and the ideal vision is unclear. Also unclear in terms of level of focus on each materiality item. • It would be better if the company shows the relationships between the ideal vision, short-term efforts, and social and economic value in an easy-to-understand manner.	• Consider reviewing materiality with an awareness of the connection with the ideal vision. • Consider referencing other companies' models improving the value creation model
Set goals and indicators from a long-term perspective	• Explanation of the feasibility of creating economic value from social value is insufficient. • Connection between business and company-wide policy is unclear (relationship with outcomes, ROIC improvement strategy). • Environment (Scope 3) and the path to the extension of one billion people's health life expectancy are unclear. • Greater disclosure regarding human resources is needed.	• Increase awareness of the connection between outcomes and business activities through the Sustainability Committee and other activities. Improve explanations in this way. • In addition to the above, efforts by individual organizations to embody the ROIC tree should be utilized. • Discussion have already started within the related divisions. • Discuss with related divisions so that the view regarding human resources can be clarified and disclosed (quantification is not mandatory).
Establish governance development and purpose implementation capabilities	• (Since the company has just changed its governance structure) It lacks an explanation of the effectiveness of the change in structure.	• Consider enabling the improvements suggested by the members of the Sustainability Advisory Council, their connection to KPIs, etc. to be reflected in the company's business management.

Output



Merits
- The value creation model shows the whole in a simple manner.
- The path to the achievement of, and connection with, a purpose is clear.

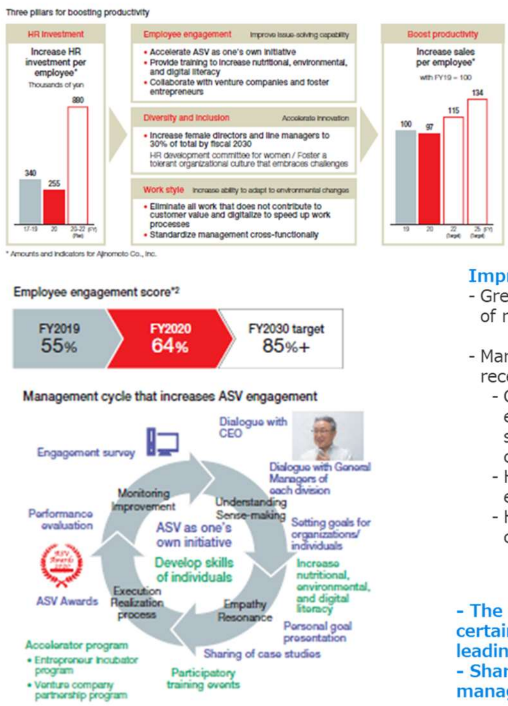
Improvements needed for the future
- Increased ability to show the connection between social and economic value would be good.

- Showing the relationship with the Mid-term Management Plan (connection between the ideal vision and short-term efforts) and a roadmap/timeline (plan for reaching the goal in 25 and 30 years) would be good.

Examples from other companies will also be considered when discussing improvements

Output

Disclosures regarding human resources



Merits
- We see the company's unique approach in its strong focus on employee engagement.

Improvements needed for the future
- Greater disclosure regarding human resources is needed (six of nine companies).

- Many different opinions regarding improvements were received.
  - Concerning (i) job satisfaction, (ii) good working environment and (iii) organization culture, the company still has a long way to go in terms of (iii) organization culture.
  - How does the disassembly of the ROIC tree link to employee engagement?
  - How to develop innovative human resources within the company, etc.

- The company needs to show a mindset that conveys certainty regarding the improvement of human resources leading to the increase of corporate value.
- Share the results of dialogue with CEO and general managers with the personnel division to begin discussion.

The following can be expected from the disclosure of improvements in the next fiscal year.

Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• Emphasize intentions and vision and increase understanding of and identification with the company's ideal vision.
	Formulate a value creation story from a long-term perspective	• Increase understanding that the story is connected more significantly to other important issues (e.g., ideal vision, awareness of the external environment, materiality, business models, strategies) as the company pursues the vision for 2030.
	Set goals and indicators from a long-term perspective	• Increase the feasibility of outcomes ((i) extension of one billion people's healthy life expectancy, (ii) 50% reduction of environmental impact) and the co-creation of social and economic value.
	Establish governance development and purpose implementation capabilities	• A change in the governance structure should lead directors to reveal a big management policy based on which the company's businesses are managed and the effectiveness of the policy's achievement of the ideal vision should be shown.
	Disclosure and engagement	• Push forward with disclosure based on an awareness of the continuity and connection of information.
Other improvements	• Share and discuss results regarding the disclosure of information and the subjects of the disclosed information, specifically, the company's management efforts, with related divisions. Enable this to lead to an improvement in the company's management efforts.	
Future issues	• No notes	

(5) Idemitsu Kosan Co., Ltd.

Purpose

About the integrated report
- We want to show (especially to the investors), in an easy-to-understand manner, the fact that our many different efforts lead to long-term value creation and sustainability.
- We want to specify and analyze the weaknesses of our disclosure in an effort to improve the disclosure.

Current issues

- Failure to link ideal vision with Medium Term Management Plan
- Failure to incorporate ESG's perspective into the resource allocation policy
- Failure to specify important factors for the creation of LTV
- Failure to set non-financial and pre-financial indicators and targets
- Failure to show how non-financial factors lead to financial impacts
- Failure to engage in dialogue with stakeholders directly linked to the company's LTV
- Failure to orient the senior management and business divisions toward ESG
- Failure to disclose information in a way that is possible for investors to make comparisons

Verification method

Ask multiple cooperators to review the last fiscal year's disclosure and the latest revision of the company-level working group, to gather before- and after-the-fact comments and review improvements.

Schedule

What to do	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
Conduct a questionnaire	○						
Conduct interviews on survey responses		○ ○					
Analyze the survey responses and specify weaknesses in the integrated report		○					
Check and discuss the draft of the revised report			○ ○	○ ○			
Review improvements							○

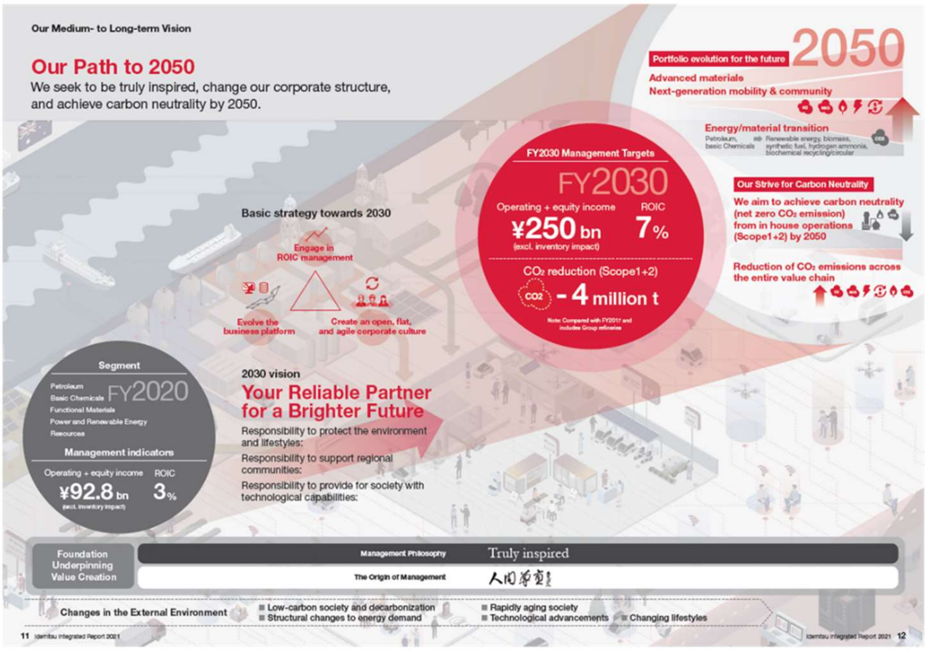
Cooperators

Operating agencies, issuers, advisory bodies, etc.

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• Failure to show ideal vision • Connection among the explanations is lame.	• Present a future image and how the company will reach it. • Clarify how the Management Philosophy, vision, materiality, and strategies are linked to one another in the value creation process.
Value from a long-term perspective Formulation of a creation story	• Failure to concretely show the value creation process • Needs more comprehensive explanations that are readable. • Failure to show competitive advantages	• Include specific efforts about the topics written in the value creation process. • Base the explanation on a comprehensive perspective. For example, use the list form of description. • Include evaluation from outside to express objective competitiveness.
Set goals and indicators from a long-term perspective	• Needs more information about financial affairs.	• Improve disclosure of financial KPIs, resource allocation, and other financial information.
Establish governance development and purpose implementation capabilities	• The description of governance still leaves something to be desired.	• Improve the disclosure of information that is interesting for investors (check it via investor interviews and other activities).
Disclosure and engagement	• It fails to express the characteristics of Idemitsu. • The integrated report and the sustainability report partly overlap each other.	• Actively explain the values the company has prioritized for many years, and its unique, new efforts. • Clarify the aims of the integrated report and the sustainability report once again and separate their descriptions.

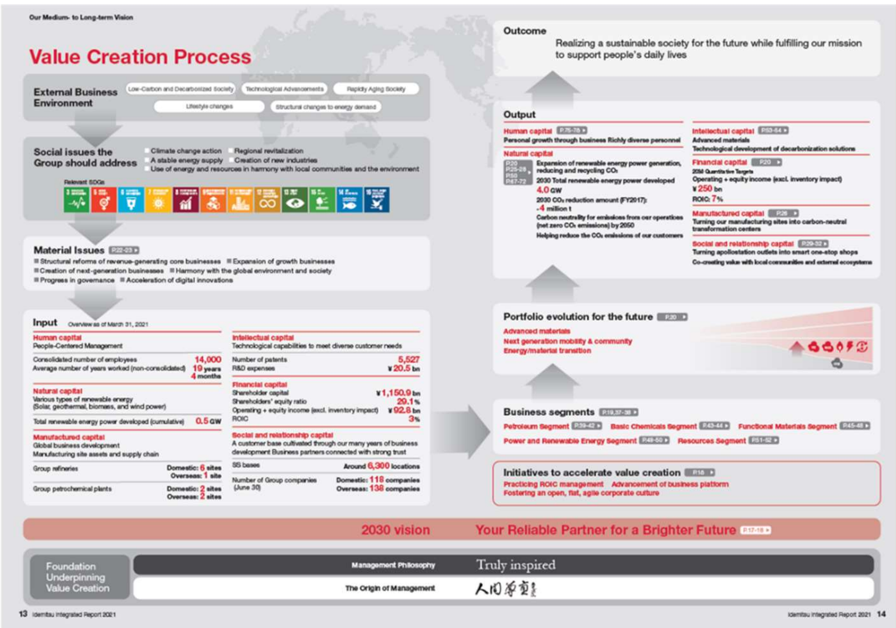
Output

Establishing an ideal vision from a long-term perspective



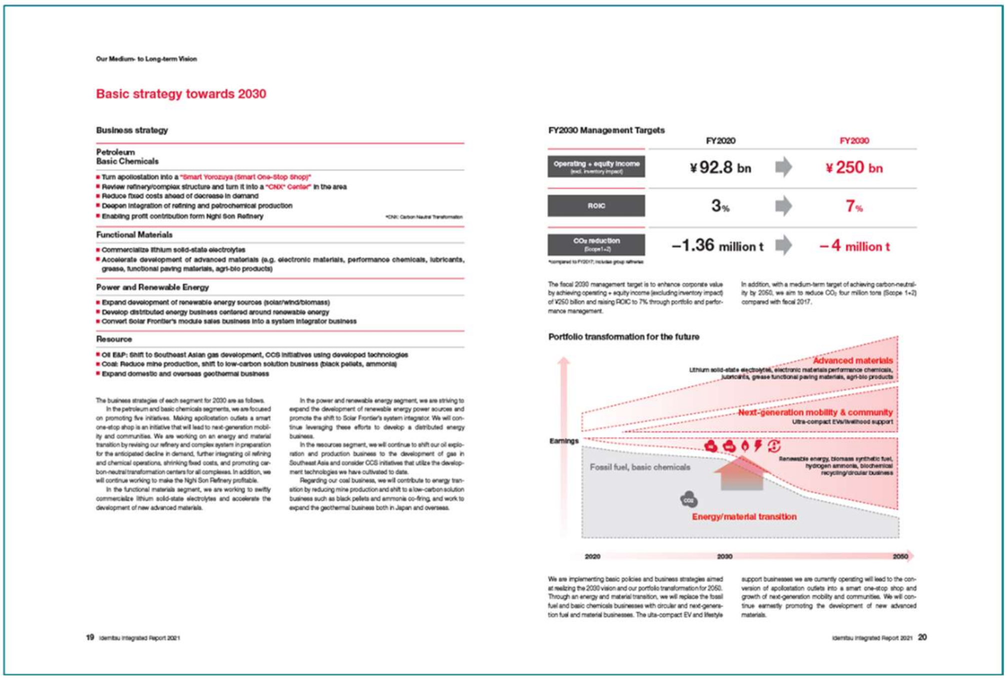
Output

Formulate a value creation story from a long-term perspective



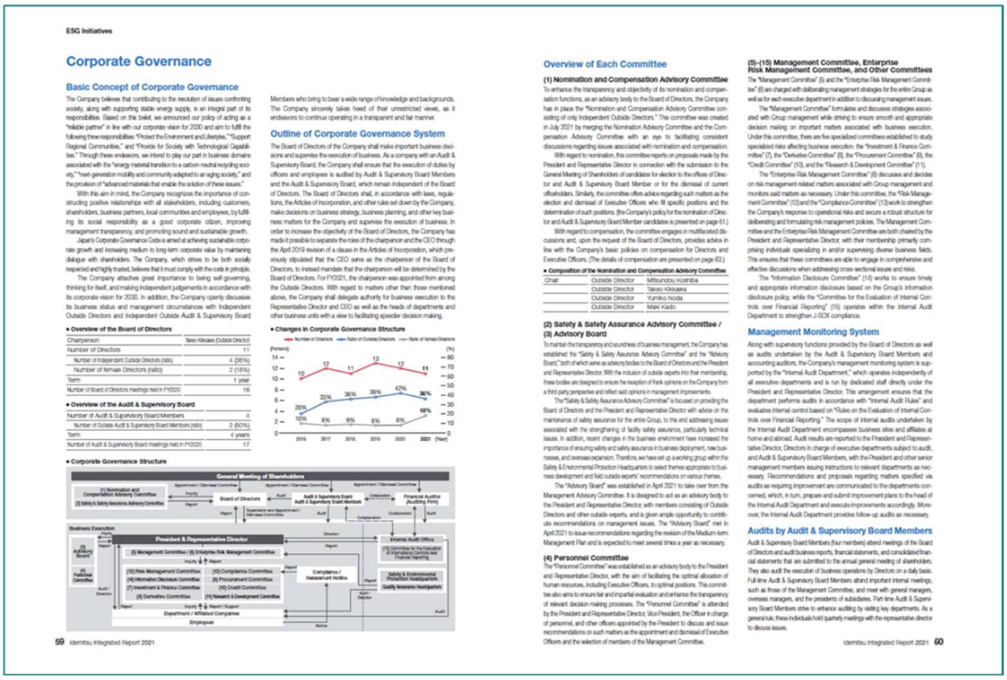
Output

Set goals and indicators from a long-term perspective



Output

Establish governance development and purpose implementation capabilities



Output

Disclosure and engagement

The Values and Management Philosophy Idemitsu Has Cherished

The Origin of Management and Management Philosophy

The Origin of Management

人間尊重

Ningen-Soncho
Written by Sazo Idemitsu

Ningen-Soncho means having respect for human beings. The Origin of Management are the words of the founder just as he wrote them. We intend to communicate to the world the importance of respecting human beings, a key tenet of our history for over a century, and unassailable ideals we continue to pass down. We have reaffirmed these as our steadfast principles.

Management Philosophy

Truly inspired

How often do we consider the countries and communities we touch,
and how much empathy do we have for the people living there?
Are we contemplating what's best for them and then doing our utmost to act in their interests?
Each day, we must reflect on our actions;
we must strive to do better not only for ourselves, but also for others.
When we come together and our efforts are united, we make the impossible possible.

With integrity, solidarity, and determination, we will overcome any challenge we face.

Idemitsu's Management Philosophy is the reaffirmation of "people-centered management" beliefs and ideals, which we have carefully maintained since our founding. It is the guidance to "keep focused on what matters" and "stay committed to providing value to society" for all Group members, simple phrases that convey the essence of Idemitsu.

Management Philosophy Short Film

This video may be taken down without notice.

Initiatives to Instill the Management Philosophy

We are taking the initiatives below to instill in each employee an appreciation of the newly established Management Philosophy and a desire to carry out the Group's mission and role in society through business operations.

- Explain how the management philosophy and its ideals were determined using intranet videos, the Group magazine "Idemitsu," and postings on in-house signage.
- Produce a short film about the Management Philosophy for presentations at townhall meetings and create new signage for the Head Office
- Conduct an awareness survey among employees to assess the current level of management philosophy comprehension and adoption
- Set aside time to think about the management philosophy in the training curriculum conducted by the Human Resources Department
- Conduct interviews of directors and general managers (produce videos) and post them on the in-house portal site

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Improvement of issues	The following are comments from cooperators.	
	Establishing an ideal vision from a long-term perspective	• Disclosing the image for the future up to 2050, target values, and the process (including the 2030 vision) has made the report very accessible and has deepened my understanding. Disclosing the shift of the future business portfolio has boosted my understanding even more. • The transition roadmap toward carbon neutrality based on the business environment up to 2050 is very easy to understand and also includes specific examples of efforts. In the future, you should clarify the ideal vision's connection with trends in technological development by showing, for example, the extent to which resources will be invested and how resources will be procured in light of financial strategies and R&D. Doing so will help us to confirm effectiveness with greater accuracy.
	Formulate a value creation story from a long-term perspective	• Concerning the value creation process, the addition of a description about the base, materiality and outcomes that support value creation made the report easier to understand. To my understanding about the distinction between output and outcomes, output is business products while the KPIs written in natural capital (with the exception of the amount of renewable energy developed) and financial capital are outcomes (future corporate value and social value). • The value creation process is beginning to show its "connection." As the demand for "contribution to" and "outcomes for" the resolution of ESG issues is growing more than ever, breaking down the disclosure of outcomes to the extent possible (e.g., the disclosure of outcomes relating to materiality that you consider to be an important issue) will give readers more insight.
	Set goals and indicators from a long-term perspective	• The financial information has become more sophisticated; it has a small but appropriate amount of information about the ROIC target for 2030 and about cash allocation without significantly increasing the description. • The financial information is also solid. It would be even better if it were linked to intangible assets, a source of competitive advantage.
	Establish governance development and purpose implementation capabilities	• Messages from outside directors show how the roles are fulfilled in terms of, for example, the aim of integrating the Nomination and Compensation Advisory Committee and the support for proactive initiatives. Meanwhile, the effectiveness evaluation would be better if it contained a review of improvements recommended in the previous fiscal year. Concerning officers' remuneration, the description of matters such as the KPIs for the variable component of remuneration and their percentages and the process for calculating remuneration should be improved. • Addition of description about the structure of officers' remuneration deepened my understanding that they are in the same boat as shareholders. Evaluation of the achievement of non-financial goals is regarded in the report as a short-term incentive. This is not relevant to the topic but feels strange to me.
	Disclosure and engagement	• It conveys your characteristics very much. It has a simple description about the starting point of your business management, Management Philosophy, the path to 2050, and other topics. Combined with president's message, they make it very easy for us to understand your purposes and long-term prospects. It explains the values and corporate philosophy you have emphasized, including the starting point of your business management. The president's message explains in detail his determination to codify the Management Philosophy to emphasize the company's values and express the company's unique characteristics. This is very helpful. Going forward, you should also show the specific systems, processes, and other measures for instilling your Management Philosophy and other principles throughout the company. This would facilitate readers' understanding even more.

Other improve-ments	• "Truly Inspired," your new Management Philosophy, can be seen in many parts and the value creation story unique to you is satisfactorily represented throughout the integrated report. • Environment-related information has been occupying a greater part of the report since the last fiscal year. This conveys your motivation to, as an energy industry company, address environmental issues for years to come. • The report contains more pages that convey, at a glance, the overall image of the company's ideal vision, outlooks by business segment, and other related issues along the timeline. This has made it easier for us to read the details that followed.
Future issues	**Learn from cooperators' reviews and identify the improvements needed for the future, as follows.** • Link non-financial factors and financial factors (between the financial KPIs linked to the achievement of management goals and non-financial KPIs). • Embody the effectiveness of the shift of a business portfolio (schedule, quantification, financial strategies, resource loading and R&D). • Clarify competitive advantages (characteristics of the business process, technological advantages, strategic differences from other companies). • Continue to improve the value creation process (output, outcomes and design). • Continue to disclose governance-related information (e.g., effectiveness review, KPIs of officers' remuneration). • Make the information relating to climate change more sophisticated (disclosure of financial impact, shift of scenario assumption from the 2 degree target to the 1.5 degree target). • Continue to embody the strategies relating to existing businesses. • Specify systems, processes, and measures for spreading the Management Philosophy throughout the company. • Differentiate the roles of the integrated report and the sustainability report to an even greater extent. • Redefine materiality from many different perspectives (double materiality). • Hold dialogues with stakeholders and reflect the findings in the company's activities.

(6) SOMPO Holdings, Inc.

Purpose	・Identify improvements to the description of the business model and capital (outcomes). ・Check investors' evaluation of the positioning of materiality and their KPIs. ・Review improvements in the production concept and content of the integrated report.
Current issues	・Remain conscious about the latest disclosure and combine financial and pre-financial factors in establishing the materiality KPIs. Going forward, their value for society (including LTV) should be, for example, visualized and quantified to make them more appealing. ・The integrated report has been underutilized so far and should be used more as a tool for dialogue with investors and the companies that will be co-creation partners.
Verification method	・Organize the questionnaire from the above perspective before distributing a survey. Obtain ratings and comments from the respondents for improvements.
Cooperators	Operating agencies and advisory bodies

Schedule

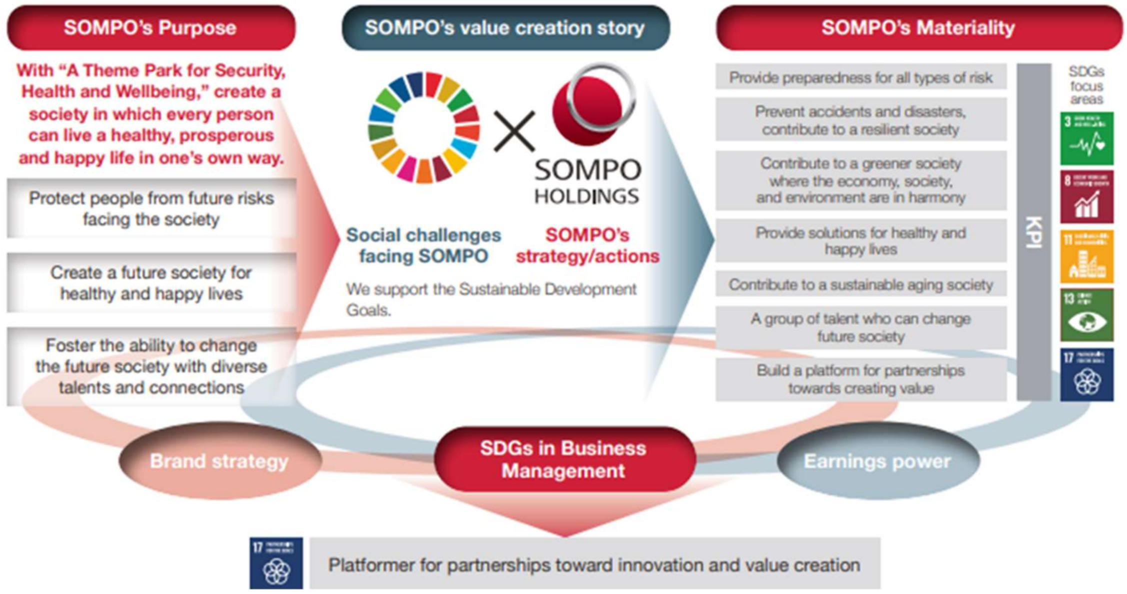
What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Issue the integrated report										○				
Hold a meeting to brief cooperating companies										○				
Accept questions from the cooperating companies											○			
Respondents complete the questionnaire												○		
Analyze the evaluation and develop a policy for improvement													○	○

Common issues	Problems identified by company-level working groups	Solutions to the problems
(i) Establishing an ideal vision from a long-term perspective	• Clarify, on the basis of Sompo's purposes, the value of making and offering a theme park to society in 2021. The cooperating agencies pointed out nothing.	• The report should be based on strategies and efforts for achieving the purposes of Sompo. Efforts will be continued to find ways to make it more appealing.
(ii) Formulate a value creation story from a long-term perspective	• The value creation process has no description about materiality or relating risks or opportunities. • Failure to link outcomes with materiality in the value creation process, etc.	• Review the value creation process by, for example, describing risks and opportunities and organizing the relationship between outcomes and materiality.
(iii) Set goals and indicators from a long-term perspective	• Most of the materiality KPIs are from the Mid-term Management Plan (FY2021 - 2023) and KPIs from a long-term perspective are missing. • Variation is needed in the degree of importance of the KPIs.	• From among the 36 KPIs, specify those that are more important for enhancing long-term corporate value. Consider how to add a good story to the disclosure.
(iv) Establish governance development and purpose implementation capabilities	• Some readers gave Sompo high marks for its governance with high transparency as a company with committees and a unique executive structure.	• Now that the company's strength in governance has been confirmed, it will keep emphasizing that governance is effectively functioning as the basis for value creation.
(v) Disclosure and engagement	• The integrated report is positioned as the core of information disclosure and exhaustively includes a great deal of information. This led to a significant increase in the number of pages.	• Organize and improve the roles and functions with the securities report and the sustainability report in an effort to optimize the volume of information included in the integrated report.

Common issue (i)

Issues for the next fiscal year
Take into consideration the following to make the report more appealing.

- The value that the Sompo Group will offer to society long-term, say 20 years or 50 years, is clarified and considered as SOMPO's Purpose.
- The priority issues for achievement of the purposes are positioned as Sompo's Materiality.

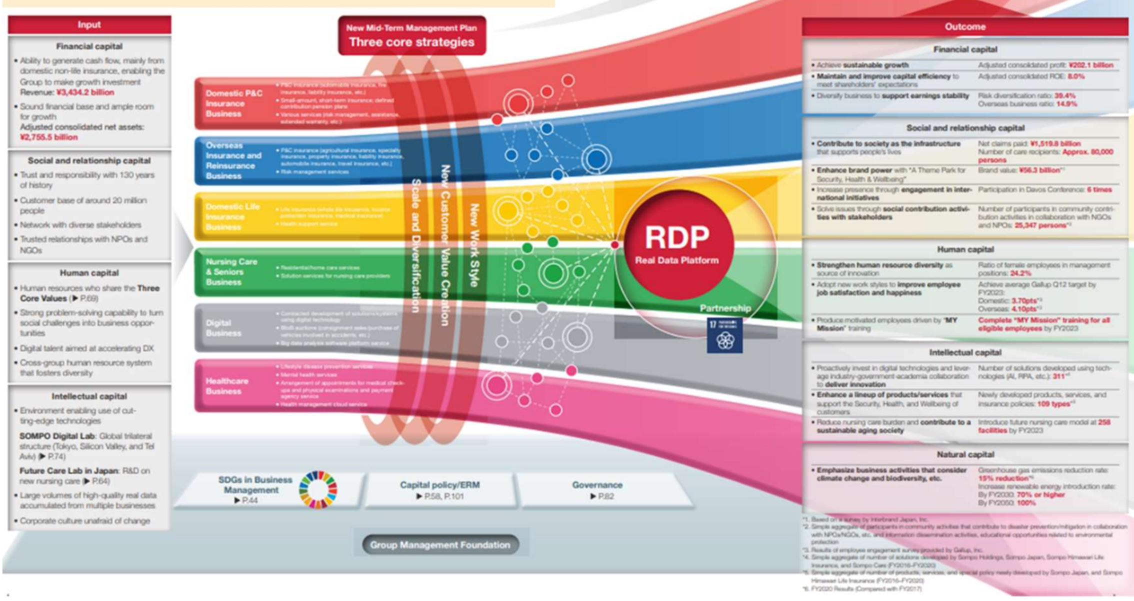


Value Creation Process

Common issue (ii)

Issues for the next fiscal year

- Describe risks and opportunities and link them to a story.
- Organize the relationship between materiality and outcomes.



Issues for the next fiscal year

➢ **Specify the KPIs that are important in enhancing long-term corporate value.**

Common issue (iii)

Materiality KPIs

Materiality	Materiality subcategories		Materiality KPIs: KPIs	Materiality KPIs: Target business	Numerical targets	Partnership KPIs	Relevant SDG targets			Society SOMPO aims for / Vision to be realized
Provide preparedness for all types of risk	Financial inclusion and promoting insurance to all people	Co-creation with various stakeholders	Domestic net written premiums (contribution to promoting insurance)	Domestic P&C insurance	FY2021: ¥1,988.6bn / FY2023: ¥2,079.9bn	Increase in partnerships (1) No. of collaborations/ partnerships announced to the public (2) No. of PoC* and pilot tests conducted through collaborations/ partnerships (3) No. of solutions provided through collaborations/ partnerships *Proof-of-Concept	1.4	8.10	11.7	Due to the evolution of insurance, people are protected from new risks such as climate change, infectious diseases and cyberattacks, and can live a secure and healthy life.
			Overseas gross written premiums (contribution to promoting insurance)	Overseas insurance	FY2021: +7.9% / FY2022: +7.1% / FY2023: +6.9% *In USD		1.4	8.10	13.1	
			No. of life insurance policies in force (contribution to promoting insurance)	Domestic life insurance	FY2021: 4.43M / FY2023: 5.00M		1.4	3.3	8.10	
			No. of sales and premiums for insurance products that help people prepare for illness and injury (Medical Master, Nyuin Passport)	Domestic P&C insurance	Increase YoY		3.3	3.4	8.10	
	Contribution to a sustainable food supply		Expansion of AgriSompo's agricultural insurance business to more countries	Overseas insurance	Increase in number of target countries by FY2023		1.5	2.4	13.1	
Prevent accidents and disasters, contribute to a resilient society	Contribution to resilient society against natural disasters		Customer satisfaction with insurance claims paid for natural disasters	Domestic P&C insurance	Improve YoY		1.5	11.b	13.1	Risks are controlled and damage is minimized by detecting signs and preventing damage.
	Contribution to secure and healthy next-generation mobility society		No. of sales and premiums for insurance products that contribute to secure and healthy next-generation mobility society (New DRIVING!, UGOKU)	Domestic P&C insurance	Increase YoY		3.6	8.10	11.2	
	Next-generation education (disaster prevention and traffic safety)		No. of participants in disaster prevention and traffic safety training	All businesses of the Group	FY2021: 15,000		3.6	4.7	11.b	
Contribute to a greener society where the economy, society and environment are in harmony	Sustainable finance (insurance underwriting, product development, investing and lending)		Participation and activities in sustainability-related initiatives and rulemaking	All businesses of the Group	Publish activity results		9.4	11.4	13.3	Inclusive and resilient carbon neutral society where people and nature are in harmony
			No. of engagement with investee and borrower companies	All businesses of the Group	Increase YoY		7.a	9.4	13.a	
	Contribution to a green society, recycling society and society in harmony with nature		Greenhouse gas emission reduction rate (Scope 1-3)	All businesses of the Group	60% reduction by FY2030 (compared to 2017), net zero by FY2050 *The target for FY2050 includes investee and borrower companies		7.2	12.8	13.2	
	ESG conscious value chain		Switching to renewable energy sources	All businesses of the Group	70% introduction rate by FY2030		7.2	12.2	13.2	
	Next-generation education (environment)		No. of participants in environmental education programs	All businesses of the Group	FY2021: 11,500		12.3	13.3	14.1	
Provide solutions for healthy and happy lives	Extending healthy life expectancy		No. of Insurhealth® policies sold	Domestic life insurance	End of FY2021: 300,000 / End of FY2023: 420,000		1.4	3.4	8.10	People who need support can live a healthy and happy life with dignity as individuals.
			No. of Insurhealth® policies in force	Domestic life insurance	End of FY2021: 600,000 / End of FY2023: 1,300,000		1.4	3.4	8.10	
			Weighting of Insurhealth® products	Domestic life insurance	End of FY2021: 60% / End of FY2023: 80%		3.4	3.a	8.10	
			Company name recognition	Domestic life insurance	End of FY2021: 60% / End of FY2023: 80%		3.4	3.a	8.10	
			Perception as a health-promoting company	Domestic life insurance	End of FY2021: No. 5 in the life insurance industry End of FY2023: No. 1 in the industry		3.4	3.a	8.10	
			No. of facilities offering dementia prevention programs	Nursing care & seniors	FY2021: 38 / FY2023: 171		3.4	5.4	10.2	
			Health guidance business revenue	Healthcare	FY2021: ¥3.519bn		3.4	3.5	4.7	
			Mental health service revenue	Healthcare	FY2021: ¥1.485bn		3.4	4.4	8.8	
	Contribution to a smart society		No. of smart community proof of concepts	Nursing care & seniors	FY2021:10		3.4	3.d	11.3	
Contribute to a sustainable aging society	Contribution to a sustainable social security system		No. of facilities that introduce a Future Nursing Care model	Nursing care & seniors	FY2021: 28 / FY2023: 258		1.3	3.4	8.8	The burden on people who support an aging society with a declining birthrate is reduced and everyone can pursue their dreams.
			Nursing care facility occupancy rate	Nursing care & seniors	FY2021: 90.8% / FY2023: 93.8%		1.3	3.4	10.2	
			No. of nursing care users	Nursing care & seniors	FY2021: 90,000 / FY2023: 120,000		1.3	3.4	10.2	
			Care provider turnover rate	Nursing care & seniors	FY2021: 11.4% / FY2023: 10.5%		1.3	3.4	8.5	
A group of talent who can change future society	Improving employee engagement through new work style		Employee engagement	All businesses of the Group	End of FY2023: Gallup Q12 average points: (domestic) 3.70 pt, (overseas) 4.10 pt		4.4	8.2	8.8	Our diverse employees develop innovative solutions and have the power to drive transformation towards a better society.
			My Mission training participation rate	All businesses of the Group	End of FY2023: 100% of eligible employees		3.4	4.4	8.2	
			Telework rate	All businesses of the Group	More than 50% of whole Group *Nursing care frontline not included		4.4	5.4	8.8	
	Health and poroductivity management, human dignity and human rights risk		Health and productivity management index (WLQ)* *Work Limitations Questionnaire	All businesses of the Group	Improvements YoY at each company		3.4	4.4	8.8	
	Promoting diversity and inclusion		Ratio of female managers	All businesses of the Group	End of FY2023: 30%		5.5	8.2	10.2	
			Ratio of employees with disabilities	All businesses of the Group	End of FY2023: 2.5%		4.4	8.2	10.2	
	Investment in HR (Lifelong learning / Recurrent education)		Shift to job-based HR system	All businesses of the Group	Realize job-based system at each company by the end of FY2023		8.2	8.5	9.5	
			No. of digital personnel developed/employed	All businesses of the Group	End of FY2023 DX specialists: 177 DX planning personnel (A) Employees who have completed basic DX training: 4,000 (B) Participants in AI planning, data utilization, CX agile design training: 3,000 Personnel using DX: 17,100 training participants		4.4	8.2	9.5	
Build a platform for partnerships towards creating value	Promoting a digital society		Group revenue generated by utilizing RDP* *Real Data Platform	Digital	¥500bn (medium- to long-term target)		3.4	9.2	11.b	SOMPO proposes a prosperous life for both people who support and people who are supported in an aging society by creating innovation based on facts and data.
			External sales and monetization of RDP products and services	Digital	More than two projects by the end of FY2023		3.4	9.2	11.b	

Issues for the next fiscal year

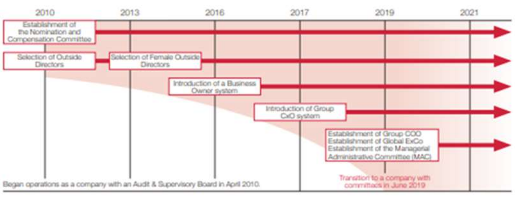
Common issue (iv)

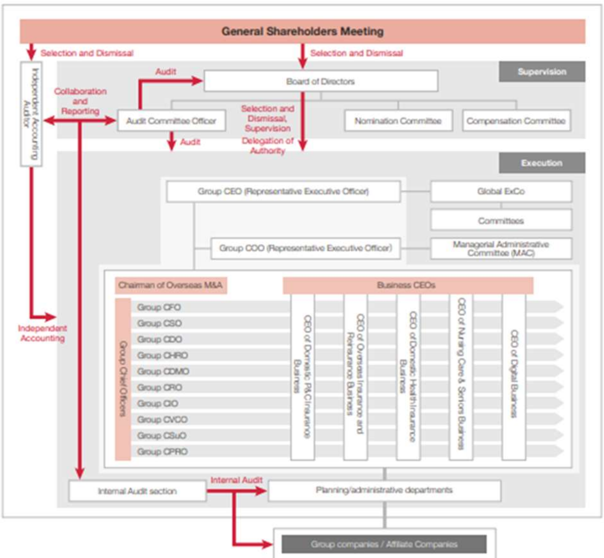
Renew your awareness that it is a strength of the Sompo Group and try to make it more appealing.

➢ **Sompo has continually pursued the best corporate governance since its establishment in 2010.**

➢ **Sompo shifted to a company with a Nomination Committee etc. in 2019 and separates supervision and business execution from each other.**

➢ **While the CEO and COO of the Sompo Group supervise the Group's business execution overall, business owners and the Group's chiefs and officers are appointed to ensure agile and flexible decision making and the execution of business operations and to clarify authority and responsibilities.**

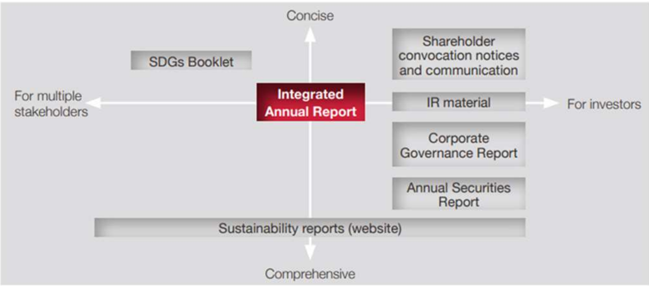


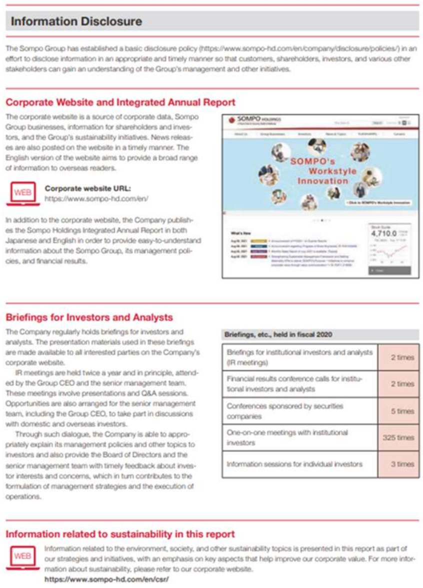


Common issue (v)

Issues for the next fiscal year

- **Optimize the amount of information by organizing the functions of different disclosure materials.**
- **To solve the problems mentioned above, secure more opportunities for dialogue with investors and other stakeholders.**
- **Consider using the report as a tool for facilitating understanding about purposes, Mid-term Management Plan and other topics throughout the company.**





Information Disclosure

The Sompo Group has established a basic disclosure policy (https://www.sompo-hd.com/en/company/disclosure/policies/) in an effort to disclose information in an appropriate and timely manner so that customers, shareholders, investors, and various other stakeholders can gain an understanding of the Group's management and other initiatives.

Corporate Website and Integrated Annual Report

The corporate website is a source of corporate data, Sompo Group businesses, information for shareholders and investors, and the Group's sustainability initiatives. News releases are also posted on the website in a timely manner. The English version of the website aims to provide a broad range of information to overseas readers.

WEB **Corporate website URL:**
https://www.sompo-hd.com/en/

In addition to the corporate website, the Company publishes the Sompo Holdings Integrated Annual Report in both Japanese and English in order to provide easy-to-understand information about the Sompo Group, its management policies, and financial results.

SOMPO's Workstyle Innovation

4,710.0

Briefings for Investors and Analysts

The Company regularly holds briefings for investors and analysts. The presentation materials used in these briefings are made available to all interested parties on the Company's corporate website.

IR meetings are held twice a year and in principle, attended by the Group CEO and the senior management team. These meetings involve presentations and Q&A sessions. Opportunities are also arranged for the senior management team, including the Group CEO, to take part in discussions with domestic and overseas investors.

Through such dialogue, the Company is able to appropriately explain its management policies and other topics to investors and also provide the Board of Directors and the senior management team with timely feedback about investor interests and concerns, which in turn contributes to the formulation of management strategies and the execution of operations.

Briefings, etc., held in fiscal 2020

Briefings for institutional investors and analysts (IR meetings)	2 times
Financial results conference calls for institutional investors and analysts	2 times
Conferences sponsored by securities companies	5 times
One-on-one meetings with institutional investors	325 times
Information sessions for individual investors	3 times

Information related to sustainability in this report

WEB Information related to the environment, society, and other sustainability topics is presented in this report as part of our strategies and initiatives, with an emphasis on key aspects that help improve our corporate value. For more information about sustainability, please refer to our corporate website.
https://www.sompo-hd.com/en/csr/

Reference: Results of evaluation from the cooperating agencies (quantitative)

Item	Question
Description of the business model	Is the business model depicted in the value creation process accurately and in an easy-to-understand manner?
Appropriateness of materiality KPIs and their presentation	Are the materiality KPIs the right indicator of the efforts to achieve the purposes (in terms of balance, comprehensiveness, disclosure methods, etc.)?
Resources to use and outcomes	The description is in line with the IIRC framework. Are the choices of capital to use and outcomes to create right? Are they described in a way that helps investors' understanding?
Appropriateness of balance of financial and pre-financial information	It has a great deal of description about pre-financial information. Is it properly balanced with financial information?
Appeal of SDGs-based management	Does the description contribute to SDGs-based management, which is aimed at solving social issues through the company's main businesses, in terms of attitude, seriousness and differentiation from other companies?
Concept of creation of a report	Can the concept for creation of a report, "clarify the company's track record and strengths past and present and, based on these, show the future that the company is seeking," be communicated to the audience?
Emphasizing Sompo's unique value	Is the value unique to Sompo, which is created from the diversity of a business, RDP and other sources, clear? Does it convey uniqueness and advantages?

Assessors		Investors								Consultants				Item average (five-point scale)
		Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H	Company I	Company J	Company K	Company L	
Assessment Items	Description of the business model	4	4	4	3	4	4	4	2	4	4	3	5	3.75
	Appropriateness of materiality KPIs and their presentation	4	5	4	3	4	3	5	2	4	3	3	5	3.75
	Description about the capital to use and outcomes	4	4	4	3	4	3	3	2	–	3	2	5	3.36
	Appropriateness of the balance between financial and non- (pre-) financial information	4	–	4	3	4	5	5	3	–	3	4	5	4.00
	Appeal of SDGs-based management	4	5	4	4	3	5	4	3	4	4	4	5	4.08
	Concept of creation of a report	3	4	5	4	3	4	5	3	3	4	2	5	3.75
	Emphasizing Sompo's unique value	5	5	4	4	5	5	5	2	4	4	3	5	4.25
Raters average		**4.00**	**4.50**	**4.14**	**3.43**	**3.86**	**4.14**	**4.43**	**2.43**	**3.80**	**3.57**	**3.00**	**5.00**	**3.85**
		Investors average						**3.87**		**Consultants average**		**3.84**		

Reference: Highly and lowly rated parts

<table>
<tr><td rowspan="5">Highly rated</td><td>Materiality determination process</td><td>- It facilitates understanding that the company links the social issues surrounding it with the SDGs targets, and that the materiality is selected from what is important in terms of SDGs
- The process for identifying materiality is logical. Making a list of relationships with SDGs communicates the characteristics of the business model very well.
- Unfailingly clarifying and describing the process for specifying priority issues is good as the report is much easier to understand than last year's one and is also linked with the management plan and SDGs promotion plan.</td></tr>
<tr><td>Governance part overall</td><td>- The improvement of information is noteworthy. Being elaborately designed, the information is confidently disclosed. Sompo's basic philosophy is different from those of other companies in the same industry and the company differentiates itself well.
- The part conveys the effectiveness of a business enterprise. I guess so from a series of description about the governance system, skill matrix, initiatives, the remuneration system, effectiveness evaluation and others.
- It discloses governance information with a high level of completion. No other company describes a decision-making process in the business execution division like Sompo does. This is an interesting read.</td></tr>
<tr><td>Business part overall</td><td>- For each business, the report encompasses different perspectives such as the identification of risks and opportunities and previous and new Mid-term Management Plans. It is relatively solid.
- The explanation about the different businesses is solid and easy to understand.
- The report deserves credit for establishing specific KPIs that will be directly linked with the enhancement of corporate value, such as an ROE for each business.</td></tr>
<tr><td>Capital part overall</td><td>- It seems few companies explain their efforts from six different perspectives of capital. In that regard, your disclosure is progressive.
- The explanation about management resources for achieving the value creation story is easy to understand.
- It carefully explains the different kinds of capital that will be the starting point of the value creation process. The report allows readers to realize many facts (especially about social capital and human capital). Despite the large number of pages, I felt very little stress in reading it through. Financial capital is the topic of the CFO's message. This is also good.</td></tr>
<tr><td>CEO message</td><td>- Sompo uses a considerable number of pages to strongly deliver a message about the whole picture.
- The senior management's speaking about the company's direction eloquently conveys the seriousness of the company's commitment.</td></tr>
<tr><td rowspan="4">Lowly rated</td><td>Materiality KPI</td><td>- Some other companies make the report easy to understand by inserting a chart that maps the degree of importance of materiality. You may learn something from them when considering how to effectively add variation of importance to the description.
- I understand this is a comprehensive approach, but it fails to tell what is truly important.
- The health-related KPIs are described with too many terms that are unique to you. Also, it's hard to see how the KPIs contribute to materiality.</td></tr>
<tr><td>Business part overall</td><td>- The report describes only the business aspect, which makes it hard for readers to see if the company really considers SDGs through its business.
- The report links SDGs icons. But it is hard to see how they are embodied in the company's businesses.</td></tr>
<tr><td>Natural capital</td><td>- Having a quantitative analysis or similar would be more desirable.
- Topics other than climate change should also be included in the content.</td></tr>
<tr><td>Management base</td><td>- The report explains SDGs-based management, capital policies, ERM and governance which, the company says, comprise the foundation for its business management. But they are too dispersed to be understandable. Organizing their relationships may help.
- More than the content, a problem lies in materiality's being described in the management base part of the new Mid-term Management Plan. This may be misleading. Overall, the description of disclosure focuses too much on the Mid-term Management Plan.</td></tr>
</table>

Reference: Main comments for improvement

■ Value creation process

- **Separate output and outcomes from each other. This would make the report easier to understand.**
- Linking the description in "PURPOSE" more with the value creation process would make the report easier to understand.

■ Materiality KPI

- **It would be better if they explain the reason for setting specific numerical figures for the KPIs they would focus on,** so that we can see whether the KPIs have the appropriate targets.
- Concerning KPIs, it would be good to quantitatively or qualitatively show materiality goals (KGIs) achievable with efforts like these.
- **It would also be good to show which of the seven materiality issues and the extensively established KPIs you place more importance on.**

■ Capital and outcomes

- It would be good if you could show that you can offer better outcomes than other companies in the same industry, including those located overseas.
- Nature capital is limited to GHG emissions and the rate of renewable energy introduction. Maybe you should also write from other perspectives such as biodiversity, forests and water.
- **It needs a little more supplementary explanation about the relationship between outcomes and materiality indicated with arrows toward the achievement of purposes.**

■ Financial and non- (pre-) financial information

- Each year, you should show a strategy for incorporating pre-financial information into financial information.
- **I recommend that you try converting non- (pre-) financial value into monetary value to quantify it.** Showing the route of conversion into financial value would let investors know the assumption on which you perform quantification. This would serve as an important message.
- **Use data to show how your non-financial value was converted into financial value (Yanagi Model). Show examples of pre-financial information that has a high probability of becoming manifest as financial information in the future.**

■ SDGs-based management

- It has very good information in terms of both quality and quantity. Since the report has so much information, I find it hard to understand which part I should focus on. Consequently, it doesn't really deliver the message you want to emphasize most.
- The report explains the company's attitude toward SDGs very well. **In order to impressively communicate the outcomes, citing more specific business examples would make the outcomes easier to understand.**

■Concept for creation of a report

- The company extensively emphasizes what it wants to be through the resolution of problems.
- **If you want to speak about the future, you should do more to analyze social and business environments on an ultra-long-term basis.** It looks like the report is based on a mid-term perspective. For example, materiality is explained in the description about the Mid-term Management Plan.
- **More parts of the report should be spent in emphasizing the power of your bottom-up efforts.** For example, you may cite an example where on-site activities led to value creation.

■Sompo's uniqueness

- SDGs are intended for solving mid-term problems. Showing longer-term goals may involve options such as taking your unique perspective in establishing your long-term ideal of society.
- Since SDGs involve macro goals, many approaches to SDGs end up being similar to each other. This makes differentiation more difficult. Discuss what you could do to society with the use of your own resources. Your efforts that can contribute to society may also fall under some of the SDGs. This would be desirable.

(7) Hitachi, Ltd.

Purpose	- Ask outside stakeholders to evaluate the importance of the issues that Hitachi will work on in pursuit of its ideal vision for FY2030. If any social issues that Hitachi should consider are omitted, they should be pointed out and included in the materiality map. Also, obtain outside feedback regarding the direction of the company's commitments and non-financial goals based on important issues. (Also used to formulate the next Mid-term Management Plan)
Current issues	- Failure to establish material materiality as a factor for differentiation - ESG perspectives not incorporated in the resource allocation policy - Failure to set non-financial and pre-financial indicators and target values
Verification method	- Based on the Strategic Focus Area disclosed in the Integrated Report published in September 2021, Hitachi works to identify materiality based on feedback from experts and stakeholders while taking into account the direction of the next Mid-term Management Plan.
Schedule	(see table below)
Cooperators	Four investor companies, three issuers, one person who is a special member and four auditing companies (stakeholder survey) Three outside experts (dialogue with outside experts)

Schedule

What to do	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
Meeting to explain the stakeholder survey prior to implementation (August 30)					○		
Stakeholder survey (August 30 - September 10)					○		
Correct the materiality map						○	
Explanation regarding the dialogue with outside experts prior to implementation (September 17)						○	
Dialogue with outside experts (September 24)						○	

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	- Clarify the company's ideal vision and story. - Should be expressed in a way that effectively conveys the business model and strategies that the company pursues.	• Establish the company's ideal vision backward from 2050 and make a story of what the company wants to be by 2030. • Incorporate them into the next Mid-term Management Plan (under consideration) and embody them.
Formulate a value creation story from a long-term perspective	- Same as above	- Same as above
Set goals and indicators from a long-term perspective	- Necessary to establish definitions and related KPIs in terms of relevance to the company's businesses (>comparability). - Concerning the measures that will be the source of the company's competitiveness, write about the company's direction as well as the KPIs.	• Linked to the establishment of an ideal vision from a long-term perspective • Clearly state the concept which is the background behind the KPIs.
Establish governance development and purpose implementation capabilities	Outside the scope of deliberation of the company-level working group	Outside the scope of deliberation of the company-level working group
Disclosure and engagement	Outside the scope of deliberation of the company-level working group	Outside the scope of deliberation of the company-level working group

Output	- Conduct the stakeholder survey and revise materiality. The importance of the proposed materiality was evaluated. The respondents used the open-ended comment box to provide significant feedback, sharing their concerns and advice in terms of specific matters such as the positioning of the proposed items in the company's management, their balance and the wording in their descriptions. They also suggested the addition of some issues. Based on the above, the issues relating to the company's businesses were reorganized. Furthermore, some of the important issues were changed to especially important issues. → Created a tentative revision of the first revision of materiality. - Comments during the dialogue with outside experts Engage in a dialogue with outside experts based on the tentative revision of the first version of materiality. Based on the feedback (main opinions on page 2), the materiality list was integrated into several categories. Categories were reorganized in accordance with the story. → Created a tentative revision of the second version of materiality. Asked for the opinions of and consulted with related departments within the company while checking on the status of deliberations regarding the next Mid-term Management Plan. - A stakeholder dialogue was also held in Europe in mid-November. - Consider their integration into the next Mid-term Management Plan and their disclosure in the next fiscal year's report and other media.

Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• Building a story backward from the mid- and long-term ideal vision helped increase recognition of the need for explanations that encompass business strategies and the fields of R&D and the environment.
	Formulate a value creation story from a long-term perspective	• Same as above
	Set goals and indicators from a long-term perspective	- The report helped me understand the importance of flexibly setting and explaining unique indicators if they lead to the achievement of the company's ideal vision.
	Establish governance development and purpose implementation capabilities	- Outside the scope of deliberation of the company-level working group
	Disclosure and engagement	- Outside the scope of deliberation of the company-level working group
Other improvements	• We shared outsiders' perspectives on sustainability with the management, business planning, IR, HR, and other related divisions.	
Future issues	• Discuss based on the results of dialogue with stakeholders not based in Japan. (A stakeholder dialogue in Europe was already held in November) • Include it in the next Mid-term Management Plan (under consideration) • Continue to discuss non-financial commitments and KPIs based on the above	

(8) Kao Corporation

Purpose

- Establish something to express originality throughout the whole. Create and share a story based on it.
- In the past, the report tended to be a combination of draft explanations gathered from the responsible divisions. Consequently, it was hard to see the stories incorporated from ideal vision in the individual efforts. This is recognized as a problem.

Current issues

- Failure to connect the ideal vision to the Medium-term Management Plan
- Failure to establish materiality as a differentiation factor
- Failure to incorporate ESG perspectives into the resource allocation policy
- Failure to specify important factors for the creation of LTV
- Failure to show how the non-financial factors financially impact the company

Verification method

- Obtain feedback on this year’s edition from cooperators, organize problems and create a revision policy.
- Again, obtain feedback on the revision policy and ensure it is reflected in the next fiscal year’s report.

Schedule

What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Publication of Integrated Report 2021					○									
Review the working group plan and reselect interview respondents									○					
Request interviews and arrange meeting dates										○				
Hold a meeting to share the feedback from interview respondents											○	○	○	
Report the company’s views on problems and revisions to the interview respondents													○	
Summarization and review														○

Cooperators

Operating agencies, issuers, and advisory bodies

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• **The value creation story, K25, and KLP fail to agree with one another in terms of the timeline and content. This makes the company's ideal vision unclear.** • You need to do something about the differences between the market perspective before and after the COVID-19 pandemic. • Explanation of purposes is missing although it is included in the table of contents. • The history (of the corporate value structure) section is important for enabling readers to imagine the structure of your future corporate value. • Failure to show the value of your global presence	• Establish a core theme and a bold story that runs through the whole report. • Organize the concepts based on the story (especially K25, the value creation story, KLP, the business portfolio, and the business strategy). • Organize and standardize terms.
Formulate a value creation story from a long-term perspective	• **The company's initial determination and aspirations are poorly connected with its operations and ESG strategy.** • **The relationship between the value creation story and the ESG strategy is unclear.** • **Inconsistency in materiality** • **Need to describe financial and non-financial outcomes** • Another place where Kao does not live up to the high expectations in terms of content. The definitions of the scope of business, etc. vary.	• (Same as above) • Review the story with a focus on connectivity. - Combine the story with the ESG strategy. - Ensure the consistency of materiality and clarify the positioning of sustainability-related brochures. • Include explanations of financial and non-financial outcomes.
Set goals and indicators from a long-term perspective	• **With no numerical targets for individual business segments, the focus areas are not described clearly.** • **Failure to show the relationships between financial and non-financial outcomes and the financial impact of the ESG goals** • Extract and highlight important figures so that they stand out. • If you do EVA management, specify numerical targets for EVA, ROE, and ROIC. • Insufficiently explains the important strategies and KPIs which would be the grounds for the increase from K25 to K30. • Failure to show the impact of the ESG goals in relation to the SDGs	• The component ratio target for each business segment should be reviewed. • Explain the relationship between non-financial and financial outcomes in some form (this may be on a qualitative basis). • Select and emphasize important KPIs.
Establish governance development and purpose implementation capabilities	• **It would be better to disclose human resources and intellectual properties which would be the grounds for LTV.** • **Decide how business management will be steered and from what market perspective. In light of this, explain that you have the right human resources and evaluations (consistent with the corporate strategy).** • **Intellectual properties are your strength. Also refer to the IP landscape as it shows the domains the company is active in and its management methods, which serve as the grounds for LTV.** • Collectively disclose the skill matrix and the person making judgments regarding it. (For in-house history, "priority given to employees who started their career with the company" is misleading.) • A very large part of the company is Japanese. They are mostly officers, which fails to describe employees' personalities and characteristics. • Failure to show diversity regarding nationality, gender, age, or specialization • For DX, show human resource strategies that combine digitalization and the areas the company has specialized in.	• Seek consistency with the whole story and improve the explanations about the ideal vision and the resolution of problems. • Also consider disclosures about executive officers.
Disclosure and engagement	• **The report insufficiently guides readers to the company's website and other brochures.** • **The sustainability-related problems should be described in greater depth.** • **What is talked about and what feedback is given to management after disclosures? Showing a PDCA cycle of value co-creation with stakeholders should increase readers' trust in the information that is disclosed and increase the ability to persuade readers.** • **Engagement with institutional investors and employees is important** (employees are also users, individual shareholders, and an interface with all stakeholders). Future subjects of note: climate change, biodiversity, human rights, diversity and inclusion, supply chain management, and the quality and number of outside directors • SAP is designed to be navigated by readers using the website according to the reader's interests and needs.	• Organize the relationships between the website and with the sustainability data book and design links to them. • Display a posture encouraging engagement.

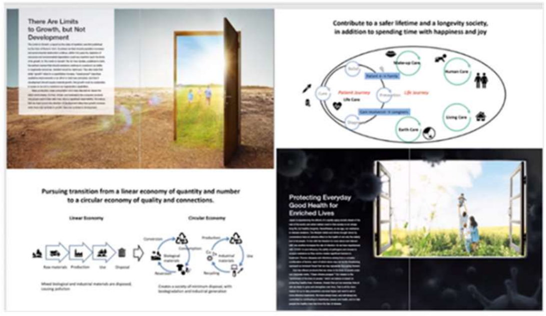
Output

Problems with the Integrated Report 2021

The connection between the introductory text and the corporate strategy is hard to understand.
Suggestions
➡ Explain it in a diagram and clearly show the relationship between the ideal vision and the company's businesses.

Current

Recommended revision



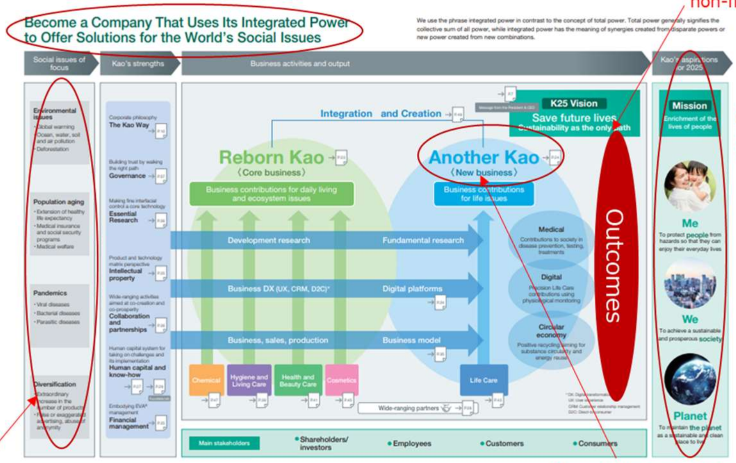
Output

Problems with the Integrated Report 2021

Inconsistencies in the value creation story, business strategy, and ESG strategy
Suggestions
➡ Establish a core theme and a bold story that runs through the entire report, and organize the concepts based on the story.

Set the core theme to be the accumulation of capabilities.

Describe financial and non-financial outcomes.



Indicate that the mission is a long-term mission.

- Materiality: Seek consistency with the sustainability data book.
- The integrated report should explain important materiality items and details should be linked to the data book.

Correct the inconsistency in the definition of Another Kao.

Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• Make the message edgy by telling a bold story based on Kao's core theme. • Clarification of definition of Another Kao and its scope • Clarify the ideal vision with a focus on the timeline (long-term value (social/environmental/financial), and medium-term (K25) value)
	Formulate a value creation story from a long-term perspective	• Improve the ways the value creation story is shown based on the core theme and consideration of connectivity (with fulfillment in each factor). • Enable the company's core and advantages to be reflected in the message to create long-term value.
	Set goals and indicators from a long-term perspective	• The resolution of important issues impacting you and social issues and non-financial information contribute to long-term corporate value and social value and improve connections. (Explain who would be impacted, how they would be impacted, and why it is important.)
	Establish governance development and purpose implementation capabilities	• Try to find a better way of introducing your officers (consider the direction for the skill matrix). • Clarify the connections between materiality, core competencies and human resources. • Disclose diversity regarding nationality, gender, age and specialization.
	Disclosure and engagement	• Position the integrated report, the SUS data book, the website, the related YouTube videos, etc. and other information disclosure media and successfully guide readers to them. Improve the understanding regarding the message's consistency. • Prepare a highlights version for consumers, employees, etc.
Other improvements	Assumed effects of the company-level working group - The key people involved in the integrated report were able to increase their understanding of the issues and goals were shared. It also increased the team's solidarity. - The report gave the employees an opportunity to review their company's advantages and characteristics that they had been unaware of. Also in that regard, the report is very meaningful.	

(9) Sekisui House, Ltd.

Purpose	• Verify the messages communicated related to the company's value creation process. (Does it accurately depict the corporate story?) • Refresh the understanding of materiality and the establishment of KPIs. • Organize the financial impact of non-financial information.
Current issues	• Failure to establish materiality as a differentiation factor • Failure to set non-financial and pre-financial indicators and targets • Failure to show how the non-financial factors financially impact the company
Verification method	• Conduct a pre-meeting survey on the issues we would like to ask the cooperators about. Input survey information into the review ahead of the meeting and use the relevant pages of the integrated report to hold a discussion in a Q&A form.
Schedule	(see schedule table below)
Cooperators	Operating agencies and advisory bodies

Schedule

What to do	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
Publication of Integrated Report 2021			○				
Outside members of the in-house ESG Promotion Committee provide reviews				○			
Conduct a questionnaire survey based on the issues (response deadline: August 2)				○	○		
Receive and organize the cooperators' reviews				○	○ ○		
Exchange opinions with cooperators on an individual basis.					○	○ ○	
Share the outcomes within the company, formulate an improvement policy for the next fiscal year, etc.						○	○ ○

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• The company's ideal vision is weak.	• Write about strategies and measures for achieving the ideal vision.
Formulate a value creation story from a long-term perspective	• Based on the outcomes, review the connection with the ideal vision. • Description of output and outcomes is too abstract.	• Build a story from a logic model. • Make abstract expressions more specific.
Set goals and indicators from a long-term perspective	• Remain aware of the timeline. • The KPI setting process is unclear.	• Long-term goals and Milestones (2050 and 2030 or 2030 and the period of the Mid-term Management Plan) • Explain why these KPIs were established.
Establish governance development and purpose implementation capabilities	• Not chosen as a topic for discussion	
Disclosure and engagement	• Increase and improve the disclosure of beneficial non-financial information. • Organize the financial impact that can be disclosed.	• Reorganize the information disclosed in the sustainability report so that it can be linked to the integrated report. • Unquantifiable financial impact should be replaced with qualitative information.

Output

Meeting takeaways

- Investors **read both the integrated report and the sustainability report**. They get the impression that some information overlap between these reports and that it is a waste not to include the useful information that only appears in one of the reports in both of the reports.
- I have expectations for the **potential for the growth of corporate value.** The value creation process is important for interpreting potential.
- While the framework is import, the report shares a corporate story **that is backcast from the ideal vision** using keywords that are **unique to Sekisui House**. I have high expectations for this.
- Investors are interested in **surveys of employee engagement and happiness**. To my understanding, these initiatives are a method for depicting something unique to Sekisui House.

Impressions of investors — They read both the integrated report and the sustainability report.

1. Overlapping of information
   Corporate information, materiality, ESG (environment, human resources and governance), etc.
2. Priority of information changes
   Improvement of non-financial information is considered necessary.
   Connections to Sustainability Vision 2050, biodiversity, the circular economy, and human rights

Importance of qualitative information — Find corporate value that is unique to Sekisui House and potential for sustainable growth.

1. Uniqueness is highly regarded.
   Initiatives such as surveys of employee engagement and happiness
2. A high level of interest in stories of sustainable growth for achieving a global vision
   Importance of processes and stories
   For example, why does the pursuit of a leading company in ESG management lead to making your home the happiest place in the world (combining tangible and intangible services, making Sekisui House's technologies a de facto standard)?

With a focus on sustainable non-financial information, the perspective is shifting to the identification of a company's potential for growth and corporate value.

4

Output

The connection between the integrated report and the sustainability report needs to be demonstrated.

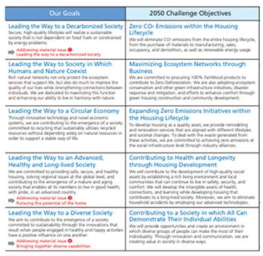
Share a story to explain the connection between a leading company in ESG management and Sustainability Vision 2050.

The Global Vision and Sustainability 2050 are poorly linked.

Sekisui House's Global Vision, excerpted from Integrated Report 2021
(formulated in 2020)

Failure to demonstrate a connection

Goals and stretch goals of Sustainability Vision 2050, excerpted from Sustainability Report 2021
(formulated in 2016 and last updated in 2017)



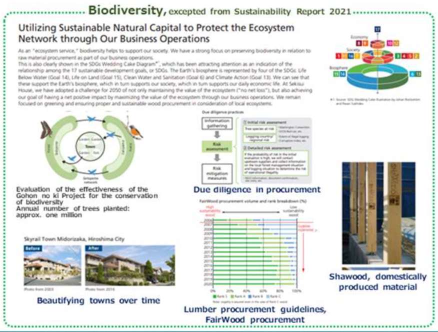
Increase and improve non-financial information which is insufficient in the integrated report.

Consider the many different biodiversity-related efforts to be the company's uniqueness and strength and disclose information accordingly.

(i) Biodiversity

Gohon no ki Project, excerpted from Integrated Report 2021

Biodiversity, excerpted from Sustainability Report 2021



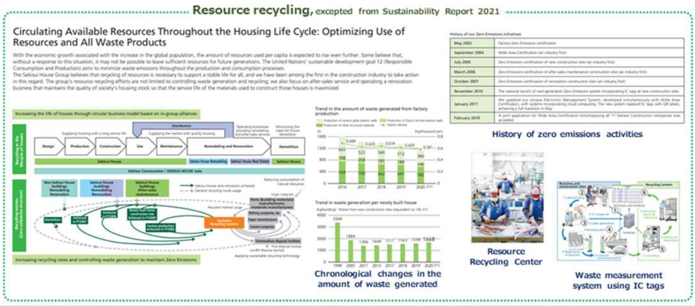
Output

Increase and improve non-financial information which is insufficient in the integrated report.

Disclose information including the history of the advanced pursuit of a circular economy, which is not mentioned in the integrated report.

(ii) Resource recycling (circular economy) **Not described in Integrated Report 2021**

Resource recycling, excerpted from Sustainability Report 2021



Output

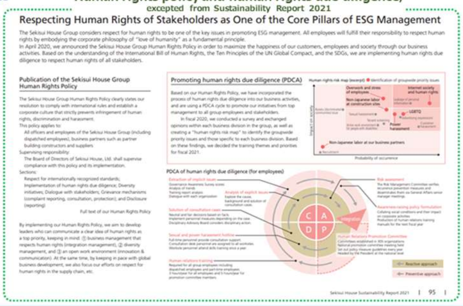
Increase and improve non-financial information which is insufficient in the integrated report.

Respect for human rights is defined as the basic attitude of the company laid out in its human rights policy, human rights due diligence, promotion system, etc. Information relating to this issue is disclosed accordingly.

(iii) Respect for human rights

Respect for human rights, excerpted from Integrated Report 2021

Human rights policy and human rights due diligence, excerpted from Sustainability Report 2021



Output

What is the non-financial information that is beneficial to investors?

Why is this non-financial information beneficial to investors?

(i) The pursuit of a decarbonized society is a business's mission. Related information must be disclosed.
→ Uniqueness-related efforts are mentioned.

(ii) ZEH rate of 91%: Emphasize the relationship with businesses such as outsourced businesses.
→ Unlike sell-side analysts, institutional investors see numerous sectors and companies and are thus have little knowledge about trends in the housing industry.

(iii) Biodiversity and resource recycling represent unique philosophy and commitment. They equal corporate value.
→ Investors pay attention to Biodiversity COP15 (2022), TNDF, etc.

(iv) Views on and commitment to human rights are the foundation of a company.
→ Investors pay attention to the respect for the human rights of foreign workers, etc. in the promotion of international businesses.

Concerning the information to be disclosed in the next fiscal year, efforts connected with the foundation, uniqueness, and value of a company are regarded as beneficial non-financial information and are incorporated into the corporate story and their disclosure in the integrated report will be improved.

Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• The company's ideal vision is weak. • The relationship between "a leading company in ESG management" and "making one's home the happiest place in the world" is unclear (hard to understand).
	Formulate a value creation story from a long-term perspective	• As the process up to the ideal vision is weak, you need to include improvements such as an emphasis on strategy and measures and review of the connection with the outcomes of the value creation story. • Desirably, the story should straightforwardly communicate humanity and happiness and business elements should be connected to it.
	Set goals and indicators from a long-term perspective	• The company establishes materiality-related KPIs, but the timeline is too short to show how it leads to the ideal vision. • The company also lacks a process for defining the KPIs and an explanation of the reasons for it. (State the degree of importance clearly.)
	Establish governance development and purpose implementation capabilities	(This is not included in the topics of discussion.)
	Disclosure and engagement	• Financial impact should be disclosed with qualitative information if it cannot be shown quantitatively. • Qualitative information that leads to future value should be disclosed from a long-term perspective.
Other improvements	• Based on findings from the one-on-one meetings and discussion, they should have analyzed the problems of the integrated report and discussed them with board members and outside ESG committee members to share the problems internally. • Go beyond the investor's perspective and also consider other stakeholders while trying to ensure that the disclosed information is well-balanced.	

Future issues

Analyze problems i, iii and vi

- **About the corporate story** → Review and discuss the value creation process and materiality.
- **About the timeline** → Set long-term KPIs and disclose the process for setting them.
- **About financial impact** → Select the items for setting KPIs that have financial impact. Sort them into those that can be disclosed qualitatively or quantitatively and those that cannot.

Regarding the outcome of one-on-one meetings

* Improve the disclosure of non-financial information that is beneficial to institutional investors.

The most important thing to do is to respond to many different opinions in an information disclosure tool based on the question, "What is the message that Sekisui House wants to deliver? (What information does it want to disclose?)"

To solve the problems

- **Corporate story** → **Exchange opinions with the CEO.** Connect the corporate story to materiality and the Sustainability Vision and clarify the relationships.
- **Timeline** → With consideration of 2050 written in the Global Vision and Sustainability Vision, standardize the timeline for the targets that can include 2030 and three-year period of the Mid-term Management Plan as milestones.
- **Financial impact** → Link financial strategies to ESG management.

Tools for next fiscal year's disclosures

* Include sustainability-related information in the integrated report to improve the disclosure of non-financial information that is beneficial to institutional investors.

(10) AGC Inc.

Purpose	• Identify problems in the FY2021 Integrated Report to improve the next fiscal year's integrated report through interviews with operating agencies and issuers.
Current issues	• Improvement of the integrated report has continued since 2019 as a part of the three-year plan. But the company fails to know its current stance toward what investors consider to be the ideal vision of the integrated report.
Verification method	• Conduct a survey and interviews regarding the FY2021 Integrated Report to identify current problems and improvements needed for the next fiscal year.

Schedule

What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Kickoff								○						
Conduct a survey of cooperators									○					
Interview cooperators										○				
Organize the information from the interviews										○	○			
Summarize improvements needed for the next fiscal year												○	○	○

Cooperators	Four companies that are operating agencies and two companies that are issuers

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• As a material company, it needs an ultra-long-term perspective beyond 2030. • Connections between the ideal vision, long-term management strategy, and materiality are unclear.	• Improve the connections between materiality, long-term management strategy, and the different business strategies and describe efforts to increase long-term, sustainable corporate value.
Formulate a value creation story from a long-term perspective	• The process for the formulation of a long-term management strategy is carefully described. But the involvement of top management is unclear.	• Carefully depict a value creation story in an easy-to-understand manner. The story should include chiefs and officers sharing roles and top management's involvement in the formulation of the long-term management strategy.
Set goals and indicators from a long-term perspective	• Definitions of materiality items are unclear. • Prioritization of social value is unclear.	• State the qualitative and quantitative goals of and indicators for materiality (risks and opportunities) so that outside people can stay updated on the progress of the strategy. • The business description page will be improved to increase the understandability of the connections between materiality and the business strategy.
Establish governance development and purpose implementation capabilities	• The positioning of the Board of Directors is unclear. • The structure for the promotion of sustainability-oriented management is unclear.	• Explain the structure for ensuring the long-term, sustainable enhancement of value by explaining the structure for promoting governance and sustainability-oriented management and how it operates.
Disclosure and engagement	• Failure to disclose information about issues such as KPIs related to materiality, governance, investment in major strategies (encouragement of sustainability-oriented management, acceleration of DX) and efforts regarding human rights and supply chains in a way that investors want • It is too wordy. Using charts would be better.	• Understand understanding gaps through the dialogue with investors, and improve disclosure accordingly. • Make the report more readable by, for example, reviewing its format and using simple expressions and charts.

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• As a material company, it needs an ultra-long-term perspective beyond 2030. • Connections between the ideal vision, long-term management strategy, and materiality are unclear.	• Improve the connections between materiality, long-term management strategy, and the different business strategies and describe efforts to increase long-term, sustainable corporate value.

Outline of the long-term management strategy

Overview of the Medium-term Management Plan

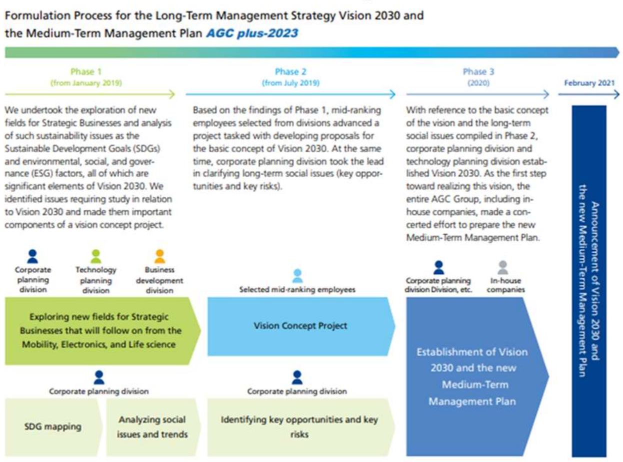
* AGC Integrated Report 2021 P.22~29

Comments from cooperators

- As AGC is a material company supporting industry, its long-term vision should span the period up to 2050 or so.
- You should have described the relationship between your awareness of social issues and your business activities.
- The connection between financial goals and the social value the company wants to create is hard to understand.

Common issues	Problems identified by company-level working groups	Solutions to the problems
Formulate a value creation story from a long-term perspective	• The process for the formulation of a long-term management strategy is carefully described. But the involvement of top management is unclear.	• In a way that is easy to understand, meticulously explain the value creation story, including chiefs and officers sharing roles and the top management's involvement in the formulation of long-term management strategies.

Process for formulating long-term management strategies and the Medium-term Management Plan



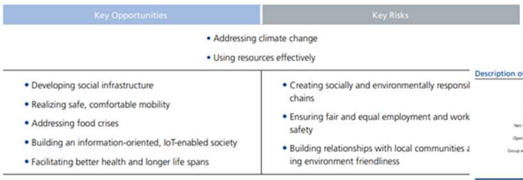
Comments from cooperators

- The formulation process should have included steps such as management meetings and board meetings.

* AGC Integrated Report 2021 P.26~27

Common issues	Problems identified by company-level working groups	Solutions to the problems
Set goals and indicators from a long-term perspective	• Definitions of materiality items are unclear. • Prioritization of social value is unclear.	• Clearly state the qualitative and quantitative goals and indicators for materiality (risks and opportunities) so that external people can stay updated on the progress of strategies. • The business description page will be improved to increase the understandability of the connections between materiality and the business strategy.

AGC's materiality



* AGC Integrated Report 2021
P.26~27, P.44~59

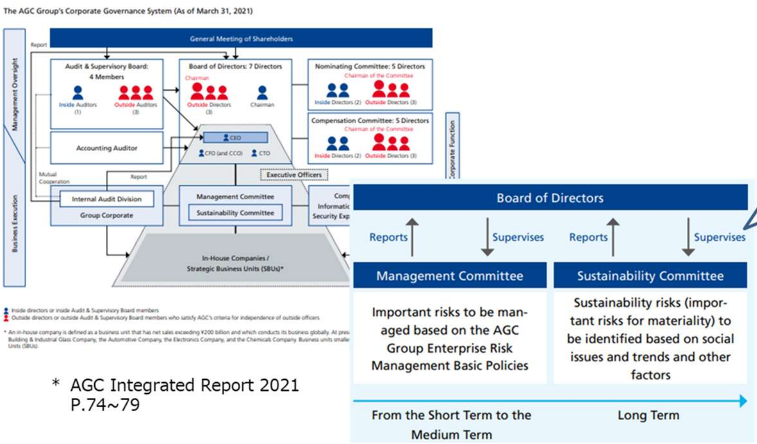
Outline of AGC's business operations

Comments from cooperators

- It is good for the long-term strategy to start from social sustainability. But the connection with the strategy is hard to understand.
- You should have written about the connections between materiality and the social value you want to generate.
- Having explanations of KPIs and goals for the creation of social value would be good.

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establish governance development and purpose implementation capabilities	• The positioning of the Board of Directors is unclear. • The structure for the promotion of sustainability-oriented management is unclear.	• Explain the structure for the promotion of governance and sustainability-oriented management and specific examples of its operation. By doing so, describe the structure for ensuring long-term, sustainable value enhancement.

AGC's corporate governance structure



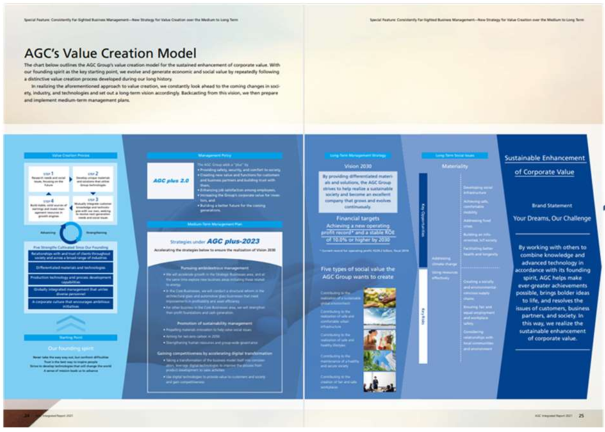
* AGC Integrated Report 2021
P.74~79

Comments from cooperators

- The positioning of the Board of Directors is hard to understand.
- The report should explain the structure for sustainability-oriented management and the establishment of non-environmental KPIs.

Common issues	Problems identified by company-level working groups	Solutions to the problems
Disclosure and engagement	• Failure to disclose information about issues such as material issue KPIs, governance, investment in major strategies (encouragement of sustainability-oriented management, acceleration of DX) and human rights and supply chain efforts in a way investors want. • It is too wordy. Using charts would be better.	• Understand understanding gaps through the dialogue with investors, and improve disclosure accordingly. • Make the report more readable by, for example, reviewing its format and using simple expressions and charts.

AGC's value creation model



Comments from cooperators

- Investors want a consistent story about how long-term value creation is achieved.
- Having to read 80-plus pages of integrated report is a hassle.

* AGC Integrated Report 2021
P.24-25 AGC's value creation model

(11)Olympus Corporation

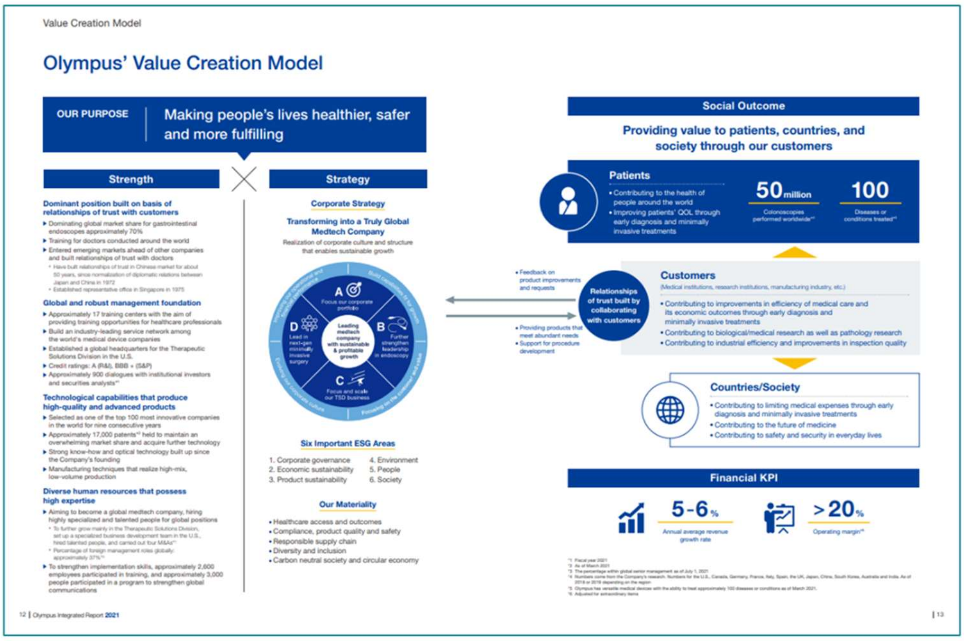
Purpose	• Create a value creation story consistent with the company's Corporate Philosophy and its already disclosed materiality.
Current issues	• Failure to connect the ideal vision to the Medium-term Management Plan • Failure to establish materiality as a differentiation factor • Failure to specify important factors for the creation of LTV, etc.
Verification method	• Ask the advisors to review the comparative analysis of (1) the value creation model and (2) the guidance for co-creating value and the latest version of the integrated report.
Schedule	(see table below)
Cooperators	Advisors

Schedule

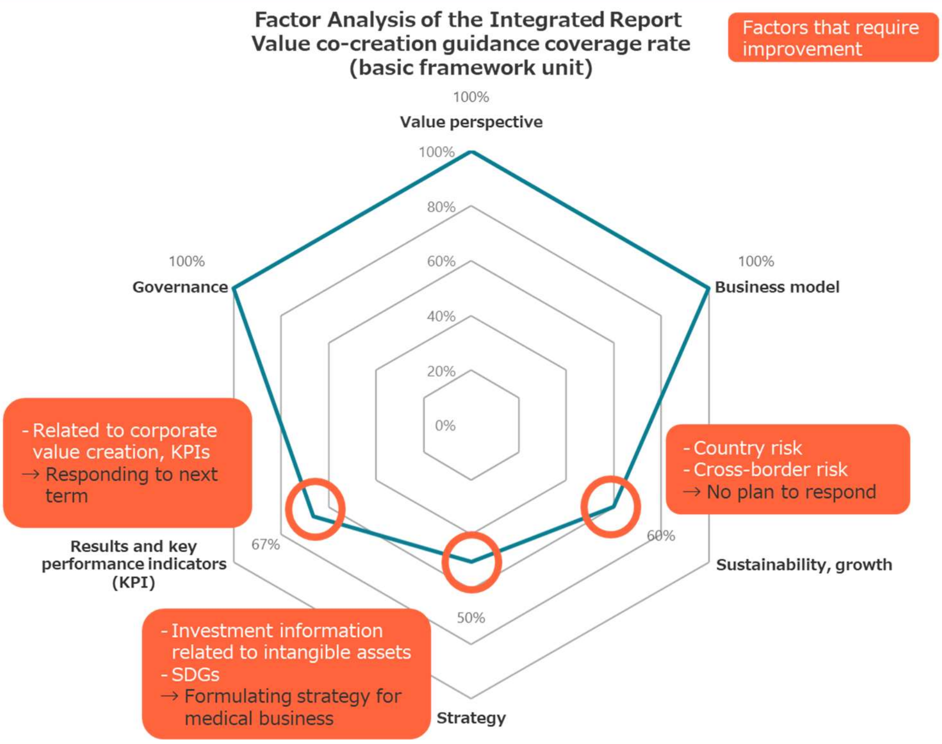
What to do	Apr.		May		Jun.		Jul.		Aug.		Sep.		Oct.	
Explain the status quo and future direction		○					○							
Formulate a draft of the value creation process.				○				○						
Obtain review from EY				○				○						
Share the same understanding of the value creation story								○		○				
Analyze excesses and deficiencies in the contents of the integrated report													○	○
Recap this project													○	○

Common issues	Problems identified by company-level working groups	Solutions to the problems
Establishing an ideal vision from a long-term perspective	• Failure to disclose the value creation process	• A draft was created and reviewed by the advisors before being disclosed.
Formulate a value creation story from a long-term perspective	• A gap was identified in the cooperating advisors' understanding of the value creation story (a lack of awareness that the value creation story should be explained throughout the integrated report).	• Excesses and deficiencies in the elements of the integrated report were analyzed and problems were identified using the guidance for the co-creation of value.

Output	Page 12 of the integrated report published on September 30, 2021 https://www.olympus.co.jp/ir/data/integratedreport/pdf/integrated_report_2021j_03.pdf



Output	



Improvement of issues	**Establishing an ideal vision from a long-term perspective**	• Complete a value creation model reflecting the advisor's reviews. • The following advisor opinions were taken into consideration. "Start from purposes.""It does not have to completely agree with the Octopus Model." • Feedback from advisors: By depicting the value creation process (value creation model) starting from its purpose and strengths, Olympus differentiated itself from other companies and emphasized its competitive advantage.
	Formulate a value creation story from a long-term perspective	• Increase ability to disclose KPIs relating to corporate value creation in the next business period. • Also ensure that the upcoming working group will be helpful for that purpose. • Feedback from advisors: (i) Clarification of financial and non-financial KPIs made it easy to understand Olympus's goals beyond its management activities. (ii) To improve further, it would be good if you could explain the relationships between the three elements of strategy (corporate strategy, the six ESG domains and materiality). If it is already explained elsewhere in the document, specify the page.
Other improvements	Excerpt from Citi Research: Highlights from the Olympus Integrated Report 2021 • About the value creation model Annual Report 2015 and following have included the value creation model (or equivalent explanation). The 2021 annual report is more specific in terms of its contents. • About the integrated report as a whole Its contents and explanations are remarkable and have been improved in comparison with the 2020 report. It includes abundant information proposing (showing anew) the direction of the company's management of its business in the future.	

ESG Disclosure Study Group