2023 Taiwan Sustainable Investment





2023 Taiwan Sustainable Investment Survey

Editorial Team

Chi-Jui Huang Professor, Dept. of Finance and Cooperative Management
 Hsiang-Lin Chih Vice President for Financial Affairs and Sustainable Developmant, NTPU; Director, Center for Global
 Change and Sustainability Science; Distinguished Professor, Dept. of Finance and Cooperative Management
 Yu-Shan Chen Dean, NTPU College of Business; Distinguished Professor, Dept. of Business Administration
 Ta-Teng Tseng Researcher, Center for Global Change and Sustainability Science
 Hua-Wei Chen Researcher, Center for Corporate Sustainability

Graphics and Cover Design

Yun-Yun Tsai Part-time Research Assistant, Center for Corporate Sustainability

Special Thanks to our Co-organizers

Financial Supervisory Commission Department of Planning, Securities and Futures Bureau, and Insurance Bureau Taiwan Stock Exchange Corporation Life Insurance Association of R.O.C. Non-Life Insurance Association of R.O.C. Securities Investment Trust & Consulting Association of R.O.C. Cathay Financial Holding Co. Ltd.

Copyright

All rights reserved to National Taipei University and Cathay Financial Holdings Co. Ltd. (the sponsor). The information posted on the Center's website may be used within a reasonable scope for reports, reviews, teaching, research, and other rational purposes, as well as for giving credit where credit is due. Please do not reproduce, publicly distribute, or publicly transfer the information without prior permission.

Declaration

The organizer of the study on the Taiwan Sustainable Investment Survey (i.e. the NTPU College of Business Center for Research on Corporate Sustainable Development) is sponsored and commissioned by Cathay Financial Holdings Co. Ltd. However, this study will not disclose the responses of each company, and the information provided is solely kept at the Center without being delivered to any other department or unit. It is hereby declared that the information obtained by Cathay Financial Holdings Co. Ltd. is similar to those of peer companies in the financial industry.

Team Introduction

As climate change exacerbates around the globe, corporate sustainability and responsibility-related issues have attracted considerable attention. Therefore, investments made by financial institutions play an important leadership role. The Center for Corporate Sustainability, College of Business, National Taipei University, has been established to showcase the teaching, research, and service features of the College of Business so that they meet the sustainable development needs of enterprises worldwide. The research team has been devoted to studying corporate sustainability issues and has created the SEED evaluation framework (Social, Economic, Environment, and Disclosure) with the help of interdisciplinary scholars and experts on and off campus. This framework set the basis of sustainability evaluation systems in Taiwan. We hope to sow the seeds of benevolence and promote Taiwan's capital market to leverage its environmental and social influence for the greater good.

The team annually rates the performance of listed companies based on their sustainability reports and other publicly accessible information related to sustainability. As the number of evaluated enterprises grows, the SEED framework now has the largest coverage for environmental, social, and governance (ESG) evaluation in Taiwan. In 2022, 864 listed companies were evaluated. Thanks to our sponsor Cathay Financial Holdings, we have implemented the Taiwan Sustainable Investment Survey for three consecutive years in line with international trends.

Based on the Taiwan Sustainable Investment Survey, the team has also launched sustainability-related indices jointly with the Taiwan Index Plus Corporation, providing a reference to investors and promoting sustainable investing in Taiwan. The rollout of these indices are as follows: TIP Taiwan Environmental Sustainability Index, TIP Taiwan Sustainability Value Index (TWSVI), TIP Customized Environmental Sustainability Dividend+ Index, TIP Taiwan Environmental Sustainability 50 Index, TIP Customized TPEx ESG 30 Index, TIP Customized Taiwan ESG Low Carbon 50 Index, TIP Taiwan Sustainability Ratings Investment Grade Total Market Index, TIP Taiwan ESG Report Index, TIP Customized Taiwan ESG Low Carbon High Dividend 40 Index, TIP Customized Taiwan ESG High Dividend equal weight index, TIP Customized Taiwan ESG High Dividend Small/Mid-Cap Index, and TIP Customized TPEx ESG Market Leader Total Return Index.

The Center is dedicated to fostering talents who help enterprises take action and put their sustainability responsibilities into practice. We offer students interdisciplinary courses and micro-courses on corporate social responsibility (CSR) and sustainable financing, to improve students' perspectives on and competence in sustainability, thus becoming the future of corporate sustainability. We also work with the Taiwan Institute for Sustainable Energy Research to develop corporate sustainability managers. From research to practice, the NTPU Taiwan Sustainable Investment Survey team joins hands with industry, government, and academia to promote ESG developments.



Website of the Center for Corporate Sustainability http://www.aacsb.ntpu.edu.tw/twsvi/

National Taipei University
Center for Corporate Sustainability//twsvi/Address: No. 151, University Rd., Sanxia Dist.,

New Taipei City 237303 Taiwan Phone: 02-8674-1111#66410 E-mail: twsvi@gm.ntpu.edu.tw Published in December 2023



Website of the Center for Global Change and Sustainability Science https://cgcss.ntpu.edu.tw/

SUMMARY

68 Institutions

Surveyed in 2023

AUM NTD **49.5 trillion**

Amount of sustainable investments NTD **19.9 trillion**

Proportion of sustainable investments

40.2%

Proportion of sustainable investments by industry

Insurance Securities investment trust Government funds companies and consulting companies

58%

33%

9%

Major investment targets in sustainable investing NO.1 Foreign bonds

NTD 9.9 trillion

NO.2 Taiwanese stocks NTD **2.7 trillion** Most popular methods of sustainable investing NO.1 Negative/Exclusionary screening

NTD 15 trillion

NO.2 ESG integration
NTD 9.2 trillion

Percentage of companies that developed sustainable investment policies within one year 75%

Percentage of companies that engaged in ESG engagements with their investee companies 74%

Major challenges of sustainable investing

NO.1 The difficulty of measuring and performing cross-company comparisons on the ESG performance of sustainable investment targets

NO.2 A lack of disclosed data concerning corporate sustainability-related issues

NO.3 The difficulty of measuring and defining the impact of sustainable investing

Contents

01 Summary
02 Definition of Sustainable Investing
03 Scope of the Survey
04 Survey Overview
05 Survey Results

Compliance with relevant initiatives Development of sustainability-related policies Total amount of sustainable investments Types of sustainable investment positions Methods of sustainable investment Sustainable investment assets

Definition of Sustainable Investing

The Global Sustainable Investment Alliance (GSIA), which seeks to increase the profile and influence of global sustainable investment organizations, released its Global Sustainable Investment Review 2022 (GSIR 2022) in November 2023. The report showed that the amount of global sustainable investments was US\$30.3 trillion, 14% less than the amount reported in the GSIR 2020. The primary reason for the reduced proportion of sustainable investments is due to efforts to reduce the risk of greenwashing. Indeed, the U.S. and Canada have implemented stringent standards for recognizing sustainable investment assets. The most significant reductions were observed in the U.S., where the total amount of sustainable investments dropped from US\$17 trillion in 2020 to US\$8.4 trillion in 2022. However, apart from the U.S., sustainable investing in other major regions increased by 20% from 2020, indicating that the sustainable investment market in general is gradually maturing.

In this study, sustainable investments were categorized into eight investment approaches based on the definition of sustainable investment provided by the Global Sustainable Investment Alliance (GSIA), Responsible Investment Association Australasia (RIAA), Japan Sustainable Investment Forum (JSIF), Organization for Economic Co-operation and Development (OECD), The Forum for Sustainable and Responsible Investment (US SIF), and European Sustainable Investment Forum (Eurosif). The eight approaches include negative/exclusionary screening, positive/best-in-class screening, norms-based screening, ESG integration, sustainability-themed investing, impact investing, shareholder action (exercising voting rights), and corporate engagement. The responses to our survey items, which were designed according to numerous studies from abroad, are expected to provide data and serve as an analytical basis for the sustainable investment market in Taiwan, thus promoting the continuous development of sustainable financing in the country.

- 1. GSIA: http://www.gsi-alliance.org/wp-content/uploads/2019/06/GSIR_Review2018F.pdf
- 2. JSIF: http://japansif.com/2021survey-en.pdf
- 3. RIAA : http://responsibleinvestment.org/
- 4. OECD 2017: https://www.oecd.org/finance/Investment-Governance-Integration-ESG-Factors.pdf
- 5. US SIF : https://www.ussif.org/files/Publications/USSIF_ImpactofSRI_FINAL.pdf
- 6. Eurosif: http://www.eurosif.org/wp-content/uploads/2018/01/Eurosif-SDGs-brochure.pdf

The aforementioned descriptions were obtained based on a consolidation of the definition of sustainable investing provided by the following institutions:

Scope of the Survey

A total of 104 institutional investors were invited to participate in the 2023 Taiwan Sustainable Investment Survey. The institutional investors included 20 life insurance companies, 22 property and casualty insurance companies, 38 securities investment trust companies, 20 securities investment consulting companies, and 4 government funds. A total of 68 companies responded to the Survey.

The response rates for all industries in the 2023 Survey were above 50%. Life insurance companies had the highest response rate at 80%, followed by government funds at 75%, property and casualty insurance companies at 68%, securities investment trust companies at 61%, and securities consulting companies at 55%. Despite the considerable decline in the response rate of securities investment trust companies, there were significant increases in those of property and casualty insurance companies and securities consulting companies. The sustainable investment market in Taiwan is largely comprised of life insurance companies. Therefore, the sample in the 2023 Survey constituted more than 70% of Taiwan's sustainable investment market, which can surely explain the status and challenges of sustainable investing in Taiwan.



Survey Overview

1. Summary

	2019	2020	2021	2022
Total sustainable investment assets (Unit: NTD 1 million)	13,242,371	17,565,169	20,346,870	19,888,301
Assets under management (AUM) (Unit: NTD 1 million)	43,780,697	47,497,548	51,375,904	49,472,717
Number of respondent institutions	59	58	68	68
Proportion of sustainable investments	30.2%	37.0%	39.6%	40.2%

2. Amount of sustainable investments by investment method (Unit: NTD 1 million)

	2021/12/31	2022/12/31	Number of institutional investors that have used the method	Year-on-year (YoY)
Negative/Exclusionary screening	14,173,526	15,066,704	33	6%
Positive/Best-in-class screening	2,981,021	3,119,674	20	5%
Norms-based screening	43,949	220,579	5	402%
ESG integration	8,706,461	9,196,128	24	6%
Sustainability-themed investing	4,166,204	4,070,707	28	-2%
Impact investing	3,130	77,000	6	2360%
Shareholder action (exercising voting rights)	4,279,059	4,317,712	19	1%
Corporate engagement	221,520	626,262	11	183%

Note: Due to different sustainable investment methods being used, the amount here is not equal to the value of the total sustainable investment assets in the aforementioned table.

3

	2021/12/31	Percentage	2022/12/31	Percentage	YoY
Taiwanese stocks	4,341,621	25%	2,735,679	17%	-37%
Foreign stocks	1,032,643	6%	760,259	5%	-26%
Domestic bonds	1,266,115	7%	1,217,278	7%	-4%
Foreign bonds	9,043,089	52%	9,915,063	61%	10%
Private equity	299,601	2%	311,822	2%	4%
Real estate (e.g. investing in green construction, green building materials, or equipment)	539,138	3%	553,465	3%	3%
Mutual funds	261,241	1%	178,262	1%	-32%
Other	678,413	4%	590,112	4%	-13%
Total	17,461,861	100%	16,261,940	100%	-7%

3. Amount of sustainable investments by asset class (Unit: NTD 1 million)

Note: Because some institutional investors only disclosed the total amount of their sustainable investments without specifying the investment amount of each investment target, the sum here is not equal to the value of the total sustainable investment assets in the aforementioned table.

Summary of the Survey

In 2022, global inflation–exacerbated by the Russia–Ukraine War has prompted the Federal Reserve Bank to raise its interest rates, which in turn has reduced hot money flows, increased the volatility of the global stock market, and lowered market performance. Furthermore, due to the surge of local COVID-19 cases, Taiwan domestic pandemic-related insurance claims reached NTD 211.6 billion, which simultaneously reduced the amount of assets under management (AUM) and sustainable investments in 2022. Despite these setbacks, the proportion of sustainable investments in Taiwan has generally continued to grow.

"A higher percentage of institutional investors are engaging in sustainable investing as well as the proportion of sustainable investments"

According to the results of the 2023 Taiwan Sustainable Investment Survey, institutional investors engaging in sustainable investing accounted for 80% of the total respondents. For the first time, the percentage of the total amount of sustainable investments in Taiwan exceeded 40%. In particular, the proportion of securities investment trusts and consulting companies engaging in sustainable investing was 33% this year, up 14% from last year's survey, suggesting that both types of firms have a significantly higher awareness toward sustainability-related issues. However, due to the impacts of the macroeconomic environment, the total amount of AUM was NTD 49.5 trillion this year, a 4% drop from last year's NTD 51.3 trillion; the total amount of sustainable investment assets was NTD 19.9 trillion, a 2% drop from last year's NTD 20.3 trillion. The overall trends were consistent with the Japan Sustainable Investment Forum's (JSIF) survey results.

"A higher percentage of institutional investors in compliance with climate change initiatives, with climate change management included in the investment decision-making processes"

According to this year's survey, the percentage of institutional investors in compliance with climate change initiatives was significantly higher than that of the previous year, with the Task Force on Climate-related Financial Disclosures (TCFD) being the most popular initiative at 60% (38 investors), followed by the CDP (formerly the Carbon Disclosure Project) at 41% (26 investors), Partnership for Carbon Accounting Financials (PCAF) at 35% (22 investors), and Science Based Targets initiative (SBTi) at 33% (21 investors). Moreover, the number of institutional investors who included climate risks in their investment decision-making process was 77% (13 investors) higher than in last year's survey. In response to climate risks, 82% (55 investors) adopted measures such as measuring the carbon emissions of their investment portfolio, negotiating and voting on climate change-related issues with investee companies, disinvesting in upstream and downstream industries related to fossil fuels, investing in climate change-related themes, and investing in green bonds. These changes in number show that institutional investors have attached greater importance to environmental sustainability issues.

"Negative/exclusionary screening and ESG integration remain the mainstream method of sustainable investing in Taiwan, followed by stakeholder action and corporate engagement, while impact investing has the most significant growth"

Survey results over the past three years have shown that the most common method of sustainable investing used by Taiwanese institutional investors was negative/exclusionary screening, followed by ESG integration. Although sustainable investments in Taiwan have gradually aligned with global trends in recent years, according to the 2022 GSIR report, major countries, such as the U.S., Japan, and New Zealand, have switched to stakeholder action and corporate engagement as their primary sustainable investing methods, while Canada's primary method was ESG integration. These results suggest that global sustainable investment trends have shifted from passive negative/exclusionary screening to active stakeholder action and corporate engagement. Therefore, we suggest that, in addition to negative/exclusionary screening, Taiwanese institutional investors should consider active approaches to sustainable investing, such as stakeholder action, corporate engagement, ESG integration, and impact investing.

Furthermore, comparing the variation in the amount of sustainable investments by method over the last two years, due to the low base period in the in the previous year, the amount of impact investing this year rose by 2360% from last year. Interestingly, this marks the first time that some institutional investors had publicly disclosed the process of impact assessment alongside the monitoring results, and adopted internationally-recognized methodologies to evaluate the outcomes of the impacts and management approaches.

A 10% growth in the amount of sustainable investments in foreign bonds from last year, accounting for more than 60% of the nationwide proportion of sustainable investments

The survey results revealed that the amount of sustainable investments in foreign bonds was 10% higher than last year, accounting for 61% of the nationwide percentage of sustainable investment assets. Foreign bonds were the primary sustainable investment asset held by Taiwanese institutional investors, followed by Taiwanese stocks. Due to the volatility of the global stock market, there was a significant decrease in the scale of sustainable investments in stock-type assets, within the volatility, Taiwanese stocks were the most impacted, with a reduction of 37% from last year's amount, as well as an 8% reduction in the overall percentage.

Survey Results

1. Compliance with relevant initiatives

Q1 Basic information

This item was used to obtain each company's basic information.

Q2 Please describe the role your institution plays in asset management and asset				
structure		(Unit:	Number o	f investors)
Options	2019	2020	2021	2022
Asset owners (i.e., government funds, insurance companies)	32	30	32	35
Asset management companies (i.e., securities investment trust and consulting enterprises)	27	28	36	34
Response rate	100%	100%	100%	100%
Number of respondents	59	58	68	68

Note: The total number of respondents was not 69 because some of the respondents were both an asset management company and an asset owner



Q3 Which of the following initiatives are you adopting or complying with? (multiple

choice)		(Unit: Number of investors		
Options	2019	2020	2021	2022
Principles for Responsible Investment (PRI)	8	30	33	39
Principle for Sustainable Insurance (PSI)	3	14	14	17
UN Global Compact	8	6	11	11
International Corporate Governance Network (ICGN)	2	3	3	3
UNFCCC	No data	No data	1	3
Glasgow financial alliance for net zero (GFANZ)	No data	No data	2	3
Science Based Targets initiative (SBTi)	No data	No data	12	21
Partnership for Carbon Accounting Financials (PCAF)	No data	No data	12	22
CDP (formerly the Carbon Disclosure Project)	13	12	19	26
Task Force on Climate-related Financial Disclosures (TCFD)	No data	No data	22	38
Task Force on Nature-related Financial Disclosures (TNFD)	No data	No data	4	7
Partnership for Biodiversity Accounting Financials (PBAF)	No data	No data	No data	3
Response rate	90%	84%	90%	93%

8

Description of item

This was a multiple-choice item. The goal was to examine institutional investors' compliance with relevant sustainable investing initiatives. The "Others" option was designed so that the investors could provide initiatives that were not listed as options. We will use these responses as a reference for next year's survey. Furthermore, if the respondent's parent companies and holding companies were compliant with an initiative, then the respondent institutional investor must also adopt the initiative for it to be tabulated in the results.

In line with the increasing global awareness of environmental sustainability issues, we included several climate change-related initiatives as options in last year's survey. This year, we added the Partnership for Biodiversity Accounting Financials (PBAF) initiative to deepen our understanding of the investors' level of attention toward biodiversity issues.

In addition to their compliance with relevant sustainable investing initiatives, this item was designed to elicit public disclosures from the companies regarding their investment outcomes to provide this important information to stakeholders. As such, each company was also requested to provide a website where this information was disclosed. In tabulating the results, companies that provided websites that did not contain information regarding the relevant initiatives or that did not include the number of conventions or associated values were excluded.

Key observations

"In response to net zero emissions, there was a significant increase in the percentage of institutional investors in compliance with climate change-related initiatives"

Compared to last year's survey, this year's results showed that the majority of incentivescomplied or adopted by the respondent institutional investors were centered on climate change, with the TCFD being the most popular initiative at 60% (38 investors), followed by the CDP at 41% (26 investors), PCAF at 35% (22 investors), and SBTi at 33% (21 investors). This shows that institutional investors have a markedly higher level of attention toward climate risks compared to previous years, thus keeping up with global trends and progressing toward net zero emission targets.

There was a significant increase in the percentage of institutional investors in compliance with climate change-related initiatives (Q3) (Unit: Number of investors)





	M Hawa wali da	clarad your complian	cowith the TWEE's St	ewardship Principles?
Y	/4 nave you ue		ice with the I was sat	ewaluship rinciples:

(Unit: Number of investors)

	(Unit	: Numbe	erotinv	estors)
Options	2019	2020	2021	2022
Yes, and we have published our stewardship report	53	53	56	58
Elaborate the means of conducting risk assessment on the invested company (must include ESG-related risks and opportunities)	No data	No data	39	41
Delineate the purpose and method of the conflict of interest management policy (including the implementation of educational dissemination and information control)	No data	No data	43	44
There are concrete improvements in the ESG performance of investees based on the disclosure of stewardship	No data	No data	25	32
Yes, but we have yet to publish our stewardship report	No data	No data	4	6
No	3	5	7	4
Response rate	95%	100%	100%	100%
Number of respondents	56	58	67	68

Note: In the 2019 and 2020 surveys, this item merely asked whether the institutional investors were compliant with the TWSE's Stewardship Principles.

Description of item

The six TSWE's Stewardship Principles are "Establish and disclose stewardship policies," "Establish and disclose policies on managing conflicts of interest," "Regularly monitor investee companies," "Maintain an appropriate dialogue and interaction with the investee," "Establish and disclose clear voting policies and voting results," and "Periodically disclose the status of the fulfilment of stewardship responsibilities." These principles were converted in our survey to three multiple-choice items to further examine the disclosure of institutional investors' stewardship reports: "Elaborate the means of conducting risk assessment on the invested company (must include ESG-related risks and opportunities)," "Delineate the purpose and method of the conflict of interest management policy (including the implementation of educational dissemination and information control)," and "There are concrete improvements in the ESG performance of investees based on the disclosure of stewardship."

Key observations

"Over 85% of respondent institutional investors declared their compliance with the TSWE's Stewardship Principles and have published their stewardship report"

In this year's survey, among the institutional investors who were compliant with the 「Stewardship Principles for Institutional Investors」 and had published their stewardship report, 71% (41) specified how they performed ESG risk assessments on investees; 76% (44) asserted having delineated the purpose and method of their conflict of interest management policy; and 55% (32) disclosed having used the Principles as a basis for making concrete improvements in the ESG performance of investees, up 10% from last year's 45% (25) of respondents. Furthermore, according to the TWSE's 2022 Report on the Rating of Institutional Investor Stewardship Disclosure, most of the investors this year had completed the formulation and disclosure of their Stewardship Principles-related policies, thereby indicating that the level of stewardship governance in the market has gradually increased.

2. Development of sustainability-related policies

Q5 Does your institution have a formal policy on sustainable investment? (such as policies on sustainable investment and responsible investment) (Select Yes if you are using the formal policy developed by your parent company or holding (Upit: Number of investors)

2022
F7
57
2
0
5
4
100%
68

Q6 For those who answered Yes to Q5, is the policy on sustainable investment

publicly disclosed?		(Unit:	Number of	investors)
Options	2019	2020	2021	2022
Yes (Publicly disclosed)	25	34	31	46
Yes (Disclosed to clients only)	2	2	3	2
No	8	5	5	9
Number of respondents	35	41	39	57

Q7-1 Have your institution publicly disclosed relevant information on your procedure for evaluating sustainable investments? (for example, ESG is handled by an ESG evaluation team, specifying how ESG risks and opportunities are included in the investment evaluation procedure, etc.) (please select Yes if you are using the publicly disclosed information on the procedure of evaluating sustainable investments at your parent company or holding company)

(Unit: Number of investors)

			·
Options	2020	2021	2022
Yes	41	41	51
No	17	24	17
Response rate	100%	96%	100%
Number of respondents	58	65	68

Q7-2 Has your institution purchased the database of an external professional ESG validation body and incorporated the ESG data or ratings into your procedure of evaluating sustainable investments through the following methods? (multiple choice) (Unit: Number of investors)

Options	2022
Yes	
If an enterprise's ESG rating does not exceed a certain threshold, the investment team will further evaluate the ESG risks and initiate the review process	32
If an enterprise's ESG rating does not exceed a certain threshold, it is directly excluded from the list of investees	6
Other evaluation methods	13
No, we have not purchased the database of an external professional ESG validation body	23
Response rate	100%
Number of respondents	68

12

13

Q7-3 Please state the ESG database(s) purchased by your institution (multiple				
choice)	(Unit: Number of investors)			
Options	2022			
Sustainalytics	4			
MSCI	14			
FTSE Russell	1			
ISS	4			
S&P Global	2			
Moody's	1			
Bloomberg	27			
Refinitiv	7			
Others	18			
None	0			
Response rate	93%			
Number of respondents	42			

Q8 Is your institution engaging in sustair	able invest		lo, skip to Number of	
Options	2019	2020	2021	2022
Yes	43	42	49	55
No				
Intend to do so within a year	0	0	7	1
Intend to do so within three years	0	3	1	1
Currently in development	11	8	4	6
No intentions whatsoever	2	3	6	5
Response rate	95%	97%	99%	100%
Number of respondents	56	56	67	68

Description of items

Q5 to Q8 examine the statuses of the institutional investors' sustainable investment policy development and disclosure, whether or not they publicly disclosed information on the procedure of evaluating sustainable investments, and whether or they engaged in sustainable investment. Additionally, the item required that if the institutional investor was using the policy on sustainable investment developed by their parent company or holding company, or other related measures, then they must state the policy so that the results to be tabulated.

In this year's survey, we added items Q7-2 and Q7-3 to examine whether the institutional investors had purchased an external ESG database and incorporated the data into their decision-making procedures. The decision-making methods include, but are not limited to, "If an enterprise's ESG rating does not exceed a certain threshold, the investment team will further evaluate the ESG risks and initiate the review process" and "If an enterprise's ESG rating does not exceed a certain threshold, it is directly excluded from the list of investees." The ESG databases of Q7-3 are publicly listed on the Taiwan Depository Clearing Corporation's IR platform.

An "Others" option was also available for this item so that institutional investors could freely add unlisted evaluation methods or ESG databases. The responses were collated and shall serve as a reference for designing next year's survey.

Key observations

"Three-quarters of institutional investors have developed their sustainable investment policies"

75% (9) of the institutional investors who responded "The policy is currently in development and will be issued within a year" to Q5 in the 2022 survey had developed their sustainable investment policies this year and achieved their targets. Only 8% (1) of the institutional investors have yet to develop a sustainable investment policy. Another 17% (2) had not responded to the survey, meaning that we could not track their achievement status.

"68% of respondent institutional investors have incorporated ESG data or ratings into their procedure of evaluating sustainable investments"

The results showed that 47% of institutional investors had further evaluated the ESG risks of an enterprise whose ESG rating did not exceed a certain threshold, 9% directly excluded the enterprise from the list of investees, while 19% used other evaluation methods, such as developing their own ESG risk-rating model or evaluating the investee's ESG performance. Furthermore, the top three most commonly used databases among Taiwanese institutional investors were successively Bloomberg, MSCI, and Refinitiv. Further to using foreign databases, some institutional investors stated having used such homegrown databases as the TEJ, CMoney, NTPU Taiwan Sustainability Evaluation Database, and SysJust.

(Unit: NTD 1 million)

3. Total amount of sustainable investments

Q9 What is the cumulative scale of your institution's sustainable investments and the sustainable investment products launched (as of the specified end date)?

			(01110.11	
Options	2019/12/31	2020/12/31	2021/12/31	2022/12/31
The scale of sustainable investments and the sustainable investment products launched	13,242,371	18,538,082	20,346,870	19,888,301
Response rate				95%

Note 1: The amount reported last year was applied across 2019–2021, the 2023 survey results were applied in 2022.

Note 2: The response rate is calculated by dividing the number of institutions engaging in sustainable investment in Q8 by the number of institutions who disclosed the amount of their sustainable investments in Q9.

Total amount of sustainable investments by industry (Unit: NTD 1 million					
	2021/12/31	2022/12/31	Annual rate of change		
Insurance companies	17,288,752	16,667,583	-4%		
Securities investment trust and consulting companies	1,528,414	1,929,178	26%		
Government funds	1,529,704	1,291,540	-16%		

Key observations

Stock-type assets underperformed due to the Federal Reserve Bank's interest rate hike and the higher volatility of the global stock market in 2022. Furthermore, due to the surge of local COVID-19 cases, pandemic-related insurance claims reached NTD 211.6 billion, which resulted in a 49% decrease in sustainable investments among property and casualty insurance companies. To summarize, the total amount of AUM was NTD 49.5 trillion this year, a 4% drop from last year's NTD 51.3 trillion; the total amount of sustainable investment assets was NTD 19.9 trillion, a 2% drop from last year's NTD 20.3 trillion. However, the proportion of sustainable investments ² continued to grow, reaching 40%. The overall trends were consistent with the Japan Sustainable Investment Forum's (JSIF) survey results.

² Proportion of sustainable investments = Total amount of sustainable investments/AUM

The proportion of sustainable investments among securities investment trust and consulting companies has grown by 14% (Q9)



"The percentage of sustainable investment among life insurance companies remained the highest, while the YoY of securities investment trust and consulting companies increased by 26%"

In decreasing order, the percentage of sustainable investment by industry type was 58% among insurance companies, 33% among securities investment trust and consulting companies, and 9% among government funds. The percentage shows that, in addition to the AUM of insurance companies accounting for a major proportion of the investment market, they were also actively engaging in sustainable developments. Furthermore, the amounts invested by securities investment trust and consulting companies also increased significantly in this year's survey, reaching 33%, up 14% from last year. The number shows that Taiwanese institutional investors have continued to increase their attention toward sustainability issues.

4. Types of sustainable investment positions

Q10 (For asset management businesses) What is the cumulative scale of your institution's sustainable investments and the sustainable investment products launched (as of the specified end date)? (Unit: Number of investors)

Options	2021/12/31	2022/12/31	ΥοΥ
Issuing mutual funds	570,332	879,227	54%
Asset owners' discretions (discretions of government funds and insurance companies)	977,692	640,804	-34%
Other discretions (discretions of typical companies, charitable foundations, individuals, and other units)	2,184	14,376	558%
Total	1,550,207	1,534,407	-1%

Note 1: The results for 2021 and 2022 were taken in 2023's survey.

Note 2: Because some institutional investors only disclosed the total amount of their sustainable investments, the total here is not equal to the value of the total sustainable investment assets in Q9.

(Unit: Number of investors)

Q11 (To be filled by asset owners including government funds and insurance companies) Please state the amount to which your institution's sustainable investment position was sourced from (as of the specified end date)?

			invescors)
Options	2021/12/31	2022/12/31	ΥοΥ
Own investments (excluding investments in funds)	7,295,288	7,437,733	2%
Onshore discretionary investments and investments in onshore funds	842,781	672,999	-20%
Offshore discretionary investments and investments in offshore funds	1,464,977	469,619	-68%
Total	9,603,046	8,580,351	-11%

Note 1: The results for 2021 and 2022 were taken in 2023's survey Note 2: Because some institutional investors only disclosed the total amount of their sustainable investments, the total here is not equal to the value of the total sustainable investment assets in Q9.

Key observations

"A decreased amount of sustainable investments among asset managers and asset owners from last year"

Due to the impacts of the macroeconomic environment and the volatility of capital markets, the number of sustainable investments among asset managers and asset owners was 1% and 11% less than last year, respectively.

Based on the structure of the asset managers' sustainable investment position structure (Q10), there was a significant growth in mutual fund issuance, up 54% from last year and accounting for 57%. Asset owners' discretions and other discretions accounted for 42% and 1%, respectively. The was a significant growth of 558% in the latter from last year due to the low base period.

Asset owners' investments (Q11) accounted for the majority of their sustainable investments at 87%, followed by onshore discretionary investments and investments in onshore funds at approximately 8% and lastly, offshore discretionary investments and investments in offshore funds at 5%, which was a 68% drop from last year.

17

5. Methods of sustainable investment

Q12 What is your institution's method of sustainable investment?

(Unit: Number of investors)

				110C3C013)		
Options	2021/12/31	2022/12/31	Number of institutional investors that have used the method	YoY		
Negative/Exclusionary screening	14,173,526	15,066,704	33	6%		
Positive/Best-in-class screening	2,981,021	3,119,674	20	5%		
Norms-based screening	43,949	220,579	5	402%		
ESG integration	8,706,461	9,196,128	24	6%		
Sustainability-themed investing	4,166,204	4,070,707	28	-2%		
Impact investing	3,130	77,000	6	2360%		
Shareholder action (exercising voting rights)	4,279,059	4,317,712	19	1%		
Corporate engagement	221,520	626,262	11	183%		
Note: The results for 2021 and 2022 were taken in 2023's survey						

Description of item

The purpose of this item was to survey the institutional investors' methods of sustainable investment. The methods and amount of sustainable investments were surveyed using the approach developed by the Global Sustainable Investment Alliance (GSIA) (see Appendix). This was a multiple-choice item because the same amount of investment may concurrently meet the requirements of different methods of sustainable investment. Thus, we hereby clarify that the sum of the amount of sustainable investments for each type of method in this item differs from the total amount of sustainable assets. Furthermore, considering that the institutional investors' definition of sustainable investment assets may have varied from last year, this year's survey also examined the two-year data by using the investors' existing classification methods to increase the comparability. The same sample was surveyed to prevent statistical errors arising from investors who did not respond to the previous survey.

Key observations

"Negative/exclusionary screening remains the most popular sustainable investing method in Taiwan, followed by ESG integration"

The survey revealed that negative/exclusionary screening remained the most common sustainable investing method, accounting for 76% of total sustainable investments, followed by ESG integration at 46%, and then shareholder action (exercising voting rights) at 22%, which replaced sustainability-themed investing.

Negative/exclusionary screening is regarded as a passive approach to sustainable investing because institutional investors must list the excluded industries at the early stage of their decision-making procedure to determine whether the amount of capital meets negative/exclusionary screening. According to the 2022 GSIR report, since 2018, there has been a steady decrease in the percentage of foreign investors who adopted negative/exclusionary screening. Instead, investors are switching to more active methods, such as shareholder action, corporate engagement, and ESG integration. Statistics from the U.S., Australia, New Zealand, and Japan showed that shareholder action and corporate engagement had the highest amounts of sustainable investments. Therefore, we suggest that Taiwanese institutional investors should consider active approaches to sustainable investing, such as stakeholder action, corporate engagement, ESG integration, sustainability-themed investing, and impact investing, in addition to negative/exclusionary screening, to align with global trends.

"23-fold growth in impact investing"x

The amount invested through impact investing grew by 2360%, largely due to there being more institutional investors who used this approach, as well as a low base period caused by the small number of investors who disclosed their impact investing outcomes in previous surveys. However, as institutional investors are more familiar with the methodologies of impact investing (see Q17 for detailed analyses), the amount of investments is expected to rise steadily in the future.



Amount of sustainable investments by method (Q12, in units of NTD 1 million)

20

6. Sustainable investment assets

Q13 / Q14 What are your institution's investment assets and the cumulative amount invested (as of the specified end date) in sustainable investing? (Unit: NTD 1 million)

Options	2021/12/31	Percentage	2022/12/31	Percentage	YoY
Taiwanese stocks	4,341,621	25%	2,735,679	17%	-37%
Foreign stocks	1,032,643	6%	760,259	5%	-26%
Domestic bonds	1,266,115	7%	1,217,278	7%	-4%
Foreign bonds	9,043,089	52%	9,915,063	61%	10%
Private equity	299,601	2%	311,822	2%	4%
Real estate (such as investing in green construction, green building materials or equipment)	539,138	3%	553,465	3%	3%
Mutual funds	261,241	1%	178,262	1%	-32%
Others	678,413	4%	590,112	4%	-13%
Total	17,461,861	100%	16,261,940	100%	-7%

Note : The results for 2021 and 2022 were taken in 2023's survey

Description of item

The purpose of this item was to survey institutional investors' sustainable investment target assets when engaging in sustainable investment. Other assets include loans, exchange-traded funds, real estate investment trusts, etc.

Key observations

"The scale of stock-type assets decreased due to the high volatility of the global stock market in 2022"

The survey results showed that similar to last year's findings, foreign bonds were the main sustainable investment target (accounting for 61% of the total sustainable investment assets and a YoY of 10%), followed by Taiwanese stocks (accounting for 17% of the total sustainable investment assets). In 2022, global inflation exacerbated by the Russia–Ukraine War prompted the Federal Reserve Bank to hike its interest rates, which in turn reduced hot money flows and increased the volatility of the global stock market. The total amount of sustainable assets was 37% less than in 2021. This year's JSIF survey results also revealed that the amounts invested in the Japanese and foreign stock markets were down 10% and 4%, respectively, from last year. Furthermore, the type of sustainable assets primarily owned by each institution was generally similar to the previous survey. Foreign bonds were the main investment target for life insurance companies, accounting for 70%; Taiwanese stocks were the main investment target for government funds, and securities investment trust and consulting companies, accounting for 81% and 51%, respectively; while domestic bonds replaced Taiwanese stocks as the primary investment target for property and casualty insurance companies, accounting for 37%.



Proportion of different investment targets by industry (Q13)



Q15 For those who answered Norms-based screening in Q12, what is the international standard that you adopted? (Unit: Number of investors)				
Options	2021	2022		
UN Global Compact	3	4		
OECD Guidelines for Multinational Corporations and International Treaties	0	1		
ILO Core Conventions	0	1		
UNICEF norms	0	0		
Not adopted	0	0		
Other	0	1		
Response rate	100%	100%		
Number of respondents	3	4		
Note: The response rate is based on the number of institutional in	vestors who had re	sponded that		

Note: The response rate is based on the number of institutional investors who had responded that they used this method of sustainable investment in Q12

Description of item

Based on the definition of sustainable investment through norms-based screening, we gave the options of the UN Global Compact, OECD Guidelines for Multinational Corporations and International Treaties, ILO Core Conventions, UNICEF norms, and Others. The purpose of this item was to survey in detail the institutional investors who adopted norms-based screening.

Key observations

Several institutional investors were still using norms-based screening as a means of sustainable investing and unanimously selected the UN Global Compact screening standard. Interestingly, this marks the first time that the OECD Guidelines for Multinational Corporations and International Treaties and ILO Core Conventions standards were chosen. This suggests that the institutional investors who used norms-based screening have diversified their reference points. Q16 For those who answered Sustainability-themed investing in Q12, please provide the investment assets and the cumulative amount invested (as of the specified end date) (Unit: NTD 1 million)

		2021/12/31	2022/12/31
	Renewable energy	25,719	24,676
Gr Stocks En	Water resources	1,970	2,659
	Green building	425	396
	Energy efficiency	6,969	7,103
	Healthcare	1,369	12,403
	Others	1,410,811	982,015
	Total	1,447,263	1,029,252
	Green bonds	74,082	125,774
	Social bonds	2,618	7,768
Bonds	Sustainable development bonds	23,335	61,500
	Others	2,450,581	2,686,254
	Total	2,550,616	2,881,297
	Real estate (e.g., green buildings)	136,225	134,964
Others	Others	78,744	114,553
	Total	214,969	249,517

Description of item

The purpose of this item was to survey the investment themes among the institutional investors who adopted thematic investing. This was a multiple-choice item as many investment themes might be included, and hence the sum of the amounts of various sustainable investment themes differs from the total amount of sustainable investment assets. Based on the previous survey results, healthcare as a form of stock asset was included in this survey.

Key observations

"Sustainability-themed investing, other assets, and bond-type assets performed excellently"

The results showed that bonds were the primary asset type owned by institutional investors who chose sustainability-themed investing. The amount invested was 13% higher than last year, likely due to the low base periods of social bonds (197% growth) and sustainable development bonds. Despite the impacts of the volatile global stock market on asset types, the overall amount of investments was 29% less than in 2021. However, this survey also revealed that healthcare and water resources were still important to investors, with growths of 806% and 35%, respectively. Although real estate investments were slightly lower than last year, the growth of investments in sustainability-themed financing and sustainable-type funds grew significantly by 46% in the same period. Consequently, the investments in other assets were higher by 16% than in 2021.

23

Q17-1 For those who answered Impact investing in Q12, did your institution publicly disclose the process of impact assessment alongside the monitoring results? (Unit: Number of investors)

	(-	· · ·
Options	2021	2022
Yes	0	1
Νο	2	5
Response rate	100%	100%
Number of respondents	2	6

Q17-2 For those who answered Impact investing in Q12, which evaluation method did you adopt for impact investing?

	(011	c. Number of investors)
Options	2021	2022
GIIN (IRIS+)	0	3
IMP (Impact Management Project)	0	1
Other standard frameworks	0	0
Self-developed evaluation methods	1	1
Response rate	50%	67%
Number of respondents	1	4

Description of item

The purpose of this item was to survey disclosure of the process of impact assessment alongside the monitoring results among the institutional investors who adopted impact investing, as well as the evaluation methods for impact investing. Based on global trends in impact investing, we consolidated the GIIN (IRIS+)³, and IMP (Impact Management Project)⁴ frameworks. Furthermore, based on the survey by Global Impact Investing Network (GIIN)⁵, since the impact investing markets in Asia and Taiwan are still in their preliminary stages, we allowed the institutional investors to state whether they have a self-developed framework or had adopted other unlisted frameworks, such as the Impact-Weighted Accounts (IWA)⁶.

- 3 https://iris.thegiin.org
- 4 https://impactmanagementproject.com

24

⁵ https://thegiin.org/assets/2022-Market%20Sizing%20Report-Final.pdf

⁶ https://www.hbs.edu/impact-weighted-accounts/Pages/default.aspx

Key observations

"Some institutional investors have begun to use international methodological frameworks to evaluate the benefits of and management approaches to impact investing"

Recent surveys have all revealed that impact investing had the most significant growth among the 8 major methods of sustainable investing, in which the amount surveyed this year saw a 23-fold increase. At the same time, the number of institutional investors who chose impact investing as their means of sustainable investment has steadily risen over the years. Interestingly, results this year showed that 50% of institutional investors who engaged in impact investing have adopted international methodological frameworks (e.g., the IRIS+ or IMP) to quantitatively evaluate the benefits of impact investing. This also marks the first time that some institutional investors publicly disclosed their evaluation process and monitoring results, suggesting that their levels of attention to and awareness of impact investment (which is expected to become the mainstream method of sustainable investing) have significantly grown.

Q18 For those who answered negative/exclusionary screening in Q12, please provide the excluded industries or activities (Unit: Number of investors)

				,
Options	2019	2020	2021	2022
Pornography	20	14	22	24
Gambling	22	13	19	21
Tobacco and liquor	17	10	17	18
Controversial weapons	19	20	28	30
Petroleum and gas industries	No data	No data	4	6
Coal-fired power generation	3	8	11	15
Upstream and downstream industries related to coal-fired power generation	No data	No data	6	11
Palm oil	0	3	4	4
Logging industry	No data	No data	6	7
Others	14	10	16	12
Response rate	-	-	-	100%
Number of respondents	-	-	-	33

Key observations

The results showed that the top three industries excluded by institutional investors were related to controversial weapons (30 investors), pornography (24 investors), and gambling (21 investors).

According to the new list of industries excluded by the institutional investors, the most excluded industries were similar to the previous survey, namely such coal-related industries as coal mining, coal-fired power generation, and coal infrastructure. Several institutional investors also excluded unconventional oil and gas companies. The phenomenon indicates that, at present, the target of negative/exclusionary screening among Taiwanese institutional investors is gradually shifting from controversial weapons-related industries to those that greatly damage the environment.



Q19 Please state the number of domestic and foreign companies with which you had ESG engagements over the past year (2022) (excluding exercising voting rights)

		2021		2022
Options	Frequency	Number of institutional investors who adopted the method	Frequency	Number of institutional investors who adopted the method
Expressing ESG expectations through an open letter	1,511	11	1,702	15
Performing long-term tracking of ESG performances through in-person visits or phone calls	3,993	36	7,393	47
Expressing ESG expectations by sending a representative to participate in shareholders' general meetings or important extraordinary general meetings	193	11	1,887	18
Presenting proposals that pertain to ESG issues at shareholders' meetings	0	1	0	0

Note 1: The number of proposals that pertain to ESG issues presented at shareholders' meetings was 0 in 2021, because the institution that chose this option did not disclose the frequency of such proposals in their response

Description of item

This item surveyed the method and frequency of ESG engagements among institutional investors. The options included "Expressing ESG expectations through an open letter," "Performing long-term tracking of ESG performances through in-person visits or phone calls," "Expressing ESG expectations by sending a representative to participate in shareholders' general meetings or important extraordinary general meetings," and "Presenting proposals that pertain to ESG issues at shareholders' meetings." In addition to examining the frequency of different engagement methods, the item also revealed the number of institutional investors who chose a specific method.

Key observations

The survey results showed that 94% of institutional investors followed up on ESG engagements by performing long-term tracking of ESG performances through in-person visits or phone calls. The result indicated an 85% growth in the frequency from 2021. The second most common method was expressing ESG expectations by sending a representative to participate in shareholders' general meetings or important extraordinary general meetings. However, in 2022, no institutional investor presented proposals for ESG issues at shareholders' meetings. The outcome suggests that compared to the activeness of foreign institutional investors in presenting proposals to shareholders for improving ESG action, this remains in the embryonic stage for Taiwanese institutional investors.

Q20 Please respond accordingly if your institution has taken any relevant measure toward climate change and net-zero investment

Q20-1 Did your institution include climate change-related risks analysis and management in the investment decision-making process?

Options	2021	2022
Yes	17	30
Νο	49	37

Q20-2 Which climate indicator(s) did your institution use when measuring the climate performance of your investment portfolio? (multiple choice)

Options	2021	2022
Reducing the carbon emissions of the investment portfolio (e.g. calculating the weighted mean carbon intensity or total emission of the portfolio)	11	22
Reducing the implied temperature rise of the investment portfolio (e.g. calculating based on the methodologies of the CDP-WWF and MSCI)	3	4
Others	6	10
No countermeasure	48	38

29

Q20-3 What are countermeasure(s) to the climate change-related risks in your institution's investment portfolio? (multiple choice)

Options	2021	2022
Measuring the carbon emissions of a portfolio	19	32
Negotiating and voting climate change-related issues with investee companies	15	24
Disinvesting in upstream and downstream industries related to fossil fuels (including petroleum, gas, coal)	8	15
Investing in climate change-related themes (renewable energy, carbon capture, carbon sequestration, etc.)	22	24
Investing in green bonds	20	22
Others	5	3
No countermeasure	21	11

Q20-4 Did your institution designate quantification goals and schedules for lowcarbon transition in your investment portfolio? (including carbon reduction goals and temperature goals) (Unit: Number of investors)

Options	2021	2022
Yes, and the carbon reduction goals have been validated by the SBTi	No data	10
Yes, and the carbon reduction goals have been submitted to the SBTi for verification	No data	4
No, but we plan to submit the carbon reduction goals to the SBTi within a year	No data	6
No, but we plan to submit the carbon reduction goals to the SBTi within three years	No data	2
No, but we plan to submit the carbon reduction goals to the SBTi at an unspecified date	No data	8
No, and we currently have no intentions to do so whatsoever	No data	36

Q20-5 Did your institution perform scenario analysis through various methods and tools to assess the impact of climate change-related risks?

	(L	Jnit: Number of investors)
Options	2021	2022
Yes	13	26
No	52	33

Description of item

The purpose of this item was to survey the countermeasures adopted by institutional investors against climate change issues. First, we surveyed whether they include climate change-related risk analysis and management in their investment decision-making process, and then the climate indicators used by them to measure the climate performance of their investment portfolio. The options include the common measures used worldwide, such as reducing the carbon emissions of the investment portfolio (e.g., calculating the weighted mean carbon intensity or total emissions of the portfolio) and reducing the implied temperature rise of the investment portfolio (e.g., calculating based on the methodologies of the CDP-WWF and MSCI), along with the Others option, for which investors could state a specific answer. The investors who selected "No" in Q20-1 meant that they would have to select "No countermeasure" in Q20-2.

This year, we revised the item and options of Q20-4 to examine whether the institutional investors had used the SBTi methodology as a standard for developing their goals for low-carbon transition to facilitate future follow-ups on the investors' implementation statuses. The options included "Yes, and the carbon reduction goals have been validated by the SBTi," "Yes, and the carbon reduction goals have been submitted to the SBTi for verification," "No, but we plan to submit the carbon reduction goals to the SBTi within a year," "No, but we plan to submit the carbon reduction goals to the SBTi within three years," "No, but we plan to submit the carbon reduction goals to the SBTi to submit the carbon reduction goals to the SBTi within three years," "No, but we plan to submit the carbon reduction goals to the SBTi within three years," "No, but we plan to submit the carbon reduction goals to the SBTi at an unspecified date," and "No, and we currently have no intentions to do so whatsoever."

Key observations

"77% more institutional investors had included climate change risk analysis and management in their investment decision-making process than last year"

The survey results showed that 45% (30) of institutional investors had included climate change risk analysis and management in their investment decision-making process, up 77% (13) from last year. The majority of these institutional investors (23) reduced the carbon emissions of their investment portfolio as their main approach. Regarding the countermeasures toward climate risks of their investment portfolio, 48% (32) measured the carbon emissions of a portfolio, 36% (24) negotiated and voted on climate change-related issues with investee companies, and 36% (24) invested in climate change-related themes (renewable energy, carbon capture, carbon sequestration, etc.). Only 16% (11) of institutional investors had no countermeasures to the climate change-related risks in their investment portfolio, down 48% (10) from last year. The decreased number illustrates that institutional investors have become more proactive toward climate change-related risks.

Regarding the designation of quantification goals for low-carbon transition in the investment portfolio and the scenario analysis-based assessment of the impact of climate change risks, 15% (10) of institutional investors had developed carbon reduction goals and passed SBTi validation, while 6% (4) had submitted their carbon reduction goals for SBTi validation. Furthermore, 39% (26) of institutional investors had used various methods and tools to perform scenario analysis-based assessments of the impact of climate change risks, a 1-fold increase from last year's survey (13).



Institutional investors' measures toward climate change-related risks (Q20-3) (Unit: Number of investors)

Q21 To survey the major challenges faced by institutional investors concerning sustainable investing, please select three issues or challenges which your

institution as most pressing.	(Unit: Number of investors)	
Options	2021	2022
It is difficult to measure and define the impact of sustainable investing	38	43
There is lack of disclosed data concerning corporate sustainability-related issues	49	45
It is difficult to measure and perform cross-company comparisons on the ESG performance of sustainable investment targets	49	46
The investment team lacks the motivation to engage in sustainable investing or lacks the awareness of it	5	8
High investment cost	22	28
It is difficult to launch attractive sustainable investment products into the market	4	2
Very few investment opportunities	4	3
Slow rollout of policies and regulations	9	7
Low returns on investment for sustainable investment targets	5	11
Others	0	2
Response rate	94%	99%
Total number of respondents	64	67

Description of item

This item was designed to examine the issues faced by institutional investors concerning sustainable investing. The options were designed based on the results of Pitchbook's Sustainable Investment Survey and in combination with the barriers to the status of and regulations of sustainable investing," "There is a lack of options included "It is difficult to measure and define the impact of sustainable investing," "There is a lack of disclosed data concerning corporate sustainability-related issues," and "It is difficult to measure and perform cross-company comparisons on the ESG performance of sustainable investment targets," "The investment team lacks the motivation to engage in or awareness toward sustainable investing," "High investment costs," "It is difficult to launch attractive sustainable investment products onto the market," "Very few investment opportunities," "Slow rollout of policies and regulations," and "Low returns on investment for sustainable investment targets." The institutional investors selected three issues or challenges that they perceived as most pressing. An "Others" option was made available to serve as a reference for revising survey items.

Key observations

The results revealed that the largest sustainable investing challenge faced by the investors was the difficulty of measuring and performing cross-company comparisons on the ESG performance of sustainable investment targets, as cited by 46 investors, followed by the lack of disclosed data concerning corporate sustainability-related issues (45 investors), and the difficulty of measuring and defining the impact of sustainable investing (43 investors). In general, there were no significant variations with the results of the previous survey.

By dividing the institutional investors into those who have engaged in sustainable investing and those who have yet to do so, the survey revealed that the lack of disclosed data concerning corporate sustainability-related issues was the largest challenge faced by the former, while the difficulty of measuring and performing cross-company comparisons on the ESG performance of sustainable investment targets was the greatest challenge faced by the latter.



The lack of disclosed data concerning corporate sustainability-related issues was the largest challenge faced by the institutional investors who have engaged in sustainable investing (Q21)

Appendix Definition of **Sustainable Investment**

In this study, sustainable investments were categorized into eight investment approaches based on the definition of sustainable investment7 provided by the GSIA, RIAA, JSIF, OECD, US SIF, and Eurosif. The eight approaches include negative/exclusionary screening, positive/best-in-class screening, norms-based screening, ESG integration, sustainability-themed investing, impact investing, shareholder action (exercising voting rights), and corporate engagement. Each approach is defined in the following table:

Negative/ Exclusionary Screening	The exclusion of activities or industries from a fund or portfolio of certain sectors due to their involvement in controversial environmental, social, and governance issues, such as the gambling, tobacco and liquor, pornography, controversial weapons, coal, and palm oil industries.
Positive/Best-in-Class Screening	In contrast to excluding specific sectors or industries when managing and selecting investment targets, investors compare between the ESG performance of target companies and selects the outstanding ESG performers relative to their peers to invest in.
Norms-based screening	Screening of compliance based on international standards or principles (such as the OECD Guidelines for Multinational Corporations and International Treaties, the ILO core labor standards, and relevant UNICEF guidelines), followed by the exclusion of specific investment targets or the adjustment of investment target weights in portfolios.
ESG integration	The systematic and explicit inclusion of ESG risks and opportunities when managing and selecting investment targets, in addition to traditional financial analysis. Thus, investors may need to cover the cost of employing professional ESG analysts or purchasing necessary ESG data. Investors should elaborately disclose the transparency and the system of the integration process.
Sustainability-themed investing	Constructing portfolios by selecting high-performing companies in specific sustainability-related themes (such as water resources, renewable energy, SDGs, etc.) when managing and selecting investment targets.
Impact investing	Impact investing are targeted at resolving social or environmental issues. Impact investing includes community investing, where capital is dedicated to traditionally underserved individuals or communities, as well as financing enterprises that account for society, environmental influence, and financial returns. This type of financing is attractive among enterprises and may offer them preferential interest rates that are lower than market interest rates.
Shareholder action (exercising voting rights)	The shareholders of an investment target company exercise their voting rights to influence the company's business strategies. This does not only include votes in ESG engagement, but also covers authorizing the voting rights to a proxy institution or commissioning other individuals to exercise the voting rights on their behalf.
	The strategic use of shareholder position to directly engage with a



