



Nasdaq 2024 Executive Report

# The ROI of ESG & Sustainability Software

# Introduction

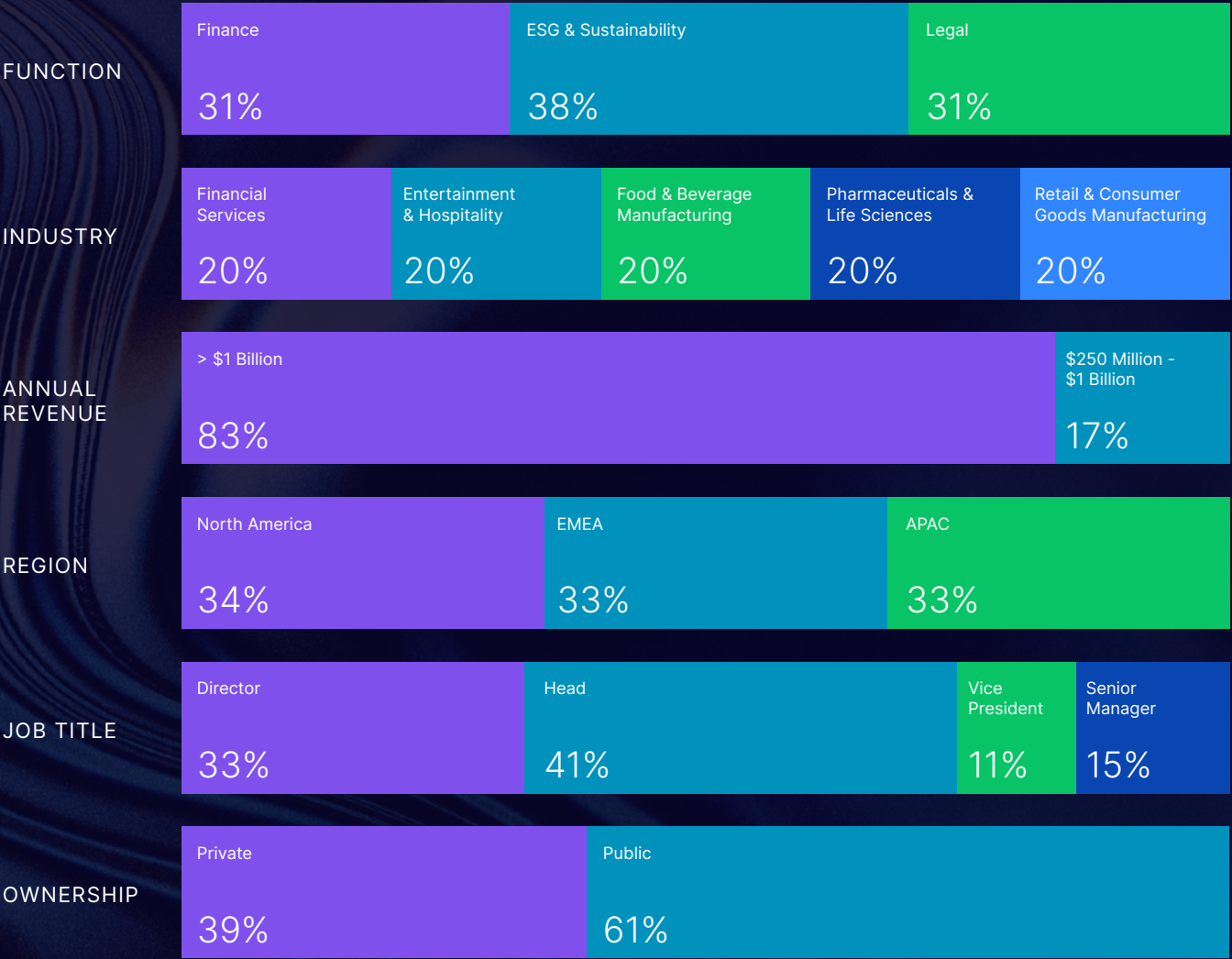
## Software underpins the success of ESG and sustainability strategies.

In response to growing stakeholder interest and a rapidly developing regulatory landscape, organizations are under increasing pressure to demonstrate excellence across ESG and sustainability initiatives. Concurrently, organizations must consider how to best communicate performance, mitigate inherent risks, and upgrade operational and digital systems to collaborate across functions and achieve ESG and sustainability goals. Many organizations are making dedicated investments in ESG and sustainability data management and reporting software ("software") to do so.

# Research Methodology

To gain perspective and understand how global organizations are using software, Nasdaq ESG Solutions commissioned independent research firm Verdantix to interview 150 ESG and sustainability, finance, and legal executives based in North America, Europe, Middle East, and Africa (EMEA), and Asia-Pacific (APAC) regions. Respondents represented five distinct industries and organizations categorized by revenues between \$250 million and \$1 billion and greater than \$1 billion (see **Figure 1**). Respondents were also asked to share their experiences using software for reporting, data management, and risk mitigation, as well as their perspectives on key challenges and risks facing their organizations.

FIGURE 1  
Demographics





## Key Takeaways

This report reveals how investment in software is helping improve organizational collaboration, mitigate risks, and meet ambitious ESG and sustainability goals. Key takeaways include:

Software empowers ESG and sustainability communication strategies.

86% of respondents state software has improved the quality of ESG and sustainability reporting and communications with stakeholders.

Software supports tangible ESG performance improvements.

78% of respondents note software improves their ability to manage progress towards ESG and sustainability KPIs, and 65% report they experience improved ESG ratings from using software.

Software significantly boosts efficiency for ESG and sustainability teams.

86% of respondents report software significantly boosts the efficiency of data collection and validation processes, and the majority report time savings of over 25% for key processes including data audit and assurance and reporting to standards and frameworks.

Software improves ESG and sustainability data accuracy and quality.

72% of respondents experience increased data quality by using software and 74% state software helps mitigate risks related to inaccurate ESG and sustainability data.

Organizations experience a full return on software investment.

62% of respondents report they experience a full return on investment within three years.

## Software is a Critical Component of Achieving ESG Reporting Excellence

All survey respondents are leveraging software to support their ambitions to achieve ESG and sustainability excellence, as it was a screen for inclusion in this research. Respondents have relatively mature and well-developed ESG and sustainability strategies and have been producing dedicated reports for an average of seven years. Furthermore, most respondents have been using software to support ESG and sustainability strategies for an average of seven years.

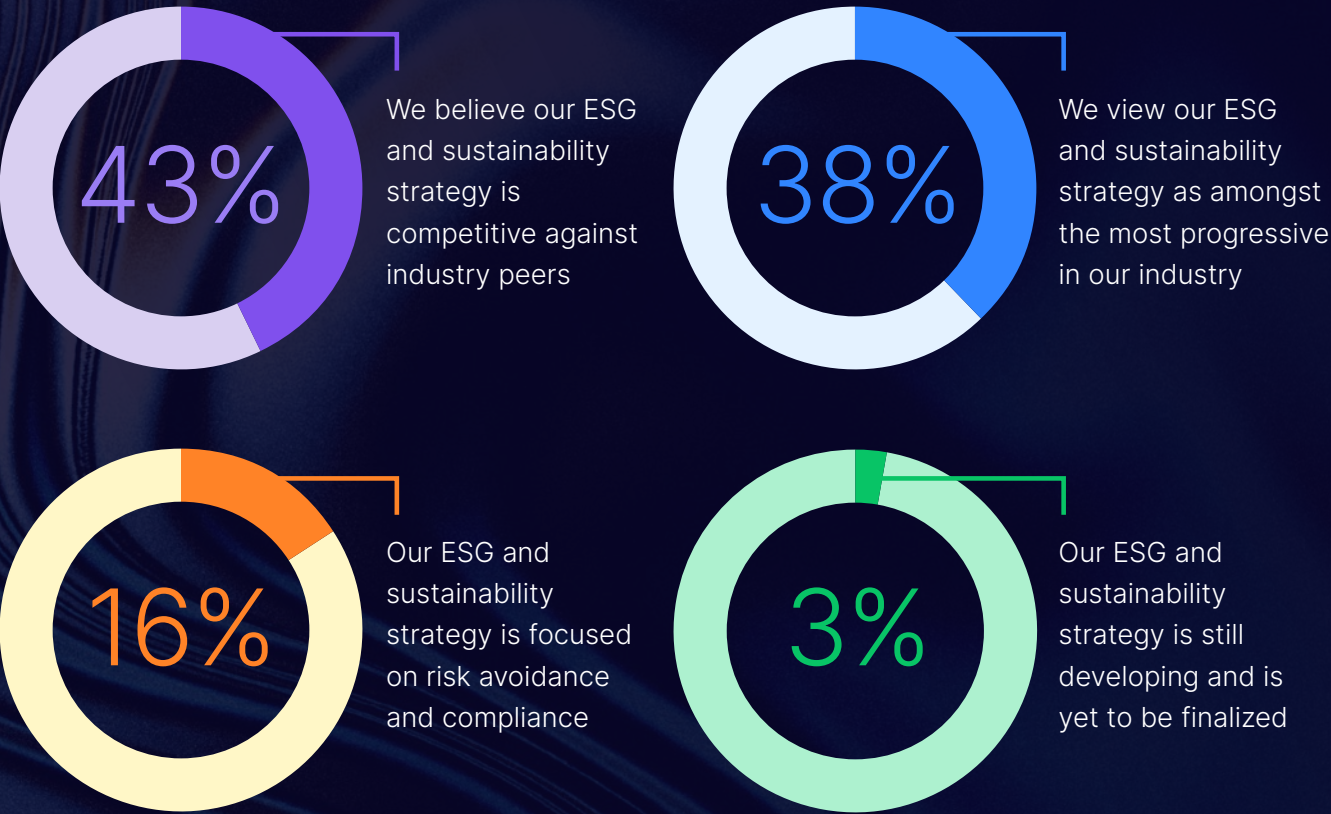
81% of organizations aim for leadership and industry competitiveness through their ESG and sustainability strategy.

Most respondents state their ESG and sustainability strategy is either among the ‘most progressive within their industry’ (38%), or ‘competitive against industry peers’ (43%) (see **Figure 2**). Only 3% indicate their strategy is yet to be finalized and 16% indicate their strategy focuses on risk avoidance and compliance. This showcases that most respondents view ESG and sustainability leadership as a competitive priority.

Strategy maturity varies significantly according to industry and ownership structures. Due to greater stakeholder and reporting pressures, 50% of public organization respondents state they believe their strategies are among the most progressive. By industry, pharmaceuticals and life sciences respondents report high levels of maturity, with nearly 66% of respondents stating they have the most progressive strategies. These findings indicate having a progressive and competitive ESG and sustainability strategy is a valued differentiator across organizations and industries.

FIGURE 2

How would you characterize the maturity of your organization’s ESG and sustainability strategy?



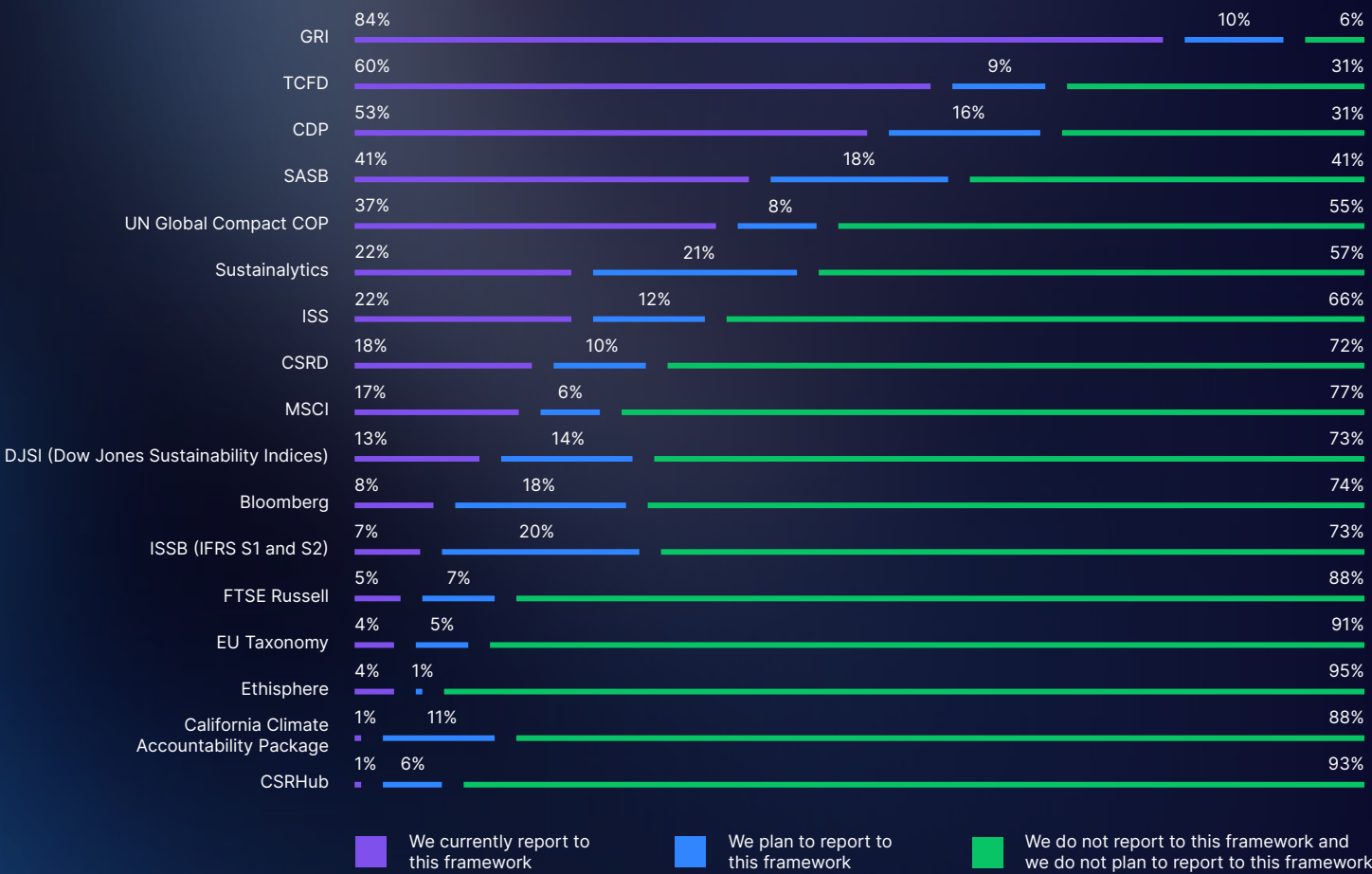


Comprehensive reporting is essential to communicating ESG and sustainability leadership and progress.

Survey respondents reveal reporting is a core element of their ESG and sustainability strategy. Voluntary frameworks, like the Global Reporting Initiative (GRI), Task Force on Climate-related Financial Disclosures (TCFD), Carbon Disclosure Project (CDP), and Sustainability Accounting Standards Board (SASB), are of high importance (see **Figure 3**). 60% of respondents indicate they report in line with the TCFD, a process which requires significant investment in climate-specific data aggregation and strategic planning, including climate risk quantification. When it comes to addressing newly developed frameworks, 20% of respondents indicate they plan to report to IFRS's International Sustainability Standards Board (ISSB).

The level of reporting ambition correlates to organization size. Smaller revenue organizations are less likely to report to multiple frameworks and are more focused on GRI, perhaps reflecting more constrained resources. From an industry perspective, financial services organizations are most likely to report or prepare to report to a variety of frameworks, including the TCFD, Institutional Shareholder Services (ISS), and Corporate Sustainability Reporting Directive (CSRD). Reporting trends reflect corresponding levels of internal investment to support data management and reporting processes and meet strategic ambitions.

FIGURE 3  
Which of the frameworks and ESG rating agencies do you report to or against?



Software use cases are expanding in tandem with reporting maturity and increased regulatory expectations.

Survey respondents consistently indicate that software use underpins key processes that enable ESG and sustainability strategic ambitions. When asked how software is used for reporting, respondents underscore using it for the GRI (87%), TCFD (86%), and CDP (77%). They are also using software to prepare for new reporting requirements, such as the California Climate Accountability package (72%) and ISSB (70%).

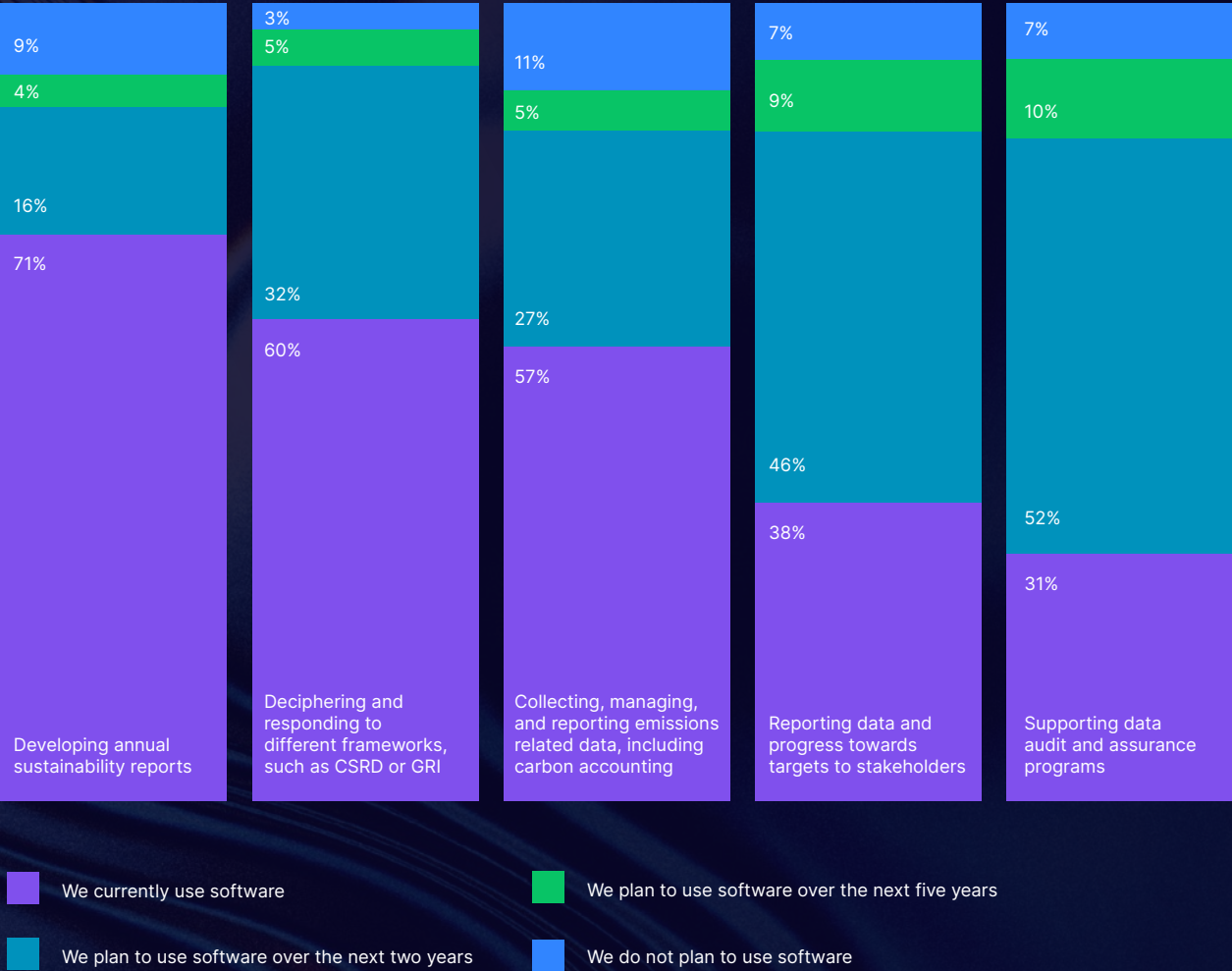
Respondents regard software as a critical part of managing emergent ESG and sustainability reporting requirements and plan to invest accordingly. This narrative extends to broader use cases, with over 50% of respondents indicating they use software to develop annual sustainability reports, decipher and report to frameworks, and manage emissions data (see Figure 4).

Survey findings indicate software use is most prominent for mature use cases, such as ESG and sustainability report development, and in early adoption for forthcoming regulatory requirements, such as data audit and assurance. Nearly all respondents indicate leveraging software to address regulatory requirements will increase rapidly over the next two years.

>50%

of respondents indicate they use software to develop annual sustainability reports, decipher and report to frameworks, and manage emissions data

FIGURE 4  
For which use cases do you use ESG and sustainability software?



# Multiple Business Functions Collaborate to Resource and Maximize Software Use

Increasingly, ESG and sustainability initiatives that span data collection and management, communications and reporting, and risk management require collaboration across business functions that play a significant role in managing software selection and are often key users upon implementation. Survey findings indicate:

ESG and sustainability teams benefit significantly from C-suite and board support when budgeting and selecting software.

Survey respondents reveal ESG and sustainability is the most involved function related to software decisions, with 29% of respondents from this function stating they are the key decision maker, and the remainder citing themselves as the largest or significant contributor to budget. However, 21% of respondents indicate C-suite leaders are key decision makers that play an active role in budget conversations. Respondents from smaller organizations report C-suite leaders play a critical role in software budgeting, with 48% stating they are the largest contributors to overall budgets. A smaller percentage of respondents indicate the board and finance function are key decision makers (see **Figure 5**). Overall, survey findings indicate software budget and selection are cross-functional initiatives among ESG and sustainability teams, finance teams, C-suite leaders, and the board of directors.

FIGURE 5  
How do business functions influence ESG and sustainability software budgets and who is the key decision maker?

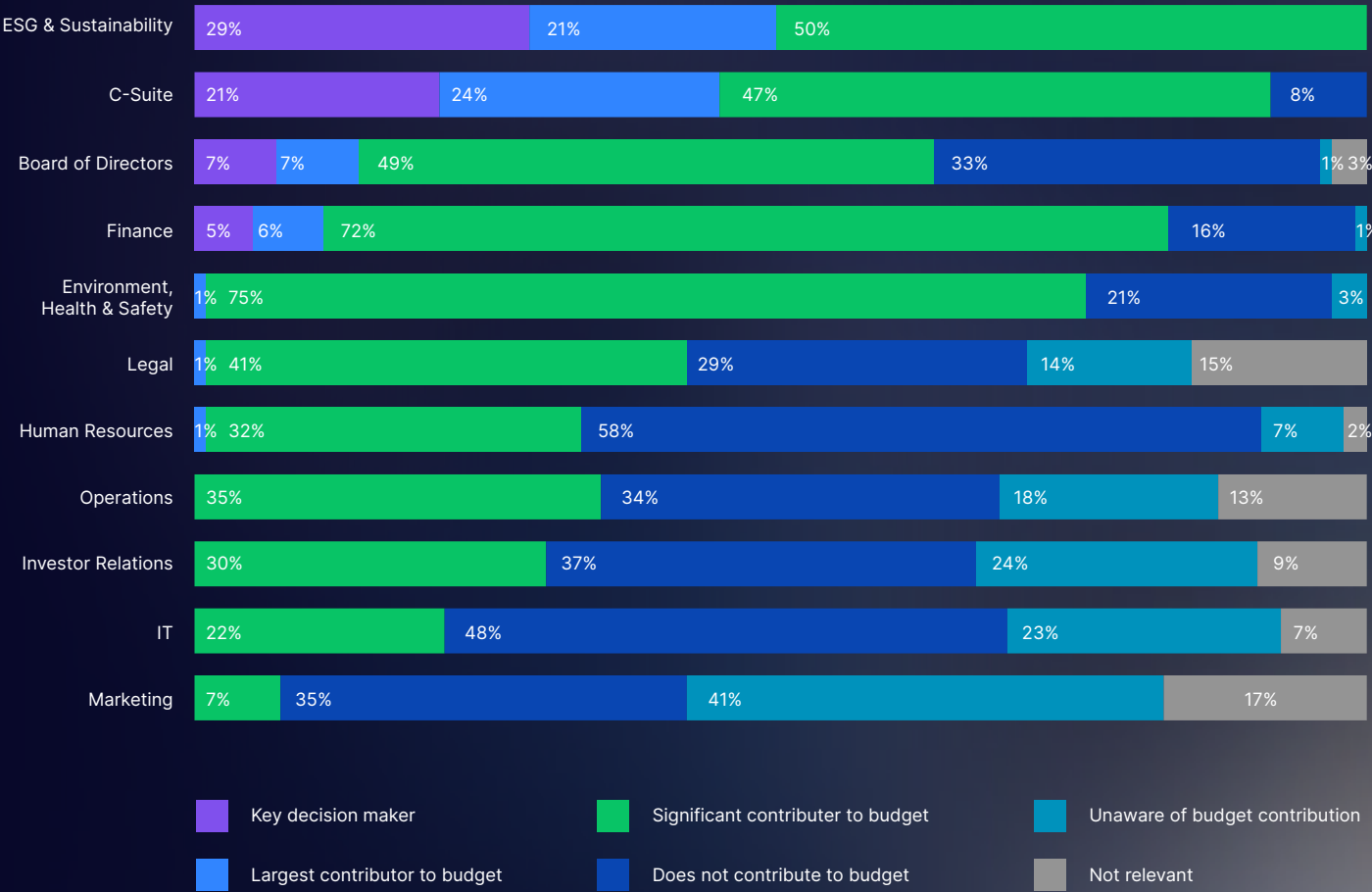
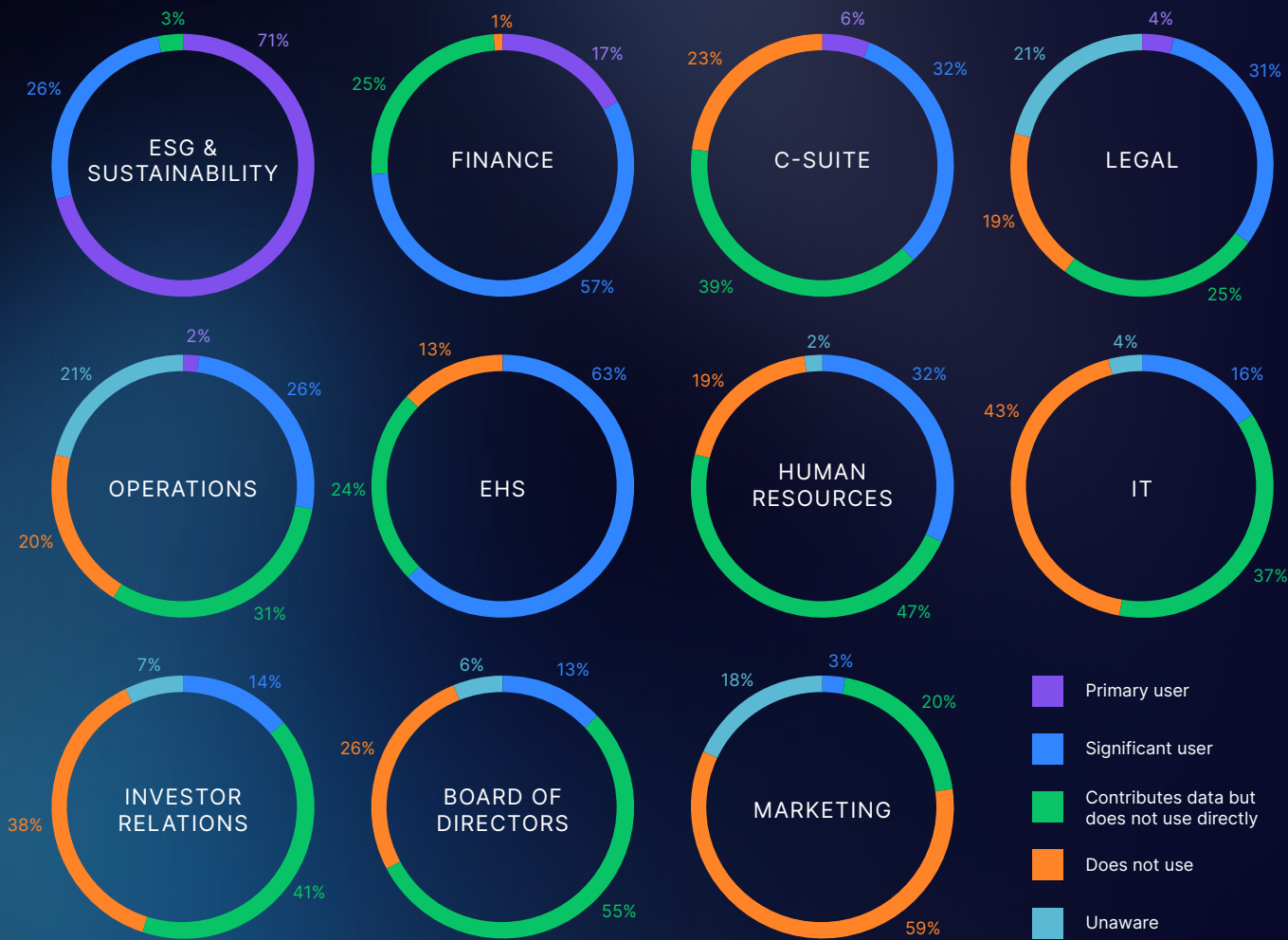


FIGURE 6  
To what extent do the business functions utilize ESG and sustainability software?



71% of respondents indicate ESG and sustainability teams are the primary software users, but finance teams also appear to be key users

While use cases vary, software is actively leveraged across different functions.

Mirroring budget contribution trends, software is actively used by various functions, including finance, legal, and environment, health, and safety (EHS) (see **Figure 6**). 71% of respondents indicate ESG and sustainability teams are the primary software users, but finance teams also appear to be key users. Other functions, including human resources (47%), investor relations (41%), and the board of directors (55%), contribute data managed within the software. Data contribution suggests software plays a key role in facilitating cross-functional collaboration for ESG and sustainability data management strategies. Moreover, as ESG and sustainability reporting becomes increasingly regulated and embedded within financial reporting, expect increased software use across finance and legal teams. Audit and assurance requirements will also contribute to this trend.



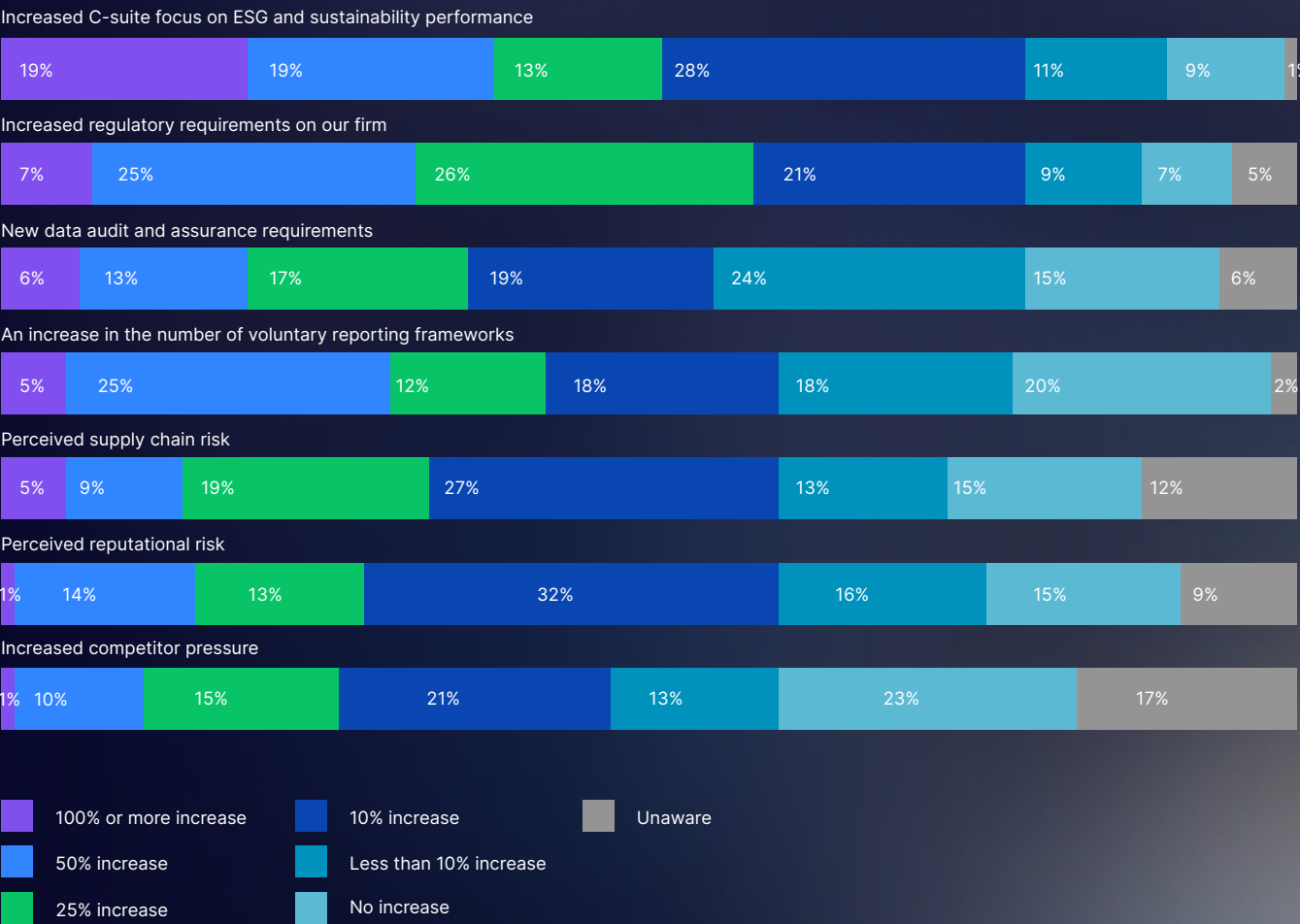
>50%

of respondents predict significant, double-digit spend increases for ESG reporting software in response to new regulatory requirements

To understand how the evolving ESG and sustainability landscape is expected to impact future spend, respondents quantify specific impacts of various external and internal drivers on future software investments (see Figure 7). Notably, over 50% of respondents predict significant, double-digit spend increases in response to expanded regulatory reporting requirements and audit and assurance needs. Specifically, nearly half of the legal respondents predict a 50% increase in software spend due to new regulations, underscoring the anticipation that software will be critical to address growing regulatory demands.

FIGURE 7

To what extent do factors impact your future levels of investment in ESG and sustainability software?



# Risk Mitigation is a Key Use Case for Software

Survey respondents indicate their organizations face internal and external risks to their ESG and sustainability ambitions across three primary areas: compliance, communications, and data quality. They also demonstrate a deep awareness of how software helps manage key operational processes to de-risk and enable successful ESG and sustainability strategies.

## Non-compliance is the greatest risk facing organizations.

23% of respondents identify ‘risks due to non-compliance with mandatory reporting requirements’ as the top risk facing their organizations (see **Figure 8**). Financial services industry respondents (40%) are most likely to emphasize their exposure to non-compliance risks, reflecting their increased exposure to regulatory requirements globally. However, respondents note software is key in mitigating non-compliance risks, with 67% stating software contributes to risk mitigation strategies (see **Figure 9**). Reflecting their greater risk exposure, financial services industry respondents are also more likely to underscore the importance of software, with 30% indicating it significantly supports risk mitigation.

FIGURE 8

How would you classify your risk exposure to ESG- and sustainability-related issues?

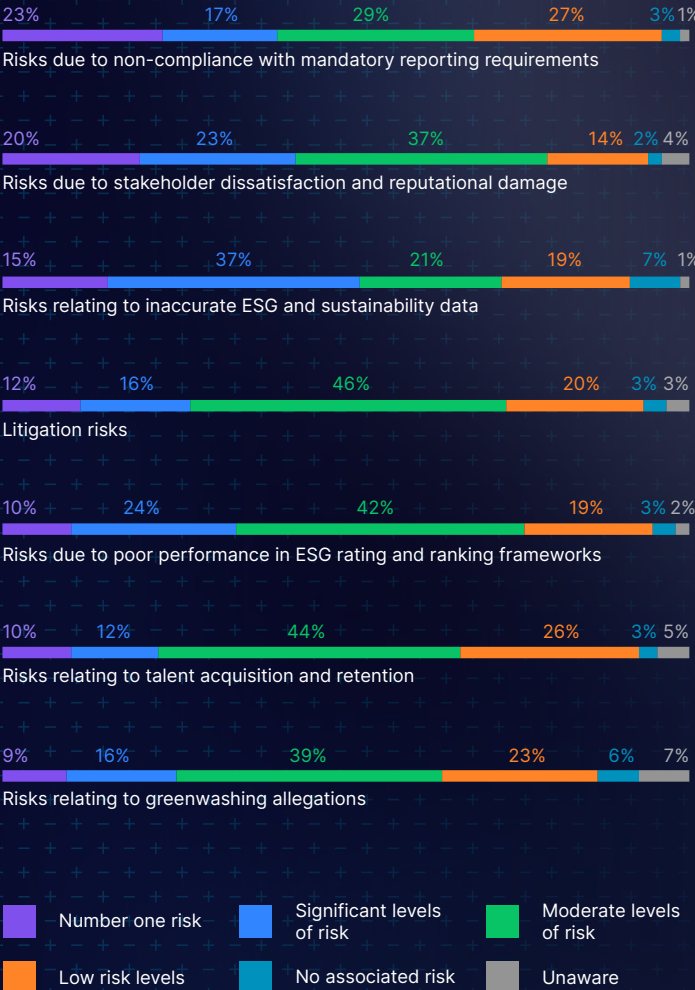
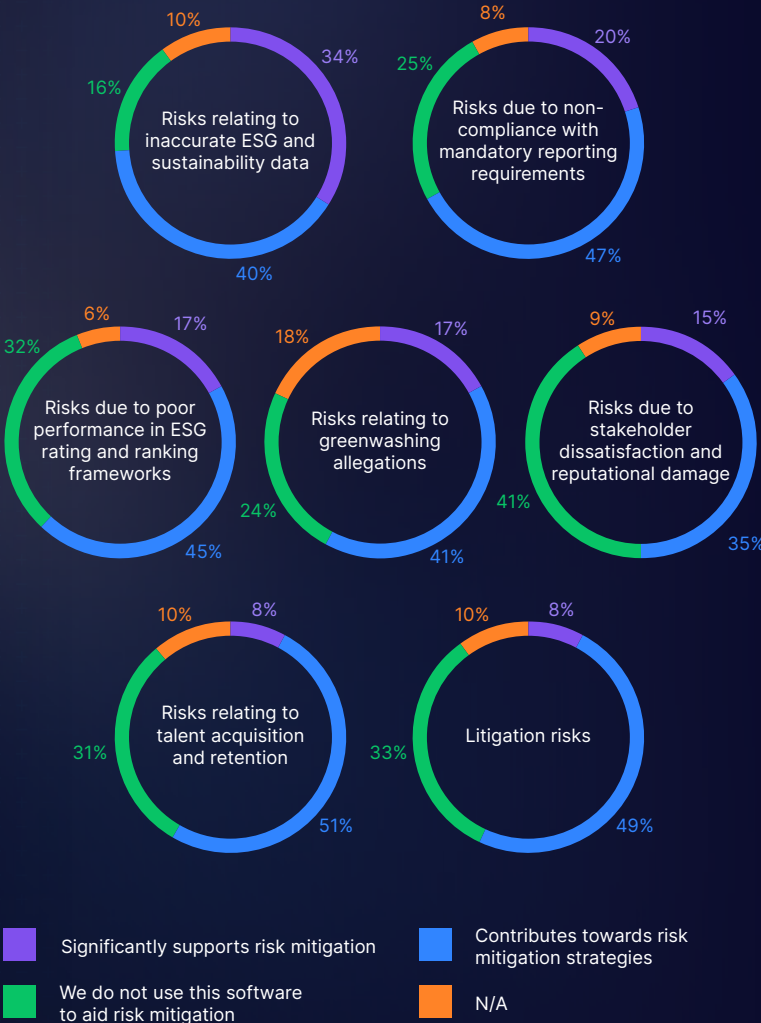


FIGURE 9

To what extent does ESG and sustainability software help you mitigate risks?



Reputational risks are mitigated by streamlining communications and disclosures through software.

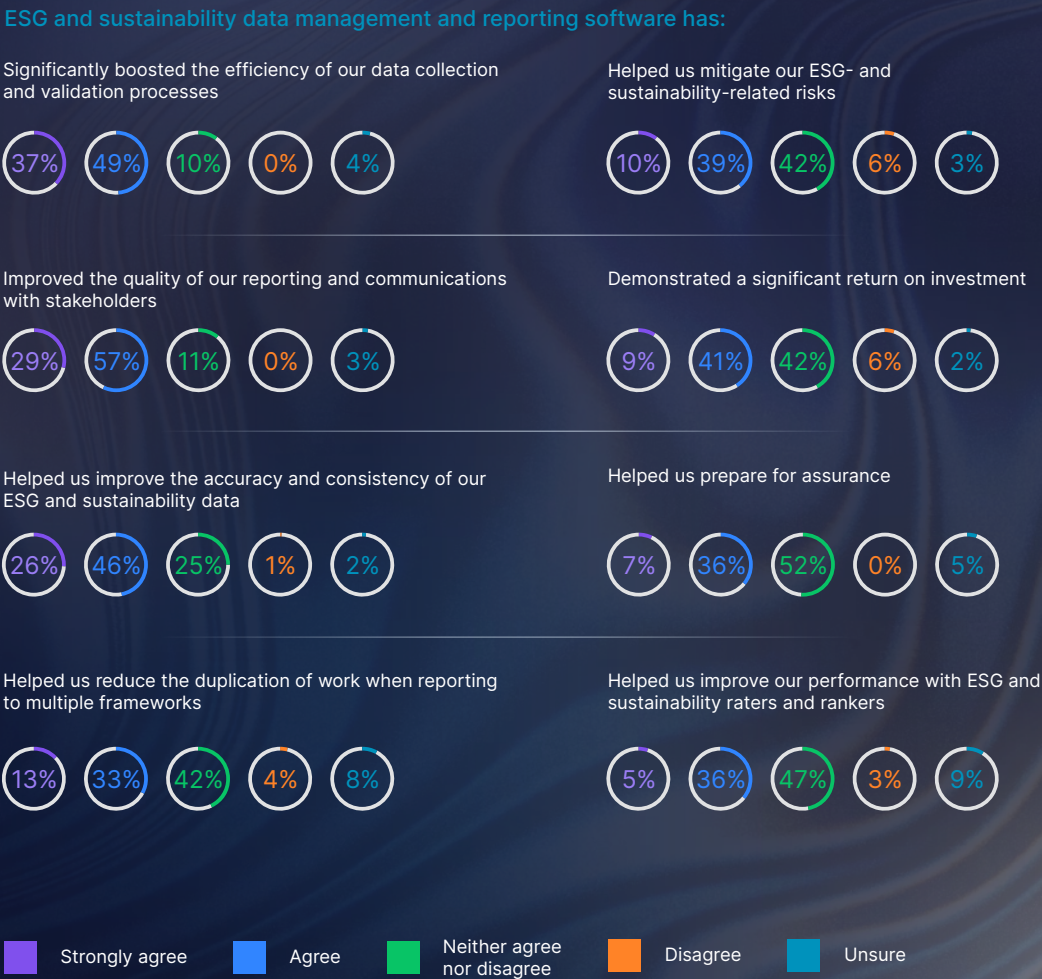
Stakeholder dissatisfaction and reputational damage are also top identified risks. One of the primary means to mitigate these risks is through transparent reporting and disclosure. 86% of respondents state software has improved the quality of reporting and communications with stakeholders (see **Figure 10**). For example, respondents state centralized data and reporting helps improve accuracy and consistency of information across reporting venues. Furthermore, over 50% of respondents report software either significantly supports or contributes to mitigating greenwashing risks, which can threaten an organization's reputation (see **Figure 8**).

86% of respondents state software has improved the quality of reporting and communications with stakeholders

“Software has enabled us to engage with our stakeholders, including investors, customers, employees, regulators, and communities, more effectively.

Finance Director, Pharmaceuticals and Life Sciences, North America

FIGURE 10  
To what extent do you agree with the following statements about ESG and sustainability software?





72% experience increased ESG and sustainability data accuracy through software use.

Respondents flag inaccurate ESG and sustainability data as another top risk. Accurate ESG and sustainability data not only underpin compliance efforts, but also stakeholder communications. Respondents proactively use software to manage risks related to inaccurate ESG and sustainability data, with a combined 74% stating software significantly supports or contributes to data quality risk mitigation strategies (see **Figure 9**). In part, this is due to the role software plays in ensuring data accuracy. 72% of respondents state software helps increase ESG and sustainability data accuracy (see **Figure 11**).

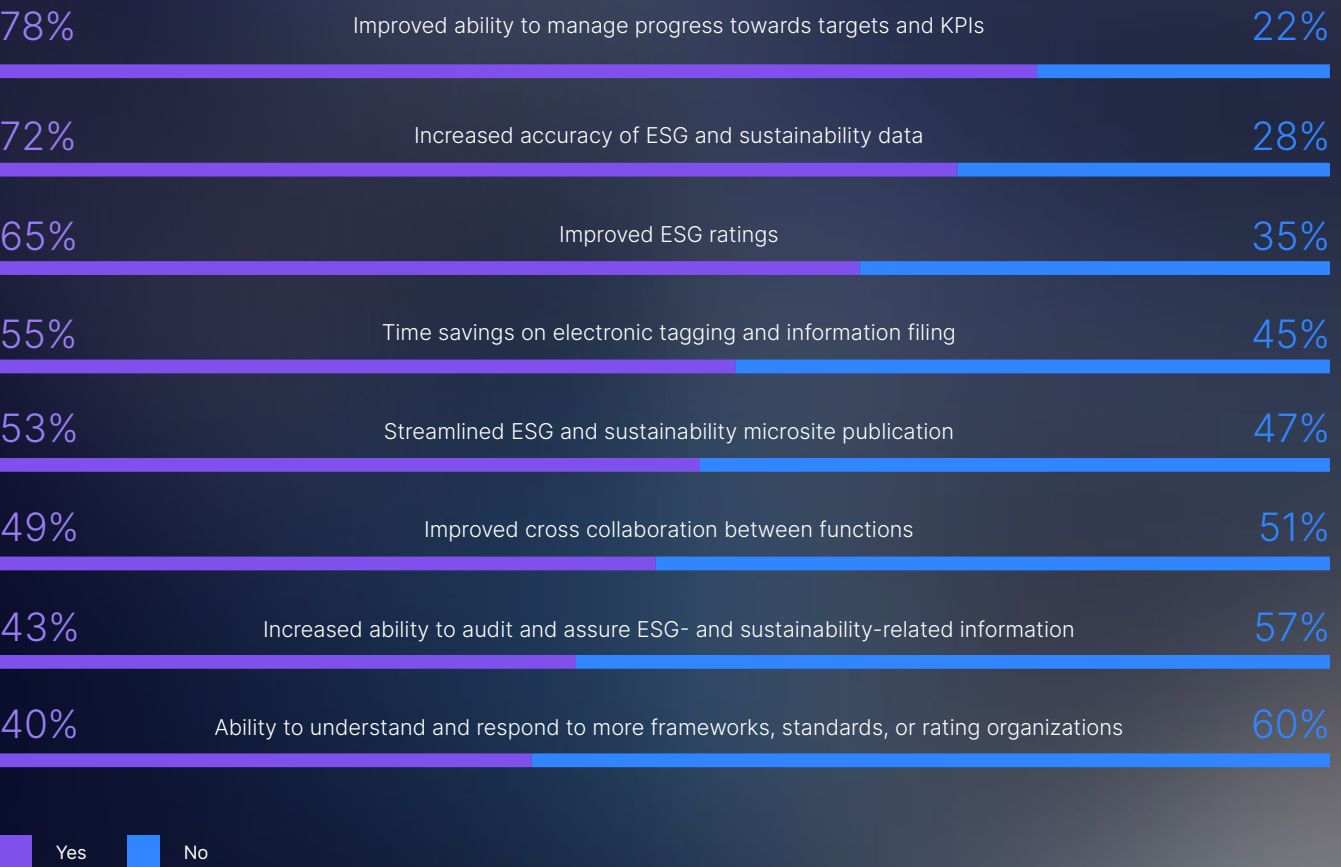
74% state software significantly supports or contributes to data quality risk mitigation strategies

“Complicated sustainability regulations require transparency. Software helps manage compliance, preventing penalties and harm to a company’s reputation. In my opinion, this is a really important component for us.

Head of Finance, Food and Beverage Production, APAC

FIGURE 11

Have you experienced the benefits of leveraging ESG and sustainability software?



# Software Empowers Teams and Counters Operational Challenges

Survey respondents reveal software is a pivotal tool in mitigating ESG- and sustainability-related risks. Yet, software also aids teams in overcoming key organizational and operational challenges related to ESG and sustainability initiatives by improving workflows and outcomes, such as the quality of data and reporting. Survey findings indicate:

Over half of respondents experience significant ESG and sustainability reporting challenges.

ESG and sustainability reporting is critical to educate stakeholders and demonstrate progress towards organizational goals. Yet, more than 50% of respondents note key processes, including reporting to ESG and sustainability standards and frameworks, data collection and quality management, and audit and assurance, are challenging (see **Figure 12**). 91% of respondents indicate such processes are at least moderately challenging. These challenges are compounded by the fact that over 50% of respondents report having dedicated ESG and sustainability teams comprised of fewer than 15 members. Moreover, nearly 50% of respondents from smaller organizations report they have between one and five full-time employees (see **Figure 13**).

FIGURE 12

How challenging are the processes associated with ESG and sustainability reporting?

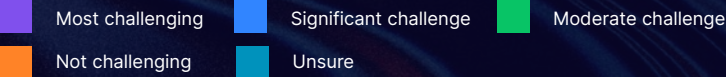
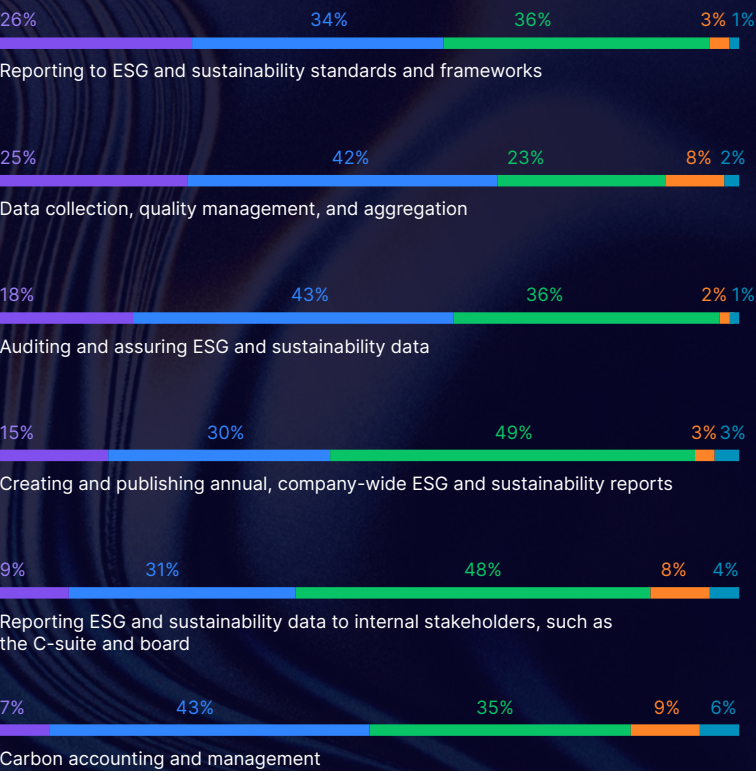


FIGURE 13

How many full-time employees make up your ESG and sustainability team?

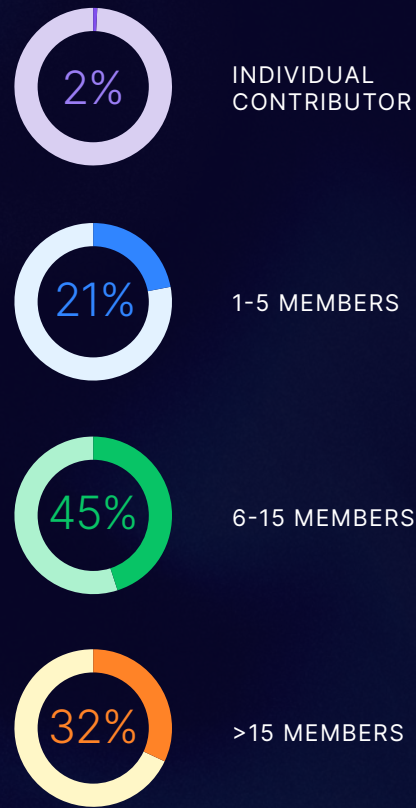
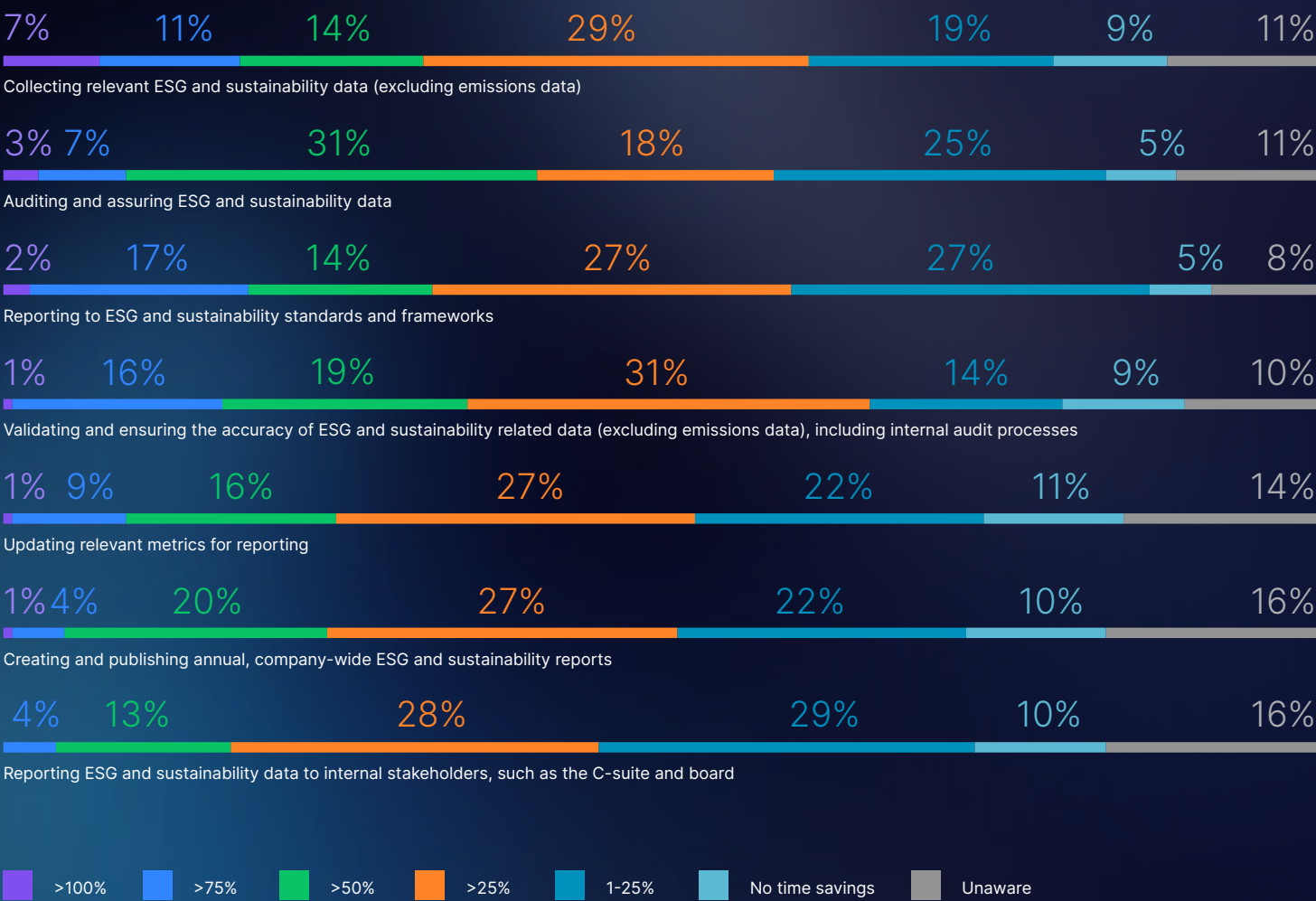


FIGURE 14

What are the estimated time savings when using software for ESG and sustainability reporting use cases?



“In my opinion, the primary advantage is that it automates complicated procedures like data collection, calculations, and formatting, which is a really valuable way to save time and resources.”

VP and Head of Legal Compliance, Food and Beverage Manufacturing, APAC

### Software boosts efficiencies for organizations grappling with various ESG and sustainability demands.

To analyze how software boosts operational efficiency, respondents quantify time savings experienced from using software for ESG and sustainability initiatives, grouped under four key processes. These four processes cover the main operational priorities of ESG and sustainability teams and consist of:

- 1 **ESG and sustainability data collection, management, and quality control.** Survey respondents note significant time savings for ESG and sustainability data management processes (see **Figure 14**). Over 60% of respondents state they experience at least 25%-time savings when using software to collect ESG and sustainability data and validate data accuracy. Time savings have knock-on effects for productivity, as data management underpins all reporting and progress analysis. Survey findings indicate software not only helps improve ESG and sustainability data accuracy, but also serves as a key efficiency driver for teams.

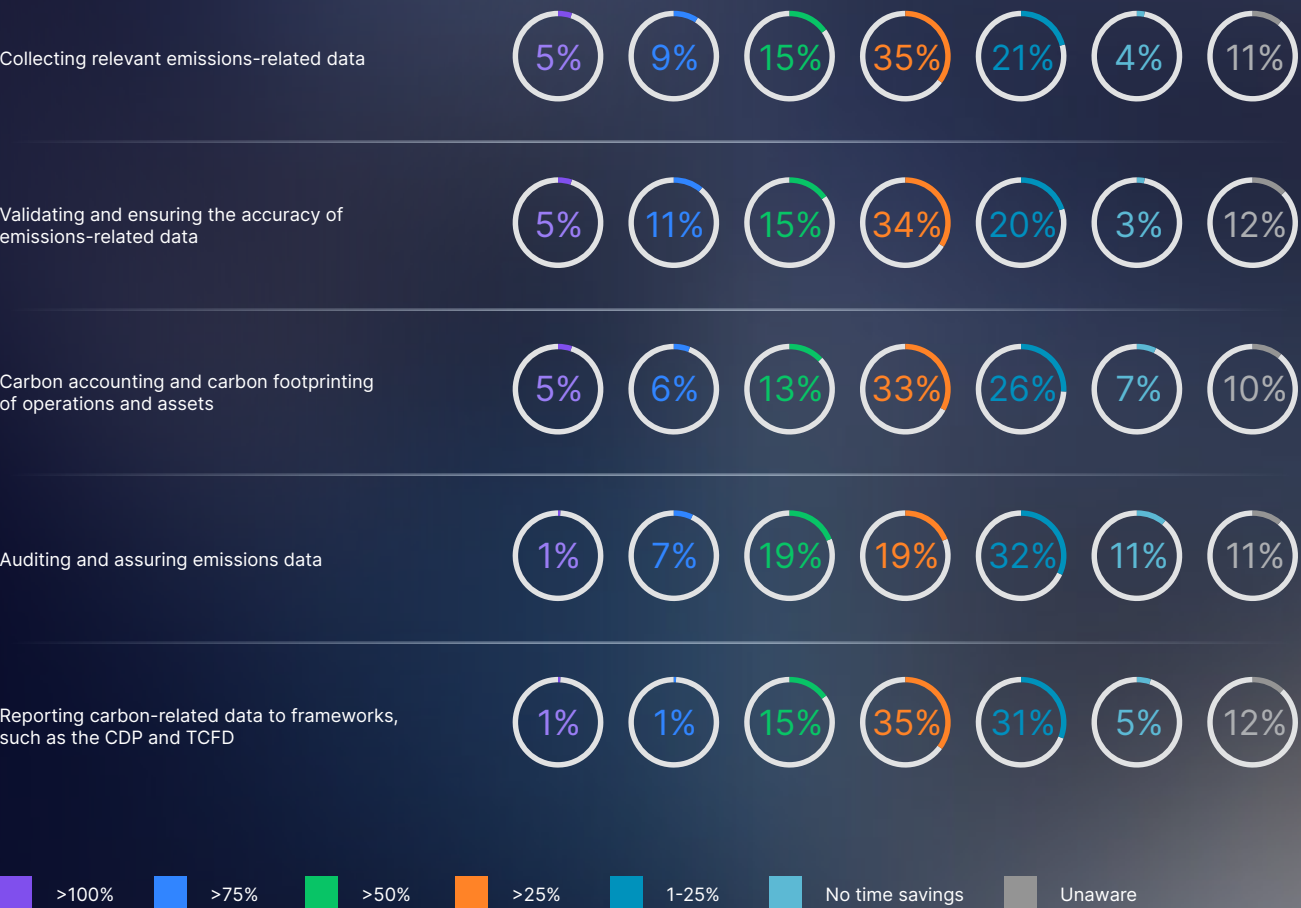


- 2 Internal and external communications efforts. Software also helps streamline reporting processes. 78% of respondents note software improves their ability to manage progress towards KPIs and 65% report they experience improved ESG ratings from using software. From an efficiency perspective, 60% of respondents note time savings greater than 25% for reporting to ESG and sustainability standards and frameworks and over 50% of respondents note similar time savings for updating relevant reporting metrics and creating and publishing ESG and sustainability reports.
- 3 Emissions data management and reporting. Emissions data management and reporting comprise distinct, yet critical, processes within ESG and sustainability strategies. With the rise of net zero goals, data granularity expectations for emissions reporting of both Scope 1 (direct) and Scope 2 and 3 (indirect) emissions are increasing. Due to the carbon accounting process, emissions data is subject to unique calculations and is a critical element of both voluntary reporting to frameworks, such as the TCFD and CDP, and regulatory reporting requirements, such as the CSRD. Respondents report significant time savings related to emissions data management, concentrated on collecting emissions data and validating data accuracy. More than 50% of respondents note time savings greater than 25% for these two processes (see Figure 15).
- 4 ESG and sustainability data audit and assurance. Respondents also report time savings from actively using software to aid sustainability data audit and assurance processes. Although this software use case is relatively nascent, 31% of respondents use software to support audit and assurance processes, helping preserve data trails, record meta data, and provide third-party access to calculations.

78% of respondents note software improves their ability to manage progress towards KPIs

FIGURE 15

What are the estimated time savings when using ESG and sustainability software for emissions-related use cases?



## ■ Key Takeaways for Software Buyers

Organizations should leverage software for more ESG and sustainability use cases to ensure success.

Survey findings indicate many organizations benefit from using software to support ESG and sustainability strategies, through three primary mechanisms: mitigating ESG and sustainability risks, improving operational efficiency, and improving strategic outcomes. On average, respondents report a full ROI within three years of software implementation (see **Figure 16**).

As software use cases increase and teams further leverage its capabilities to meet changing ESG and sustainability demands, this time to value is expected to shorten. With respondents already anticipating increased spend over the next two years to support ESG and sustainability initiatives, organizations should:

Leverage software to prepare for forthcoming regulatory reporting requirements.

Less than one-third of respondents report using software to support data audit and assurance processes. However, over 50% plan to use software for this over the next two years. With an increase in regulations requiring data assurance, such as the CSRD, SEC, and California climate regulations, organizations should consider accelerating timelines for software implementation to prepare and ensure they are ready and compliant.

Employ software to improve cross-functional collaboration.

Survey findings reveal that different functions use software on a regular basis. Nearly 50% of respondents indicate software improves cross-functional collaboration. Implementing software that is designed to integrate with and work alongside ESG-adjacent functions is one method to improve collaboration and operational efficiency. And as various functions hold key budget allocation and decision-making roles, implementing software that enables collaboration is influential in accessing greater budgets and support.

Integrate software into risk mitigation strategies.

Survey respondents indicate software improves operational efficiencies and performance. However, for several use cases, including non-compliance and reputational damage, some respondents do not use software as part of their holistic risk mitigation strategies. As software acts as a valuable repository for risk-relevant data across ESG and sustainability matters, organizations may consider integrating software into their risk mitigation strategies to identify risk-related trends and reduce exposure.

Understand how software can help improve ESG and sustainability performance.

ESG and sustainability strategies are intended to improve performance and communicate achievements to stakeholders. 78% of respondents report software improves their ability to manage progress towards targets and KPIs. Nearly two-thirds of respondents note tangible ESG and sustainability performance improvements from using software, including improved ESG ratings. By understanding how software can be used to track and manage targets, organizations may realize ROI through a key third vertical: performance improvement.

FIGURE 16  
After how many years of operation do you expect to achieve a full ROI for ESG and sustainability software?



“ To our advantage, the most significant benefit is that all sustainability data is housed on a single platform, enhancing data consistency and accessibility between departments.

Finance Director, Pharmaceuticals and Life Sciences, Europe

“ Software helps us identify and mitigate risks related to social, governance, and environmental factors, which is something that my organization finds to be very significant.

Head of Finance and Investor Relations, Food and Beverage Manufacturing, Europe

“ The primary benefit, in my opinion, would unquestionably be the ability to make better decisions thanks to the extensive data and analytics those programs provide.

VP of Finance, Financial Services, North America

Investment in ESG and sustainability data management and reporting software, like Nasdaq Metrio™, is helping organizations improve collaboration, mitigate risks, and meet ambitious ESG and sustainability goals.

Nasdaq Metrio is built to scale to meet the evolving needs of organizations at any stage in their ESG journey. Nasdaq’s software combines the power of hyper-granular data collection, tracking, management, emissions calculations, and assurance with a robust library of metrics from raters, rankers, and regulatory bodies.

[Click Here to Learn More About Nasdaq Metrio](#)

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