



PERSEFONI

Via Electronic Mail to rule-comments@sec.gov

May 20, 2022

Secretary Vanessa Countryman
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Public Comment on Proposed Rule: Enhancement and Standardization of Climate-Related Disclosures for Investors - Release Nos. 33-11042; 34-94478; File No. S7-10-22

Dear Secretary Countryman,

On behalf of Persefoni Inc. (“Persefoni”) I am pleased to submit for the public comment file the attached report, “[Costs and Benefits of Climate-Related Disclosure Activities by Corporate Issuers and Institutional Investors](#),” issued May 17, 2022 by The SustainAbility Institute by ERM (“ERM”). The report, which Ceres and Persefoni commissioned, reflects the results of a survey conducted by ERM between February and March, 2022, which was designed to assess a range of corporate and investor costs associated with climate-related disclosure activities.

The full report is appended below.

Sincerely Yours,

Timothy J. Mohin
Chief Sustainability Officer // Persefoni

Costs and Benefits of Climate-Related Disclosure Activities by Corporate Issuers and Institutional Investors

Overview

The SustainAbility Institute by ERM ('ERM') conducted a survey of corporate issuers and institutional investors to understand what U.S. private sector organizations currently spend measuring and managing climate-related disclosure activities. The survey was conducted February-March 2022. Ceres and Persefoni commissioned the survey to help inform mandatory and voluntary climate disclosure guidelines and methods being developed by regulators, standard setters, and individual firms. Specifically, the survey findings are intended to inform discussions related to the U.S. Securities and Exchange Commission's (SEC) recent proposed [Rules on Enhancement and Standardization of Climate-Related Disclosures for Investors](#). Given the ERM survey aimed to assess a broad range of corporate costs connected to climate-related disclosure activities, and because the survey was designed before the draft SEC rule was released, the survey included cost categories not strictly aligned with potential SEC disclosure requirements.

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1. Introduction

On March 21, 2022, the U.S. Securities and Exchange Commission (SEC) proposed new rules to enhance and standardize climate disclosure for investors.¹ Noting concerns that existing SEC rules “have not resulted in the consistent and comparable information about climate-related risks that many investors have stated that they need in order to make informed investment or voting decisions,”² the SEC laid out a set of proposed changes to current regulations that aim to “improve the consistency, comparability, and reliability of climate-related disclosures.”³ Via additions to Regulations S-X and S-K,⁴ the proposed rule includes a broad range of requirements for U.S.-listed corporate issuers regarding disclosure of greenhouse gas (GHG) emissions data and climate-related financial data that would be included within financial filings such as the Form 10-K.⁵

In its economic analysis of potential impacts of the rule, the SEC asks the public to provide “comment on all aspects of our economic analysis, including the potential costs and benefits of the proposed rules and alternatives thereto ... Commenters are requested to provide empirical data, estimation methodologies, and other factual support for their views, in particular, on costs and benefits estimates.”⁶

In its discussion of the benefits and costs of the proposed rules, the SEC notes that its quantification of the anticipated economic impacts is impeded by lack of information about actual current costs of climate-related disclosure activities. In predicting potential costs and benefits of the proposed rule, the SEC examined a number of comment letters, anecdotal figures, and studies that estimate current costs of climate-related disclosure, and based its estimates primarily on six sources.⁷

The SEC notes the difficulty in quantifying current costs for corporate issuers based on such partial information, observing that:

[c]osts related to preparing climate-related disclosures are generally private information known only to the issuing firm, hence such data are not readily available to the Commission. There is also likely considerable variation in these costs depending on a given firm’s size, industry, complexity of operations, and other characteristics, which makes comprehensive estimates difficult to obtain.⁸

The ERM survey that is the focus of this paper provides a window into this “generally private information” for 39 corporate issuer respondents representing a range of industry sectors across the U.S. economy.⁹ The issuers included in the survey results represent over \$3.8 trillion in combined market capitalization, with specific respondents’ market capitalization ranging from less than \$1 billion to over \$200 billion. The companies’ employee counts ranged from less than 1,000 to over 250,000.

In regards to assessing costs for investors, the SEC notes that “existing empirical evidence does not allow us to reliably estimate how enhancements in climate-related disclosure affect information processing by investors or firm monitoring.”¹⁰ The ERM survey provides quantification of the current costs and benefits associated with climate-related disclosure for 35 institutional investor respondents representing a broad range of sizes and investing approaches (see Table 1.1: Respondent Sectors/Types).

Table 1.1: Respondent Sectors/Types¹¹

Issuer Industry Sectors (Respondents could choose all that applied)	Number of Respondents
Healthcare and Pharmaceuticals	2
Financials, Insurance, and Professional Services	4
Consumer Discretionary Products	3
Communication Services	1
Transportation, Construction, and Industrials	5
Consumer Staples	5
Oil, Gas, and Energy	2
Utilities	3
Real Estate	1
Metals, Plastics, and other Raw Material	1
Information Technology	5
Other	9
Investor Types	Number of Respondents
Active asset manager	15
Asset owner	11
Both passive/index and active asset manager	8
Other	1

The survey was conducted from February 16 to March 31, 2022. It was distributed to leaders and subject matter experts in sustainability and climate-related roles in both corporate issuer and institutional investor companies. The survey aimed to assess a broad range of corporate costs connected to climate-related disclosure activities. It was designed and distributed before the SEC’s proposed rule was released, and it included cost categories not strictly aligned with potential SEC disclosure requirements. While this paper’s presentation of results anonymizes the respondents, none of the participating corporate issuers are Smaller Reporting Companies (SRCs) as defined under current SEC guidance,¹² and ERM’s analysis and interpretation thus focuses on non-SRC provisions of the proposed rule. A complete discussion of the scope and methodology of the study is included below as Appendix A of this paper, and the text of the survey questions is included as Appendix B.

2. Issuer Costs & Benefits of Climate-Related Disclosure Activities

2.1 General Findings Related to Issuers

Current measurement and disclosure of climate-related information by U.S. issuers is largely voluntary, designed to meet demands from internal and external stakeholders. Some existing climate-related disclosure activity meets specific compliance requirements an issuer faces from local, state, federal, or international regulations. Whether voluntary or required, current climate disclosure efforts likely generate considerable material that could be used to respond to new disclosure rules. Because of this, it is possible to use estimates of issuers’ current costs to support predictions of the future costs of compliance with the SEC’s proposed rule.

The SEC proposal uses the Task Force on Climate-related Financial Disclosures (TCFD) and the Greenhouse Gas Protocol as the basis for the disclosure requirements. The proposal explains that one goal in doing so is to limit the burden of compliance by leveraging current frameworks and reporting approaches.¹³ Adopting this approach also makes it more feasible for the SEC to develop predictions of future costs of compliance by using estimates of issuers' current costs for climate-related disclosure activities. Compliance with the SEC's proposed rule would, for many issuers, build on their current efforts in measuring and disclosing climate-related information.

2.2 How the SEC derives its cost estimates

In Section V of the proposed rule, the SEC includes predictions of issuers' annual costs and benefits related to compliance.¹⁴ The SEC's estimation of the burden of complying with the rule is based largely on six sources. The SEC walks through its process for using those sources and its own calculations to create estimates of "burden-hours" for the cost elements that make up the predicted activities necessary for compliance with the rule.

Along with the estimated current costs coming from six external sources, the SEC provides its own set of calculated predictions of the costs of compliance with the proposed rule following the first year of its implementation.¹⁵ These estimates are derived from estimates of current costs to issuers, in accordance with the methodology developed under the Paperwork Reduction Act. The SEC includes three cost elements in its calculations: (1) Climate-related disclosures regarding governance, strategy, and risk management; (2) Financial statement metrics; and (3) GHG emissions metrics and targets.¹⁶

Based on estimates of current costs to corporate issuers for those three cost elements, the SEC predicts future cost of compliance with its proposed rule for: (1) GHG Emissions Assurance costs; and (2) Increase in Professional Costs for Affected Respondents.¹⁷ Following an estimated higher cost of \$640,000 in the first year due to activities associated with adopting new disclosure practices, the SEC estimates the annual costs of compliance with the proposed rule for non-Smaller Reporting Company (SRC) registrants to be \$530,000 (\$150,000 for internal costs and \$380,000 for outside professional costs per year.)¹⁸

2.3 Comparing the SEC's estimates of issuer costs with the results of the ERM survey

Following its calculation of the predicted cost of compliance, the SEC requests comment in order to "evaluate the accuracy of our estimate of the burden of the proposed collections of information, including any assumptions used."¹⁹ Although developed and distributed in February 2022, before the SEC's proposed rule was released, the ERM survey provides relevant information that can be used to respond to that request (see Tables 2.1-2.3: Issuer Average Spend, Investor Average Spend, and Total Average Costs).

Table 2.1: Issuer Average Spend among Those Spending in Each Defined Survey Category

Category	Average Spend (USD)	Number of Issuers Reporting Spending in the Category (out of 39)
GHG analysis and/or disclosures	237,000	39
Climate scenario analysis and/or disclosures	154,000	31
Additional climate-related analysis and/or disclosures	130,000	30
Internal climate risk management controls	148,000	27
Proxy responses to climate-related proposals	80,000	19
Assurance/audits related to climate	82,000	28

Table 2.2: Investor Average Spend among Those Spending in Each Defined Survey Category

Category	Average Spend (USD)	Number of Investors Reporting Spending in the Category (out of 35)
External ESG ratings, data providers, and consultants	487,000	33
Collecting climate data related to assets	257,000	29
Internal climate-related investment analysis	357,000	28
Third-party proxy advisor report and/or consulting for voting decisions	154,000	27
In-house, outside counsel, & proxy solicitor analysis of shareholder proposals	405,000	15
Preparing public disclosures	149,000	22

Table 2.3: Total Average Costs

Total Average Costs (USD)	
Issuer total average of survey categories ²⁰	677,000
Issuer average cost for categories covered by the proposed rule ²¹	533,000
Investor total average cost of survey categories ²²	1,372,000

The SEC's estimated annual costs after the first year of compliance are generally comparable to corporate issuers' current average spend as reflected by the ERM survey. The SEC estimated an annual cost of \$530,000 to comply with its proposed rule a year after implementation. The ERM survey's corporate issuer respondents reported current combined average cost of \$533,000 per year based on four ERM survey categories that are similarly defined as – but not identical to – the three cost elements used by the SEC in its calculations of predicted costs. The ERM survey categories were: GHG analysis and/or disclosures; climate scenario analysis and/or disclosures; internal climate risk management controls; and assurance/audits related to climate.

2.4 Issuer Costs in Key Categories

All 39 corporate issuer respondents to the ERM survey reported spending an average of \$237,000 annually on GHG analysis and/or disclosures.²³ This survey category included all costs related to developing GHG inventories, including analysis and disclosure of Scope 1, Scope 2, and/or Scope 3 GHG emissions. This category also included preparation of GHG data for inclusion in public reporting, any analysis related to setting science-based targets, and other similar efforts to understand GHG emissions.

Note: ERM survey respondents were asked to report costs based on one financial year, either 2020 or 2021. Due to the nature of climate-related disclosure activities, not all issuers would necessarily have incurred costs in all survey categories during their chosen year. For example, an issuer may have done scenario work in one year and reported on it in another. For full data on the average spend by issuer respondents within each survey cost category as well as the number of respondents noting spend in that category for the designated year, please see the costs in Tables 2.1-2.3.

Four survey cost categories reported by issuer respondents in ERM's survey are incorporated into the estimate of \$533,000 annual cost discussed above. Along with the GHG emissions analysis costs just described, three other survey cost categories for climate-related disclosure activities were covered by the cost elements defined by the SEC. The specific costs captured by the survey in each of the three additional categories are discussed in more detail below.

Climate scenario analysis and/or disclosure spend averaging \$154,000 annually was reported by 31 of the 39 issuer respondents, nearly 80 percent. This survey cost category includes all costs to a company related to conducting assessments of the impact of climate in the short, medium, or long term using scenario analysis as well as TCFD/CDP disclosure of risks and opportunities. Respondents were asked to exclude from this category any costs that they included in their costs of GHG analysis and disclosures. As with all survey responses, respondents provided data for only one fiscal year of spend, which is of note here since scenario analysis is often a multi-year process.²⁴

Twenty-seven issuers, almost 70 percent of respondents, noted costs averaging \$148,000 annually related to integrating climate risk into business processes. This category included costs for internal climate risk management controls, namely the costs related to integrating climate risk into enterprise risk management, oversight at the board level, strategic planning, internal audit, and other fundamental business processes. In addition, this category included issuer costs related to climate-related data collection and aggregation, including IT costs and staff time; internal review of climate-related data collection by management, committees, and board; in-house counsel drafting; and review by outside counsel.

As well, 28 issuer respondents, over 70 percent, reported current annual costs of \$82,000 related to third-party full or partial assurance or audit related to climate. Stakeholders expect increasing accuracy in GHG emissions data and other climate-related information, and issuers may elect to undertake third-party assurance or internal audit related to this data. Issuers with operations in certain markets or jurisdictions may also face regulatory demands for assurance of some climate-related disclosures.²⁵ This cost category encompasses such activities.

As stated in the Introduction, given the ERM survey aimed to assess a broad range of corporate costs connected to climate-related disclosure activities, and because the survey was designed before the draft SEC rule was released, the survey included some cost categories not strictly aligned with potential SEC disclosure requirements.

In addition to categories aligned with potential SEC disclosure requirements, the survey also captured current issuer costs for two categories of climate-related spend for activities not directly required for disclosure on the Form 10-K or other forms subject to the SEC's proposed regulatory amendments. One of these is the important category of costs related to proxy responses to climate-related shareholder proposals, which relate to SEC filings not addressed by the proposed rule.²⁶ The other is spend related to additional voluntary climate-related analyses and disclosures for processes largely disconnected from current and proposed climate-related disclosure regulation by the SEC such as outreach, engagement, and management.

Climate-related shareholder proposals have become a common feature of the annual proxy season, with 110 filed by shareholders of U.S. corporate issuers in 2022, a 10-year high.²⁷ Studies of recent proxy voting trends have found that institutional investors more often support such measures than they did in the past.²⁸ Heightened awareness of climate-related shareholder proposals, contested ballots, and engagement policies at major institutional investors²⁹ have increased the focus on shareholder voting power at many issuers. Issuers may elect to spend significantly on the processes related to submission and response to climate-related shareholder proposals. Nineteen issuers, almost half of respondents, indicated that they spend an average of \$80,000 per year on costs related to this category.

The other cost category tracked in the ERM survey that is not covered by the SEC proposal relates to costs involved in voluntarily taking on additional climate-related analyses and disclosures such as stakeholder engagement, government relations, low-carbon transition planning, and the preparation of related disclosures. Thirty issuers or nearly 77 percent of respondents indicated that they spend an average of \$130,000 annually in this category. Many corporate issuers have taken on costs in these categories as a part of a business strategy, for instance to better understand their position within the changing landscape of climate action and/or to respond to stakeholder and/or investor demands. Activities in this category, such as the development of climate transition plans, are also encouraged within disclosure approaches such as the TCFD framework or the GDP disclosure.³⁰

When reported costs in the two survey categories not covered by the SEC's proposed rules are taken into account, the ERM survey finds that corporate issuers currently spend an average of \$677,000 per year on climate-related disclosure activities.

The survey also provided an option for respondents to include any additional costs for climate-related disclosure activities not covered by the defined survey categories. Nine of the 39 issuer respondents noted at least one additional individual, company-specific, "other" cost not included in the defined survey categories. These nine companies reported spending an average of \$76,000 annually in this catch-all category.³¹

2.5 Specific Takeaways re Costs Reported by Issuers

The survey's 39 issuer respondents represent a broad range of industry sectors across the U.S. economy, ranging from information technology to oil & gas.³² The issuers included in the survey results represent at least \$3.8 trillion combined market capitalization, with specific respondents' market cap ranging from less than \$1 billion to over \$200 billion. The issuer respondents include 29 large accelerated filers, of which 27 are U.S. firms and two are Foreign Private Issuers (FPI),³³ with the remaining respondents including companies anticipating filing an S-1, accelerated filers, and non-accelerated filers. Along with market cap, ERM asked issuer respondents to indicate the size of their companies by estimating the number of employees; these answers ranged from fewer than 1,000 to over 250,000.

One notable element of the SEC's proposed rule is the establishment of a requirement related to Scopes 1 and 2 GHG emissions assurance that would gradually come into effect in the years after the initial provisions of the rule took effect.³⁴ The assurance requirement would be phased in, with limited assurance required in the year following initial compliance and reasonable assurance two years after initial compliance with the disclosure rules.³⁵ The SEC notes that, "Increasing investor demand for consistent, comparable, and reliable climate-related financial information appears to have led a growing number of companies to voluntarily obtain third-party assurance over their climate-related disclosures both within the U.S. and globally."³⁶

ERM's issuer survey included a separate cost category for any external assurance or audits related to climate, covering both third-party full and partial assurance. As noted above, 28 of the issuer respondents reported current average spend of \$82,000 per year for this category.

The ERM survey did not ask issuer respondents to include details of the specific level of assurance or the scope of business practices covered, whether assurance covered all locations or all business units, or whether it consisted of limited or reasonable assurance. The costs reported by issuer respondents may include third-party assurance of Scope 1 and/or 2 GHG emissions metrics, financial metrics, or both.

In the proposed rule, the SEC notes that "the additional compliance efforts required to comply with the proposed assurance requirement should be limited for the many registrants that—according to commenters and others—are already obtaining limited assurance for their climate-related disclosures." The survey finding that 72 percent of issuer respondents already obtain some level of climate-related audit/assurance is broadly in line with the SEC's supposition that many issuers are already obtaining assurance for their climate-related disclosures.³⁷

2.6 Specific Takeaways re Benefits Reported by Issuers

Along with discussions of costs, the survey asked issuer respondents to rate how strongly they thought their company was impacted by certain potential benefits of climate-related disclosures and impact assessments. For the issuer respondents answering this question, the highest ranked benefit was "better performance in meeting sustainability, climate, ESG, and SDG goals."

The second highest was “better access to data capable of enhancing corporate strategy,” and the third highest was “better relationships/reputation with NGOs, non-profits, and civil society.” In the proposed rule, the SEC notes that:

[m]ore consistent, comparable, and reliable disclosures could lead to capital market benefits in the form of improved liquidity, lower costs of capital, and higher asset prices (or firm valuations). These benefits would stem from reductions in information asymmetries brought about by the required disclosure of climate-related information, both among investors and between firms and their investors.³⁸

While issuers noted a broad range of benefits as discussed above, the one that scored the lowest on average was “lower cost of capital.” While issuer respondents rated this benefit lowest, some ranked it highly, and a correlation was found between spending more on overall climate-related disclosure and recognizing a lower cost of capital. This suggests that issuers spending more on climate-related disclosure may be recognizing additional benefits.

The 11 issuer respondents that rated “lower cost of capital” as a 4 or 5 (very important) on a scale of 1 to 5 spent nearly twice as much on average on overall climate-related disclosure activities as did the 28 issuer respondents that rated it 3 or below.³⁹ This correlation is seen in the survey results on the level of individual issuers’ current disclosure practices, and its finding is informative within the context of potential capital markets benefits of the SEC proposed rule. In its predictions of beneficial effects of the proposed rules for capital formation, the SEC cites academic studies that found that firms voluntarily disclosing GHG emissions had lower costs of equity and loan spreads.⁴⁰

This survey finding suggests that if more comprehensive and reliable climate-related disclosure were to be required of issuers, the SEC’s observation about potential benefits to capital markets may be realized.

3. Investor Costs & Benefits of Climate-Related Disclosure Activities

3.1 General Findings Related to Investors

ERM surveyed investors as well as corporate issuers, finding that institutional investor respondents spend an average of \$1,372,000 annually to collect, analyze, and report climate data to inform their investment decisions.

The current costs for investors are most effectively analyzed and understood separately from issuers' current costs. This is because investor costs may include not only their own disclosure efforts, but also a broad range of issuer, portfolio, and sector-level investment-related analysis of climate-related disclosure, performance, and risks. The types of institutional investors answering the survey were diverse, including asset owners such as pension funds and large endowments, relatively small active asset managers, and a range of publicly traded asset management firms with assets under management (AUM) in excess of \$1 trillion.

3.2 Specific Takeaways on Costs Reported by Investors

Among investor respondents that shared their costs for defined survey categories of specific climate-related disclosure activities, the most commonly reported area of spend is on external ESG ratings, data providers, and consultants. This is a realm in which nearly all responding investors are active, with 33 of 35 investors, 94 percent of respondents, indicating average spend of \$487,000 during the financial year for which they reported. This category includes all costs for external consultants as well as services investors use to acquire information related to ESG ratings, data providers, and analytical services including Bloomberg Terminal ESG Data, CDP Scopes 1-3 Emissions Datasets, FTSE Russell ESG Ratings, ISS-ESG Ratings, MSCI ESG Ratings, Moody's ESG, Morningstar, and S&P (Trucost/DJSI).

Twenty-nine of the 35 investor respondents, or almost 83 percent, reported spending an average of \$257,000 per year on collecting climate data related to assets. This category included all costs associated with collecting and ensuring the accuracy of climate-related data for analysis related to any managed or owned assets, including that associated with internal staff time and external consultants to ensure accuracy of climate-related data.

Twenty-eight investors, or 80 percent of respondents, reported average spending of \$357,000 per year on internal climate-related investment analysis, including all costs associated with managing and analyzing data collected from assets. This survey category includes the management of databases, data aggregation, and/or normalization for the purposes of managing and analyzing climate-related data.

Additional cost categories for investor respondents included in the ERM survey were: in-house, outside counsel, and proxy solicitor analysis of shareholder voting for ballot items, including all costs associated with any counsel for voting ballot items related to climate change, where 15 investor respondents, or 43 percent, indicated an average annual spend of \$405,000; third-party proxy advisor reports and/or consulting for voting decisions, including all costs associated with reports or consulting for voting decisions related to climate change for both shareholder proposals and management proposals, where 27 investor respondents, or 77 percent, reported average annual spend of \$154,000; and preparing public disclosures, where 22 investor respondents, or 62 percent, said they spend an average of \$149,000 per year.

The cost questions for investor respondents also included an additional “other” category allowing respondents to write in additional costs of climate-related disclosure activities not included in ERM’s categories. While only two investors used this “other” category to specify costs, those that did were large institutions, and they took time to describe sophisticated climate data processes. One active asset manager with over \$1 trillion AUM noted “engagement with companies in private and public markets” as an additional cost category.⁴¹ Another respondent, this one with over \$1 trillion AUM in both active and passive asset management vehicles combined, explained their firm’s additional data costs by noting that it has “a huge data budget and a large stewardship team, so the numbers are very large especially when taking headcounts in scope”, and continuing, “(a)nd then we also have regulatory and risk staff that is [sic] also focused on climate.”⁴²

For some investor respondents, breaking down costs on climate-related activities in the categories ERM provided may have been difficult given their costs may be embedded within larger internal cost structures and included within different management pillars. ERM’s survey provided cost ranges for respondents to choose from when answering rather than requiring respondents to enter specific figures as a way to allow respondents to estimate costs per category. One respondent noted that estimating costs for ERM’s category of in-house, outside counsel, and proxy solicitor analysis of shareholder voting for ballot items was difficult because the “legal and compliance teams work across global markets,” which makes estimating costs of U.S. activities alone difficult. The same respondent noted that the cost of preparing public disclosure was currently “highly difficult to calculate as these are via both regulated and informal (e.g., website) disclosures,” and that collection of climate data related to assets was the responsibility of a “six person team as central resource.”⁴³ As a result of the difficulty of defining this portion of their costs of climate-related disclosure activities within ERM’s pre-defined categories, this respondent included additional costs under the “other” category to ensure that all costs were captured.

Other investor respondents noted difficulties in estimating costs for categories that required gauging the percentage of full-time equivalent (FTE) time spent specifically on climate-related activities.⁴⁴ Cost and time tracking practices vary from firm to firm, and certain investors may have more difficulty accurately gauging annual cost for categories defined by the survey due to their processes for internal cost tracking. In those instances, costs for climate-related disclosure activities may be more clearly understood as part of the firm’s overall investment approach and business processes rather than an as separate add-on cost. For example, one asset owner marked zero for the category “collecting climate data related to assets” noting that this process was “done internally with existing staff resources.”⁴⁵ Another respondent marked zero for “internal climate-related investment analysis” noting that “[t]his does not reflect hours of FTE time.”⁴⁶ Additional discussion of the role of climate-related activities as a business practice, rather than a cost burden, can be found in this paper’s Conclusion.

3.3 Specific Takeaways re Benefits Reported by Investors

Along with costs, ERM’s survey asked investor respondents how much benefit their firms currently recognize from the climate-related disclosure activities they undertake (see Table 3.1: Average Score of Benefits).

In the proposed rule, the SEC notes that climate-related disclosure by issuers would improve comparability of standardized content, efficiency of information processing, and reliability,⁴⁷ likely providing benefits to investors in the form of “access to more consistent, comparable, and reliable disclosures with respect to registrants’ climate-related risks...[which] is expected to enable investors to make more informed investment or voting decisions.”⁴⁸

Table 3.1: Average Score of Benefits

Investors	Rank (5 = Highest)
Meet client/customer demands for climate disclosures and related products	4.1
Better performance in meeting sustainability, climate, ESG, and SDG goals	3.9
Reduced risk of owning a company	3.8
Improved financial performance	3.6
Better access to data capable of enhancing corporate strategy	3.5
Better relationships/reputation with NGOs, non-profits, and civil society	3.4
Improved operational performance	2.9
Meet disclosure obligations imposed by regulation (e.g. EU SFDR)	2.6
Increased ability to attract and retain employees	2.4
Lower cost of capital	2.4

Issuers	Rank (5 = Highest)
Better performance in meeting sustainability, climate, ESG, and SDG goals	4.5
Better access to data capable of enhancing corporate strategy	4.1
Better relationships/reputation with NGOs, non-profits, and civil society	3.7
Reduced risk factors	3.6
Increased ability to attract and retain employees	3.3
Improved operational performance	3.6
Improved financial performance	3.2
Lower cost of capital	2.8

The highest-ranked benefit among investor survey respondents is “meet client/customer demands for climate disclosures and related products” followed by “better performance in meeting sustainability, climate, ESG, and SDG goals.” For investor respondents, benefits reported in survey responses are balanced between two factors relying on climate-related data and analysis. On the one hand, investor respondents report that they recognize benefits via improved investment performance – that ability to meet client demand for ESG investment products. On the other, they cite benefits related to being better able to meet stakeholder demand for climate-related disclosure and data about the firm itself.

The rest of the top five most highly-rated benefits for investors were “reduced risk of owning a company,” “improved financial performance,” and “better access to data capable of enhancing corporate strategy,” all of which relate to improved investment performance.

The SEC identifies such investment-focused benefits as ones likely to be more pronounced under its proposed rule, noting the potential for improved “ability to assess [climate-related] risks and their impact on registrants’ financial condition and operations, thereby allowing investors to make better-informed investment decisions,” and “mitigat[ing] adverse selection problems that may arise in the presence of asymmetric information.”⁴⁹

As noted above, investors may use climate-related information for investment decision-making as well for disclosure and related activities. To gain more insight into the ways this occurs, ERM asked investor respondents to indicate how they currently use climate-related information within their investment decision-making processes (see Table 3.2: Investors’ Reported Uses of Climate Data). Two uses tied for first place, with 30 respondents indicating that they made use of climate-related information in shareholder engagement through stewardship management, and an equal number indicating they used it to support proxy voting decisions for shareholder proposals. The next most commonly reported uses were: managing portfolio-wide risks; portfolio construction; proxy voting decisions for management proposals; and buy-sell-hold decisions for individual securities.

Use	Number of Respondents Using Data
Shareholder engagement via stewardship management	30
Proxy voting decisions for shareholder proposals	30
Managing portfolio-wide risks	29
Portfolio construction	28
Proxy voting decisions for management proposals	27
Buy-sell-hold decisions for individual securities	22

As the purpose of the SEC’s proposed rule is to provide useful information for investors, understanding how investor respondents use this information in the investment process is relevant. The SEC notes that “under the current regime, many climate-related risks may be unobservable or obfuscated, giving short-term-focused managers an incentive to initiate projects exposed to these risks without properly informing investors.”⁵⁰

Although the survey indicates that investors are using climate-related information in stewardship management, investors may be hampered by a lack of reliability or completeness in what issuers provide. The proposed rule notes that issuers “often provide information outside of Commission filings and provide different information, in varying degrees of completeness, and in different documents and formats—meaning that the same information may not be available to investors across different companies.” It also notes that:

companies primarily provide this information separate from their financial reporting, [so] it may be difficult for investors to determine whether a company’s financial disclosures are consistent with its climate-related disclosures... [and the information] is not subject to the full range of liability and other investor protections that help elicit complete and accurate disclosure by public companies.⁵¹

Finally, in the proposed rule, the SEC notes the potential for portfolio-level benefits because “any enhancements in the portfolio companies’ disclosures can subsequently be leveraged by these financial firms in assessing the risks to their portfolios and to the firm as a whole.”⁵²

4. Scope 3 Emissions Measurement

4.1 Issuer Measurement of Scope 3 Emissions

ERM's survey asked all issuer and investor survey respondents to indicate whether they currently measure their Scope 3 GHG emissions as a possible indicator of their overall commitment to using climate-related metrics (see Table 4.1: Respondent Climate-Related Disclosure Practices).

Table 4.1: Respondent Climate-Related Disclosure Practices			
Issuer	Yes	No	N/A
Issued TCFD Report	18	21	0
Issued Sustainability Report	32	7	0
Reported on GHG emissions	35	4	0
Currently measure Scope 3 GHG emissions	28	10	1
Investor	Yes	No	N/A
Issued TCFD Report	13	22	0
Issued Sustainability Report	20	15	0
Reported on GHG emissions	11	24	0
Currently measure Scope 3 GHG emissions	14	18	3

Seventy-four percent or 28 of the 38 issuer respondents answering this question in the survey reported that they currently measure Scope 3 emissions.

While the measured data may not be disclosed publicly, this signals a high level of engagement to measure and address climate risk among issuer respondents.

Issuer respondents may not disclose Scope 3 estimates due to concerns about disparate approaches and methodologies for estimation.⁵³ The SEC notes in the proposed rule “that the methodologies pertaining to the measurement of GHG emissions, particularly Scope 3 emissions, are evolving”⁵⁴ and that as Scope 1 and 2 disclosure becomes more common, the cost and reliability of Scope 3 reporting will improve. The SEC also observes that:

[Although] a registrant may not own or control the operational activities in its value chain that produce Scope 3 emissions, it nevertheless may influence those activities, for example, by working with its suppliers and downstream distributors to take steps to reduce those entities’ Scopes 1 and 2 emissions (and thus help reduce the registrant’s Scope 3 emissions) and any attendant risks. As such, a registrant may be able to mitigate the challenges of collecting the data required for Scope 3 disclosure.⁵⁵

Corporate issuers that currently measure their Scope 3 emissions may be more likely to benefit from lower overall climate-related disclosure costs under the proposed rule, and the proposed rule may increase the amount of accessible and reliable Scope 1 and 2 GHG emissions reported within a given issuer’s value chains, which may improve the availability and quality of that issuer’s own Scope 3 emissions disclosure.

4.2 Investor Measurement of Scope 3 Emissions

ERM also asked investor respondents to indicate whether their organizations currently measure Scope 3 GHG emissions (see Table 4.1: Respondent Climate-Related Disclosure Practices). For investors, Scope 3 consists largely of financed emissions, which are defined as emissions from assets in which the firm invests via debt or equity. Of the 32 investor respondents answering this question in the survey, 14 respondents, or 44 percent, reported that they currently track their Scope 3 emissions, a markedly lower percentage than found among issuer respondents. The difference in Scope 3 measurement is even greater when asset owners' responses are separated from those of other investors. Only one of 11 asset owner respondents reported measuring Scope 3 emissions. The reasons behind asset owners' current pattern of lower Scope 3 tracking are not clear from the survey responses. This may be worth further inquiry by asset owners themselves, and/or by stakeholders or regulators.

The lower number for tracking Scope 3 among investor respondents may be due in part to the difficulty of getting the company data required to populate this category. Because calculations of financed emissions under Scope 3 are dependent on the reporting of Scope 1 and 2 by issuers within investors' portfolios, data quality and data availability may be limited by the obtainability of issuer data.

One asset owner, a very large pension fund, indicated that it did not track Scope 3 emissions due to lack of data, not due to a disinclination to track.⁵⁶ Another respondent, an active asset manager with over \$1 trillion AUM, wrote:

Please note on Scope 3 emissions that we [are] currently constrained by lack of underlying verifiable data from issuers - so our work is largely focused on the 'systemically important carbon emitters' via Climate Action 100+ which covers 85% of industrial emissions. It's vitally important that the SEC includes Scope 3 in its risk reporting requirements.⁵⁷

In the proposed rule, the SEC noted that the Partnership for Carbon Accounting Financials (PCAF) had submitted a comment letter that included an estimate of costs and efforts of GHG accounting for financial institutions based on a survey of 18 PCAF signatories including banks, insurance companies, asset owners, and asset managers. That study reported annual costs for measurement of financed emissions for financial institutions to be below \$20,000 per year, but the study's measurement process covered only a fraction of the total AUM for the institutions in the study. The asset size of the respondents ranged from \$1 billion to \$500 billion, but the assets covered by the disclosure activity was much lower. On average, the assets covered by the GHG disclosure activity was in the \$5 billion- \$20 billion category.⁵⁸ This suggests that investors may lag on tracking Scope 3 not necessarily because it is expensive, but because they are hampered by lack of available and reliable data from issuers.

5. Patterns in Disclosure Practices

ERM also asked respondents to indicate the type of climate-related public disclosure that they were already undertaking (see Table 5.1: Length of Time Producing Climate-Related Disclosure). The survey found 82 percent of issuer respondents and 57 percent of investor respondents had issued a sustainability report in the past year. The divergence between issuer and investor frequency may be related to the fact that the investor respondents include a number of nonpublic entities, namely several pension funds and other asset owners, as well as smaller active asset managers. Additionally, 90 percent of issuer respondents issued a report on GHG emissions, while only 31 percent of investor respondents did so.

When it comes to TCFD, the divergence is not as pronounced: 46 percent of issuers and 37 percent of investors responding to the survey indicated that they had engaged in reporting related to TCFD in the past year.

Table 5.1: Length of Time Producing Climate-Related Disclosure

	0-1 yr	1-5 yrs	5-10 yrs	>10 yrs	n/a
Issuers	3	16	7	12	1
Investors	2	13	9	5	6

In addition to the categories of public disclosure that ERM specifically asked about, a broad range of investor and issuer respondents also indicated that they conducted additional sustainability-related and/or climate-related reporting, including CDP (formerly the Carbon Disclosure Project), Global Reporting Initiative (GRI), Science Based Targets initiative (SBTi), and Sustainability Accounting Standards Board (SASB)-related reports and disclosures.⁵⁹ On the investor side, respondents also indicated a variety of additional disclosures, including impact analyses, portfolio-level carbon footprinting, Principles for Responsible Investment (PRI) reporting, and private Limited Partner (LP) ESG reports.⁶⁰ The ERM dataset also includes foreign private issuers (FPIs) that are subject to expectations and regulations in the European Union as well as the U.S., and two EU-based FPI large accelerated filers noted they had issued an Integrated Annual Report.⁶¹

6. Conclusion: Evolving Approaches to Climate-Related Disclosure Activities

Voluntary climate-related disclosure activities have been evolving and expanding among both issuers and investors in recent years. This is apparent from the ERM survey, with some respondents noting that they are in the process of expanding the climate-related disclosure activities they undertake right now. For example, one large utility company noted that, “We have not tracked these costs precisely but will be doing that going forward.”⁶²

That utility is not alone in anticipating and acting to meet increasing demand for climate-related disclosure. Several issuer respondents replied “no” to the survey’s opening question asking whether their company spent “time or resources collecting and/or analyzing data related to climate change (e.g., for use in climate reporting, disclosure, or corporate decision making).” When prompted as to why they did not yet disclose on climate-related topics, they noted that they plan to do so in coming years. One telecom sector issuer respondent noted that while they do not currently disclose on climate, they “are in the beginning of our journey. The first ESG-related role was hired in 2021.”⁶³ Another firm that reported spending no time or resources in 2020 or 2021 indicated that they “are starting now on 2022. We did a pilot project in 2019 but now to expand our entire organization [sic].”⁶⁴ A small private firm that responded to the survey indicated that, “we are a startup with limited resources that hopes to measure in near [future].”⁶⁵ Although measuring future ambition was not a goal of the survey, these anecdotal answers are suggestive of a trend towards increasing disclosure.

The survey asked respondents to report on current costs incurred due to climate-related disclosure activities. Several observed that their current costs for these activities should not be understood as a burden.

One small asset manager stated that “[t]hree of the ‘costs’ are the function of our employee/owners jobs. We created our business to do these things. So I’m not sure that there are ‘costs’ in the sense that they are additional burden. It is what we setup our business to do.”⁶⁶ Likewise, some issuers noted that their engagement on climate-related disclosures was seen as an opportunity as well as an expense. A building materials company noted that, “This is a business opportunity for us, not a response to regulatory expectations.”⁶⁷

Investor and issuer respondents to the ERM survey cited varied strategies and approaches for climate-related disclosure activities. Firms may elect to take on specific climate-related disclosure activity costs or to delay them based not only on regulatory necessity, but also on management strategy and in response to stakeholder expectations.

Overall, the ERM survey finds considerable evidence of climate-related disclosure activity being undertaken by U.S. corporate issuers and investors in advance of the release of the SEC’s proposed rule, suggesting that adoption of the rule is something that many companies current activity will have helped prepare them to address.

Endnotes

¹ “The Enhancement and Standardization of Climate-Related Disclosures for Investors, A Proposed Rule by the Securities and Exchange Commission.” *Federal Register* Vol. 87, No. 69 (April 11, 2022) (to be codified at 17 CFR 210, 229, 232, 239, and 249). Accessed 14 May 2022. <https://www.govinfo.gov/content/pkg/FR-2022-04-11/pdf/2022-06342.pdf>.

² *Fed Reg* 21413.

³ *Ibid*.

⁴ *Fed Reg* 21345. Regulation S-X focuses on financial statements, while S-K focuses on qualitative descriptions.

⁵ *Fed Reg* 21413-21415.

⁶ *Fed Reg* 21452.

⁷ *Fed Reg* 21453.

⁸ *Fed Reg* 21428.

⁹ Full tally in Table 1.1: Respondent Sectors/Types. Because of the diversity of companies that the survey respondents represent, ERM’s analysis of the 39 responses upon which the survey is analyzed is not broken down by issuers’ industry sector or other descriptive category.

¹⁰ *Fed Reg* 21428.

¹¹ Throughout, survey findings are presented in USD and are rounded to nearest 000 for cost estimates. All percentages rounded to nearest whole number.

¹² Please note that due to the composition of this survey’s issuer respondents, throughout this paper, discussion and analysis of the SEC proposed rule will focus on non-SRC issuers. A Smaller Reporting Company (SRC) is defined as a company that has public float of less than \$250 million; or that has less than \$100 million in annual revenues and public float of less than \$700 million (or no public float). <https://www.sec.gov/education/smallerbusiness/goingpublic/SRC>.

¹³ *Fed Reg* 21346-7.

¹⁴ “V. Paperwork Reduction Act.” *Fed Reg* 21452-21462. The Paperwork Reduction Act of 1995 aims to reduce individual and corporate paperwork burden necessary for compliance with federal laws. In accordance with the PRA, the SEC includes in the proposed rule Section V, which provides information about, and estimates of, the predicted hours and costs that would be associated with preparing and filing the forms and reports required by the proposed rule.

¹⁵ *Fed Reg* 21439. Note also that the SEC is not required to provide specific cost-benefit analysis in a proposed rule. “Notably, nothing in relevant case law suggests that the SEC must support every assumption in its cost-benefit analysis with empirical evidence, quantify all of the rule’s significant impacts, or demonstrate that aggregate quantified benefits outweigh aggregate quantified costs. Instead, the Commission need only provide a reasoned explanation for its assumptions (taking into account available empirical evidence), make a good-faith effort to quantify impacts when possible and, when quantification is not possible, explain why.” Jack Lienke and Alexander Song. 2022. Assessing the Costs and Benefits of Mandatory Climate Risk Disclosure. ii. Accessed 14 May 2022. https://policyintegrity.org/files/publications/Climate_Risk_v3_%281%29.pdf. See also SEC Office of Inspector General. Follow-Up Review of Cost-Benefit Analyses in Selected SEC Dodd-Frank Act Rulemakings. 2012. Accessed 14 May 2022. <https://www.sec.gov/about/offices/oig/reports/audits/2012/499.pdf>.

¹⁶ Estimated Paperwork Burden Effects of the Proposed Amendments for Non-SRC and SRC Registrants.” Column 2, PRA Table 1. *Fed Reg* 21457.

¹⁷ PRA Table 3 *Fed Reg* 21459.

¹⁸ *Fed Reg* 21439.

¹⁹ *Fed Reg* 21462.

²⁰ For calculating total average cost, issuer overall average was calculated including issuers reporting zero in each category. For this calculation (39 total issuers in every category) included categories are: GHG analysis and/or disclosures, 237,000; Climate scenario analysis and/or disclosures, 126,000; Internal climate risk management controls, 105,000; Assurance/audits related to climate, 61,000; Additional climate-related analysis and/or disclosures, 102,000; Proxy responses to climate-related proposals, 42,000. Other respondent-specific costs reported that were reported as “other” write-in costs were excluded from the average.

²¹ Excluded cost categories for this calculation total 144,000 (additional climate-related analysis and/or disclosures; proxy responses to climate-related proposals).

²² For calculating total average cost, investor overall average was calculated including investors reporting zero in each category. For this calculation (35 total investors in every category) included categories are: External ESG ratings, data providers, and consultants, 473,000; Collecting climate data related to assets, 226,000; Internal climate-related investment analysis, 294,000; Third-party proxy advisor report and/or consulting for voting decisions, 126,000; In-house, outside counsel, & proxy solicitor analysis of shareholder proposals, 184,000; Preparing public disclosures, 99,000. Other respondent-specific costs reported that were reported as “other” write-in costs were excluded from the average.

²³ For full definitions of all cost categories in the survey, see Tables 2.1-2.3.

²⁴ The costs associated with climate scenario analysis and transition planning would be treated the same way under the proposed rule. Neither is required to be conducted but for both cases, if they are conducted by an issuer they must be disclosed. “A registrant also would be required to describe any analytical tools, such as scenario analysis, that the registrant uses to assess the impact of climate-related risks on its business and consolidated financial statements, or to support the resilience of its strategy and business model in light of foreseeable climate-related risks.” *Fed Reg* 21356.

²⁵ The European Commission’s proposed Corporate Sustainability Reporting Directive would include such a requirement. Accessed 14 May 2022. https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en.

²⁶ The proxy statement and other filings and disclosures related to the proxy process are regulated by the SEC separately from those subject to the proposed rule.

²⁷ As You Sow. *Proxy Preview* 2022. 14-29. Accessed 14 May 2022. <https://www.proxypreview.org/2022/report>.

²⁸ Ceres, Inc. As Climate Risks Skyrocket, Largest Asset Managers Vote for More Climate-Related Shareholder Proposals, Tipping Support to Record Levels in 2021. Online Posting. Accessed 14 May 2022. <https://www.ceres.org/news-center/blog/climate-risks-skyrocket-largest-asset-managers-vote-more-climate-related>.

²⁹ For one example, see BlackRock’s statements of climate-related proxy voting and stewardship approach. BlackRock. 2022. “Climate Risk and the Global Energy Transition: Investment Stewardship. Accessed 14 May 2022. <https://www.blackrock.com/corporate/literature/publication/blk-commentary-climate-risk-and-energy-transition.pdf>; BlackRock. 2022. “BlackRock Investment Stewardship: Proxy voting guidelines for U.S. securities.” Accessed 14 May 2022. <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-guidelines-us.pdf>.

³⁰ CDP. 2022. Just a Third of Companies (4002/13,100+) That Disclosed Through CDP in 2021 Have Climate Transition Plans. Online posting. Accessed 14 March 2022. <https://www.cdp.net/en/articles/companies/just-a-third-of-companies-4002-13-100-that-disclosed-through-cdp-in-2021-have-climate-transition-plans>. Note that the existence of low-carbon transition planning, if conducted by an issuer, would be required disclosure under the rule: “If a registrant has adopted a transition plan, the proposed rules would require it to describe its plan, including the relevant metrics and targets used to identify and manage physical and transition risks.” *Fed Reg* 21361.

³¹ For example, Respondent #166, “Customer responses on product embodied carbon;” Respondent #182, “Direct investment in reducing supply chain ghg emissions.”

³² Full tally in Table 1.1: Respondent Sectors/Types. Because of the diversity of companies that the survey respondents represent, ERM’s analysis of the 39 responses upon which the survey is analyzed is not broken down by issuers’ industry sector or other descriptive category.

³³ Comprised of two large accelerated filers (LAFs) filing on Form 20-F and one Canadian firm below the LAF threshold filing on Form 40-F. A foreign private issuer (FPI) is a non-US issuer with an international incorporation and over 50 percent shareholders of record with non-US citizenship. SEC. Accessing the U.S. Capital Markets: A Brief Overview for Foreign Private Issuers. Accessed 14 May 2022. <https://www.sec.gov/divisions/corpfin/international/foreign-private-issuers-overview.shtml>.

³⁴ SRCs would not be subject to the proposed assurance requirement.

³⁵ For large accelerated filers this phase-in process is initiated in the second year of the rule. For accelerated/non-accelerated filers it is initiated in the third year. *Fed Reg* 21411-2.

³⁶ *Fed Reg* 21394.

³⁷ This should be compared to two estimates based on information from 2020 and 2019, respectively. “53% of the S&P 500 companies had some form of assurance or verification over climate-related metrics” which SEC cites from CAQ, *S&P 500 and ESG Reporting* (Aug. 9, 2021) and “up to 61% of [the top 100 companies (by revenue)] companies... obtaining assurance” *Fed Reg* 21394 fn 587.

³⁸ *Fed Reg* 21430.

Endnotes

³⁹ Average spend for the issuers marking this category a “4” or “5” was 1,023,000. Average spend for the issuers marking this category a “3” or lower was 541,000. A response selection of n/a was scored as a zero for analysis.

⁴⁰ *Fed Reg* 21447.

⁴¹ Respondent ID #196.

⁴² Respondent ID #174, input in “any extra comments or clarifications” field.

⁴³ Respondent ID #196.

⁴⁴ For example, “Done internally with existing staff resources” for collecting climate data related to assets for Respondent ID #285; “This does not reflect hours of FTE time” for internal climate-related investment analysis for Respondent ID #286. Note however that in cases where a respondent indicated zero for all cost categories, they were removed from the survey dataset and not included in cost calculations.

⁴⁵ Respondent #285.

⁴⁶ Respondent #286.

⁴⁷ *Fed Reg* 21429.

⁴⁸ *Fed Reg* 21412-3.

⁴⁹ *Fed Reg* 21430.

⁵⁰ *Fed Reg* 21430.

⁵¹ *Fed Reg* 21463.

⁵² *Fed Reg* 21430.

⁵³ Quote from Respondent ID #146 commented that measurement of Scope 3 “is related to our estimations via Quantis [Scope 3 Evaluator]” only.

⁵⁴ *Fed Reg* 21377.

⁵⁵ *Fed Reg* 21377.

⁵⁶ “Scope 3 is- we assess, but limited availability.” Respondent ID #221.

⁵⁷ Respondent ID #196.

⁵⁸ *Fed Reg* 21442, fn 938: “The 18 survey respondents consist of 2 insurance companies, 13 banks (commercial, investment, or development), 1 asset owner, and 2 asset managers. Respondents’ asset size ranges from less than a \$1bn USD to \$500bn USD. The average assets covered by this disclosure activity was approximately \$5-20bn USD,” Letter from PCAF Partnership for Carbon Accounting Financials Secretariat. Dec. 21, 2021. Comments for The Enhancement and Standardization of Climate-Related Disclosures for Investors. Accessed 14 May 2022. <https://www.sec.gov/comments/cli-mate-disclosure/cll12-20111746-265069.pdf>. CDP’s most recently released Financial Services Disclosure Report noted that calculations of financed emissions do not cover entire portfolios, stating that for “the 25% of financial institution that do report [financed emissions] to CPD... [t]he most common response was that the calculation covered less than 10% of the portfolio.” CDP. *The Time to Green Finance: CDP Financial Services Disclosure Report 2020*, p 34. Accessed 14 May 2022. <https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/741/original/CDP-Financial-Services-Disclosure-Report-2020.pdf>.

⁵⁹ Write-in responses from Respondent ID #157, #166, #167, #194, and #203.

⁶⁰ Write-in responses from Respondent ID #178, #206, #215, #255, and #264.

⁶¹ Respondent ID #238 and #208.

⁶² Respondent ID #156.

⁶³ Respondent ID #224.

⁶⁴ Respondent ID #279.

⁶⁵ Respondent ID #243.

⁶⁶ Respondent ID# 191.

⁶⁷ Respondent ID #166. This respondent wrote “Building materials” in the “other” category for industry sector.

Appendix A: Survey Design, Approach, Methodology, and Data Quality

The survey was designed by ERM practitioners familiar with best practices in survey construction. Questions were designed for response clarity and data integrity.

Two variations of the survey were created: one tailored to investors and one to issuers (see Appendix B for full text of both versions of survey). Each survey variation had four parts: introduction questions, cost questions, benefits questions, and demographic questions. The introduction questions, which were the same for all respondents, were used as a baseline to determine if the respondent had the necessary information to complete the survey, and direct them to appropriate set of cost, benefit, and demographic questions, i.e., those designed for issuers or investors.

Several climate-related disclosure activities and cost ranges were listed in a table where respondents were asked to indicate the cost range of each disclosure activity in which their organization participated. All investor and issuer respondents were then asked to rate benefits associated with their climate-related disclosure activities by indicating the extent to which each category applied for their firm on a scale of 1 to 5, where 5 equals most value. For benefit questions, respondents could also indicate N/A. Investor respondents were also asked to review a list of ways climate-related disclosure activities can be used in investment activities and to note which ones they employ.

In the final section, all respondents were prompted to answer a series of demographic questions that captured the size of the firm, the industry sector(s) that defined their organization, the cadence of their reporting activities, and whether or not the respondent's organization was currently measuring Scope 3 GHG emissions.

Separate surveys were necessary for issuers and investors because the costs and benefits associated with climate-related disclosure vary depending on category. The two variations of the survey were tailored for issuers and investors to best capture accurate costs and benefits for each group.

Appropriate disclosure activities, cost ranges, and potential benefits for each group were determined using extensive guidance and feedback from ERM subject matter experts and external issuer and investor experts in climate-related disclosure activities and their costs. Several iterations of the survey were tested with potential respondents to fine tune the questions and input methods before it opened.

A1.1 Cost Questions

ERM developed a list of costs of climate-related disclosure activities based on ERM experience working with issuers and investors on climate strategy, performance, measurement, and reporting.

For issuers, the list of climate-related disclosure activities included:

- GHG analysis and/or disclosures.
- Climate scenario analysis and/or disclosures.
- Additional climate-related analyses and/or disclosures.
- Internal climate risk management controls.
- Proxy responses to climate-related proposals.
- Assurance/audits related to climate.

For investors, the list of climate-related disclosure activities included:

- External ESG ratings, data providers, and consultants.
- Collecting climate data related to assets; internal climate-related investment analysis.
- Third-party proxy advisor reports and/or consulting for voting decisions.
- In-house, outside counsel, and proxy solicitor analysis of shareholder voting for ballot items.
- Preparing public disclosures.

Both issuers and investors also had the opportunity to select “other” and write in other climate-related costs not covered in the categories above. Additionally, issuers and investors were provided definitions for each of the activities listed and were informed that costs can include data services, internal data collection, external consultants, and internal staff.

A1.2 Benefit Questions

Climate-related disclosures and impact assessments provide different benefits to issuers and investors. ERM developed a list of benefits of climate-related disclosure activities based on ERM experience working with issuers and investors on climate strategy, performance, measurement, and reporting. Each group was given a list of benefits to rank on a scale of 1 to 5 to indicate the extent of the benefit for each category, or could mark “N/A” if the benefit did not apply.

For issuers, the list of benefits associated with climate-related disclosure included:

- Increased ability to attract and retain employees.
- Better performance in meeting sustainability, climate, ESG, and SDG goals.
- Better relationships/reputations with NGOs, non-profits, and civil society.
- Improved operational performance.
- Improved financial performance.
- Better access to data capable of enhancing corporate strategy.
- Lower cost of capital.
- Reduced risk factors.

For investors, the list of benefits associated with climate-related disclosure included:

- Meet client/customer demands for climate disclosures and related products.
- Meet disclosure obligations imposed by regulation; improved operational performance.
- Improved financial performance.
- Better access to data capable of enhancing corporate strategy.
- Lower cost of capital.
- Reduced risk of owning a company.
- Increased ability to attract and retain employees.
- Better performance meeting sustainability, climate, ESG, and SDG goals.
- Better relationships/reputation with NGOs, non-profits, and civil society.

Another question tailored towards investors also captured the activities for which investors use climate-related information. The list of uses of climate-related information for investors included:

- Portfolio construction.
- Managing portfolio-wide risks.
- Buy-sell-hold decisions for individual securities.
- Proxy voting decisions for management proposals.
- Proxy voting decisions for shareholder proposals.
- Shareholder engagement through stewardship management.
- None of the above.

Respondents were also asked whether they anticipated annual spending related to tracking and disclosing climate-related data will change over the next 3-5 years. The project team determined that the release of the SEC's proposed rule on March 21, 2022, during the survey's open response period, might significantly impact how respondents completing the survey before and after that date would answer the question. Because of this, the project team decided that no responses to this question would be analyzed.

A1.3 Demographic Questions

Issuer and investor respondents both were asked to provide the total number employees at their organizations. Additionally, issuers were asked to provide their market capitalization and investors their assets under management respectively. Both sets of respondents were asked to provide the industry sectors that define their company or organization, how long they have produced climate-related disclosure reports, the type of disclosure reports, and whether they are currently measuring Scope 3 emissions.

All respondents were prompted to provide their contact information. As a benefit for participation in the survey, any respondents that provided contact information were promised access to an anonymized compilation of the basic survey result inputs, a dataset which they may find useful for making comparisons to approaches to managing climate disclosure, and when comparing their own firms' approaches to those of other respondents. While most respondents provided contact information, several elected to remain anonymous. All respondent identities will remain anonymous and confidential throughout the process of discussing and disseminating research results.

Data Quality

A1.4 Overview of the Issuer and Investor Respondents and Survey Procedures

Once the survey opened, potential respondents were contacted by ERM or its partners with an invitation to participate in the survey. A list of high-quality potential respondents was identified from ERM, Ceres, and Persefoni's networks, and these potential respondents were sent invitations to participate in the survey.

Issuer survey results are based on 39 corporate responses, including organizations of various sizes across a broad range of industry sectors representing a combined market capitalization of at least \$3.8 trillion. Based on the demographic profile of the issuer responses, none of the issuers included in the analysis were Smaller Reporting Companies (SRCs) as defined by the SEC.

Investor survey results are based on 35 institutional investor responses representing \$7.2 trillion combined assets under management.

Once the survey was closed, ERM undertook extensive review of responses to ensure data quality. Some responses were removed before data summary and statistical analysis began. This happened for several reasons.

For instance, if a survey respondent indicated that their firm had spent money on climate-related disclosure activities, but the respondent did not complete the cost questions, that response was removed from the analysis.

Because the survey was distributed via targeted invitation to subject matter experts, frivolous responses were at a minimum; the handful that did appear were also eliminated. Five respondents indicated that their company did not “spend time or resources collecting and/or analyzing data related to climate change” in 2020 or 2021, and respondents who indicated that answer were directed to a text box to indicate a rationale. While those respondents’ answers to the survey’s opening question and any associated written rationales were noted during ERM’s overall analysis, they are not included in the tally (39 issuer and 35 investor respondents) of total responses analyzed for the survey data.

Certain respondents did not answer every question. Any respondent who did not enter any costs was removed from ERM’s data analysis, since this survey and its analysis focuses on costs. Several respondents who answered all cost questions skipped one or more questions in the benefit or demographic section of the survey. The decision to include any such respondents were made by the data team based on scrutiny of the quality of the entire response, which had to reach a threshold of robustness to merit inclusion. While respondents were provided an opportunity to include company name and individual contact information, some respondents declined to do so. Several anonymous or semi-anonymous responses were included after examination based on metadata and overall robustness of the survey response.

Once the final makeup of the study dataset was confirmed, ERM data scientists generated statistical analyses. Analysis of average costs were generated using the center point of respondents’ selected ranges. Internal peer review ensured statistical accuracy. Accuracy of data processing and statistical analysis was ensured through extensive review and backtesting within the project team, followed by peer review by ERM data scientists not affiliated with the project team as well as by external reviewers. Draft versions of the research whitepaper also underwent peer review by ERM data scientists and climate disclosure experts and external reviewers.



Appendix B: Survey Questions for Issuers and Investors

Cost of Climate Change Disclosure Survey

This survey is focused on understanding the costs to companies and investors for climate-related disclosures and climate-related enterprise risk assessments over the course of a single twelve-month period.

[Ceres](#) and [Persefoni](#) have commissioned ERM to assess the current costs incurred by corporations and investors for measuring and managing climate change data and disclosure. This effort will inform mandatory and voluntary climate disclosure guidelines and methods being developed by regulators, standard setters, and individual firms.

Completing the survey will grant your organization access to an anonymized compilation of survey results, which can be used to compare your company's approach to managing climate disclosure against that of others. Respondents' identifying information will be kept confidential by ERM.

This survey includes five questions on the costs and benefits of climate-related disclosure plus demographic questions on the profile of your company or organization. It should take 10-15 minutes to complete. This survey closes on March 7.

Survey Instructions:

As you work on the survey, your entries will save each time you complete all questions on a page and click Next. Use the Back button at the bottom of survey pages (not the back button of your browser) to return to a previous page.

For additional information or questions regarding this survey please contact the ERM project manager, Emily K. Brock:
climatecostsurvey@erm.com

Introduction

1) In 2020 or 2021, did your company spend time or resources collecting and/or analyzing data related to climate change (e.g., for use in climate reporting, disclosure, or corporate decision making)?*

Yes

No



2) This survey is focused on understanding the costs to companies and investors for climate-related disclosures and climate-related enterprise risk assessments over the course of a single twelve-month period.

For which calendar or fiscal year will you provide data? (choose one)*

2020

2021

3) Could you please provide the reasoning as to why your organization does not spend time or resources collecting or analyzing data related to climate change (e.g., for use in climate reporting, disclosure, or corporate decision making)?

4) This survey is designed to be answered by both investor and issuer respondents. Please select the set of survey questions best aligned to your organization in order to proceed:*

Questions for Issuers/Publicly Traded Companies

Questions for Investors

5) Please indicate the type of investor your organization identifies as:*

Passive/index asset manager

Active asset manager

Both passive/index and active asset manager

Asset owner

Other - Write In: _____



Cost Questions for Investors

6) For the chosen year (2020 or 2021), please indicate the cost range of the following activities related to climate disclosure. The costs should include voluntary disclosures as well as costs for complying with SEC 2010 Guidelines and the climate disclosure regulations in other jurisdictions.*

If applicable, the cost estimates should include costs for assets managed or owned, regardless of whether they are publicly traded.

Note on Costs: Costs can include data services, internal data collection, external consultants (legal review, communications, and analytical staff), internal staff (include time spent report writing, analysis, legal review, government relations, communications, and stakeholder engagement).

Cost Table Definitions

External ESG ratings, data providers, and consultants – This includes all costs for external consultants and services your firm uses to acquire information related to ESG ratings, data providers, and analytical services such as: Bloomberg Terminal (ESG Data), CDP Scores 1-3 Emissions Data, FTSE Russell, ISS-ESG, MSCI; Moody's, Morningstar, S&P (Trucost/DJSI).

Collecting climate data related to assets – This includes all costs associated with collecting climate-related data for analysis related to any managed or owned assets, including costs associated with internal staff time and external consultants to ensure accuracy of climate-related data.

Internal climate-related investment analysis – This includes all costs associated with managing and analyzing data collected from assets, including management of databases, data aggregation, or normalization for the purposes of managing and analyzing climate-related data.

Third-party proxy advisor reports and/or consulting for voting decisions – This includes all costs associated with reports or consulting for voting decisions related to climate change, including both shareholder proposals and management proposals.

In-house, outside counsel, and proxy solicitor analysis of shareholder voting for ballot items – This includes all costs associated with any counsel solicited for voting ballot items related to climate change.

Preparing public disclosures – Drafting, compiling, and releasing climate disclosures, including use of internal and external staff.

Other – Disclose other climate-related costs not covered in the categories above (and explain).

Benefit Questions for Investors

9) Climate-related disclosures and impact assessments may provide benefits for investors. Listed below are some ways in which climate-related disclosures and impact assessments may provide benefits.

Please indicate the extent to which each category provides benefits for your firm on a scale of 1-5, where 1 equals least value and 5 equals most value.*

	1	2	3	4	5	NA
Meet client/customer demands for climate disclosures and related products	()	()	()	()	()	()
Meet disclosure obligations imposed by regulation (e.g., EU SFDR)	()	()	()	()	()	()
Improved operational performance	()	()	()	()	()	()
Improved financial performance	()	()	()	()	()	()
Better access to data capable of enhancing corporate strategy	()	()	()	()	()	()
Lower cost of capital	()	()	()	()	()	()
Reduced risk of owning a company	()	()	()	()	()	()



Increased ability to attract and retain employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better performance in meeting sustainability, climate, ESG, and SDG goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better relationships/reputation with NGOs, non-profits, and civil society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10) How do you anticipate that your annual spending related to tracking and disclosing climate-related data will change over the next 3-5 years? Please exclude any potential spending changes that may be triggered by future SEC climate disclosure regulations.*

Select the anticipated spending change.

- Decrease
- Stay the same
- Increase
- Not applicable

Please indicate the anticipated cost range.

- Up to \$50,000
- \$50,001 - \$100,000
- \$100,001 - \$250,000
- \$250,001 - \$500,000
- \$500,001-\$750,000

11) For which of the following activities do you use climate-related information?*

- Portfolio construction
- Managing portfolio-wide risks



- Buy-sell-hold decisions for individual securities
 - Proxy voting decisions for management proposals
 - Proxy voting decisions for shareholder proposals
 - Shareholder engagement through stewardship management
 - None of the above
-

Investor/Issuer Demographic Information Questions

12) Please indicate the current approximate total number of employees for your organization.*

- Over 250,000
- 150,000 to 250,000
- 100,000 to 150,000
- 50,000 to 100,000
- 25,000 to 50,000
- 10,000 to 25,000
- 1,000 to 10,000
- Less than 1,000

13) Please indicate the current approximate market capitalization (USD) of your company.*

- More than \$200 billion
- \$100 billion - \$200 billion
- \$50 billion - \$100 billion
- \$10 billion - \$50 billion



- \$5 billion - \$10 billion
- \$1 billion - \$5 billion
- \$300 million - \$1 billion
- Less than \$300 million
- Not sure

14) Please indicate the current approximate total number of employees for your organization.*

- Over 50,000
- 25,000 to 50,000
- 10,000 to 25,000
- 1,000 to 10,000
- Less than 1,000

15) Please indicate the current approximate total assets under management for your organization.*

- Over \$1 trillion
- \$500 billion- \$1 trillion
- \$250-500 billion
- \$125-250 billion
- \$50-\$125 billion
- \$25-\$50 billion
- \$1-\$25 billion
- Less than \$1 billion

16) What industry sector(s) define your company or organization? Please check all that apply.*



- Information Technology
- Healthcare and Pharmaceuticals
- Financials, Insurance, and Professional Services
- Consumer Discretionary Products
- Communication Services
- Transportation, Construction, and Industrials
- Consumer Staples
- Oil, Gas, and Energy
- Utilities
- Real Estate
- Metals, Plastics, and other Raw Materials
- Nonprofit, Philanthropic, and Endowment
- Other - Write In: _____

17) How long has your firm been using and/or producing climate-related disclosure such as TCFD or corporate sustainability reports?*

- 0 to 1 year
- 1 to 5 years
- 5 to 10 years
- Greater than 10 years
- Other - Write In: _____
- Not applicable

18) During the chosen year (2020 or 2021), did your firm produce any of the following?*



- TCFD Reporting
- GHG Emissions Inventory
- Sustainability Report
- None of the above
- Other - Write In: _____

19) Does your organization currently measure its Scope 3 GHG emissions?*

- Yes
- No

20) Please provide your name, title, and email address.*

Name: _____
Title: _____
Company name: _____
Email address: _____

21) We welcome any extra comments or clarifications (optional).

Thank You!

Thank you for taking our survey. Your response is very important to us.

[Ceres](#)
[Persefoni](#)
[ERM](#)



Cost of Climate Change Disclosure Survey

This survey is focused on understanding the costs to companies and investors for climate-related disclosures and climate-related enterprise risk assessments over the course of a single twelve-month period.

[Ceres](#) and [Persefoni](#) have commissioned ERM to assess the current costs incurred by corporations and investors for measuring and managing climate change data and disclosure. This effort will inform mandatory and voluntary climate disclosure guidelines and methods being developed by regulators, standard setters, and individual firms.

Completing the survey will grant your organization access to an anonymized compilation of survey results, which can be used to compare your company's approach to managing climate disclosure against that of others. Respondents' identifying information will be kept confidential by ERM.

This survey includes five questions on the costs and benefits of climate-related disclosure plus demographic questions on the profile of your company or organization. It should take 10-15 minutes to complete. This survey closes on March 7.

Survey Instructions:

As you work on the survey, your entries will save each time you complete all questions on a page and click Next. Use the Back button at the bottom of survey pages (not the back button of your browser) to return to a previous page.

For additional information or questions regarding this survey please contact the ERM project manager, Emily K. Brock:
climatecostsurvey@erm.com

Introduction

1) In 2020 or 2021, did your company spend time or resources collecting and/or analyzing data related to climate change (e.g., for use in climate reporting, disclosure, or corporate decision making)?*

Yes

No



2) This survey is focused on understanding the costs to companies and investors for climate-related disclosures and climate-related enterprise risk assessments over the course of a single twelve-month period.

For which calendar or fiscal year will you provide data? (choose one)*

2020

2021

3) Could you please provide the reasoning as to why your organization does not spend time or resources collecting or analyzing data related to climate change (e.g., for use in climate reporting, disclosure, or corporate decision making)?

4) This survey is designed to be answered by both investor and issuer respondents. Please select the set of survey questions best aligned to your organization in order to proceed:*

Questions for Issuers/Publicly Traded Companies

Questions for Investors

5) Please indicate the type of investor your organization identifies as:*

Passive/index asset manager

Active asset manager

Both passive/index and active asset manager

Asset owner

Other - Write In: _____



Cost Questions for Issuers/Publicly Traded Companies

7) For the chosen year (2020 or 2021), please indicate the cost range of the following activities related to climate disclosure. The costs should include voluntary disclosures as well as costs for complying with SEC 2010 Guidelines and the climate disclosure regulations in other jurisdictions.*

Note on Costs: Costs can include data services, internal data collection, external consultants (legal review, communications, and analytical staff), internal staff (include time spent report writing, analysis, legal review, government relations, communications, and stakeholder engagement).

Cost Table Definitions

GHG analysis and/or disclosures – All costs related to developing GHG inventories, and the analysis and/or disclosure of GHG emissions, including Scope 1, Scope 2, and/or Scope 3. Include preparation of GHG data for inclusion in public reporting, analysis for setting science-based targets, etc.

Climate scenario analysis and/or disclosures – All costs related to conducting assessments of the impact of climate on your company in the short, medium, or long term, using scenario analysis, including TCFD/CDP disclosure of risks and opportunities. Exclude any costs included in GHG analysis and disclosures.

Additional climate-related analyses and/or disclosures – Costs related to developing low-carbon transition plans, stakeholder engagement, government relations, and preparing related disclosures. Do not include costs included in GHG inventories, analysis and/or disclosures, or scenario analysis.

Internal climate risk management controls – Costs related to integration of climate risk into business processes. This includes integration into enterprise risk management, board oversight, strategic planning, internal audit, etc. Include costs related to data collection/aggregation (e.g., IT costs & staff time; in-house counsel drafting; internal review by management, committees, and board; outside counsel review).

Proxy responses to climate-related proposals – Costs related to shareholder engagement to respond to climate-related shareholder proposals and management proposals; engagement with legal and regulatory agencies regarding climate-related shareholder proposals.

Assurance/audits related to climate – Third party full or partial assurance.

Other – Any other climate-related costs not covered in the categories above (and explain).



Benefit Questions for Issuers

8) Climate-related disclosures and impact assessments may provide benefits for issuers. Listed below are some ways in which climate-related disclosures and impact assessments may provide benefits.

Please indicate the extent to which each category provides benefits for your firm on a scale of 1-5, where 1 equals least value and 5 equals most value.*

	1	2	3	4	5	N/A
Increased ability to attract and retain employees	()	()	()	()	()	()
Better performance in meeting sustainability, climate, ESG, and SDG goals	()	()	()	()	()	()
Better relationships/reputations with NGOs, non-profits, and civil society	()	()	()	()	()	()
Improved operational performance	()	()	()	()	()	()
Improved financial performance	()	()	()	()	()	()
Better access to data capable of enhancing corporate strategy	()	()	()	()	()	()
Lower cost of capital	()	()	()	()	()	()
Reduced risk factors	()	()	()	()	()	()



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 - None of the above
-



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- Consumer Staples
- Oil, Gas, and Energy
- Utilities
- Real Estate
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- Other - Write In: _____



19) Does your organization currently measure its Scope 3 GHG emissions?*

Yes

No

20) Please provide your name, title, and email address.*

Name: _____

Title: _____

Company name: _____

Email address: _____

21) We welcome any extra comments or clarifications (optional).

Thank You!

Thank you for taking our survey. Your response is very important to us.

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[Persefoni](#)
[ERM](#)



About ERM

ERM is the business of sustainability.

As the largest global pure play sustainability consultancy, ERM partners with the world's leading organizations, creating innovative solutions to sustainability challenges and unlocking commercial opportunities that meet the needs of today while preserving opportunity for future generations.

ERM's diverse team of 6,500+ world-class experts in over 150 offices in more than 40 countries supports clients across the breadth of their organizations to operationalize sustainability. Through ERM's deep technical expertise, clients are well positioned to address their environmental, health, safety, risk, and social issues. ERM calls this capability its "boots to boardroom" approach – a comprehensive service model that allows ERM to develop strategic and technical solutions that advance objectives on the ground or at the executive level.



About Ceres

Ceres is a nonprofit organization working with the most influential capital market leaders to solve the world's greatest sustainability challenges. Through our powerful networks and global collaborations of investors, companies, and nonprofits, we drive action and inspire equitable market-based and policy solutions throughout the economy to build a just and sustainable future. For more information, visit ceres.org and follow [@CeresNews](https://twitter.com/CeresNews).



About Persefoni

Persefoni, Inc., is the leading Climate Management & Accounting Platform (CMAP). The company's Software-as-a-Service solutions enable enterprises and financial institutions to meet stakeholder and regulatory climate disclosure requirements with the highest degree of trust, transparency, and ease. As the ERP of Carbon, the Persefoni platform provides users a single source of carbon truth across their organization, enabling them to manage their carbon transactions and inventory with the same rigor and confidence as their financial transactions. Learn more at persefoni.com.



The SustainAbility Institute is ERM's primary platform for thought leadership on sustainability

The purpose of the SustainAbility Institute by ERM is to define, accelerate, and scale sustainability performance by developing actionable insight for business. We provide an independent and authoritative voice to decode complexities. The Institute identifies innovative solutions to global sustainability challenges built on ERM's experience, expertise and commitment to transformational change.

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