



CLIMATE TRANSPARENCY REPORT 2020

Nuveen, a TIAA Company

About the Climate-related Disclosure Indicators

Climate has been identified as a top priority for PRI signatories, with over 70% of asset owners reporting this as the most important long-term trend they are acting on.

The FSB Task Force's guidance on climate-related financial disclosure aim to create a single framework for disclosure on assessment and management of climate-related risk. The recommendations, supported by investors representing US\$22 trillion, identify four main disclosures, Governance, Strategy, Risk Management, Metrics and Targets, and include specific guidance for asset owners and managers.

As a result, the PRI introduced climate-related disclosure indicators that can be used to align with the TCFD recommendations in the 2020 PRI Reporting Framework.

About this report

This report is an export of only the climate-related indicators from the 2020 Reporting Framework response. The full Public Transparency Report is available here (<https://reporting.unpri.org/surveys/PRI-reporting-framework-2020/-556F4AF9-3EE0-470D-830C-67FC07BEFD5E/79894dbc337a40828d895f9402aa63de/html/2/?lang=en&a=1>). It shows the responses to all the completed climate indicators, even those you chose to keep private. It is designed for your internal review or – if you wish - to share with your stakeholders.

The PRI will not publish this report on its website if you have designated your 2020 climate reporting as “private”. Otherwise, you will be able to access the Climate Transparency Report of your organisation and that of other signatories on the [PRI website](#) and on the [Data Portal](#).

To easily locate information, there is a **Recommendation index** which summarises the indicators that signatories complete and disclose. The report presents information exactly as it was reported as per signatory preference. Where an indicator offers a response option that is multiple-choice, all options that were available to the signatory are presented in this report.

TCFD Recommendations Index

Strategy and Governance - CC			TCFD Recommendation			
Indicator	Reported	Disclosure	Governance	Strategy	Risk Management	Metrics & Targets
SG 01.6 CC	✓	Public				
SG 01.7 CC	✓	Public				
SG 01.8 CC	✓	Public				
SG 01.9 CC	✓	Public				
SG 01.10 CC	✓	Public				
SG 07.5 CC	✓	Public				
SG 07.6 CC	✓	Public				
SG 07.7 CC	✓	Public				
SG 07.8 CC	✓	Public				
SG 13.1	✓	Public				
SG 13.2	✓	Public				
SG 13.4 CC	✓	Public				
SG 13.5 CC	✓	Public				
SG 13.6 CC	✓	Public				
SG 13.7 CC	✓	Public				
SG 13.8 CC	✓	Public				
SG 14.1	✓	Public				
SG 14.2	✓	Public				
SG 14.3	✓	Public				
SG 14.6 CC	✓	Public				
SG 14.7 CC	✓	Public				
SG 14.8 CC	✓	Public				
SG 14.9 CC	✓	Public				
SG 15.1	✓	Public				
SG 15.2	✓	Public				
SG 15.3	✓	Public				

Symbol	Status
✓	The signatory has completed this sub-indicator
-	The signatory did not complete this sub-indicator.
	This indicator is relevant to the named TCFD recommendation
Within the first column "Indicator", indicators marked in blue are mandatory to complete. Indicators marked in grey are voluntary to complete.	

ORGANISATIONAL OVERVIEW

This section provides an overview of your organisation. These characteristics are used to define your peer groups.

MAIN CHARACTERISTICS	
Name	Nuveen, a TIAA Company
Signatory Category	Mixed Services
Signatory Type	n/a
Size	US\$ > 50 billion AUM
Main Asset Class	Multi-Asset
Signed PRI Initiative	2018
Region	North America
Country	United States
Disclosure of Voluntary Indicators	73% from 38 Voluntary indicators

Nuveen, a TIAA Company

Reported Information

Public version

Strategy and Governance

PRI disclaimer

This document presents information reported directly by signatories. This information has not been audited by the PRI Secretariat or any other party acting on their behalf. While this information is believed to be reliable, no representations or warranties are made as to the accuracy of the information presented, and no responsibility or liability can be accepted for any error or omission.

Investment policy

SG 01	Mandatory	Public	Core Assessed	General
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New selection options have been added to this indicator. Please review your prefilled responses carefully.

SG 01.1	Indicate if you have an investment policy that covers your responsible investment approach.
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SG 01.6	Additional information [Optional].
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Nuveen's Responsible Investing Principles:

(1) ESG Integration

We believe that the consideration of ESG factors in investment research and portfolio management enhances long-term performance and allows us to better manage downside risk. We created and utilize a proprietary, technology-enabled platform to share ESG data, research and tools to augment traditional investment analysis, providing visibility into the financial risks and opportunities inherent in ESG.

(2) Engagement

We believe that effective engagement allows us to drive change at our portfolio companies and in the broader market to mitigate corporate risks and bolster company value.

Our key engagement activities include:

Proxy voting: We execute thoughtful, case-by-case voting on management and shareholder proposals for publicly traded companies.

Dialogue: We engage in direct and constructive dialogue with CEOs, senior management, boards of directors, tenants and operators as well as other appropriate stakeholders to promote value-enhancing outcomes through encouraging relevant ESG disclosure and adoption of best practices.

Targeted initiatives: We aim to drive measurable outcomes with company, industry, thematic and country-specific initiatives.

Market initiatives: We collaborate with peers, interdisciplinary experts and industry stakeholders to create best practices and drive more effective outcomes.

Policy influence: We actively help to shape legislation, public policy and global standards related to RI best practices.

(3) Impact

We believe that all investments have an impact on society and the environment. There are a growing number of opportunities across asset classes to pursue specific, positive and measurable social and environmental results while delivering robust long-term financial returns. By measuring and managing impact we seek to surface new insights, reveal future opportunities and help our clients invest in portfolios that meet their financial and impact goals.

While each of our investment specialists takes a unique investment approach to pursuing competitive risk-adjusted returns on behalf of its clients, we believe that these principles are applicable across all asset classes. Further, the underlying activities in each principle continue to expand and develop over time to meet evolving business needs and to ensure that we are realizing the full investment benefits of an RI approach.

SG 01 CC	Mandatory to Report Voluntary to Disclose	Public	Descriptive	General
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SG 01.6 CC	Indicate whether your organisation has identified transition and physical climate-related risks and opportunities and factored this into the investment strategies and products, within the organisation's investment time horizon.
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Yes

Describe the identified transition and physical climate-related risks and opportunities and how they have been factored into the investment strategies/products.

Impacts from climate change may include significant risks to global financial assets and economic growth. As investors, our primary objective is to mitigate investment risks stemming from climate change. We recognize that long-term investment performance depends on other well-functioning systems, including natural systems that provide clean water, abundant food, and many other resources to the global economy. These systems are threatened by global climate change, which in turn threatens economic growth and investment performance. Therefore, our focus on mitigating climate risk is grounded in this orientation.

Nuveen's climate change strategy seeks to align our practices with the recommendations of the Task Force on Climate-Related Financial Disclosure, while recognizing our unique multi-asset class structure. Specific facets of the strategy include the development of an overarching risk classification framework, constructing internal climate metrics, and addressing data gaps through building upon industry vendors' specific asset class strengths.

Physical risks & Nuveen's exposure:

Physical risks of climate change are observed in all geographical regions: the atmosphere and oceans are warming, sea levels are rising and weather patterns are changing (linked to the increasing intensity and frequency of storm surges and hurricanes). These changes can have a strong adverse impact on infrastructure, agricultural yields, quality of life, public health and economic growth. Emerging markets are likely to be more vulnerable to these impacts than developed markets.

Physical risks may affect Nuveen clients' public & private investments, with exposure concentrated in two areas: 1) private investments in agriculture, timber, real estate, energy and infrastructure, and to a lesser extent, 2) public equity and debt investments in the utilities, energy, food and beverage, apparel, metals/mining, industrials and basic materials industries.

Transition risks & Nuveen's exposure:

Transition risks of climate change stem from the transition to a low carbon economy via technological innovation (increasing viability of renewable energy, energy efficiency, energy storage, and alternative and lower-carbon fuels), environmental regulation (cap and trade/carbon tax, fuel efficiency standards, etc.), and market forces (changes in fossil fuel commodity prices and consumer preferences).

Transition risk may affect Nuveen clients' public & private investments, with exposure concentrated in fossil fuel and energy-intensive sectors. An abrupt or disorderly low carbon transition is expected to increase the transition risk facing these sectors.

Factoring climate risks into investment strategies:

Nuveen factors physical and transition risks of climate change into investment strategies in a variety of ways. Individual investment teams identify and manage risks that apply to the specific assets that they oversee. Nuveen's Responsible Investing professionals work closely with investment teams in each asset class to integrate ESG considerations, including climate risk, into the fundamental investment process. For example, investment teams receive specialized training and have widespread access to carbon and climate data for their asset class.

In real assets, Nuveen emphasizes direct investments in climate change adaptation/mitigation projects like renewable energy and desalination and screens. In public markets, Nuveen is among the largest global investors in green bonds, and has launched over 10 low carbon mutual funds and ETFs.

No

**SG 01.7
CC**

Indicate whether the organisation has assessed the likelihood and impact of these climate risks?

Yes

Describe the associated timescales linked to these risks and opportunities.

Nuveen participates in TIAA's Emerging Risk's Working Group, under which climate risk was initially identified and tracked. The Emerging Risk Working Group developed the following timescale rubric:

- Short-term: 1-4 years
- Intermediate: 3-6 years
- Mid-term 6-10 years
- Long-term:>10 years

We evaluated the timescale, level of importance, impact, and likelihood of several aspects of climate risk, including carbon-intensive assets and the physical, macroeconomic, and water impacts from climate change. While timescales can vary significantly based on a number of factors, we believe that carbon-intensive assets may face more short- and intermediate-term risks than other assets. However, the likelihood and impact of these risks is uncertain depending on the speed and nature of the low carbon transition. Meanwhile, we expect physical risks to materialize more so in the long term, with higher likelihood due to the physical effects of climate change already projected to occur.

In addition to these initial views developed through the emerging risks process, we plan to conduct additional analysis on the timescale, likelihood, and impact of these risks as part of formally embedding climate risk into our enterprise risk management process. For certain asset classes with less liquidity and longer hold periods (such as real estate), Nuveen already conducts more detailed analysis over a 30 year time horizon.

No

**SG 01.8
CC**

Indicate whether the organisation publicly supports the TCFD?

Yes

No

**SG 01.9
CC**

Indicate whether there is an organisation-wide strategy in place to identify and manage material climate-related risks and opportunities.

Yes

Describe

The Climate Risk Task Force (the "CRTF") is an internal working group established to develop an organization-wide strategy and oversee the management of risks associated with climate change that may arise across the Enterprise and its investment specialists. The task force's responsibilities include but are not limited to:

- Coordinate board-level communication on climate change risk topics
- Recommend new climate risk management processes to monitor the exposure of Nuveen investment portfolios
- Review and recommend potential climate risk controls

Environmental issues have always figured prominently in TIAA's Policy Statement on Responsible Investing. Prior to the establishment of the CRTF, in early 2017, TIAA's Executive Committee approved a new Climate Change Statement of Principles, which provided further clarity and guidance across the company on this important cross-cutting issue. Language from the statement was later integrated into the Climate Change section of the 7th edition of the TIAA Policy Statement on Responsible Investing published in March 2019. The full Policy Statement can found online at: https://www.tiaa.org/public/pdf/ri_policy.pdf.

No

**SG 1.10
CC**

Indicate the documents and/or communications the organisation uses to publish TCFD disclosures.

Public PRI Climate Transparency Report

Annual financial filings

Regular client reporting

Member communications

Other

specify

- The National Association of Insurance Commissioners survey assessing our climate risk strategy.
- Nuveen Real Estate publishes a sustainability report and participates in the GRESB benchmark.

We currently do not publish TCFD disclosures

Governance and human resources

SG 07 CC	Mandatory to Report Voluntary to Disclose	Public	Descriptive	General
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SG 07.5 CC Indicate the roles in the organisation that have oversight, accountability and/or management responsibilities for climate-related issues.

Board members or trustees

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Chief Executive Officer (CEO), Chief Investment Officer (CIO), Chief Risk Officer (CRO), Investment Committee

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Other Chief-level staff or heads of departments

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Portfolio managers

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Investment analysts

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Dedicated responsible investment staff

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Investor relations

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

External managers or service providers

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

Other role, specify (1)

Risk Management / Oversight

- Oversight/accountability for climate-related issues
- Assessment and management of climate-related issues
- No responsibility for climate-related issues

**SG 07.6
CC**

For board-level roles that have climate-related issue oversight/accountability or implementation responsibilities, indicate how these responsibilities are executed.

The Corporate Governance and Social Responsibility Committees ("Committees") are standing committees of the TIAA Board of Trustees and TIAA-CREF Fund Complex Board of Trustees. These Committees were established to assist the Boards in fulfilling their oversight responsibilities of the firm's responsible investing program and activities, including climate-related issues, across the TIAA enterprise and the TIAA-CREF Fund Complex. These Committees meet at minimum, on a quarterly basis. Full charters can be found on TIAA.org.

Other committees of the aforementioned boards, such as the Investment Committee are also briefed on climate-related issues on an as-needed basis.

**SG 07.7
CC**

For management-level roles that assess and manage climate-related issues, provide further information on the structure and processes involved.

Our internal Climate Risk Task Force (refer to 1.9) meets on a weekly basis and is co-owned by the Global Head of Responsible Investing for Nuveen and the Chief Risk Officer of TIAA. Additional committee members include colleagues from Operational Risk, Model Risk, asset class SMEs from the Responsible Investing group, Corporate Social Responsibility and asset class heads from TIAA's General Account*.

The primary responsibilities of the CRTF include conducting analysis of internal practices versus the TCFD guidelines, recommending new practices and processes to fill any gaps, and implementing those practices and processes within each members' respective group. In 2019, the CRTF focused primarily on establishing governance structures and evaluating potential climate risk data vendors. Looking ahead, the CRTF will continue its focus on selecting and embedding climate risk data into internal processes, as well as formalizing climate risk within Nuveen's enterprise risk management process and supporting engagement with policymakers, regulators, and issuers on climate issues.

*The TIAA General Account, Nuveen's largest client, insures assets from the TIAA Traditional Annuity, a retirement plan option for current or former employees of a non-profit or governmental organization.

**SG 07.8
CC**

Indicate how your organisation engages external investment managers and/or service providers on the TCFD recommendations and their implementation.

- Request that external managers and/or service providers incorporate TCFD into mainstream financial filings (annual financial reports, other regulatory reporting or similar)
- Request incorporation of TCFD into regular client reporting
- Request that external managers complete PRI climate indicator reporting
- Request responses to TCFD Fund Manager questions in the PRI Asset Owner Guide
- Other
- We do not engage with external managers and/or service providers on the TCFD recommendations and their implementation

ESG issues in asset allocation

SG 13

Mandatory

Public

Descriptive

PRI 1

SG 13.1

Indicate whether the organisation carries out scenario analysis and/or modelling, and if it does, provide a description of the scenario analysis (by asset class, sector, strategic asset allocation, etc.).

- Yes, in order to assess future ESG factors
- Yes, in order to assess future climate-related risks and opportunities

Describe

See the response to Question 13.4 CC for more information.

- No, our organisation does not currently carry out scenario analysis and/or modelling

SG 13.2

Indicate if your organisation considers ESG issues in strategic asset allocation and/or allocation of assets between sectors or geographic markets.

We do the following

- Allocation between asset classes
- Determining fixed income duration
- Allocation of assets between geographic markets
- Sector weightings
- Other, specify
- We do not consider ESG issues in strategic asset allocation

SG 13 CC

Mandatory to Report Voluntary to Disclose

Public

Descriptive

General

**SG 13.4
CC**

Describe how your organisation is using scenario analysis to manage climate-related risks and opportunities, including how the analysis has been interpreted, its results, and any future plans.

- Initial assessment

Describe

Nuveen has engaged with a vendor partner whom we are working closely with to develop scenario analysis processes across multiple asset classes utilizing their proprietary software capabilities. This software incorporates emissions scenarios known as Representative Concentration Pathways (RCPs) from the International Panel on Climate Change (IPCC). Four RCPs are included in the IPCC AR5: RCP8.5, RCP6, RCP4.5, and RCP2.6.

While our process for identifying financially material climate risks in the public markets is still under development, we are working to develop both a bottom up approach (at the individual investment level) which will be informed by scenario analysis, as well as a top down approach across all asset classes.

- Incorporation into investment analysis

Describe

The maturity of our use of scenario analysis varies by asset class. Due to liquidity and holding periods, our real assets (farmland, timber, and infrastructure) and real estate assets may have more exposure to physical risks such as severe storms, floods, droughts and wildfires than public market investments, and therefore have a more systematic process in place for understanding the financial implications of climate risk on current and future assets. For example, in 2019, Nuveen Real Estate conducted an in-depth climate risk and financial loss analysis for 100 locations globally over the next 80 years which will be used to better understand the financial implications of physical risk to existing assets and regions for potential investment.

- Inform active ownership
- Other

**SG 13.5
CC** Indicate who uses this analysis.

- Board members, trustees, C-level roles, Investment Committee
- Portfolio managers
- Dedicated responsible investment staff
- External managers
- Investment consultants/actuaries
- Other

**SG 13.6
CC** Indicate whether your organisation has evaluated the potential impact of climate-related risks, beyond the investment time horizon, on its investment strategy.

- Yes

Describe

Our climate scenario model goes out to 2090, however as previously stated, our investment time horizon can be longer and shorter than this depending on the parameters set by our clients.

We recognize that impacts from climate change may include significant risks to global financial assets and economic growth. As investors, our primary objective is to mitigate investment risks stemming from climate change. We recognize that long-term investment performance depends on other well-functioning systems, including natural systems that provide clean water, abundant food, and many other resources to the global economy. These systems are threatened by global climate change, which in turn threatens economic growth and investment performance. Therefore, our focus on mitigating climate risk is grounded in this orientation.

- No

**SG 13.7
CC**

Indicate whether a range of climate scenarios is used.

- Analysis based on a 2°C or lower scenario
- Analysis based on an abrupt transition, consistent with the Inevitable Policy Response
- Analysis based on a 4°C or higher scenario
- No, a range is not used

**SG 13.8
CC**

Indicate the climate scenarios your organisation uses.

Provider	Scenario used
IEA	<input type="checkbox"/> Beyond 2 Degrees Scenario (B2DS)
IEA	<input type="checkbox"/> Energy Technology Perspectives (ETP) 2 Degrees scenario
IEA	<input type="checkbox"/> Sustainable Development Scenario (SDS)
IEA	<input type="checkbox"/> New Policy Scenario (NPS)
IEA	<input type="checkbox"/> Current Policy Scenario (CPS)
IRENA	<input type="checkbox"/> RE Map
Greenpeace	<input type="checkbox"/> Advanced Energy [R]evolution
Institute for Sustainable Development	<input type="checkbox"/> Deep Decarbonisation Pathway Project (DDPP)
Bloomberg	<input type="checkbox"/> BNEF reference scenario
IPCC	<input checked="" type="checkbox"/> Representative Concentration Pathway (RCP) 8.5
IPCC	<input checked="" type="checkbox"/> RPC 6
IPCC	<input checked="" type="checkbox"/> RPC 4.5
IPCC	<input checked="" type="checkbox"/> RPC 2.6
Other	<input type="checkbox"/> Other (1)
Other	<input type="checkbox"/> Other (2)
Other	<input type="checkbox"/> Other (3)

SG 14

Mandatory to Report Voluntary to Disclose

Public

Additional Assessed

PRI 1

SG 14.1 Some investment risks and opportunities arise as a result of long term trends. Indicate which of the following are considered.

- Changing demographics
- Climate change
- Resource scarcity
- Technological developments
- Other, specify(1)

other description (1)

We view investment risks and opportunities as material ESG factors that can be industry-and location specific

- Other, specify(2)

other description (2)

Changing global policy landscape, rise of responsible investment, shift of power from west to east

- None of the above

SG 14.2 Indicate which of the following activities you have undertaken to respond to climate change risk and opportunity

- Established a climate change sensitive or climate change integrated asset allocation strategy
- Targeted low carbon or climate resilient investments

Specify the AUM invested in low carbon and climate resilient portfolios, funds, strategies or asset classes.

	trillions	billions	millions	thousands	hundreds
Total AUM		55	700	000	000
Currency	USD				
Assets in USD		55	700	000	000

Specify the framework or taxonomy used.

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 across three investment themes that benefit low- to moderate-income communities globally: affordable housing, inclusive growth and resource efficiency. Within affordable housing, a portion of AUM is committed to Green Buildings.

Our proprietary impact framework, for identifying and classifying publicly traded fixed income securities, seek competitive risk-adjusted returns alongside direct and measurable environmental or social outcomes. The framework targets investment opportunities along four broad themes, two of which are climate related: Renewable Energy and Climate Change, and Natural Resources.

We offer 13 strategies across equity and fixed income that explicitly include low carbon criteria relating to companies' current and future carbon emissions.

Within Real Assets, we have investments in renewable power generation (solar, wind, biogas) and sustainably managed timberland and farmland.

Within Nuveen's global real estate portfolio, we have voluntary sustainability building certifications (e.g. LEED, BREEAM, Energy Star, BOMA 360, DGNB, NABERS, HQE).

- Phase out your investments in your fossil fuel holdings
- Reduced portfolio exposure to emissions intensive or fossil fuel holdings
- Used emissions data or analysis to inform investment decision making
- Sought climate change integration by companies
- Sought climate supportive policy from governments
- Other, specify
- None of the above

SG 14.3	Indicate which of the following tools the organisation uses to manage climate-related risks and opportunities.
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- Scenario analysis
- Disclosures on emissions risks to clients/trustees/management/beneficiaries
- Climate-related targets
- Encouraging internal and/or external portfolio managers to monitor emissions risks
- Emissions-risk monitoring and reporting are formalised into contracts when appointing managers
- Weighted average carbon intensity
- Carbon footprint (scope 1 and 2)
- Portfolio carbon footprint
- Total carbon emissions
- Carbon intensity
- Exposure to carbon-related assets
- Other emissions metrics
- Other, specify

	other description
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View investment risks/opps as material ESG factors that can be industry/location specific. Real Estate investment committee assesses energy exposure to current/future impacts.

None of the above

SG 14.5	Additional information [Optional]
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Prior to moving forward with our current scenario analysis vendor, we evaluated multiple industry leading competitors. Criteria we looked at included: assets covered, issuers and securities covered, coverage of transition and physical risk, climate scenarios used, climate risk measurement output (risk score, value at risk), and overall process.

Through our evaluation process we found the concept of tying public companies or other entities to a wide variety of physical locations is relatively nascent and requires a lot of bottoms up development work on our part to build that out.

SG 14 CC	Voluntary	Public	General
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SG 14.6 CC	Provide further details on the key metric(s) used to assess climate-related risks and opportunities.
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Metric Type	Coverage	Purpose	Metric Unit	Metric Methodology
Climate-related targets	<input type="checkbox"/> All assets <input type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets			
Carbon footprint (scope 1 and 2)	<input type="checkbox"/> All assets <input type="checkbox"/> Majority of assets <input checked="" type="checkbox"/> Minority of assets	For all real estate equity investments - To identify areas of risk and to provide transparency to investors	Tonnes CO2	Energy consumption is monitored and reported by property managers – this is then converted into carbon emissions using publicly available emissions conversion factors
Portfolio carbon footprint	<input type="checkbox"/> All assets <input type="checkbox"/> Majority of assets <input checked="" type="checkbox"/> Minority of assets	For select pilot real estate portfolios an exercise to incorporate scope 3 emissions and therefore provide portfolio carbon footprint has been undertaken to give a more complete picture of transition risk than would be possible by looking at scope 1 and 2 emissions only	Tonnes CO2	Data on energy procured directly by tenants was gathered or estimated and then converted to carbon emissions using publicly available emissions conversion factors
Total carbon emissions	<input type="checkbox"/> All assets <input type="checkbox"/> Majority of assets <input type="checkbox"/> Minority of assets			
Carbon intensity	<input type="checkbox"/> All assets <input type="checkbox"/> Majority of assets <input checked="" type="checkbox"/> Minority of assets	For all real estate equity investments – we normalise carbon emissions by floor area to give greater insight into the level of transition risk across assets.	kgCO2/m2	Carbon emissions total per asset is divided by floor area

SG 14.7
CC

Describe in further detail the key targets.

Targettype	Baseline year	Target year	Description	Attachments
<input type="checkbox"/> Absolute target <input checked="" type="checkbox"/> Intensity target	2015	2030	Reduce the energy intensity of Nuveen Real Estate's entire global equity portfolio by 30% by the year 2030, based on a 2015 baseline	
<input checked="" type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target	2020	2050	All buildings to be net zero carbon	
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target				
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target				
<input type="checkbox"/> Absolute target <input type="checkbox"/> Intensity target				

**SG 14.8
CC**

Indicate whether climate-related risks are integrated into overall risk management and explain the risk management processes used for identifying, assessing and managing climate-related risks.

- Processes for climate-related risks are integrated into overall risk management

Please describe

With respect to its investment portfolio, Nuveen's investment discipline and risk management are executed at the asset class and strategy level by specialized teams, while overall portfolio exposures to the underlying asset classes are managed in a top-down manner through the enterprise risk management framework. Nuveen is now working to formally embed climate risk in the enterprise risk management framework through the work of the Climate Risk Task Force (CRTF). The CRTF is co-owned by TIAA's Chief Risk Officer and Nuveen's Global Head of Responsible Investing to oversee this process.

Individual investment teams identify and manage risks that apply to the specific assets that they oversee. For example, our private direct equity investments in real estate, agriculture, timberland, energy and infrastructure are subject to policies that mandate pre-deal due diligence activities, selection of appropriate partners and agents, use of operating risk scorecards and ongoing monitoring activities that seek to measure and mitigate risks (including environmental) at the asset level.

- Processes for climate-related risks are not integrated into overall risk management

**SG 14.9
CC**

Indicate whether your organisation, and/or external investment manager or service providers acting on your behalf, undertake active ownership activities to encourage TCFD adoption.

- Yes

Please describe

Our Responsible Investment Team monitors public company's governance practices to help protect against downside investment risk related to corporate ESG practices. The Responsible Investing team engages with boards and executives of our public equities and fixed income portfolios to advocate for effective oversight and risk management approaches. In particular, we deploy engagement and proxy voting strategies that encourage companies and their boards to exercise diligence in their (a) assessment of climate risk, (b) analysis of related strategic and economic implications and (c) disclosure of climate policies and progress on related performance indicators.

During our conversations with portfolio companies on ESG issues, we will often advise them to consider reporting using global ESG reporting frameworks that we believe will help us in our mission to integrate ESG into the investment process. Examples include TCFD, CDP and GRI.

- No, we do not undertake active ownership activities.
- No, we do not undertake active ownership activities to encourage TCFD adoption.

SG 15	Mandatory to Report Voluntary to Disclose	Public	Descriptive	PRI 1
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SG 15.1 Indicate if your organisation allocates assets to, or manages, funds based on specific environmental and social themed areas.

Yes

SG 15.2 Indicate the percentage of your total AUM invested in environmental and social themed areas.

%

3.9

SG 15.3 Specify which thematic area(s) you invest in, indicate the percentage of your AUM in the particular asset class and provide a brief description.

Area

Energy efficiency / Clean technology

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.013725891

Fixed income - Corporate (financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.001020957437

Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.006957216

- Fixed income - Securitised

Percentage of AUM (+/-5%) per asset class invested in the area

0.016280641

- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance
- Cash
- Other (1)

Brief description and measures of investment

Within Fixed Income, we have securities issued by federal, state or local government entities or corporations, which seek to: conserve natural resources including energy, reduce emissions, waste and pollution.

- Renewable energy

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.084128589

- Fixed income - Corporate (financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.011029734

- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.075155853

- Fixed income - Securitised

Percentage of AUM (+/-5%) per asset class invested in the area

0.011595361

- Private equity
- Property
- Infrastructure

Percentage of AUM (+/-5%) per asset class invested in the area

0.207396709

- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance
- Cash
- Other (1)

Brief description and measures of investment

Within Real Assets, we have investments in renewable power generation (solar, wind, biogas).
 Within fixed income, we invest in securities issued by federal, state or local government entities or corporations which seek to finance projects that increase the share of renewable energy in the global energy mix, increase energy efficiency and reduce greenhouse emissions.

- Green buildings

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

.00414322

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.011218276

- Fixed income - Securitised

Percentage of AUM (+/-5%) per asset class invested in the area

0.049539532

- Private equity
- Property

Percentage of AUM (+/-5%) per asset class invested in the area

2.139956955

- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.001403698

- Cash
- Other (1)

Brief description and measures of investment

Within Nuveen's global real estate portfolio, we have voluntary sustainability building certifications (e.g. LEED, BREEAM, Energy Star, BOMA 360, DGNB, NABERS, HQE).

Within Fixed Income, we invest in securities issued by federal, or state or local government entities or corporations that support sustainable building projects.

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 across three investment themes that benefit low- to moderate-income communities globally: inclusive growth, affordable housing, resource efficiency.

- Sustainable forestry

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.007287166

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.014074694

- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry

Percentage of AUM (+/-5%) per asset class invested in the area

0.179115339

- Farmland
- Inclusive finance
- Cash
- Other (1)

Brief description and measures of investment

Within Real Assets, we have investments in sustainably managed timberland.

Within Fixed Income, we invest in securities issued by federal, state or local government entities or corporations which finance sustainable forestry or land preservation/ conservation.

- Sustainable agriculture

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.002545323

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.005128354

- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland

Percentage of AUM (+/-5%) per asset class invested in the area

0.773024098

- Inclusive finance
- Cash
- Other (1)

Brief description and measures of investment

Within Real Assets, we have investments in sustainably managed farmland.

Within Fixed Income, we invest in securities issued by federal, state or local government entities or corporations which finance sustainable agriculture practices, including sustainable marine practices.

Microfinance

Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.015583034

- Cash
- Other (1)

Brief description and measures of investment

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 across three investment themes that benefit low- to moderate-income communities globally: inclusive growth, affordable housing, resource efficiency.

SME financing

Asset class invested

- Listed equity
- Fixed income - SSA
- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.017930388

- Cash
- Other (1)

Brief description and measures of investment

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 across three investment themes that benefit low- to moderate-income communities globally: inclusive growth, affordable housing, resource efficiency.

- Social enterprise / community investing

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.027338657

- Fixed income - Corporate (financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.0000000754

- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.06787528

- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.006316172

- Cash
- Other (1)

Brief description and measures of investment

Within the Social Choice Bond Proprietary Impact Framework, we invest in securities issued by supranational, federal, state or local government entities or corporations to support community economic development projects, humanitarian, disaster, and international aid services inclusive of underserved and/or economically disadvantaged communities.

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 across three investment themes that benefit low- to moderate-income communities globally: inclusive growth, affordable housing, resource efficiency.

- Affordable housing

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.019891229

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.003148659

- Fixed income - Securitised

Percentage of AUM (+/-5%) per asset class invested in the area

0.011633069

- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.041242721

- Cash
- Other (1)

Brief description and measures of investment

Within the Social Choice Bond Proprietary Impact Framework, we invest in securities issued by supranational, federal, state or local government or corporate entities to support increasing the availability of affordable housing, reducing the rent burden, increasing home ownership, with a focus on low and moderate income households and increasing access housing near to transit oriented hubs.

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 across three investment themes that benefit low- to moderate-income communities globally: inclusive growth, affordable housing, resource efficiency.

- Education

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.002073967

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.001216098

- Cash
- Other (1)

Brief description and measures of investment

Within the Social Choice Bond Proprietary Impact Framework, we invest in securities issued by supranational, federal, state or local government or corporate entities to increase availability of education services for underserved populations, including access to vocational training.

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 across three investment themes that benefit low- to moderate-income communities globally: inclusive growth, affordable housing, resource efficiency.

Within the inclusive growth theme, our Social Impact Investment Portfolio invests in strategies that provides financial services, healthcare and education to reduce poverty among underserved populations, particularly in emerging markets. By providing higher-quality services at lower cost, these investments help the poor contribute to and benefit from broader economic growth.

- Global health

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.005486585

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)

Percentage of AUM (+/-5%) per asset class invested in the area

0.001385787

- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance

Percentage of AUM (+/-5%) per asset class invested in the area

0.004807832

- Cash
- Other (1)

Brief description and measures of investment

Within the Social Choice Bond Proprietary Impact Framework, we invest in securities issued by supranational, federal, state or local government or corporate entities to increase availability of healthcare and medical services.

Within the inclusive growth theme, our Social Impact Investment Portfolio invests in strategies that provides financial services, healthcare and education to reduce poverty among underserved populations, particularly in emerging markets. By providing higher-quality services at lower cost, these investments help the poor contribute to and benefit from broader economic growth.

- Water

Asset class invested

- Listed equity
- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.046287174

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance
- Cash
- Other (1)

Brief description and measures of investment

Securities issued by federal, or state or local government entities or corporations support development of water infrastructure that improves clean drinking water supplies and/or sewer systems, and protects local water sources.

Investments include Fixed Income SSA, Fixed Income Corporate Financial, and Fixed Income.

- Other area, specify

Low Carbon

Asset class invested

- Listed equity

Percentage of AUM (+/-5%) per asset class invested in the area

0.090641789

- Fixed income - SSA

Percentage of AUM (+/-5%) per asset class invested in the area

0.012434375

- Fixed income - Corporate (financial)
- Fixed income - Corporate (non-financial)
- Fixed income - Securitised
- Private equity
- Property
- Infrastructure
- Commodities
- Hedge funds
- Forestry
- Farmland
- Inclusive finance
- Cash
- Other (1)

Brief description and measures of investment

We offer 13 strategies that explicitly include low carbon criteria relating to companies' current and future carbon emissions

- No