2023 Edition

Environmental, Social, and Governance Reporting Market Study

Wisdom of Crowds' Series

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Definitions

Background to ESG, CSR, and Sustainability Reporting

Environmental, social, and governance (ESG) reporting is a term that gained significant traction in recent years. ESG reporting attempts to capture in a structured way the potential impacts that environmental and social factors may have on the financial sustainability of an organization. It also quantifies the impacts that an organization itself may have on people; the planet; and the economy; and how these affect the long-term sustainability of both the organization and the environment in which it operates.

The concept of ESG is in many ways an evolution of corporate social responsibility (CSR) reporting. CSR emerged in the 1970s and became popular in the 1990s and 2000s as the focus of many enterprises expanded from purely financial measures of performance to include their relationship with customers, employees, and the wider environment. However, regulators never enshrined CSR principles in any specified mandatory reporting that remained focused on financial measures. CSR reporting was always optional and thus ignored by many organizations.

In recent years, ESG principles became increasingly used by the investment community to drive more ethical and sustainable investment decisions. This gave greater impetus to formalize ESG reporting to create comparability in investment decision making and to build on the good intentions of CSR. In 2022, both the International Financial Reporting Standards Foundation and the European Union announced formal ESG reporting standards that will come into force in 2024. Both organizations agreed to harmonize their ESG standards as much as possible. The Securities and Exchange Commission in the United States also proposed rules on climate disclosures in 2022; but there is no timeline for their implementation yet.

Environmental, Social, and Governance Reporting Defined

Environmental, social, and governance reporting includes the data, tools, processes, and standards used in preparing non-financial reports that reflect an organization's impact on the planet, its impact on people (both inside and outside the organization), and its approach to running and governing the organization. ESG reporting also includes the potential impacts of environmental and social factors on the long-term sustainability of the organization as a going concern

Introduction

In 2023, we mark the 16th anniversary of Dresner Advisory Services. We are thankful for the support and encouragement of our clients and related communities. This has allowed us to build a stellar analyst organization and create world-class market research focused exclusively upon data, analytics, business intelligence, performance management, and associated topics.

Last year, in support of our members, we published over 3,500 pages of independent and objective primary research across 20 different Flagship and thematic market reports, 50 Research Insights (thought leadership articles), and 55 Vendor Insights reports. As in previous years, we remain committed to creating the most in-depth and relevant research available for these domains.

This is our inaugural Environmental, Social, and Governance (ESG) reporting Market Study. Although ESG reporting was a growing topic of discussion for several years, it was only in 2022 that any standards-setting bodies proposed the first formal ESG reporting standards. The International Sustainability Standards Board recently announced that its first two ESG standards, IFRS S1 and IFRS S2, will be effective from January 1, 2024, while the European Union mandated ESG reporting from January 2024 using its European Sustainability Reporting Standards.

We therefore felt it appropriate to conduct research into attitudes concerning ESG reporting and to assess the level of preparedness among organizations ahead of the introduction of these standards.

We hope you enjoy this report!

Best.

Chief Research Officer Dresner Advisory Services

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Benefits of the Study

This Dresner Advisory Services Environmental, Social, and Governance Market Study provides a wealth of information and analysis, offering value to both consumers and producers of business intelligence technology and services.

Consumer Guide

As an objective source of industry research, consumers use the Dresner Advisory Services Environmental, Social, and Governance Market Study to understand how their peers leverage and invest in these technologies.

Using our unique vendor performance measurement system, users glean key insights into environmental, social, and governance software supplier performance, which enables:

- Comparisons of current vendor performance to industry norms
- Identification and selection of new vendors.

Supplier Tool

Vendor licensees use the Dresner Advisory Services Environmental, Social, and Governance Market Study in several important ways:

External Awareness

- Build awareness for business intelligence markets and supplier brands, citing Dresner Advisory Services Environmental, Social, and Governance Market Study trends and vendor performance
- Gain lead and demand generation for supplier offerings through association with Dresner Advisory Services Environmental, Social, and Governance Market Study brand, findings, webinars, etc.

Internal Planning

- Refine internal product plans and align with market priorities and realities as identified in the Dresner Advisory Services Environmental, Social, and Governance Market Study
- Better understand customer priorities, concerns, and issues
- Identify competitive pressures and opportunities.

About Howard Dresner and Dresner Advisory Services

The Dresner Advisory Services Environmental, Social, and Governance Market Study was conceived, designed, and executed by Dresner Advisory Services, LLC—an independent advisory firm—and Howard Dresner, its President, Founder and Chief Research Officer.

Howard Dresner is one of the foremost thought leaders in business intelligence and performance management, having coined the term "Business Intelligence" in 1989. He

has published two books on the subject, *The Performance Management Revolution – Business Results through Insight and Action* (John Wiley & Sons, Nov. 2007) and *Profiles in Performance – Business Intelligence Journeys and the Roadmap for Change* (John Wiley & Sons, Nov. 2009). He lectures at forums around the world and is often cited by the business and trade press.

Prior to Dresner Advisory Services, Howard served as chief strategy officer at Hyperion Solutions and was a research fellow at Gartner, where he led its business intelligence research practice for 13 years.

Howard has conducted and directed numerous in-depth primary research studies over the past two decades and is an expert in analyzing these markets.

Through the Wisdom of Crowds[®] Business Intelligence market research reports, we engage with a global community to redefine how research is created and shared. Other research reports include:

- Wisdom of Crowds[®] Flagship BI Market Study
- Enterprise Performance Management (EPM)
- Financial Consolidation, Close Management, and Financial Reporting
- Sales Performance Management
- Small and Midsized EPM
- Supply Chain Planning and Analysis
- Workforce Planning and Analysis

You can find more information about Dresner Advisory Services at www.dresneradvisory.com.

The Dresner Team

About Elizabeth Espinoza

Elizabeth is Research Director at Dresner Advisory and is responsible for the data preparation, analysis, and creation of charts for Dresner Advisory reports.

About Kathleen Goolsby

Kathleen is Senior Editor at Dresner Advisory ensuring the quality and consistency of all research publications.

About Danielle Guinebertiere

Danielle is the Director of Client Services at Dresner Advisory. She supports the ongoing research process through her work with executives at companies included in Dresner market reports.

About Michelle Whitson-Lorenzi

Michelle is Client Services Manager and is responsible for managing software company survey activity and our internal market research data.

Survey Method and Data Collection

As with all our Wisdom of Crowds® market studies, we constructed a survey instrument to collect data and used social media and crowdsourcing techniques to recruit participants.

Data Quality

We carefully scrutinized and verified all respondent entries to ensure that only qualified participants were included in the study.

Executive Summary

Executive Summary

- Adoption of ESG reporting is currently low, with only 32 percent of organizations using it today. Current usage is highest in EMEA (45 percent) and lowest in North America (23 percent).
- Current usage of ESG reporting is significantly higher in large organizations
 (1,001 to 10,000 employees) and very large organizations (more than 10,000
 employees) at 42 percent and 51 percent, respectively. Sixty percent of small
 organizations (1 to 100 employees) state they have no plans to adopt ESG
 reporting.
- Despite low overall levels of current adoption, there is good awareness of ESG reporting. A total of 64 percent of respondents regard it as critical, very important, or important.
- Organizations that are more successful with BI are also more likely to have adopted ESG reporting, indicating they are better equipped to deal with the challenges presented by ESG reporting.
- The Global Reporting Initiative and Sustainability Accounting Standards are the most widely used standards among organizations that adopted ESG reporting.
- Thirty-nine percent of organizations do not know who will be responsible in their organization for ESG reporting, while a further 9 percent have not assigned responsibility yet.
- Respondents most frequently cite a cross-functional team and the CFO and finance team as having responsibility for ESG reporting. A small number of organizations have specific executive roles focused on ESG and sustainability.
- The most popular approaches to ESG reporting are to build in house using existing BI capabilities (16 percent) and to wait for an enterprise performance management vendor to provide these capabilities in a future release (13 percent). However, 56 percent of organizations have not defined their approach to ESG reporting.
- Very large organizations (more than 10,000 employees) have the highest preference for sourcing ESG reporting capabilities from enterprise performance management vendors.
- Most respondents view enterprise performance management functional capabilities as an important enabler for ESG reporting.

Study Demographics

Study Demographics

Study participants provide a cross-section of data across geographies, functions, organization sizes, and vertical industries. We believe that, unlike other industry research, this supports a more representative sample and better indicator of true market dynamics. We constructed cross-tab analyses using these demographics to identify and illustrate important industry trends.

Geography

Survey respondents represent the span of geographies. North America (including the United States, Canada, and Puerto Rico) accounts for the largest group with 57 percent of all respondents. EMEA accounts for 27 percent, Asia Pacific for 14 percent, and Latin America 2 percent (fig. 1).

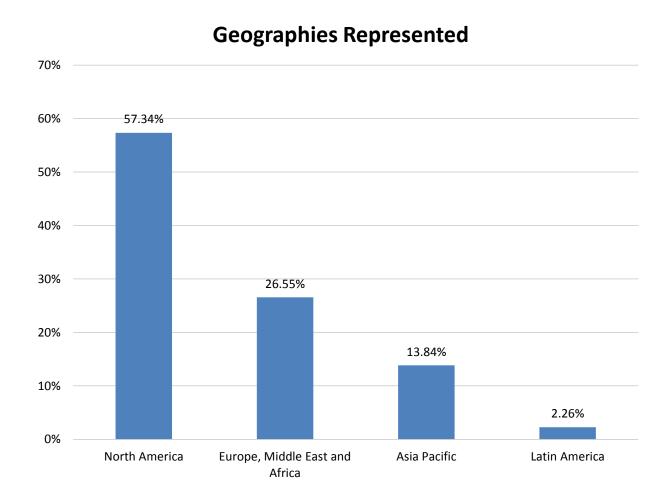


Figure 1 – Geographies represented

Functions

Finance is the function most represented among respondents, with about 45 percent of the sample (fig. 2). IT follows with 20 percent, while executive management represents 15 percent. These three functions account for over 80 percent of respondents.

Operations, strategic planning, the BI Competency Center (BICC), and marketing and sales are the next most represented. Fewer than one percent of respondents are from human resources, while about 5 percent of respondents do not fall into our functional breakout.

Tabulating results by respondent function helps us create analyses that represent different perspectives by function.

Functions Represented

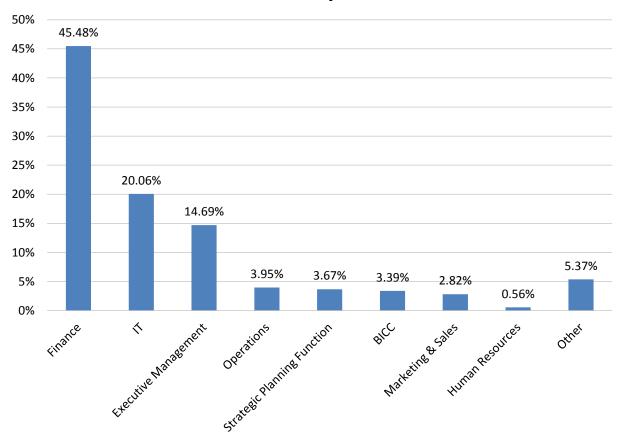


Figure 2 – Functions represented

Vertical Industries

Survey respondents are from a broad range of industries. Business services and manufacturing are the most represented industries, accounting for 32 percent and 22 percent of the sample, respectively (fig. 3). Consumer services, technology, financial services, healthcare, and education are the next most represented, with nearly 5 percent not falling into our industry classifications.

Tabulating results across industries helps us develop analyses that reflect the maturity and direction of different business sectors.

Vertical Industries Represented

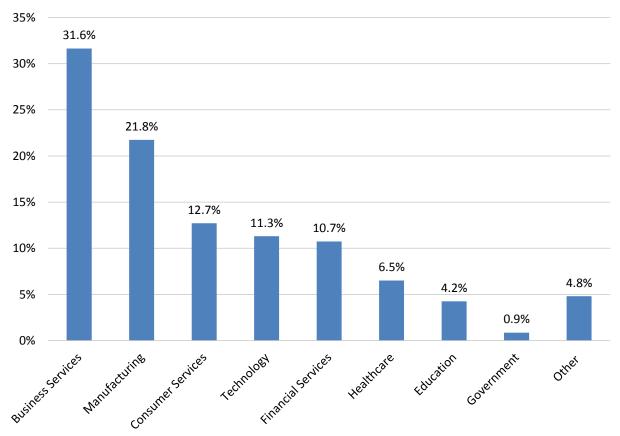


Figure 3 - Vertical industries represented

Organization Size

Survey respondents represent organizations of all sizes (measured by global employee head count). Small organizations (1-100 employees) represent about 17 percent of respondents, midsize organizations (101-1,000 employees) account for over 25 percent, while large and very large organizations (more than 1,000 employees) account for the remaining 57 percent (fig. 4).

Tabulating results by organization size reveals important differences in practices, planning, and maturity

Organization Sizes Represented 40% 36.3% 35% 25.4% 20.9% 17.4% 15% 0%

Figure 4 – Organization sizes represented

1-100

More than 10,000

1,001-10,000

101-1,000

Organization Age

Survey respondents are from organizations of differing ages (age is measured from when the organization was founded). Around 64 percent of respondents are from organizations that have been in existence for 16 years or more (fig. 5). Organizations aged less than five years represent 10 percent of respondents while those from organizations aged 5-10 years and 11-16 years represent between 15 percent and 12 percent, respectively.

Tabulating results by organization age reveals differences in approaches and attitudes to enterprise performance management based on how long an organization has been in existence.

Organization Ages Represented

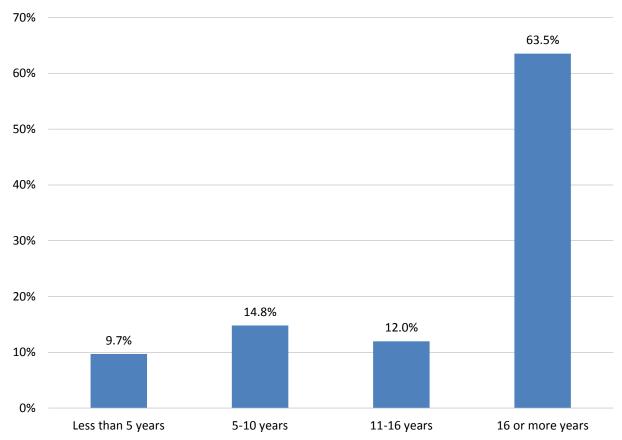


Figure 5 – Organization ages represented

Analysis & Trends

Analysis and Trends

Environmental, Social, and Governance Reporting Adoption

Only 32 percent of organizations currently produce some form of ESG reporting, clear evidence that ESG is not a high priority in most organizations (fig. 6). However, 18 percent report they are considering it, making a total of nearly 50 percent that either produce ESG reports today or are considering it. Respondents in 22 percent of organizations currently do not know what their plans are, while 28 percent state they currently have no plans to produce ESG reports.

This data show that, despite a reasonable level of awareness of ESG reporting, most organizations don't produce ESG reports today. This likely indicates a lack of preparedness in many organizations that may find it difficult to respond to any mandatory ESG reporting requirements that are introduced in the near future.

ESG Reporting Usage

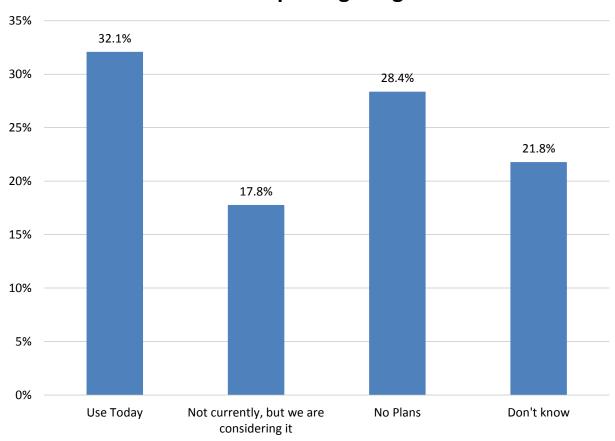


Figure 6 – Environmental, social, and governance reporting usage

Adoption of ESG reporting varies considerably by geography (fig. 7). Forty-five percent of organizations in EMEA and 43 percent in Asia Pacific currently produce ESG reports, compared to only 24 percent in North America. North America and Latin America have the highest percentage of organizations that have no plans to produce ESG reports (around 38 percent in both regions). Respondents in North America clearly rate ESG reporting as a low priority at the current time.

ESG Reporting Usage by Geography 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Europe, Middle East and Asia Pacific Latin America North America Africa ■ Not currently, but we are considering it Use today ■ No plans ■ Don't know

Figure 7 – Environmental, social, and governance reporting usage by geography

The difference in adoption of ESG reporting across regions reflects the differing approach of standards-setting bodies and regulators. The European Union (EU) has been promoting ESG reporting for several years, and IFRS standards are also widely used in EMEA in both EU and non-EU countries. The introduction of formal ESG reporting from 2024 through both the EU's Corporate Sustainability Reporting Directive and the IFRS sustainability standards (IFRS S1 and IFRS S2) is reflected in the low percentage of EMEA organizations that have no plans to adopt ESG reporting (14 percent).

Conversely, although the U.S. Securities and Exchange Commission has proposed rule changes for climate disclosure, its publication was pushed back, and there is no timeline for their introduction. This lack of time pressure from external regulators is likely the main reason for the higher percentage of organizations in North America that have no plans to adopt ESG reporting.

Adoption of ESG reporting is highest in the manufacturing industry vertical, with nearly 42 percent of organizations currently producing ESG reports (fig. 8). This likely reflects the focus on greenhouse gas emissions related to the manufacturing process. However, there is broad industry comparability when looking at the combined percentage of organizations that are either currently using ESG reporting or are considering it. These range from 47 percent in consumer services to 59 percent in manufacturing.

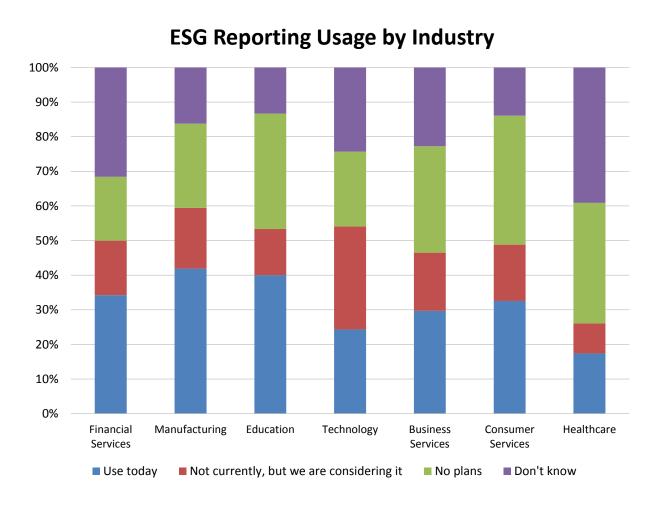


Figure 8 – ESG reporting usage by industry

The one notable outlier is the healthcare vertical, with only 26 percent of respondents either currently using or considering ESG reporting. This is likely due to a higher percentage of respondents in this industry originating from North America (which has the lowest level of ESG reporting usage).

ESG reporting adoption varies significantly by organization size. Nearly 51 percent of very large organizations (more than 10,000 employees) already produce ESG reports, as do 42 percent of large organizations (1,001 to 10,000 employees) (fig. 9). However, only 8 percent of small organizations (1 to 100 employees) currently produce ESG reports, while 60 percent have no plans for ESG reporting, compared to only 5 percent of very large organizations (more than 10,000 employees).

ESG Reporting Usage by Organization Size 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 1-100 1,001-10,000 More than 10,000 101-1,000

Figure 9 – ESG reporting usage by organization size

Use today

This data is clear evidence that organization size is the main factor driving ESG adoption. Large and very large organizations are most likely to be affected by environmental, social, and governance issues, and the reputational impact of these

■ Not currently, but we are considering it

■ Don't know

■ No plans

issues could be considerable for major brands. However, data leaders in small and midsize organizations (SMEs) should not assume ESG reporting will not affect them. Although SMEs are often exempted from the full complexity of new reporting requirements, it is unlikely they will not be impacted at some stage by ESG reporting requirements. For example, the European Union's Corporate Sustainability Reporting Directive will apply to listed SMEs, but they get an additional three years to comply with the requirements (they will be required to report in 2027 on 2026 data).

Organization age does not appear to be a major factor in adoption of ESG reporting (fig 10). The percentage of organizations that have either adopted ESG reporting or are considering it is around 50 percent for most organization ages. This figure is slightly lower for organizations aged 11 to 16 years, and organizations of this age have the highest percentage of "don't know" respondents (29 percent).

ESG Reporting Usage by Organization Age

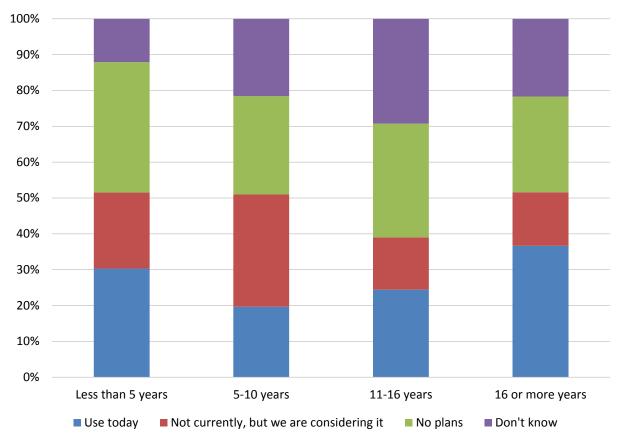


Figure 10 -- ESG reporting usage by organization age

Our research reveals that success with BI appears to be a significant factor in adoption of ESG reporting (fig. 11). Forty-four percent of organizations that are *completely successful* with BI adopted ESG reporting, compared to 30 percent of organizations that are *somewhat successful* and only 12 percent of organizations that are *somewhat unsuccessful* with BI. Also, 58 percent of organizations that are *somewhat unsuccessful* or *unsuccessful* with BI have no plans for ESG reporting, compared to 31 percent for organizations that are *somewhat successful* with BI and only 22 percent of organizations that are *completely successful* with BI.

ESG Reporting Usage by Success with BI 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Completely Successful Somewhat Successful Somewhat Unsuccessful & Unsuccessful ■ Not currently, but we are considering it Use today ■ No plans Don't know

Figure 11 – ESG reporting usage by success with BI

ESG reporting presents a complex BI challenge. It creates data management and data governance challenges, there are few packaged software solutions available to help, and the requirements are vague and evolving. Our data indicate that organizations that are successful with BI are more likely to the people, processes, and infrastructure in place to address these challenges.

Importance of Environmental, Social, and Governance Reporting

Despite the low current adoption of ESG reporting, our research shows that it is regarded as an important topic by the majority of organizations (fig. 12). Although only 11 percent of respondents regard it as *critically important*, a total of 64 percent regard it as *critical*, *very important*, or *important*. Only 19 percent regard it as *not important*.

This data is encouraging because it shows that ESG is on the mind of most organizations. It may not be of high priority for most organizations currently, but it is something they know will likely impact them. Data leaders must ensure they stay on top of developments in ESG reporting requirements so they are not caught unaware when regulatory bodies mandate reporting requirements. This is a topic that can be discussed on a periodic basis with auditors and accounting/financial advisory firms.

Importance of ESG Reporting

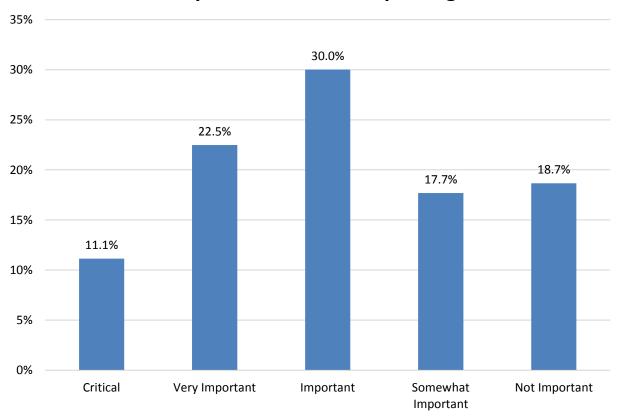


Figure 12 - Importance of ESG reporting

Environmental, Social, and Governance Reporting Standards

There are as yet no mandatory ESG reporting standards issued by regulatory bodies, although the first of these will become effective in 2024. However, as CSR evolved and expanded into ESG in recent years, several independent bodies emerged that developed a range of ESG reporting measures and processes. Some of these are broad in scope, such as the Global Reporting Initiative, while others, such as the Greenhouse Gas Protocol, focus on specific aspects of ESG reporting.

ESG Reporting Standards in Use

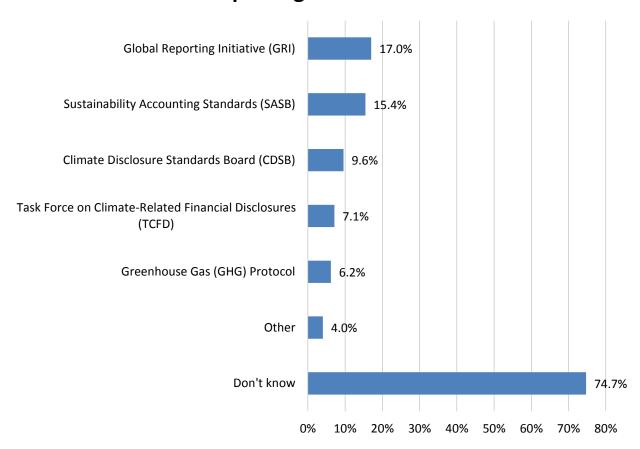


Figure 13 - ESG reporting standards in use

Unsurprisingly, 75 percent of respondents state they don't know what standards are in use or are likely to be used (fig.14). This is further evidence that ESG reporting is currently not a high priority in most organizations. Also, because mandatory standards are starting to emerge, a "wait-and-see" approach makes sense for organizations that do not want to be leaders in the adoption of ESG reporting.

Among organizations that adopted ESG reporting standards, the Global Reporting Initiative and Sustainability Accounting Standards are the most popular, used by 17 percent and 15 percent of organizations, respectively (note that respondents can select multiple standards, hence the percentages do not add to 100 percent). Respondents that selected the "Other" option use a range of standards including ISO 14001, the World Economic Forum's IBC metrics, GRESB, and the European Union's ESR standards. One organization is already using the SEC's proposed climate disclosure rules even though there is no timeline as yet for mandatory adoption.

A notable development in ESG reporting occurred in 2022. The Value Reporting Foundation (which was responsible for the SASB standards) and the CDSB were consolidated into the IFRS Foundation. The SASB standards served as a key starting point for the development of the IFRS Sustainability Disclosure Standards (IFRS S1 and IFRS S2), while the CDSB staff were transferred to the IFRS Foundation. As both the SASB and CDSB standards have good usage levels among early adopters (at 15 percent and 10 percent, respectively), this indicates that the upcoming IFRS Sustainability Disclosure Standards should gain traction relatively quickly in ESG reporting.

Responsibility for Environmental, Social and Governance Reporting

Thirty-nine percent of organizations don't know who will be responsible in their organization for ESG reporting, and a further 9 percent have not yet assigned responsibility. There is no clear leader among organizations that assigned responsibility, although respondents most frequently cite a cross-functional team and the CFO and finance team, at 13 percent and 12 percent, respectively. Executive management are responsible for ESG reporting in nearly 10 percent of organizations, evidence that this is viewed as a high priority by some organizations.

Among the respondents that selected the "Other" option, one organization identified they have a VP of ESG, while others named a Chief Sustainability Officer and a Sustainability Director. Again, this is evidence that in some organizations ESG reporting is a senior executive-level priority.

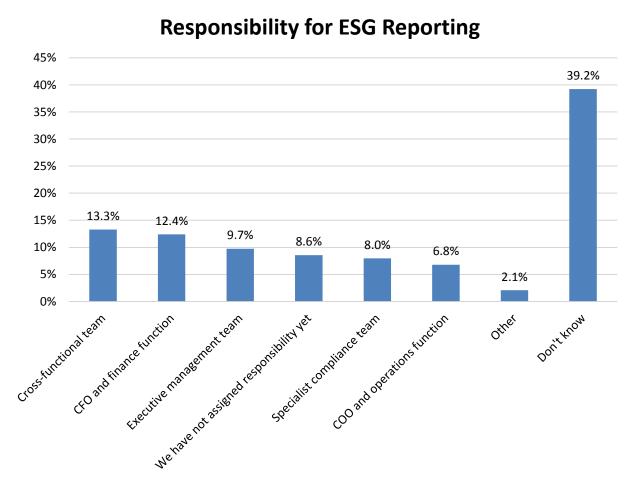


Figure 14 - Responsibility for ESG reporting

Sourcing of Environmental, Social, and Governance Reporting Capabilities

ESG reporting is currently challenging. It requires monitoring and tracking many non-financial metrics and data elements, combining these with financial and other existing performance measures, and producing complex reports that contain both data and narrative elements. It is therefore unsurprising that the majority of organizations (56 percent) do not know how they will source ESG reporting capabilities (fig.15).

ESG Reporting Capability Sourcing 60% 55.6% 50% 40% 30% 20% 15.8% 13.4% 10.3% 10% 4.9% 0% Specialist disclosure Build in-house using Provided by our Provided by our existing Don't know existing BI/analytics enterprise performance management/compliance BI/analytics vendor(s) in capabilities management vendor in vendor or vendors future releases future release

Figure 15 - ESG reporting capability sourcing

Among organizations that defined their approach to ESG reporting, the most popular options are to build in-house using existing BI capabilities (16 percent) and to wait for an enterprise performance management vendor to provide these capabilities in a future release (13 percent). Our data show that organizations that are completely successful with BI are most likely to have already adopted ESG reporting, and these organizations are most likely to have the skills and resources to leverage existing BI capabilities to build ESG reporting solutions.

Twenty-nine percent of organizations prefer to source ESG reporting capabilities in a more packaged format from a vendor. Enterprise performance management vendors are the most popular choice followed by specialist disclosure management/compliance vendors and then BI/analytics vendors.

Organizations in North America have the highest level of "don't know" responses (65 percent), compared to 46 percent for EMEA, 36 percent for Asia Pacific, and 50 percent for Latin America (fig.16). Organizations in EMEA have the highest preference for inhouse development using existing BI and analytics capabilities, while organizations in Asia Pacific and Latin America have the highest preference for solutions from enterprise performance management vendors.

ESG Reporting Capability Sourcing by Geography

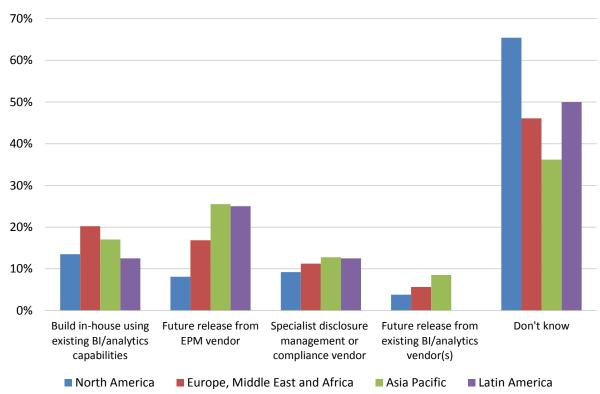


Figure 16 – ESG reporting capability sourcing by geography

Very large organizations (more than 10,000 employees) have the lowest level of "Don't know" responses with regard to sourcing ESG reporting capabilities (fig. 17). This is in line with the higher adoption levels of ESG reporting among these organizations. Also, they have the highest preference for sourcing ESG reporting capabilities from enterprise performance management vendors (23 percent, compared to 12 percent for organizations with 1,001 to 10,000 employees). This represents a potential market opportunity for enterprise performance management vendors.

ESG Reporting Capability Sourcing by Organization Size

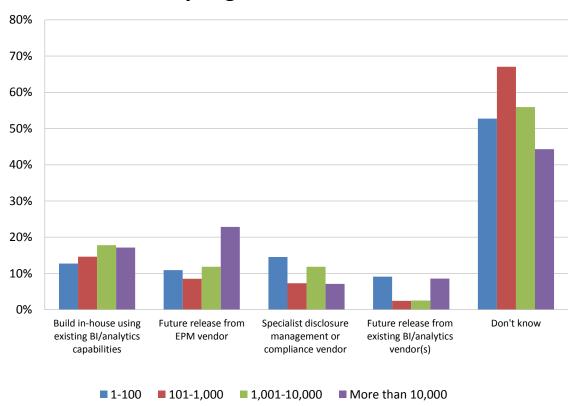


Figure 17 – ESG reporting capability sourcing by organization size

Functionality Priorities for Environmental, Social and Governance Reporting

Respondents clearly view ESG reporting functionality as important, but no individual functional capabilities stand out as "must haves" (fig. 18). However, it is clear that most respondents see an important link between enterprise performance management capabilities and ESG reporting. Five of the top six functional priorities relate to accessing enterprise performance management metadata and data from either existing in-house EPM systems or from external systems (such as enterprise resource planning systems). Respondents clearly want to leverage the same reporting structures for ESG reporting they already use for financial and management reporting. This is key to supporting one of the main drivers of ESG reporting, which is consistency between financial results and ESG reports.

ESG Reporting Functionality Priorities

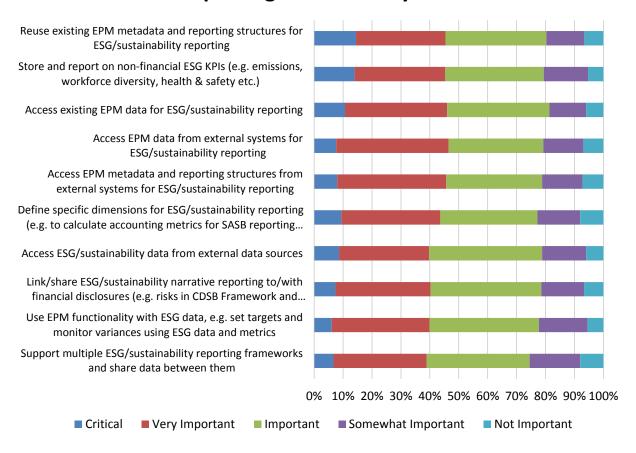


Figure 18 – ESG reporting functionality priorities

Storing and reporting on non-financial data for ESG reporting is the second highest priority functional capability. This shows that data governance will play an important role in any ESG reporting initiative, as defining the appropriate data for inclusion in ESG reporting and ensuring its quality will be key to success.

There is one notable difference in the way that business functions prioritize ESG reporting functional capabilities. All functions give very similar priority ratings across ESG functional capabilities, with the exception of the BICC respondents, who rate all capabilities as higher priority than other business functions (fig. 19). This is an encouraging sign as it appears respondents from the BICC appreciate the data management and data governance challenges that ESG reporting will likely create. The BICC is ideally placed to coordinate these activities across multiple business functions to mitigate these challenges.

ESG Reporting Functionality Priorities by Function

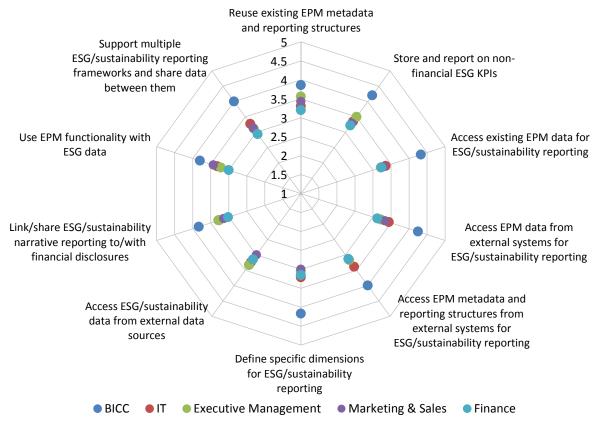


Figure 19 – ESG reporting functionality priorities by function

Industry and Vendor Analysis

Industry and Vendor Analysis

Industry Support for ESG Reporting Features

ESG reporting is a new and evolving category. Until regulators define and mandate specific reporting standards, it is challenging to perform direct comparisons between vendors. However, at this early stage of the market, the most important capabilities relate to the ability to share ESG data and metadata with enterprise performance management systems and other data sources. This helps ensure that ESG reporting is not a disconnected (and potentially inconsistent) reporting silo separate from other key corporate and organizational business data. Currently, all vendors support these fundamental capabilities and thus will provide a solid foundation for ESG reporting (fig. 20).

Industry Support for ESG Reporting Features

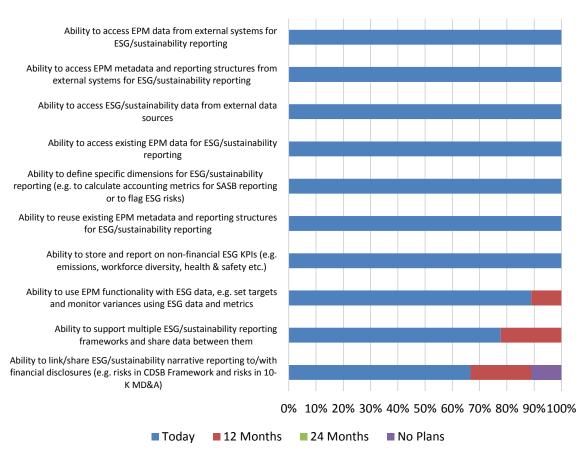


Figure 20 – Industry support for ESG reporting features

However, some vendors are missing important capabilities. Eleven percent of vendors do not support the use of enterprise performance management functionality (such as planning and forecasting) with ESG data, making their solutions static reporting tools rather than proactive management capabilities. Twenty-two percent of vendors do not currently support multiple ESG reporting frameworks, while 33 percent do not currently support linking ESG narrative reporting with financial disclosures. Both capabilities are important for larger organizations with complex ESG reporting requirements; so, data leaders need to assess ESG reporting needs against both current capabilities and future road maps to ensure vendors will meet their organization's requirements.

Industry Support of Templates for ESG Reporting Standards

Most ESG reporting standards are based on a set of principles rather than definitions of specific reports and layouts. It is therefore hard for vendors to provide a completely "out of the box" solution. However, it is possible to interpret these standards and provide reporting templates, which provide a starting point for an organization's own ESG reporting solution. The use of reporting templates should enable faster delivery of an ESG solution.

Industry Support of Templates for ESG Reporting Standards

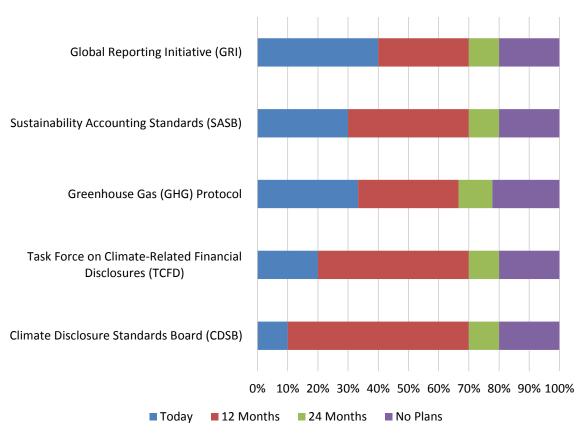


Figure 21 — Industry support of templates for ESG reporting standards

Only a minority of vendors currently provide any ESG reporting templates (fig. 21), with the top three supported standards being the Global Reporting Initiative (40 percent), the Greenhouse Gas Protocol (33 percent), and Sustainability Accounting Standards (30 percent). However, within 12 months, close to 70 percent of vendors plan to provide

templates for all ESG reporting standards in our survey. This is evidence of the immaturity of the ESG reporting market.

Environmental, Social, and Governance Reporting Vendor Ratings

For the vendor ratings, we considered a combination of ESG features and support for ESG standards. While all ranked vendors provide support for ESG features, only a limited few currently support ESG standards.

Top vendors include Wolters Kluwer and Workiva (tied for first place), OneStream (2nd), and Unit4 (3rd).

ESG Vendor Ratings

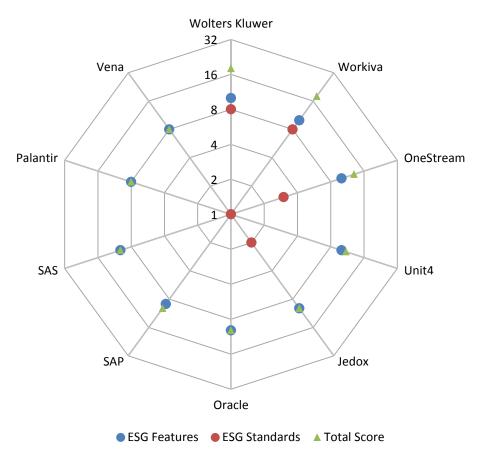


Figure 22 – ESG vendor ratings

^{*}A logarithmic scale is used for the scoring chart to address skewness towards larger values

Other Dresner Advisory Services Research Reports

- Wisdom of Crowds® "Flagship" Business Intelligence Market Study
- Analytical Data Infrastructure
- Analytical Platforms
- BI Competency Center
- Cloud Computing and Business Intelligence
- Data Engineering
- Data Science and Machine Learning
- Embedded Business Intelligence
- Enterprise Performance Management
- Financial Consolidations, Close Management, and Financial Reporting
- Guided Analytics
- Master Data Management
- ModelOps
- Sales Performance Management
- Self-Service Business Intelligence
- Small and Mid-Sized Enterprise Business Intelligence
- Small and Mid-Sized Enterprise Performance Management
- Supply Chain Planning and Analysis
- Workforce Planning and Analysis

Appendix: Environmental, Social and Governance Reporting Survey Instrument

| First Name*: |
|--|
| Last Name*: |
| Title: |
| Company Name*: |
| Street Address: |
| City: |
| State: |
| Zip: |
| Country: |
| Email Address*: |
| Phone Number: |
| URL: |
| |
| May we contact you to discuss your responses and for additional information? |
| () Yes |
| () No |
| |
| What major geography do you reside in?* |
| () North America |
| () Europe, Middle East and Africa |
| () Latin America |
| () Asia Pacific |
| |
| Please identify your primary industry* |

| () Advertising |
|-------------------------------|
| () Aerospace |
| () Agriculture |
| () Apparel & accessories |
| () Automotive |
| () Aviation |
| () Biotechnology |
| () Broadcasting |
| () Business services |
| () Chemical |
| () Construction |
| () Consulting |
| () Consumer products |
| () Defense |
| () Distribution & logistics |
| () Education (Higher Ed) |
| () Education (K-12) |
| () Energy |
| () Entertainment and leisure |
| () Executive search |
| () Federal government |
| () Financial services |
| () Food, beverage and tobacco |
| () Healthcare |
| () Hospitality |
| () Insurance |

| () Legal |
|---------------------------------|
| () Manufacturing |
| () Mining |
| () Motion picture and video |
| () Not for profit |
| () Pharmaceuticals |
| () Publishing |
| () Real estate |
| () Retail and wholesale |
| () Sports |
| () State and local government |
| () Technology |
| () Telecommunications |
| () Transportation |
| () Utilities |
| () Other - Please specify below |
| |
| Please type in your industry |
| |

| now many employees does your company employ worldwide? |
|--|
| () 1-100 |
| () 101-1,000 |
| () 1,001-2,000 |
| () 2,001-5,000 |
| () 5,001-10,000 |
| () More than 10,000 |
| |
| 7) What function do you report into?* |
| () Business Intelligence Competency Center |
| () Executive management |
| () Faculty (Education) |
| () Finance |
| () Human resources |
| () Information Technology (IT) |
| () Manufacturing |
| () Marketing |
| () Medical staff (Healthcare) |
| () Operations |
| () Research and development (R&D) |
| () Sales |
| () Strategic planning function |
| () Supply chain |
| () Other - Write In |
| |

Does your organization currently produce any Environmental, Social and Governance

| and/or Sustainability reporting? |
|--|
| () Yes |
| () Not currently, but we are considering it |
| () No |
| () Don't know |
| Which Environmental, Governance, Social and Sustainability reporting standards do you use (or may use in future)? Select all that apply. |
| [] Global Reporting Initiative (GRI) |
| [] Sustainability Accounting Standards (SASB) |
| [] Climate Disclosure Standards Board (CDSB) |
| [] Task Force on Climate-Related Financial Disclosures (TCFD) |
| [] Greenhouse Gas (GHG) Protocol |
| [] Don't know |
| [] Other - Write In: |
| |
| Who is/will be responsible for ESG/Sustainability reporting in your organization? |
| () The executive management team |
| () The CFO and finance function |
| () The COO and operations function |
| () A cross-functional team |
| () A specialist compliance team |
| () We have not assigned responsibility yet |
| () Don't know |
| |

| () Other - Write In: |
|--|
| How will you source capabilities to deliver ESG/Sustainability reporting? |
| () We expect our enterprise performance management vendor to provide them in future releases |
| () We will use a specialist disclosure management/compliance vendor or vendors |
| () We expect our existing BI/analytics vendor(s) to provide them in future releases |
| () We will build them ourselves using existing BI/analytics capabilities |
| () Don't know |

Please prioritize the importance of the following ESG solution features

| | Critica I | Very Importan t | Importan t | Somewha t Important | Not Importan t |
|---|--------------|-----------------------|---------------|---------------------------|----------------------|
| Ability to reuse existing EPM metadata and reporting structures for ESG/sustainabilit y reporting | () | () | () | () | () |
| Ability to access EPM metadata and reporting structures from external systems for ESG/sustainabilit y reporting | () | () | () | () | () |
| Ability to access existing EPM data | () | () | () | () | () |

| for ESG/sustainabilit y reporting | | | | | |
|--|----|----|----|----|----|
| Ability to access EPM data from external systems for ESG/sustainabilit y reporting | () | () | () | () | () |
| Ability to define specific dimensions for ESG/sustainabilit y reporting (e.g. to calculate accounting metrics for SASB reporting or to flag ESG risks) | () | () | () | () | () |
| Ability to store and report on non-financial ESG KPIs (e.g. emissions, workforce diversity, health & safety etc.) | () | () | () | () | () |
| Ability to access ESG/sustainabilit y data from external data sources | () | () | () | () | () |
| Ability to use EPM functionality with ESG data, e.g. set targets and monitor variances using | () | () | () | () | () |

| ESG data and metrics | | | | | |
|---|----|----|----|----|----|
| Ability to link/share ESG/sustainabilit y narrative reporting to/with financial disclosures (e.g. risks in CDSB Framework and risks in 10-K MD&A) | () | () | () | () | () |
| Ability to support multiple ESG/sustainabilit y reporting frameworks and share data between them | () | () | () | () | () |