

TIAA-CREF: Leadership in

Responsible Investment

2015 REPORT



Financial Services



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Responsible Investment at TIAA-CREF:

Seeking competitive returns while making a positive impact.

For more than four decades, TIAA-CREF has been a leader in Responsible Investment, and today, we are proud to be one of the largest U.S. asset managers in this space. By incorporating Environmental, Social and Governance (ESG) factors into our investment strategies, we aim to deliver long-term investment returns while promoting broader economic development, positive societal change, and a healthier environment for future generations.

Our clients, who entrust us with \$639 billion in assets under management,¹ look to us to help them meet their financial goals and achieve lifelong financial well-being. One of the many ways we strive to make a difference in their lives is to provide ESG-focused investment options that can play a core role in a well-diversified portfolio. Our Social Choice products, with over \$17 billion in assets under management¹ are the most visible representation of this commitment. They enable our clients to align investments with RI outcomes without sacrificing performance.

This report highlights our Responsible Investment activities during 2014 and 2015. Notably, we added two new funds to our Social Choice lineup, providing even more opportunity for investors to take advantage of our expertise and approach. We were also proud to receive the U.S. Environmental Protection Agency's 2015 ENERGY STAR Partner of the Year award. This marks our eighth consecutive win, and our sixth consecutive year at the Sustained Excellence level—the program's highest honor.

TIAA-CREF has been making a difference for nearly a century now. Our commitment to Responsible Investment is grounded in our innate desire to serve and our relentless drive to perform. As we strive to deliver outcomes that matter to our clients, our commitment to doing good while performing well remains as strong as ever. We hope you enjoy this year's report.

Roger W. Ferguson, Jr.
President and Chief Executive Officer

Robert Leary
EVP, President of Asset Management



Our Responsible Investment approach

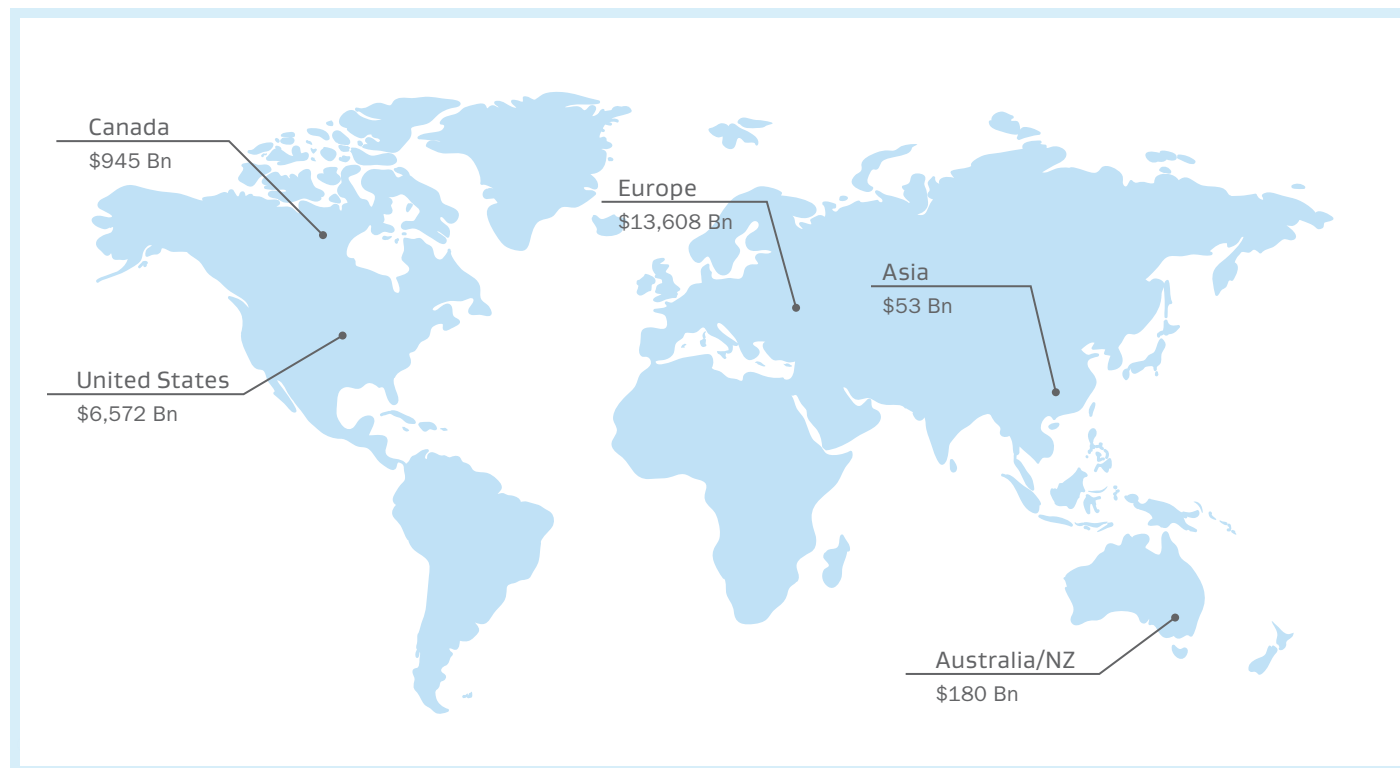
In our nearly 100-year history, TIAA-CREF has focused on providing the best investment outcomes for our clients. We believe that the consideration of ESG factors can produce competitive, long-term financial returns for our clients while also contributing to positive societal outcomes, broader economic development and a healthy environment for future generations.

According to the Global Sustainable Investment Alliance, at least \$21.4 trillion of professionally managed assets incorporate ESG considerations into their investment profile. This represents 30.2% of the funds under management in the regions surveyed, demonstrating the scale and scope of this trend.

Responsible Investment encompasses a wide range of approaches that incorporate ESG factors into investment decision-making and ownership practices. It is an investment discipline that spans investment analysis, due diligence and ongoing monitoring of our portfolios.

As Responsible Investment becomes a more important feature of the global financial landscape, it is increasingly clear that success in this area comes from organizational commitment as well as specific actions. At TIAA-CREF, we are committed to implementing these principles at the firm, asset class and product levels, always with the focus on achieving competitive returns and value.

Responsible Investment grows globally



Source: GSIA 2014 Report

The market for investments that take into account ESG considerations is significant and growing globally. These statistics cover a range of Responsible Investment approaches, including ESG leadership, impact and community investing, ESG integration, corporate engagement and shareholder action.

Committed to Responsible Investment leadership

Managing Director Amy O'Brien leads the growing Responsible Investment team within TIAA-CREF Asset Management (TCAM). The team is dedicated to providing strategic leadership and implementation guidance for our Responsible Investment initiatives, including the organization's obligations as a signatory to the UN-supported Principles of Responsible Investment (PRI). "Among our team's primary mandates are to establish and manage the ESG strategy utilized within TCAM's proprietary Social Choice investment fund suite and other ESG focused products," says Amy. "We also establish and manage TCAM's Impact Investing portfolio made up of private market and real estate related investments in projects, companies and funds. Additionally, in partnership with TIAA-CREF portfolio management and research groups, our team oversees the integration of ESG considerations into investment decisions across asset classes."



Achievements in 2014/2015



Outcomes:

In 2014, we **cut greenhouse-gas emissions** across our real estate portfolios by approximately **47,750 metric tons** through improved efficiencies, which lowered utility costs by an estimated \$13 million.



Investment options:

In August 2015, we launched the **TIAA-CREF Social Choice Low Carbon Equity Fund** and the **TIAA-CREF Social Choice International Equity Fund**. Investors now have a broader range of investment choices for core portfolio allocations with a goal of maintaining higher ESG performance than broad asset-class benchmarks.



Commitments joined:

TIAA-CREF is a founding member of the **Investment Leaders Group**, a three-year project designed to influence mainstream thinking on investment towards responsible, long-term value creation.

TIAA-CREF is a member of the **Global Real Estate Sustainability Benchmark** initiative, an international initiative that seeks to evaluate and improve sustainability best practices in the global real estate sector.



Awards:

TIAA-CREF received the U.S. Environmental Protection Agency's **2015 ENERGY STAR Partner of the Year award** for the eighth consecutive year, and for the sixth consecutive year at the Sustained Excellence level—the program's highest honor.



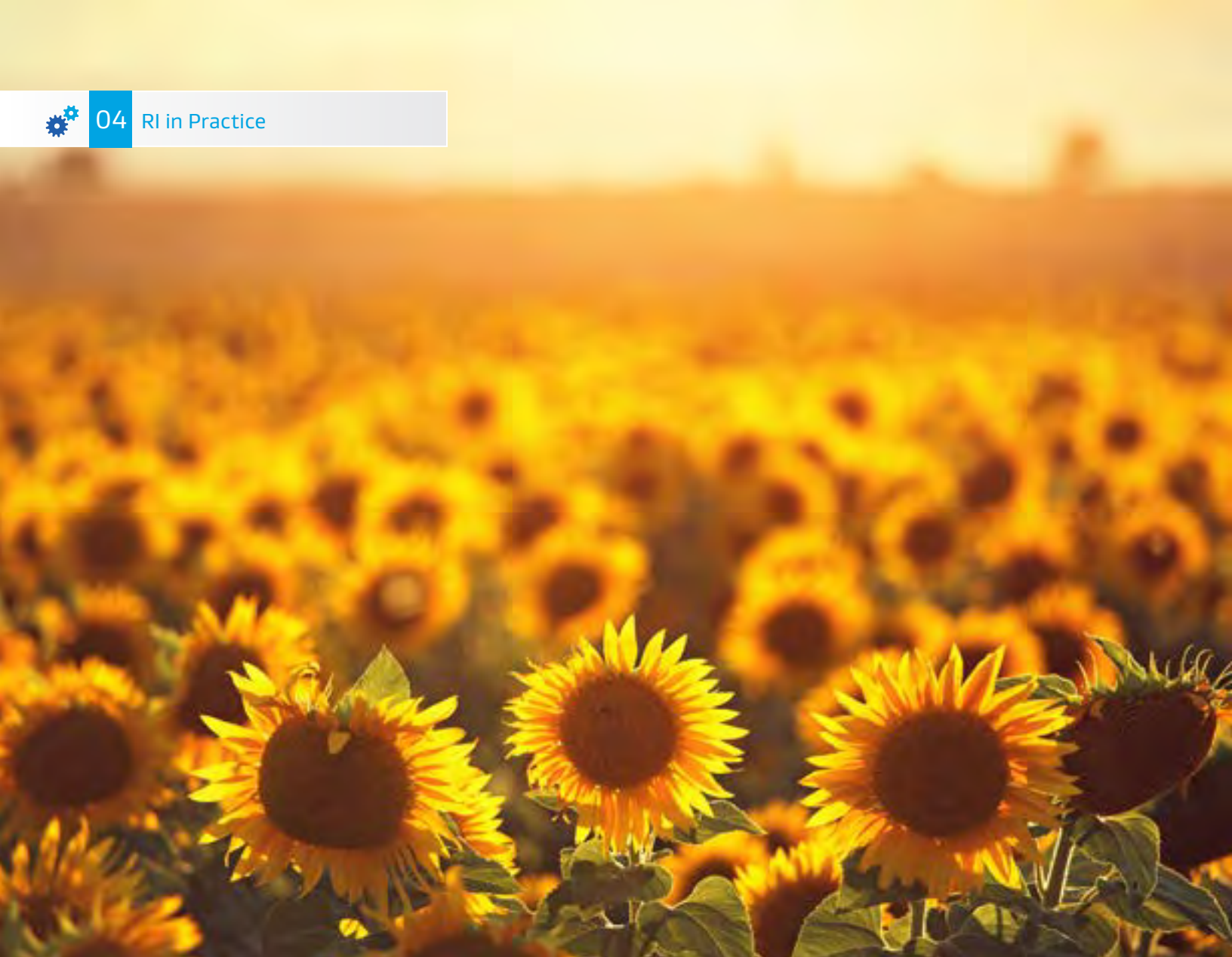
Size of influence:

We managed **\$17.3 billion in assets across our Social Choice product suite**,² making TIAA-CREF among the largest managers of ESG mandates.

Our program to date has allocated over **\$2 billion to Proactive Social Investments**, TIAA-CREF's proprietary framework for identifying public fixed income securities that help provide competitive risk-adjusted returns through potential and clear measurable environmental or social benefits.

TIAA's General Account Social Impact Investment Program portfolio totalled **over \$700 million**.² In 2014, we made **\$114.5 million in new investment commitments** focused on **low-income communities**. These commitments provided investment support in areas such as affordable housing, financial inclusion and basic services like childcare, education, healthcare and environmental improvements.

Through our over **\$5 billion farmland platform**,¹ we direct capital to land maintenance and development, and integrate sustainable farming best practices into our investment management process.



Responsible Investment in practice

TIAA-CREF has a long-standing history of actively supporting the development of Responsible Investment principles. Our commitment is a multi-faceted effort and involves the following key approaches: developing and advancing RI practices; incorporating ESG factors in investment decisions; engaging with our portfolio companies and other stakeholders; and promoting transparency and accountability. Consistent with those areas, we have organized the remainder of this report around the following four themes:

- Providing thought leadership and collaborating with our peers
- Incorporating ESG factors across our portfolios
- Promoting active ownership
- Achieving accountability through reporting

Providing thought leadership and collaborating with our peers

The landscape of Responsible Investment is evolving quickly. Collaboration with peers is paramount to our organizational commitment to expand and improve RI practices. Our efforts range from addressing ESG issues across asset classes, enhancing ESG disclosure, providing research and analysis that underpin specific investment strategies, and providing leadership to advance industry best practice and standards.

TIAA-CREF knows first-hand that putting principles into practice can be challenging. In order to contribute to the advancement of this space, in 2013, we became one of the founding members of the Investment Leaders Group (ILG). This three-year project is designed to promote understanding of how investors can realize positive long-term investment returns by understanding and managing for environmental and social factors. The group, comprised of 11 global asset owners and managers, is working together to shift the investment chain toward responsible, long-term value creation for companies and investors. In May 2014, the ILG released its first report, *The Value of Responsible Investment*, outlining the business case for taking action.³

This initiative complements TIAA-CREF's involvement with the UN Principles for Responsible Investment (UN PRI), which we joined in 2009. The UN PRI is an international network of investors seeking to incorporate ESG issues into investment practices across asset classes. We continue to serve on the steering committee of the Principle for Investors in Inclusive Finance, which focuses on expanding access to financial products and services for low-moderate income communities and underserved populations.

We also serve in a leadership role in:

- **Global Impact Investing Network Investor Council**, an organization dedicated to increasing the scale and effectiveness of impact investing
- **Principles for Responsible Investment in Farmland**
- **Global Initiative for Sustainability Ratings**, a multi-stakeholder initiative to design and steward the development of a global ESG ratings standard

In addition, we are institutional members of:

- **The US Forum for Sustainable and Responsible Investment (US SIF)**, an organization dedicated to advancing dialogue, promoting awareness and increasing the focus for investors on the value of responsible investing

- **Greenprint Center at Urban Land Institute**, an industry program to develop an international benchmarking protocol to track and report on energy, emissions, water and waste as a means to improve environmental performance
- **Global Real Estate Sustainability Benchmark (GRESB)** organization, an international initiative that seeks to evaluate and improve sustainability best practices in the global real estate sector
- **Council of Institutional Investors**, an association of pension funds, employee benefit funds, endowments and foundations that works to educate members and the public on effective corporate governance, shareholder rights and related investment issues
- **International Corporate Governance Network (ICGN)**, an investor-led organization of governance professionals, ICGN's mission is to inspire and promote effective standards of corporate governance to advance efficient markets and economies worldwide

Many Responsible Investment approaches depend upon improving the quantity and quality of ESG metrics and data available to investors. TIAA-CREF is committed to supporting ESG disclosure frameworks and the work of standard-setting bodies across asset classes.

TIAA-CREF also seeks to engage individual investors on RI issues. In early 2014, we conducted a survey of our retirement plan participants, assessing their perceptions of RI and their holdings in ESG funds to better understand investor preferences and trends in this area. This research serves to advance broader investor education and awareness of the field. Results found that:⁴

- Interest in ESG is strong – 60% of those not currently invested in ESG funds are interested in these options
- Millennials and women are most interested in ESG options
- Investors look for competitive returns from ESG funds, but won't give up return for social outcomes
- Knowledge on ESG options is limited
- Investors prefer ESG leadership and a multi-dimensional view of ESG performance

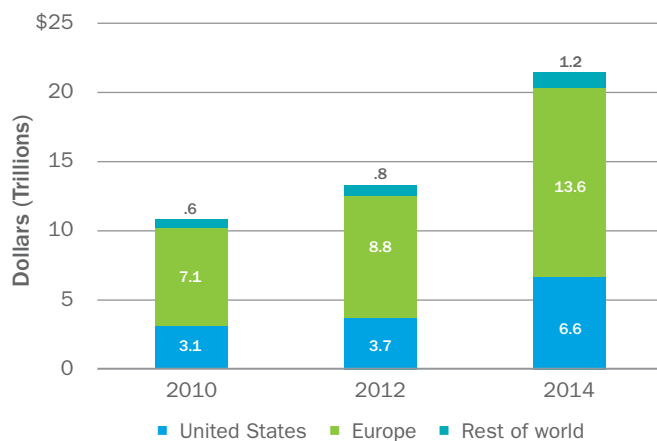


From ideas to good practice

TIAA-CREF is a proud member of US SIF—The U.S. Forum for Sustainable and Responsible Investment, and a benefactor sponsor of the US SIF Foundation’s flagship biennial research project, the Report on US Sustainable, Responsible, and Impact Investing Trends—a critical benchmarking measure for the industry. The 2014 US SIF Report serves as an important industry resource to track the evolution and growth of Responsible Investment and various ESG strategies and vehicles in the United States. The US SIF, and GSIA (Global Sustainable Investment Alliance), among other data sources helps TIAA-CREF obtain a robust, global picture of the state of Responsible Investment.

RI market growth

Global (\$21.4 trillion) and United States (\$6.6 trillion) market



Incorporating ESG factors across our portfolios

At TIAA-CREF, we pursue opportunities across asset classes that provide competitive returns for our clients. Within specific strategies, we may consider ESG criteria to inform the analysis of and due diligence on investment opportunities and to guide the management and monitoring of our holdings. We incorporate ESG factors across our portfolio through three primary approaches:

- ESG-focused investments
- Impact-investing strategies
- ESG integration across asset classes

ESG-focused investments

Our Social Choice portfolios aim to provide competitive, long-term performance through investments in public securities that meet specific ESG criteria. Combined, these products hold \$17.3 billion as of June 30, 2015, offering equity, fixed income and balanced strategies:

Social Choice Account – The CREF Social Choice Account, launched in 1990, is a blended stock/bond variable annuity that incorporates ESG criteria into investment decision making.⁵

Social Choice Equity – The TIAA-CREF Social Choice Equity Fund is a U.S. equity fund that seeks to match the characteristics of the Russell 3000® Index while giving special consideration to certain ESG criteria.

Social Choice Bond – The TIAA-CREF Social Choice Bond Fund is an actively managed fund that invests in U.S. fixed income securities while emphasizing ESG criteria in the selection process. Social Choice Bond also leverages our proprietary Proactive Social Investment (PSI) framework to invest in fixed income securities that deliver measurable social and environmental outcomes alongside competitive risk-adjusted return potential. See page 11 for more detail about PSI.

Expanding our Social Choice Funds suite

In August 2015, we proudly launched the TIAA-CREF Social Choice Low Carbon Equity Fund and the TIAA-CREF Social Choice International Equity Fund. These mutual funds complement the existing Social Choice funds and continue our long-standing commitment to Responsible Investment.

Social Choice Low Carbon – The TIAA-CREF Social Choice Low Carbon Equity Fund is a U.S. equity fund that seeks to match the characteristics of the Russell 3000® Index while giving special consideration to companies' ESG performance. The ESG evaluation process also includes additional criteria relating to companies' current and future carbon emissions, resulting in a considerably lower carbon footprint relative to the benchmark.

Social Choice International – The TIAA-CREF Social Choice International Equity Fund is an international equity fund that seeks to match the characteristics of the MSCI EAFE Index while giving special consideration to companies' ESG performance.

With the launch of the TIAA-CREF Social Choice Low Carbon Equity Fund and the TIAA-CREF Social Choice International Equity Fund, investors now have a broader range of investment choices that can serve as core portfolio allocations with a goal of maintaining higher ESG performance than broad asset-class benchmarks.



Assessing investments for the Social Choice portfolios

When considering investments in public companies for our Social Choice portfolios, we evaluate companies on the most relevant ESG issues for their industry. This process is consistent for all securities, and seeks to strike the appropriate balance between ESG quality and portfolio diversification. Those considered for inclusion are ESG leaders among their peers, reflecting the company's positive and negative impact on its key stakeholders: employees, communities, customers, suppliers and the environment. We also consider a company's involvement in any ESG-related controversies. We continually evaluate and refine these standards by incorporating new ESG research and evolving best practices. As part of the ESG evaluation process, we consider factors such as:

Environmental: climate impact, energy consumption, waste management and natural resources

Social: employee engagement, labor relations, human rights practices, product safety and community impact

Governance: management structure, board accountability and independence, executive compensation, audits and internal controls, and shareholder rights

The role of ESG criteria and evaluating risk and opportunities in fixed income

Stephen M. Liberatore, CFA, Lead Portfolio Manager for the TIAA-CREF Social Choice Fixed-Income strategies, manages his portfolios with the dual objectives of achieving competitive risk-adjusted returns and improved ESG performance as compared to the broad fixed-income market. "Our primary goal is to identify securities that have the potential to outperform over time," says Liberatore. "We believe that rigorous ESG criteria provides us a competitive advantage in generating outperformance. Using ESG criteria helps to establish how well an entity is operated and managed, which is crucial to our investment and valuation processes."

Achieving competitive returns alongside direct and measurable outcomes

TIAA-CREF's proprietary Proactive Social Investment (PSI) framework combines TIAA-CREF's expertise in public market fixed-income investing with our experience and leadership in Responsible Investment.

The PSI framework focuses on four thematic areas:

- Affordable housing: Investments that support the financing of low- and moderate-income housing loans, transit-oriented development, walkable communities, or mixed-use development projects
- Community and economic development: Investments that support financial, medical, or educational services, community centers, urban revitalization and humanitarian, disaster, and international aid services, focusing on underserved and/or economically disadvantaged communities

- Renewable energy and climate change: Securities that finance new or expand existing projects in renewable energy (including hydroelectric, solar, wind, geothermal and energy from waste), smart grid and related systems that make power generation and transmission more efficient, and other energy-efficient ways to reduce greenhouse gas emissions
- Natural resources: Investments in projects or programs that support land conservation, sustainable forestry and agriculture, remediation and redevelopment of polluted or contaminated sites, sustainable waste management, water infrastructure (such as improving clean drinking water supplies and upgrading sewer systems), and sustainable building

Investments are made in a variety of publicly traded fixed-income securities, including agency debt, asset-backed securities, commercial mortgage-backed securities, corporate bonds, mortgage-backed securities and municipal bonds.

Impact-investing strategies

Within TIAA's General Account, the investment portfolio supporting our guaranteed fixed-annuity products, we use the Social Impact Investment Portfolio to direct capital to quality investment opportunities that also create measurable social outcomes. As of the end of 2014, this portfolio had made over \$790 million in total investments and commitments across three investment themes that benefit low- to moderate-income communities globally: affordable housing, financial inclusion and community and economic development.

TIAA-CREF's affordable housing theme targets investments in communities throughout the United States and focuses on the growth and preservation of affordable multifamily rental properties for low- and moderate-income families. Many of the country's affordable housing properties, which have been held to strict affordability criteria through government incentives are at risk of conversion to market rate rents once their compliance periods end, risking displacement of the families who live there. These investments seek to ensure that the affordability of the properties is preserved, while also improving the living standards of residents.

In 2014, TIAA-CREF made a unique \$50 million investment in the Rose Affordable Housing Preservation Fund LLC (Fund), managed by Jonathan Rose Companies, a leading national developer, investor and fund manager with deep experience in green, urban affordable and mixed-income housing. In addition to preserving the affordability of these properties, the Fund will improve and "green" these buildings through high-impact/low-cost energy retrofits, as well as provide hands-on asset management that will reduce/control expenses and enhance tenant quality of life. In this way, the Fund offers a "triple bottom line", meaning it offers financial, social and environmental benefits to its investors and the communities it impacts. TIAA-CREF was the sole external investor in the Fund and worked closely with Jonathan Rose Companies to develop the themes and strategy.



ESG integration across asset classes

ESG integration is the proactive consideration of relevant environmental, social, and governance risks and opportunities in conventional investment analysis, portfolio construction and ongoing monitoring across all asset classes. Still a broad and evolving concept, with significant variation in implementation among investment managers, ESG integration impacts existing funds, new investment products and overall growth. At TIAA-CREF, we believe that the consideration of ESG factors by investors can enhance the long-term economic value of companies and produce competitive, long-term financial returns for our clients. We have seen that responsible business practices often lowers risk, improves financial performance, and brings better results across an array of social responsibility issues from ensuring product safety and protecting shareholder rights to safeguarding the environment.

Our overall goal is to integrate ESG information systematically so that it can be leveraged across a range of fundamental investment strategies. In 2015, we placed significant effort on expanding our ESG integration programs and efforts. This initiative involved engaging directly with our analysts and portfolio managers on ESG issues, facilitating their access to relevant data and tools, and providing guidance on emerging ESG themes across industries. In particular, we have designed sector-specific frameworks to integrate material ESG factors into the valuation process. We also expanded linkages between significant public equity investments and the firm's active ownership practices (i.e., company engagement, proxy votings and related topics).

Farmland and timber

Today's global farmland and timberland markets are characterized by an evolving set of challenges, such as growing food and fuel demand to support a projected population of 9 billion people by 2050, increasing protein consumption, climate change and global water scarcity. At the same time, land managers are better equipped to confront these and other challenges through opportunities such as advanced farming practices, GPS mapping and tracking of water and nutrient use. As responsible farmland and timberland investors, we are cognizant of these challenges. We see our investments and management practices as a way to support sustainable agricultural and timberland development that will help feed and support the world's growing population while making the most efficient use of limited resources such as land, inputs, and water.

Five principles form the foundation for how we invest and manage our farmland and timberland portfolios:

- Promote environmental sustainability
- Respect labor and human rights
- Respect existing land and resource rights
- Uphold high business and ethical standards
- Report on activities and progress toward implementing the principles

These principles are formally integrated within the PRI as Guidance for Responsible Investment in Farmland and TIAA was a founding member of the group of PRI signatories that established them in 2011. Since 2012 we have been reporting annually on our progress in implementing the Guidelines. The current report is publicly available on the TIAA-CREF website.⁶

In the three years that we have been publishing the report we have provided much needed transparency on this asset class. In addition to a regular update on our global farmland portfolio's crops and regions, we also explain the farmland investment value chain and how we earn returns as investors. We also provide a description of how the principles are incorporated into our acquisition and portfolio management processes and provide some detailed insight into specific ESG-focused activities within the portfolio. With the 2013 report we also incorporated 13 key performance indicators (KPIs) to quantify our progress on implementing the principles and we expect these to evolve with the industry over time.

Beyond the Farmland Guidelines reporting, TIAA-CREF continues to sponsor research on environmental, social, and governance practices particularly through our Center for Farmland Research with the University of Illinois. In 2014 the Center directed an undergraduate research experience program at the university. As part of a longer-term strategy for developing both presence in and capacity to participate in agricultural policy formation and evaluation for programs that impact agricultural land, the Center participated in a Regional Conservation Program proposal to evaluate the impacts of adoption of conservation and stewardship programs on the value of agricultural land.

The management of our timberland portfolio is guided by the same five principles. We are committed to ensuring the long-term productivity and sustainability of our timberland properties and focus on obtaining and developing properties that have third-party certifications. Over 90% of TIAA's portfolio is certified by a major third-party sustainable forestry organization, such as the Forestry Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC).



TIAA-CREF's Efforts: Water Conservation Technologies

On all its properties, TIAA-CREF works to minimize soil erosion and rainfall runoff by building properly designed roads, berms, culverts and terraces. Across its permanent crop lands (tree fruits, nuts, citrus, grapes), TIAA-CREF implements efficient drip-line and micro-sprinkler irrigation systems. On farmlands using flood or furrow irrigation, TIAA-CREF aims to use recyclable polyethylene piping. When combined with other water-management techniques, these pipes can improve water-use efficiency by 25%.

On TIAA-CREF properties in the southern United States and Australia, techniques like precision land leveling are being introduced to increase drainage, control erosion and reduce overall water use. Where appropriate, TIAA-CREF also implements low-pressure, center pivot irrigation systems with drip nozzles, perimeter pads and flashboard-riser culverts as well as cutting-edge technologies like moisture probes that monitor soil moisture levels and inform the farmer to apply water only when necessary. All of these techniques are designed to improve sustainability and efficiency. When used, they can cut overall water usage dramatically.



Real estate

TIAA-CREF has developed a range of internal and external approaches to sustainability. One of the most visible is the Global Real Estate Sustainability Initiative (GRESI), established in 2007 to define the environmental and Responsible Investment practices that we expect of ourselves and our real estate partners. The framework integrates sustainability criteria into both the investment decision-making process and the ongoing management of a property. GRESI seeks formally to promote energy efficiency, encourage water conservation and implement waste reduction techniques. GRESI mandates benchmarking against independent and measurable standards as a method of tracking performance and ensuring that benefits are achieved.

As a result of these efforts:

- TIAA-CREF received recognition from the U.S. Department of Energy for our Innovation Model, a part of our commitment as a Better Buildings Challenge Partner.
- In 2015, TIAA-CREF received the U.S. Environmental Protection Agency's ENERGY STAR Partner of the Year award for the eighth consecutive year, and for the sixth consecutive year at the Sustained Excellence level—the program's highest honor.
- In 2014, 33 investments held the U.S. Green Building Council's LEED certification, including five Platinum certifications, the highest level.
- BOMA International, an industry advocacy and education organization, recognized 13 of our investments with the BOMA360 designation, indicating industry-leading performance in seven key areas, including sustainability and tenant relations.

Improving green solutions

Nicholas Stolatis, Senior Director and Head of Global Sustainability, heads up the GRESI platform, developed in 2007 to implement, track, and report on energy efficiency, water conservation and reduction of waste across the TIAA-CREF real estate portfolio, which had \$82.3 billion in assets under management as of March 31, 2015. By demonstrating leadership in the field, this groundbreaking platform has meant that the firm has won ENERGY STAR Partner of the Year Award for eight years running, a record that no other financial services company can match. As Stolatis says, "We are actively engaged with EPA and the ENERGY STAR program, using it to help achieve incremental improvement in our performance each year.

This steady evolution provides solid gains, and additional knowledge and expertise that we can leverage for future efforts. This fits in with our organizational vision and objective to deliver excellence." The starting point for TIAA-CREF's approach to integrating ESG into real estate, explains Stolatis, is the firm's role as a fiduciary. "Environmental savings translates to the bottom line," he says. "We always look to financial considerations and ESG metrics. On average, our portfolio is 17.6% more energy efficient than it was in 2007."

Active ownership

Our pioneering effort to practice Responsible Investment dates back to the 1970s, when we were one of the first institutional investors to engage in dialogue with companies and other investors on ESG issues. Known as active ownership, these activities are increasingly being applied by institutional investors across asset classes. Investors can use their formal rights such as proxy voting, and informal influence by engaging through dialogue, to encourage companies held in their portfolios to improve management systems, ESG related performance or stakeholder engagement.

In public markets

As a long-term investor, TIAA-CREF believes sound governance practices and responsible corporate behavior can contribute to the long-term performance of public companies. As stewards of our participants' investments, the Corporate Governance Team encourages our portfolio companies to embrace ESG best practices that will enhance and protect assets under management, and the value of our participants' investments. We do this by voting our shares in public company annual meetings, engaging with public companies and promoting our views on ESG practices.

Establishing trust is a critical element of our engagements with portfolio companies. As such, we prefer to engage with companies privately, an approach we call “quiet diplomacy,” to learn how companies apply their ESG policies and manage related risks.

We also share our views in a range of stakeholder forums to improve ESG practices market-wide. For instance, our advocacy in Japan's corporate governance forums has helped improve the ratio of independent directors on Japanese boards. Most directors of Japanese companies are affiliated with the company, which can weaken the board's objectivity when overseeing management. Since 2010, Japanese regulators have encouraged the appointment of at least one independent director or statutory auditor. TIAA-CREF has gone a step further, advocating for a minimum of two independent directors on Japanese company boards, for more effective independent oversight. As of 2014, 45% of large companies listed on the Tokyo Stock Exchange now have two or more independent outside directors, more than double the number in 2013.

Practices beyond public equity include dialogue with issuers of green bonds when structuring these issuances for guidance on characteristics needed to satisfy investor demand in regard to the appropriate level and quality of subsequent disclosure around the use of proceeds.



In private markets

As one of the world's largest real estate investors, TIAA-CREF has long influenced the sustainability characteristics of the properties we own. Through our Global Real Estate Sustainability Initiative (GRESI), we look to influence energy efficiency, water conservation and waste reduction in our properties, whether managed by us or by third parties. Our Property Management Governance platform allows us to provide oversight over our third-party property management firms in a manner that helps drive continuous performance improvement.

TIAA-CREF is a signatory to and serves in a leadership capacity for the Principles for Investors in Inclusive Finance (PIIF). We work to encourage our investee companies and funds in inclusive finance to integrate RI practices into their operations, such as integrating ESG factors into their reporting, incorporating transparent pricing practices and client protection policies into the operations of their underlying companies. At TIAA-CREF, we have made over \$300 million inclusive finance investment commitments and these are part of the Social Impact Investment portfolio. Our inclusive-finance effort seeks to make affordable financial services available to low- and moderate-income populations and small- and medium-sized enterprises globally.



Proxy Access in the United States

We promote better board accountability at U.S. public companies through proxy access. Proxy access refers to the right of shareholders to nominate directors for election to the board. This right enhances board accountability and may improve board quality by adding incentive for corporations to ensure that optimal board candidates are nominated for shareholder elections.

As a proponent of proxy access for over a decade, we have a long track record as a thought leader on this issue. In 2015, we encouraged our top 100 holdings to adopt proxy access. Our advocacy has helped persuade leading companies like Microsoft and Prudential Financial to empower their shareholders with the right of proxy access.



Accountability through reporting and transparency

Responsible Investment starts at home. TIAA-CREF is committed to reporting on its activities and progress in implementing RI principles. We view such reporting as an important part of our ongoing engagement with stakeholders.

It also includes our efforts to improve the quality and quantity of information available to investors regarding ESG issues.

As part of our effort to be transparent, we disclose our RI practices and activities each year by:

- Reporting our progress against the PRI's six principles of Responsible Investment
- Disclosing our efforts to reduce energy consumption in our real estate portfolio through ENERGY STAR
- Disclosing – and taking action to reduce – the environmental impact of our own operations through the Carbon Disclosure Project
- Submitting three portfolios to the GRESB survey to establish their adoption of socially responsible practices relative to global peers
- Producing this report, *TIAA-CREF: Leadership in Responsible Investment*



Addressing climate change

For many, global climate change is among the most pressing issues of our time. Recent calls for limiting or divesting holdings in fossil-fuel companies have raised awareness and advanced the dialogue about how to appropriately integrate such concerns into investment portfolios. A transition to a less carbon-intensive economy will ultimately require action by multiple stakeholders—including the business community, consumers, investors and political leadership.

This topic is important to TIAA-CREF as an asset owner and investor across multiple sectors and asset classes. In our view, the investment approach to climate change should be balanced, thoughtful and addressed in a manner that upholds and augments our firm's core mission and long-term investment objectives. For many years, climate change has been a cross-cutting theme of TIAA-CREF's Responsible Investment activities, including how to address it within existing structures and management practices.

As part of this focus, we have assessed numerous low carbon principles, frameworks and standards and expect that this work will inform existing and future investment approaches. TIAA-CREF has sought to develop exposure and expertise in sectors that would benefit from such a shift towards a lower carbon economy, such as energy, infrastructure, agriculture, timberland and real estate.

Real estate

TIAA-CREF's Global Real Estate group applies Responsible Investment principles to its property investments. Through improved energy efficiencies, the TIAA-CREF Global Real Estate Initiative (GRESI) has achieved large reductions in greenhouse-gas emissions across real estate portfolios. In 2014, we:

- Reduced the energy intensity, which is the amount of energy used per square foot, across our real estate portfolios by 18.9% (office), 9.3% (multifamily) and 15.9% (retail) over their respective baseline performance metrics.
- Cut greenhouse-gas emissions by approximately 47,750 metric tons through improved efficiencies, which lowered utility costs by an estimated \$14.1 million.
- Achieved electricity consumption savings of approximately 108 million kilowatt hours and cut 43,532 metric tons of greenhouse-gas emissions— across our office portfolio alone. This is comparable to removing roughly 9,165 cars from the nation's roads for one year.

From mandating LEED certification for all new development projects to pursuing ENERGY STAR certification for all eligible properties, our continuing efforts in sustainability help address the risks and opportunities of climate change.

Natural resources and infrastructure

The TCAM Private Markets team invests in natural resources and infrastructure assets that support the production of energy from renewable sources, including solar, geothermal and wind-generated energy. Investments in our farmland portfolio provide raw materials for the production of biofuel (ethanol). Additionally, investments in our energy and timberland portfolios are helping meet the increasing demand for other alternative energy sources.

The Social Choice Funds

For investors wishing to limit their exposure to fossil fuels, our Social Choice Funds have historically offered reduced exposure to companies in the fossil-fuel industries, relative to their respective benchmarks. Companies considered for inclusion in these Funds are leaders in their respective sectors according to a broad and industry-specific set of ESG factors.

Our new Social Choice Low Carbon Equity Fund addresses climate change by taking a comprehensive approach that combines rigorous ESG criteria with a thematic overlay to address investor interest in “low carbon” investment options.



The Fund applies industry-specific baseline ESG criteria to identify best-in-class leaders within each sector, followed by additional criteria on companies' current and future carbon emissions. As a result, the Fund has a considerably lower carbon footprint relative to the benchmark.

Through our Proactive Social Investments (PSI) framework within the Social Choice fixed-income strategies, we invest in projects and entities that directly benefit the environment, in keeping with our investment themes of “Renewable Energy and Climate Change” and “Natural Resources.” To date, Social Choice strategies have invested over \$1 billion in green bonds—bonds whose proceeds are earmarked to support environmentally beneficial projects or activities. TCAM continues to serve as an expert resource for both issuers and investment banks across fixed income sectors in how to structure, execute and report on environmentally beneficial deals. TCAM also serves on the Executive Committee of the Green Bond Principles which is working on developing voluntary guidelines for Green Bonds issuance and impact reporting.

Stewardship & corporate governance

TIAA-CREF seeks to use our influence as shareholders in public companies to influence their environmental practices to help protect the long-term value of our participants' investments.

- We encourage companies to take a responsible and proactive approach to measuring, reporting and reducing their impact on the climate, and to explore strategies to adapt to anticipated environmental challenges that may result from climate change.

- We support reasonable shareholder proposals asking for greater disclosure of companies' climate impacts and strategies for addressing risks related to climate change.
- We engage with portfolio companies in multi-stakeholder discussions to learn how companies manage policies and implement business strategies that mitigate business risks related to climate change, and to exchange insights on best practices.

Investing in clean energy

TIAA-CREF, in partnership with Energy Power Partners, established a joint venture platform to make project equity investments in the renewable and clean energy sector across North America. The North American Sustainable Energy Fund is focused on landfill gas, biofuels, solar, wind, and cogeneration projects. The platform targets small to mid-sized operating assets and construction-ready projects located in North America with contracted cash flows. The United States currently has the world's largest and most diverse supply of untapped renewable energy resources, contributing to a rich selection of potential investment opportunities, job growth, and long-term sustainable energy.

Bringing solar and wind on stream

Climate change initiatives have become an important driver of public fixed-income issuance, with green bonds and the green credit market in particular continuing to evolve and expand, driven largely by investor demand. Amid a growing number of issuers, larger and more liquid investments, and new opportunities across the yield curve, we remain an active participant in this key part of the market.

Since 2007, TIAA-CREF Asset Management has used a proprietary process within our Social Choice fixed-income strategies to identify publicly traded instruments that directly support the development, enhancement, or operations of renewable energy projects. To date, we have invested over \$1 billion in publicly traded debt categorized as supporting renewable energy and other green initiatives to address climate change.

Notable issues in 2014-15 include:

- Solar Star Funding LLC, a developer of solar power projects, issued a project finance bond to finance construction of the largest-capacity solar electric generation facility (579 MW) in the country. Upon completion, this project will provide enough electricity on an annualized basis to power 255,000 average homes, displacing 570,000 tons of CO₂—the equivalent of taking 108,862 cars off the road.
- Toyota Motor Credit Corporation issued its second ABS Green Bond, the proceeds of which will be used to finance loans and leases for both hybrid and low-emission vehicles.
- Kommunalbaken AS, a Norwegian local government funding agency, issued an inaugural green bond that will support financing of various projects.
- Morgan Stanley, a global financial services firm, issued its first green bond. This offering will fund future renewable energy and energy-efficiency projects.





A favorable future: Growth in Responsible Investment

At TIAA-CREF, we take Responsible Investment seriously—as seriously as we take our role as stewards of other people’s assets. We believe these two ideas need not function in opposition. It is possible to achieve competitive financial returns while still influencing positive change in the environment, society and the wider economy over the long term.

We are always looking for new ways to integrate these principles into our business practice. Because we know that RI is the way forward, we will continue to refine our practices and remain a leader in this area.

¹ Number as of December 31, 2014

² As of June 30, 2015

³ The Value of Responsible Investment http://www.cisl.cam.ac.uk/about/press/press-releases/pr_pdfs/ilg-pr-22-may-2014-value-of-responsible-investment.pdf/view

⁴ Participant Survey Results <https://www.tiaa-cref.org/public/pdf/survey-of-TIAA-CREF-retirement-plan-participants.pdf>

⁵ The CREF Social Choice Account is available to eligible participants via employee retirement plans.

⁶ Responsible Investment in Farmland Report <https://www.tiaa-cref.org/public/assetmanagement/insights/commentary-perspectives/perspectives/responsible-investment-farmland>

The initiatives described in this material involve risks that could result in loss of principal. Because social screening criteria exclude some investments, the variable annuity accounts and mutual funds referenced in this report may not be able to take advantage of some market opportunities or trends available to accounts and funds that do not use these criteria. In addition, the variable annuity accounts and mutual funds are subject to other risks, which are described in their respective prospectuses.

Annuity account options are available through contracts issued by TIAA or CREF. These contracts are designed for retirement or other long-term goals, and offer a variety of income options, including lifetime income.

Payments from the variable annuity accounts [and mutual funds] are not guaranteed and will rise or fall based on investment performance.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161, or visit tiaa-cref.org for a current prospectus that contains this and other information. Please read the prospectus carefully before investing.

The TIAA General Account is an insurance company account, does not present an investment return, and is not available to investors.

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