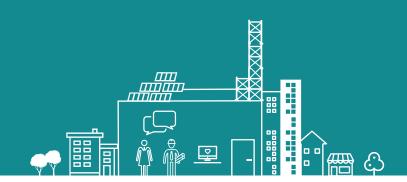
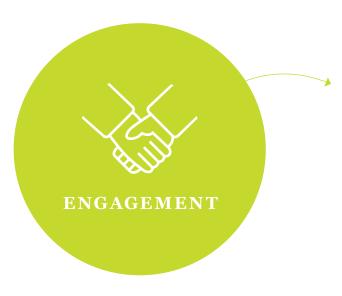




Engagement

Unlocking long-term potential





We help companies and issuers innovate, attract new capital, operate more efficiently and manage risk by engaging on Environmental, Social & Governance (ESG) issues.

We engage in multiple asset classes, but this document focuses on public equities and fixed income.

We've been engaging for almost half a century

As investors, we naturally think about today's investment performance. But, more importantly, we carefully consider tomorrow's performance in tomorrow's world. Engaging on their Environmental, Social and Governance (ESG) policies and practices is critical to unlocking long-term potential for investments by keeping companies, issuers, tenants, farmers and operators accountable.

Engagement is in our DNA. In 1970, TIAA and CREF Trustees developed formal procedures for voting on

shareholder proposals. A year later, in 1971, then TIAA chairman William Greenough wrote an op-ed in The New York Times to engage the public with TIAA's view on the importance of corporate social responsibility.

Our attention to ESG factors is embedded in how we invest. Our investment staff are actively considering material ESG factors in their investment process and in conversations with companies.

"A corporation can only continue to be a profitable investment for its stockholders if it discharges its obligations to societu."

William C. Greenough former TIAA chairman, writing in *The New York Times*, 02 May 1971

We engage with a spectrum of strategies to influence and innovate

Power of the proxy

- · Primary method for influencing company behavior
- · Thoughtful, caseby-case voting on management and shareholder proposals

Company dialogue

· Meet directly with company CEOs, senior management and board of directors

Targeted initiative

 Produce measureable outcomes with company, industry and country specific initiatives

Market initiatives

 Collaborate with industry peers to set market leading standards

Policy influence

• Influence legislation, public policy and global standards of best practices

We engage with industry groups and policy makers

We work closely with policymakers and industry groups to establish clear standards that let shareholders more accurately evaluate their investments.

Forum for Sustainable and **Responsible Investment** (USSIF)

Member

Global Investing Impact Network

Founding member, Investors' Council

Green Bond Principles

Signatory and executive committee member

Global Real Estate Sustainability Benchmark

Member and recipient of 10 Green Stars

Sustainable Accounting Standards Board

Founding member, SASB Investor Advisory Group

PRI Farmland Guidelines

Signatory

One of a group of PRI signatories that developed the Principles for Responsible Investment in Farmland, precursor to today's PRI Farmland Guidelines

United Nations Principles for Responsible Investment Signatory

Global Initiative for Sustainability Ratings

Founding partner

University of Cambridge Institute for Sustainability Leadership

Investment Leaders Group, Founding member

Engagement: our performance by the numbers

SUMMARY OF VOTES

Over the past five years, the RI team voted at or on:1



Shareholder meetings





Ballots



Agenda items

WHAT WE ENGAGED ON

In 2017, we conducted over

total engagements

on behalf of more than

companies



WE ENGAGE WITH CONVICTION

Voted "for" on proposals with environmental issues:2

91%

Reports on sustainability 80%

Reports on/ reductions in GHG emissions, methane

95%

Reports/ taking action on climaterelated risk

100%

Reducing deforestation stewardship

Better water

100%

Engagement: our commitment to integrity and strong relationships



Nuveen has geologists, agronomists, foresters, entomologists, farmers, sustainability experts, international relations professionals and other experts on staff.



PROCESS

We work with the investment team to ensure that engagement activities and priorities align with ESG issues that are identified as material risks. We focus on where we can have clear outcomes.



PERSISTENCE

We seek to hold public companies and boards accountable through proxy voting, director votes and shareholder proposals.



PROOF

We are relentless in our drive for transparency, third-party and internal audits, and third-party verifications. We verify and confirm information from companies, farmers, tenants, lenders and even our affiliates.

Challenge: human capital at a technology company (public equities)

We engaged with a public company to better understand how they view risks related to gender pay disparity. The company cited a report it produced, which asserted that no gender pay gap exists – but provided little evidence of a methodology that would allow shareholders to confirm that statement. The company was unwilling to provide more information. Accordingly, we voted to support a shareholder resolution asking the company to prepare a detailed report to encourage a more comprehensive assessment of pay inequity.

Challenge: disclosure for U.S. electric utilities (public fixed income)

TIAA Investments is a top bondholder in several U.S. electric utilities. Utility ESG disclosure is not standardized or targeted at material ESG issues such as future CO² intensity. One of these utilities finalized its ESG disclosure template in December 2017, and two others immediately published reports using the new template. The new disclosures will be employed in TIAA Investments' income-neutral swap program, and will provide greater transparency to investors across the entire market.

In 2014, TIAA and Nuveen came together to expand our capabilities across all investment types. Today, our customers fully benefit from our combined history of stability, retirement leadership and innovation.³

For more information about RI, visit us at TIAA.org/responsibleinvesting.

- ${f 1}$ Time period: 01 Jan 2013 20 Jun 2018. Inclusive of only TIAA Investments.
- 2 TIAA and CREF registered Funds and Accounts Voting Record, 2017
- 3 Reference to financial stability does not apply to the investment products offered

Risks and other important considerations

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy or sell securities, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her advisors.

Mutual fund investing involves risk; principal loss is possible. There is no guarantee a fund's investment objectives will be achieved. A fund which includes only holdings deemed consistent with applicable **Environmental Social Governance (ESG)** guidelines may result in available investments that are more limited than other funds that do not apply such guidelines. ESG criteria risk is the risk that because the criteria excludes securities of certain issuers for nonfinancial reasons, a fund may forgo some market opportunities available to funds that don't use these criteria.

The investment advisory services, strategies and expertise of TIAA Investments, a division of Nuveen, are provided by Teachers Advisors, LLC, and TIAA-CREF Investment Management. LLC.

