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Disclaimer: This report is provided only for informational purposes. It does not constitute investment advice. Past performance does not guarantee future results. Investments and strategies discussed herein may not be suitable for all readers, so readers should consult with financial, legal, tax or accounting professionals before acting upon any information or analysis contained herein. This report does not measure or monitor the performance of managers or funds. The lists, examples and case studies of investment managers and vehicles presented in this report should in no way be considered endorsements or investment solicitations. In no way should this report be construed as an offer to invest or a form of marketing.
The practice of ESG integration—the systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis—has grown at a stunning pace, at least as reported by money managers. While many smaller money managers have practiced ESG integration for years, several large money managers with hundreds of billions of dollars in assets under management (AUM) now report that they are implementing the strategy, dramatically expanding the overall tally of assets managed according to sustainable, responsible and impact investment (SRI) strategies.

From 2012 to 2014, according to biennial surveys by the US SIF Foundation, ESG integration grew nearly eightfold to encompass almost $5 trillion in US-domiciled money manager assets. ESG integration has grown at a rapid pace globally as well, with the encouragement of a number of investment associations and bodies, including the United Nations Environmental Programme Finance Initiative, the Principles for Responsible Investment (PRI), the Global Sustainable Investment Alliance (GSIA) and the US SIF Foundation.

However, the rapid expansion of ESG integration has raised questions for many observers as to how, and how thoroughly, asset managers are implementing this strategy. To get a better understanding, this report focuses on some of the largest money managers that practice ESG integration in the United States. Included are those having at least $3 billion in assets to which they apply ESG factors based on the US SIF Foundation’s 2014 survey of sustainable, responsible and impact investing, and which are practicing ESG integration across more than 50 percent of those assets. To be included in the sample, money managers also needed to have submitted a 2013/2014 and 2014/2015 Responsible Investment (RI) Transparency Report to the Principles for Responsible Investment.

The resulting sample consisted of 16 money managers—two private equity firms, two investors with significant property allocations, and 12 investment money managers with mostly listed equities and fixed income assets. The report’s authors then drew on public information—from RI Transparency reports, firm websites and investment policy statements—and from comments from the money managers themselves for this study.

**KEY FINDINGS**

**ESG INTEGRATION TECHNIQUES USED BY THE LARGEST MONEY MANAGERS:** Most of the 16 money managers described investment strategies that fall within the US SIF Foundation’s definition of ESG integration: the systematic and explicit inclusion by investment managers of ESG factors into traditional financial analysis. They speak of ESG factors, risks or opportunities in pre-investment diligence and post-investment monitoring.

On the other hand, five of the 16 money managers reported that as part of ESG integration, they use certain SRI strategies that the US SIF Foundation and the GSIA have seen as complementary to but separate from ESG integration. Three of the firms said that post investment, their ESG integration practices encompassed company engagement, shareholder advocacy or proxy voting. Other strategies mentioned include exclusionary screening, coalition building and public policy involvement.
LEVEL OF DISCLOSURE REGARDING ESG CRITERIA: The 16 money managers fell into four categories with regard to how much detail they provided in their RI Transparency Reports, their websites or other public sites on the specific ESG factors they consider:

1. NO DISCLOSURE: Four did not publicly disclose the ESG criteria they consider in ESG integration.

2. PARTIAL DISCLOSURE-FIXED INCOME ONLY: One large money manager provided ESG criteria for its ESG integration assets in fixed income but not for those in listed equities.

3. PARTIAL DISCLOSURE-PROPERTY ONLY: Three money managers disclosed the ESG criteria they consider in their property investments but not for their other asset classes in ESG integration.

4. FULL DISCLOSURE: Eight provided either examples or detailed information on the ESG criteria they consider for all relevant asset classes.

Collectively, the eight money managers in the first three categories did not disclose ESG criteria for $778 billion to $1.66 trillion in assets under management for which they claim to be doing ESG integration. (The ranges reflect the minimum and maximum percentages of their assets under management they may hold in various asset classes.)

BREADTH OF ESG INTEGRATION ACROSS ASSETS: Of the 16 money managers reviewed, six indicated in the 2014/2015 RI Transparency Reports that they did 100 percent ESG integration for listed equities only, one for fixed income only, and six for both these asset classes. Many descriptions of the ESG integration strategies and criteria provided clear evidence that ESG integration was in fact taking place across an entire asset class. However, in a few cases ESG integration did not appear to occur across 100 percent of an asset class even if a money manager marked 100 percent. For example, one money manager described its “company-wide ESG integration program” as entailing “sharing critical ESG information with all investment teams” but without explaining to what extent the recipients actually use, or are expected to use, this information. Another said that its analysts were not required to review a specific set or framework of ESG factors before deciding whether to invest in a company.

RECOMMENDATIONS

Based on our review of ESG integration trends and the public information available, we offer three recommendations for money managers and the SRI industry to advance robust and transparent ESG integration practices.

1. Money managers should apply specific ESG criteria in ESG integration strategies and disclose their criteria.

Obtaining more accurate and detailed information about the ESG criteria money managers consider in investment analysis is a necessary first step for analysts and policymakers who wish to assess the impact that ESG integration may be having on portfolio construction, investment risk mitigation, the companies assessed and society at large.
2. Money managers should clearly articulate whether their ESG integration practice is systematic and consistent across all affected assets or applied only ad hoc or upon request.

Without a consistent and systematic approach, there is potential for “greenwashing” in the industry, for miscounting the assets that consider ESG issues, and for creating confusion among investors who then may avoid utilizing SRI strategies.

3. To help accomplish the first two goals, investment analysts, portfolio managers, researchers, consultants and other financial professionals should take advantage of the education and training opportunities in sustainable, responsible and impact investing.

The SRI and broader investment industry can benefit from using a common set of definitions of the various SRI investment strategies. A growing body of resources is available to investors interested in developing ESG integration techniques.

We conclude with a list of best practices for money manager ESG integration.
The practice of ESG integration—the systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis—has grown at a stunning pace, at least as reported by money managers. From 2012 to 2014, according to biennial surveys by the US SIF Foundation, it has grown nearly eightfold to encompass almost $5 trillion in US-domiciled money manager assets. While many smaller money managers have practiced ESG integration for years, several large money managers with hundreds of billions of dollars in assets under management (AUM) now report that they are implementing the strategy, dramatically expanding the overall tally of assets managed according to sustainable, responsible and impact investment (SRI) strategies.

The rapid expansion of ESG integration has raised questions for many observers as to how, and how thoroughly, asset managers are implementing this strategy. To help answer these questions, this report provides an overview of the rise of ESG integration and then reviews some of the largest money managers that practice ESG integration in the United States. The 16 selected firms have at least $3 billion in assets to which they apply ESG factors and practice the specific strategy of ESG integration across more than 50 percent of those assets. The analysis highlights the techniques they use and the ESG factors they consider in implementing ESG integration. For comparative purposes, the report also provides summaries on the practice on ESG integration in Asia, Australia and New Zealand. The report concludes with recommendations on what money managers and practitioners within the SRI industry can do to encourage robust ESG integration practices and reporting.

This report is designed for money managers interested in exploring and practicing systemic ESG integration, the industry researchers who serve them, and the investment consultants and institutional investors seeking to identify money managers with ESG integration capabilities. We hope it serves as a useful guide to the state of ESG integration and its place in advancing the field of sustainable, responsible and impact investment.
Since 1995, the US SIF Foundation has examined the growth of sustainable, responsible and impact investing practices in the United States. For the surveys, it has sought to identify:

- US-domiciled assets held by institutional asset owners or money managers that practice “ESG incorporation” by applying various environmental, social and governance criteria in their investment selection and analysis, and
- US-domiciled assets held by institutions or money managers that file or co-file shareholder resolutions on ESG issues at publicly traded companies.

From 2001 through 2012, these surveys showed that assets managed according to SRI strategies kept pace with the overall market of professionally managed assets in the United States, accounting for a fairly consistent 10-12 percent share of the whole.

After 2012, however, sustainable investing leapt forward. The US SIF Foundation’s Report on US Sustainable, Responsible and Impact Investing Trends 2014 documented, at the start of 2014:

- $6.20 trillion in US-domiciled assets practicing ESG incorporation, and
- $1.72 trillion in US-domiciled assets held by institutional investors or money managers that filed shareholder resolutions on ESG issues from 2012 through 2014.

After eliminating double-counting for assets involved in both strategies, the overall total of SRI assets was $6.57 trillion—a 76 percent increase over the $3.74 trillion identified in sustainable investing strategies at the outset of 2012. As a result, assets managed with SRI strategies accounted for nearly 18 percent of all professionally managed assets in the United States at the start of 2014.

### TABLE 1: ESG INCORPORATION STRATEGIES BY MONEY MANAGERS (US$ BILLIONS)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative screening</td>
<td>$1,190</td>
<td>$4,441</td>
</tr>
<tr>
<td>Positive screening</td>
<td>$197</td>
<td>$343</td>
</tr>
<tr>
<td>ESG integration</td>
<td>$614</td>
<td>$4,739</td>
</tr>
<tr>
<td>All ESG incorporation methods</td>
<td>$1,412</td>
<td>$4,803</td>
</tr>
</tbody>
</table>

*Note: These strategies are not mutually exclusive.*

1. ESG incorporation comprises a number of strategies, including ESG integration as well as negative/exclusionary screening, positive/best-in-class screening, norms-based screening, ESG integration, sustainability themed investing, and impact/community investing. See pages 9–10 for definitions.
The single most important factor in this growth over the two-year period was in the assets held by money managers practicing ESG incorporation, and particularly the ESG incorporation strategy known as ESG integration. As Table 1 indicates, while there was a more than three-fold increase overall in the assets of US investment products that take ESG factors into account in some way, the growth in the reported use of ESG integration, specifically, exploded from $614 billion to $4.74 trillion, a nearly eightfold increase.

However, many of these newer entrants to ESG incorporation did not specify the specific criteria they consider. As a result, the US SIF Foundation had to attribute more than $2 trillion in US-domiciled assets to general and undefined ESG factors, as shown in Table 2.

<table>
<thead>
<tr>
<th>TABLE 2: ESG INTEGRATION AND RELATED INDICATORS (US$ BILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets to which money managers applied ESG integration</td>
</tr>
<tr>
<td>$614</td>
</tr>
<tr>
<td>$4,739</td>
</tr>
<tr>
<td>Assets in investment vehicles that consider:</td>
</tr>
<tr>
<td>Governance—general undefined</td>
</tr>
<tr>
<td>$287</td>
</tr>
<tr>
<td>$2,497</td>
</tr>
<tr>
<td>Environment—general undefined</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>$2,571</td>
</tr>
<tr>
<td>Social—general undefined</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>$2,550</td>
</tr>
</tbody>
</table>

Much of the data the 2014 *Trends* report research team obtained on the rise in ESG integration and other ESG incorporation strategies came from the first annual publication—in 2014—of the Responsible Investment Transparency Reports required of signatories to the Principles for Responsible Investment (PRI).²

The practice of ESG integration has grown at a rapid pace globally as well. At the start of 2014, it was the second most popular ESG incorporation strategy practiced by asset managers and owners in the combined markets of the United States, Canada, Europe, Asia and Australasia, accounting for $12.9 trillion in assets at the beginning of 2014, up 116 percent from $5.9 trillion in 2012. (Negative screening remains the most widely practiced strategy in terms of assets, affecting $14.4 trillion globally at the start of 2014.)³

Interest in a comprehensive approach to investment analysis of ESG risks and opportunities gained impetus in the last decade as a result of a number of international initiatives.

One is the United Nations Environment Programme Finance Initiative (UNEP FI), a coalition of more than 200 global financial institutions working in partnership with the UNEP to promote sustainable finance. UNEP FI has produced a number of influential reports through its Asset Management Working Group. One such report examined fiduciary law in nine developed markets including the United States. It found that “…the links between ESG factors and financial performance are increasingly being recognized. On that basis, integrating ESG considerations into an investment analysis so as to more reliably predict financial performance is clearly permissible and is arguably required in all jurisdictions.”⁴

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This report and others commissioned by the working group helped gain broader, mainstream interest in responsible investment and support for the Principles for Responsible Investment, the debut of which took place in 2006 at the United Nations. Signatories commit to the following six principles.

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices.
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.
4. We will promote acceptance and implementation of the Principles within the investment industry.
5. We will work together to enhance our effectiveness in implementing the Principles.
6. We will each report on our activities and progress towards implementing the Principles.

In the meantime, the UNEP FI Asset Management Working Group continued its analytical work. It commissioned Mercer, a global investment consulting group, to review the academic research analyzing links between ESG factors and investment performance. The first report, in 2007, analyzed 20 academic studies and offered a glossary of responsible investing terms, including ESG integration, defined as “The active investment management processes that include an analysis of environmental, social and corporate governance risks and opportunities.” A 2009 report examined a further 16 studies. It concluded that of the 36 studies reviewed beginning with the 2007 report, 20 showed evidence of a positive link between ESG performance and financial performance, and only three showed a negative relationship. The 2009 report further noted that a number of tools can be used to incorporate ESG into the investment process, “including … ESG integration into valuation metrics.”

Thus, by the end of the decade, “ESG integration” was becoming a widely used term.

In 2012, the US SIF Foundation and the other members of the Global Sustainable Investment Alliance (GSIA) decided to share data and coordinate efforts in order to produce the first-ever report reviewing the extent of sustainable and responsible investing worldwide, focusing on the United States (represented by US SIF), Canada (Responsible Investing Association Canada), Europe (Eurosif), Asia (ASrIA), Australia and New Zealand (Responsible Investing Association Australasia), and Africa (Africa SIF).

As part of that effort, they sought to develop consistent, mutually acceptable definitions for the various ways in which investors can practice ESG incorporation.

The GSIA definitions of sustainable investment, published in the Global Sustainable Investment Review 2012 and in the 2014 Review, are:

1. NEGATIVE/EXCLUSIONARY SCREENING: the exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria;
2. POSITIVE/BEST-IN-CLASS SCREENING: investment in sectors, companies or projects selected for positive ESG performance relative to industry peers;
3. NORMS-BASED SCREENING: screening of investments against minimum standards of business practice based on international norms;
4. INTEGRATION OF ESG FACTORS: the systematic and explicit inclusion by investment managers of environmental, social and governance factors into traditional financial analysis;

7. The Global Sustainable Investment Alliance is a collaboration of membership-based sustainable investment organizations around the world. The GSIA’s mission is to deepen the impact and visibility of sustainable investment organizations at the global level.
5. SUSTAINABILITY THEMED INVESTING: investment in themes or assets specifically related to sustainability (for example clean energy, green technology or sustainable agriculture); and

6. IMPACT/COMMUNITY INVESTING: targeted investments, typically made in private markets, aimed at solving social or environmental problems, and including community investing, where capital is specifically directed to traditionally underserved individuals or communities, and financing that is provided to businesses with a clear social or environmental purpose.

The six categories are not mutually exclusive, as more than one approach can be used with the same investment vehicle. A fund manager, for example, may automatically exclude companies that produce tobacco products but also assess current and potential portfolio companies on a wide range of ESG issues. In addition to the six ESG incorporation strategies above, the GSIA noted an additional strategy of corporate engagement and shareholder action.

The Principles for Responsible Investment, which now counts over 1,370 signatories from around the world comprising investment managers, asset owners and professional service providers, has used the GSIA definitions as a jumping off point as it has sought to promote ESG integration and other forms of responsible investment. In its PRI Reporting Framework 2014/15 Main Definitions, PRI says:

“Integration of ESG issues encompasses the use of qualitative and quantitative ESG information in investment processes, with the objective of enhancing investment decision-making. Integration of ESG issues can be used to inform economic analysis and industry analysis. It can be used at the portfolio level by taking into account ESG related trends such as climate change, or at the stock, issuer or investee level. The term is used interchangeably with ESG integration or integrated analysis.”

For private equity and property investing specifically, PRI noted to the US SIF Foundation that it recognizes ESG factors as an important input into pre- and post-investment activities for these asset classes, but it does not distinguish between different ESG approaches (such as integration or screening) due to the diversity of approaches described by signatories.

Both US SIF and Eurosif have from time to time refined the original GSIA definition of ESG integration to specify that “ESG factors” means “ESG risks and opportunities.” In its most recent report on responsible investing trends in Europe, for example, Eurosif says that ESG integration is “the explicit inclusion by asset managers of ESG risks and opportunities into traditional financial analysis and investment decisions based on a systematic process and appropriate research sources.”

While the various organizations cited above seem to be largely aligned on how to define ESG integration, they are still grappling with how it can be practiced. In pursuit of this answer, PRI released a report in February 2013 focusing on fundamental analysis of listed equities and “the contribution that analysis of ESG factors can make towards an accurate valuation of a listed company.” It broke down the potential for ESG integration into five areas:
• **ECONOMIC ANALYSIS:** how ESG factors affect economic growth and macroeconomic themes such as resource scarcity.

• **INDUSTRY ANALYSIS:** how ESG factors influence consumer preference and regulatory change, such as environmental legislation.

• **COMPANY ANALYSIS:** how a company manages ESG risks and opportunities.

• **FINANCIAL REPORTS:** how ESG factors affect earnings growth, operational efficiency, intangible assets and underlying cash flows.

• **VALUATION TOOLS:** how analysts are integrating ESG considerations into valuation tools to help understand why the market is—or may begin—pricing a stock above or below its book value.

The Sustainability Accounting Standards Board (SASB), which describes its mission as to “develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors,” has also pioneered research on the ESG criteria that may be material to publicly held corporations. It has developed the SASB Materiality Map, which investors in publicly traded companies can use to assess their portfolios’ exposure to various ESG risks and opportunities. Morgan Stanley added to the literature on ESG integration with a report it released in 2015 that lays out a framework for weighting various ESG factors in 29 industry sectors, from aerospace to utilities. For each industry sector, it notes which of 18 specific criteria will be particularly relevant for consideration.

The US SIF Foundation has also sought to provide basic instruction on the how-to of ESG integration through an introductory course, *Fundamentals of Sustainable and Responsible Investment.* The course explains that ESG research and analysis can be applied in Discounted Cash Flow modeling, ratio-analysis and peer-to-peer analysis. Methods include: adjusting estimated future cash flows based upon evaluation of ESG-related risks and opportunities, adjusting modeled discount rates using information about ESG-related risks and opportunities, identifying and measuring the impact of off-balance-sheet assets and liabilities related to ESG issues, and creating inter-company comparative rankings using ESG-related criteria.

16. US SIF’s *Fundamentals of Sustainable and Responsible Investment* course is offered both as an online and live version, and therefore, the material changes slightly in each presentation depending on the presenter.
To get a better understanding of how ESG integration is implemented today, this report focuses on the largest money managers practicing ESG integration identified through the US SIF Foundation’s 2014 Trends survey: those having at least $3 billion in assets to which they apply ESG factors and which are practicing ESG integration across more than 50 percent of those assets. To be included in the sample, money managers also needed to have submitted a 2013/2014 and 2014/2015 RI Transparency Report to PRI. The resulting sample consisted of 16 money managers—two private equity firms, two investors with significant property allocations, and 12 investment money managers with mostly listed equities and fixed income assets.

The report’s authors then drew on public information—from RI Transparency Reports, firm websites and investment policy statements—and on comments from the money managers themselves for this study. This report does not include any information provided confidentially to the US SIF Foundation’s 2014 Trends survey.

The 2013/2014 and 2014/2015 RI Transparency Reports, while providing much helpful data to this report, also had limitations in that some of the key information of interest to this report was not mandatory for signatories to disclose. PRI explained that indicators are voluntary for practices it deems to be advanced or niche or where it has received input that the information is commercially sensitive. Nonetheless, many money managers voluntarily provided information that was not required for reporting. The information relating to ESG integration on which this report focuses is shown in Table 3.

<table>
<thead>
<tr>
<th>Description of how ESG issues are integrated into investment decision-making processes</th>
<th>Listed Equities</th>
<th>Fixed Income</th>
<th>Private Equity</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary</td>
<td>Voluntary</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 4 provides an at-a-glance overview of the 16 money managers’ approaches to ESG integration and level of disclosure. More detailed profiles of each firm can be found in the appendix that begins on page 25.
### TABLE 4: 2014/2015 LEADING MONEY MANAGERS WITH ESG INTEGRATION STRATEGIES—AT A GLANCE

<table>
<thead>
<tr>
<th>Money Manager</th>
<th>Percentage ESG Integration within Classes</th>
<th>ESG Integration Strategy</th>
<th>ESG Integration Criteria Disclosure in 2014/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAMS STREET PARTNERS</td>
<td><strong>Private equity:</strong> N/A*</td>
<td>Adams Street Partners implemented an ESG checklist for each of its investment teams tailored to each team’s investment focus (i.e., primary investments, secondary investments, direct investments and co-investments) to assist in integrating ESG factors in pre-investment diligence and post-investment monitoring.</td>
<td>Typical ESG criteria examples or specific ESG criteria are publicly disclosed for private equity.</td>
</tr>
<tr>
<td>CALVERT INVESTMENTS</td>
<td><strong>Listed equities:</strong> 67% ESG integration and screening. <strong>Corporate fixed income:</strong> 99.8% ESG integration and screening; 0.2% ESG integration, screening and thematic investments.</td>
<td>For listed equities, Calvert uses a proprietary framework to incorporate ESG information into its research process, including the due diligence phase and maintenance research of portfolio holdings. For fixed income, the credit team works with in-house sustainability research analysts to analyze how ESG factors relevant to a company, given its sector, may affect the credit drivers of spread performance and its valuation.</td>
<td>Typical ESG criteria examples or specific ESG criteria are publicly disclosed for listed equity and fixed income.</td>
</tr>
<tr>
<td>CAPITAL GROUP INTERNATIONAL</td>
<td><strong>Listed equities:</strong> 50% integration alone; 50% integration and screening^ <strong>Fixed income:</strong> 70% integration alone; 30% integration and screening^</td>
<td>Capital Group International says it fully integrates ESG issues into its investment philosophy and research process, rather than treating them as the responsibility of a separate team. It considers ESG issues alongside other financial and economic indicators in its fundamental analysis of companies and their value. Using research by its own analysts enables Capital to distinguish, within a particular industry or sector, those companies that are better or worse at managing the ESG risks relevant to that industry.</td>
<td>ESG criteria are not publicly disclosed.</td>
</tr>
<tr>
<td>CBRE GLOBAL INVESTORS</td>
<td><strong>Listed equities:</strong> 99% integration alone. <strong>Property:</strong> N/A*</td>
<td>For listed equities, CBRE believes that ESG issues are most relevant to evaluating companies’ management teams. For property, CBRE includes in its Due Diligence Checklists measurable sustainability factors appropriate to the asset class and market. CBRE not only focuses on new acquisitions, but also drives the sustainability improvement of all investments during the entire lifecycle of the investments.</td>
<td>ESG criteria are not publicly disclosed for listed equity, but typical ESG criteria examples or specific ESG criteria are publicly disclosed for property.</td>
</tr>
</tbody>
</table>

**ESG INTEGRATION TECHNIQUES USED BY THE LARGEST MONEY MANAGERS:** Most of the 16 money managers described investment strategies that fall within US SIF Foundation’s definition of ESG integration: the systematic and explicit inclusion by investment managers of ESG factors into traditional financial analysis. They speak of ESG factors, risks or opportunities in pre-investment diligence and post-investment monitoring.

(continued on page 17)
<table>
<thead>
<tr>
<th>Money Manager</th>
<th>Percentage ESG Integration within Classes</th>
<th>ESG Integration Strategy</th>
<th>ESG Integration Criteria Disclosure Level in 2014/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F&amp;C ASSET MANAGEMENT (acquired by BMO Asset Management in 2014)</strong></td>
<td>Listed equities: 64% integration alone; 10.5% integration and screening; 1.3% integration, screening and thematic investments.</td>
<td>For both listed equities and fixed income, F&amp;C has developed an ESG risk tool that blends proprietary analysis with best-in-class externally sourced data to produce a score that can be applied across existing F&amp;C systems. The tool covers more than 3,000 companies worldwide, and gives quantitative assessments of performance against ESG-related risks. It covers most constituents of the world’s major stock indices as well as major bond issuers. For property, sustainability issues are considered alongside conventional investment criteria and fully integrated into the investment process. Individual fund managers will use their intrinsic skill and judgement to evaluate the degree of impact ESG issues might have on their conventional considerations and criteria.</td>
<td>ESG criteria are not publicly disclosed for listed equity and fixed income, but typical ESG criteria examples or specific ESG criteria are publicly disclosed for property.</td>
</tr>
<tr>
<td></td>
<td>Fixed income: 99.1% integration alone, 0.9% integration and screening.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Property: N/A*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GENERATION INVESTMENT MANAGEMENT</strong></td>
<td>Listed equities: 100% integration alone.</td>
<td>For listed equities, GIM fully integrates sustainability factors into its investment process across all investment products. Because ESG integration forms the core of GIM’s investment process, it has not developed a formal ESG policy, and it only offers one integrated product (i.e., it doesn’t offer a “traditional” and “SRI” product). For private equity, investments are made as part of the Climate Solutions Fund, which has a mandate to invest only in businesses which the team judges to be “solutions” according to the Climate Materiality threshold applied. In addition, the management and business quality of the company is assessed against the same framework that seeks to make a judgement from a long-term perspective and integrate sustainability issues with financial analysis.</td>
<td>Typical ESG criteria examples or specific ESG criteria are publicly disclosed for listed equity and private equity.</td>
</tr>
<tr>
<td></td>
<td>Private equity: N/A*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JANUS CAPITAL MANAGEMENT</strong></td>
<td>Listed equities: 100% integration and screening.</td>
<td>Janus incorporates the concepts of ESG in the financial analysis of companies as part of the fundamental research process to better understand risks/opportunities and drive value-creation for clients.</td>
<td>ESG criteria are not publicly disclosed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>KOHLBERG KRAVIS ROBERTS &amp; CO L.P. (KKR)</strong></td>
<td>Private equity: N/A*</td>
<td>KKR uses key performance indicators such as the identification of ESG risks and opportunities pre-investment and the management of ESG issues during portfolio management, among others. Critical ESG issues identified in the diligence process are included in 100-day plans, with goals and steps to achieve them.</td>
<td>Typical ESG criteria examples or specific ESG criteria are publicly disclosed for private equity.</td>
</tr>
</tbody>
</table>
### TABLE 4: 2014/2015 LEADING MONEY MANAGERS WITH ESG INTEGRATION STRATEGIES—AT A GLANCE (CONTINUED)

<table>
<thead>
<tr>
<th>Money Manager</th>
<th>Percentage ESG Integration within Classes</th>
<th>ESG Integration Strategy</th>
<th>ESG Integration Criteria Disclosure Level in 2014/2015</th>
</tr>
</thead>
</table>
| **MFS INVESTMENT MANAGEMENT** | Listed equities: 82% integration alone; 18% integration and screening.  
Fixed income: 100% integration alone. | In listed equities, MFS integrates a company’s ESG risks and opportunities into the overall security analysis to the extent it believes that such factors are material to and have an economic impact on shareholder value. If an ESG risk or opportunity is considered material, the analyst may adjust his or her model or valuation to account for the risk or opportunity, among other options. Alternatively, the portfolio manager who owns a security tied to the company may adjust his or her weighting of the security to account for the risk. In fixed income, MFS uses a comprehensive research process to identify ESG issues, among other factors, that could materially affect security valuation. | ESG criteria are not publicly disclosed.  
[The firm does disclose examples of ESG issues it raises in its shareholder engagement.] |
| **MILLER/HOWARD INVESTMENTS** | Listed equities: 39% integration alone; 61% integration and screening. | Miller/Howard Investments uses an “integrated approach,” which in its view includes screening, shareholder advocacy, proxy voting, coalition building and public policy involvement. | Typical ESG criteria examples or specific ESG criteria are publicly disclosed for listed equity. |
| **PARNASSUS INVESTMENTS** | Listed equities: 95% integration and screening; 5% integration, screening and thematic investments.  
Fixed income: 100% integration and screening. | Companies undergo a rigorous, proprietary ESG evaluation. ESG research is fully integrated into the investment process such that both fundamental and ESG research analysts are able to identify and address company-specific ESG issues. As part of the integrated approach to ESG analysis, ESG factors are considered both from an ESG and financial perspective and at multiple points during the investment process. | Typical ESG criteria examples or specific ESG criteria are publicly disclosed for listed equity and fixed income. |
| **PAX WORLD INVESTMENTS** | Listed equities: 100% integration, screening and thematic.  
Fixed income: 100% integration and screening. | Pax World identifies key ESG risk and opportunity factors for a given industry, and then evaluates companies relative to their peers based on 1) exposure to ESG risks, 2) historical management of ESG issues, 3) initiatives to mitigate ESG risks, and 4) positioning to capitalize on ESG-related opportunities. The results of this ESG analysis are integrated into portfolio construction. | Typical ESG criteria examples or specific ESG criteria are publicly disclosed for listed equity and fixed income. |
| **PICTET ASSET MANAGEMENT** | Listed equities: 100% integration, screening and thematic investments. | Pictet Asset Management implemented a company-wide ESG integration program that entails sharing critical ESG information with all investment teams. This also entails proxy voting and exclusions of controversial weapons. A subset of its ESG integration program is its $10 billion in environmental thematic funds and sustainable equity portfolios. | ESG criteria are not publicly disclosed. |
## Table 4: 2014/2015 Leading Money Managers with ESG Integration Strategies—At a Glance (Continued)

<table>
<thead>
<tr>
<th>Money Manager</th>
<th>Percentage ESG Integration within Classes</th>
<th>ESG Integration Strategy</th>
<th>ESG Integration Criteria Disclosure Level in 2014/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRINCIPAL GLOBAL INVESTMENTS</strong></td>
<td></td>
<td>For listed equities and fixed income, ESG issues are considered within the investment process as part of the fundamental research driving security selection. Analysts provide the insights into industry trends and company-specific considerations, integrating ESG factors into their final investment thesis. For property, Principal uses a due diligence checklist that includes a broad spectrum of ESG issues. ESG issues are factored into Principal’s financial modeling and influence its determination of present and future asset value.</td>
<td>ESG criteria not publicly disclosed for listed equity or fixed income, but typical ESG criteria examples or specific ESG criteria are publicly disclosed for property.</td>
</tr>
<tr>
<td>Listed equities: 96% integration alone; 2% integration and screening; 2% integration and thematic investments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed income: 99% integration alone; 1% integration and screening.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property: N/A*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TIAA-CREF</strong></td>
<td></td>
<td>For listed equities, broad concerns relating to ESG factors are typically expressed as risk factors that may reduce an investment’s fair value and increase its potential downside risk. This would occur via a higher discount rate used to value future projected cash flows given the uncertainty and potential for future liabilities. For property, sustainability matters are reviewed as part of the overall due diligence process, utilizing a combination of internal engineering expertise, external consultants/experts and the asset management team. The Global Real Estate Sustainability Initiative (GRESI) defines and promotes TIAA-CREF’s leadership role in integrating ESG principles into the administration of our investment real estate. A comprehensive due diligence checklist, linked to an automated tracking and completion tool, is employed.</td>
<td>Typical ESG criteria examples or specific ESG criteria are publicly disclosed for listed equity and property.</td>
</tr>
<tr>
<td>Listed equities: 100% integration and screening.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property: 90% [provided by TIAA-CREF]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WELLINGTON MANAGEMENT COMPANY</strong></td>
<td></td>
<td>To help its portfolio managers and investment teams better assess risks and opportunities in client portfolios, Wellington Management has integrated the analysis of ESG factors into its investment and risk-management processes firm-wide. To aid in the integration of ESG analysis, a specialized in-house ESG team manages several investor tools, including an innovative portfolio review process, ESG ratings and reference guides that examine ESG factors by sector and country.</td>
<td>Typical ESG criteria examples or specific ESG criteria are publicly disclosed for fixed income.</td>
</tr>
<tr>
<td>Listed equities: 98% integration alone; 1% integration and screening; 1% integration, screening and thematic investments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed income: 99% integration alone; 1% integration and screening.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Data sources for this table are money managers’ websites, RI Transparency Reports and additional comments to the US SIF Foundation. The descriptions under “ESG Integration Strategy” quote or paraphrase these sources. The assessment of money managers’ disclosure of ESG criteria is based on the detail they provided in public sources (RI Transparency Reports or websites). See appendix section for more detailed profiles of each money manager.

*Percentage ESG integration is a field in the RI Transparency Report for listed equities and fixed income, but not for private equity or property.
For example, in listed equities, F&C Asset Management uses an ESG risk tool that blends proprietary analysis with best-in-class externally sourced data to produce a score that can be applied across existing systems, covering thousands of companies and providing quantitative assessments of performance against ESG risks. TIAA-CREF notes in its RI Transparency Report that it expresses concerns relating to ESG issues as risk factors that may reduce an investment’s fair value and increase its potential downside risk; it then applies a higher discount rate to value future projected cash flows given the uncertainty and potential for future liabilities.

Pax World and Wellington both integrate ESG issues into the following aspects of investment analysis for listed equities: macroeconomic analysis, industry analysis, analysis of company strategy and quality of management, and idea generation. In addition, Pax integrates ESG criteria into portfolio construction, and Wellington into fair value/fundamental analysis. For Wellington, the latter involves adjustments to income forecasts (sales, earnings, cash flows) and adjustments to valuation tools (discount rates, return forecasts, growth rates). Calvert Investments applies ESG integration to all six areas.

In fixed income, Calvert’s credit team works with in-house sustainability research analysts to analyze how ESG factors relevant to a company, given its sector, may affect the credit drivers of spread performance and its valuation. And in private equity, Adams Street Partners uses an ESG checklist in pre-investment diligence, while KKR similarly says it reviews key performance indicators, including ESG risks and opportunities, pre-investment.

Four of the 16 money managers disclosed information about property investing in the 2014/2015 RI Transparency Reports, but only one of them used the term “integration” when describing its ESG considerations in this asset class. According to the US SIF Foundation’s definition, all four practice ESG integration. In one example, CBRE Global Investors explained its strategy as using due diligence checklists including “measurable sustainability factors appropriate to the asset class and market.” Post investment, in the monitoring and active ownership phase, CBRE said that it considers ESG issues in property monitoring and management; developments and refurbishments, occupier engagements and community engagement related to their properties. The other three property investors, likewise, say they consider ESG issues in the post-investment phase.

On the other hand, five of the 16 money managers reported that as part of ESG integration, they use certain SRI strategies that the US SIF Foundation and the GSIA have seen as complementary to but separate from ESG integration. Three of the firms said that post investment, their ESG integration practices encompassed company engagement, shareholder advocacy or proxy voting. Other strategies mentioned include exclusionary screening, coalition building and public policy involvement.

**LEVEL OF DISCLOSURE REGARDING ESG CRITERIA:** The 16 money managers analyzed for this report fell into four categories with regard to how much detail they provided in their RI Transparency Reports, their websites or other public sites on the ESG factors they consider:

1. **NO DISCLOSURE:** Four did not publicly disclose the ESG criteria they consider in ESG integration.

2. **PARTIAL DISCLOSURE-FIXED INCOME ONLY:** One large money manager provided ESG criteria for its ESG integration assets in fixed income but not for those in listed equities.

3. **PARTIAL DISCLOSURE-PROPERTY ONLY:** Three money managers disclosed the ESG criteria they consider in their property investments but not for their other asset classes in ESG integration.

4. **FULL DISCLOSURE:** Eight provided either examples or detailed information on the ESG criteria they consider for all relevant asset classes.
### TABLE 5: EXTENT OF DISCLOSURE BY MONEY MANAGERS OF THE ESG CRITERIA THEY CONSIDER IN THEIR ESG INTEGRATION ASSETS (US$ BILLIONS)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Money Managers</th>
<th>Total AUM</th>
<th>Total ESG Integration AUM</th>
<th>Unexplained* Integration AUM</th>
<th>Percentages AUM Unexplained</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Disclosure</td>
<td>4</td>
<td>$822</td>
<td>$513–$721</td>
<td>$513–$721</td>
<td>100%</td>
</tr>
<tr>
<td>Partial:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed income only</td>
<td>1</td>
<td>$914</td>
<td>$274–$914</td>
<td>$91–$457</td>
<td>33%–50%</td>
</tr>
<tr>
<td>Partial:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property only</td>
<td>3</td>
<td>$553</td>
<td>$266–$536</td>
<td>$174–$477</td>
<td>65%–89%</td>
</tr>
<tr>
<td>Full Disclosure</td>
<td>8</td>
<td>$760</td>
<td>$197–$509</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>$3,049</td>
<td>$1,250–$2,680</td>
<td>$778–$1,655</td>
<td>62%</td>
</tr>
</tbody>
</table>

*“Unexplained” refers to ESG integration assets under management (AUM) for which ESG criteria are not disclosed. Total ESG Integration AUM and Unexplained ESG Integration AUM are given as ranges because money managers usually opted to provide ranges of US dollars in each asset class in the public RI Transparency Reports.

The four money managers in the first category, who do not publicly disclose any ESG criteria, account for more than $500 billion in ESG integration assets.

In the second and third categories, the four money managers that disclose ESG criteria for only some of their relevant assets collectively represent $540 billion-$1.45 trillion in ESG integration assets, but leave over one-third of those assets “unexplained” with regard to the ESG criteria involved. In the second category, one money manager with almost $1 trillion in assets under management disclosed some ESG criteria for fixed income but not for $91–$457 billion it manages in listed equities. In the third category, the three money managers that provide ESG criteria only for their property investments are leaving 65–89 percent of their ESG integration assets unexplained. In property, the examples of the ESG issues they consider include:

- **ENVIRONMENT:** Consumption efficiency (focused on energy and water); energy benchmarking, water benchmarking, toxic materials review; climate change (e.g., risk of flooding); and contamination of fabric and ground, ecological impact.
- **SOCIAL:** Health and safety; and fair labor practices and quality craftsmanship through responsible contracting and standardized construction contracts and service agreements.
- **GOVERNANCE:** Employees affirm Corporate Code of Business Conduct and Ethics; and Management Committee reviews all major transaction decisions to ensure compliance with portfolio investment guidelines and performance.

The eight money managers in the last category represent between about $200 and $500 billion in ESG integration assets. They represent the highest level of disclosure in that they provide criteria for each of the asset classes for which they indicated they practice ESG integration. However, because criteria were usually framed as typical examples, it is difficult to determine whether these criteria are a small sampling or a closer to complete list of the issues considered and the range of assets that integrate the criteria. In addition, with some of the money managers in this category it was unclear whether the ESG criteria they cited were considered as part of ESG integration specifically or in another ESG incorporation strategy such as screening.
ESG INTEGRATION IN ASIA

The 2014 Asia Sustainable Investment Review published by the Association for Sustainable and Responsible Investment in Asia (ASrIA) shows that ESG integration is the largest sustainable investment strategy in the region by assets, with $23.4 billion, a growth of 19 percent per year over the last two years. This preference was confirmed by a survey of 40 investors conducted for the review, where 82 percent of respondents stated that they practice ESG integration.

Hong Kong, South Korea and Singapore are the markets where most ESG integration assets are recorded, with a further five out of a total 14 markets covered also contributing to the total.

Listed and private equities are the asset classes where ESG integration is most prevalent, whereas fixed income and real estate are less common but still used by over 30 percent of respondents to the survey. While respondents almost universally apply ESG integration across environmental, social and governance issues, there are differences in how this is approached in the investment analysis:

• most (67 percent) apply ESG integration in a systematic manner into standard financial analysis, revealing a high incidence of sophistication among the survey respondents;
• 24 percent have ESG specialists working alongside mainstream financial analysts to add an additional layer to the financial analysis; and
• 10 percent supply ESG information to the mainstream financial analysts without additional analytical support.

When asked about the barriers to ESG integration, respondents who do not practice it state a variety of reasons. These include challenges to quantifying and valuing ESG risks, and insufficient evidence to link ESG criteria to financial return. Some of the barriers are technical, such as lack of uniform reporting by companies and inadequate internal resources or qualifications to implement ESG integration.

While some investors still question the alpha to be gained from ESG integration, those that use the strategy do so from a belief that it delivers superior risk-adjusted returns. In the survey responses, ESG integration is the strategy that most respondents (87 percent) view as delivering positive risk-adjusted returns. The remainder (13 percent) perceive it as being return-neutral.

These results give a flavor of the market for ESG integration in Asia. While it is difficult to generalize results—most of the assets are concentrated in a few markets, and other strategies dominate in individual markets—it is clear that ESG integration is an important element of the sustainable investing landscape in Asia. Motivated by a belief that ESG integration brings positive risk adjusted returns, many Asia-based investors have built sophisticated ESG integration frameworks. They remain a dedicated and small, but growing, part of the sustainable investment industry in Asia.


All eight of these money managers each provided at least three examples of ESG criteria, and they span the range of E, S and G issues. They included the following:
ENVIRONMENT: Possibility of environmental damages or liability, potential future regulation, water and natural resource scarcity, environmental degradation, climate change management, recycling and waste reduction, and use of clean and renewable energy.

SOCIAL: Fair employment practices, diversity, workplace safety, labor and community relations, human rights in the supply chain, indigenous people’s rights, product safety and responsible lending practices.

GOVERNANCE: Transparency in company operations, board and executive diversity, executive compensation, lobbying and expenditures, bribery and fraud, shareowner rights, and engagement with stakeholders.

BREADTH OF ESG INTEGRATION ACROSS ASSETS: Of the 16 money managers reviewed, six indicated in the 2014/2015 RI Transparency Reports that they did 100 percent ESG integration for listed equities only, one for fixed income only, and six for both these asset classes. Many descriptions of the ESG integration strategies and criteria provided clear evidence that ESG integration was in fact taking place across an entire asset class.

However, in a few cases ESG integration did not appear to occur across 100 percent of an asset class even if a money manager marked 100 percent. For example, one money manager described its “company-wide ESG integration program” as entailing “sharing critical ESG information with all investment teams,” but without explaining to what extent the recipients actually use, or are expected to use, this information.

In the scenario that a second money manager described, each portfolio manager and investment team “develops their own investment approach or approaches, respectively, whereby ESG considerations are integrated into their research and decision-making processes to the extent they believe these issues may affect the long-term success of a company and investment returns.” However, if each team applies its own approach, it is uncertain what ESG integration practices are actually taking place and how often.

Another money manager said that its analysts were not required to review a specific set or framework of ESG factors before deciding whether to invest in a company.

The extent to which ESG integration is practiced across assets is difficult to unpack and fully understand for the following reasons:

- As noted above, a few money managers wrote contradictory statements, claiming full ESG integration, but also stating that ESG integration is only practiced under certain circumstances.
- Money managers may have chosen not to disclose information that could have demonstrated the breadth (and depth) of their ESG integration strategy.
- ESG integration appears to mean different things to different money managers, and therefore a few consider themselves doing 100 percent ESG integration even though their investment practices do not fall under US SIF Foundation’s definition of ESG integration.

Given the opportunity to update their profiles in this report, two money managers provided new language to demonstrate a greater breadth of ESG integration practice. The additional information they gave to the US SIF Foundation demonstrates a desire to convey greater and more consistent activity in this investment practice.

17. RI Transparency Reports use a range of +/- 10 percent for ESG incorporation strategies so in some cases the actual percentage of ESG integration could be as low as 90 percent.
ESG INTEGRATION AND RESPONSIBLE INVESTMENT IN AUSTRALASIA

In the last decade, responsible investment has emerged from a niche industry to a significant proportion of the investment industry in Australia and New Zealand. For large institutional investors, this has meant focusing primarily on applying ESG integration practices to traditional financial analysis. For the Responsible Investment Association of Australasia (RIAA), defining and measuring ESG integration practices is challenging due to limited disclosure and a broad variation in the depth of integration—from systematic implementation embedded into investment valuation practices and company engagement to more ad hoc approaches.

Because RIAA’s objective is to deepen the way responsible investment is practiced, it has taken a conservative approach to estimating the ESG integration component of the responsible investment industry in all of its Benchmark Reports (now in their 14th year). As part of the research for its 2015 Responsible Investment Benchmark Report, RIAA undertook a review of the leading global definitions and existing assessment frameworks for ESG integration practices in order to develop an assessment framework that could achieve two objectives:

1. To provide practical guidance around leading practices in ESG integration, what it means and how it is implemented.
2. To assess the size of the responsible investment AUM managed under leading practice ESG integration strategies in Australia.

This review of the global definitions of ESG integration involved looking at numerous definitions including those from the Global Sustainable Investment Alliance (of which RIAA is a member), its members and the Principles for Responsible Investment, as well as a number of large international asset managers and asset consultants.

This review found that although it is difficult to prescribe a single best practice process for integrating ESG factors into investment decision making (which will necessarily differ across asset classes), a number of leading practices can be identified. RIAA established a framework that assessed asset managers against the following seven criteria:

- Publicly stated commitment to responsible investment
- Responsible investment policy
- Commitment to transparency of processes and approach
- Systematic process for ESG integration and evidence of how this process is applied within traditional financial analysis
- Evidence of activity in other areas of active ownership and stewardship including voting and engagement
- Member of collaborative investor initiative
- Coverage of total AUM by responsible investment or ESG practices

These pillars were then weighted to ensure a balance between evidence of systematic investment process versus policies and public commitments, with particular weight given to evidence of a systematic approach to ESG integration and to active ownership and stewardship. Using this framework, RIAA then assessed over 80 asset managers across Australia and New Zealand based on their publicly available information including websites and PRI RI Transparency Reports. In the 2015 Responsible Investment Benchmark Report, those managers scoring above 80 percent were included in the final list of asset managers deemed to be practicing Broad Responsible Investment. Eleven of the 76 asset managers domiciled in Australia were counted in this list.
A primary area of the US SIF Foundation’s work is to examine and publicize trends in sustainable, responsible and impact investing. Our analysis of 16 leading money managers has yielded insights into the current state of ESG integration strategies and deepened our understanding of the challenges specific to this sustainable investment strategy. We were heartened by the additional commentary that many of the money managers provided about their practice of ESG integration either to us directly for this report or in their most recent submissions to PRI.

Nonetheless, there are still many areas where we encountered gaps in information. While most of the 16 money managers provide a general overview of their approach to ESG integration, few publicly disclose a detailed description. For some, the reticence may stem from the fact that ESG integration is a newer practice for them. In addition, money managers seek to protect their strategies as trade secrets to maintain a competitive advantage. Finally, in comparison with SRI strategies such as negative screening and thematic investments, it may be more challenging for money managers to effectively and succinctly explain the complexities of ESG integration.

Based on our review of ESG integration trends and the public information available, we offer three recommendations for money managers and the SRI industry to advance robust and transparent ESG integration practices.

1. **MONEY MANAGERS SHOULD APPLY SPECIFIC ESG CRITERIA IN ESG INTEGRATION STRATEGIES AND DISCLOSE THEIR CRITERIA.**

Some of the largest money managers reporting on ESG integration do not currently publicly disclose the specific criteria they consider. As a result, approximately half of the ESG integration assets identified by the US SIF Foundation for its *Report on US Sustainable, Responsible and Impact Investing Trends 2014* could only be attributed to general environmental, social and governance factors, rather than to more specific criteria such as climate concerns, labor rights and board independence. Collectively, the 16 money managers analyzed in this report do not provide examples of the ESG criteria they consider for approximately 60 percent of the assets under management for which they claim to be doing ESG integration. This leaves a major gap in understanding the full picture of SRI trends and investment practice.

Disclosing specific ESG criteria would help clients and the industry understand the specific issues money managers are factoring into the investment process and would put them in a better position to meet increasing demand for this information. For example, some asset owners such as the California Public Employees’ Retirement System (CalPERS), the largest pension fund in the United States by AUM, have already announced that they will require their money managers to disclose how they integrate ESG and sustainability factors in the investment process. The PRI also encourages and works with asset owners to develop processes to obtain relevant information from money managers. Similarly, numerous other pension funds, consultants like Mercer, universities and foundations are holding their investment managers accountable on this question. How managers deal with climate change and climate risk is particularly central in this discussion.
Many managers are beginning to see this transparency as a precondition to attracting new business. As such, money managers will likely face increasing pressure to disclose ESG criteria and other details in ESG integration.

Obtaining more accurate and detailed information about the ESG criteria money managers consider in investment analysis is a necessary first step for analysts and policymakers who wish to assess the impact that ESG integration may be having on portfolio construction, investment risk mitigation, the companies assessed and society at large. Moreover, transparency and accountability are critical components of responsible investment.

2. MONEY MANAGERS SHOULD CLEARLY ARTICULATE WHETHER THEIR ESG INTEGRATION PRACTICE IS SYSTEMATIC AND CONSISTENT ACROSS ALL AFFECTED ASSETS OR APPLIED ONLY AD HOC OR UPON REQUEST.

Most money managers in our sample indicated that they do 100 percent ESG integration in at least one asset class, but in a few of those cases it seems that ESG integration is not a systematic process. Evidence of a systematic approach would be the consistent application of ESG research and analysis in Discounted Cash Flow modeling or consistently considering the ESG criteria that are material to companies by industry sector. If ESG integration is taking place across 100 percent of an asset class, then the process of selecting and valuing companies or investments must be different than if ESG integration was not taking place. Without a consistent and systematic approach, there is potential for “greenwashing” in the industry, for miscounting the assets that consider ESG issues, and for creating confusion among investors who then may avoid utilizing SRI strategies.

3. TO HELP ACCOMPLISH THE FIRST TWO GOALS, INVESTMENT ANALYSTS, PORTFOLIO MANAGERS, RESEARCHERS, CONSULTANTS AND OTHER FINANCIAL PROFESSIONALS SHOULD TAKE ADVANTAGE OF THE EDUCATION AND TRAINING OPPORTUNITIES IN SUSTAINABLE, RESPONSIBLE AND IMPACT INVESTING.

The ESG integration techniques money managers report vary widely. While the techniques reported often fall within the US SIF Foundation’s definition of ESG integration, they also sometimes include what we consider complementary but separate SRI strategies, mainly screening or shareholder engagement. The SRI and broader investment industry can benefit from using a common set of definitions of SRI investment strategies. This would allow the US SIF Foundation and others to better track information and investment trends. The US SIF Foundation’s Center for Sustainable Investment Education (http://www.ussif.org/education) includes a resource on “SRI Basics,” which provides an overview of the subject and clear definitions. The Global Sustainable Investment Alliance and the PRI also use the same or similar terminology.

A growing body of resources, including the studies cited in this report, is available to investors interested in developing ESG integration techniques. The US SIF Foundation’s Center for Sustainable Investment Education provides a course on The Fundamentals of Sustainable and Responsible Investment that provides a definition of and introduction to ESG integration. The Sustainability Accounting Standards Board provides additional resources to investors in listed equities on assessing ESG risks and opportunities.19

BEST PRACTICES FOR MONEY MANAGER ESG INTEGRATION: In sum, our recommendations for a money manager aspiring to best practice can be stated as follows.

1. Gain familiarity with mainstream definitions of “ESG Integration,” such as those used by the US SIF Foundation, the Global Sustainable Investment Alliance, and the Principles for Responsible Investment.
   - US SIF SRI Basics: [http://www.ussif.org/sribasics](http://www.ussif.org/sribasics)
   - US SIF Fundamentals course on SRI: [http://www.ussif.org/courses](http://www.ussif.org/courses)

2. Disclose, in the annual RI Transparency Report, on the company website and in all other relevant materials, the specific ESG criteria that the firm factors into the process of integration.

3. Describe at which points ESG integration is implemented—pre-investment, post-investment or both. For listed equities, money managers can apply PRI’s framework:
   - Economic analysis: how ESG factors affect economic growth and macroeconomic themes such as resource scarcity.
   - Industry analysis: how ESG factors influence consumer preference and regulatory change, such as environmental legislation.
   - Company analysis: how a company manages ESG risks and opportunities.
   - Financial reports: how ESG factors affect earnings growth, operational efficiency, intangible assets and underlying cash flows.
   - Valuation tools: how analysts are integrating ESG considerations into valuation tools to help understand why the market is—or may begin—pricing a stock above or below its book value.

4. Indicate whether, post investment, other SRI strategies, such as shareowner engagement, are employed to complement ESG integration.

5. Ensure that the firm’s public statements on ESG integration practices are consistent.

Sustainable, responsible and impact investing is a dynamic field that continues to evolve across the asset class spectrum, encompassing vehicles as diverse as private equity impact investments, development finance institution green bonds and mutual fund products that seek to advance women’s empowerment. The expansion in ESG integration across trillions of dollars in money manager assets within a two year time span has led to questions about the meaning of this development and whether it necessarily constitutes a genuine form of sustainable, responsible and impact investing. Greater disclosure about the process and the ESG factors considered is clearly critical to building credibility and growing assets invested in this manner. We hope this report contributes to strengthening the practice of ESG integration—with the ultimate goal of achieving both competitive long-term financial returns and positive impacts to the environment, communities and corporate governance.
Profiles of the Largest Money Managers That Practice ESG Integration in the United States

These profiles each comprise two sections.

The first section only includes information from public sources. Unless indicated otherwise, the source for the information in this section is the firm's public 2014/2015 Responsible Investment Transparency Report. Other public sources used include websites, investment policy statements and sustainability reports.

All money managers were invited to provide additional information, which, if provided, are included under “Additional Comments.”
ADAMS STREET PARTNERS

Total AUM: Approximately $27 billion as of 12/31/2014

Reported percentage of ESG integration applied: Not a field in RI Transparency Report for private equity funds.

ESG integration strategy view and approach

Private equity: Adams Street Partners implemented an ESG checklist for each of its investment teams tailored to each team’s investment focus (i.e., primary investments, secondary investments, direct investments and co-investments) to assist in integrating ESG factors in pre-investment diligence and post-investment monitoring.

ESG criteria used in ESG integration: Adams Street Partners says it typically considers ESG issues in the investment selection process and provided the following as examples:

- Environmental—cleantech, any possibility of environmental damage and/or liability, any applicable regulatory considerations
- Social—employment issues, sustainability of business, immigration issues
- Governance—transparency of company’s operations, reputation of company’s management team members, reputation of other investors in company

Research resources used: None listed

Staff involved: Various levels of Adams Street Partners staff are involved in the oversight and implementation of the firm’s integration of ESG factors into the investment process. The seven-person ESG Committee is comprised of investment professionals (who collectively cover the United States, Europe and other regions) and business development, client service and legal professionals. The ESG Committee works with Adams Street Partners’ investment professionals to facilitate and enhance the ongoing integration of ESG factors into the investment process.

Additional comments:

No additional information given.
Total AUM: $12.4 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities: 67% ESG integration and screening
- Corporate fixed income: 99.8% ESG integration and screening
  - 0.2% ESG integration, screening and thematic

ESG integration strategy view and approach

Listed equities:
- Calvert systematically integrates ESG issues into the following aspects of investment analysis for listed equities: macroeconomic analysis, industry analysis, analysis of company strategy and quality of management, idea generation, portfolio construction and fair value/fundamental value analysis.
- The following methods are part of the process to integrate ESG information into fair value/fundamental analysis: adjustments to income forecasts (sales, earnings, cash flows); adjustments to valuation tools (discount rates, return forecasts, growth rates); and other adjustments to fair value projections, specifically adjustments to longer-term competitive advantage period assessments as well as buy/sell triggers.
- Calvert believes ESG factors “play an increasingly important role in value creation and investment performance. We believe that it is important to include such information in company-level investment analyses as well as macro-level portfolio management techniques. Calvert uses quantitative techniques in the security selection and portfolio management processes; it melds this approach with a highly developed fundamental analysis framework to govern the identification and assessment of material financial and ESG information on a company level. Calvert believes this process not only enables analysts to value specific ESG factors, but can produce differentiated insights that fall outside of the consensus viewpoint.”
- “ESG issue identification and analysis are merged with the research process in which Calvert’s investment analysts are trained. Fundamental research analysts work in close conjunction with sustainability analysts to help assure the optimal gathering and assessment of material ESG information. The initial investment process layer involves a rigorous proprietary criteria review process. Calvert then uses a quantitative process that incorporates ESG factors. Fundamental analysts are trained to use a rigorous framework to identify and process material ESG information.”

Effects following ESG integration in listed equities:
- Reduce or prioritize the investment universe
- Overweight/underweight at sector level
- Overweight/underweight at stock level
- Buy/sell decision

Fixed income:
- Calvert’s credit team works with in-house sustainability research analysts to analyze how ESG factors relevant to a company, given its sector, may affect the credit drivers of spread performance and its valuation.
- To aid in ESG risk assessment, they have “created a sector framework for integrated research, which involves identifying the most relevant ESG factors and metrics for every individual industry (using Barclays index classifications) that correspond with credit drivers/metrics that influence spread performance.”
- Calvert identifies opportunities and risks in industries and companies that exhibit outlier public characteristics, adopting an overweight stance to companies that have a combination of particularly
strong/improving fundamentals and favorable ESG factors and avoiding exposure in areas of the credit market where the reverse may apply.

Effects following ESG integration in fixed income—corporate:
• Narrow down or prioritize the investment universe
• Buy/sell/weight decisions

**ESG criteria used in ESG integration:** “We systematically review the potential significance of [E, S and G] issues and investigate them accordingly.” ESG issues noted on Calvert’s website and throughout their RI Transparency Report include: environment, workplace, product safety, human rights, governance and ethics, indigenous peoples’ rights and community relations.20

**Research resources used:** For listed equities, sources include primary research (the research process framework, company and industry contacts), sustainability analysts and third-party information sources. ESG information is held within centralized databases or tools and it is accessible by all relevant staff. For fixed income, sustainability analysts share their insights based on extensive proprietary research, conversations with management, NGO reports, trade union reports and other sources. Calvert also considers Bloomberg ESG risk analytics.

**Staff involved:** Integration of ESG and financial analysis is undertaken by Equities, Fixed Income and Sustainability Research teams. There are periodic meetings between Equities, Fixed Income and Sustainability Research teams regarding advocacy, and policy objectives and opportunities.

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**Additional comments:**

**ESG integration strategy view and approach**

**Listed equities:** Calvert’s actively-managed equity funds employ rigorous corporate and security analyses as well as proprietary criteria methodologies.

Many Calvert Funds integrate rigorous reviews of financial performance with thorough assessments of ESG information. In addition to deep and high-standard ESG-based criteria, Calvert’s analysts incorporate material ESG information with their valuation techniques and investment theses.

In select funds, we emphasize strategic engagement to advance environmental, social and governance performance in companies that may not meet Calvert’s Signature® ESG criteria today but have the potential to improve. Calvert analysts merge financial ESG analyses with advocacy strategies to optimize the identification of valuable engagement issues, as well as enhance the communication of key rationale to corporations.

Calvert’s passively-managed index funds employ a rigorous ESG criteria review process to help assure optimal universe definition based upon ESG criteria. Sustainability research analysts investigate active and prospective index member for proper issue and factor identification.

**Fixed income:** Based on our proprietary statistical back testing analysis, we believe that certain industries and certain parts of the credit quality curve are particularly influenced by very strong or very poor ESG profiles, and express these views in the sector and security selection process.

**ESG criteria used in ESG integration:** ESG themes and related metrics vary by fund and may span across governance and ethics, environment, workplace, product safety, human rights, indigenous people’s rights, and community relations, depending on the sector, and [we] assess their potential impact on a company’s credit profile and ultimately its valuation.

Total AUM: $93 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities:
  - 50% ESG integration alone
  - 50% ESG integration and screening\(^{21}\)
- Fixed income:
  - 70% ESG integration alone
  - 30% ESG integration and screening\(^ {22}\)

ESG integration strategy view and approach

Listed equities and fixed income: Capital’s investment professionals “consider ESG issues alongside other financial and economic indicators in their fundamental analysis of companies and their value.” “The internal generation of research by Capital’s analysts enables a customized approach, rather than simple numerical screens provided by a third party. This enables Capital to distinguish, within a particular industry or sector, those companies that are better or worse at managing the ESG risks relevant to that industry. This can affect investment decisions, as these risks can contribute to a decision not to invest in a company.”

ESG criteria used in ESG integration: Capital Group does not disclose the ESG criteria it considers in evaluating listed equities and fixed income. However, it said: “We occasionally review the potential significance of \([E, S \text{ and } G]\) issues and investigate them accordingly.”

Research resources used for ESG integration: [See additional comments below]

Staff involved in ESG integration: For RI broadly, the CEO, CIO and investment committee have oversight and accountability for RI, while the portfolio managers implement RI. Dedicated RI staff are involved in both areas.

Additional comments:

ESG integration strategy view and approach: Capital Group believes that ESG factors can present material investment risks and opportunities. As long-term investors, these issues are particularly pertinent as they can affect value over multi-year timeframes. Capital’s approach is to fully integrate ESG issues into our investment philosophy and research process, rather than treating them as the responsibility of a separate team.

In listed equities and fixed income, ESG factors are integrated into the decision whether or not to recommend investing in a company. In some cases an analyst will decide not to recommend a stock if they consider there to be ESG risks which the company has not addressed.

ESG criteria used in ESG integration: Capital does not have a set framework of financial or ESG factors an analyst is required to consider before recommending investing in a company. No specific ESG criteria are used in the investment process.

\(^{21}\) Percentage figures include assets that have also been screened to comply with legal restrictions and client exclusion lists.
\(^{22}\) Percentage figures include assets that have also been screened to comply with legal restrictions and client exclusion lists.
**Research resources used for ESG integration**: As a bottom up research organization, Capital’s primary research effort is proprietary and conducted in-house. That said, Capital does have access to the following additional sources which supplement the internal research:

- Governance and proxy research: Glass Lewis, ISS and IVIS (part of The Investment Association)
- ESG research: Ethix
- SRI screening analysis: MSCI

**Staff involved in ESG integration**: Capital International has around 100 in-house equity and fixed-income analysts who are responsible for evaluating all relevant factors, including ESG issues, as part of their company research where they believe those factors are relevant to long-term value.

Capital Group says its analysts are well-resourced and focused in their coverage, and have typically been evaluating their sectors for a number of years and have a deep knowledge of the ESG issues faced by the sector as a whole and by individual companies. Analysts identify ESG risks and opportunities during the course of their thorough and continual research process. This approach to responsible investment applies across all mandates.

Analysts are assisted in their work on ESG issues by the dedicated resources of our Governance and Proxy team. The team comprises associates based in London, Los Angeles and Singapore and facilitates all voting as well as monitoring and engagement activities for Capital’s clients. The team includes associates with considerable experience in voting and ESG issues.

To support the work of this team, there are regional proxy voting committees comprised of members of legal and the investment group.

In addition, Capital has internal meetings to oversee industry and company ESG developments. Members of the investment group, legal department, client relations and the Governance and Proxy team participate in these internal meetings.
CBRE GLOBAL INVESTORS

Total AUM: $90.6 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities:
  - 99% ESG integration alone
- Property
  - Not a field in the RI Transparency Report

ESG integration strategy view and approach

Listed equities: “We believe that ESG issues are most relevant to evaluating companies’ management teams.”

ESG criteria used in ESG integration: CBRE does not disclose the ESG criteria it considers in evaluating listed equities. However, it says:
- “We occasionally review the potential significance of [environmental and social] issues and investigate them accordingly.”
- “We systematically review the potential significance of corporate governance issues and investigate them accordingly.”

Research resources used: None listed

Property:
- “At CBRE Global Investors we include in our Due Diligence Checklists measurable sustainability factors appropriate to the asset class and market.”
- “We see ESG management as a key element of our investment operations during the entire investment lifecycle. We don’t only focus on new acquisitions, furthermore we actively drive the sustainability improvement of all our investments during the entire lifecycle of our investments.”

ESG criteria used in ESG integration—typical examples
- Environmental: consumption efficiency (focused on energy and water); climate change (e.g., risk of flooding); contamination of fabric and ground
- Social: demographical trends and changes (e.g., centralization and urbanization trends within catchment area); social conventions (e.g., tenant mix suitability, Green Building eligibility); income disparity (e.g., purchasing power in catchment of shopping centers)

Post investment (monitoring and active ownership): CBRE marked the following indicators:
- We consider ESG issues in property monitoring and management
- We consider ESG issues in property developments and refurbishments
- We consider ESG issues in property occupier engagements
- We consider ESG issues in community engagements related to our properties

Staff involved: Broadly, CEO, CIO and investment committee have oversight and accountability for RI, and portfolio managers implement RI. Dedicated RI staff members do both.

Additional comments:

No additional information given.
**Total AUM:** $129.4 billion as of 12/31/2014

**Reported percentage of ESG integration applied (+/- 10%):**

- **Listed equities:**
  - 64% ESG integration alone
  - 10.5% ESG integration and screening
  - 1.3% ESG integration, screening and thematic investments

- **Fixed income:**
  - 99.1% ESG integration alone
  - 0.9% ESG integration and screening

- **Property**
  - Not a field in the RI Transparency Report

**ESG integration strategy view and approach**

**Listed equities and fixed income:**

- “During 2013 F&C started rolling out a program to significantly enhance our approach to integration across our investment teams, with the introduction of systems to flag high company-level ESG risks for further analysis by analysts and fund managers to assess implications for valuations and, ultimately, portfolio construction. Already fully embedded into our corporate credit processes, we are also implementing this approach in equities.”

- “We have developed an ESG risk tool that blends proprietary analysis with best-in-class externally sourced data to produce a score that can be applied across existing F&C systems. The tool covers more than 3,000 companies worldwide, and gives quantitative assessments of performance against ESG-related risks. It covers most constituents of the world’s major stock indices as well as major bond issuers.”

**ESG criteria used in ESG integration:** F&C does not disclose the ESG criteria it considers in evaluating listed equities and fixed income. However, it said “We systematically review the potential significance of [E, S and G] issues and investigate them accordingly.”

**Research resources used:** “We believe that it is critical to have expert in-house resources in place to support fund managers and analysts in interpreting the data that is available.”

**Staff involved:** For ESG integration and other ESG analysis, F&C has an “in-house Governance and Sustainable Investment (GSI) team. The team, which includes regional, sector and issue specialists, provides an expert view on how a company’s management of ESG risks compares with best practice, and how this may translate into investment risks or opportunities.”

“The research on the materiality of ESG risks to the investment case is undertaken by fund managers and credit analysts themselves, who are best placed to understand how these issues affect the business strategy, and in what way they might affect their view on company valuation. In this research they are supported by GSI team experts.”

23. F&C Asset Management was acquired by BMO Global Asset Management in 2014.
25. Ibid.
26. Ibid.
27. Ibid.
28. Ibid.
Property: “Individual fund managers will use their intrinsic skill and judgement to evaluate the degree of impact ESG issues might have on their conventional considerations and criteria….We are also very much of the view that [responsible property investing] is woven into normal decision making processes and so it is difficult to isolate, and therefore formalize deeply, the evaluation of characteristics. However, we recognize the increasing level of mandatory requirements and movements in market sentiment which we monitor and feed into fund and asset managers through regular briefings.”

ESG criteria used—typical examples
- Environmental: Energy generation, consumption and efficiency; contamination and flooding risks.
- Social: Health and safety; occupier turnover and satisfaction

Post investment (monitoring and active ownership)
- F&C marked the following indicators:
  - We consider ESG issues in property monitoring and management
  - We consider ESG issues in property developments and refurbishments
  - We consider ESG issues in community engagements related to our properties

Additional comments:
No additional information given.
Total AUM: $11.7 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):

- Listed equities:
  - 100% ESG integration alone
- Private Equity: Not a field in RI Transparency Report for private equity funds.

ESG integration strategy view and approach

Listed equities: “We fully integrate sustainability factors into our traditional investment process across all of our investment products. While we don’t have a formal policy as such, through each stage of our investment process, the relevant and material sustainability factors are incorporated.”

ESG criteria used in ESG integration:

- “We focus on key drivers of global change, including climate change and environmental degradation; poverty and development; water and natural resource scarcity; pandemics and healthcare, and demographics, migration and urbanization.”
- “We occasionally review the potential significance of [E, S and G] issues and investigate them accordingly.”

Private equity: “…private equity investments are made as part of the Climate Solutions Fund, which has a mandate to invest only in businesses which the team judges to be ‘solutions’ according to the Climate Materiality threshold applied. In addition, the management and business quality of the company is assessed against the same framework that seeks to make a judgement from a long-term perspective and integrate sustainability issues with financial analysis.”

ESG criteria used in ESG integration: Generation Investment Management says it typically considers ESG issues in the investment selection process and, in addition to climate solutions noted above, provided the following as typical examples:

- Environmental—net emissions of products/services
- Social—supply chain practices
- Governance—management alignment; board composition

“Note that ESG issues are integrated into the investment process and the relevant issues for a particular company/sector are considered on an ad-hoc basis.”

Research resources used: “Generation has built a global research platform to integrate sustainability research into fundamental financial analysis... Our research plays an important role in our assessment of the quality of a business, its management team, and ultimately how we value a business.”

Staff involved: The CEO, CIO, investment committee, portfolio managers and investment analysts have oversight and accountability for RI and implement RI broadly.

30. Ibid.
Additional comments:

ESG integration strategy view and approach

Listed equities: Generation’s investment philosophy is based on the conviction that the ESG issues that ultimately drive global trends and challenges will materially impact upon a company’s ability to sustain returns over the long-term. With this in mind, we fully integrate sustainability factors into our traditional investment process across all of our investment products. Generation has built a strong research platform designed to identify the key long-term drivers of business value. As we consider that ESG metrics are closely tied to financial performance, ESG issues are considered throughout our process. In this way, we are aiming to identify companies that are part of the solution to material sustainability issues in their sector and/or are well-positioned for long-term secular trends. Because ESG integration forms the core of our investment process, we have not developed a formal ESG policy, and we only offer one integrated product (i.e., we don’t offer a “traditional” and “SRI” product).

ESG criteria used in ESG integration: Our process explicitly seeks to recognize and incorporate the ESG issues that are relevant and material to a particular industry, sub-sector or company. We have built a structured research process that allows the flexibility we believe is necessary in order to assess the complete set of inputs, costs and externalities, which vary according to a company’s unique situation. We never consider ESG metrics in isolation; however, examples of those we look at include natural resource management, executive remuneration, regulatory risk and human capital management.

Research resources used: Primary internal research is central to all aspects of our investment process, and is aided by the use of expert networks, as well as the company dialogue allowed to us by the strong relationships we have developed with management teams through being long-term, engaged investors. Primary research is augmented by selective external research provided by our brokers. In addition, relationships with organizations such as the Carbon Disclosure Project, the Sustainability Accounting Standards Board (SASB) and the World Resources Institute provide valuable sources of information on broader sustainability issues. It is augmented by selective external research.

Staff involved: We do not have separate ESG and financial analysts; all investment analysts are expected to incorporate the relevant ESG issues into their analysis of a company.
Total AUM: $119.9 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
• Listed equities:
  — 100% ESG integration and screening

ESG integration strategy view and approach

Listed equities: Janus Capital incorporates the concepts of ESG in the financial analysis of its companies as part of its fundamental research process to better understand risks/opportunities and drive value-creation for clients.

ESG criteria used in ESG integration: Janus does not disclose the ESG criteria it considers in evaluating listed equities but said: “We systematically review the potential significance of [E, S and G] issues and investigate them accordingly.”

Research resources used: None listed

Staff involved: For RI broadly, the Director of Research and Portfolio Oversight Team has oversight/accountability for RI and implementation of RI. Investment analysts also implement RI.

Additional comments:
No additional information given.
Total AUM: $61.5 billion as of 12/31/2014

Reported percentage of ESG integration applied: Not a field in RI Transparency Report for private equity funds.

ESG integration strategy view and approach

In 2013, KKR formalized its own Private Equity ESG Policy and began communicating it to its employees.31

Private equity:

- KKR uses key performance indicators such as the identification of ESG risks and opportunities pre-investment and the management of ESG issues during portfolio management, among others.32
- Pre-investment: As part of due diligence, cross-functional internal subject matter experts identify material ESG factors when reviewing prospective investments. Information is gathered from the company of interest to help make recommendations about potential risks and opportunities.33
- Post investment: Critical ESG issues identified in the diligence process are included in 100-day plans, with goals and steps to achieve them. For ESG issues that do not need to be addressed immediately, KKR may engage with them after the initial transition period.34
- Other: KKR has dedicated programs, such as the Green Portfolio Program, the Responsible Sourcing Initiative, and Vets @ Work.

ESG criteria used in ESG integration: KKR noted that it typically considers ESG issues in the investment selection process and in post-investment monitoring and active ownership. It provided the following as typical examples:

- Social—worker safety, human rights in the supply chain, labor relations
- Governance—corruption and bribery, transparency, engagement with stakeholders

Research resources used: KKR’s ESG diligence team has developed a series of guides that assist with an in depth review of key ESG questions based on sectors and subsectors.35 The firm uses a network of external advisors, including not-profit organizations, membership organizations and thought leaders, in addition to its internal team, to help manage critical issues, including “evolving US and non-US rules governing investment activities generally, environmental and energy policy, labor relations, supply chain management, transparency, and other matters.” It has also engaged experts from Sustainalytics and Environmental Resources Management.36

34. Ibid.
**Staff involved:** The Global Public Affairs team serves as KKR’s internal experts, helping assess stakeholder and other ESG issues for potential private equity investments, monitoring regulatory changes affecting the industries in which it invests, and helping portfolio companies address these issues as they arise. KKR Investment Committees oversee material ESG issues that have been brought to their attention when making investment decisions.

**Additional comments:**

In many cases, the firm works with select portfolio companies on issues material to their operations and provides guidance through programs on ESG-related topics ranging from eco-efficiency to responsible sourcing to workplace wellness.
MFS INVESTMENT MANAGEMENT

Total AUM: $430.8 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities:
  - 82% ESG integration alone
  - 18% ESG integration and screening
- Fixed income:
  - 100% ESG integration alone

ESG integration strategy view and approach

Listed equities: Portfolio managers and investment analysts “integrate a company’s ESG risks and opportunities into their overall security analysis to the extent they believe that such factors are material to and have an economic impact on shareholder value.”

Fixed income:
- MFS is currently exploring how to incorporate ESG factors in their investment analysis and portfolio decision making process for fixed income.
- “From our perspective, the evolution of an explicit and systematic framework for consideration of ESG issues in fixed-income investing (e.g., formal guidelines and procedures) is still at an early stage across the global investment management industry, and we feel our current process reflects that trend.”

ESG criteria used in ESG integration: MFS provided some examples of the criteria it considers for fixed income in the additional comments section. MFS said for listed equities:
- “We occasionally review the potential significance of [E and S] issues and investigate them accordingly.”
- “We systematically review the potential significance of corporate governance issues and investigate them accordingly.”

Research resources used: Internal research and research of third parties.

Staff involved: MFS has established the MFS Responsible Investment Committee to oversee the integration of ESG issues. There are four dedicated RI staff—three proxy voting staff and one research analyst.

Additional comments:

ESG integration strategy view and approach: ESG issues often impact the value of our clients’ investments. As a result, we integrate ESG factors into our investment process and proxy voting practices to the extent that the integration of such factors is consistent with our fiduciary duty to help clients achieve their investment objectives and protect their economic interests.

37. 100% ESG Integration was marked in 2013/2014 RI Transparency report but was removed in 2014/2015 RI Report. MFS noted to US SIF that it continues to do 100% ESG integration in fixed income.
Listed equities:
• Our goal is to integrate material ESG factors into our research. As a result, our due diligence process for ESG factors is generally similar to our process for any risk or opportunity factor. This process is centered on deep fundamental, bottom up research; however, for ESG topics, our bottom up research is augmented by the bottom up and thematic ESG analysis done by our dedicated ESG research analyst.
• **Example of ESG criteria used in ESG integration:** …our ESG analyst recently performed in-depth research on the risks associated with tax avoidance techniques used by multinational corporations. As a result of this work, multiple portfolio holdings were reduced in size in MFS portfolios, several analysts “normalized” or increased tax rates in future years to account for the increased risk of various tax avoidance strategies; and other analysts incorporated large tax rate increases into downside scenario analyses to understand how their valuation would be impacted if a worst case outcome occurred.
• While we only introduce specific negative screens into a client’s portfolio if directed by such client or to comply with applicable law, we may choose—and have in the past chosen—to not purchase securities that have significant ESG risks that we do not believe are properly managed or offset by other opportunities or valuation.
• We may engage with the management team or board of directors of a firm or conduct site visits to assess ESG performance. If the ESG risk or opportunity being assessed is still considered material, the analyst may adjust his or her model, valuation, or scenario analyses, among other options. Alternatively, the portfolio manager who owns a security tied to the company may adjust his or her weighting of the security to account for the risk.
• Separate from this ongoing process, a report detailing the ESG rating for each equity holding is incorporated in the semiannual risk review of all equity portfolios.

Fixed income:
• The fixed income investment team uses a comprehensive research process to identify ESG issues, among other factors, that could materially affect security valuation.
• As an active fixed income manager, we have long based our investment decision making primarily on our own internally generated bottom-up credit research and top-down macroeconomic analysis. The fixed income research process attempts to examine all factors, including ESG factors, which could influence cash flows and the cost of capital for sovereign and corporate bond issuers.
• **ESG criteria used in ESG integration:** The assessment of political stability figures prominently in our emerging markets debt sovereign research, and our decision to invest in or avoid specific sovereign issuers may in part be predicated on our analysis of a government's success in addressing social and political issues that could potentially represent a source of instability.

The goal of MFS’s ESG integration efforts: At MFS, we believe that success as it relates to the incorporation of ESG factors can most clearly be evaluated through outcomes (investment decisions and corporate practices that have been changed and as a result of our ESG integration efforts) and integration (the extent to which individual analysts are incorporating these issues more frequently into their work, either with or without the assistance of our ESG analyst). Regarding outcomes, we have seen many examples of success, such as those outlined in the tax avoidance example above. In terms of integration, many individual analysts have begun to incorporate new data into their models that was originally suggested and provided by our ESG research analyst. Furthermore, the thematic research produced by our ESG analyst has been used independently by analysts to reassess their views on individual securities.
Total AUM: $8.7 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities:
  - 39% ESG integration only
  - 61% ESG integration and screening

ESG integration strategy view and approach

Listed equities: Miller/Howard Investments (MHI) uses the term “integrated approach,” which for it includes screening, shareholder advocacy, proxy voting, coalition building, and public policy involvement. Miller/Howard uses this approach to achieve its objectives of long-term competitive returns and investing in a way that is aligned as much as possible with personal values.39

ESG criteria used in ESG integration: “We systematically review the potential significance of [E, S and G] issues and investigate them accordingly.” Miller/Howard's broad SRI approach includes established principles of environmental stewardship, fair employment policies, and ethical, transparent governance.40

Research resources used: For ESG incorporation broadly, Miller/Howard has an in-house ESG research team. In addition, Miller/Howard said it uses third-party research from many sources, including EIRIS, various social indexes and the Interfaith Center on Corporate Responsibility.

Staff involved: For RI broadly, the board members or trustees, CEO, CIO, investment committee, portfolio managers and dedicated responsible investment staff have oversight and accountability for RI and implement RI.

Additional comments:

Miller/Howard Investments is an employee-owned management firm with more than 20 years’ experience managing dividend-focused portfolios. We emphasize high-quality stocks with high yield and strong dividend growth. Our portfolios offer clients the opportunity for capital appreciation, high current income and growth of income.

While MHI offers a combination of investment and divestment, its primary focus is engagement. MHI asks companies to adhere to identified best practices, look at the long-term picture, utilize resources appropriately (including of energy, water and people) and be efficient and innovative. We strive to foster working—not adversarial—relationships with company management, having found through experience and research that such an approach is efficacious with outcomes beneficial to both shareholder and company, and protective of the dividend.

Listed equities: Miller/Howard Investments has a multi-faceted ESG process, which utilizes the following: negative/positive screened strategies, shareholder advocacy including dialogues with companies and shareholder resolutions, proxy voting, coalition building and public policy involvement. This approach is used to achieve MHI’s objectives of long-term competitive returns and investing in a way that's aligned as much as possible with client values.

**ESG criteria used in ESG integration:** Factors we consider for ESG investing are: a company’s governance and ethics; environmental record; workplace policies; human rights record, especially regarding international operations; and the sustainability of their products and services for future generations.

**Staff involved:** Dedicated: a responsible investment/ESG team. Broadly involved: board member or trustees, CEO, CIO, investment committee, portfolio managers. All parties share various levels of responsibility for oversight/implementation of responsible investing.
PARNASSUS INVESTMENTS

Total AUM: $14.7 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):

- Listed equities:
  - 95% ESG integration and screening
  - 5% ESG integration, screening and thematic investments
- Fixed income:
  - 100% ESG integration and screening

ESG integration strategy view and approach

Listed equities and fixed income:

- A company undergoes “a rigorous, proprietary ESG evaluation. ESG research is fully integrated into the investment process such that both fundamental and ESG research analysts are able to identify and address company-specific ESG issues.”
- As part of the integrated approach to ESG analysis, ESG factors are considered both from an ESG and financial perspective and at multiple points during the investment process.

ESG criteria used in ESG integration:

- “We systematically review the potential significance of [E, S and G] issues and investigate them accordingly.”
- In the integrated approach to ESG analysis, issues considered for each company include those affecting employees, customers, the supply chain, local communities, the environment and shareholders.  

Research resources used: Parnassus uses proprietary ESG research that is benchmarked against third-party sources.

Staff involved: Executive level portfolio managers, investment analysts, and dedicated RI staff members implement RI. These groups also have oversight/accountability for RI along with board members or trustees. All investment team members consider ESG factors, and two team members exclusively cover ESG factors.

Additional comments:

No additional information given.

43. Ibid.
Total AUM: $3.4 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities:
  - 100% ESG integration, screening and thematic investments
- Fixed income:
  - 100% ESG integration and screening

ESG integration strategy view and approach

Listed equities: Pax World integrates ESG issues into the following aspects of investment analysis for listed equities: macroeconomic analysis, industry analysis, analysis of company strategy and quality of management, idea generation and portfolio construction.

Listed equities and fixed income:
- The Sustainability Research Department must approve each stock or bond that portfolio managers and analysts think might be appropriate for a portfolio.
- If the issuer is significantly exposed to ESG risks or has faced ESG controversies, Pax reviews the companies’ policies and procedures for managing such issues. After determining whether the issuer meets Pax’s sustainability criteria, information is shared with the portfolio manager to help decide whether to make an allocation to the issuer.

ESG criteria used in ESG integration:
- “We systematically review the potential significance of [E, S and G] issues and investigate them accordingly.”
- Pax notes the following examples on its website:
  - Environment: air and water emissions, recycling and waste reduction, use of clean and renewable energy, climate change initiatives, and other policies and practices relating to environmental impact.
  - Social: Workplace factors: diversity, employee relations, health and safety, human rights;
    Product integrity factors: product health and safety, consumer issues, emerging technologies, marketing/advertising;
    Community factors: community relations, responsible lending practices, philanthropic activities.
  - Governance: executive compensation; shareowner rights; corruption, bribery and fraud

Research resources used: For ESG incorporation broadly Pax conducts ESG research in-house and uses ratings external research providers. It uses raw ESG company data, and company-, sector-, country- and issue-related analysis or ratings. This includes a list of the ESG ratings of every company in the MSCI World Index and the Russell 1000 Index.

Staff involved: Executive level, SVP for Sustainable Investment, portfolio managers, investment analysts, dedicated RI staff and external managers implement RI. Board members or trustees have oversight/accountability for RI, along with several other levels of staff.

Additional comments:

ESG integration strategy view and approach

Listed equities and fixed income: Pax World identifies key environmental, social and governance (ESG) risk and opportunity factors for a given industry, and then evaluates companies relative to their peers based on: 1) exposure to ESG risks, 2) historical management of ESG issues, 3) initiatives to mitigate ESG risks, and 4) positioning to capitalize on ESG-related opportunities. The results of this ESG analysis are integrated into portfolio construction.

ESG criteria used in ESG integration:

- emissions
- resource efficiency
- waste reduction
- water/stress availability
- climate change mitigation and adaptation
- gender and ethnic diversity
- health and safety
- human capital and labor management
- product safety and integrity
- community relations
- board and executive diversity
- executive compensation
- corruption, bribery and fraud
- board structure and accountability
- lobbying activities and expenditures

Research resources used: Pax World’s investment process incorporates sustainability data from multiple sources, including third-party research, company filings and sustainability reports, news sources, sustainability research and advocacy organizations, and government databases.

Staff involved: Investment Management Department, led by the Chief Investment Officer, and the Sustainability Research Department, led by the Senior Vice President for Sustainable Investing. These Departments report to the CEO and the Board of Trustees, who oversee the implementation of Pax World’s sustainable investing strategy on behalf of shareholders.
Total AUM: $178 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):
- Listed equities:
  - 100% ESG integration, with screening and thematic investments

ESG integration strategy view and approach

Listed equities
- Pictet has implemented a company-wide ESG integration program that entails sharing critical ESG information with all investment teams.
- Its ESG integration program also entails “the systematic exercise of voting rights (actively managed equities), and the exclusions of companies involved in the production of anti-personnel mines and cluster munitions (actively managed funds and discretionary mandates).”

ESG criteria used in ESG integration: Pictet does not disclose the ESG criteria it considers in evaluating listed equities, but said: “We systemically review the potential significance of [E, S and G] issues and investigate them accordingly.”

Research resources used: For RI broadly, Pictet has an in-house SRI team as well as external research from “specialized agencies.” This includes Inrate, Sustainalytics, ISS and RepRisk.

Staff involved: For RI broadly, Pictet involves various levels of staff including dedicated RI staff and sustainability experts working on oversight/accountability and implementation.

Additional comments:

[A subset of Pictet’s ESG integration program is its $10 billion in environmental thematic funds and sustainable equity portfolios.]

Environmental strategies:
- Our Water fund, launched in 2000, was not only the first but is today the largest in its sector. Tapping into trends such as urbanization, heavily water-dependent economic growth and the shortage of clean water, the fund focuses on perhaps the world’s most critical resource. The portfolio comprises companies which derive about two-thirds of their income from water-related activities.
- Our Clean Energy fund offers the opportunity to invest in companies that contribute to and profit from the transition towards a low carbon economy. These companies are primarily involved in developing renewable energy technologies and equipment, infrastructure and resources. The fund also targets companies that contribute to reducing energy demand through energy-efficiency.
- Our Timber fund invests in listed companies that own and manage forests and timberlands. Investors can acquire a stake in this strategic renewable resource, while benefiting from the convenience and daily liquidity of a conventional investment fund.
- Our Agriculture fund focuses on companies that provide solutions to improving farming practices and invests worldwide in the agribusiness value chain. The fund has strict policies on investing in genetically modified organisms (GMOs) and avoids companies that damage the environment.
**Sustainable strategies:** Sustainable equity strategies target quality companies with superior corporate responsibility, on the premise that companies of this type that incorporate sustainability in their development strategies are in a better position to seize new business opportunities, mitigate operational, reputational and financial risks, motivate employees and, ultimately, create long-term shareholder value.

The investment process is designed to capture the ability of companies to generate attractive and resilient shareholder returns while avoiding boom-and-bust business models. In order to be eligible for investment, companies must excel from both a financial and extra-financial point of view. Equally, we seek to avoid companies that are profitable at the expense of shareholders, employees, consumers or the environment, as well as companies that are “green” but financially unattractive.
**Total AUM:** $333.2 billion as of 12/31/2014

**Reported percentage of ESG integration applied (+/- 10%):**

- **Listed equities:**
  - 96% ESG integration alone
  - 2% ESG integration and screening
  - 2% ESG integration and thematic investments

- **Fixed income:**
  - 99% ESG integration alone
  - 1% ESG integration and screening

- **Property:**
  - Not a field in the RI Transparency Report

**ESG integration strategy view and approach**

“Integration of ESG factors takes place across all asset classes that PGI manages. The integration approach is determined by the specific investment process of the underlying asset class, whether it is equities, fixed income or real estate.”

**Listed equities and fixed income:**

- ESG issues are considered within the investment process as part of the fundamental research driving security selection.
- “The analysts provide the essential insights into industry trends and company-specific considerations integrating ESG factors into their final investment thesis.”

**ESG criteria used in ESG integration:** Regarding its investment policy statement: “There are no specific environmental, social or governance issues covered by the policy, rather each issue is addressed on a case-by-case, security-level analysis.”

- **For listed equities:**
  - “We systematically review the potential significance of [environmental and corporate governance] issues and investigate them accordingly.”
  - “We occasionally review the potential significance of social issues and investigate them accordingly.”

- **For fixed income:**
  - “We systematically review the potential significance of corporate governance issues and investigate them accordingly.”
  - “We occasionally review the potential significance of [environmental and social] issues and investigate them accordingly.”

**Research resources used:** None listed

**Staff involved:** Analysts at Principal Global Investors.

**Property:**

- “We thoroughly evaluate ESG issues, for both short and long term impacts, from the earliest stages of our pre-investment process. Starting with basic factors such as geographic location, environmental concerns, regulatory conditions or social matters, we consider ESG issues that are unique to each site and those which are obvious today or may have greater impact in the future. For example, we consider proximity to...”
health or environmental concerns such as pollution sources, sensitive ecologies, and exposure to extreme weather events. We take into account local market resilience, from both an economic and regulatory perspective. These considerations inform our investment process from the outset."

• “Our due diligence checklist includes a broad spectrum of ESG issues such as overall building performance and energy efficiency, green certifications like LEED and ENERGY STAR (If not certified, perform GAP analysis) indoor environmental quality, occupant health and safety, toxic materials, environmental assessments, compliance with accessibility regulations, tenant satisfaction, walkability score and more depending on the specific property. For new development projects, other criteria may also be utilized such as an ecological impact assessment.”

• “To better assess and respond to geographically specific ESG issues, Principal relies on local market expertise provided by our property management and development partners, and a regional asset manager and engineering organizational structure that allows for greater insight and focus on key local market conditions.”

• “ESG issues are factored into our financial modeling and impact our determination of present and future asset value. For example, we consider energy expenses and operating costs among other ESG factors to determine our purchase price, but also incorporate a continuous improvement methodology to identify and capitalize on value-creation opportunities and risk reduction through improved property performance.”

• “Finally, ESG issues, when applicable, are also incorporated into the Investment Committee underwriting process, as well as into the annual business plan for each individual asset. ESG information gained in the investment selection process is maintained and included in records and files for the asset throughout the ownership period. ESG information gathered in the investment process forms the baseline of key performance indicators, which are tracked and monitored over the life of the investment. We then actively work with our property management partners to continuously improve the environmental and financial performance of the asset.”

ESG criteria used—typical examples:

• Environmental: Energy consumption and opportunity for energy efficiency; water consumption and opportunity for water efficiency; ecological impact, mitigation risks or needs, or opportunities for value-added enhancement.

• Social: Tenant health, comfort and satisfaction through indoor air quality and water intrusion risk management and mitigation, compliance with regulations for accessibility and conduct assessments as needed, fair labor practices and quality craftsmanship through responsible contracting and standardized construction contracts and service agreements.

• Governance: All employees affirm Corporate Code of Business Conduct and Ethics. Management Committee reviews all major transaction decisions to ensure compliance with portfolio investment guidelines and performance. We conduct extensive due diligence on all of our partners to ensure that they abide by high standards for ethics, governance and financial practices.

Post investment (monitoring and active ownership): Principal Global Investors marked the following indicators:

• We consider ESG issues in property monitoring and management
• We consider ESG issues in property developments and refurbishments
• We consider ESG issues in property occupier engagements
• We consider ESG issues in community engagements related to our properties

Staff involved: The CEO/CIO, investment committee, portfolio managers and dedicated RI staff have oversight and accountability for RI and implement RI. Investment analysts also implement RI.

Additional comments:

No additional information given.
UNLOCKING ESG INTEGRATION

TIAA-CREF

Total AUM: $620.3 billion as of 12/31/2014

Reported percentage of ESG integration applied (+/- 10%):

- Listed equities:
  - 100% ESG integration and screening
- Property: Not a field in the RI Transparency Report but TIAA CREF noted 90%.

ESG integration strategy view and approach

“TIAA-CREF has made a firm-wide commitment to broaden the scope of strategies and investment areas that include the integration of ESG information. Approaches for integrating ESG vary across asset classes and strategies, as do the specific policies and levels of disclosure.”

Listed equities:

- “TIAA-CREF believes that the consideration of environmental, social and governance criteria by investors can enhance the long-term economic value of companies and produce competitive, long-term financial returns for our clients. It has seen that responsible business practices often lower risk, improve financial performance, and bring better results across an array of social responsibility issues, from ensuring product safety and protecting shareholder rights to safeguarding the environment.”
- “Broad concerns relating to ESG factors are typically expressed as risk factors which may reduce an investment’s fair value and increase the potential downside risk associated with an investment. This would occur via a higher discount rate used to value future projected cash flows given the uncertainty and potential for future liabilities. Known factors such as increased expense associated with regulatory requirements or changing consumer preferences are explicitly captured when modeling the estimated future cash flows of a company.”
- “ESG factors are an important aspect of our investment process given their importance in the sustainability of a company’s value over time. Increasingly these issues are being considered in a more systematic fashion and are becoming a more explicit part of our research process.”
- “ESG considerations can be both direct (e.g., environmental liability to a company after a disaster) and indirect (e.g., management focus and/or company reputation relating to environmental safety) inputs into investment decision making.”
- “Individual portfolio managers and analysts determine the degree to which ESG factors are weighed into investment decisions.”
- “Each sector analyst reviews those ESG factors most relevant to their respective companies as ESG issues can vary in their relevance across companies and industries. Governance considerations are often cross cutting across industries while many social and environmental issues are consistently important in our company analysis across many industries (for example, environmental regulation, brand value and corporate reputation, and changing consumer preferences).”
- “A key aspect of our research process centers on discussions with company management. Our analysts regularly meet face to face with management teams across all sectors with the intent of understanding and analyzing their strategic priorities as well as assessing the quality of the management team. It is during these meetings that we probe ESG issues that are relevant to the company. The results of these discussions along with other ESG data gathered during the research process will be incorporated into our final analysis and investment decisions.”

ESG criteria used in ESG integration: “We occasionally review the potential significance of [E, S and G] issues and investigate them accordingly.”

Specific criteria listed for ESG incorporation broadly:

- Environment: natural resources, utilities (e.g., carbon tax), consumer (e.g., green choices)
- Social: industrials (e.g., labor relations), consumer (e.g., healthier choices)
- Governance: technology (e.g., board independence), financials (e.g., regulatory scrutiny), emerging markets (e.g., disclosure)
Property:
• “The Global Real Estate Sustainability Initiative (GRESI) defines and promotes TIAA-CREF’s leadership role in integrating ESG principles into the administration of our investment real estate. Incorporating sustainability into the decision-making process and striving for operational excellence, has led to: a) improvements in resource efficiency to reduce our environmental footprint, b) implementation of policies and procedures covering activities such as responsible contractors to conduct supplier relationships in a responsible manner, and c) implementation of innovative property governance processes to mitigate risks and improve controls.”
• “Sustainability matters are reviewed as part of our overall due diligence process, utilizing a combination of internal engineering expertise, external consultants/experts and the asset management team. A comprehensive due diligence checklist, linked to an automated tracking and completion tool, is employed to ensure that all applicable conditions and areas of focus and concern are properly evaluated and incorporated into the investment decision for each property.”
• “ESG is used to understand the conditions existing at a specific investment, to inform and guide the evaluation of the projected expectations for that investment. It is not a direct screen, but may be a proximate cause for an investment opportunity to be declined.”

ESG criteria used—typical examples:
• Environmental: Energy benchmarking, water benchmarking, toxic materials review
• Social: Responsible Contractor Policy
• Governance: Policy and procedures on-boarding of property management teams

Post investment (monitoring and active ownership):
• We consider ESG issues in property monitoring and management
• We consider ESG issues in property developments and refurbishments
• We consider ESG issues in property occupier engagements
• We consider ESG issues in community engagements related to our properties

Research resources used: TIAA-CREF works with ESG research partners on ESG incorporation broadly.

Staff involved: Board members or trustees, the CEO, CIO and investment committee have oversight and accountability for RI. Portfolio managers, investment analysts and external managers or service providers implement responsible investment. Dedicated responsible investment staff are also involved in all these areas.

Additional comments:

Real assets: TIAA has sector-specific policies for certain assets (agricultural farmland, energy, infrastructure and timberland). The policies specify the sources of operating and reputational risks, which may include ESG factors associated with investments in the respective sectors and the oversight activities designed to assess and mitigate risks.

Real estate: TIAA-CREF has internal policies and procedures related to property management that include considerations of sustainability such as energy use, water conservation and waste reduction.

General Account Social Impact Investment Portfolio: The General Account Social Investment Program is a commitment our company has to directing capital towards high-quality investment opportunities that create measurable social outcomes, serving low-to-moderate income populations, in the areas of affordable housing, inclusive finance, and community and economic development.

Proactive Social Investment (PSI) Framework (leveraged within the fixed income strategies of Social Choice): The PSI Framework sets internal guidelines for identifying and classifying fixed income investment opportunities along four thematic areas according to ESG criteria, namely in affordable housing, community and economic development, renewable energy and climate change, and natural resources.
WELLINGTON MANAGEMENT COMPANY

Total AUM: $914 billion as of 12/31/14

Reported percentage of ESG integration applied (+/- 10%):
• Listed equities:
  — 98% ESG integration alone
  — 1% ESG integration and screening
  — 1% ESG integration and thematic investments
• Fixed income:
  — 99% ESG integration alone
  — 1% ESG integration and screening

ESG integration strategy view and approach

Wellington’s ESG integration strategies include curating internally and externally generated EGS research and conducting in-depth portfolio reviews to assess ESG risks and opportunities at the portfolio level, as well as engaging with companies invested in through proxy voting and engagement. Each portfolio manager and investment team “develops their own investment approach or approaches, respectively, whereby ESG considerations are integrated into their research and decision-making processes to the extent that they believe these issues may affect the long-term success of a company and investment returns.” This can affect the investment thesis or portfolio weighting for a particular security, proxy voting and/or company engagement efforts.48

Listed equities: Wellington systematically integrates ESG issues into the following aspects of investment analysis: macroeconomic analysis, industry analysis, analysis of company strategy and quality of management, idea generation, and fair value/fundamental analysis. The latter involves adjustments to income forecasts (sales, earnings, cash flows) and adjustments to valuation tools (discount rates, return forecasts, growth rates).

Fixed income:
• For government bond portfolios, Wellington has resources to “help investors assess the ESG risks or opportunities that would impact the long-term economic growth and sustainable development of the respective countries.”
• Examples it listed for ESG issues related to sovereign bonds include political stability, corruption, social inequality, investment in education, and climate change management.

ESG criteria used in ESG integration: Wellington does not provide specific ESG criteria outside of the above examples, but it gave the following information.

  For listed equities
  • “We systematically review the potential significance of [ESG] issues and investigate them accordingly.”

  For fixed income active strategies
  • “We systematically review the potential significance of [ESG] issues and investigate them accordingly.”

For fixed income—government issuers

- “We occasionally review the potential significance of environmental issues and investigate them accordingly.”
- “We systematically review the potential significance of [social and corporate governance] issues and investigate them accordingly.”

**Research resources used:** Wellington generates proprietary ESG research, including market analysis and sector and country guides, to highlight key ESG risks. It also maintains relationships with over 400 research providers, allowing access to multiple data sets across thousands of securities across every asset class.

**Staff involved:** Specialized in-house ESG team

**Additional comments:**

**ESG integration strategy view and approach:** Wellington Management considers environmental, social, and corporate governance (ESG) criteria as one set of factors among many that should be weighed appropriately to inform investment decision making. To help its portfolio managers and investment teams better assess risks and opportunities in client portfolios, Wellington has integrated the analysis of ESG factors into its investment and risk-management processes firm-wide. To aid in the integration of ESG analysis, a specialized in-house ESG team manages several investor tools, including an innovative portfolio review process, ESG ratings, and reference guides that examine ESG factors by sector and country. The ESG team also works closely with their portfolio managers and analysts to engage with company managements and vote proxies each year.