

2016

Global Sustainable Investment Review



**GLOBAL SUSTAINABLE
INVESTMENT ALLIANCE**



GSIA

Table of Contents

Foreword	2
Executive Summary	3
Introduction	5
Sustainable Investing Defined	6
Global Sustainable Investments 2014–2016	7
Growth of Global SRI Assets	7
Sustainable Investment Strategies	8
Global Market Characteristics	9
Regional Market Characteristics	11
Regional Highlights	12
Europe	12
United States	12
<i>Sustainable Investing in Latin America</i>	13
Canada	14
Australia and New Zealand	15
Asia ex Japan	16
<i>Investing for Impact in Africa</i>	17
Japan	18
Spotlight on Green Finance	19
China	19
United States	19
Europe	20
Canada	21
Australia and New Zealand	21
Conclusion	23
Appendix 1 – Methodology and Data	24
Appendix 2 – Glossary	26
Appendix 3 – Data Table	27
Acknowledgements	28

Foreword

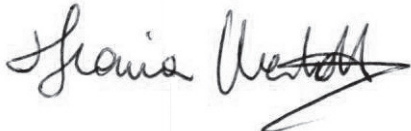
The Global Sustainable Investment Alliance (GSIA) is an international collaboration of membership-based sustainable investment organizations. Our mission is to deepen and expand the practice of sustainable investment through intentional international collaboration. We are pleased to present the *Global Sustainable Investment Review 2016*, the third edition in the series since our inaugural review of sustainable investment worldwide in 2012.

Since 2014, when we released our last biennial review, sustainable, responsible and impact investing has continued to grow, with investor concerns and actions on climate change providing one of the important drivers on this growth. Accordingly, this edition features a special focus on green finance, with examples from China, the United States, Europe, Canada, and Australia and New Zealand.


We are also pleased to be able to report on the activities of LatinSIF, launched in 2013, and the growth of sustainable and impact investing in Latin America. Sustainable investing is also making inroads on the African continent, and we provide a snapshot of developments in the three major African economies: Kenya, Nigeria and South Africa.

We want to thank the many sponsors—listed in the Acknowledgments page—of the regional research reports used to prepare the *Global Sustainable Investment Review 2016*. We are grateful to US SIF: The Forum for Sustainable and Responsible Investment, which led the production of the report.¹ We also acknowledge the role that the Principles for Responsible Investment (PRI) played in gathering data for Asia ex Japan. We offer our gratitude to Bloomberg LP for the financial support it provided for the global review. Without the generous support of these sponsors, this report and the research on which it is based would not have been possible.

Sincerely,



Flavia Micilotta, Executive Director
Eurosif, the European Sustainable Investment Forum



Lisa Woll, CEO
US SIF: The Forum for Sustainable and Responsible Investment and the US SIF Foundation



Simon O'Connor, CEO
Responsible Investment Association Australasia



Deb Abbey, CEO
Responsible Investment Association Canada

1. US SIF however relies on data provided by other regions and is not responsible for the content or accuracy of non US reports and data.

Executive Summary

In early 2015, the Global Sustainable Investment Alliance (GSIA) released the *Global Sustainable Investment Review 2014*, which collated the results from the market studies of regional sustainable investment forums for Europe, the United States, Canada, Asia, Japan, and Australia and New Zealand. In the period since the last report was released, the global sustainable investment market has continued to grow, and in most of the regions covered by GSIA's member organizations, its share of professionally managed assets has also grown. This report summarizes the status of sustainable and responsible investing in these markets at the start of 2016.

Globally, there are now \$22.89 trillion of assets being professionally managed under responsible investment strategies, an increase of 25 percent since 2014. In all the regions except Europe, which tightened its definition of sustainable investing, sustainable investing's market share has grown. In relative terms, responsible investment now stands at 26 percent of all professionally managed assets globally. Clearly, sustainable investing constitutes a major force across global financial markets.

From 2014 to 2016, the fastest growing region has been Japan, due to greater reporting and sustainable investing activity by Japanese institutional asset owners, followed by Australia/New Zealand and Canada. In terms of assets, the largest three regions were Europe, the United States and Canada, respectively.

Sustainable investing is an investment approach that considers environmental, social and governance (ESG) factors in portfolio selection and management. For the purpose of this global report and for articulating our shared work in the broadest way, GSIA uses an inclusive definition of sustainable investing, without drawing distinctions between this and related terms such as responsible investing and socially responsible investing. These are collectively referred to as sustainable investing or SRI.

Sustainable investment encompasses the following activities and strategies:

1. Negative/exclusionary screening,
2. Positive/best-in-class screening,
3. Norms-based screening,
4. Integration of ESG factors,
5. Sustainability themed investing,
6. Impact/community investing, and
7. Corporate engagement and shareholder action.

The largest sustainable investment strategy globally is negative/exclusionary screening (\$15.02 trillion), followed by ESG integration (\$10.37 trillion) and corporate engagement/shareholder action (\$8.37 trillion). Negative screening is the largest strategy in Europe, while ESG integration now dominates in the United States, Canada, Australia/New Zealand and Asia ex Japan in asset-weighted terms. Corporate engagement and shareholder action is the dominant strategy in Japan.

Impact investing is a small but vibrant segment of the broader sustainable and responsible investing universe in all the markets studied. GSIA defines impact investing as targeted investments, typically made in private markets, aimed at solving social or environmental problems. Community investing, whereby capital is specifically directed to traditionally underserved individuals or communities, is included in this category, as is finance that is provided to businesses with an explicit social or environmental purpose.

In Europe, total assets committed to sustainable and responsible investment strategies grew by 12 percent from 2014 to 2016 to reach \$12.04 trillion. Fifty-three percent of total professionally managed assets in Europe now use responsible investment strategies. Exclusionary screens remain the dominant strategy at

\$11.06 trillion, a growth rate of 48 percent over the past two years. Norms-based screening is the second biggest SRI approach with over \$5.55 trillion in assets, a growth rate of 40 percent from 2014. Engagement and voting follows quite closely in terms of popularity, with over \$4.65 trillion in assets and 30 percent growth. Using a narrower definition of ESG integration in 2016 and recalculating the 2014 ESG integration total, Eurosif found that this strategy grew 39 percent over the two-year period to reach \$2.88 trillion. Impact investing is once again the fastest growing strategy with growth of 385 percent, although the assets remain small (\$107.2 billion). There is increasing overlap between SRI strategies in Europe, with investment vehicles frequently using more than one. As a result, in percentage terms, the overall tally of SRI has grown by a smaller percentage—12 percent—than each of the constituent strategies.

US sustainable, responsible and impact investing continues to rise, with total SRI assets at the beginning of 2016 at \$8.72 trillion, up 33 percent from \$6.57 trillion in 2014. Of this, \$8.10 trillion is held by institutional investors, money managers and community investment institutions applying various environmental, social and governance criteria in their investment analysis and portfolio selection. In addition, from 2014 to 2016, 176 institutional investors and 49 investment management firms with total assets of \$2.56 trillion filed or co-filed resolutions on ESG issues at publicly traded companies. Eliminating double counting for assets involved in both strategies yields the overall total of \$8.72 trillion, which represents nearly 22 percent all investment assets under professional management in the United States. ESG integration, the dominant strategy, affects approximately \$5.8 trillion in assets.

Canada's responsible investment market continues to experience growth. According to survey data from the Responsible Investment Association of Canada, assets managed using one or more responsible investment strategies increased from \$729.0 billion to \$1.09 trillion in two years, a 49 percent increase. In relative terms, 38 percent of total professionally managed assets use responsible investment strategies. The dominant sustainable investing strategy in 2016 was ESG integration (\$1.05 trillion), followed by corporate engagement and shareholder action (\$862.1 billion). The top three engagement issues were: executive compensation, greenhouse gas emissions and supply chain management. Impact investing continues to be a small but important category of SRI: Canadian impact investment assets now stand at \$6.7 billion, growing 123 percent since 2014.

Responsible investment assets managed by asset managers, asset owners, banks and advisors in Australia and New Zealand grew substantially, both at retail levels and institutional levels, across all responsible investment strategies. In both countries combined, responsible investment assets have grown from 2014 to 2016 to reach \$515.7 billion, and to a point where in Australia, sustainable investments now account for 50 percent of all professionally managed assets.

The overall market for sustainable investment in Asia has been growing more slowly than in previous periods. As of 2016, \$52.1 billion in assets were managed using one or more sustainable investment strategies. When Sharia-compliant funds are excluded, the total sustainable investment assets total \$34.2 billion. Sustainable investment assets have grown 16 percent since 2014, compared to 32 percent from 2012 to 2014. The most common strategies are ESG integration, representing \$24.5 billion of assets, and negative/exclusionary screening, with \$18.8 billion in assets. The fastest growing strategies are sustainability themed investments with a growth rate of 198 percent, and negative/exclusionary screening with a growth rate of 14 percent.

According to the Japan Sustainable Investment Forum (JSIF), the total sustainable investment market in Japan is measured at \$473.6 billion, up from \$7.0 billion during the last review. The dramatic growth can be explained by a number of changes to the sustainable investment market in Japan since 2014 along with new surveys by JSIF that provided information for the first time on the sustainable investing strategies of large institutional asset owners. JSIF found that corporate engagement and shareholder action is the dominant strategy at \$289.6 billion, applying to 61 percent of SRI assets. ESG integration (\$120.0 billion) is the second biggest approach, with 25 percent of SRI assets. Norms-based screening (\$56.0 billion) and positive screening/best-in-class (\$25.1 billion) follow, with 12 percent and 5 percent, respectively.

Introduction

The Global Sustainable Investment Alliance (GSIA) is pleased to release the *Global Sustainable Investment Review 2016*, the third edition of this biennial report. This review continues to be the only report collating results from the market studies of regional sustainable investment forums from Europe, the United States, Canada, Australia and New Zealand, and Japan. It provides a snapshot of the sustainable and impact investing in these markets at the start of 2016 by drawing on the in-depth regional and national reports from GSIA members—Eurosif, Responsible Investment Association Australasia, RIA Canada and US SIF—as well as reports and insights from the Principles for Responsible Investment (PRI) and Japan Sustainable Investment Forum (JSIF). PRI provided data on Asia ex Japan, while JSIF covered Japan.

Since the launch of the inaugural study in 2012, the sustainable investment market has continued to grow and evolve globally. While each region's approach to sustainable investment is slightly different, some trends have had a global reach. Every region saw a rise in ESG integration, sustainability themed investing and impact or community investing. Growing concern over climate change has resulted in rising interest in green finance, including climate-aligned bonds.

This report introduces the Latin American Sustainable Investment Forum (LatinSIF). Created in 2013, the LatinSIF is gathering knowledge, resources and capacity to support sustainable and impact investing opportunities in several countries in North, Central and South America, some of which are highlighted here. This report also presents data on the African sustainable investing market for the second time since the 2012 edition of the *Review*, thanks to the cooperation of the African Investing for Impact Barometer based at the University of Cape Town's Graduate School of Business.

Together, these resources provide data points, insights, analysis and examples of the shape of sustainable investing worldwide.

Unless stated otherwise, all assets in this report are presented in US dollars. All 2016 assets are reported as of December 31, 2015, except for Japan, which reports as of March 31, 2016, and currencies are converted to US dollars at the exchange rate prevailing on December 31, 2015, for comparability. Historical 2014 data are reported as of December 31, 2013, except for Japan which is reported as of September 30, 2014. The 2014 asset data (unless otherwise specified) have also been converted into US dollars at the exchange rate prevailing on December 31, 2015, in order to avoid introducing currency exchange rate trends into the calculations. Refer to Appendix 1 for more information on methodology and data.

Sustainable Investing Defined

Sustainable investing is an investment approach that considers environmental, social and governance (ESG) factors in portfolio selection and management. For the purpose of this global report and for articulating our shared work in the broadest way, GSIA uses an inclusive definition of sustainable investing, without drawing distinctions between this and related terms such as responsible investing and socially responsible investing. These are collectively referred to as sustainable investing or SRI.

The GSIA definitions of sustainable investment, published in the *Global Sustainable Investment Review 2012*, have emerged as a global standard of classification. These 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. **ESG integration:** the systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis;
5. **Sustainability themed investing:** investment in themes or assets specifically related to sustainability (for example clean energy, green technology or sustainable agriculture);
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, as well as financing that is provided to businesses with a clear social or environmental purpose; and
7. **Corporate engagement and shareholder action:** the use of shareholder power to influence corporate behavior, including through direct corporate engagement (i.e., communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

The sum of these individual strategies, after adjusting for double counting since some assets are subjected to more than one strategy, results in the sustainable assets under management included in this report. In the report the aggregated figure is referred to as sustainable investment or investment taking into account ESG concerns, without making a judgment about the quality or depth of the process applied.

Global Sustainable Investments 2014–2016

Growth of Global SRI Assets

Global sustainable investment assets are continuing to increase, albeit at a slower pace than in previous years. At the start of 2016, global sustainable investment reached \$22.89 trillion, compared with \$18.28 trillion in 2014, an increase of 25 percent. Previously, global sustainable investment assets grew 61 percent from 2012 to 2014. Still, nearly all regions saw increases in their SRI assets relative to their total professionally managed assets, with the greatest rise seen in Australia and New Zealand. (See Tables 1 and 2.)

Region	2014	2016	Growth over period	Compound Annual Growth Rate
Europe	\$ 10,775	\$ 12,040	11.7%	5.7%
United States	\$ 6,572	\$ 8,723	32.7%	15.2%
Canada	\$ 729	\$ 1,086	49.0%	22.0%
Australia/New Zealand	\$ 148	\$ 516	247.5%	86.4%
Asia ex Japan	\$ 45	\$ 52	15.7%	7.6%
Japan	\$ 7	\$ 474	6689.6%	724.0%
Total	\$ 18,276	\$ 22,890	25.2%	11.9%

Note: Asset values are expressed in billions.

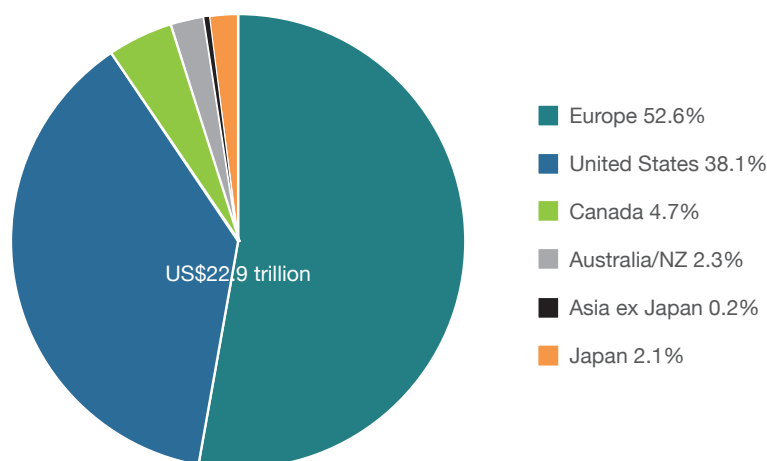
Asia ex Japan 2014 assets are represented in US dollars based on the exchange rates at year-end 2013. All other 2014 assets, as well as all 2016 assets, are converted to US dollars based on exchange rates at year-end 2015.

Region	2014	2016
Europe	58.8%	52.6%
United States	17.9%	21.6%
Canada	31.3%	37.8%
Australia/New Zealand	16.6%	50.6%
Asia	0.8%	0.8%
Japan		3.4%
Global	30.2%	26.3%

Note: Asia figure includes Japan in 2014, but excludes Japan in 2016. Eurosif used a narrower definition of SRI in 2016 than in 2014. See Appendix I: Methodology and Data, for details.

Just over half of the SRI assets referred to in this report are in Europe (53 percent), but the relative contribution of the United States increased to 38 percent in 2016, as shown in Figure 1.

Figure 1: Proportion of Global SRI Assets by Region

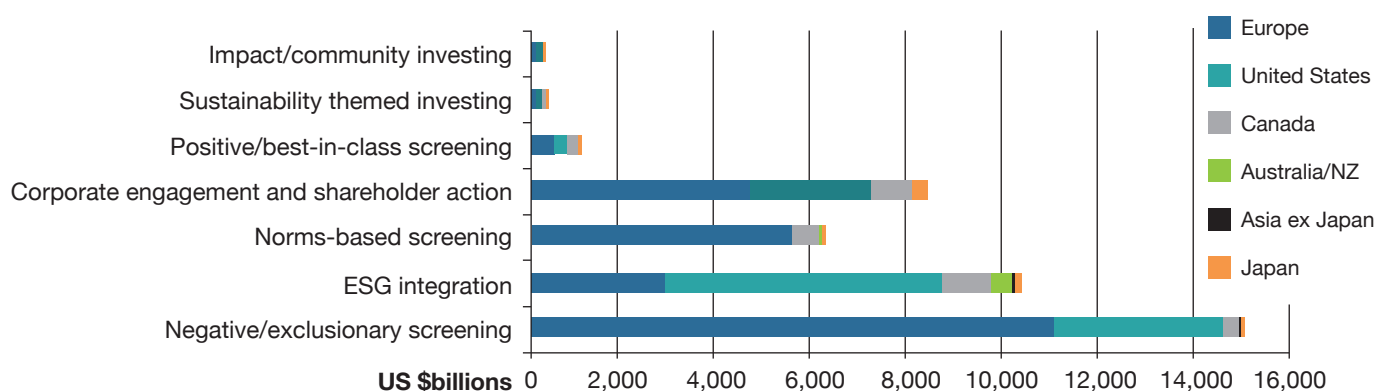


Over this two-year period, Japan, tracked separately in this year's *Review*, has been the fastest growing region, due in part to new surveys by JSIF that provided information for the first time on numerous large asset owners. (See Regional Highlights for additional information.) This is followed by Australia and New Zealand, and then Canada and the United States.

Sustainable Investment Strategies

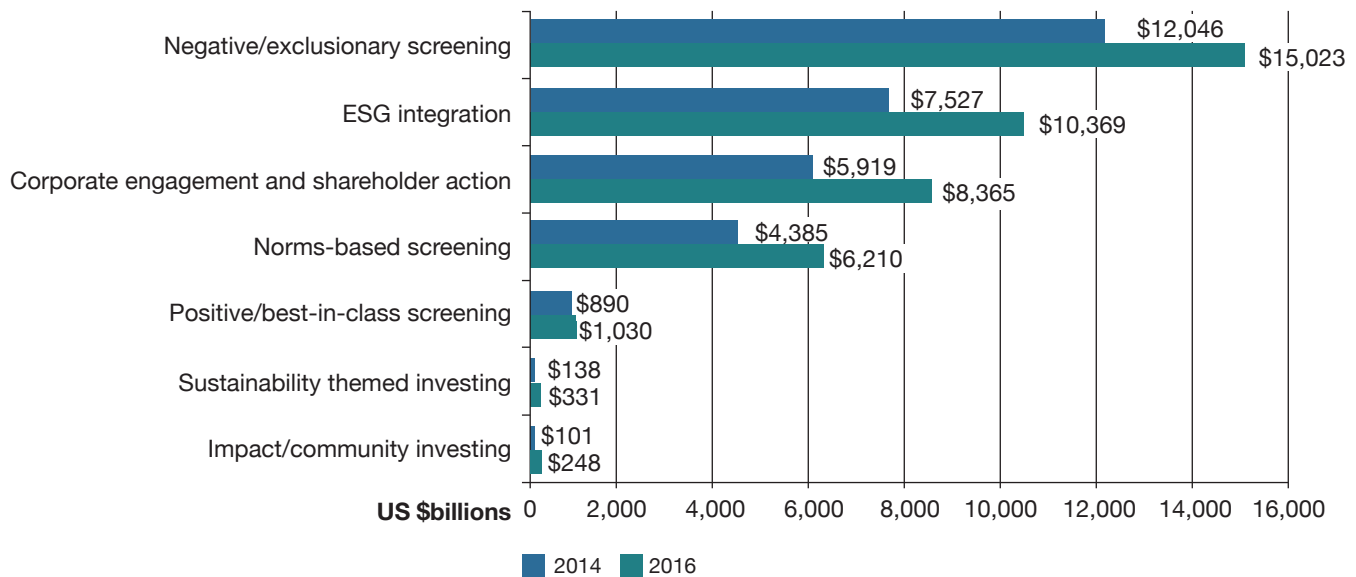
The largest sustainable investment strategy globally is negative/exclusionary screening (\$15.02 trillion), followed by ESG integration (\$10.37 trillion) and corporate engagement/shareholder action (\$8.37 trillion), as shown in Figure 2. Negative screening is the largest strategy in Europe, while ESG integration leads in the United States, Canada, Australia/New Zealand and Asia ex Japan. Japan's primary sustainable investment strategy is corporate engagement and shareholder action.

Figure 2: SRI Assets by Strategy and Region



All SRI strategies continued to experience growth between 2014 and 2016, as shown in Figure 3. The fastest growing strategies, although also the smallest in absolute dollar terms, were impact/community investing (146 percent) and sustainability-themed investing (140 percent), as shown in Table 3. Europe and the United States were the largest contributors to both of these categories.

Figure 3: Growth of Strategies 2014–2016



Also continuing to grow are norms-based screening (42 percent) corporate engagement/shareholder action (41 percent), ESG integration (38 percent), negative/exclusionary screening (25 percent) and positive/best-in-class screening (16 percent).

Table 3: Growth of Strategies 2014–2016

Strategy	2014	2016	Growth	CAGR
Impact/community investing	\$101	\$248	146%	56.8%
Sustainability themed investing	\$137	\$331	140%	55.1%
Positive/best-in-class-screening	\$890	\$1,030	16%	7.6%
Norms-based screening	\$4,385	\$6,210	42%	19.0%
Corporate engagement and shareholder action	\$5,919	\$8,365	41%	18.9%
ESG integration	\$7,527	\$10,369	38%	17.4%
Negative/exclusionary screening	\$12,046	\$15,023	25%	11.7%

Note: CAGR=compound annual growth rate. Asset values are expressed in billions.

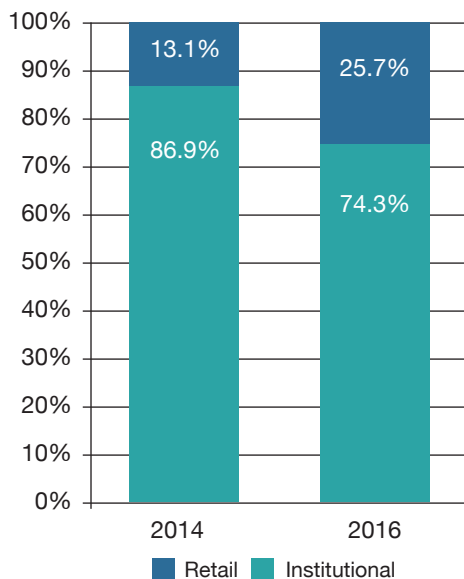
Global Market Characteristics

INSTITUTIONAL AND RETAIL INVESTORS: Investments managed by professional asset managers are often classified as either retail or institutional. Retail assets are personal investments by individuals in professionally managed funds purchased in banks or through investment platforms. Institutional assets are the assets of large asset owners such as pension funds and insurers. It has been a feature of the SRI market in most of the regions that professional institutional investors dominate the market, but interest by retail investors in SRI is continuing to grow.

Indeed, the relative proportion of retail SRI investments in Canada, Europe and the United States increased from 13 percent in 2014 to 26 percent at the start of 2016 (this data was not collected in

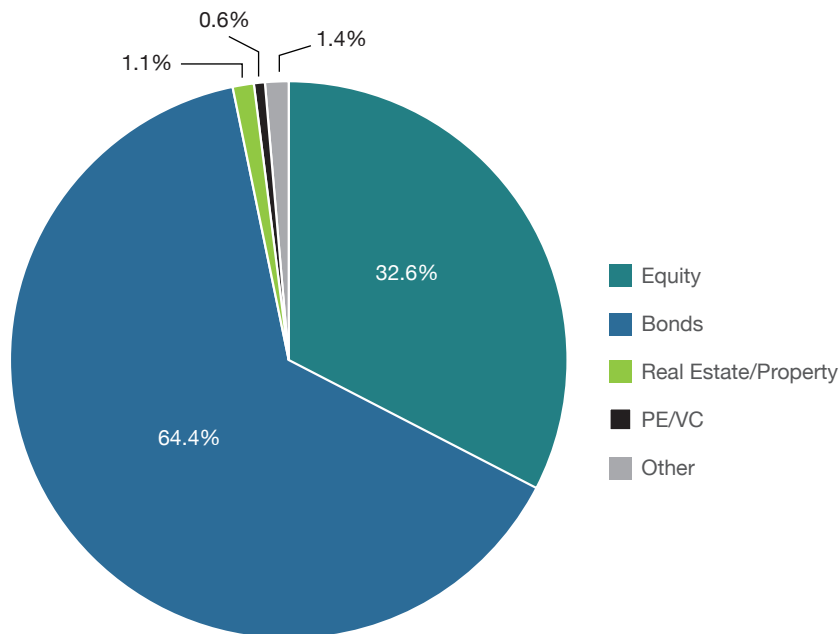
Australia/New Zealand and Asia), as shown in Figure 4. Over a third of SRI assets in the United States were retail.

Figure 4: Institutional/Retail SRI Assets



ASSET ALLOCATION: SRI asset allocation can vary greatly from market to market. In Canada and Europe, most of the assets are in bonds (64 percent) and equities (33 percent), as shown in Figure 5. This is a flip from 2014, when 50 percent of assets were in equities and 40 percent in bonds, and is largely a reflection of the rise in green bonds over this time period. The other regions did not collect data on asset allocation.

Figure 5: SRI Asset Allocation in Canada and Europe

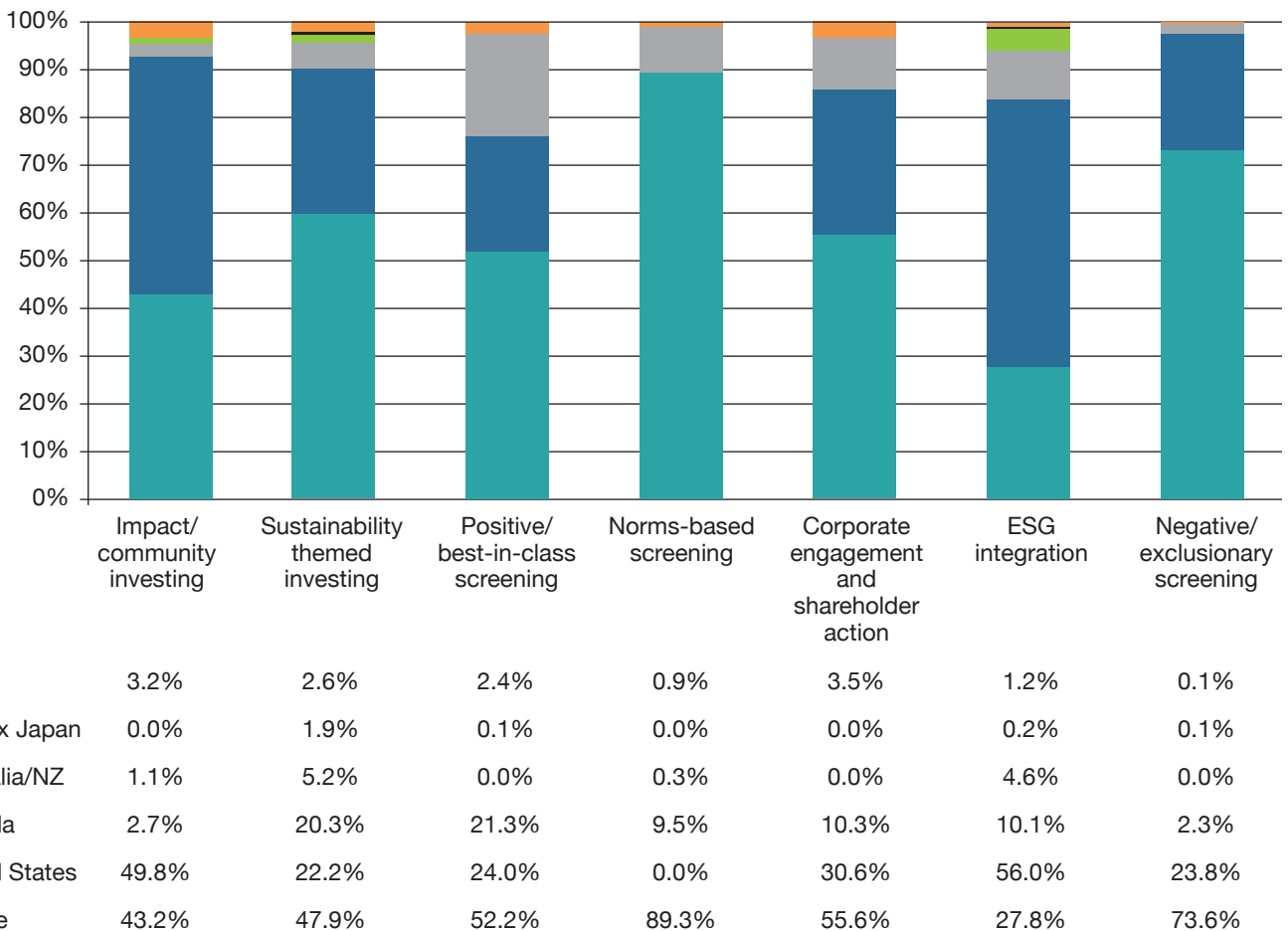


Note: Other includes alternatives/hedge funds, monetary/deposits, commodities and infrastructure.

Regional Market Characteristics

There are significant differences in the SRI strategies investors choose to employ at the regional level, resulting in interesting weightings based on geography. For example, although the Australia/New Zealand region holds just 2.3 percent of global SRI assets, it accounts for a much larger share of global sustainability themed investing and ESG integration, as shown in Figure 6. Canada has 4.7 percent of global SRI assets, but 21.3 percent of assets within the positive/best-in-class strategy. The United States accounts for the major global share of assets engaged in ESG integration and impact investing. Meanwhile, Europe holds nearly three-quarters of the global SRI assets in the negative/exclusionary screening strategy, compared with 52.6 percent of global SRI assets.

Figure 6: Regional Share, by Asset Weight, in Global Use of SRI Strategies



Regional Highlights

Europe

In Europe, total assets committed to sustainable and responsible investment strategies grew by 12 percent from 2014 to 2016 to reach \$12.04 trillion. This tally comprises institutional and retail assets from 13 European markets.

Exclusionary screens remain the dominant strategy at \$11.06 trillion, growing 48 percent since 2014 and now represented in 48 percent of the total European professionally managed assets. Norms-based screening is the second biggest SRI approach with over \$5.55 trillion in assets, a growth rate of 40 percent from 2014. Engagement and voting follows quite closely in terms of popularity, with over \$4.65 trillion in assets and 30 percent growth. Recalculating ESG integration in 2014 and 2016 with a narrower definition, Eurosif found that use of this strategy, based on assets affected, grew 39 percent, to reach \$2.88 trillion.²

There is increasing overlap between SRI strategies in Europe, with investment vehicles frequently using more than one. As a result, in percentage terms, the overall tally of SRI has grown by a smaller percentage—12 percent—than each of the constituent strategies.

Impact investing is once again the fastest growing strategy with growth of 385 percent, although the assets remain small (\$107.2 billion). Impact investing is followed by sustainability themed investments with a growth of 146 percent. This is a particularly interesting shift, since this strategy registered the slowest growth during the last review. Renewable energy and energy efficiency remain as the top categories of investment for this strategy. Both impact investing and sustainability themed investments benefited from increasing concerns about climate change, perhaps driven by key international events such as the 2016 Paris Agreement.

Although institutional investors continue to lead the market, the retail sector has grown from 3.4 percent to 22 percent.

The asset allocation distribution registered a significant decrease in equities, at 30 percent of total European SRI assets compared with 50 percent in 2014. There was a sharp increase in bonds, now at 64 percent from the 40 percent registered in 2014. This rise correlates closely with a surge in green bonds, underlining continued climate concerns.

Fiduciary duty considerations have been recognized as a main driver for SRI, sending a very strong message to policy makers. Many fund managers have begun to see ESG considerations as part of their investment obligations in line with fiduciary duty.

United States

US sustainable, responsible and impact investing continues to rise, with total SRI assets at the beginning of 2016 at \$8.72 trillion, up 33 percent from \$6.57 trillion in 2014.

Of this, \$8.10 trillion is held by institutional investors, money managers and community investment institutions applying various environmental, social and governance criteria in their investment analysis and portfolio selection. It also includes \$2.56 trillion in US-domiciled assets held by institutional investors and money managers who filed or co-filed shareholder resolutions on ESG issues at publicly traded companies from 2014 through 2016. Eliminating double counting for assets involved in both strategies yields the overall total

2. In 2014, Eurosif's ESG integration consisted of three categories, including ESG research and analysis made available to mainstream analysts and fund managers. Eurosif removed this category from its 2016 measure of European ESG integration assets and therefore from its overall total of European SRI assets. For more information, please review Appendix 1.

SUSTAINABLE INVESTING IN LATIN AMERICA

The creation of the Latin American Sustainable Investment Forum (LatinSIF), in 2013, has highlighted and assisted numerous initiatives to promote sustainable investing in the region. With the support of financial institutions, stock exchanges, service providers and other key market players, LatinSIF aims to gather knowledge, capacity and resources to developing the sustainable and impact investing market in several countries.

LatinSIF started in Colombia with support from global research firm Sustainalytics, Grupo Sura, Bancolombia, Deloitte and the Colombia Stock Exchange. The Colombia Stock Exchange was one of the first Latin American exchanges, after Brazil's, to sign on to the Sustainable Stock Exchange (SSE) initiative. In addition, the launch of the Green Protocol, an association that seeks to strengthen the ESG credentials of Colombia's main banks and financial institutions, has enabled the creation of "green financing lines" for environmentally sustainable projects.

In Argentina, Acrux Partners, an advisory firm focused on responsible and impact investing in South America, has been in conversation with senior decision makers at the National Pension Fund (ANSES), major banks, private investors, the Buenos Aires Stock Exchange and the government, to advocate that they incorporate ESG factors into their investment analysis and practice. Successes so far include the subscription of the Buenos Aires Stock Exchange to the SSE Initiative and the incorporation of an ESG clause in the first fund of funds the government will launch in 2017.

In Chile, consulting firm Governart and research group Vigeo have been key advocates for the development of sustainable and responsible investing. Achievements to date include the signing of the SSE initiative by the Santiago Stock Exchange and the subsequent launch of the exchange's sustainability index. Since 2016, publicly traded Chilean companies have been required to report on sustainability issues under a regulation issued by the main corporate regulatory office.

In Mexico, the most important driver for responsible investing is international investors. The Mexican Stock Exchange is a partner in the SSE Initiative and has had a sustainability index since 2011. The AFORES (Private Pension Funds) in Mexico, the main domestic investors in the country, are beginning to develop ESG strategies, not necessarily because they see ESG strategies as a value driver, but in response to international pressure. At the same time, the Biological Diversity Summit held in Mexico in 2016 helped spur large enterprises and financial institutions such as ASN Bank and Banorte to start measuring their biodiversity footprint.

Peru's Programme for Responsible Investment (PIR), a founding member of LatinSIF, is an initiative led by the Lima Stock Exchange, Grupo Sura and COFIDE, Peru's state development bank. Created in 2014 after the COP20 in Lima, it has provided technical assistance and training for local investors to develop and implement responsible investment practices. PIR has been a key promoter of new regulation on corporate sustainability reporting that goes into effect March 2017.

Cross-border initiatives are also underway. These include the RI LatAm Conference hosted in Santiago in 2015 and 2016, and the ALAS20, an initiative that seeks to give recognition to excellence in sustainable and responsible practices in investment companies in Brazil, Chile, Colombia, Mexico and Peru. Meanwhile, stakeholders in Argentina, Paraguay and Uruguay have joined together to create an impact investment task force and launch an impact investment fund for the three countries.

of \$8.72 trillion, which represents nearly 22 percent all investment assets under professional management in the United States.

Several factors are driving the growth in ESG assets held by money managers. These include: market penetration of SRI products, the development of new products that incorporate ESG criteria, and the incorporation of ESG criteria by numerous large asset managers across wider portions of their holdings. Much of this activity is coming to light because of increased disclosures by signatories to the Principles for Responsible Investment.

Of the managers that responded to an information request about reasons for incorporating ESG, the top factor was client demand, cited by 85 percent. Sixty-two percent reported that they use some combination of negative screening, positive screening, and ESG integration within their funds. More than half reported using impact investing strategies, and nearly half used sustainability themed investing as a strategy. The incorporation strategy that affected the highest number of assets was ESG integration; extrapolating from the sample of managers, it would affect \$5.8 trillion of SRI assets.

With \$4.72 trillion of ESG assets, a 17 percent increase since the start of 2014, institutional investors play a substantial role in the SRI universe. The leading and often overlapping ESG criteria institutional investors consider are: restrictions on investing in companies doing business in regions with conflict risk (\$2.75 trillion), consideration of climate change and carbon emissions (\$2.15 trillion), and unspecified general environmental, social, and governance criteria (\$1.2 trillion).

Climate change remains the most significant overall environmental factor in terms of assets, affecting \$1.42 trillion in money manager assets and \$2.15 trillion in institutional investor assets—more than three times the amounts affected in 2014. Moreover, shareholders concerned about climate risk filed 93 resolutions specifically on the subject in 2016 and negotiated a number of commitments from the target companies to report on strategic planning around climate change or to reduce their greenhouse gas emissions.

The number of institutions and managers filing shareholder resolutions has remained stable over the past four years. From 2014 to 2016, 176 institutional investors and 49 investment management firms with total assets of \$2.56 trillion filed or co-filed resolutions. In addition to filing shareholder resolutions, managers and institutional investors are also pursuing engagement strategies on ESG issues. Fifty-seven institutional investors reported doing so, as did 61 asset managers.

Looking ahead, regulatory developments that could further promote sustainable investing in the United States are recent decisions by the US Department of Labor (DOL). DOL is responsible for enforcing the Employment Retirement Income Security Act (ERISA) which governs private sector pension plans. In October 2015, DOL rescinded its 2008 bulletin on Economically Targeted Investments, which had discouraged fiduciaries for private sector retirement plans from considering environmental and social factors in their investments, and was a major departure from its 1994 guidance that had essentially stated the opposite. In addition to rescinding the 2008 guidance, DOL issued an Interpretive Bulletin that makes clear that “fiduciaries need not treat commercially reasonable investments as inherently suspect or in need of special scrutiny merely because they take into consideration environmental, social or other such factors.”³

At year-end 2016, the DOL also rescinded another 2008 Interpretive Bulletin, this one relating to the Exercise of Shareholder Rights, and replaced it with guidance that notes the positive role fiduciaries play through the exercise of shareholder rights. The 2008 guidance had appeared to discourage ERISA plan fiduciaries from exercising their shareholder rights. Additionally, the 2016 guidance also reinforced that environmental, social and governance impacts can be intrinsic to the market value of an investment.

Canada

Canada’s responsible investment market is experiencing continued growth. According to survey data from the Responsible Investment Association of Canada, assets managed using one or more responsible investment strategies increased from \$729.0 billion to more than \$1.08 trillion in two years, a 49 percent increase. The growth can be attributed to at least four factors:

- Investment managers are increasingly engaging in responsible investment, including taking ESG issues into account when making investment decisions and signing onto the Principles for Responsible Investment.

3. Federal Registrar, *Interpretive Bulletin Relating to the Fiduciary Standard Under ERISA in Considering Economically Targeted Investments*, A Rule by the Employee Benefits Security Administration on October 26, 2015. Available at <https://www.federalregister.gov/documents/2015/10/26/2015-27146/interpretive-bulletin-relating-to-the-fiduciary-standard-under-erisa-in-considering-economically>.

- There is an increasing awareness of the significance of ESG opportunities and risks when it comes to long-term returns.
- Canada's pension funds grew by \$374 billion over the past two years, an increase of 45 percent.
- Millennial investors are becoming an increasingly important demographic, and are much more likely to consider ESG factors when making investment decisions.

Canadian investors and investment managers employ numerous, often overlapping, sustainable investing strategies, but four strategies are key. The dominant strategy in 2016 was ESG integration (\$1.05 trillion), used in the management of 97 percent of Canadian responsible investing assets. Corporate engagement and shareholder action is the second most prominent strategy, with \$862.1 billion, representing 79 percent of assets. The top three engagement issues are: executive compensation, greenhouse gas emissions and supply chain management. Norms-based screening (\$589.7 billion) and negative screening (\$347.0 billion) represent 54 percent and 32 percent, respectively, of Canada's SRI assets.

Impact investing continues to be a small but important category of SRI. Canadian impact investment assets stood at \$6.7 billion at the start of 2016, an impressive 123 percent increase since 2014. This can be attributed to increasing demand from institutional and high-net-worth investors, growing availability of impact investment products, and a deeper understanding by investors of how to generate positive social and environmental impacts across asset classes.

Recent policy developments in Canada could help drive further growth in responsible investing. Under Ontario's Pension Benefits Act, pension plans have been required since January 2016 to report in their statements of investment policies and procedures whether they incorporate ESG factors and if so, how. Many of Canada's large public sector pension funds supported the Ontario legislation, and it is expected that other provinces will implement similar pension disclosure requirements. On the national front, RIA Canada is part of a broad coalition of advocates who are asking the Canadian federal government to follow Ontario's lead. They seek an amendment to the regulations under the Pension Benefits Standards Act to require federally registered pension plan administrators to disclose whether, and how, they consider ESG issues in investment policy.

Australia and New Zealand

Responsible investment assets managed by asset managers, superannuation funds, banks and advisers in Australia and New Zealand grew substantially, both at retail levels and institutional levels, across all responsible investment strategies.

In both countries combined, SRI assets overall have grown by 248 percent since 2014 to reach \$515.7 billion. These assets now make up a substantial portion of the professional investment market in this region, including 50 percent of professionally managed assets in Australia. This development reflects the strong commitment to ESG integration by some of the region's largest investment institutions across sovereign wealth funds, superannuation and funds management.

In Australia, "core" responsible investment strategies—those incorporating screening, sustainability themed investments, impact investments and community finance—grew 62 percent in one year, to \$37.6 billion in assets under management. Core responsible investment strategies—those most closely related to retail ethical and SRI investments—account for 3.8 percent of Australia's total professionally managed assets (\$978.2 billion), up from 2.5 percent in 2014. This is a key indicator of the rising consumer demand for responsible investment options in Australia that is increasingly shaping the market, and resulting in a flourishing of new investment offerings for an increasingly engaged consumer.

The growth is explained by both performance and inflows. Measured against mainstream equivalent funds and their benchmark index, Australia's core responsible investment funds outperformed across most fund categories and time horizons:

- **Core Responsible Investment Australian Equities Funds** outperformed both the ASX300 and the average large cap Australian equities funds across one, three, five and 10 years.
- **Core Responsible Investment International Equities Funds** outperformed large cap international equities funds over five and 10 years, but slightly underperformed in the short term.
- **Core Responsible Multi-Sector Growth Funds (Balanced Funds)** outperformed their equivalent mainstream multi-sector growth funds over all time periods—one, three, five and 10 years.

In New Zealand, responsibly invested assets grew 28 percent annually from 2014 to 2016 to reach \$53.5 billion. The most significant component of responsible investment in New Zealand involves larger owners and asset managers taking an ESG integration approach across their entire funds (as opposed to offering standalone SRI options). This category constituted 98 percent of total responsible investment assets.

In New Zealand and Australia, there is a continued trend for ESG and ethical factors to be considered systematically across the full financial sector. Consumer demand continues to surge and investment organizations are moving to meet this demand, developing products and options across all asset classes and all investment styles.

Notably, the Australian Stock Exchange now requires its listed companies, under its recently revised Corporate Governance Guidelines, to report on any material exposure to sustainability risks. The New Zealand exchange has also undertaken a recent consultation to investigate the implementation of a similar “comply or explain” reporting requirement for listed companies around ESG issues.

Asia ex Japan

The overall market for sustainable investment in Asia ex Japan has been growing more slowly than in previous periods. As of 2016, \$52.1 billion in assets were managed using one or more sustainable investment strategies. When Sharia-compliant funds are excluded, the total sustainable investment assets total \$34.2 billion. Sustainable investment assets have grown 16 percent between 2014 and 2016, compared to 32 percent from 2012 to 2014.

The most common strategies are ESG integration, representing \$24.5 billion of assets, and negative/exclusionary screening, with \$18.8 billion in assets. The fastest growing strategies are sustainability themed investments with an annualized growth rate of 73 percent, and negative/exclusionary screening with an annualized growth rate of 7 percent.

Although growth in total sustainable fund assets may have slowed, the number of funds available to investors has grown by 15 percent per year from 2014 to 2016, compared with 11 percent from 2012 to 2014, reaching a total of 658 funds.

The largest markets for sustainable investing in Asia ex Japan are: Malaysia (30 percent), Hong Kong (26 percent), South Korea (14 percent) and China (14 percent). The fastest growing market for sustainable investing is China, with a growth of 105 percent since the start of 2014, followed by India (104 percent) and Pakistan (50 percent).

Sustainability themed assets have attracted particular interest in China. These assets have grown 157 percent annually since 2014, from \$450.9 million to \$2.9 billion, a majority of them related to clean energy. This can be attributed to China’s growing interest in green finance and its policy commitments to curtail carbon emissions by 2030. In the coming year, China is expected to make further advances in climate change and environmental policy, including drafting a climate change law and establishing carbon trading regulation. Access to environmental data is still a challenge, but solid data could be provided soon by institutions such as the Institutes of Science and Development, the Chinese Academy of Sciences, and private institutions such as Trucost.

INVESTING FOR IMPACT IN AFRICA

The *African Investing for Impact Barometer*, an annual publication of the Bertha Centre for Social Innovation and Entrepreneurship at the University of Cape Town's Graduate School of Business, documents the range of investments in Africa that combine financial returns and positive impact on society and environment. The Barometer refers to sustainable and responsible investments as the investing for impact market and includes ESG integration, corporate engagement, screening (positive, negative and norms-based), thematic investing and impact investing.

The *Barometer* focuses on the three largest economies in Eastern, Western and Southern Africa: Nigeria, Kenya and South Africa. South Africa holds the biggest share of total assets with 94 percent (\$678 billion) surveyed. Nigeria is second with 4 percent (\$30 billion), followed by Kenya with 2 percent (\$13 billion). Of the \$721 billion of investment assets surveyed across the three countries, 47 percent of all funds implemented one or more sustainable investing strategies.

The fund managers surveyed include asset managers as well as private equity and venture capital firms investing locally across the three countries. The *Barometer* also includes fund managers who have headquarters outside of the countries, but have capital invested in the countries. The survey is compiled from publicly available information sourced from fund manager disclosures on their websites, reports and fund fact sheets as of 2015. Additional information is sourced from regulators and industry associations, again where information is publicly available.

ESG integration and engagement are the most prevalent strategies in South Africa and Kenya, and corporate governance appears to be the most integrated of the ESG categories. South African asset managers appear to be more transparent about ESG integration and engagement relative to Kenya and Nigeria. This can be attributed to the fact that South Africa's largest asset managers and private equity firms are signatories of PRI and/or endorse the Code for Responsible Investing in South Africa, which requires public disclosure of SRI strategies. Kenya and Nigeria have recently adopted stewardship and corporate governance codes that may influence better disclosure in the future.

Negative screening is the dominant form of screening across the three countries. Private equity and venture capital firms are guided primarily by the International Finance Corporation performance standards, particularly in screening out "sin" stocks. Religious based screening is a small but growing practice among asset managers in Nigeria and South Africa, where Islamic finance is developing. These countries have established Sharia-compliant indices on their stock exchanges. Investments in Sharia-compliant portfolios were estimated at \$4 billion and \$28 million in South Africa and Nigeria, respectively.

Overseas investors continue to be the most prominent sustainable investment investors in the region, representing \$18.2 billion in assets. The largest markets with global investors were Hong Kong, with \$12.9 billion in assets, and Singapore, with \$4.3 billion. In emerging markets like China and South Korea, regional and local investors are the main investors in sustainable assets.

As China continues to open up its market, a change could occur in this dynamic. In July 2015, the Chinese government announced it would allow 100 percent foreign-owned fund managers to operate under their own names and market their own products to local clients.

The data collected for Asia's responsible investing review also includes assets managed consistently with Islamic law or Sharia principles. Of the total sustainable investment assets in 2016, 34 percent of the assets (\$17.9 billion) are Sharia-compliant, with annual growth of Sharia-compliant assets since 2014 of 3 percent.

Japan

According to the Japan Sustainable Investment Forum (JSIF), the total sustainable investment market in Japan is measured at \$473.6 billion, up from \$7 billion during the last review. At first glance, this growth appears to be staggering, but can be explained by new survey data and a number of significant changes to the sustainable investment market in Japan since 2014.

Until recently, the scope of JSIF's reporting was limited to publicly available figures pertaining to SRI investment trusts and social impact bonds. Disclosures concerning sustainable investment by institutional investors, including pension funds, were limited, and balances were not publicized. As a result, JSIF was not able to reflect many of these investments in its calculations. However, in 2015, JSIF undertook a survey for the first time of institutional asset owners.

But the surge in Japan's sustainable investing market is not only due to better reporting; it also reflects major developments that have promoted responsible investment. In February 2014, Japan's first Stewardship Code was established, encouraging institutional investors to participate in constructive engagement with the companies in which they invest. Although the principles are voluntary, 201 institutional investors had adopted them as of December 2015. In June 2015, the Corporate Governance Code, which sets rules concerning whistle-blowing, disclosure and stakeholders' rights, was announced. Furthermore, the world's largest pension fund, the Japanese Government Pension Investment Fund (GPIF), became a PRI signatory.

JSIF conducted two surveys focused on sustainable investment, first at the end of 2015 and again in the fall of 2016. In the first survey, 26 respondents (93 percent) reported adoption of the Japanese Stewardship Code. Twenty-seven respondents (96 percent) indicated that they were engaged in sustainable investment.

Combining the data from both surveys, JSIF found that corporate engagement and shareholder action is the dominant strategy at \$289.6 billion, applying to 61 percent of SRI assets. This number includes both general engagement/use of voting at \$130.3 billion and ESG-related engagement/use of voting at \$159.3 billion. ESG integration (\$120.0 billion) is the second biggest approach, with 25 percent of SRI assets. Norms-based screening (\$56.0 billion) and positive/best-in-class screening (\$25.1 billion) follow, with 12 percent and 5 percent, respectively.

Spotlight on Green Finance

The greenhouse gas reduction goals pledged by the world's nations at the 2015 conference of parties to the United Nations Climate Change Conference, also referred to as COP21, is certain to spur further interest and growth in green finance to aid carbon reduction and other environmental initiatives.

The nonprofit Climate Bonds Initiative (CBI) tracks climate bond data across countries and maintains a public list of labelled green bonds. The CBI categorizes its data into two main categories. **Labelled green bonds** are bonds “with use of proceeds defined and labelled as green.”⁴ **Unlabelled climate-aligned bonds**, on the other hand, “do not carry a green label.”⁵ Together, these two categories comprise the **climate-aligned bond universe**, which is \$694 billion globally, according to its latest *State of the Market* report, issued in mid-2016.

What follows are highlights of the green finance markets in China, the United States, Europe and Canada and the national and sub-national policies that are shaping them.

China

China, the world's largest emitter of greenhouse gases, agreed at COP 21 to reduce its carbon intensity—its greenhouse gas emissions in relation to GDP—60 to 65 percent by 2030 from the level in 2005. The People's Bank of China estimates that this goal will require annual investments of \$320 billion to \$640 billion annually, of which 85 percent or more will have to be supplied by the private sector. The decarbonization goals are urgent for domestic political reasons as well, as China's rapid and coal-intensive economic growth has caused staggering levels of air pollution that have compromised public health. As part of China's presidency of the G20 in 2016, the government co-hosted, along with the United Kingdom, a Green Finance Study Group that gathered data and experience from G20 members and international institutions on how to mobilize private capital for environmental initiatives.

After issuing its first corporate green bond only in 2015, China has now become the world's largest issuer of climate-aligned bonds, according to CBI, with \$220 billion in issuances. The bulk of its unlabelled climate-aligned bonds are for the railway and transport sector. It is also developing a labeled green bond market and turning to certification firms such as KPMG, EY and Trucost for assistance.

United States

The United States, the world's second largest emitter of greenhouse gases, pledged to reduce its greenhouse gas emissions by 26–28 percent by 2025 at the UN Climate Summit.

To help meet those targets, the Obama administration developed the Clean Power Plan to set state-by-state standards to reduce carbon dioxide emissions from electric power plants 32 percent from 2005 levels by 2030.⁶ Although the regulations are on hold as they face legal battles from pro-fossil fuel states and businesses and hostility from the Trump administration, other federal policies to galvanize renewable energy production remain in place. In particular, the US Congress in December 2015 passed a budget that included a multi-year extension of solar and wind tax credits, as well as one-year extensions for various other renewable energies such as geothermal and landfill gas.

4. Climate Bonds Initiative, *Bonds and Climate Change: The State of the Market in 2016* (2016), 2. Available at <https://www.climatebonds.net/files/files/CBI%20State%20of%20the%20Market%202016%20A3.pdf>.

5. Ibid.

6. Environmental Protection Agency, *FACT SHEET: Clean Power Plan by the Numbers*. Accessed January 19, 2017, <https://www.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-numbers>.

The multi-year nature of the tax credits has provided predictability to the solar and wind industries in the United States. According to Bloomberg New Energy Finance (BNEF), US clean energy investment trended upward between 2013 and 2015, but declined by 7 percent to \$58.6 billion in 2016.⁷ BNEF explains that this was due to “less pressure” to push through investments after the extension of the tax credits.⁸ It has estimated that the extensions could lead to \$73 billion in new investment and give more than eight million households access to affordable clean energy over time.⁹

Moving to the state level, some states passed referenda in 2016 supporting green finance: Florida approved property tax exemptions for renewable energy devices, and Rhode Island approved green economy bonds. Moreover, as of year-end 2016, 29 states had renewable portfolio standards, which require utilities to sell a specific percentage or amount of electricity generated from renewable sources.¹⁰ California and New York have requirements of meeting 50 percent of their power needs with clean energy by 2030.¹¹

According to CBI, the United States is the second largest issuing country in the climate-aligned bond universe with \$111 billion, or 16 percent of the global total. It is also the largest issuing country of labelled green bonds. Two important sectors in the US market are renewable energy and water: 40 percent of the water-themed investments tracked by CBI are from US issuers, and US issuers have raised \$28 billion for 200 renewable energy initiatives.

CBI identified \$30 billion in climate-aligned US municipal bonds, of which \$4.7 billion were issued just in 2015. Top climate-aligned muni bonds issuers are New York, California and Massachusetts, and bonds are primarily going towards transport and water projects. CBI notes that the main reason for the popularity of the muni bond market in the United States is because bonds are “frequently structured to give tax breaks to bond buyers.”¹²

Another source of US green finance is alternative investments. The US SIF Foundation [Report on US Sustainable, Responsible and Impact Investing Trends 2016](#) identified 354 alternative investment funds with \$197 billion in assets that considered environmental criteria in portfolio selection at year-end 2015.

Among the private equity and venture capital funds in this group, the top specific ESG issue was clean tech, with 112 funds identified with \$80 billion in assets. Fifty-six funds with \$74 billion in assets incorporated climate change and carbon emissions in their investment process. The primary factors considered by property funds were all “green” related: green building and smart growth (\$60 billion), climate change and carbon emissions (\$47 billion) and pollution and toxics (\$39 billion).

Europe

The European Union has committed to cut greenhouse gas emissions by at least 40 percent by 2030 while modernizing the EU’s economy and delivering on jobs and growth for all European citizens. To that end, in November 2016, the European Commission presented a package of measures, under the denomination of “Clean Energy for All Europeans,” to keep the European Union competitive. This package finds that an extra €177 billion is needed in Europe annually from 2021 onwards to reach the 2030 climate and energy goals. New innovative funding and investment mechanisms will be essential to achieve this.

7. See: Bloomberg New Energy Finance, *Global Trends in Clean Energy Investment* (2017). Available at <https://about.bnef.com/clean-energy-investment/> and “Global Clean Energy Investment Fell 18% in 2016 with Slowdown in China,” Greentech Media, January 12, 2017, <https://www.greentechmedia.com/articles/read/global-clean-energy-investment-dropped-18-in-2016-with-slowdown-from-china>.

8. “Global Clean Energy Investment Fell 18% in 2016 with Slowdown in China,” Greentech Media, January 12, 2017, <https://www.greentechmedia.com/articles/read/global-clean-energy-investment-dropped-18-in-2016-with-slowdown-from-china>.

9. “What Just Happened in Solar Is a Bigger Deal Than Oil Exports,” Bloomberg, December 17, 2015, <https://www.bloomberg.com/news/articles/2015-12-17/what-just-happened-to-solar-and-wind-is-a-really-big-deal>.

10. National Conference of State Legislatures, *State Renewable Portfolio Standards and Goals*. December 28, 2016, <http://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx>.

11. Ibid.

12. Ibid, 16.

Currently, the United Kingdom and France are the third and fourth largest issuers of climate-aligned bonds, according to CBI, each with 9 percent of the issuances in 2016. Somewhat further behind is Germany, with 2 percent of the climate-aligned bond universe. Altogether, Western Europe accounted for \$195 billion in climate-aligned issuances. For France and the United Kingdom, climate-aligned issuances are centered on financing rail networks; in Germany, renewable energy projects predominate.

In light of the global commitment to shift to a low carbon economy, the European green bond market is likely to continue to grow in the years to come, attracting more diverse issuers and investors. The EU market has experienced participants and increasing political support from the EU institutions. The Europe 2020 Project Bond Initiative led by the European Investment Bank with the European Commission supports capital market financing of projects and promotes increasing the use of bond financing at the project level. This initiative aims to increase the market share of asset-based securities in the EU. Nevertheless, the green bond market still only constitutes a very small share (around 0.13 percent) of the total EU bond market. The market is particularly strong not only in the UK, France and Germany, but also in the Nordic countries, the Netherlands and Switzerland.

Canada

At COP 21, the Canadian government committed to reduce the country's greenhouse gas emissions by 30 percent below 2005 levels by 2030. Through its 2016 budget, the federal government has set aside funding to invest in renewed infrastructure and climate mitigation efforts and to support clean innovation, jobs and growth.

The federal government has committed to green bond issuances as well. Prime Minister Justin Trudeau's mandate letter to the Minister of Infrastructure and Communities directed him to work with the Minister of Finance to prepare for "the launch of a new Canadian Green Bond." At the same time, several provincial governments have also indicated commitments to low-carbon investments.

Canada's climate-aligned bond universe has grown to \$27 billion, or 4 percent of the world total, according to CBI, making it the fifth largest issuer after France and the United Kingdom. Of all the thematic areas where proceeds are invested, energy is the largest single theme, accounting for 61 percent of the climate-aligned universe. Transport is the second largest theme, accounting for 28 percent.

When Export Development Canada (EDC) issued its first green bond in January 2014, the AAA \$300 million issuance sold out in 15 minutes and was oversubscribed by \$200 million. In December 2015, the EDC issued a second green bond of \$300 million.

The Province of Ontario successfully launched a green bond program in October 2014 with an inaugural green bond of C\$500 million. In January 2016, Ontario launched a second green bond of C\$750 million, and has recently announced plans to issue its third green bond during the 2017 fiscal year.

In 2015, Canada's first green retail bond was issued, for C\$300,000. CoPower, the issuer, is using the funds raised to finance community-scale clean energy projects across North America. Retail bonds like CoPower and SolarShare (a renewable energy co-op) are significant in their ability to raise awareness among communities and individuals who might not otherwise have exposure to green investing.

Australia and New Zealand

The last two years have seen a distinct shift in Australasia from talking about investment opportunities in green finance to capital moving into green finance opportunities. After a number of years during which investors in this region undertook detailed assessments of their environmental exposures and portfolio carbon footprints, capital is now starting to flow to green finance on a scale that is rapidly rising.

Investments in sustainability themed vehicles tripled from 2014 to 2015 from \$AU8 billion to \$AU24 billion. While multiple themes fall under this sustainable investing strategy, what dominates are low carbon strategies, green property funds, green bonds and sustainable agriculture investments.

The most recent two years have seen high profile allocations of capital being made in green finance that include:

- Green themed bonds: These have been issued by major banks in Australia, by property managers, and by a state government.
- Low carbon tilting of portfolios: A major superfund in Australia implemented a low carbon tilt across its full international equities allocation.
- Private equity allocations: Major asset owners in the region have been putting in place more active private equity strategies with explicit targets for low carbon or clean energy companies that offer renewable energy or energy efficiency solutions.
- Green property funds: Australian's listed property groups have long been leaders in managing ESG issues in the built environment, and more property funds (largely commercial real estate) are positioning themselves as green themed funds where assets are managed to a very high environmental standard.
- Sustainable agriculture: As more large institutional investors are focusing on the opportunities in agriculture, the ESG and sustainability related risks and opportunities are starting to become key features of investment deals across agriculture, horticulture and forestry.
- Impact investment products: The first water bond was recently issued, and there are now clean energy venture capital impact funds.

Some key institutions have been integral in unlocking capital flows into environmental finance, most specifically the government backed, \$AU10 billion Clean Energy Finance Corporation, which is tasked with co-investing with private investors into low carbon assets and businesses, with a model very similar to the UK's Green Investment Bank.

Conclusion

In almost all the markets represented in this report, sustainable investing has grown in both absolute and relative terms in the two years since the beginning of 2014. As a result, sustainable investing represents a significant share of the market not only in Europe and Australia, where it accounts for approximately 50 percent of their professionally managed assets, but also in the United States and Canada, where its share of the market ranges from 22 to 38 percent. Thanks to increased reporting from Japan, more information is available on a broader range of sustainable investing practitioners.

The global growth in sustainable investing demonstrates the increasing demand among investors—both institutional and retail—for greater disclosure and consideration of ESG issues. Several GSIA members report that the consideration of fiduciary duty has been an important driver for sustainable investing, indicating that SRI is becoming more accepted by a wider audience than in years past.

Concern over climate change has also been a driving force, particularly in the wake of the Paris Agreement. New green financing products have appeared, and climate-aligned bonds are continuing to show strong demand. New markets such as China are contributing to this rise as well.

Finally, pension funds around the world are demonstrating that they view sustainable investing as critical to long-term investing and risk mitigation. Often comprising the largest percentage of institutional assets in their region, superannuation funds and pension funds are increasingly requesting ESG integration in their investments, and many are becoming signatories to the Principles for Responsible Investment.

Appendix I: Methodology and Data

Each region covered by this report uses a slightly different method to collect data for its respective regional report. The consolidation made in this report is made on a best effort basis, but some regional inconsistencies may remain, notably in impact investing. All 2016 assets are reported as of December 31, 2015, except for Japan which reports as of March 31, 2016, and currencies are converted to US dollars at the exchange rate prevailing on December 31, 2015, for comparability. Historical 2014 data are reported as of December 31, 2013, except for Japan which is reported as of September 30, 2014. The 2014 asset data (unless otherwise specified) have also been converted into US dollars at the exchange rate prevailing on December 31, 2015, in order to avoid introducing currency exchange rate trends into the calculations. Readers should consult each regional report for more detail on data and data collection methods.

Europe

Data collection for Eurosif's European study was conducted using an Excel-based questionnaire including both quantitative and qualitative questions, and was sent to key SRI market participants including asset managers, banks and asset owners (pension funds, universities, foundations, state owned players and insurance companies). The study covers 13 distinct markets: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Poland, Spain, Sweden, Switzerland and the United Kingdom. In total, 278 asset managers and asset owners with combined assets under management of \$20 trillion participated in the survey, representing market coverage of 81 percent. In a limited number of cases where survey responses from key industry players were not received, Eurosif and the national SIFs were able to enhance the data sample by using publicly available information.

The 2016 data used in this report is slightly different than what is reported in the 2014 *Review*, due to a change in how ESG integration assets were measured. In 2014, ESG integration included three categories: 1) ESG research and analysis made available to mainstream analysts and fund managers; 2) systematic consideration/inclusion of ESG research/analyses in financial ratings/valuations by analysts and fund managers; and 3) mandatory investment constraints based on financial ratings/valuations derived from ESG research/analyses. In 2016, Eurosif removed the first category from its 2016 measure of European ESG integration assets and therefore from its overall total of European SRI assets. However, it was not possible to recalculate total European SRI assets for 2014 based on the revised definition of ESG integration; therefore, this report used the 2014 SRI total inclusive of the prior definition of integration. More detail on Eurosif's current methodology is available in the [European SRI Study 2016](#).

United States

In the United States, the US SIF Foundation, from May through July 2016, sent a confidential, personalized survey link by email to 512 investment management firms and 1,144 institutional asset owners identified in previous surveys as practicing sustainable investing strategies or believed to be new entrants to sustainable investing practice. Survey recipients were asked to detail whether they considered ESG issues in investment analysis and portfolio selection, to list the issues considered, and to report the value of the US-domiciled assets affected as of December 31, 2015. They were also asked to report their total US-domiciled assets as of year-end 2015 and whether they filed shareholder resolutions or engaged in other shareholder engagement activities. The research team also collected additional data from public and third-party sources. In total, the US SIF Foundation research team researched 797 money managers and 1,660 institutional investors. Of this universe, it identified 477 institutional investors and 300 managers that incorporate ESG criteria in investment analysis or portfolio selection. It also identified a somewhat overlapping group of 225 institutional investors or money managers that filed or co-filed shareholder resolutions on ESG issues. More

detail on the methodology is available in the [Report on US Sustainable, Responsible and Impact Investing Trends 2016](#), available from the US SIF Foundation website.

Canada

In Canada, the Responsible Investment Association contacted asset management firms directly, requesting information on sustainable investing assets under management, effective December 31, 2015. RIA emailed survey questionnaires to participants, and followed up by telephone. The survey results were combined with publicly available data on retail sustainable investing funds compiled by the RIA. Data on impact investing was obtained from a survey of community investment providers across Canada and was combined with other publicly available information and other data. Pension fund assets were gathered from publicly available sources combined with interviews with fund representatives. More detail on the methodology is available in the [2016 Canadian Responsible Investment Trends Report](#).

Australia and New Zealand

In Australia and New Zealand, the Responsible Investment Association Australasia (RIAA) undertook a survey of 69 fund managers, superannuation funds, financial advisers, banks and community investment managers to collect data as of December 31, 2015. Primary data was then collated along with data from a range of other sources. Morningstar provided information on total assets under management and the average performance of certain managed fund categories. Where survey responses were not received, public information was used as available. More detail on the methodology is available in the *Responsible Investment Benchmark Report 2016 Australia* and *Responsible Investment Benchmark Report 2016 New Zealand*, both available on the [RIAA website](#).

Asia ex Japan

An independent consultant collected and analyzed data on Asia's sustainable assets from 2013 to 2015. Data was collected using Bloomberg Professional Service, Thomson Reuters, Eikon and other publically available sources. Market data for Korea was provided by KoSIF. Research was conducted on 13 markets: Bangladesh, China, Hong Kong, India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam. Sustainable investments were categorized into one of the seven strategies defined and used by the Global Sustainable Investment Alliance. Assets were categorized according to the dominant strategy in order to avoid double counting.

Japan

The Japan Sustainable Investment Forum (JSIF) undertook two surveys to provide the data included in this report. The first survey took place from November to December 2015; 59 institutions received the survey and 28 responded. The second survey took place from September to October 2016, and resulted in 31 responses. One key difference from the 2014 report is that the 2015 survey was sent to institutional investors, while previously the report relied only on information from public retail funds. The 2015 survey also included questions on corporate engagement, which was not previously tracked.

Appendix 2: Glossary

Best-in-Class/Positive screening: Investment in sectors, companies or projects selected from a defined universe for positive ESG performance relative to industry peers.

Corporate engagement and shareholder action: Employing shareholder power to influence corporate behavior through direct corporate engagement (i.e. communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

ESG: Environment, social and governance—refers to sustainable investment criteria used alongside traditional financial criteria in managing and selecting investments.

Institutional investors: Organizations that pool large sums of money, including pension funds, insurance companies, investment companies, foundations, charities, public authorities and universities.

ESG integration: Explicit consideration of environmental, social and governance factors in the investment decision-making process.

Impact investing: Targeted investments, typically made in private markets, aimed at solving social or environmental problems. Impact investing includes community investing, where capital is specifically directed to traditionally underserved individuals or communities, or financing that is provided to businesses with a clear social or environmental purpose.

Norms-based screening: Screening of investments based on compliance with international norms and standards such as those issued by OECD, ILO, UN and UNICEF; may include exclusions of investments that are not in compliance with norms or standards or over and underweighting.

Sustainable investment: An approach to investment where environmental, social or governance factors, in combination with financial considerations, guide the selection and management of investments.

SRI: A generic term covering sustainable, responsible, socially responsible, ethical, environmental, social investments and any other investment process that incorporates environmental, social and governance issues.

Sustainability themed investment: Strategy that addresses specific sustainability issues such as climate change, food, water, renewable energy/clean technology and agriculture.

Appendix 3: Data Table

2014 \$Bn	Europe	United States	Canada	Australia New Zealand	Asia ex Japan	Japan	Global
Negative/exclusionary screening	\$7,470.81	\$4,441.00	\$117.86	—	\$16.55	—	\$12,046.23
ESG integration	\$2,071.04	\$4,739.00	\$564.97	\$129.04	\$23.41	—	\$7,527.46
Corporate engagement and shareholder action	\$3,570.76	\$1,716.00	\$630.90	\$0.02	\$1.16	—	\$5,918.84
Norms-based screening	\$3,960.84	—	\$410.37	\$13.86	—	—	\$4,385.06
Positive/best-in-class screening	\$385.37	\$501.00	\$2.11	—	\$1.73	—	\$890.21
Sustainability themed investing	\$64.27	\$30.00	\$35.43	\$3.86	\$2.09	\$1.81	\$137.47
Impact/community investing	\$22.09	\$69.00	\$2.98	\$1.65	\$0.00	\$5.16	\$100.88
Total	\$10,774.61	\$6,572.00	\$728.98	\$148.42	\$44.94	\$6.97	\$18,275.93

2016 \$Bn	Europe	United States	Canada	Australia New Zealand	Asia ex Japan	Japan	Global
Negative/exclusionary screening	\$11,064.15	\$3,574.64	\$347.00	—	\$18.80	\$18.67	\$15,023.26
ESG integration	\$2,884.52	\$5,811.21	\$1,051.83	\$477.02	\$24.48	\$119.95	\$10,369.01
Corporate engagement and shareholder action	\$4,654.35	\$2,558.20	\$862.10	—	\$1.05	\$289.59	\$8,365.29
Norms-based screening	\$5,545.67	—	\$589.73	\$18.91	\$0.05	\$55.96	\$6,210.32
Positive/best-in-class screening	\$537.78	\$246.79	\$219.27	—	\$1.38	\$25.07	\$1,030.29
Sustainability themed investing	\$158.32	\$73.27	\$67.10	\$17.03	\$6.25	\$8.60	\$330.56
Impact/community investing	\$107.18	\$123.40	\$6.65	\$2.72	\$0.06	\$7.96	\$247.96
Total	\$12,039.57	\$8,723.22	\$1,085.97	\$515.73	\$52.07	\$473.57	\$22,890.14

Growth 2014–2016	Europe	United States	Canada	Australia New Zealand	Asia ex Japan	Japan	Global
Negative/exclusionary screening	48.1%	-19.5%	194.4%	na	13.5%	na	24.7%
ESG integration	39.3%	22.6%	86.2%	269.7%	4.6%	na	37.7%
Corporate engagement and shareholder action	30.3%	49.1%	36.6%	na	-8.9%	na	41.3%
Norms-based screening	40.0%	na	43.7%	na	na	na	41.6%
Positive/best-in-class screening	39.5%	-50.7%	10273.0%	na	-19.9%	na	15.7%
Sustainability themed investing	146.3%	144.2%	89.4%	340.6%	198.3%	374.3%	140.5%
Impact/community investing	385.1%	78.8%	123.2%	64.6%	na	54.1%	145.8%
Total	11.7%	32.7%	49.0%	247.5%	15.9%	6689.6%	25.2%

Note 1: Asia ex Japan 2014 assets are represented in US dollars at the exchange rate as of year-end 2013. All other assets—for both 2014 and 2016—for non-US markets are expressed in US dollars at the exchange rate for the applicable non-US currency at year-end 2015. Asia's 2014 assets were reported in year-end 2013 dollars because no data about the mix of base currencies was available.

Note 2: The Japan 2014 values for SRI strategies of ESG integration, corporate engagement/shareholder action and positive/best-in-class screening were non-zero in 2014, but because they were so small, and were gathered using a different data collection process, the calculation of the growth between 2014 and 2016 is not included. Growth between 2014 and 2016 that was not able to be calculated because data is missing or non-comparable is labeled "na" to represent that that data point is not available.

Note 3: Europe's 2014 ESG integration number has been adjusted to correspond to the narrower definition Eurosif used in 2016. Because investors may use more than one SRI strategy, it is unclear how the narrower definition of ESG integration, if employed in 2014, would have affected total SRI assets in Europe in 2014. Therefore, the 2014 SRI total is presented here unchanged from the total presented in the 2014 *Review*.

Acknowledgements

The Global Sustainable Investment Alliance thanks Kristin Lang, Christi Electris and Andreea Rodinciuc of the Croatan Institute for collating and analyzing the data from Japan Sustainable Investment Forum, PRI's Asia staff and the GSIA member organizations for the *2016 Global Sustainable Investment Review*. We thank these Croatan Institute staff members and Farzana Hoque and Meg Voorhes of US SIF for additional writing contributions on the *Review*.

RIA Canada: The Canadian research for this report was made possible by IA Clarington Investments, NEI Investments, OceanRock Investments and RBC.

Eurosif: The European research for this report was made possible with the financial support from Candriam Investors Group, Degroof Petercam, Mirova Responsible Investing, Northern Trust, OFI Asset Management and Etica SGR.

PRI: All data and content related to Asia (ex-Japan) was gathered and prepared by Mary Ho of SustainComm Ltd), with support from the PRI. PRI would also like to thank Karl C.S. Yang, Executive Director, KoSIF, for providing the market data for South Korea.

US SIF: The US research for this report was made possible by a grant from Wallace Global Fund and financial support from Bloomberg, Calvert Investments, Candriam Investors Group, JP Morgan Chase, TIAA, KKR, MacArthur Foundation, Neuberger Berman, Saturna, Bank of America, BlackRock, CBIS, Community Capital Management, ImpactUS, Legg Mason Global Asset Management, Morgan Stanley Institute for Sustainable Investing, Sentinel Investments, Trillium Asset Management and Walden Asset Management.

RIAA: The research on Australia and New Zealand for this report was made possible by financial support from: Australian Ethical, BT Financial Group, Northern Trust Asset Management, New Zealand Super Fund and Teachers Mutual Bank.



www.gsi-alliance.org

Bloomberg is a proud sponsor of

The 2016 Global Sustainable Investment Review

Environmental, Social and Governance Analysis

Bloomberg Environmental, Social and Governance (ESG) products enable all investors across a range of asset classes to understand the risks and opportunities associated with potential investments or counterparties as the market continues to embrace ESG factors.

Bloomberg provides analytical models and material ESG data to shed light on sustainability performance for approximately 10,000 publicly-listed companies globally. Bloomberg offers decision-useful models, sustainability news, research, indices, funds, energy & emissions data, legal & regulatory as well as robust screening, scoring and other portfolio optimization tools.

For more information visit
bloomberg.com/professional/sustainable-finance
or call us at +1 212 318 2000.