

State of Integrated and Sustainability Reporting 2018



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The IRRC Institute will dissolve by December 31, 2018. Its intellectual property will be assumed by the Weinberg Center at the University of Delaware.

As of January 2019, please refer to
www.weinberg.udel.edu.

The Sustainable Investments Institute (Si2) is a non-profit organization which helps its institutional investor subscribers make informed, independent voting decisions on social and environmental shareholder proposals. Si2 also researches related efforts to influence corporate policies, explaining what investor reformers want and how companies respond. Primary support comes from annual fees paid by the largest U.S. college and university endowments and the largest North American pension funds.

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Executive Summary

Sustainability reporting for large public companies around the world has become the norm. Si2's research this year (2018) found that 78 percent of the S&P 500 issued a sustainability report for the most recent reporting period, most with environmental and social performance metrics. The rate of sustainability reporting for the world's largest companies is even higher, with some figures noting as high as 93 percent.¹ This is a starkly different picture from the 1980s, when a handful of companies in vulnerable sectors—extractives and chemicals, which had to respond to public backlash against environmental mishaps—were the only ones to publish environmental reports with limited performance metrics. It was not until the 1990s that sustainability reports as we know them today started gaining traction, after the concept of “triple bottom line”—environmental, social and economic—corporate performance was [introduced](#) and became popular.

Integrated reporting reflects a critical point in the evolution of financial accounting practice. Its core purpose is to ensure that organizations provide a more accurate account of their creation or destruction of value among the different forms of capital. It achieves this by shifting the focus away from the traditional exclusivity of financial measurement.

— Dr. Robert Massie (Co-founder), [GRI](#)

Now, almost three decades later, the landscape is again ripe for a shift. This time, the new concept is “value creation,” that companies should create shared value for all—including investors, employees, suppliers, communities and the environment. Proponents say that companies should disclose how they integrate the triple bottom line impacts through a more holistic report of its inputs and outputs, through what's called an integrated report. Integrated reports would elevate the status of material sustainability matters to be commensurate with financial ones, and help investors make more informed decisions.

Si2, with funding from the IRRIC Institute, last looked at these issues in 2013 in a first-of-its-kind analysis of the state of integrated reporting among the S&P 500, [Integrated Financial Sustainability Reporting in the United States](#). But the world has seen a number of important changes in the five years since then. In the background are a number of historic developments including the spread of the Internet, the coming of age of the Internet generation, dwindling public trust in institutions and a scientific consensus about the threat of global climate change. All these factors have increased expectations from a wide range of corporate stakeholders—consumers, investors and regulators—about the role businesses should play in society and how they should make positive contributions.

At the same time, investors in the United States and around the world continue to integrate environmental, social and corporate governance factors into their analyses. The Principles for Responsible Investment, which call for such integration, are now supported by large institutional investors with a total of \$82 trillion in assets under management.² By comparison, the entire Gross National Product (GNP) of the United States is about one-quarter of that amount. Investors are clearly fueling demand for more and standardized corporate environmental and social data. With investor attention on such information higher than ever, corporate sustainability reporting is ripe for the next phase of its evolution. In addition, introductions of new integrated reporting frameworks from the

¹ See *The Road Ahead: KPMG Survey of Corporate Responsibility Reporting 2017*.
https://home.kpmg.com/content/dam/kpmg/campaigns/csr/pdf/CSR_Reporting_2017.pdf

² As of April 2018. See <https://www.unpri.org/pri/about-the-pri>

International Integrated Reporting Council (IIRC) and the Sustainability Accounting Standards Board (SASB) have raised expectations for companies in ways that may not only change how companies report on sustainability, but also how they define their corporate identities and approach business in general.

It is with this background that Si2 launched this year's update of the 2013 review, using a new lens. This year's research takes a higher level view of the S&P 500's sustainability and integrated reporting than the earlier, more granular study. The 2013 report focused on what was being reported by the companies in their financial filings without regard to their status as mandatory versus voluntary measures. This year's research focuses only on voluntary disclosures. This year's research also concentrates on which sustainability reporting frameworks companies reference, to gauge the spread and influence of integrated reporting frameworks, as well as to uncover where corporate reporting is headed.

Broadly, Si2's 2018 analysis looks at:

- 1) how many U.S. S&P 500 companies now are *reporting on sustainability performance and strategy*,
- 2) how many are issuing *stand-alone integrated reports*³ and
- 3) how many are including *voluntary sustainability information in financial reports*.

Knowing the tally of reports is essential for assessing the voluntary inclusion of sustainability information in financial reporting. This year's review therefore set out to capture the influence of many important new developments driving the convergence of corporate financial and sustainability reporting.

Key Findings

Si2's key findings paint a dynamic picture of corporate sustainability reporting. Most companies reporting on sustainability issues are navigating the landscape in their own way, using multiple reporting models and customizing guidance for their own needs. The number of integrated reporters in the S&P 500 has doubled since 2013, although from a low baseline (14 now issue such reports, up from seven five years ago). But Si2 also found a surprising share of companies are including sustainability information in their financial filings—annual reports, Forms 10-K and proxy statements—indicating elementary but growing acceptance that sustainability information is material to investors. All these findings show most companies are paying attention and adapting to raised expectations from stakeholders, including but not limited to investors. Integrated reporting just may be the future of corporate disclosure its proponents assert, even if change is slow and constantly shifting.

More specifically, Si2 reached the following key findings from this year's assessment of sustainability reporting among the S&P 500:

- **A total of 395 companies (78 percent) issue sustainability reports, in either a discrete, downloadable format (68 percent) or only on the web with unclear boundaries (9 percent).**

³ Si2 counted as integrated reports those that were self-declared as such, with one exception. **Allstate** did not make a declaration but had all of the comparable qualities—mainly, combining financial and sustainability information within its annual report—and was counted as an integrated report.

- Most of these reports (95 percent) offer *environmental performance metrics* (quantified measures that are comparable year-over-year), while 67 percent set quantified and time-bound *environmental goals*.
- About 86 percent offer *social performance metrics*, although Si2 cast a wide net and gave full credit for the most common social metrics including injury and accident rates. *Goal setting for social performance* was much lower than for the environment, however, in place for just 40 percent of all reporting companies.
- **Most lack external assurance; only 36 percent of sustainability reports include it.**
 - About 90 percent of external assurance pertains only to some data, in most cases greenhouse gas (GHG) emissions.
 - Only 3 percent of reporters stated their reports' environmental *and* social performance data were externally verified, although significant ambiguity exists given the varying language companies use and the level of transparency they offer about external assurance.
- **Nearly all (97 percent) of reporting companies chose to customize extant sustainability reporting models—in style, format and content—instead of closely following any one framework.**
 - Only 10 reporting companies issue sustainability reports that follow only one reporting framework *closely*, using either the GRI or an industry-specific model.
 - 106 companies (27 percent) reference and *loosely* follow just one framework, while 46 percent reference *two or more* reporting models.
 - 97 companies (25 percent) *do not reference* any reporting models.
- **A minority of the S&P 500 references a recognized integrated reporting framework.** SASB is cited as an influence by 35 companies (9 percent), while four companies reference the IIRC.
- **Fourteen S&P 500 companies issued an integrated report in 2018, twice the number in 2013.**
 - Neither the size of a company (in revenue) nor its share of income from international markets seems to influence the likelihood a company will use integrated reporting.
 - About half the integrated reporters obtained some form of external assurance for their sustainability data, a much higher rate than reporters as a whole.
- **Integrated reporters are more likely to treat sustainability information as material to investment decisions,** making it easier for investors to review such information as part of normal research processes.
 - All 14 companies offered their integrated reports under the investor relations section of their websites.
 - Seven companies used their integrated reports as their annual reports, although only two—**Intel** and **Clorox**—included voluntary discussion of sustainability in their 10-K business descriptions.
- **Many more integrated reporters (71 percent) have a board committee overseeing sustainability issues than do general reporters (42 percent).**

- **Integrated reporters noted varying degrees of influence from sustainability reporting models.**
 - References to integrated reporting frameworks were low even in among those doing it, with just four citing SASB and three citing IIRC. Two companies—**Pfizer** and **Praxair**—referenced both SASB and IIRC.
- **IIRC’s influence may be greater than it seems, however. Eleven (79 percent) of the integrated reports address the concept of “creating shared value for all,” the central tenet of IIRC.** This departs significantly from traditional business theory—that the sole purpose of business is profit—and addresses the increasing expectations of investors and other stakeholders about corporate ESG (Environmental/Social/Governance) data disclosure.

“To continue creating prosperity businesses must take on a bigger role in society. Let’s be clear, a business needs to make an acceptable profit since this is a measure of how effectively it uses society’s resources. Yet more is expected and needed from business. Eighty-seven percent of young Americans believe that businesses need to do more than make a profit. Companies also need to be held accountable for creating jobs, making sure free markets work and improving our communities.”

— **Allstate** (Chairman’s Letter, [2017 Prosperity Report](#))
- **A surprising share of the S&P 500 includes voluntary sustainability information in financial reports, but the extent varies widely.**
 - Companies representing about 40 percent of the S&P 500 now include the concept of sustainability in their *annual reports* or *Forms 10-K*.
 - A total of 191 companies (38 percent) include discussions of corporate responsibility or sustainability in their *proxy statements*, beyond the traditional discussion of board governance and executive compensation.
 - A total of 212 companies (42 percent) have a formal *board committee* overseeing sustainability. (As noted above, 71 percent of integrated reporting companies do.)

In This Report

This report is organized into two broad sections:

- I. **Background:** This section describes why Si2 believed it was important to revisit the analysis of integrated reporting among the S&P 500 at this time. It sets out important changes—in the world at large and in the financial markets—that have taken place in the past five years, which may have profound implications for the future of corporate sustainability reporting. . It also explains key differences between Si2’s study in 2013 and this one.
- II. **2018 Findings:** This section presents the results from Si2’s 2018 review of the S&P 500’s sustainability reporting practices in two parts:
 - **State of Sustainability Reporting 2018:** This section shows how sustainability reporting has become the normal practice among U.S. companies, but notes the quality of these reports varies widely. As key indicators of report quality, Si2 looked at whether the reports offer *environmental and social (ES) metrics*, if *information is verified* by a third-party and if a *materiality analysis* and *stakeholder engagement process* are disclosed—

as broad but illustrative indicators.⁴ In addition, Si2 looked at which sustainability reporting *guidelines* are being used by the companies, including those offered by the IIRC and SASB, as an indicator of where reports may be headed.

- **State of Integrated Reporting 2018:** This section focuses on the disclosure practices of the small group of companies that have issued integrated reports, identifying patterns and key takeaways. Si2 finds that the number of integrated reporters has grown slowly in the last five years, but those that do report seem to be listening to the latest thinking about the reimagined role of companies in society, using a lens of value creation. Si2 also looked at the S&P 500's financial filings—Forms 10-K and proxy statements—and reviewed how many include voluntary sustainability information beyond compliance requirements.⁵ Si2 finds that a surprising share of companies already have expanded their ESG reporting in financial filings, albeit mostly at a rudimentary level.

Study approach: Following the sample group from its 2013 research, Si2 examined the S&P 500 as of May 2018—a total of 506 companies—and their 2017 annual revenue figures. When Si2 accessed the list of S&P 500 in the beginning of 2018 it included a total of 505 companies; we further separated out Dow and Dupont—which is listed as one entity but still had separate sustainability reporting practices—bringing the total number to 506. The study uses a new set of indicators to review:

- 1) how many among the U.S. S&P 500 companies are now *reporting on sustainability performance* and strategy,
- 2) how many are issuing *stand-alone integrated reports* and
- 3) how many are including *voluntary sustainability information* in their financial reports.

Information came from company websites examined between June and August. (*See Appendix, part 1, p. 38, for the full list of indicators.*)

⁴ While Si2 recognizes the importance of accounting for “triple-bottom line” sustainability— including the environmental, economic and social—it focuses on environmental and social indicators for this study.

⁵ This meant that the company intentionally addressed the issue in a way that provided at least minimal insight into the company's approach to sustainability. Mere mentions of sustainability awards were not given credit; acknowledgements of sustainability efforts in a board chair's letter in the annual report or stand-alone sections on sustainability management in 10-Ks or proxies were given full credit.

I. Background

Study in 2013

The Sustainable Investments Institute (Si2), with sponsorship of the Investor Responsibility Research Center Institute (IRRCi), published in 2013 a first-of-its-kind analysis of the state of integrated reporting among the S&P 500. [*Integrated Financial Sustainability Reporting in the United States*](#) looked at how many companies were including environmental and social information in their financial filings and/or issuing stand-alone integrated reports, detailing many historical and regulatory forces driving the push for corporate sustainability disclosure.

While it found the majority of U.S. companies disclosed a number of environmental and social information in their Securities and Exchange Commission (SEC) filings, much reporting was driven by regulation. For example, 66 percent of companies studied included a discussion on climate change in their Form 10-Ks. Only a handful—seven—had issued full and voluntary integrated reports that sought to present a more holistic picture of the companies' operations.

Integrated reporting, as defined by its present champions, seeks to identify value drivers in companies linked to human, intellectual, natural and social capital, in addition to more traditional financial and manufactured forms of capital, and to present this information to investors in regulatory filings, such as Form 10-Ks or glossy annual reports.

—[*Integrated Financial and Sustainability Reporting in the United States*](#), 2013

The definition of integrated reporting remains as elusive today as it was in 2013. Si2's last report focused in part on a model of sustainability disclosure through regulatory filings, as was the dominant thinking at the time (*see box above*). But since then, a newer framework espoused by the [*International Integrated Reporting Council*](#) (IIRC) has presented a more flexible approach focused on principle and efficiency, rather than location of information, giving companies more choice. This model has been embraced in many international markets and become the standard in some.

Still, many other proponents of integrated reporting stand by the importance of disclosure through regulatory filings. Squarely in this camp is the newest reporting framework, the U.S.-based [*Sustainability Standards Accounting Board \(SASB\)*](#); it issued Provisional Standards for public comment in October 2017 and plans to issue a final iteration in late 2018. SASB's framework presents much more detailed guidance on the *what*, *how* and *where* of corporate sustainability reporting. It presents [*a model*](#) in which a prescribed set of material sustainability metrics is disclosed in the companies' Forms 10-K or 20-F filings with the SEC, primarily for the benefit of investors. SASB supporters also are exploring taking the approach to global markets, and have worked to ensure the approach is aligned with other major global initiatives. (*See box above; details about the IIRC and SASB frameworks are on pp. 19-24.*)

"SASB's mission is to develop and disseminate industry-specific sustainability accounting standards to assist public corporations in disclosing material, decision-useful information to investors in mandatory filings with the Securities and Exchange Commission ("SEC"), such as Forms 10-K and 20-F."

--SASB Rules of Procedure

Si2's 2013 report found integrated reporting in the United States at a crossroads. This remains true today. Yet important developments since then have changed and matured the landscape further, including the new frameworks noted above. Hence Si2 started out this year to take the current pulse of U.S. companies and their adoption of integrated reporting, with a new set of benchmarking indicators.

Current Study

Most importantly, while the 2013 report looked at required environmental and social information within the companies' regulatory filings, this year's report only counts voluntary disclosures outside of required regulatory disclosures. This change recognizes the extreme variance in the quality of compliance-based information. The current study also seeks to measure how many companies have gone past compliance. For example, a perfunctory and general statement about the threat of climate change under the "risk items" section of the Form 10-K, as required by law, may convey little information about a company's thinking on the matter, while voluntary and stand-alone disclosure on the same topic elsewhere in the document could tell much more, including whether a more detailed discussion is proffered at all. In addition, unlike Si2's 2013 review, this year's study takes a macro-perspective on the state of sustainability and integrated reporting. (*See the complete list of indicators in Appendix 1, p. 38*). It focuses less on the content of *what* is reported and more on *how* and *why* data are disclosed.

Broadly, Si2's 2018 analysis looks at:

- 1) how many U.S. S&P 500 companies are now reporting on sustainability performance and strategy,
- 2) how many are issuing stand-alone integrated reports (*box, right, explains what the study counts as a fully integrated report*) and
- 3) how many are including voluntary sustainability information in their financial reports.

Knowing the tally of reports is essential for assessing the voluntary inclusion of sustainability information in financial reporting. This study therefore set out to capture the influence of many important new developments driving the convergence of corporate financial and sustainability reporting.

Integrated Reports, 2018

Si2 counted as integrated reports those that were self-declared as such, with one exception.

Allstate did not make a declaration but had all of the comparable qualities—mainly, combining financial and sustainability information within its annual report—and was counted as an integrated report.

Recent Developments in Corporate Sustainability Reporting

The world has seen a number of important changes since our last report. In the background are a number of historic developments including the spread of the Internet, the coming of age of the Internet generation, dwindling public trust in institutions and a scientific consensus about the threat of global climate change. All these factors have increased expectations from a wide range of corporate stakeholders—consumers, investors and regulators—about the role businesses should play in society and how they should make positive contributions.

At the same time, investors in the United States and around the world continue to integrate environmental, social and corporate governance factors into their analyses. The Principles for Responsible Investment, which call for such integration, are now supported by large institutional investors with a total of \$82 trillion in assets under management.⁶ By comparison, the entire GNP of the United States is about one-quarter of that amount. Investors clearly are fueling the demand for

⁶ As of April 2018. See <https://www.unpri.org/pri/about-the-pri>

corporate environmental and social data. With investor attention on and trust in such information higher than ever before, corporate sustainability reporting is ripe for evolution. In addition, introductions of the already-mentioned integrated reporting frameworks such as those from IIRC and SASB have raised expectations for companies, in ways that may not only change how companies report on sustainability, but also how they define their corporate identities and approach business in general.

Changing World, Changing Expectations

The world online continues to converge with every new Internet user, every day. Although still short of majority, the share of population around the world using the Internet has grown consistently, reaching [46 percent](#) by 2016. More than ever, access to all kinds of information is at the touch of a fingertip, delivered in seconds. Mobile access means that information is available 24/7. In this age of unfiltered information, public trust in institutions is fragile, although businesses have fared better than governments and the media.⁷ Access to information also has empowered consumers. The majority in developed markets are now willing to make purchasing decisions based on facts other than price; people also expect more from companies as producers of goods, employers and even leaders of social change. For example, a February [2018 survey on trust](#) found that 63 percent of the general public expressed willingness to stop buying from a company when trust is violated. It also found that 64 percent expected CEOs to be agents of change rather than followers of it; 56 percent believed that companies that focus only on profits are “bound to fail.”

This certainly marks an expansion in stakeholder expectations of business, compared with just three decades ago when the term “[sustainable development](#)” set out by the United Nations espoused a new and particular concept: development without harm for future generations. Yet the expectations for business are seemingly even greater among the younger generations of Millennials and Generation Z⁸, who overwhelmingly believe companies’ missions should be beyond profit and include making a positive difference in the world. According to the [latest survey](#) of Millennials from around the world, 83 percent believed that business success should be measured by more than financial performance alone. More specifically, they believe that businesses should set out to achieve “a broad balance” of the following:

In the future, most Americans, taking their cue from Millennials, will demonstrate a greater desire to advance the welfare of the group and be less concerned with individual success. They will be less worried about being guided in their daily decisions by software and more intrigued by the opportunities it offers. Even without any major environmental disaster, they will display a greater reverence for the environment and less interest in the acquisition of things as opposed to experiences.

— [How Millennials Could Upend Wall Street and Corporate America](#), Brookings Institute

- *Making a positive impact on society and the environment,*
- *Creating innovative ideas, products and services,*
- *Job creation, career development and improving people’s lives and*
- *An emphasis on inclusion and diversity in the workplace.⁹*

⁷ See 2018 Edelman Trust Barometer: The State of Trust in Business, http://cms.edelman.com/sites/default/files/2018-02/2018_Edelman_Trust_Barometer_State_of_Business.pdf

⁸ Millennials were born between January 1983 and December 1994, Generation Z members were born between January 1995 and the mid-2000s.

⁹ 2018 Deloitte Millennial Survey, <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html>

Some experts therefore conclude that the world economy is due for a major shift, to one that focuses more on the collective good and well-being of people and the planet. (*Box, previous page.*)

Some of these dynamics are already playing out. Faced with rising temperatures—2017 was the [third warmest year](#) on record, after 2016 and 2015, respectively—and the threat of global climate change, the world has mobilized with renewed energy for a collective response. In September 2015, 193 countries signed on to the United Nations’ [2030 Sustainable Development Goals](#) (SDGs), a 17-point agenda designed to address the most pressing global development challenges. A few months later, countries negotiated the historic [Paris Climate Accord](#), which seeks to fight climate change by keeping global temperature rise in this century below a 2-degree Celsius increase over pre-industrial levels.

Key corporate stakeholders expect the private sector to take an active role in these endeavors. Many companies have responded. For example, in the United States about [1,784 businesses](#) have joined the [We Are Still In](#) coalition—a voluntary network of public and private institutions pledging to honor the country’s commitments to the Paris Accord after the Trump administration backed out; they are making progress on their own to cut emissions and publicly report on this progress. For the 2030 SDGs, organizations such as [Business for 2030](#) seek to mobilize business partnerships to advance the goals; it counts [218 initiatives](#) from 54 companies and organizations to date.

On the regulatory front, the most recent push for corporate sustainability has come from Europe. The [European Union Directive](#) on non-financial and diversity reporting, passed in 2014, requires large public companies to include a sustainability statement in their annual reports from 2018 onward, although much of its implementation is left to member countries. Similarly, a number of countries including South Africa, the United Kingdom, Japan and India have already taken measures to require different forms of sustainability reporting for public companies, driving the rate of disclosure upward in those markets.

In addition, another softer push for requiring corporate sustainability disclosure has come from the United Nations’ [Sustainable Stock Exchanges \(SSE\)](#) initiative. Launched in 2009, the SSE works with exchanges to guide their listed companies on ESG practices and reporting. It currently lists [76](#) such partnerships at various stages of commitment. In the United States, both [Nasdaq](#) and [NYSE](#) have signed on as partners. While neither has committed to require ESG reporting as a listing rule, Nasdaq has pledged to formalize its support for ESG reporting by [committing](#) to publish its own guidelines in the near future.¹⁰

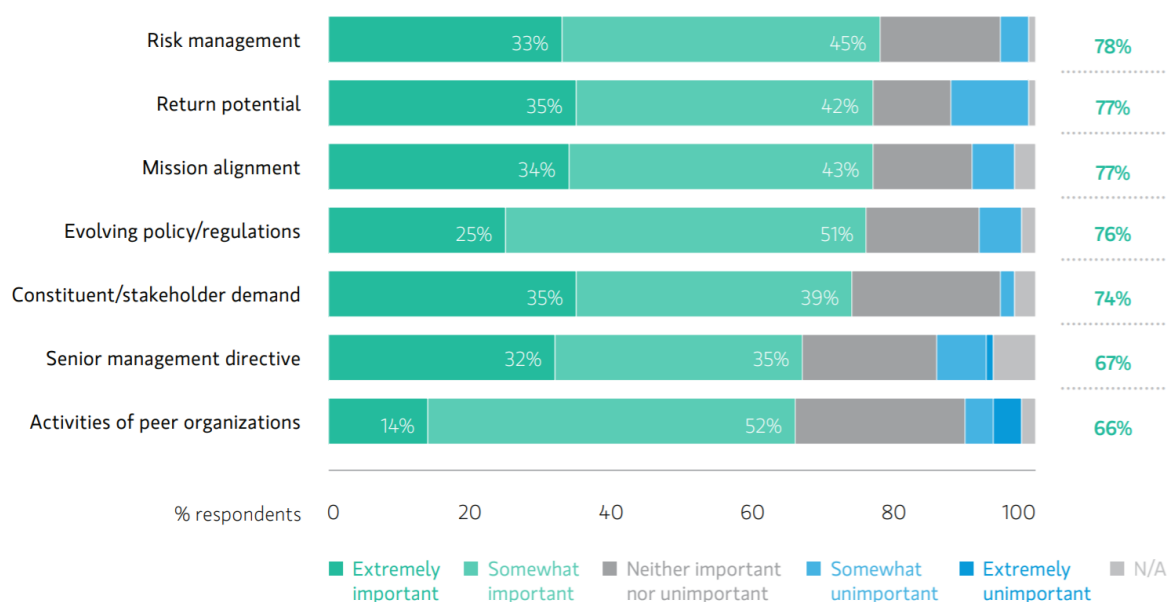
As the above developments illustrate, many forces have driven companies to pay more attention to their ESG practices and reporting. These changes have occurred alongside key developments in the investment community that are pushing for improved disclosure of sustainability issues deemed material to companies’ long-term health.

¹⁰ NASDAQ has already published an ESG reporting guideline, but only for companies listed on its Nordic and Baltic exchanges. See <https://business.nasdaq.com/esg-guide/list-of-sustainability-resources.html>. There is [no specified timeline](#) for if and when it will issue one for its US exchanges.

Growing Responsible Investment & Investor Awareness

The U.S. Social Investment Forum (US-SIF) [notes](#) that \$8.7 trillion (almost 22 percent) of the \$40.3 trillion in total assets under professional management in the United States in 2016 was managed by funds using socially responsible investment (SRI) strategies. This marks 33 percent growth from \$6.6 trillion in 2014, and the share of responsibly invested funds had grown a whopping 14-fold since the group began tracking data in 1995. The trend is similar worldwide. Globally, responsible investing grew [25 percent](#) between 2014 and 2016, according to [Global Sustainable Investment Alliance \(GSIA\)](#). Responsible investment around the world amounted to \$22.9 trillion in 2016, GSIA says, representing about 26 percent of all professionally managed assets worldwide. Similarly, as of April 2018, the Principles for Responsible Investment (PRI), boasted a total of 1,961 signatories from 373 asset owners around the world, [representing](#) almost US\$82 trillion in total assets under management. This is a huge jump from when the group started out in 2006, with only 63 signatories from 32 asset owners, representing about \$6.3 trillion in total assets under management.

Figure 1: Drivers of ESG Integration into Investment Strategy



Source: [Sustainable Signals: Asset Owners Embrace Sustainability](#), Morgan Stanley, June 2018

ESG integration in investment strategy by mainstream funds continues to accelerate. Most recently, a [November 2017 survey](#) of 118 large global investment institutions found that 84 percent of these asset owners were “pursuing or actively considering pursuing” ESG integration in their investment process. Of these, 60 percent had begun implementing ESG strategies in the last four years and 37 percent had in the last two years. About 70 percent had already implemented ESG strategies at the time of the survey, 49 percent across their entire portfolio and 21 percent within a portion of their portfolio.

Motivators for choosing ESG integration varied. While the survey found 77 percent of respondents agreed with the statement, “Asset owners have a responsibility to address global sustainability issues through their investments,” it found the top reasons to include risk management and return potential—as well as mission alignment and constituent/stakeholder demand. (*Figure 1, above.*)

Despite this enthusiasm, the survey found implementation challenges to remain. Topping the list of impediments was the “proof of market-rate financial performance” for sustainable investing, with 24 percent of respondents citing this challenge, followed by 23 percent reporting the lack of quality ESG/sustainability data.

Investor frustration with the quality of sustainability information is nothing new. While [a 2016 investor survey](#) from Ernst & Young found that the share of investors who used a company’s sustainability performance as part of their investment process had grown from 52 percent to 68 percent in just one year, those who believed that companies needed to disclose more of such data also grew from 64 percent to 81 percent. That survey also found that the share of investors who believed that sustainability data were “often inconsistent, unavailable or not verified” had grown from 32 percent to 42 percent between 2015 and 2016; those who complained about the incomparability of this information had grown from just 16 percent to 42 percent in the same period. In addition, the majority of investors believed that companies disclosed sustainability information to build corporate reputation with customers (74 percent) or to comply with regulation (62 percent), rather than to satisfy investor need for information (38 percent), highlighting the divide between where corporate sustainability disclosure has been and where it needs to be to meet investor needs.

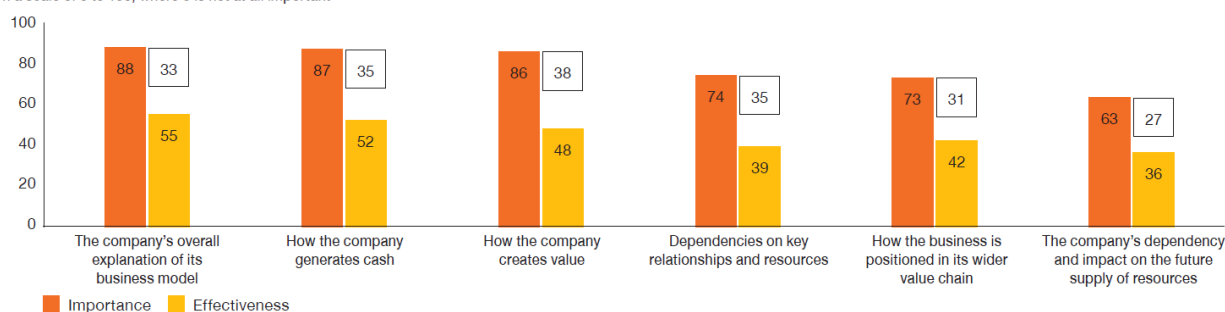
Integrated Reporting Benefits for Companies and Investors

Integrated reporting seeks to fill the information gap between a firm’s risk and return potential by telling a more wholistic picture of its inputs and outputs, by linking resource allocation to business strategy in a rapidly changing and responsive environment. As illustrated above, today’s investors need and want to take into consideration the environmental, social and economic factors that may influence a firm’s short-, medium- and long-term performance, and how these factors are being incorporated into its strategy. A [2014 survey of investment professionals](#) more clearly outlines these information gaps, with some surprising results. (Figure 2, below.)

Figure 2: Effectiveness Gaps for Investors in the Current System of Corporate Reporting

How important is each of these pieces of information provided by a company for your analysis, and how effective is the information that you currently receive in all aspects of company reporting?

On a scale of 0 to 100, where 0 is not at all important



Note: The analysis has been prepared using a Likert model. A score of 100 would be equivalent to every respondent giving a score of 5/5 for importance or effectiveness. The number in the box next to each column is the 'effectiveness gap'.

— [Corporate performance: What do investors want to know? Powerful stories through integrated reporting](#), PwC, September 2014

Two Company Views

Si2 interviewed officials from two large companies that issue integrated reports about the reasons why they prepared these reports and the value they see in them—with contrasting results:

- Despite issuing an integrated report, an official from one of the companies expressed considerable skepticism about the report marking any significant change in ESG reporting or practice at her company. She indicated her firm did not include a materiality analysis in the report given wariness about what she sees as potential legal issues connected to risk disclosure, and said most significant ESG risks are not, in fact, financially material to her firm. She stressed the expense of creating the integrated report, and noted all the information in it is already gathered as a routine matter of business. Further, “I’m skeptical that [integrated] report itself drives increased transparency or changed behavior within the company because it’s really a summary of prior, sometimes more detailed, disclosures.” Still, she said the report is a useful resource for the board in answering questions about the company, bringing together high level information about both ESG and financial performance. It also serves management in its work on shareholder engagement, “which is ever increasing.”
- Another integrated reporter was much more positive about the practice. A longtime discloser, she said sustainability reporting has undergone “huge” evolution in the last decade or so, and that her sector (which is more likely to report than others) contains more mature reporters that are “bringing others along” from other sectors. She said the drive for more transparency changes how a company thinks of itself and its business, and in doing so encourages “out of the box” thinking and more innovation. She agreed reporting may carry some legal risks, but believes this will change as reporting evolves further. While her firm’s report is not externally assured, she noted it is audited internally, painstakingly, and she is confident its reported data are accurate. She sees the current landscape of frameworks as having room for clarification, with a struggling IIRC, an emergent but highly prescriptive SASB, and GRI moving to standards. Looking ahead, she foresees more customized reporting—with initiatives that may be issue- and industry-specific—which her experiences suggests investors like. Commenting on the public policy environment and the wide gap between the current deregulatory fervor in Congress and corporate moves that embrace the concept of sustainability, she concluded that “the train has left the station,” and that companies are setting sustainability goals based on their customers’ preferences and economic analysis that favors more action in this area, not less—whatever happens with regulation.

Integrated reporting seeks to minimize informational risk-return gaps so that investors can make better informed decisions about their investment needs. The central principle is value creation, that corporate disclosure should accurately reflect how well a company manages various types of assets’ value—such as physical resources, reputation and stakeholder relationships—over time, recognizing that its ability to create value in the future is affected by its past and present activities. Advocates of integrated reporting say this can be communicated through their approach to disclosure, which should reflect how well sustainability issues have been integrated into a firm’s business and management strategy. These advocates assert that sustainability reporting is a necessary step before integrated reporting, since the

sustainability reporting process is a fundamental precursor to integration, and that the two types of reports should serve the different information needs of different audiences. Integrated reports target the needs of investors, while sustainability reports can serve the needs of the general public, civil society organizations and consumers.¹¹

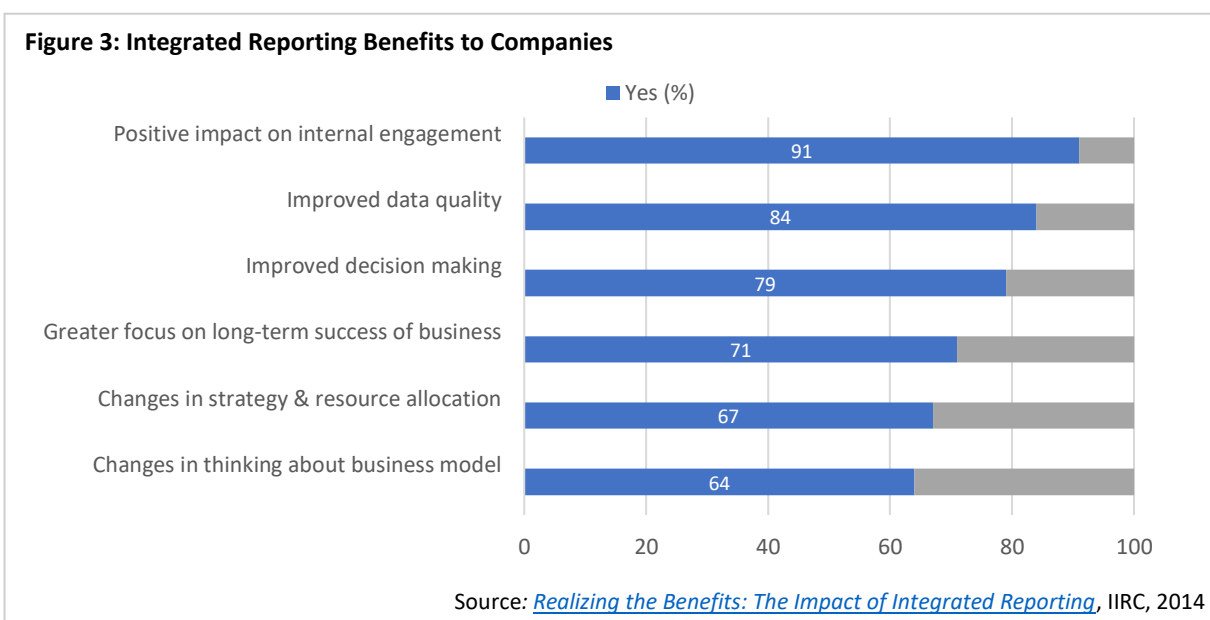
Initial research on current disclosure practices suggests that integrated reporting can benefit both companies and investors though it may still be too early to determine the real effectiveness of integrated reporting. For example, a [2014 survey](#) of early adopters (according to the IIRC model) suggests benefits for all. In financial markets, companies reported the following:

- Improved relationships with institutional investors (56 percent) and financial analysts (52 percent),
- Better understanding of the firm's strategy by investors (87 percent) and
- Greater confidence in the long-term viability of its business model by investors (79 percent).

Similarly, a [2016 survey](#) of investors illustrated a clear preference for integrated reports over sustainability reports as a source for corporate information outside traditional financial assessment; about 57 percent considered integrated reports “very useful” to “essential” in making investment decisions, second only to annual reports (63 percent). Only 44 percent felt the same about corporate social responsibility or sustainability reports.

For companies, the 2014 [survey](#) of early adopters found improved internal engagement (91 percent) as the most significant benefit, followed by improved data quality (84 percent), better decision making (79 percent) and greater focus on long-term business success (71 percent). (*Figure 3, below.*)

In addition, findings from at least one independent researcher supports value for company-investor relations. According to “[Integrated Reporting and Investor Clientele](#)” in the *Journal of Applied Corporate*



¹¹ See *Forging a Path to Integrated Reporting*, Global Reporting Initiative, 2016.
<https://www.globalreporting.org/information/news-and-press-center/Pages/Forging-a-path-to-integrated-reporting.aspx>

Finance in spring 2015, companies that practice integrated reporting “have a more long-term oriented investor base with more dedicated and fewer transient investors.”

A Sea of Sustainability Reporting Models

Despite what seem to be clear benefits, integrated reporting remains a foreign concept for most U.S. companies today, at least as reflected in their public disclosures. The rate of adoption for integrated reporting in the United States has been steady but slow, as this report shows. (*Details, pp. 34-35*). Despite the wide proliferation of corporate sustainability reporting, reports are at best inconsistent and at worst missing performance metrics entirely for some companies, with each report directly reflecting a different stage of a company’s reporting maturity and sustainability experiences. Proponents of integrated reporting remain vigilant in their push, most notably through offering reporting guidelines.

One of the most effective approaches that has influenced corporate sustainability reporting has been the introduction of various guidelines and frameworks. One of the first and most effective is the [Global Reporting Initiative](#) (GRI), which set forth a detailed set of standards based on the “triple-bottom line” performance model in 1999 and is now in its fifth iteration. The GRI continues to be the most referenced framework for corporate sustainability reporting worldwide. A [recent survey](#) found 75 percent of the world’s largest 250 companies use GRI; Si2 also found that 60 percent of the S&P 500 reference it in their reports. (*Details, p. 32.*) But numerous other frameworks have sprung up, too, including the industry-led [IPIECA](#) (International Petroleum Industry Environmental Conservation Association) and the [Global Real Estate Sustainability Benchmark](#) (GRESB), as well as the topic-specific [CDP](#) (formerly the Carbon Disclosure Project) and the [Task Force on Climate-Related Financial Disclosures](#) (TCFD). Recently added to this landscape are the earlier-mentioned SASB and IIRC, which push for integrated reporting of financial and sustainability information. (*See below for more information on these frameworks.*) Each effort seeks to influence corporate sustainability disclosure and, to some extent, behavior toward what each asserts should be the benchmark in their area.

In reviewing which reporting models the companies were most frequently using, Si2 focused on the following existing models: the GRI, SASB, IIRC, SDGs and CDP. Si2 focused on the IIRC and SASB models to gauge the companies’ level of acceptance of integrated reporting. We considered any references to these models in the companies’ sustainability reports served to indicate IIRC and SASB influence in shaping integrated reporting. The GRI, as explained earlier, remains a dominant force in sustainability reporting; CDP, while not a model for a triple-bottom line reporting, has been most influential in the proliferation of key climate related disclosures. Si2 also looked at the SDGs as a reporting model—which in practice meant that the companies were adding an information index in their reports—to assess the companies’ initial response to the newcomer. In addition to these models, Si2 tallied other sustainability reporting models that the companies had referenced. (*These findings appear on page 32.*)

First, below are brief descriptions of each of the reporting models mentioned in this report. (*More in-depth background information on the SASB and IIRC models is on pp. 19-24*).

GRI—The GRI has established itself as the most common framework for sustainability reporting. Headquartered in Amsterdam, GRI started as a project of the Ceres coalition in 1997. After the UN Environmental Program partnered with it in 1999, GRI released its first set of reporting guidelines, became independent in 2001 and moved to Amsterdam in 2002. Since then, periodic and comprehensive global consultations have produced revised iterations of the framework. GRI says its

guidelines are applicable to organizations “regardless of their size, sector or location.” The guidelines establish an international reference for stakeholders to assess reporting companies and other organizations. GRI is committed to the idea that disclosure drives management, although it does not rate or evaluate disclosure or the sustainability performance of reporting companies.

GRI released its latest update, the “[GRI Standards](#)” in October 2016. The Standards did not include significant changes from the previous version but included clarifications and greater emphasis on disclosure of management approach to sustainability. It is divided into two general sections: 1) Universal Standards, which applies to all organizations and addresses general disclosure topics as well as management approach, and 2) Topic-Specific Standards, which provide reporting guidance on economic, environmental and social topics from which a company can select only the content deemed material. GRI also provides sector-specific supplemental guidelines that companies can choose to use.

While the GRI presents an intricate map of corporate sustainability reporting, it also provides room for flexibility by allowing companies to report “based on” or “in accordance with” the guidelines. This flexibility has helped GRI-based reporting expand around the world, although most companies continue to report “based on” the model and a wide range of report content and quality exists in that spectrum.

CDP—Formerly the Carbon Disclosure Project, CDP gathers information on companies’ environmental performance metrics in an annual survey that allows investors to compare company performance on the same metrics. CDP collects information from the world’s largest companies on their greenhouse gas emissions and climate change strategies, but it also has expanded to include water and forests. CDP’s Climate Program, still the central operation of the group and the most impactful to corporate disclosure, operates on behalf of some 650 institutional investors, representing assets worth more than \$87 trillion. Just 235 companies responded to CDP’s inaugural survey in 2003, but its latest iteration of the climate survey in 2017 received almost 1,100 responses from companies. Survey responses are available online on the group’s database, each with a rating based on the company’s climate performance and disclosure.

SDGs—As briefly mentioned in the background section of this report, in September 2015 193 countries adopted the [Sustainable Development Goals](#) (SDGs)—a 17-point agenda designed to address the most pressing global development challenges, to be achieved by 2030. These ambitious goals build on previous attempts by the United Nations to devise a collective plan to solve the world’s problems, and followed the [Millennium Development Goals](#), an agenda intended to be achieved by 2015, which had haphazard results. The 2030 SDGs were developed with input from the private sector, in recognition of its important role in global development. Many UN bodies have made it their latest mission to embrace and support the SDGs. Spurred by the imminent threat of global warming, the UN’s latest goal-setting agenda has gained considerable traction among governments, NGOs and businesses globally.

The 17 SDGs are divided into a total of [169 targets and 230 indicators](#), meant to help measure specific progress. (See page 31, Figure 12 for a complete list.) The indicators are designed to [help monitor](#) progress against the targets and the broader goals. International organizations working to build momentum for the SDGs in the business community have pushed companies to use the framework as a disclosure model, adding another dimension to their engagement toolbox. The GRI, which has supported SDGs-based reporting as a complement to its own model, published [guidance](#) on how to do so in August 2018. While it remains to be seen how this will play out in practice, Si2’s research finds that

some companies have already started to include the SDGs as part of their sustainability reporting indexes. *(See page 32 for these findings.)*

In addition to the above, the following guidelines were most cited by reporting companies:¹²

The UN Global Compact—The UNGC calls itself “the world’s largest corporate sustainability initiative.” As part of its continuing efforts to involve the private sector in advancing its agenda and sustainable development, the UN in 2000 launched this set of broad principles. The Compact is neither a code of conduct nor a reporting scheme; it calls itself “a strategic policy initiative for businesses.” Its [10 principles](#) address human rights, labor, the environment and corruption, incorporating key concepts from the [Universal Declaration of Human Rights](#), the [International Labor Organization core conventions](#), the [Rio Declaration on Environment and Development](#) and the [UN Convention Against Corruption](#). Companies that sign on are to use its principles to organize and develop their sustainability strategies. The Compact has formed a strategic partnership with GRI and encourages its signatories to use the GRI Guidelines to fulfill the annual Communications on Progress (COP) reporting requirement. Most recently it has turned its focus to supporting the mission of the SDGs, working with companies on various aspects of the goals.

IPIECA—Originally the International Petroleum Industry Environmental Conservation Association, it says it is “the global oil and gas industry association for environmental and social issues.” It is an industry association dedicated to improving the environmental and social performance of member companies; its latest [guidance](#) on sustainability reporting came out in September 2015. It says its disclosure topics were chosen based on industry consensus and cover 12 sustainability issues and 34 indicator categories across environmental, health and safety and social and economic issues.

EEI—Similar to the above is a new framework set forth by the Edison Electric Institute, an industry association for electric utilities in the United States. This framework is so new that the organization only just made its [announcement](#) in August 2018, although Si2 found a number of companies that had participated in its pilot disclosure based on a template published in December 2017. The target audience for this new framework is electricity customers and investors, according to the group’s press release; the model includes emphasis on both qualitative and quantitative information on ESG issues, it says.

GRESB—The Global Real Estate Sustainability Benchmark. GRESB, is set up as a private limited company based in Amsterdam but is a collaboration among some of the world’s biggest pension funds—including the California Public Employees’ Retirement System (CalPERS) and the Development Bank of Japan—and academic institutions. It says that its purpose is to help companies apply the ESG framework to real assets. The group assesses the sustainability performance of real estate and infrastructure portfolios and assets worldwide, offering ESG data, scorecards, benchmark reports and portfolio analysis tools. The GRESB Real Estate Assessment serves as a benchmarking and reporting tool for companies managing properties; its framework covers seven sustainability aspects and about 50 indicators. GRESB says on its website that 903 property companies, real estate investment trusts (REITs), funds and developers participated in this assessment in 2017, up 6 percent from the previous year.

¹² Si2 chose to present only those models referenced by more than 9 reporting companies.

Integrated Reporting Models Push the Envelope

Added to the abundance of frameworks in the last few years are those offered by the IIRC and SASB. Each presents a different model for companies to disclose sustainability information alongside financial data. Although seemingly at opposite ends of approach, they can actually complement each other. Indeed, as evidenced in a [memorandum of understanding](#) (MoU) signed in late 2013, the two organizations have sought to collaborate in advancing corporate integrated reporting and to share certain fundamental principles about the topic. For example, both organizations acknowledged that integrated reporting is about companies communicating how they create value over time. (*Box, right.*) The IIRC's mission was to “create *the* globally accepted” integrated reporting framework, it said, while SASB was focused on “the development and dissemination of industry specific sustainability accounting standards.” SASB's work was “an important stepping stone towards the practical implementation of the concept of (integrated reporting) in the USA,” according to this memo; more recently, SASB has expressed interest in international applicability of its concept, as well.

Integrated Reporting (‘IR’) is a process that results in communication by an organization, most visibly a periodic integrated report, about value creation over time. An integrated report is a concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term.

— IIRC and SASB, [2013 MoU](#)

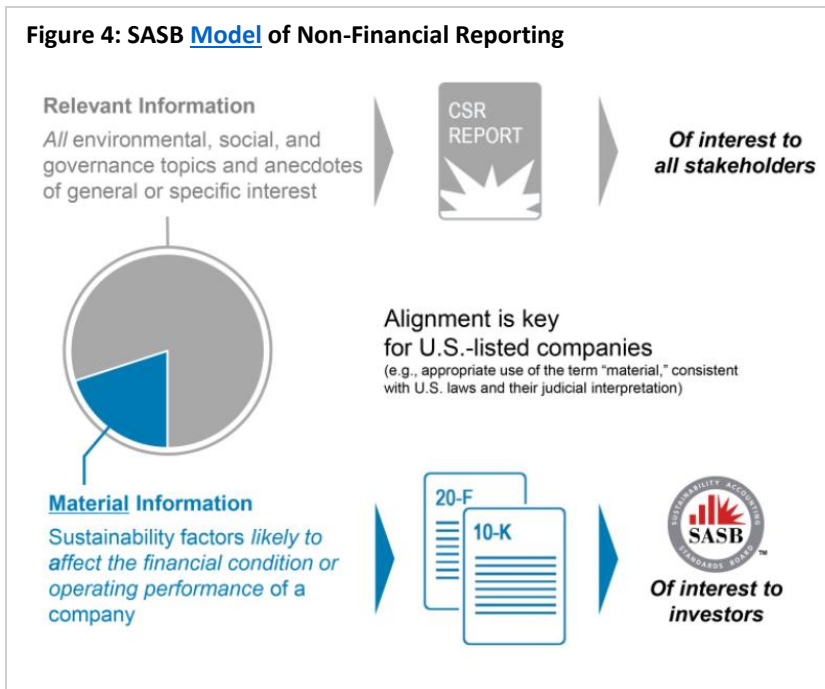
Despite the above-expressed intention to collaborate for a common goal, each organization's approach has been very different. This is worth understanding because, at first glance, the two models seem to compete with each other. Given the inherent complexities on both sides, it is difficult to quickly discern how the two can work together. The following sections of this report therefore briefly describe each approach and compare them.

Sustainability Accounting Standards Board (SASB)

In the United States, the non-profit [SASB](#) finally codified and [launched](#) its reporting standards on November 7th, marking the end of a multi-year process involving rigorous research, stakeholder feedback and updates on its new accounting standards. A careful review of the group's website does not produce a concise definition of integrated reporting, however. Rather, the group has been focused on developing specific guidance on *how* companies can integrate material sustainability data into existing channels of information for investors, so they may easily find verified, comparable information. SASB's unique strength is in its industry-specific standardization of quantitative, sustainability metrics—addressing an important pain point for investors described earlier. Already, a [2016 survey](#) from PricewaterhouseCoopers shows U.S. investors' preference for SASB (43 percent) over GRI (21 percent) for corporate ESG reporting, which illustrates its influence.

Background: With roots going back to the [Initiative for Responsible Investment](#) at Harvard University, SASB launched a method to identify material sustainability factors for six industries in 2010. It formally incorporated in 2011, with a mission “to develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors.” It says in its [Rules of Procedure](#) that it aims to “enable the standardized measurement and disclosure of corporate performance on the most critical sustainability factors—those that are reasonably likely to have material impacts on the financial condition or operating performance of a company,” which it says will enable

better decisions by companies and their investors. SASB also says that its standards are “aligned” with existing securities laws such as in Regulation S-K, the legal requirements that companies must disclose “known trends, uncertainties, and events that are reasonably likely to have a material impact on [their] financial condition or results of operations.” Implied in SASB’s purpose is the inclusion of sustainability data in companies’ financial filings, even though the standards’ usage remains voluntary.



In March 2016, SASB finished issuing provisional standards for 79 industries in 11 sectors. SASB’s latest public consultation phase—designed to elicit feedback on the standards’ materiality, cost effectiveness and decision-usefulness—ended at the end of January 2018. SASB received more than [120 letters](#) from 97 commenters, including companies, investors, industry associations and others across all its sectors.

Such extensive consultation phases resulted in a series of changes to the standards. In its final launch in November 2018, however, SASB’s standards included 77 industries in 11 sectors according to the latest [Sustainable Industry Classification System \(SICS\)](#), which categorizes global businesses according to their resource intensity and sustainability impact. The final sectors are:

- Consumer Goods
- Extractives & Minerals Processing
- Financials
- Food & Beverage
- Health Care
- Infrastructure
- Renewable Resources & Alternative Energy
- Resource Transformation
- Services
- Technology & Communications
- Transportation

The final standards for each industry can be downloaded from SASB’s [website](#).

Key concepts: SASB says on its website that sustainability accounting reflects a company’s management of its environmental and social impacts as well as its “environmental and social capitals necessary to create long-term value.” This includes the impacts that sustainability challenges have on innovation, business models and corporate governance, which lead to the following major sustainability areas:

- **Environment**—Includes environmental impacts that may affect the company’s financial condition or operating performance, such as greenhouse gas emissions, air quality, water and waste management and ecological impacts.

- **Social capital**—Relates to the expectation that a business will contribute to society in return for a social license to operate. It addresses the management of stakeholder relationships, such as community relations, human rights, access and affordability, as well as data privacy and security.
- **Human capital**—Addresses the management of a company's human resources as key assets to delivering long-term value, including labor relations, compensation, employee health and safety, as well as engagement and diversity.
- **Business model & innovation**—Addresses the integration of environmental, human, and social issues in a company's value creation process. Includes issues such as product design and life cycle management, product packaging and distribution, supply chain management, material sourcing and business model resilience.
- **Leadership & governance**—Involves the management of issues that are inherent to the business model or common practice in the industry and that are in potential conflict with the interest of broader stakeholder groups, and therefore create a potential liability or a limitation or removal of a license to operate. Includes issues such as ethics, competitive behavior and critical incident risk management.

SASB also sets forth a number of important principles that guided its standards-setting process, such as the potential to affect corporate value, interest to investors, relevance across the industry, actionability by companies and reflective of stakeholder consensus.

Materiality: Central to SASB's approach is the concept of materiality. According to the [U.S. Supreme Court](#), information is material when there is "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available." SASB says that its standards "address the sustainability topics that are reasonably likely to be material and to have material impacts on the financial condition or operating performance of companies in an industry," using the definition of "materiality" under U.S. securities laws. Its standards, then, are designed to be integrated into companies' financial filings such as the Management's Discussion and Analysis section or in other relevant standardized, required sections of Forms 10-K or 20-F.

Remaining challenges: As noted earlier, SASB enjoys an early welcome by investors and companies as a source of corporate ESG information. Si2's research shows that a surprising number of U.S. companies seem to be already paying attention, even before the standards are formally codified. (See p. 32.) But the elephant in the room is that SASB's target disclosure is through mandatory disclosure, and there is no indication that companies are willing to take on this additional burden anytime soon. Nor is there any indication that it will be required by legislation or regulation in the near future, particularly given the Trump administration's consistent opposition to regulation and corporate disclosure requirements about information outside traditional financial assessment.¹³ Without broad adoption and consistency in reporting, the relative strength of the SASB model, that investors will be able to compare performance apples-to-apples, is weakened.

¹³ Since taking office in January 2017, President Trump has effectively halted two disclosure rules on business and human rights resulting from the Dodd-Frank Act: the conflict minerals rule and payments to governments by resource extractors.

The IIRC Framework

The [International Integrated Reporting Council](#) (IIRC) is based in London and includes a coalition of regulators, investors, companies, standards setters, accounting professionals and civil society organizations working toward a global framework for integrated reporting. IIRC-based integrated reporting has seen recent momentum globally. According to [KPMG's analysis](#) of corporate responsibility reports, about 14 percent of the world's largest companies issued integrated reports in 2017; about two-thirds of them referencing the IIRC framework.

IIRC aims to “establish integrated reporting and thinking within mainstream business practice as the norm in the public and private sectors.” Its vision is “to align capital allocation and corporate behavior to wider goals of financial stability and sustainable development through the cycle of integrated reporting and thinking.”

Key concepts: The IIRC launched its [framework](#) in December 2013 with overarching “Guiding Principles” (box below) and eight “Content Elements.” The two are “fundamentally linked” and “not mutually exclusive.” (IIRC's framework for value creation process is illustrated in Figure 5, next page.)

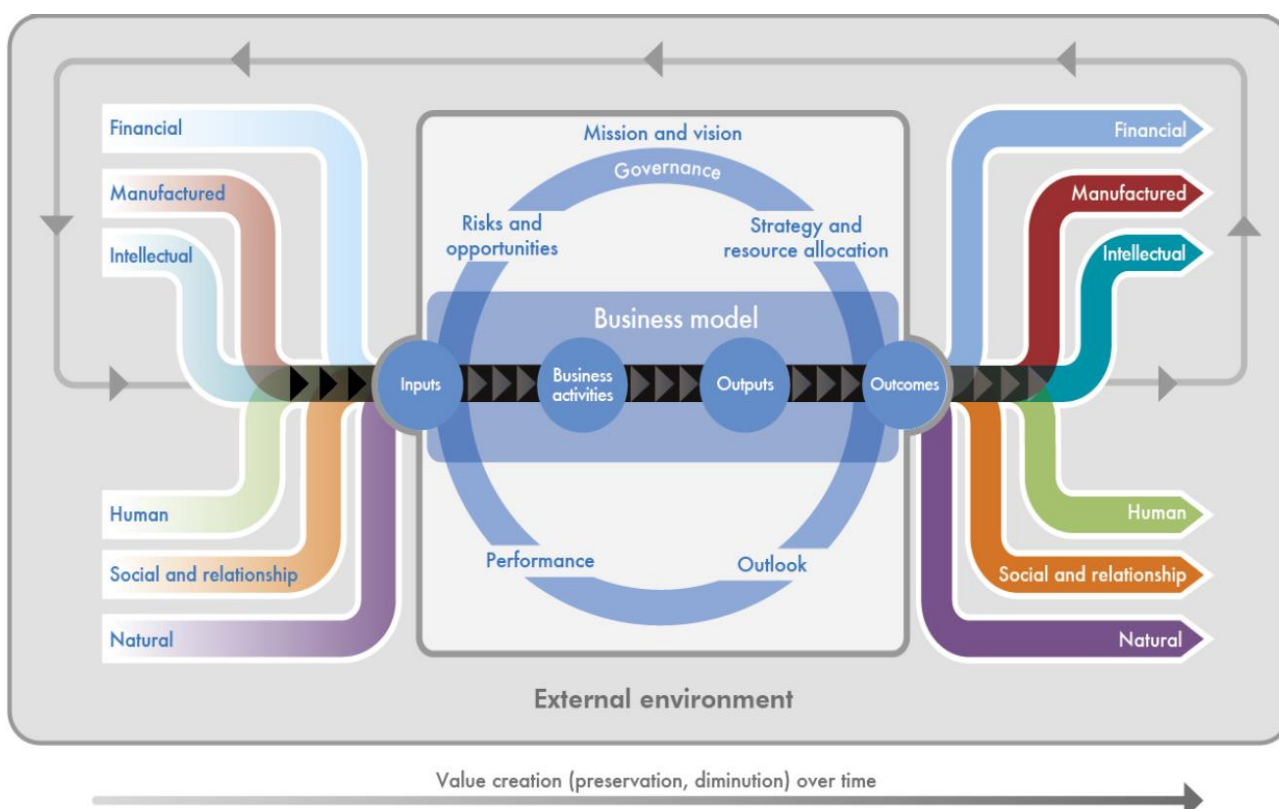
Principles-based approach—Unlike SASB's sustainability accounting standards, IIRC's framework does not lay out for companies exactly what to report in key performance indicators or measurement methods. Rather, IIRC says that it takes a “principles-based approach,” to “strike an appropriate balance between flexibility and prescription that recognizes the wide variation in individual circumstances of different organizations while enabling a sufficient degree of comparability across organizations to meet relevant information needs.” IIRC leaves companies to determine which indicators are material and how they should disclose information. It does not necessarily advocate that companies include integrated reports as part of their compliance with current disclosure requirements, although it acknowledges that they may do so, and says that integrated reports could be presented separately or as a “distinguishable, prominent and accessible part of another report or communication.”

Emphasis on value creation—Integrated reporting based on the IIRC framework looks at corporate sustainability through the lens of value creation, providing insights about:

1. the *external environment* that affects an organization;

IIRC Guiding Principles

- **Strategic focus and future orientation:** An integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term, and to its use of and effects on the capitals
- **Connectivity of information:** An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time
- **Stakeholder relationships:** An integrated report should provide insight into the nature and quality of the organization's relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests
- **Materiality:** An integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term
- **Conciseness:** An integrated report should be concise
- **Reliability and completeness:** An integrated report should include all material matters, both positive and negative, in a balanced way and without material error
- **Consistency and comparability:** The information in an integrated report should be presented: (a) on a basis that is consistent over time; and (b) in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time.

Figure 5: IIRC's Model of Business Value Creation (IIRC Reporting Framework)

2. the *resources and relationships* (or capitals)—including financial, manufactured, intellectual, human, social and relationship, and natural—used and affected by the organization; and
3. how the organization interacts with the *external environment* and the capitals to create value over the short, medium and long term.

Remaining challenges: Despite IIRC's success in many international markets, its adoption in the United States has been at a snail's pace. The flexible approach that IIRC takes may be a hindrance as well as a strength. Companies that may have been influenced by the IIRC framework and its principles may not reference or declare it—the GRI guidelines, for example, instructs companies to acknowledge use of its framework—making it difficult to measure its real influence. IIRC's [website](#) currently lists 17 companies across North America whose reports have been influenced by it. The list includes **American Electric Power (AEP), Eli Lilly, Entergy, GE, Nisource, PGE, Praxair, Prudential Financial** and **Clorox** in the United States. But Si2's research suggests only four of these firms in the S&P 500—Intel, **Pfizer**, Prudential Financial and Praxair—actually reference IIRC. (See Table 5, p. 35 for more.)

Comparing Major Reporting Frameworks

Even though the GRI, IIRC and SASB each take a different approach, and while the landscape is crowded with alternatives, there remains plenty of room for the three frameworks to work together to enhance companies' sustainability disclosures. All three approaches have the same broad purpose: each seeks to promote a world in which companies behave as responsible citizens, acting more holistically, measuring and reporting on their actions. But each model presents a different path, allowing companies to choose

or combine what they want to follow. The table below (*next page*) highlights the differences between the three models.

Table 1: Comparison Chart of SASB, IIRC and GRI Reporting Models			
	SASB	IIRC	GRI
Type of Guidance	Standards	Framework	Standards
Scale	U.S. Focus	Global	Global
Scope	Industry specific	General	General & specific for some sectors
Target Disclosure	Mandatory filing	Flexible	Voluntary sustainability report
Target Reporters	Publicly traded companies on U.S. exchanges ¹⁴	Publicly traded companies around the world	Public and private companies and organizations around the world
Target Audience	Investors	Investors	All stakeholders
Central Emphasis	Quantitative metrics for material ESG topics	Corporate value creation over time & ESG integration into strategy	Qualitative and quantitative ESG disclosures
Definition of Materiality	Information is material if “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.” (U.S. Supreme Court U.S. Supreme Court definition)	“A matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organization’s ability to create value over the short, medium and long term.” (IIRC definition)	Information that “may reasonably be considered important for reflecting the organization’s economic, environmental and social impacts, or influencing the decisions of stakeholders” (GRI definition)

Source: Modified from [SASB website](#) with information from IIRC and GRI websites

Si2 found in this project that leading companies do not follow just one framework, but instead take guidance from multiple sources, with 182 out of the S&P 500 referencing at least two reporting frameworks. (*More on p. 32.*)

ESG Raters’ Use of Data and Current Views on Integrated Reporting

Recent webinars, conference panels and meetings in mid-2018 exemplify current thinking from ratings agencies about sustainability reports, and their views on integrated reports, locating these within the ecosystem of ESG data and ratings. The Conference Board convened a working group on integrated reporting, in collaboration with PricewaterhouseCoopers (PwC), and met starting in January 2018 to explore the practice further; this section reports on those discussions. To further draw back the veil on what drives companies to report as they do, Si2 also interviewed two companies that produce integrated reports, uncovering their very different conclusions.

¹⁴ While SASB says its standards may be used in international markets, it has primarily focused on rolling out the model within the United States thus far. The final launch of the standards took place at the London Stock Exchange in November 2018.

Raters: At a May 2018 webinar hosted by US-SIF, the SRI industry association, representatives from leading rating firms discussed the current state of ESG ratings and data availability. Diederik Timmer, Sustainalytics' Executive Vice President of Client Relations stressed that his firm is always looking for material, forward-looking information about the companies it examines. He stressed ESG data provide a “sniff test” for analysts, and that sustainability reporting shows the extent to which companies have integrated ESG into their businesses. Jon Hale, Director of Sustainable Investing Research at Morningstar Research Services, and Laura Nishikawa, Executive Director of ESG Research at MSCI, both emphasized what they see as a need for more corporate transparency about ESG data in general, in whatever form companies provide it. All three firms have their own approaches to using ESG data and all are agnostic about where information comes from; they simply want more of it. Nishikawa pointed to an “evolution” in data quality assessment, and MSCI’s attempt to define “ESG momentum,” with ESG changes over time producing a performance signal. She noted, however, that it is difficult to gauge company intentions.

Companies and investment advisors: The annual US-SIF conference in late May 2018 featured a panel with two company sustainability officers and two investment advisors, discussing company ESG data reporting, data use and intermediaries’ role in the data ecosystem. David Tulauskas, **General Motor’s** Director of Sustainability, said his company’s reporting must serve investors, help attract talented prospective employees, inform civil society groups and satisfy governments. Picking up the theme of momentum raised by MSCI’s Nishikawa, David Stangis, Chief Sustainability Officer at **Campbell’s Soup**, said his company is looking beyond corporate footprint metrics to understand where data users are headed in their lines of questioning; he said the next horizon is using ESG data to measure business opportunity, and to drive competitive advantage—underscoring the material impact potential for ESG factors. Noting the challenges investors face, Duane Roberts of Dana Investments Advisors also pointed out that the ratings offered by MSCI and Sustainalytics, the two main U.S. ESG data providers, correlate to one another only about 40 percent of the time, making it necessary to cast a wide data net. Roberts also said ESG information helps to identify investment opportunities. Jessica Urdangarin, another panelist, from investment advisor Brown Flynn, said her firm advises “integrated thinking” by companies, which GM’s Tulauskas believes is coming—although Stangis was not sure data users’ thirst for ESG will be quenched by integrated reports.

The Conference Board working group: In collaboration with PwC, The Conference Board convened a working group of its members and experts to explore the current state of integrated reporting.

Raters and views about them—At a June 2018 meeting, raters offered their thoughts about the pros and cons of the practice. One rater participant saw significant benefits for raters, in that these reports give more visibility in general to sustainability information and are more likely to contain data verified by external assurers, a key benefit. But she cautioned that integrated reports also give less space for ESG information and are more likely to emphasize a corporate vision rather than data, a problem for raters. Another rater pointed to “intense and rapid” interest in integrated reporting in Asian markets, but also noted that corporate voluntary disclosure accounts for only about 30 percent of her firm’s rating. She stressed the need for reports to focus on the most material key performance indicators, from an investment perspective, and opined that integrated reports tend to produce the most useful information in this regard. She also noted that her firm considers the factors companies think are most important to them—and sees externally audited ESG data as of particular interest to ratings clients.

A large operating company representative questioned whether integrated reports are just a matter of form over substance, while a leading asset owner suggested that if ESG factors are built into business considerations from the start, corporate social responsibility staff can focus less on gathering data and more on other tasks. A major accounting firm participant offered the view that better corporate reporting would help cut out information intermediaries that may use less accurate information. An industry group participant also said the ongoing consolidation of ratings firms may address the problem of survey fatigue among companies, in concert with metrics consolidation.

A major mutual fund firm representative underscored the view of raters—that more information offered by companies is usually better than less, and that it must be publicly disclosed. She also said the ratings firms' scores are helpful for sorting through the mass of data that is on offer, helping portfolio managers when clients express particular interest in ESG awareness in their investments. Yet she also said metrics standardization is laudable; further, she felt ESG metrics are particularly helpful in mitigating downside risk. Picking up the theme of ESG momentum and signaling, a large asset manager said his firm is “all in” on the concept of ESG factors indicating better corporate management, which can be particularly true for small- and mid-cap companies. Integrated reports really help his firm’s “deep engagement” with management, he said, because they cut through “pervasive greenwashing” and are more concise.

Materiality—In September, The Conference Board working group met to consider current thinking about materiality and integrated reporting. Information is material if a “reasonable investor” thinks it is important, but as a corporate law expert noted, the precise nature of what is material is “a mixed question of law and fact”—which becomes an issue in integrated reports. He said the emphasis now is on value drivers, which vary by sector, but pointed out that securities laws often define materiality as matters related to financial performance. This can be in a quantitative sense, but a qualitative aspect also must be considered. The group considered how definitions of materiality may be affected if securities buyers look beyond financial performance, and what other sustainability outcomes they find relevant to buy/sell decisions. Another legal expert observed that there is no requirement from securities laws to disclose everything that is material, and said assessments of materiality usually end up being an after-the-fact exercise. A corporate attorney from one of the largest U.S. companies sees securities class action lawsuits as a large threat, noting negative outcomes for companies when investors are harmed by the omission of data that negatively affects company financial performance. Still, he said there is a fine line between what is financially material and what is otherwise of interest to the “reasonable investor.” His firm is trying to report less but more meaningful information. He also noted his firm tends to proactively disclose to allow executives to engage in meaningful conversations with investors and not violate fair disclosure laws. Speaking to the issue of value drivers, the company lawyer says his test is three-fold: if the company is asked about something, if disclosure about it would surprise anyone, and if there is any previous disclosure history.

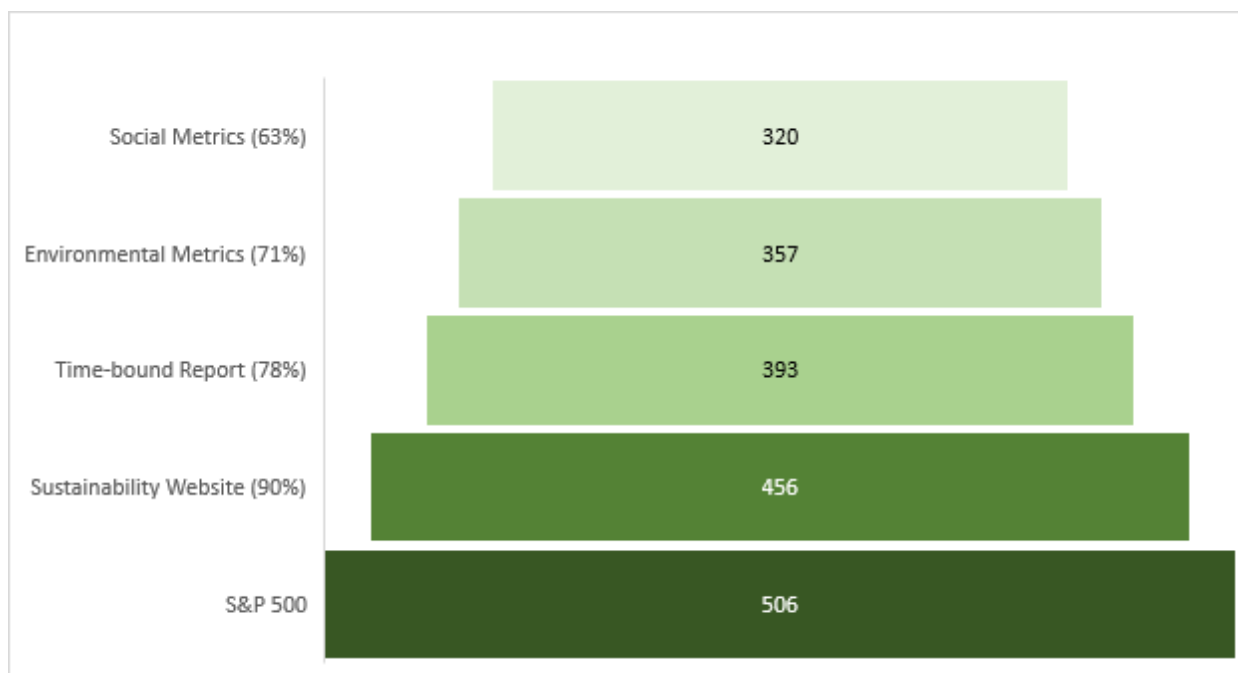
The group concluded that the “total mix of information” investors may consider to be material has grown, and that its inclusion in securities filings (such as those vetted externally in integrated reports that include financial data) is costlier. Participants seemed to agree that multiple types of reports may provide the best solution for reporting, not just a one-size-fits-all report. A GRI report might speak to a wide range of stakeholders, beyond investors, while an integrated report using SASB metrics would focus primarily on investors. A proponent of integrated reporting said these types of reports represent a better, more evolved financial report about value creation, which ultimately lowers the cost of capital

for companies and makes markets operate more efficiently, because they reflect better corporate strategy.

II. 2018 Findings

State of Sustainability Reporting, 2018

Majority reports on sustainability: An overwhelming majority of companies in the S&P 500 (92 percent), offered sustainability information on their websites, although not all included a comprehensive report. A total of 395 companies (about 78 percent) issued sustainability reports,

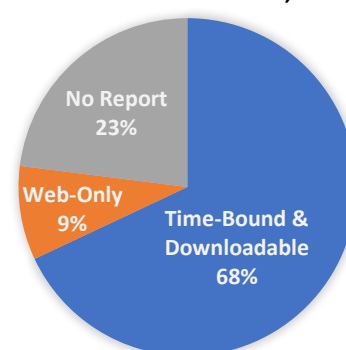


although when it comes to offering real ESG performance metrics, the rates fell, with 357 including environmental metrics and only 320 social data. (Figure below.)

Figure 6: Sustainability Information Offered by the S&P 500, 2018
Most reports were downloadable: Companies are most likely to use a discrete, downloadable and year-specific report (68 percent), but 9 percent offered information in a web-only format (with unclear parameters that may change over time). The static, time-bound reports help stakeholders locate data in a time series, and usually companies that offer these provide past reports on their websites as an archive, making historical data available to those interested. These also tend to follow a more defined structure that is comparable between report versions. While we distinguish between these two formats, most companies actually use some combination of the two, with both static

(# companies)

Figure 7: Sustainability Reporting Formats of the S&P 500, 2018



material (full reports, summary brochures, performance data tables, or a GRI index) and web-based presentations. Companies sometime include only a few ESG performance metrics but use multiple reporting formats, muddying the overall distinction; Si2 sought to capture a big-picture snapshot.

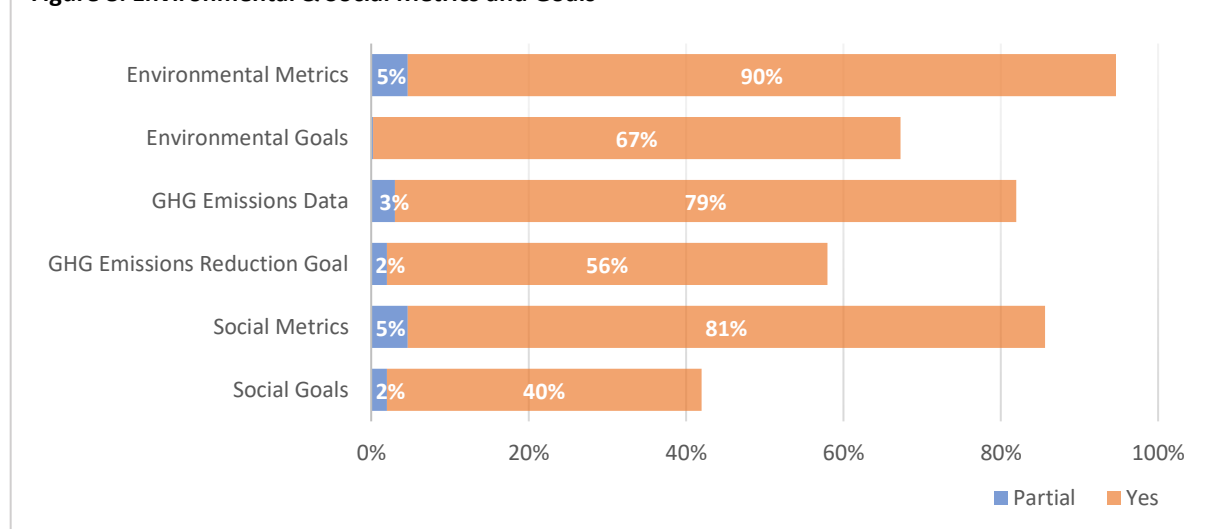
Most reports are annual: About 93 percent of the 395 sustainability reporters issued time-bound reports. The dominant majority of reporters (87 percent) publish their reports annually, while 6 percent report biannually and two companies—**Mattel** and **Costco**—do so every three years. For 26 companies (7 percent), all web-only reporters, it is unclear how often content is updated, highlighting a key weakness of this format.

Table 2: Sustainability Reporting Rates among Sectors, S&P 500

Industry (GICS)	Total # Cos.	Reporting Rate
Telecommunication Services	3	100%
Consumer Staples	32	97%
Utilities	27	96%
Materials	25	96%
Industrials	59	84%
Energy	26	84%
AVERAGE		83%
Health Care	46	74%
Real Estate	24	73%
Financials	49	71%
Information Technology	48	70%
Consumer Discretionary	56	68%

High reporting by most sectors: Among the 11 sectors represented in the sample, just one—*Telecommunications*—had a 100 percent reporting rate, although there are only three companies in it.¹⁵ Consumer Staples, Utilities and Materials were not too far behind, all with reporting rates in the high 90-percent range. The least likely to report are *Consumer Discretionary* firms, with 68 percent doing so. On average, 83 percent of the entire index reports. (See table above.)

Figure 8: Environmental & Social Metrics and Goals



¹⁵ Si2 used the Global Industry Classification Standard (GICS)

Quality of Reports Varies

Most include ES metrics: The quality of report content varies widely. Si2's basic assessment was whether report offer specific environmental and/or social (ES) performance *metrics* and *goals*. While most reporting companies offer at least some ES performance metrics, the number that articulate goals is far lower, especially for social issues. More specifically, Si2 found that:

- Most reports (95 percent) offer environmental performance *metrics* (quantified measures that are comparable year-over-year), while 67 percent set quantified and time-bound environmental *goals*.
 - 313 companies (nearly 80 percent of reporters) disclose *greenhouse gas emissions (GHG) data* in absolute numbers, with another 10 (3 percent) earned "partial" credit in the assessment for offering GHG intensity figures. A total of 223 companies (56 percent) of reporters set time-bound *GHG reduction goals*, either in absolute or carbon intensity reductions.
- Most reports (86 percent) offer *social performance metrics*, although Si2 cast a wide net and gave full credit for the most common social metrics including injury and accident rates. *Goal-setting for social performance* is relatively low, coming from just 40 percent of reporting companies.

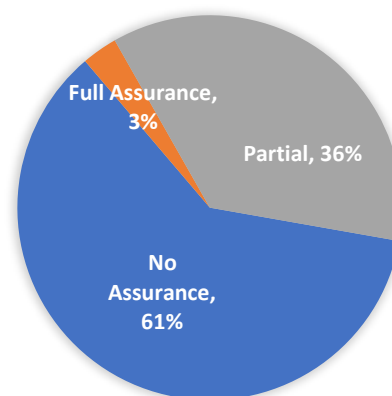
(See Figure 8, previous page, for bar graph with findings.)

Most lack external assurance: The quality of report content drops further when it comes to third-party assurance of the sustainability data presented. A minority (about 38 percent) of reports obtain external assurance, and 90 percent of these pertain only to some data, in most cases GHG emissions. (See pie chart below.)

Only 3 percent of reporters assert their reports or ES performance data are completely externally verified, although even then ambiguity exists given the varying language companies use and how much transparency they offer about auditing. For example, some companies said their "report" was externally verified, explaining that a third-party reviewed the company's accounting methods for providing the information but did not necessarily verify the ES performance data were accurate. Still other companies stated that their ES metrics were reviewed by multiple assurers through a process that included site visits.

The issue of external assurance is clearly a key pain point for investors, who have consistently complained about the lack of external verification of sustainability data, as noted above in this report. Varying standards and the haphazard nature of the current state of external data verification hinders stakeholders' evaluation of company performance and gets in the way of more robust analysis of

Figure 9: External Assurance of Sustainability Reports



comparable metrics among peer groups.¹⁶ (*Appendix, part 2, p. 41, lists companies that provide full external assurance and quotes the language they use to describe the process; Appendix, part 3, p. 44, lists external auditors most commonly used by S&P 500 sustainability reporters.*)

Less than two in three provide a materiality analysis and report on a stakeholder engagement process:

SASB has zeroed in on materiality in its assessment, a familiar concept to investors, bridging the gap between public policy-oriented sustainability discussions and the investment world. As illustrated above (p. 24), each of the major reporting models covered in this report provides a broadly similar definition of materiality, which is that disclosed sustainability information should have relevance to the judgement and decision-making process of investors or stakeholders. Si2 examined materiality analysis disclosures to see how companies are thinking about their environmental, economic and social impacts and if that thinking includes considerations for business strategy, which can help investors and other stakeholders see if and how ESG factors are included in business planning.

Disclosure of a stakeholder engagement process also is an [element](#) in the GRI reporting model. It teases out how a company is working to gather independent feedback from those outside its organization. Stakeholder engagement go hand in hand with a materiality analysis, since the first often is a key tool for the latter.

Just over half of the 395 reporting companies in the 2018 S&P 500 (53 percent) include a materiality analysis in sustainability reports; another 11 companies (3 percent of reporters) provide some information about materiality analysis but not a complete accounting; these earned “partial” credit in the Si2 analysis. About 62 percent of reporting companies reported on the stakeholder engagement process; another 2 percent received “Partial” credit.

Alignment with UN Sustainable Development Goals (SDGs)

As noted, the SDGs are a set of 17 goals the UN set forth in 2015 to address the most pressing global development challenges, to be achieved by 2030. The goals range widely from alleviating hunger and poverty to tackling climate change. (*See Figure 12, next page.*) Many international organizations have

Figure 10: Materiality Analysis among Sustainability Reporters, S&P 500

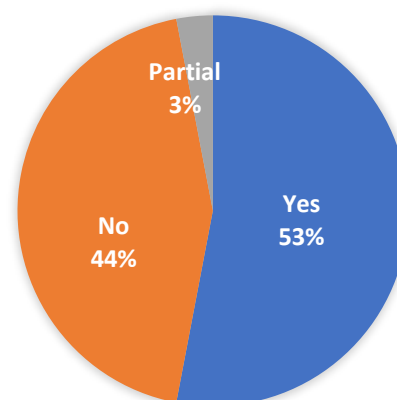
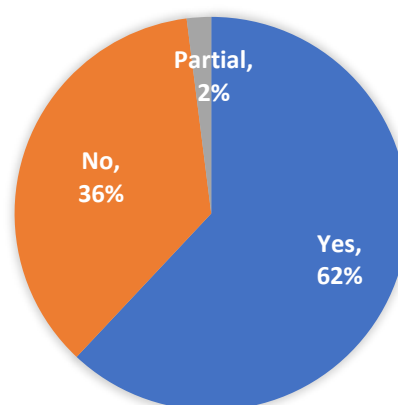


Figure 11: Stakeholder Analysis among Sustainability Reporters, S&P 500



¹⁶ An IRRCI/CFA survey in 2015 found that CFA Institute members were split about what level of independent ESG data verification they thought was needed, with 44 percent favoring an approach similar to a formal audit and another 46 percent satisfied with more limited assurance. See <https://irrcinstitute.org/wp-content/uploads/2015/09/FINAL-CFA-ESG-Study-August-20151.pdf>.

Figure 12: The 2030 U.N. Sustainable Development Goals

made the SDGs a part of their missions. In the investment world, this includes the UN Sustainable Stock Exchanges (SSE) Initiative mentioned earlier and the [Global Compact](#); each has pledged to enlist the business community in support of the SDGs. In response, many companies have started to disclose how their sustainability efforts align with the SDGs.¹⁷ Si2 used mention of the SDGs as a proxy for each company's level of awareness about the external environment and its role as a corporate citizen. *(Some companies also have begun using the SDGs in their sustainability reporting indexes, and are using its disclosure framework for disclosure, as explored in more detail below.)*

Si2 found that among the 395 companies that issue sustainability reports, 103 (26 percent) note or map out how their sustainability strategies align with the SDGs. Another 16 companies (4 percent) acknowledge the SDGs in their reports without mapping out where their goals align with the UN effort.

Picking and Choosing Frameworks

Si2 focused on prominent sustainability reporting models in assessing the S&P 500—the GRI, SASB, IIRC, SDGs and CDP *(discussed pp. 16-18)*. The assessment tallied up which frameworks are most frequently cited and found that in most cases, companies do not commit to just one model and instead issue reports that combine the style, format and content from several approaches.

Most reporting companies, or 385 out of 395 (97 percent), chose customization and a unique style over following any one reporting framework closely. Less than 3 percent (just 10 reporting companies)

Table 3: Number of Sustainability Reporting Models Used, S&P 500

<i>No. of Models Used</i>	<i>Count of Reporter</i>
6	1
5	10
4	14
3	53
2	104
1	116
0	97
Total	395

¹⁷ This is different from using the SDGs as a disclosure framework, which Si2 discusses below. When companies identified how their sustainability strategies aligned with the SDGs, they dedicated space in the management section of the report and listed a selection of SDGs on which they had decided to focus.

only followed either the GRI or one of the industry-led reporting models closely, without using another as well. About 97 companies (25 percent of reporters) did not reference a specific framework.

- **GRI** remains the most used reporting framework for sustainability reports, with 60 percent of all reporters referencing or following it. Si2 categorized those companies that were providing a brief GRI index at the end of the report as “referencing” the model, counting only those that followed the framework closely as “following” it. About 6 percent of all reporters (23 companies) belong to this latter category.
- **CDP** is the next most-referenced framework, used by 49 percent of sustainability reporters—although it is limited to environmental issues, and more specifically, to climate change.¹⁸
- 49 companies (12 percent) provide a disclosure index for **SDGs**, helping stakeholders to easily track information related to the goals. This is notable as the SDGs are only three years old.
- 35 companies (9 percent) reference **SASB**, illustrating its remarkable influence even though its final iteration was not yet final when research for this project was conducted.
 - Notably, [Digital Realty Trust](#) does not issue a standalone report on sustainability but includes in its [2017 Form 10-K](#) a selection of energy- and water-related performance metrics derived from SASB’s Real Estate Owners, Developers & Investment Trusts Sustainability Accounting Standard guidance.
- Only four companies reference **IIRC**, although its influence could be greater than that small number would imply, as discussed in more detail below. The relative lack of uptake by U.S. companies understates the extent to which it is gaining ground in other global markets.

In addition to the above models, reporting companies referred to numerous other frameworks, mostly industry- and/or issue-specific initiatives. Those referenced by more than nine companies are listed on Table 4 (*right*); in addition to these, three companies referenced the [UN Guiding Principles Reporting Framework](#), specific to human rights.

Increasing Inclusion of Sustainability in Financial Reports

Almost 40 percent of the S&P 500 now voluntarily address some aspect of sustainability in their financial reports,

although the nature and extent vary widely. Si2 reviewed the annual reports, Forms 10-K and proxy statements of the 506 companies in the S&P 500 to broadly measure the inclusion of sustainability information.¹⁹ In making this assessment, Si2 did not judge the quality or quantity of such information, but examined letters from board chairs in annual reports and voluntary sections about sustainability in the 10-Ks to see if sustainability issues were addressed. (Compliance related information typically offered under “Environmental Matters” or “Risk Factors” sections was not counted.) In proxy

Table 4: Other Sustainability Reporting Models Used, S&P 500

<i>Model</i>	<i>Count of Reporters</i>
UNGC	33
IPIECA	15
EEI	11
GRESB	9
TCFD	9

¹⁸ Disclaimer: Si2 only counted when companies attributed using the CDP framework in their own sustainability reports, consistent with how it counted references to other models reviewed. Because survey responses to CDP are housed outside of the company’s own website, Si2 did not count, for example, when a company did not issue a stand-alone sustainability report but had responded to CDP.

¹⁹ When Si2 accessed the list of S&P 500 in the beginning of 2018 it included a total of 505 companies; we further separated out Dow and Dupont—which is listed as one entity after the merger but still had separate sustainability reporting practices—bringing the total number to 506.

statements, Si2 counted information outside governance-related discussion of board committees and executive compensation, and examined board oversight of sustainability separately.

- A total of 118 companies (23 percent) voluntarily address sustainability in *10-Ks*; another 80 companies (18 percent) do so only in *annual reports*. In all, about 40 percent of the S&P 500 now include voluntary sustainability discussion in their annual reports or *10-Ks*.
 - When looking at the pool of sustainability reporters, 181 companies (46 percent) include voluntary sustainability information in their *10-Ks* or *annual reports*.
- A total of 191 companies (38 percent) include discussion of corporate responsibility or sustainability in *proxy statements* above and beyond board governance and executive compensation disclosures. While the extent of these inclusions varies widely, Si2 found many proxy statements describe company sustainability efforts and goals—typically in a “proxy statement summary” prominently placed at the beginning of the filing. For example, **Bristol Myers Squibb** included a section on “[Global Corporate Citizenship & Sustainability](#)” in its proxy statement and outlined its sustainability philosophy and goals.
 - A total of 172 sustainability reporters among the S&P 500 (44 percent) include voluntary sustainability information in their *proxy statements*.
- A total of 212 companies (42 percent) disclose formally designated *board committee oversight* of sustainability issues, although specificity varies. While the nearly all (89 percent) of committees are directed to oversee both environmental and social issues, 12 companies (4 percent) must oversee only environmental issues and 20 companies (7 percent) only social issues.²⁰
 - A total of 201 sustainability reporters (51 percent) formally designate a board committee to oversee sustainability issues.
 - Only 10 companies—**Western Union, Electronic Arts, LyondellBassell, Everest Re Group, Allegion, Mastercard, Biogen, Fortune Brands Home and Security, Travelers, Williams Companies** and **Cabot Oil & Gas**—have formal board committee oversight of sustainability issues *without* having issued a time-bound sustainability report.

²⁰ An additional seven companies received “Partial” credit for this indicator. In these cases, the company had a board committee dedicated to an issue too narrow in scope to deserve a full credit, such as a committee with oversight on “patient safety” at a pharmaceutical company.

State of Integrated Reporting 2018

Integrated reporting has not yet deeply penetrated the sustainability reporting landscape of U.S. companies. Even though a surprising number—35 companies—indicate that their reporting is influenced by SASB, most have of those have not yet issued integrated reports. In fact, the majority of companies that issued integrated reports in 2017 cited neither SASB nor IIRC. Even though Si2's research this year shows that integrated reporting has yet to establish a strong foothold in the S&P 500, corporate reporting has seen healthy growth and evolved to reflect some of the latest thinking, including that articulated by SASB and IIRC.

In this section, Si2 looks in more detail at the small group of companies that have issued integrated reports, with most of them identified by self-declaration.

Number of Integrated Reporters Doubles

Overall, **14 companies issued an integrated report for their latest reporting periods, twice the number from 2013.** In 2013 Si2 found just seven companies issued integrated reports; five of these continued to do so in 2018. (*See figure above.*) One that did not is **Dow**, which merged with DuPont and is in the process of splitting into three new companies; Dow's last full sustainability report in 2016 was integrated. The other, **Eaton**, has transitioned its report to a fully web-based format that focuses primarily on environmental and social performance metrics with no financial information.

This year's integrated reporters have the following key characteristics, summarized in Table 5 (*next page*):

- **Seven sectors out of 11 are in the group of reporters.** **Health Care** leads, with four firms; **Utilities** and **Industrials** are next, with three each.
- **The size of a company, measured in revenue, does not seem to affect decisions about issuing an integrated report.** The reporters' 2017 revenues ranged from almost \$4.0 billion (**Dentsply Sirona**) to \$120.5 billion (**General Electric**), and averaged about \$30.0 billion.
- **Exposure to international markets also does not seem to influence integrated reporting decisions.** Si2 explored the hypothesis that increased preferences for integrated reporting in some international markets would prompt greater uptake by U.S. firms with more international business. But four companies with integrated report did not derive any income from abroad in 2017 and another earned just 3 percent of its revenue internationally; the average percentage of international revenue for the group was about 31 percent. While a closer examination might reveal otherwise, available data suggest that just having a presence in international markets does not seem to significantly affect a company's decision to issue an integrated report.
- **Half of the group obtained some form of external assurance for sustainability data.** Two out of the 14 integrated reporters obtained "full" external assurance for their sustainability information, a much higher rate (14 percent) than sustainability reporters overall (3 percent). Five additional companies obtained "partial" external assurance (35 percent).

Figure 13: Integrated Reporters in the S&P 500, 2013 and 2018

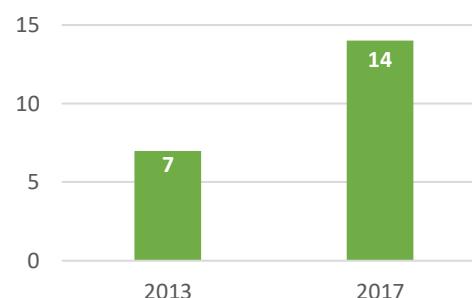


Table 5: Integrated Reporters of the S&P 500, 2018

Company	GICS Sector	2017 Revenue (\$mil)	Int. Income (1)	2013 IR?	Reporting Models Cited	External Assurance	SI in 10-K or AR (2)	SI in Proxy Statement (3)	Board Comm. on SI (4)
General Electric	Industrials	\$120,468	53%		GRI		10-K	Yes	Yes
Intel	Information Technology	\$ 62,761	83%		GRI, IIRC & CDP	Partial	10-K	Yes	Yes
Pfizer	Health Care	\$ 52,546	50%	Yes	GRI, SASB, IIRC & SDGs		AR		Yes
Allstate	Financials	\$ 38,524	3%		GRI, SASB & SDGs		AR	Yes	
Medtronic	Health Care	\$ 29,710	40%		GRI, SASB & CDP			Yes	
Eli Lilly & Co	Health Care	\$ 22,871	44%		CDP & UNGC	Partial			
Southwest Airlines	Industrials	\$ 21,171	0%	Yes	GRI & CDP		10-K		Yes
American Electric Power	Utilities	\$ 15,425	0%	Yes	GRI, CDP & EEI			Partial	Yes
Ingersoll-Rand	Industrials	\$ 14,198	35%	Yes	GRI	Yes	AR		Yes
Praxair	Materials	\$ 11,437	47%		GRI, SASB, IIRC, SDGs, CDP	Partial		Yes	Yes
Entergy	Utilities	\$ 11,074	0%		GRI & EEI	Partial	10-K	Yes	Yes
Clorox	Consumer Staples	\$ 5,973	17%	Yes	GRI & UNGC	Yes	10-K	Yes	Yes
NiSource	Utilities	\$ 4,875	0%		GRI & EEI	Partial	10-K		Yes
Dentsply Sirona	Health Care	\$ 3,993	65%		CDP		10-K		

1. Share of 2017 revenues derived from markets outside the U.S. or North America, whichever figure was available.

2. Voluntary sustainability information included in Forms 10-K or annual reports.

3. Voluntary sustainability information included in the proxy statement, outside executive compensation and board governance.

4. Formal governance of sustainability issues through a board committee.

- **Integrated reporters noted varying degrees of influence from existing sustainability reporting models.** Most cited was the GRI, with 12 companies mentioning it; seven companies referenced CDP and three provided an SDG information index.
- References to integrated reporting frameworks were limited; four cited SASB and three cited IIRC, and just two—Pfizer and Praxair—cited both SASB and IIRC.

Pursuing “Shared Value for All”

Even though only three companies formally reference IIRC, its influence may be greater since most integrated reporters address IIRC’s core concept of “creating shared value for all.” Most of the integrated reports (11 of the 14) use this concept in their integrated reports, saying in some way that companies should create value for all stakeholders.

- References from companies to the idea of shared value for all are idiosyncratic. Seven are in a CEO/Chair letter, one in a Chief Sustainability Officer letter, two in the report body and one in an executive summary. *(Example statements, box on next page.)*
- **This new approach to business expands significantly from a singular focus on the short-term bottom line.** This shift seems to reflect pressures that public companies now face to be responsible citizens and even leaders of society, if they want to build long-term sustainable businesses. This is one of the major trends that is driving integrated reporting, as discussed in the background section of this report. *(See p. 10.)*

Quotes on Shared Value Creation from Integrated Reporters

- “Linking our strategy and business opportunities to important global trends creates long-term value for our people, customers and the world. Whether the challenge is climate change, urbanization or natural resources constraints, our expertise enables us to reduce energy demand and improve efficiency.” — **Ingersoll Rand** (Page 8, [2017 Sustainability Supplement](#))
- “At Dentsply Sirona, we believe that being a responsible corporate citizen creates value for all of our stakeholders, including our shareholders. For the first time, we have decided to integrate our financial and sustainability reporting to increase awareness and transparency about our corporate social responsibility platform.” — **Dentsply Sirona** (Chairman’s letter, [2017 Annual Report & Corporate Social Responsibility Platform](#))
- “To continue creating prosperity businesses must take on a bigger role in society. Let’s be clear, a business needs to make an acceptable profit since this is a measure of how effectively it uses society’s resources. Yet more is expected and needed from business. Eighty-seven percent of young Americans believe that businesses need to do more than make a profit. Companies also need to be held accountable for creating jobs, making sure free markets work and improving our communities.” — **Allstate** (Chairman’s Letter, [2017 Prosperity Report](#))
- “Our commitment to corporate responsibility and sustainability—built on a strong foundation of transparency, governance, and ethics—creates value for Intel and our stockholders by helping us mitigate risks, reduce costs, build brand value, and identify new market opportunities. We set ambitious goals for our company and make strategic investments to advance progress in the areas of environmental sustainability, supply chain responsibility, diversity and inclusion, and social impact that benefit the environment and society.” — **Intel** (Page 5, [2017-18 Corporate Responsibility at Intel](#))

Courting Investors

Integrated reporters are more likely to treat sustainability information as material to investment decisions, making it easier for them to include these issues in normal business review processes. Where and how the companies position their integrated reports shows how this works:

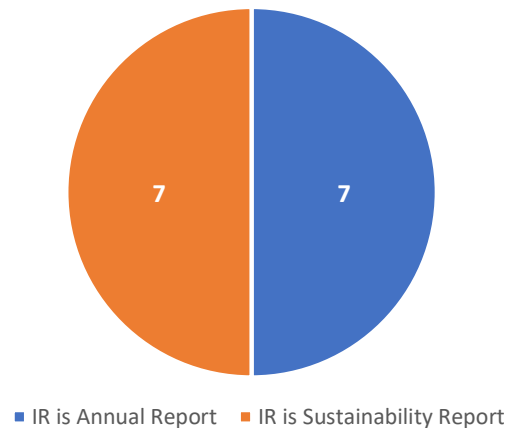
- All 14 companies present their integrated reports in the **investor relations section** of their websites.
- **Seven (half) the companies offer integrated reports as their annual reports**, available under the annual information section of the companies’ investor relations websites, alongside 10-Ks.²¹
- **Three companies offer integrated reports in addition to and separate from annual reports.** In all these cases, the integrated report serves primarily as the sustainability report with added data on financial dimensions, while the companies also offer separate annual reports. Two of these reports are provided under the annual information section of the investor relations website; the other, **Intel**, is not but its annual report also offers a section on sustainability issues.
- For the remaining four companies, the integrated report *serves as a sustainability report* but they do not offer separate annual reports and only issue a 10-K.
- **When it came to SEC filings, only a few companies treat sustainability matters as equal to financial ones.** Just **Intel** and **Clorox** included sustainability issues under business and/or

²¹ Si2 classified annual reports as stand-alone documents prepared by the company separate from Form 10-Ks filed with the SEC, although some companies offer as their annual report the 10-K with just a few additions tacked on the front, such as a CEO/chair letter.

strategy descriptions in their 10-Ks. Another two—**GE** and **Southwest Airlines**—made brief references to sustainability efforts in 10-Ks and provided links to sustainability data.

- Notably, Southwest Airlines' mention of sustainability programs in its 10-K also includes a disclaimer: "Information contained in the Southwest One Report is not incorporated by reference into, and does not constitute a part of, this Form 10-K."
- These findings may suggest companies' reluctance to include information outside traditional financial reporting as part of their regulatory filings, although it may be just too early to draw any conclusion at all. For example, **Digital Realty Trust**, does not issue a separate sustainability report but includes key environmental performance metrics following the SASB model in its 10-K, a very different approach from Southwest Airlines. *(See p. 14 for one company official's comments about liability concerns.)*
- The total number of companies in the integrated reporting group that have either included sustainability information in their 10-Ks or annual reports (71 percent) is much higher than that for general sustainability reporters (46 percent) or the S&P 500 (39 percent). *(See page 31 for more on all sustainability reporters.)*

Figure 14: Purpose of Integrated Reports Evenly Split



Links to Formal Board Oversight of Sustainability

- Ten of the 14 integrated reporters (71 percent) disclose that they have a formal board committee overseeing sustainability issues, compared with 54 percent among the general pool of sustainability reporters and 42 percent of the overall S&P 500, according to proxy statement information identifying a board committee whose charter indicates it oversees either environmental and/or social issues.
- Eight of the 14 integrated reporters (57 percent) highlight sustainability efforts in their proxy statements above and beyond discussion of board committee oversight and executive compensation, compared with 44 percent of the general pool of sustainability reporters and 38 percent of the S&P 500.

III. Appendix

The study's list of indicators appears first, followed by assurance statements used by companies that provide full or partial assurance of their reports. A tally of how often companies use which assurance providers forms the third section of the appendix.

1. List of Indicators

	#	Indicator	Response	Explanation
General Sustainability Reporting	1	Company offers sustainability info on website	Yes/No/Partial	There is a designated webpage for sustainability or CSR information.
	2	Company offers a downloadable sustainability report	Yes/No/Partial	
	3	Company offers only web-based sustainability report	Yes/No	
	4	The sustainability report is time-bound	Yes/No	
	5	Frequency of report	Annual/biannual/other	
	6	Past reports are available	Yes/No	At least one issue of previous report is archived and available.
	7	Report contains environmental performance metrics	Yes/No/Partial	The report offered multiple metrics to provide a minimal level of insight into the company's practices.
	8	Report contains environmental performance goals	Yes/No/Partial	Time-bound and quantified goals were disclosed.
	9	Disclosed GHG emissions data	Yes/No/Partial	GHG emissions data was disclosed in absolute numbers; GHG emissions intensity disclosures were tagged as "Partial."
	10	Disclosed time-bound GHG emissions reduction goals	Yes/No/Partial	Time-bound GHG emissions reduction goal was disclosed; GHG emissions intensity goals were tagged as "Partial."
	11	Disclosed social performance metrics	Yes/No/Partial	The report offered multiple metrics to provide a minimal level of insight into the company's practices.
	12	Report contains social performance goals	Yes/No/Partial	Time-bound and quantified goals were disclosed.
	13	Report indicated third-party assurance	Yes/No/Partial	Assurance of entire report or data set received "Yes"; assurance of selected data received "Partial."
	14	Assurance provider?		
	15	Report contained results of materiality analysis	Yes/No/Partial	
	16	Report described stakeholder engagement process	Yes/No/Partial	
	17	Report maps company goals aligned with SDGs	Yes/No/Partial	

	#	Indicator	Response	Explanation
Integrated Reporting	18	The company issues an integrated report	Yes/No	Counted declared and undeclared but integrated reports.
	19	Report follows or references the GRI	Follow/Reference/No	A full GRI report received "Follow"; own-style report with GRI Index received "Reference." GRI indexes varied widely in information and complexity.
	20	Report follows or references SASB	Follow/Reference/No	
	21	Report follows or references IIRC	Follow/Reference/No	
	22	Report follows or references SDGs	Follow/Reference/No	Companies offering SDGs related disclosure as part of its information index received "Reference."
	23	Report follows or references CDP	Reference/No	References to the CDP within main sustainability report was counted.
	24	Does it follow another? If so, what?		Other models used by companies included EEI, GRESB, IPIECA, TCFD and UNGC.
	25	Sustainability report includes a financial summary	Yes/No/Partial	
	26	Offers a third doc as an integrated summary	Yes/No/Partial	A shorter document separate from sustainability and annual reports references both.
	27	Percentage of 2017 revenues from outside US or North America		
IR in Financial Documents	28	Company's Form 10-K or annual report includes voluntary sustainability information	10-K/AR/No	
	29	Information in the 10-K or AR contains environmental and/or social information	E/ES/NA	
	30	Company's proxy statement contains voluntary information on sustainability issues	Yes/No/Partial	Counted voluntary highlight or summary of sustainability practices, outside of board governance and executive compensation descriptions
	31	Company's board had a committee of sustainability management	Yes/No/Partial	
	32	Board oversight of sustainability included environmental and/or social issues	E/ES/NA	

2. Companies that Provided “Full” External Assurance of Sustainability Reports

Company	Provider	Assurance Language
Apple	Bureau Veritas & Fraunhofer IZM	<p>Assurance Letters, 2018 Environmental Responsibility Report:</p> <p><i>Bureau Veritas North America, Inc. (BVNA) was engaged by Apple, Inc. (Apple) to conduct an independent assurance of select environmental data reported in its 2017 environmental report (the Report). This Assurance Statement applies to the related information included within the scope of work described below. ...</i></p> <p><i>The overall aim of this process is to provide assurance to Apple’s stakeholders on the accuracy, reliability and objectivity of select information included in the Report.</i></p> <p><i>This information and its presentation in the Report are the sole responsibility of the management of Apple. BVNA was not involved in the collection of the information or the drafting of the Report.</i></p>
		<p><i>Fraunhofer IZM reviewed Apple’s scope 3 carbon footprint data related to the products manufactured and sold by Apple Inc. in fiscal year 2017. ...</i></p> <p><i>This review checks transparency of data and calculations, appropriateness of supporting product related data and assumptions, and overall plausibility of the calculated</i></p> <p><i>comprehensive annual carbon footprint comprised of emissions derived from the life cycle assessment (LCA) of Apple products shipped in fiscal year 2017.</i></p>
		<p><i>Bureau Veritas North America, Inc. (BVNA) was engaged by Apple, Inc. (Apple) to conduct an independent assurance of its Supplier Clean Energy Program data reported in its 2017 environmental report (the Report). This Assurance Statement applies to the related information included within the scope of work described below.</i></p>
		<p><i>Fraunhofer IZM reviewed Apple’s comprehensive fiber footprint data related to corporate fiber usage from products, corporate, and retail operations in fiscal year 2017.</i></p>
		<p><i>Fraunhofer IZM reviewed Apple’s packaging plastic footprint data related to packaging plastic usage from products and retail operations in fiscal year 2017.</i></p>
Clorox	Ernst & Young (EY)	<p>Clorox 2018 Integrated Report:</p> <p>VOLUNTARY ASSURANCE OF NONFINANCIAL INFORMATION</p> <p><i>We believe voluntary assurance strengthens our reporting process and enhances the credibility of our nonfinancial information. We engage a third party to review the following nonfinancial key performance indicators: U.S. greenhouse gas emissions, U.S. energy</i></p>

Company	Provider	Assurance Language
		<i>consumption, global water consumption, product sustainability improvements, workforce demographics, recordable incident rate, employee engagement and U.S. product donations. Items undergoing assurance are indicated throughout the report. We continue to look for opportunities to provide external review of metrics that provide further insight into how we create value for all our stakeholders.</i>
Cummins	Bureau Veritas	<p>Cummins 2017 GRI Databook:</p> <p><i>Cummins' financial data is audited by PricewaterhouseCoopers LLP.</i></p> <p><i>The environmental, corporate responsibility, diversity, safety and governance data has been assured by Bureau Veritas. Bureau Veritas' assurance letters are included at the end of this report.</i></p>
Ingersoll-Rand	ERM Certification and Verification Services (ERM CVS)	<p>Ingersoll-Rand 2017 Sustainability Report:</p> <p><i>Our EHS data is assured annually by a third party and the results of our 2017 assurance can be found here.</i></p> <p>Assurance Letter:</p> <p><i>Lloyd's Register Quality Assurance, Inc. (LRQA) was commissioned by Ingersoll Rand Company (Ingersoll Rand) to assure the greenhouse gas (GHG) Emissions Inventory and other EHS Data for the calendar year 2017 (hereafter referred to as "the Assertion").</i></p> <p><i>The Assertion relates to direct GHG emissions (Scope 1), energy indirect GHG emissions (Scope 2), and Environmental, Health, and Safety (EHS) data. The EHS Data includes Energy Use, Water Use, Waste Data, Total Lost Time Incident Rate, Total Recordable Incident Rate, Number of Fatalities, and Occupational Illness Frequency Rate.</i></p>
Kimberly-Clark	WSP	<p>Kimberly-Clark 2017 Sustainability Report, Assurance Statement:</p> <p><i>WSP was commissioned by Kimberly-Clark Corporation (Kimberly-Clark) to conduct independent assurance of its 2017 Sustainability Report ('the report') as published on the company's website at https://www.sustainability2022.com/.</i></p> <p><i>We planned and performed our work in accordance with the AA1000 Assurance standard 2008 (AA1000AS). We were engaged to provide an AA 1000 Type 2 assurance, which covers evaluation of adherence to the AA1000 AS assurance principles of Inclusivity, Materiality and Responsiveness. We also reviewed the reliability of specified sustainability performance information to a moderate level of assurance. In addition, as criteria for our assurance work, we used the GRI 101 Foundation guidelines which set out the Reporting Principles for defining report content and quality and the ISO standard 14064-3: Greenhouse gases Part 3: Specification with Guidance for the validation and verification of greenhouse gas assertions. The information and presentation of data within the Sustainability Report is the responsibility of Kimberly-Clark. This statement is the responsibility of WSP and represents our independent</i></p>

Company	Provider	Assurance Language
		<i>opinion. The intended users of this statement are the readers of the Kimberly-Clark Sustainability Report and it is intended for this statement to be read in its entirety.</i>
Lockheed Martin	DNV GL	<p>Lockheed Martin 2017 Sustainability Report:</p> <p><i>Assurance: DNV GL, an independent third party, assured this report, including the Lockheed Martin Sustainability Management Plan performance indicators and select GRI indicators. Verification details are in the assurance statement.</i></p>
Newmont Mining	Bureau Veritas	<p>2017 Sustainability Report:</p> <p><i>Newmont does not have a formal written policy requiring external assurance for this report; however, in support of our commitment to ICMM's 10 Principles for Sustainable Development we engaged Bureau Veritas to independently assure our 2017 Beyond the Mine sustainability report.</i></p>
Prologis	Lloyd's Register Quality Assurance (LRQA)	<p>2017 Sustainability Report:</p> <p><i>This report has been externally assured by Lloyd's Register Quality Assurance (LRQA) using the AA1000 Assurance Standard (2008). LRQA interviewed members of the Prologis executive committee and senior management to ensure that this report complies with the principles of inclusivity, materiality and responsiveness.</i></p> <p><i>LRQA also assessed the reliability of specified sustainability performance information and verified our 2017 GHG inventory using the World Resource Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol. Our complete External Assurance Statement is found on page 42.</i></p>
UPS	Deloitte & Touche	<p>2017 GRI Index:</p> <p><i>For this Report, we engaged Deloitte & Touche LLP to conduct a review, in accordance with attestation standards established by the American Institute of Certified Public Accountants, to provide a limited level of assurance on our 2017 Corporate Sustainability Report.</i></p> <p><i>We also engaged Deloitte & Touche LLP to conduct an examination, in accordance with attestation standards established by the American Institute of Certified Public Accountants, to provide a reasonable level of assurance on our Statement of Greenhouse Gas Emissions for the year ended December 31, 2017.</i></p> <p>Assurance Statements:</p> <p><i>We have examined the accompanying Statement of Greenhouse Gas Emissions ("Statement of GHG Emissions") of United Parcel Service, Inc. (the "Company") for the year ended December 31, 2017 for Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions.</i></p>

Company	Provider	Assurance Language
		<p>And</p> <p><i>We have reviewed the accompanying 2017 Corporate Sustainability Report of United Parcel Service, Inc. (the "Company") for the year ended December 31, 2017. The Company's management is responsible for preparing and presenting the Corporate Sustainability Report in accordance with the Global Reporting Initiative Sustainability Reporting Standards under its Comprehensive option. Our responsibility is to express a conclusion on the Corporate Sustainability Report based on our review.</i></p>

3. External Auditors Most Frequently Used by S&P 500 Sustainability Reporters

Auditor	Number of Companies
Bureau Veritas	28
ERM-Certification and Verification Services (CVS)	16
Lloyd's Register Quality Assurance	19
Undisclosed	17
Cventure	8
WSP	9
EY	8
Deloitte & Touche	5
PricewaterhouseCoopers (PwC)	5
Trucost	5