



Survey of TCFD Disclosure in Japan (FY2022)

Japan Exchange Group, Inc.
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- There is a growing awareness of the importance of sustainability (including ESG issues) as a management issue from the perspective of improving mid- to long-term corporate value. Climate change especially is being spotlighted as a crucial issue that must be tackled on a global basis, and within the financial industry is considered to have a high probability of causing instability in the financial markets. In response to this, the Financial Stability Board (FSB) convened the Task Force on Climate-related Financial Disclosures (TCFD) in 2015 to begin discussing possible impacts on the financial sector and actions that should be taken.
- The TCFD Recommendations, published in June 2017, have been widely adopted worldwide, and the number of organizations declaring their support for the Recommendations has grown to 4,075. On a single country basis, Japan has the largest number of supporting companies and organizations, at 1,158 (as of December 22, 2022).
- Japan's Corporate Governance Code, which was revised in 2021, asks listed companies (on a comply-or-explain basis) to address sustainability issues, including climate change and other global environmental issues, positively and proactively. Alongside this, it states that companies listed on the Prime Market in particular should collect and analyze the necessary data on the impact of climate change-related risks and earning opportunities on their business activities and profits, and enhance the quality and quantity of disclosure based on the TCFD Recommendations or an equivalent framework.
- In November 2021, JPX published the "Survey of TCFD Disclosure in Japan," the results of a survey of the 259 listed companies that had declared support for TCFD as of the end of March 2021. This aimed to shed light on the situation around Japanese companies' climate change-related information disclosure based on the TCFD Recommendations and provide listed companies with helpful reference information for preparing their own climate-related disclosure.
- Tokyo Stock Exchange has launched its new market segments since the first survey was published, and it can be expected that many more listed companies have been working to improve the quality and quantity of their TCFD-based disclosure. This year's survey covers a bigger range of companies, namely the constituents of the JPX-Nikkei Index 400, in order to better reflect the current situation around Japanese companies' climate-related disclosure.
- We hope that this survey can be of help to listed companies preparing their climate-related disclosure.

Purpose To understand the current situation around Japanese companies' disclosure of climate-related information based on the TCFD Recommendations, with the hope that it can be referred to by Japanese companies working on their own climate disclosure, as well as support efforts to enhance the quality and quantity of disclosure in general.

Subjects Constituents of the JPX-Nikkei Index 400 (as of October 31, 2022)

We confirmed whether there was published information corresponding to each of the 11 Recommended Disclosures set out in the “Final Report – Recommendations of the Task Force on Climate-related Financial Disclosures” in each company’s Annual Securities Report*, integrated/annual report, ESG/CSR/environment/sustainability report, or TCFD report (reports used were the most recent documents corresponding to each type that were available on each company’s official website as of October 31, 2022. The data was collected by KPMG Japan).

- Method**
- Integrated/annual report: a document created annually to report on a company’s financial and non-financial information in an integrated format.
 - ESG/CSR/environment/sustainability report: a document created to disclose mostly a company’s non-financial information.
 - TCFD report: a document created to disclose information based on the TCFD Recommendations.

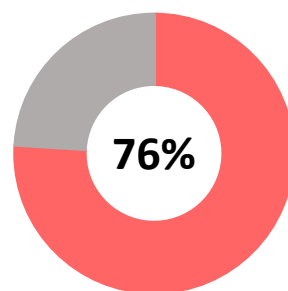
Note: This survey confirmed only the existence of information corresponding to the TCFD’s Recommended Disclosures and did not evaluate the quality of the disclosed information.

*The Annual Securities Report (yūka shōken hōkokusho) is a statutory report required from certain Japanese companies, including all listed companies, by the Financial Instruments and Exchange Act.

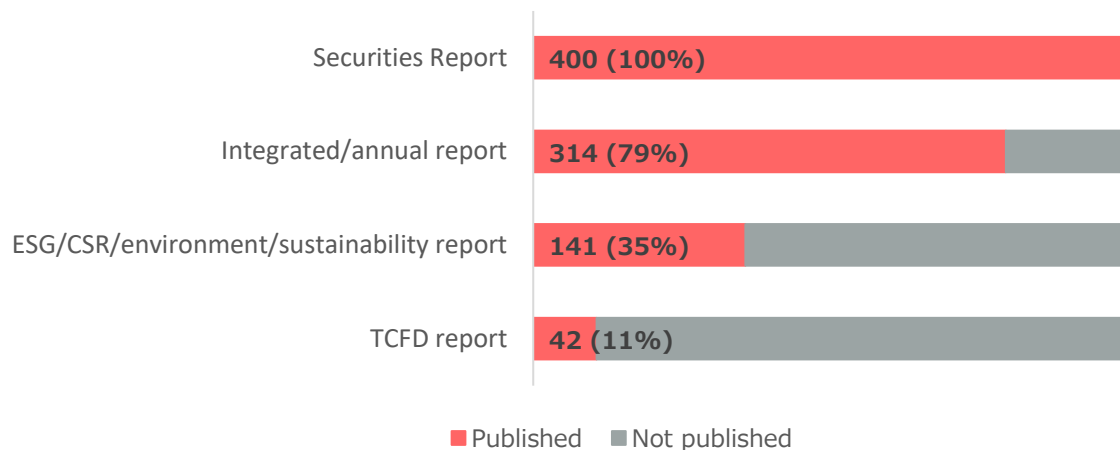
Overview of Surveyed Companies

- The total market capitalization of the 400 surveyed companies made up 76% of the total market capitalization of all companies listed on Tokyo Stock Exchange (TSE).
- Of the surveyed companies, 314 had published an integrated or annual report, 141 had published an ESG, CSR, environment, or sustainability report, and 42 had published a TCFD report.

Percentage of surveyed companies' market cap out of total TSE listed company market cap
(as of October 31, 2022. Source: TSE)



Publication status of each type of report among surveyed companies (total 400 companies)



TCFD's 11 Recommended Disclosures

- The TCFD Recommendations set out 11 Recommended Disclosures for all sectors, under the framework of “Governance,” “Strategy,” “Risk Management,” and “Metrics and Targets.” Below are the identifiers for each used in this survey (**in bold and highlighted**).

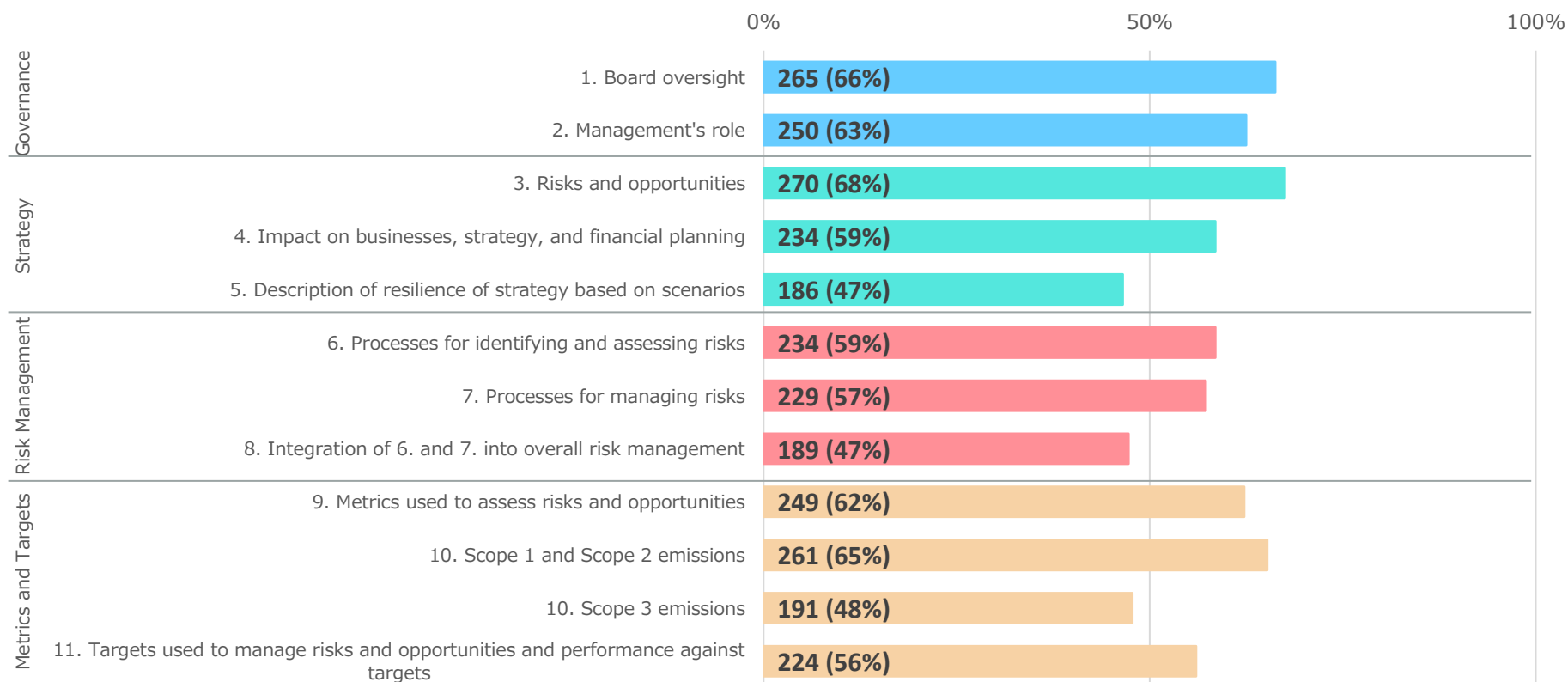
Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization’s governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures			
a) Describe the board’s oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization’s processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
1. Board oversight	3. Risks and opportunities	6. Processes for identifying and assessing risks	9. Metrics used to assess risks and opportunities
b) Describe management’s role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.	b) Describe the organization’s processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
2. Management's role	4. Impact on businesses, strategy, and financial planning	7. Processes for managing risks	10. Scope 1, Scope 2, and, if appropriate, Scope 3 emissions
	c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.
	5. Description of resilience of strategy based on scenarios	8. Integration of 6. and 7. into overall risk management	11. Targets used to manage risks and opportunities and performance against targets

(Source: Recommendations of the Task Force on Climate-related Financial Disclosures. Shortened identifiers used in this survey are shown in **bold and highlighted** below each Recommended Disclosure.)

Disclosure of the 11 Recommended Disclosures

- Looking at each of TCFD's 11 Recommended Disclosures, disclosure was most common on 3. Risks and opportunities (270 companies, 68%), followed by 1. Board oversight (265, 66%) and 10. Scope 1 and Scope 2 emissions (261, 65%).
- The categories with the lowest level of disclosure were 5. Description of resilience of strategy based on scenarios (186, 47%) and 8. Integration of 6. and 7. into overall risk management (189, 47%).
- 191 companies (48%) disclosed information relating to Scope 3 emissions.

Disclosure status of TCFD's 11 Recommended Disclosures
(number (ratio) of companies disclosing information on each category in at least one of the surveyed reports.
Total 400 companies)

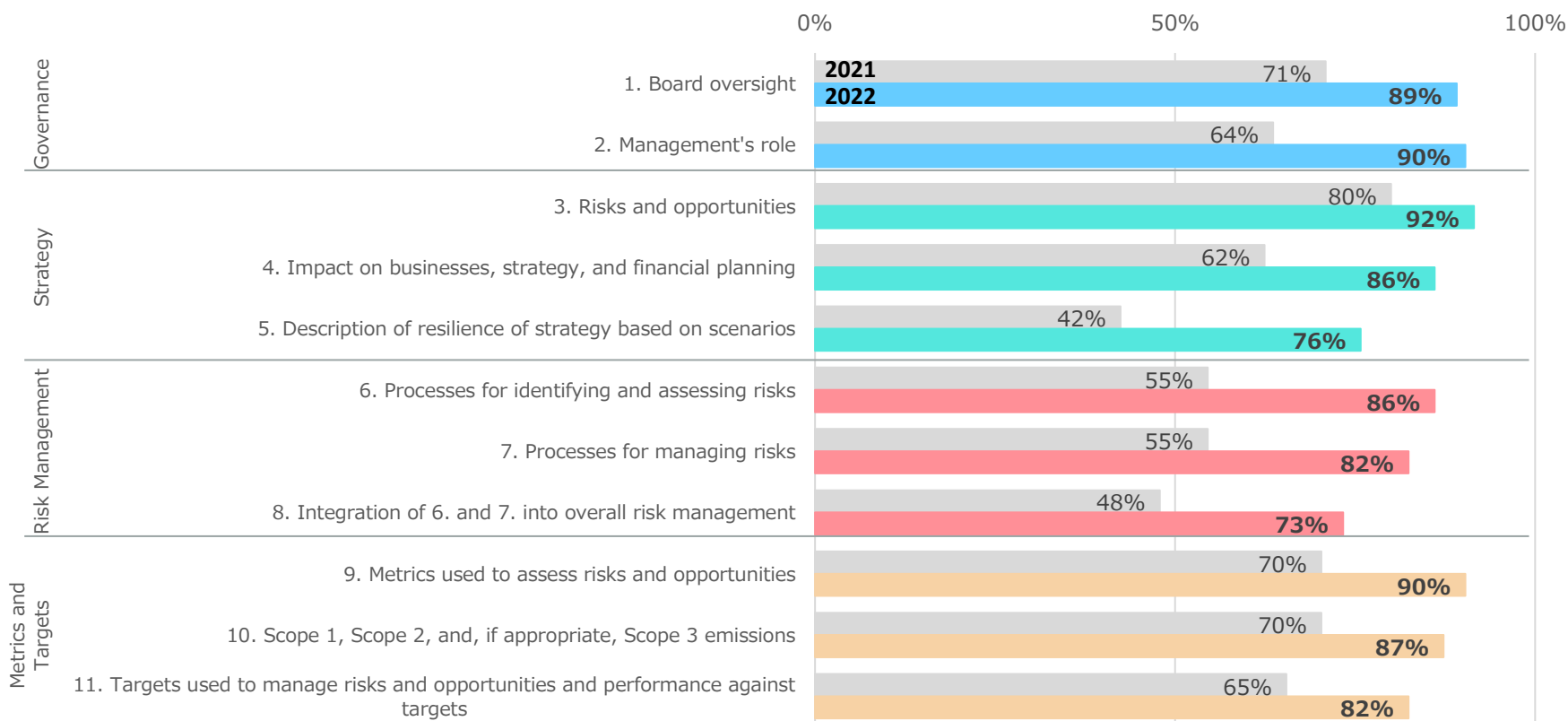


(Scopes 1 and 2 and Scope 3 emissions were surveyed separately for category 10.)

Disclosure Rates in Comparison with 2021 Survey

- Looking at the 165 companies that were included in both this survey and the previous survey (published November 2021, covering the 259 listed companies that had declared support for TCFD as of March 31, 2021), disclosure rates have increased in all categories.
- The biggest increases came in 5. Description of resilience of strategy based on scenarios (a 34-point increase) and 6. Processes for identifying and addressing risks (31 points).

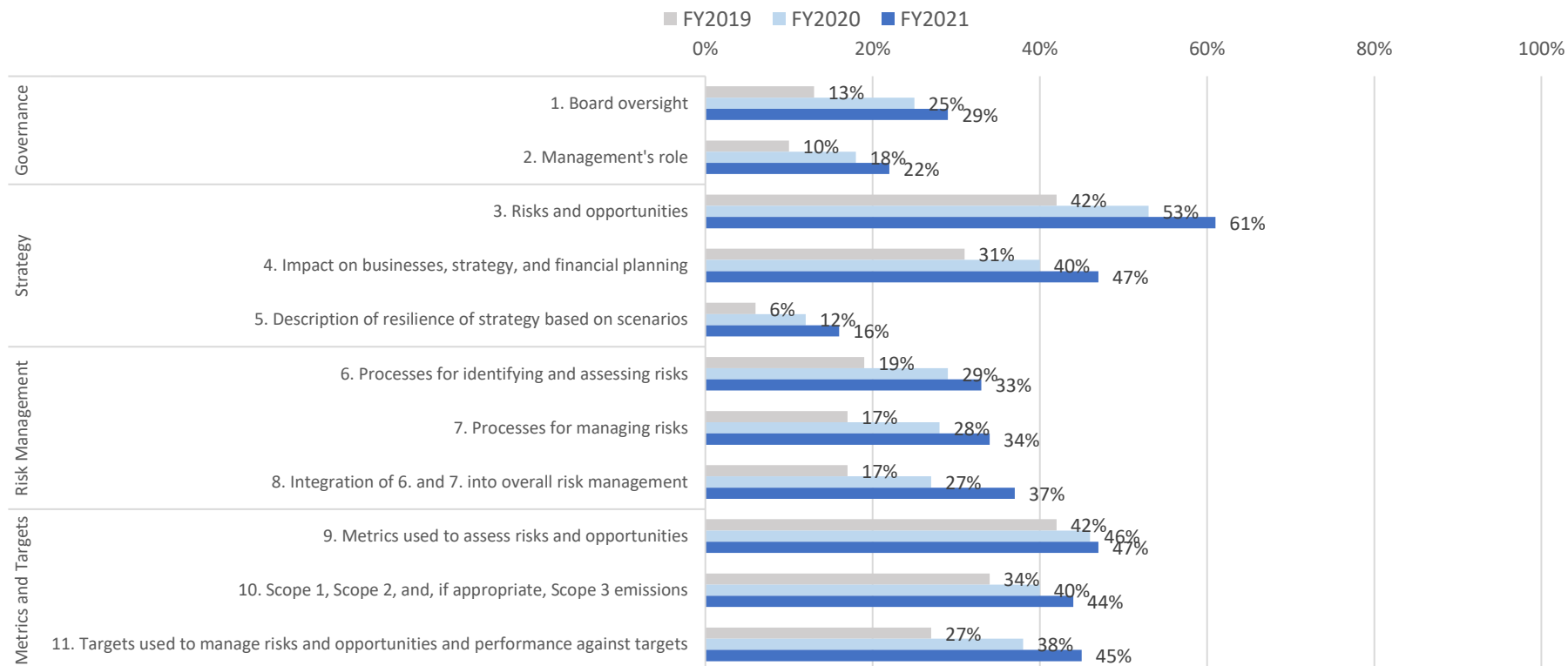
Disclosure Status of TCFD's 11 Recommended Disclosures
 (number (ratio) of companies disclosing information on each category in at least one of the surveyed reports.
 Total 165 companies)
 Upper line: 2021 Lower line: 2022



(Reference) TCFD Status Report 2022

- Every year since 2018, TCFD has used AI to analyze the state of climate-related reporting among approximately 1,400 companies around the world (including TCFD supporters and non-supporters) and published the results in a Status Report.
- While disclosure rates continue to improve for all categories and 80% of companies disclosed on at least one category for FY2021 reporting, only 4% of the companies analyzed disclosed on all categories, and around 40% disclosed on 5 or more categories.
- The most disclosed category for FY2021 reporting was 3. Risks and opportunities (61%), while the least disclosed was 5. Description of resilience of strategy based on scenarios (16%).
- The TCFD Recommendations ask that all companies disclose on the categories under Governance and Risk Management regardless of whether climate change is material to their business, but the two categories under Governance are the second and third least disclosed categories.

Disclosure status of TCFD Recommended Disclosures worldwide (source: TCFD Status Report 2022)

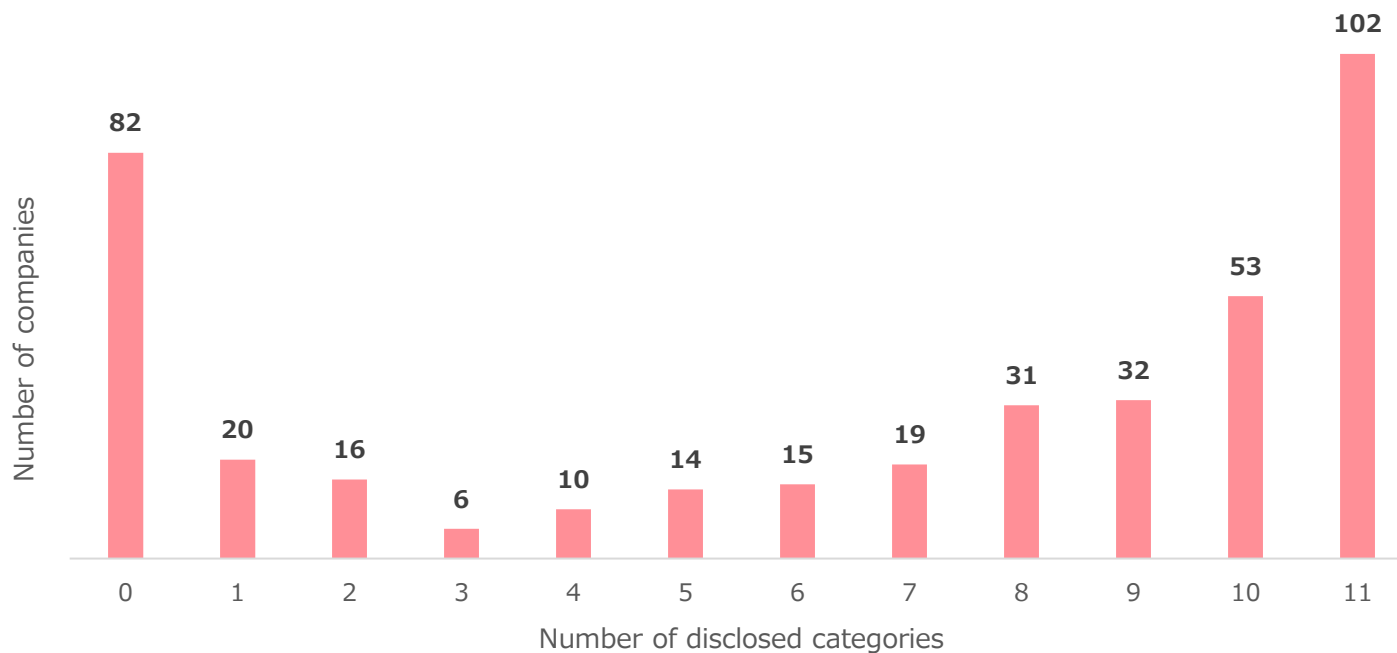


For details on the companies included, the survey method, and other information, please see the TCFD Status Report 2022 published on the TCFD official website. (<https://assets.bbhub.io/company/sites/60/2022/10/2022-TCFD-Status-Report.pdf>)

Disclosure by Number of Disclosed Categories (1)

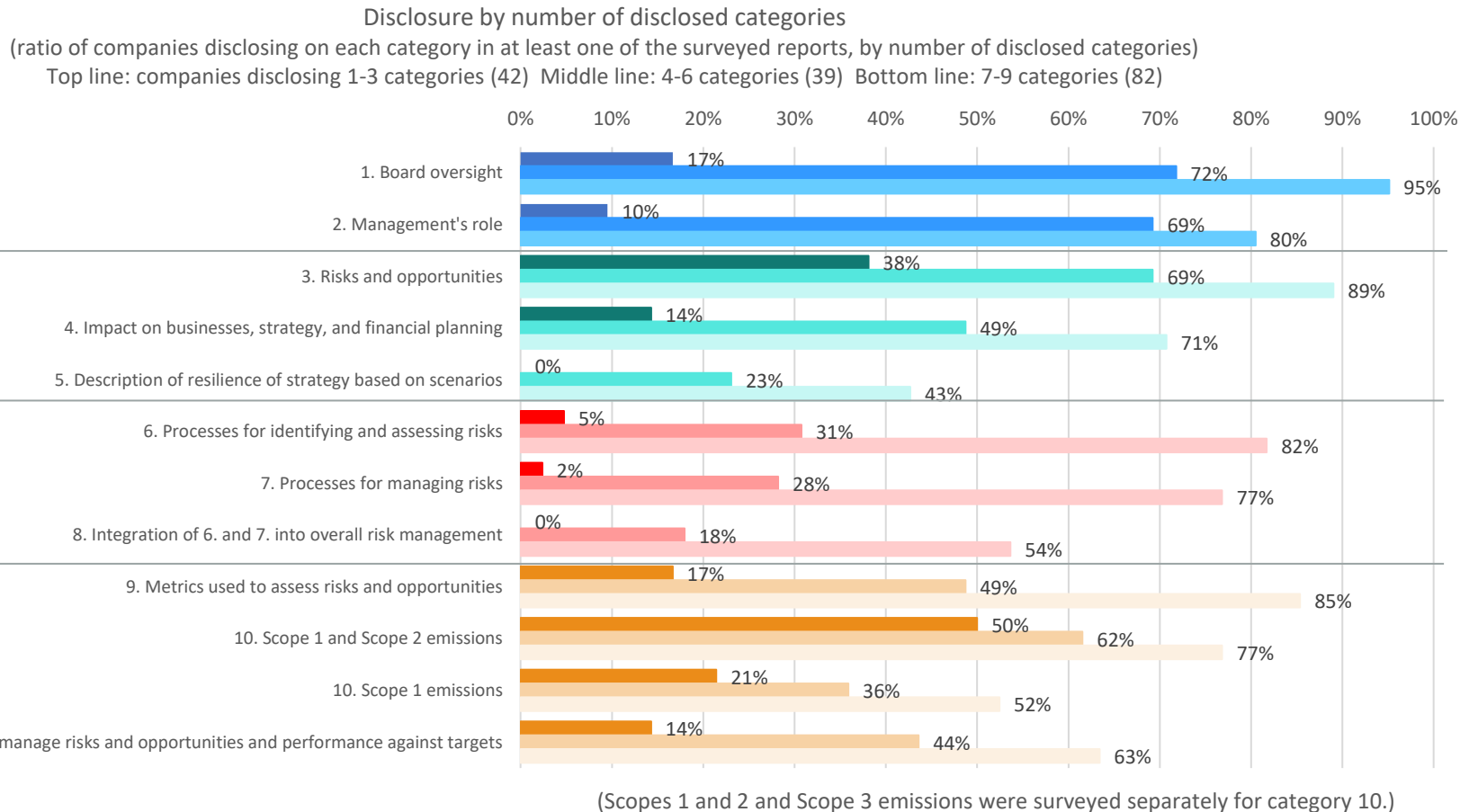
- Of the 400 companies surveyed, 102 disclosed on all 11 of the Recommended Disclosures in at least one of the surveyed reports.
- At the other end of the scale, 82 companies did not include information on any of the 11 categories in any of the surveyed reports.

Number of categories that companies disclosed on (total 400 companies)



Disclosure by Number of Disclosed Categories (2)

- For companies that only disclosed on one to three categories, the highest disclosure rate was for 10. Scope 1 and Scope 2 emissions (50%), while none disclosed information on 5. Description of resilience of strategy based on scenarios or 8. Integration of 6. and 7. into overall risk management.
- Among those disclosing on four to six categories, disclosure rates were high for 1. Board oversight (72%), 2. Management’s role (69%), and 3. Risks and opportunities (69%).
- Among companies disclosing on seven to nine categories, while the rates of disclosure were higher for all categories, only a minority disclosed on 5. Description of resilience of strategy based on scenarios (43%).



Disclosure by Type of Report

- Of the 400 surveyed companies, 314 had published an integrated or annual report, 141 an ESG, CSR, environment or sustainability report, and 42 a TCFD report.
- All the 11 Recommended Disclosures were disclosed on most in integrated or annual reports. In Securities Reports, 106 companies (27%) disclosed on 3. Risks and opportunities, 72 companies (18%) on 1. Board oversight, and 67 companies (17%) on 4. Impact on businesses, strategy, and financial planning.

		Securities Report (total 400)	Integrated/ annual report (314)	ESG/CSR/ environment/ sustainability report (141)	TCFD report (42)
Governance	1. Board oversight	72 (18%)	217 (54%)	102 (26%)	40 (10%)
	2. Management's role	63 (16%)	198 (50%)	98 (25%)	38 (10%)
Strategy	3. Risks and opportunities	106 (27%)	200 (50%)	97 (24%)	39 (10%)
	4. Impact on businesses, strategy, and financial planning	67 (17%)	179 (45%)	87 (22%)	38 (10%)
	5. Description of resilience of strategy based on scenarios	32 (8%)	136 (34%)	73 (18%)	35 (9%)
Risk Management	6. Processes for identifying and assessing risks	56 (14%)	184 (46%)	90 (23%)	35 (9%)
	7. Processes for managing risks	56 (14%)	178 (45%)	89 (22%)	36 (9%)
	8. Integration of 6. and 7. into overall risk management	48 (12%)	148 (37%)	74 (19%)	29 (7%)
Metrics and Targets	9. Metrics used to assess risks and opportunities	64 (16%)	207 (52%)	105 (26%)	38 (10%)
	10. Scope 1 and Scope 2 emissions	20 (5%)	202 (51%)	118 (30%)	33 (8%)
	10. Scope 3 emissions	10 (3%)	127 (32%)	99 (25%)	24 (6%)
	11. Targets used to manage risks and opportunities and performance against targets	26 (7%)	175 (44%)	99 (25%)	29 (7%)

(Number of companies disclosing on each category. Proportions out of 400 companies.)

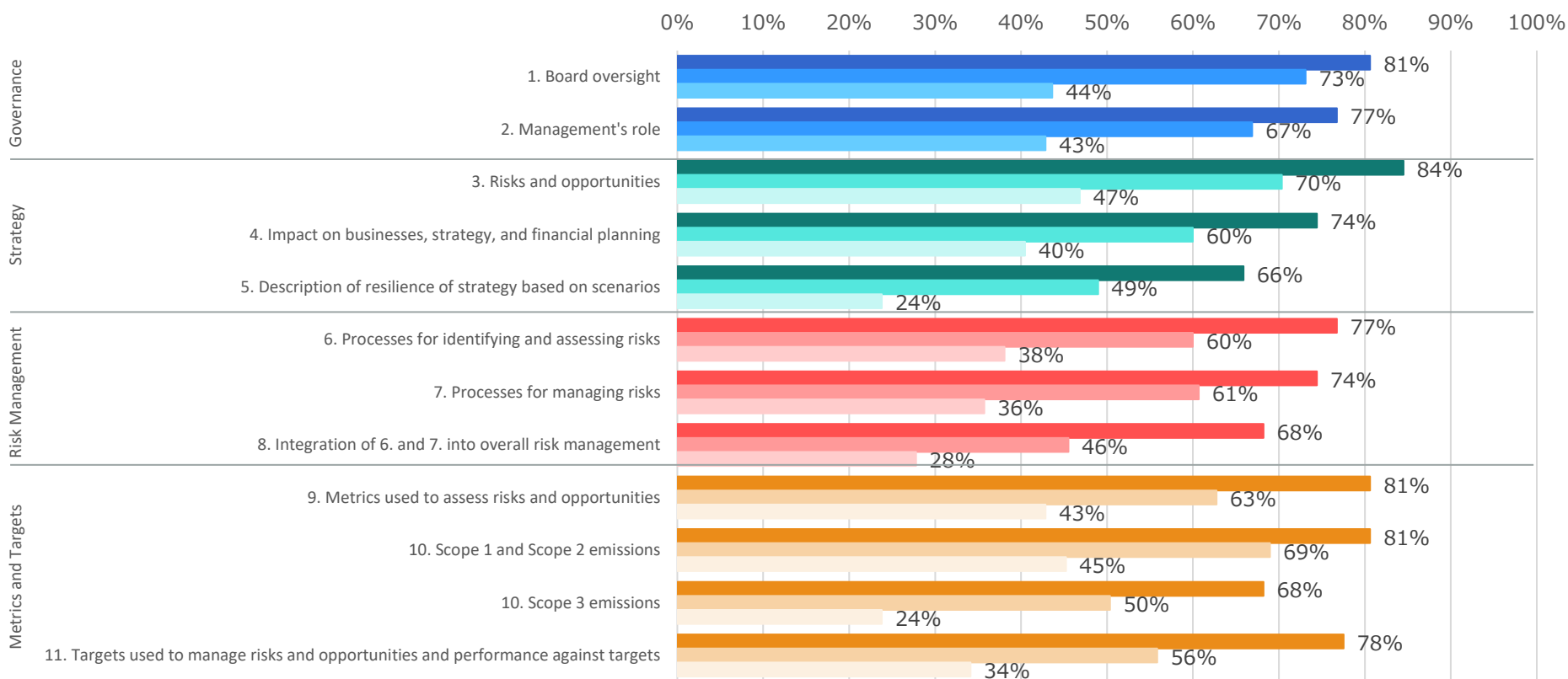
Disclosure by Market Cap

- By market capitalization, disclosure on all categories was highest among companies worth JPY 1 tril. or more. The biggest gaps between these companies and those in the next largest group were in 8. Integration of 6. and 7. into overall risk management and 11. Targets used to manage risks and opportunities and performance against targets (both 22-point gaps).
- Among companies with a market cap of under JPY 300 bil., disclosure was most common on 3. Risks and opportunities (47%) followed by 10. Scope 1 and Scope 2 emissions (45%), 1. Board oversight (44%), 2. Management's role (43%), and 9. Metrics used to assess risks and opportunities (43%).

Disclosure by market capitalization

(ratio of companies within each market cap group that disclosed on each category in at least one of the surveyed reports)

Top line: JPY 1 tril. or more (129 companies) Middle line: JPY 300 bil. or more and under 1 tril. (145) Bottom line: Under JPY 300 bil. (126)



(Scopes 1 and 2 and Scope 3 were surveyed separately for category 10. Market cap is as of October 31, 2022.)

Disclosure by Sector (1/2)

Disclosure by sector category - 33 sectors as defined by TSE

(ratio of companies within each sector disclosing on each category in at least one of the surveyed reports)

	Information & Communication (41)	Electric Appliances (41)	Chemicals (35)	Retail Trade (31)	Services (27)	Machinery (21)	Construction (21)
1. Board oversight	44%	83%	77%	55%	22%	67%	57%
2. Management's role	39%	76%	86%	42%	22%	62%	52%
3. Risks and opportunities	51%	78%	91%	45%	33%	52%	62%
4. Impact on businesses, strategy, and financial planning	29%	73%	63%	32%	30%	71%	67%
5. Description of resilience of strategy based on scenarios	27%	66%	63%	23%	7%	29%	43%
6. Processes for identifying and assessing risks	32%	73%	74%	39%	15%	57%	57%
7. Processes for managing risks	34%	71%	74%	39%	15%	57%	57%
8. Integration of 6. and 7. into overall risk management	24%	73%	66%	16%	7%	57%	38%
9. Metrics used to assess risks and opportunities	24%	71%	86%	45%	22%	62%	67%
10. Scope 1 and Scope 2 emissions	46%	76%	86%	45%	37%	76%	57%
10. Scope 3 emissions	32%	59%	60%	29%	22%	57%	52%
11. Targets used to manage risks and opportunities and performance against targets	24%	66%	83%	39%	15%	52%	38%

(Categories with 10 or more companies shown.)

Disclosure by Sector (2/2)

Disclosure by sector category - 33 sectors as defined by TSE

(ratio of companies within each sector disclosing on each category in at least one of the surveyed reports)

	Wholesale Trade (19)	Foods (19)	Pharmaceutical (17)	Real Estate (16)	Transportation Equipment (13)	Banks (12)	Other Financing Business (10)
1. Board oversight	74%	68%	71%	63%	85%	100%	50%
2. Management's role	74%	68%	53%	63%	77%	100%	50%
3. Risks and opportunities	68%	79%	76%	56%	77%	100%	40%
4. Impact on businesses, strategy, and financial planning	58%	74%	71%	56%	62%	100%	40%
5. Description of resilience of strategy based on scenarios	53%	37%	41%	44%	85%	83%	40%
6. Processes for identifying and assessing risks	68%	74%	65%	56%	62%	100%	50%
7. Processes for managing risks	63%	68%	59%	56%	62%	100%	50%
8. Integration of 6. and 7. into overall risk management	47%	68%	47%	56%	38%	75%	50%
9. Metrics used to assess risks and opportunities	53%	84%	65%	56%	85%	92%	30%
10. Scope 1 and Scope 2 emissions	68%	53%	88%	50%	69%	92%	30%
10. Scope 3 emissions	42%	58%	53%	44%	46%	58%	20%
11. Targets used to manage risks and opportunities and performance against targets	63%	68%	65%	50%	77%	92%	30%

(Categories with 10 or more companies shown.)

- This survey attempted to shed light on the status of disclosure of the 11 TCFD Recommended Disclosures among constituent companies of the JPX-Nikkei Index 400, by disclosure category and company attributes (size and sector).
- By disclosure category, the categories where disclosure was highest (3. Risks and opportunities, 1. Board oversight, and 10. Scope 1 and Scope 2 emissions) and those where it was lowest (5. Description of resilience of strategy based on scenarios and 8. Integration of 6. and 7. into overall risk management) were along the same trends as the previous survey (published November 2021). There was no notable difference between the disclosure rates of Governance and Risk Management categories, for which TCFD recommends disclosure from all companies, and Strategy and Metrics and Targets categories, which should be based on materiality (apart from Scope 1 and Scope 2 emissions, disclosure of which is recommended regardless of materiality).
- Among companies that were also included in the previous survey, disclosure has increased in all categories, and the category with the lowest rate of disclosure – 5. Description of resilience of strategy based on scenarios – had the highest rate of increase. This suggests an improvement in the availability of information that companies can use when engaging with shareholders and other stakeholders. While a company’s material issues and the kinds of information it can most easily gather and disclose depend on its attributes (size, sector, etc.) and external environment, the survey results suggest that companies are starting from wherever their circumstances allow and gradually expanding their activities and information disclosure from there.
- It is important to note that this survey specifically covered four types of reports, including the Annual Securities Report, based on the TCFD’s recommendation that disclosure should be included in a company’s annual financial filings (or, in some cases, other official company reports published once a year). However, many companies publish related information on their websites in order to supplement these reports.
- The world of sustainability-related disclosure is heading toward some big changes. In November 2022, the Japan Financial Services Agency proposed an amendment to the Cabinet Office Order on Disclosure of Corporate Affairs which would add a new section on approaches and responses to sustainability to the Annual Securities Report and require disclosure of detailed sustainability-related information, including responses to climate change, under this section if deemed material (this would apply to Securities Reports covering fiscal years ending on or after March 31, 2023). Internationally, in March 2022 the International Sustainability Standards Board (ISSB), established under the IFRS Foundation, published two exposure drafts: S1, which sets out general requirements for sustainability-related information, and S2, which is specifically for climate-related information. The ISSB is continuing discussions with the aim of finalizing the requirements in early 2023.
- We hope to see companies improving the quality and quantity of disclosure through voluntary disclosure based on the TCFD Recommendations as well as statutory disclosure based on these regulatory changes and information provision to supplement this, leading to more active dialogue with shareholders and other stakeholders. This should then contribute to improvements in sustainable growth and mid- to long-term corporate value, leading in turn to a more attractive Japanese market.

Appendix

Climate Change Disclosure and Shareholder Proposals

This Appendix was created with the cooperation of ICJ, Inc.

Shareholder Proposal Approval Rates (for June 2022 AGMs)

- According to ICJ's research, there were ten shareholder proposals calling for disclosure of information on climate change at June 2022 annual general meetings (AGMs) in Japan.
- The average approval rate among votes in the name of custodian trust banks (i.e., domestic institutional investors) was 18.3%, and the average approval rate among votes in the name of overseas custody banks (i.e., overseas institutional investors) was 37.0%.
- Of the ten proposals, voting advisory firms ISS and Glass Lewis ("GL" below) recommended approval for eight and five, respectively.

Proposal		June 2022 AGMs					June 2021 AGMs				
		No.	Approval Recommended*		Domestic Approval**	Overseas Approval***	No.	Approval Recommended*		Domestic Approval**	Overseas Approval***
			ISS	GL				ISS	GL		
Revisions to Articles of Incorporation	Compensation disclosure	15	15	13	35.7%	57.9%	8	8	4	28.2%	52.9%
	Abolition of advisory officers	6	6	0	35.7%	54.8%	4	4	0	29.8%	49.5%
	Retirement of treasury stock	4	4	3	8.5%	81.0%	0	0	0	-	-
	Disclosure of information on climate change	10	8	5	18.3%	37.0%	3	1	1	27.5%	24.5%
	Disclosure of cost of capital	5	2	0	3.0%	46.2%	0	0	0	-	-
	Other (proposals to non-energy companies)	46	7	1	3.3%	13.7%	15	3	4	8.7%	17.6%
	Other (proposals to energy companies)	71	0	2	0.2%	3.4%	56	0	0	0.1%	2.3%
Appropriation of surplus		15	13	2	8.4%	64.1%	7	4	0	9.9%	39.5%
Share buybacks, cancellation of T. shares		17	17	1	6.2%	63.9%	3	3	0	12.3%	72.2%
Restricted stock compensation		7	5	0	0.5%	59.2%	-	-	-	-	-
Election/dismissal of directors, auditors, etc.		45	5	3	5.0%	10.2%	40	5	5	6.4%	11.4%
Total		241	82	30	6.7%	24.5%	136	28	14	6.8%	15.0%

*Number of approval recommendations for shareholder proposals by voting advisory firms (ISS/Glass Lewis)

**Average approval rate among votes by custodian trust banks on the Electronic Voting Platform (EVP). Approval rate = Approvals / (Approvals + Oppositions + Abstentions)

***Average approval rate among votes by overseas custody banks on the EVP. Approval rate = Approvals / (Approvals + Oppositions + Abstentions)

(Created by ICJ. Covers the proposals of 1,218 companies using the EVP for AGMs held in June 2022.)

Details of Climate Change Disclosure-related Proposals

Securities Code	Company	Proposal	Approval Rate
8058	Mitsubishi Corporation	Partial amendment to Articles of Incorporation (adoption and disclosure of short-term and mid-term greenhouse gas emission reduction targets aligned with the goals of the Paris Agreement)	20.18%
8058	Mitsubishi Corporation	Partial amendment to Articles of Incorporation (disclosure of how the company evaluates the consistency of each new material capital expenditure with its net zero greenhouse gas emissions by 2050 commitment)	16.21%
8316	Sumitomo Mitsui Financial Group, Inc.	Partial amendment to Articles of Incorporation (setting and disclosing short- and medium-term greenhouse gas emissions reduction targets consistent with the goals of the Paris Agreement)	27.05%
8316	Sumitomo Mitsui Financial Group, Inc.	Partial amendment to Articles of Incorporation (financing consistent with the IEA's Net Zero Emissions Scenario, etc.)	9.55%
9501	Tokyo Electric Power Company Holdings, Incorporated	Partial amendment to Articles of Incorporation (compatibility with a decarbonized society: disclosure of asset resilience in line with a Net Zero by 2050 Pathway)	9.55%
9502	Chubu Electric Power Company, Incorporated	Partial amendment to Articles of Incorporation (compatibility with a decarbonized society: disclosure of asset resilience in line with a Net Zero by 2050 Pathway)	19.9%
9503	The Kansai Electric Power Company, Incorporated	Partial amendment to Articles of Incorporation (reform to corporate structure in view of achieving a decarbonized society: disclosure of climate-related risks and opportunities)	35.6%
9513	Electric Power Development Co., Ltd.	Partial amendment to Articles of Incorporation (formulation and disclosure of a business plan with science-based short- and mid-term greenhouse gas emissions reduction targets aligned with Articles 2.1 (a) and 4.1 of the Paris Agreement)	25.8%
9513	Electric Power Development Co., Ltd.	Partial amendment to Articles of Incorporation (disclosure, in the annual report, of details of how the company assesses the alignment of its capital expenditure with its greenhouse gas emissions reduction targets)	18.1%
9513	Electric Power Development Co., Ltd.	Partial amendment to Articles of Incorporation (disclosure, in the annual report, of details of how the company's remuneration policies facilitate the achievement of the Company's greenhouse gas emissions reduction targets)	18.9%

(The ten proposals relating to "Disclosure of information on climate change" as shown on the previous page. Based on information disclosed by each company.)

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