

TIAA Fails Clients on Climate

Weak Strategy Requires Overhaul to Achieve Market Leadership Position

Executive Summary

Over the last decade, a number of institutional investors have set a new standard for leadership on climate change. Universities, pension funds, churches, banks, and entire nations have divested their holdings in fossil fuels, driven by the long-term weak financial performance of coal, oil and gas stocks; the increasing frequency and intensity of droughts, storms, floods, and fire; and the scientific consensus on the causes of global warming. In late 2021, the Teachers Insurance and Annuity Association of America (TIAA) and its investment manager Nuveen issued a Climate Action Plan (CAP). The plan is modest and disappointing—with at minimum \$78 billion invested in fossil fuels, TIAA has a long way to go to become a climate leader.

The financial case for fossil fuel divestment is strong. For most of the last decade, fossil fuel stocks clustered at the bottom of the market, overproducing and following an outmoded business model that exposed them to price volatility. With Russia's invasion of Ukraine raising oil prices, the industry's fortunes have improved. But the invasion has stripped away any pretense that the industry is governed by supply and demand. The high oil prices and improved financial fortunes of investors are now driven by command and control in Russia. Some producer and consumer countries have responded by doubling down on fossil fuel infrastructure expenditures and by pledging long-term support for fossil fuel consumption. However, it is clear that that future of the fossil fuel industry is both volatile and unstable.

TIAA's failure to fully consider divestment as a mechanism to protect its portfolio is a striking lapse in its fiduciary obligations. TIAA has made it clear that climate risk is financial risk. The company's failure to consider taking a strong defensive step and divest its fossil fuel holdings to clear its portfolio of the risk is logically inconsistent, financially imprudent and strategically unsound. It is difficult to see how its Climate Action Plan can meet its net zero goals without a clear, policy-based use of the divestment option.

Serving a customer base of educational, cultural, health and social service professionals who are knowledgeable about the dangers of fossil fuels and alarmed by rapidly accelerating global climate change, TIAA is well-positioned to undertake much more significant leadership on sustainable investing. The company claims its climate plan will eventually address its enterprise-wide \$1.4 trillion portfolio of bonds, real estate, private equity and stocks. Its portfolio has been shaped by its legacy as an insurance company. The legacy leaves it with a portfolio weighted heavily in fixed income investments (bonds). To balance out the bond market, TIAA and its principal subsidiary Nuveen developed a private equity portfolio that adds higher returns and greater risk. The company's substantial real estate portfolio is

innovative when it comes to implementing climate initiatives, but it falls short in many other asset areas.

This review focuses on TIAA-Nuveen's Climate Action Plan, and more broadly on its \$1.4 trillion portfolio. The findings of the analysis are as follows:

- The first phase of the Climate Action Plan covers TIAA's \$285 billion General Account. TIAA's corporate bond portfolio and real estate holdings in the General Account are considered the first priority investments. They constitute \$136.5 billion and \$3.4 billion of the General Account, respectively. This \$140 billion constitutes 10% of the TIAA's total \$1.4 trillion assets under management, a small, unambitious priority.
- IEEFA conservatively estimates that TIAA's **enterprise-wide** portfolio of \$1.4 trillion contains \$78 billion in fossil fuel risks. Our finding is heavily qualified due to a lack of transparency. TIAA should use the CAP process to address this opaqueness in the future.
- TIAA's **public corporate bond** portfolio is heavily weighted with fossil fuels. A review of its \$136.5 billion corporate bond portfolio in its General Account finds that the corporate bond portfolio carries an estimated 17.2% exposure to fossil fuel and utility companies.
- IEEFA estimates that approximately 12%, or \$4.7 billion of the \$34.1 billion General Account **private equity portfolio** has significant carbon exposure. TIAA's **private equity investments**, currently called "other investments" and ranked a "low priority" for climate action, should be a much higher priority. The portfolio contains fossil fuel companies and financiers that have generated worldwide controversy due to their fossil fuel holdings. TIAA can bring an end to that outmoded legacy. Full disclosure of the holdings would be pathbreaking and consistent with TIAA's professed commitment to leadership on transparency.
- The \$10.1 billion in **stocks** in the General Account is a miniscule portion of TIAA-Nuveen's vast holdings. However, these holdings are structured by an investment policy that covers the total estimated \$501 billion in equity holdings, and therefore have much larger implications. IEEFA estimates that approximately 7% of the equity portfolio is exposed to fossil fuels. The first installment on TIAA-Nuveen's Climate Action Plan is an opportunity to signal its longer-term perspective on fossil fuels. Even to bring this small portion into net-zero alignment, TIAA must consider major reforms to its individual and institutional customers. Will TIAA offer fossil free or decarbonized alternatives, or maintain its commitment to the losing proposition of fossil fuel equities?

A. Recommendations

This report makes a number of recommendations that TIAA's board and management can take immediately. Other recommendations can be phased in over time, with greater transparency and deliberation.

At the top of TIAA-Nuveen's climate change agenda should be a decision **to stop investing in fossil fuels**. Then, the company needs to **improve transparency**. TIAA is a large institution—its holdings are complex and its corporate layers can be incomprehensible to the outside observer. It is beyond the scope of this report to establish a definitive account of TIAA's carbon footprint, but this work should be central to the company's efforts to both identify and mitigate its role in supporting carbon emissions.

In the next stage of its Climate Action Plan, TIAA-Nuveen needs to include—at minimum—the following specific steps:

1. **Do not make new bond purchases in the General Account from companies and utilities exposed to fossil fuels.** In 2021, the company bought \$35.6 billion in bonds. An exclusion list can be generated quickly, and the ban can be communicated to Nuveen and TIAA staff and external bond advisors immediately. To round out the policy changes, publish a list of high-carbon emitters in the portfolio, the timing of bond maturations, a strategy for engagement, and a clear policy guide to divestment/reinvestment, new purchases and refinancing.
2. **Do not make new private equity or other asset purchases in the General Account from companies and utilities exposed to fossil fuels.** This can be communicated to Nuveen and TIAA staff and external money managers immediately. Compile a list of high emitters in the private equity and other asset portfolio, articulate a strategy for engagement, and lay out clear standards for divestment/reinvestment.
3. **Reduce, with the aim to eliminate, high emitters from TIAA's equity holdings.** The \$10.1 billion stock portfolio in the General Account is invested largely in funds and indexes sponsored by TIAA and Nuveen. From a policy and institutional perspective, the treatment of the stocks in the General Account portfolio has significant, long-term implications for TIAA, its customers and the estimated \$500 billion enterprise-wide stock portfolio. How the company will align these holdings with the broader portfolio requires TIAA to decide now: Will it be offering fossil-free alternatives as leading products for individual and institutional funds and/or will it align all of its current equity products and indexes to achieve fossil-free status?
4. **Clarify the standards to be used in TIAA-Nuveen's real estate carbon assessments and plans for corrective action** for the General Account's \$3.7 billion in investments. Create a publicly available, regularly updated reporting protocol. This data should guide TIAA-Nuveen's internal goals and provide an industry model for reporting on climate change initiatives. The

CAP report should offer clear guidance on the implications of these steps for the full \$156 billion real estate investment portfolio.

B. Customer Concerns

TIAA has garnered 17 resolutions from faculty groups in the United States calling on it to divest from fossil fuels. The resolutions reflect the trends shaping educational institutions around the world. There are now more than 1,500 institutions worldwide that have decided to divest in a manner that is consistent with the risk assessment and philosophy that governs each of the individual funds. Recent polling strongly suggests that college-educated professionals (TIAA's customer base) have a strong interest in climate change.

On Oct. 19, 2022, almost 300 clients of TIAA/Nuveen filed a complaint with the Principles of Responsible Investment (PRI) initiative. The complaint highlights TIAA/Nuveen's investments in fossil fuels and timberlands that are in apparent violation of the climate change principles it pledged to follow when it joined PRI. The complaint requests a thorough review of TIAA/Nuveen's policies and practices, as well as a corrective action plan.

TIAA has an opportunity to realign its portfolio and reporting with the growing sustainable economy. The energy transition is creating significant shifts in the direction of investment capital. This trend will continue, and TIAA can greatly assist the finance sector by showing how a climate conscious fund can integrate the energy transition into its operations and investment portfolio.

C. Method

The precise figures generated by IEEFA in this report must be considered highly preliminary. The magnitudes and trajectories, however, are clear and reliable. TIAA's system of reporting is designed to comply with insurance industry regulatory requirements and the needs of individual and institutional investors. The data is NOT meant to be used as the basis of a fossil fuel or carbon footprint analysis. In its Climate Action Plan, TIAA/Nuveen promises to undertake that task.

In this report, IEEFA relies on a series of reports and website postings from both Nuveen and TIAA, including annual audits, annual and quarterly filings with the New York State Department of Financial Services (DFS), fund and index annual reports, and press releases. The investment portfolio of TIAA is highly complicated and layered. The various documents prepared by Nuveen and TIAA have different accounting methodologies and categories, definitions, and valuation methods that cannot easily cross between documents. IEEFA has requested clarification from TIAA on these issues, but our requests have gone unanswered.

This report attempts to assemble the data in a format that: a) describes the broad categories of assets under management; b) provides some indication of the value of the assets; and c) identifies the fossil fuel exposure of the fund, index or company. For most of the report, IEEFA found it necessary to rely on definitions provided by TIAA, which remain mostly unclear; extrapolation of subsamples of assets rather than complete accounting; and manual transfers of large amounts of data from

company filings. All of these steps create the potential for error in the data and analysis. Despite these impairments, IEEFA remains confident in the magnitudes and trajectories provided in this report. It is anticipated that the upcoming CAP report published by TIAA will sharpen definitions, accounting and policy direction. This will undoubtedly correct and update any flaws in this report.

Table of Contents

Executive Summary	1
I. Background	7
II. The Financial Case for Divestment.....	11
III. TIAA's Climate Action Plan	15
IV. Recommendations.....	30
Conclusion	33
Appendix: Adani Group and Investor Responses.....	35
About the Author	40

I. Background

A. Corporate Structure

Teachers Insurance and Annuity Association of America (TIAA) was established by the Carnegie Foundation in 1918 as a legal reserve life insurance company under the insurance laws of New York. TIAA's purpose is to aid and strengthen non-profit educational and research organizations, governmental entities and other non-profit institutions by providing retirement and insurance benefits for their employees and their families, and by counseling such organizations and their employees on benefit plans and other measures of economic security. Net earnings from investments in excess of the amounts needed to provide for contractual benefits are available for distribution or remain available for purposes that the TIAA board of trustees determines can uphold TIAA's mission.

All of the outstanding common stock of TIAA is held by the TIAA Board of Overseers. The board is a Type B New York not-for-profit corporation, created for the purpose of holding TIAA stock. The overseers elect the trustees, who supervise the management of TIAA and also approve changes to TIAA's organization documents.

TIAA operates in conjunction with the College Retirement Equities Fund (CREF), a separate entity formed in 1952 as a not-for-profit corporation under New York law to provide variable annuity contracts as alternatives to TIAA's fixed annuity contracts. CREF is registered as an open-end diversified management investment company.

TIAA and CREF serve approximately 5 million people across more than 16,000 colleges, universities and related education and research institutions in the United States. More than 65% of the premiums paid by TIAA's customers comes from New York, Michigan, California, Pennsylvania, New Jersey, Georgia, Massachusetts, Connecticut, Minnesota and Wisconsin.¹

TIAA-CREF Life Insurance Company (TIAA-CREF Life) was incorporated and commenced business in 1996, as a stock company under the laws of New York. It is a direct wholly-owned subsidiary of TIAA. TIAA-CREF Life sells life insurance and annuity products to the general public with a large focus on marketing its products to individuals who own retirement annuities or insurance policies issued by TIAA. TIAA-CREF Life also sells funding agreements and separate account guaranteed interest contracts (SAGIC). The funding agreements are issued directly to states in support of state-sponsored 529 college savings and scholarship plans.

TIAA itself and its subsidiary TIAA-CREF Life Insurance Company are regulated by the New York Department of Financial Services as life insurers.²

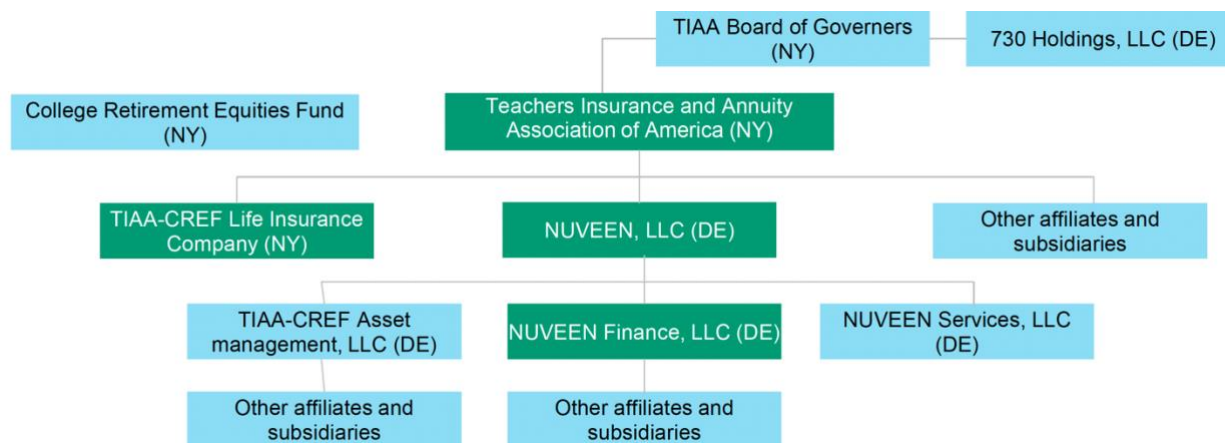
The company's core business is complemented by banking and asset management services. This organizational capacity was enhanced by the acquisition of TIAA FSB

¹ A.M. Best. [Best's Rating Reports](#). August 2021.

² TIAA. [TIAA Statutory Audit 2021](#). December 31, 2021. ("Annual Audit").

(formerly EverBank) and Nuveen Inc. (a diversified investment management company). TIAA acquired Nuveen in April 2014.³ TIAA acquired Everbank in 2017.⁴ Nuveen is effectively the asset manager for TIAA-CREF.

Figure 1: Simplified TIAA Organization Chart



Source: Moody's. *Teachers Insurance and Annuity Association of America: Rising interest rates relieve spread compression.* June 16, 2022.

TIAA, directly and through its subsidiaries and affiliates, offers a variety of financial services and products including fixed and variable annuities, mutual funds, wealth management advice, education savings programs, life insurance, trust and banking services, planned giving and endowment services, brokerage services and institutional third-party asset management. TIAA and Nuveen have market leadership roles in the higher education and not-for-profit market.

The multiplicity of product offerings provides access to a wide community of present and future retirees. The TIAA system offers its customers pension portability and other benefits that enable education and research workers to change employers without diminishing retirement benefits. The benefit package is complemented on the investment side by withdrawal restrictions that create a degree of illiquidity, diminishing the potential for unexpected, disruptive cash withdrawals and allowing for the introduction of a level of risk in the investment portfolio that enhances returns.

TIAA enjoys strong credit ratings from Fitch, Standard and Poor's, Moody's and Best AM. Moody's, for example, gives TIAA a long-term rating of Aa1 Stable.⁵ Moody's attributes TIAA's credit positives to: Dominant market presence in education and

³ New York Times. *TIAA CREF to buy Nuveen for \$6.25 billion.* April 14, 2014.

⁴ Businesswire. *TIAA Enters Into Definitive Agreement to Acquire Everbank.* August 8, 2016.

⁵ Moody's. *Teachers Insurance and Annuity Association of America: Rising interest rates relieve spread compression.* June 16, 2022. The Aa1 rating is illustrative of a company that is a very low credit risk. The rating is one notch below Aaa, Moody's highest rating. See: Moody's Investor Service. *Rating Symbols and Definitions.* June 2, 2022.

research institutions; reputation and expertise in the payout annuity market; unique liability structure—approximately 70% of TIAA's liabilities are not subject to discretionary withdrawal; and outstanding capitalization with most liabilities passing actual investment experience through to policyholders. The company's credit challenges stem from: Managing a large block of interest-sensitive fixed annuities; retaining assets of higher education retirees; an earnings profile with modest profitability; slow growth of the company's core defined-contribution pension market and increasing competition at employee participant level at sponsoring institutions; and significant exposure to alternative investments.

B. Assets Under Management

TIAA has \$1.4 trillion in assets under management, reflecting assets across Nuveen Investments affiliates and TIAA investment management teams of \$1.375 billion as of Dec. 31, 2021.⁶ Nuveen claims \$1.2 trillion in assets under management as of March 31, 2022, inclusive of “underlying investment specialists.”⁷ Included as part of TIAA's total assets under management is its General Account.

C. General Account

The General Account is an insurance account. It consists of a diversified set of investments under TIAA's control. The General Account includes a core set of assets and four separate accounts.⁸ The majority of TIAA's General Account is invested in fixed income, long-term bonds. The remainder of the assets consists of alternative assets (private equity and infrastructure), mortgage loans, preferred and common stocks, real estate assets, contract loans, short-term securities and derivative instruments.⁹ Most of TIAA's General Account common stocks are invested in TIAA and Nuveen subsidiaries and affiliates.¹⁰

⁶ TIAA. [Facts and Statistics](#). Last visited August 15, 2022.

⁷ Nuveen. [Nuveen by the Numbers](#). Last visited August 15, 2022. Neither TIAA nor Nuveen offer a clear, detailed accounting of the trillion dollars in holdings. IEEFA's efforts to derive a total assets under management by tallying the various funds listed on each company's website totaled \$1.16 trillion (Table III).

⁸ The General Account is not an investable instrument and provides no return although the funds and indexes held within it are considered as part of TIAA's assets under management. TIAA. [Financial Strength: The TIAA General Account](#). March 31, 2022.

⁹ TIAA. [Annual Audit](#). December 2021.

¹⁰ New York State Department of Financial Services. [TIAA Annual Statement Investment Schedules](#), Preferred and Common Stocks, as of December 31, 2021 (2021 Investment Schedules).

Table 1: TIAA General Account Investments as of September 30, 2021

Assets	Amount (\$)	Percentage
Bonds	199,468,373,065	70%
Mortgages and First Liens	35,973,420,351	13%
Other Invested Assets	32,667,849,656	11%
Common and Preferred Stocks	8,476,991,507	3%
Real Estate	3,677,161,069	1%
Securities Lending	3,125,738,246	1%
Contracts/Cash/Derivatives/Other	2,528,316,914	1%
Total	285,917,850,808	

Source: TIAA, Statement as of September 30, 2021 of the Teachers Insurance and Annuity Association of America. [Quarterly Statement](#). November 1, 2021.

TIAA's three separate accounts fund variable annuities, and a fourth separate account funds flexible fixed annuity contracts offered to defined pension plans, principally in the 403(b) market.

The September quarterly statement lists the aggregate for the four separate accounts at \$47.9 billion. The four separate accounts are:¹¹

- TIAA Real Estate Account
- TIAA Separate Account VA-3
- TIAA Separate Account VA-1
- TIAA Stable Value Account

As an investment portfolio, the overall breadth of the General Account is a microcosm of TIAA/CREF/Nuveen's \$1.4 trillion assets under management.

¹¹ The September Quarterly statement does not break out the values for each of the four accounts. A more complete description and accounting of the value of the four separate accounts can be found in: TIAA. [TIAA Audited Statutory – Basis Financial Statements](#). December 31, 2021. These statements are used throughout this report as they reflect a full year accounting of the various assets. The use of the September 2021 quarterly accounting for the purposes of the CAP adds an unfortunate level of complexity to a transparent understanding of TIAA's holdings in relation to the CAP.

II. The Financial Case for Divestment

A. Long-term Financial Performance of the Fossil Fuel Sector Has Been Weak, and Short-term Performance Is Unsustainable¹²

This paper offers a defensive strategy and financial rationale to protect TIAA's investment portfolio from climate risk. TIAA has concluded that climate risk is financial risk. This section of the report offers a summary of the case for divestment as a prudent option.

The divestment option related to climate change instructs a fund to make no new investments in fossil fuel stocks, bonds, private equity or other investment instruments. Additionally, it should manage the existing portfolio investments in fossil fuels with a goal of exiting those investments where it is prudent to do so.

A divestment plan assumes that these steps are taken consistent with the targeted return assumptions governing the enterprise.

The case for divestment developed in this paper is a financial one. For most of the last decade the fossil fuel industry has been a poor financial performer—a striking departure from the coal, oil and gas engine that grew the world economy and propelled financial markets for most of the last century.

The coal, oil and gas sectors that came out of World War II contributed to world economic growth—the manufacturing sectors drove the world economy, and fossil fuels powered the manufacturing sectors. As gross domestic product grew, so did the fossil fuel sector. The ups and downs of the business cycle allowed the industry to garner massive cash profits in an upcycle. This buffered the industry during down times and even allowed it to buy additional oil and gas reserves from small, cash-strapped companies.¹³ The constant replenishment of reserves provided an appropriate metric to ensure that a company's asset base could maintain supply as growth occurred.

Through recession and war, this business model sent the oil and gas sector to the top of the financial markets. Fossil-fuel market strength dominated the transport, electricity and petrochemical sectors. For most of the last half of the 20th century, fossil fuel companies were an integral part of the Standard and Poor's 500-stock index. Coal worked in tandem with oil and between the 1960s and 1970s, it grew from a regional player to a contributor to economic growth in the United States. With supportive governmental policies, the sectors became quasi-monopolies, a protected political class.¹⁴

¹² For an extended discussion of the financial case for divestment see: IEEFA. [Two Economies Collide: Competition, conflict and financial case for fossil fuel divestment](#). October 2022.

¹³ Daniel Yergin. *The Prize*. Simon and Schuster: New York, 1990. Also see: Daniel Yergin. *The Quest*. Penguin Books: New York, 2011. Also see: Stephen Coll. *Private Empire*. Penguin Books: New York, 2012.

¹⁴ Yergin. *The Quest*, p. 400.

The last decade revealed a paradox within one of the industry's greatest innovations—hydraulic fracturing.¹⁵ The new technological process allowed the industry to create more oil and gas faster and more efficiently, but its business model was poorly aligned. One company after another teetered financially. The oversupply forced oil and gas prices and profits down. As one company official put it at the time, the industry had lost credibility with the financial sector because of a track record of “destroyed capital”.¹⁶ In 2020, the pandemic and a dispute between Russia and Saudi Arabia drove prices even lower, creating a worldwide crisis. As the economic impacts of the pandemic faded and recovery set in, prices spiked and then spiked again with Russia's invasion of Ukraine.

The competitive landscape facing the oil and gas industry was changing before the pandemic. Broad macroeconomic indicators of energy intensity (primary energy consumed per unit of GDP) have been decreasing since the early 1990s because of efficiency improvements, especially in the manufacturing sector.¹⁷ Competition from energy efficiency and alternative energy in the electricity, transport and petrochemical sectors was reshaping the market. The competitive conditions facing the industry prior to the invasion persist. The fossil fuel industry's most recent plans to respond to climate change with carbon capture and sequestration technology remain unproven. Today, fossil fuel companies and TIAA face an unsustainable industry that requires geopolitical manipulations to prop up oil and gas prices. Although most of the industry had historically been driven by principles of supply and demand, it now follows the command-and-control activities of Russian leadership. Russia's invasion sparked a price increase, and the benefits have provided a lifeline to the oil and gas industry broadly, as well as to other governments heavily dependent on production.

No one knows when the war will end or how countries will react to its energy implications. The market framework that is emerging supports a two-economy scenario: On one side, a fossil fuel sector facing stiff competition and long-term risk to market share, and on the other side, sustainable economics in the electricity, transport and petrochemical sectors. Sustainable economics will continue to push prices down and drive investment away from the fossil fuel sector.

Divestment is a defensive measure to protect investment portfolios from volatility and value destruction. It is also an acknowledgement of the unprecedented competition being driven by concerns over climate change and the opportunity to develop new markets to replace fossil fuels.

¹⁵ Yergin. *The New Map*. Penguin Books: New York, 2021.

¹⁶ Texas Monthly. [The “mother fracker” reckons with the mother of all oil busts](#). July 2020.

¹⁷ International Energy Agency. [Data and Projections: Energy Intensity](#). Last visited October 1, 2022.

B. An Initial Look at TIAA’s Portfolio and Fossil Fuel Exposure¹⁸

Like most investment funds, TIAA and Nuveen are ill-prepared to identify their own carbon footprint. The issue starts with a general lack of transparency. TIAA discloses that its assets under management equal \$1.4 trillion. Based upon public disclosures, it is very difficult to understand how they have arrived at this number.¹⁹ For the general purposes of this report, IEEFA uses TIAA’s \$1.4 trillion, despite the discrepancy with IEEFA’s attempt to generate a figure using website disclosures.

IEEFA’s Review of TIAA and Nuveen’s Website Disclosures Identifies \$1.2 Trillion in Assets Under Management

Table 2: IEEFA Estimate of TIAA Assets Under Management

Funds and Accounts	Stocks	Bonds	Others	Total
TIAA-CREFF	445,204,496,830	326,042,906,244	138,029,170,671	909,276,573,745
Nuveen Mutual Funds	17,162,091,524	91,400,569,468	4,612,530,667	113,175,191,659
Nuveen Closed End Funds	4,277,236,187	58,725,909,950	1,216,411,952	64,219,558,089
Nuveen ETF	5,950,551,917	630,697,167	118,012,753	6,699,261,837
Nuveen Separately Managed Account	28,090,390,000	40,066,199,330	2,100,000,000	70,256,589,330
Total	500,684,766,458	516,866,282,159	146,076,126,043	1,163,627,174,660
				-
Percentage of Portfolio	43%	44%	13%	100%
Approximate Carbon Exposure	7%	5%	14%	
Approximate Carbon Exposure (dollars)	35,047,933,652	25,843,314,108	17,529,135,125	78,420,382,885

Source: IEEFA calculations based on TIAA and Nuveen website listings.

Each section of this paper describes the basis for the estimates of the approximate carbon exposure for each asset classification. The summary is contained in Table 2. The overall exposure of the fund is approximately \$78 billion, or 7% of the \$1.2 trillion estimated value of the fund. This estimate is very conservative since it is based on an assessment of the portfolio with very limited information about the actual investments. The sub-samplings that form the basis of the estimates should be enlarged (clarifying the size of the holdings and disclosing a consistently applied carbon footprint) and the definitions strengthened.

To generate this table, IEEFA developed spreadsheets based on both companies’ website disclosures. An assessment was made of the asset categories and carbon footprint based on the layout of the website (name of the fund and links to any fund-specific financial disclosure documents) as well as various disclosure documents filed by TIAA at the New York State Department of Financial Services. Where

¹⁸ Unless otherwise noted, all of the figures on this page are taken from TIAA publications.

¹⁹ IEEFA, Letter from Tom Sanzillo, Director of Financial Analysis to Thasunda Duckett, TIAA CEO. IEEFA wrote to TIAA on June 1, 2022 and requested clarification of this figure and some others that flowed from the Climate Action Plan. TIAA did not respond to the request for information. (Letter available upon request.)

possible, website disclosures were compared to annual reports linked to the various funds.

TIAA Climate Action Plan and IEEFA Critique by the Numbers

- 1) The General Account Assets Targeted for Climate Action Plan: \$285.4 billion¹
 - a) Priority for Climate Action (\$140 billion—10% of \$1.4 trillion)
 - i) Corporate Bonds: \$136.5 billion²
 - ii) Real Estate: \$3.7 billion
 - b) Lower Priority for Climate Action
 - i) Stocks: \$8.5 billion
 - ii) Other Assets: \$32.7 billion
- 2) TIAA's Carbon Footprint (IEEFA ESTIMATES)³
 - a) Corporate Bonds: 17.2% of GA Corporate Bonds Have Fossil Fuel Exposure
 - b) Stocks: 7% Carbon Exposure for Fossils and Utilities
 - c) Other Assets: Estimated at 14% of Portfolio
- 3) Observations and Critiques
 - a) CAP priority \$140 billion, too small (only 10% of total assets of \$1.4 trillion)
 - b) IEEFA recommendations for first climate report
 - i) Stop all future investments in companies with fossil fuel exposure
 - (1) No new bond purchases to fossil fuel companies; restrict \$35.6 billion annual purchases⁴
 - (2) No new investments in fossil fuel companies by private equity and other assets; restrict \$5 billion annual purchases⁵
 - (3) Creation of exit list for bonds and private equity serves as early warning message for investments that mature later
 - ii) Take leadership on real estate
 - iii) Make a policy decision now to eliminate fossil fuels from stock portfolio of \$8.5 billion
 - (1) Send a message to individual investors
 - (2) Let indexes know intentions
 - (3) Set the stage for withdrawing from fossil fuels across \$500 billion equities portfolio
 - iv) Step up on controversies:
 - (1) Adani (Appendix)

¹ The CAP uses the financial description of its climate priorities based on its quarterly filing ending in September 2021. The CAP data can be tracked to the NYS DFS September filing. See: TIAA. [Quarterly Statement September 2021](#). September 30, 2021, p. 2. All TIAA references to the General Account in this statistical section are from the September Quarterly statement unless otherwise noted. Throughout the rest of the report, IEEFA relied principally on the year end reports as they are more comprehensive.

² Corporate Bond figures are taken from end of year 2021 disclosure. TIAA. [2021 Schedule of Investments](#), p. E10.200. The annual schedules provide the complete listing of all bonds held whereas the quarterly statements track only transactions occurring within the quarter.

³ See Section V: Recommendations.

⁴ See: TIAA. [Annual Statement 2021](#). January 22, 2022.

⁵ *Ibid.*

III. TIAA's Climate Action Plan²⁰

In a Dec. 2021 climate report, TIAA announced that it was designing and commencing implementation of a Climate Action Plan that would be focused on the organization's General Account.²¹ The General Account is not an investment fund, but a planning tool used by TIAA CREF. IEEFA has produced a statistical overview of the plan (see Inset: TIAA Climate Action Plan and IEEFA Critique by the Numbers). The substantive direction of the Climate Action Plan guides the structure and analysis of the rest of this paper.

TIAA's climate report outlined five strategic goals to combat climate change. The overall program is organized around the basic idea that "climate risk is investment risk," and managing the risk is essential to providing stable returns.²²

The TIAA climate program aims to:

1. Encourage corporate action by advocating for companies to broaden emissions disclosures and set emission reduction goals;
2. Target TIAA's corporate operations to reduce emissions that are in the direct managerial control of TIAA's board and management;
3. Evaluate new investment activity to better position TIAA's investments to transition to the low-carbon economy;
4. Evaluate the disposition of assets that are not well positioned to transition; and
5. Advocate for clear consistent disclosure requirements.

TIAA has established priority net-zero goals related to the General Account, Nuveen Real Estate and TIAA operations.²³ Private equity, stocks and other assets are given lower priority status presumably to be addressed at some later date.

TIAA's \$1.4 trillion in assets under management covers a broad set of asset classes (stocks, bonds, private equity, real estate, real assets) across the globe, covering all sectors of the economy. The cash amounts are packed into a complicated array of funds, indexes and accounts designed to comply with various insurance mandates and attract individual and institutional investors.

The CAP focus is on the General Account. The General Account covers investments valued at \$338.8 billion as of Sept. 20, 2021. The CAP does not include coverage of

²⁰ TIAA. [Facing the Climate Crisis](#). December 2021.

²¹ *Ibid.*

²² *Ibid.*

²³ Nuveen. [Nuveen Real Estate](#). Last visited August 15, 2022. Nuveen Real Estate claims \$156 billion in assets under management as of September 2021. The figure is inclusive of underlying investment specialists.

investments in the four separate accounts that are considered part of the General Account.

Minus the separate accounts, the CAP identifies \$285 billion of assets. The CAP refines the carbon targets further by establishing two priorities: “Public corporate bonds” and “private direct real estate.” The categories are not clearly defined in either the CAP or TIAA’s various audits and financial filings.

For the purpose of this section, IEEFA relies upon the 2021 Annual Report and Supplemental Schedules of Investment. The ‘public corporate bonds’ category covers a significant portion of TIAA’s General Account bond investments of \$197 billion. Based on IEEFA’s review, “public corporate bonds” cover at least \$136.5 billion of the \$197 billion identified in TIAA’s filing as of Dec. 31, 2021.²⁴

The direct private real estate portfolio that is part of the General Account appears to cover approximately \$3.7 billion.²⁵

The first-tier priority scope of TIAA’s net-zero plan explicitly covers approximately \$140 billion (\$136.5 billion public corporate bonds plus \$3.7 billion real estate) in invested assets out of a potential universe of \$1.4 trillion.

The next section of this report will cover the two priority categories—public corporate bonds and real estate—because TIAA has identified these assets as first-tier priorities. The report will then provide commentary on some of the other accounting categories in the General Account, specifically common and preferred stocks (\$10.1 billion) and other invested assets (\$34.1 billion).²⁶

In TIAA’s report to its investors regarding shareholder stewardship, the company has made it clear that divestment is not seen as an effective investment strategy.²⁷ TIAA argues that the divestment tool does not reduce emissions and also often results in the assets being transferred to other investors rather than having a broader impact.

TIAA’s customer base is largely made up of employees of higher education institutions.²⁸ Leading public opinion research on climate change shows that highly educated people are the most likely part of the population to be concerned about climate change.²⁹ Since 2021, TIAA has received resolutions from 17 faculty senates and teachers unions urging TIAA to take aggressive action to decarbonize its

²⁴ TIAA. [2021 Schedule of Investments](#). Issuer Obligation, Actual Cost, p.E.10.200.

²⁵ TIAA. [2021 Schedule of Investments](#). E.01-01 discloses a carrying value of \$3.7 billion and actual costs of \$5.0 billion.

²⁶ TIAA. [Annual Statement 2021](#), p. 2.

²⁷ TIAA. [2020-2021 Annual Stewardship Report](#). November 2021.

²⁸ Moody’s. [Teachers Insurance and Annuity Association of America: Rising interest rates relieve spread compression](#). June 16, 2022.

²⁹ Center for Climate Integrity. [Surveys of Michigan, Wisconsin, Minnesota and Pennsylvania all indicate that individuals holding more than a bachelor’s degree are the most concerned part of the population about climate change](#). July 2021. (Proprietary Research).

portfolio.³⁰ Recently, the American Federation of Teachers, an organization of more than one million members, passed a resolution calling on TIAA to divest.

On Oct. 19, 2022, 300 clients of TIAA/Nuveen filed a complaint with Principles for Responsible Investments (PRI).^{31,32} PRI is a United Nations-sponsored initiative designed to support the work of investment funds that utilize Environmental, Social and Governance (ESG) metrics. TIAA/Nuveen is a member of PRI and agrees to abide by a series of ESG-related principles and protocols. The complaint centers on TIAA/Nuveen's fossil fuel and timber holdings. The complaint points to TIAA/Nuveen's lagging status with regard to climate change compared to other insurers and large investors. The complaint asks PRI to review TIAA/Nuveen's holdings and other aspects of its operations and seeks a corrective action plan. The complaint was spearheaded by TIAA-Divest.³³

In November 2021, the New York State Department of Financial Services (DFS) provided climate guidance to covered insurers. The guidance identified reputational risk issues for insurers that continue underwriting fossil fuel investments and otherwise contribute to climate change through their investments. DFS calls particular attention to reputational risk issues stemming from divestment campaigns.³⁴ DFS guidance refers insurers to a May 2021 International Association of Insurance Supervisors report that summarizes an industry survey in which "almost all insurers implemented an exclusion or divestment policy."³⁵ The consideration of such options is an integral part of a robust diligence process. A filtering process related to fossil fuels implies that policy-driven reductions in exposure to stocks, bonds and private equity are a critically important policy tool needed to achieve net zero emissions goals. In effect, it is an industry best practice.

A. General Account

The scope of the General Account net zero initiative focuses on emission levels across the General Account investment portfolio with an immediate priority on "public corporate fixed income" and "private direct real estate."³⁶ The initial prioritization is based on data TIAA has received from the Net Zero Asset Owners Alliance (NZA0) and the Institutional Investor Group on Climate Change (IIGCC). The General Account net-zero scope also does not include the \$47 billion in the separate accounts managed above.

³⁰ TIAA Divest. [TIAA Divest](#). Last visited September 8, 2022.

³¹ [Letter to Principles for Responsible Investment from 300 TIAA/Nuveen clients](#). October 19, 2022.

³² Principles for Responsible Investment. [About the PRI](#). Last visited October 24, 2022.

³³ TIAA Divest. [TIAA Divest](#). Last visited October 24, 2022.

³⁴ New York State Department of Financial Services. [Guidance of Domestic Insurers on Climate Change](#), Section 3.8.2.7 Reputational Risk, Paragraph 65. November 15, 2021.

³⁵ International Association of Insurance Supervisors. [Application Paper on the Supervision of Climate-related Risks in the Insurance Sector](#). May 2022.

³⁶ International Association of Insurance Supervisors, *op. cit.*, p. 18.

General Account Bonds

To obtain a view of the climate issues related to TIAA's public corporate bond holdings, a review was conducted of its 2021 bond disclosures that are included with the company's annual schedule of investments filed with DFS.³⁷ "Public corporate fixed income" is identified in the CAP as the immediate asset class for priority treatment. TIAA's formal financial filings do not contain a category of "public corporate fixed income."³⁸

For the purposes of this review, TIAA's filings under its annual bond holdings contain a grouping of bond issuances organized under the rubric "Issuer Obligations." This category accounts for \$136.5 billion of the total bond amounts of \$197 billion.³⁹ It consists largely of bonds issued by corporations from every sector of the economy. The remainder of the bond portfolio covered in the 2021 annual schedule of investments consists of municipal and real estate, commercial, and structured securities.⁴⁰ (See Table 3).

IEEFA's examination generated a list of approximately 1,100 bonds issued by oil, gas and coal companies and utilities with fossil fuel exposure. The fossil fuel bond issuances from companies with fossil fuel exposure equaled \$23.5 billion, or 17.2% of all of the Issuer Obligation bonds covered in the annual filing.

This report assumes that there are two categories of issuers that contain fossil fuel exposure: a) Oil and gas companies typically found in the GICS classification for the

³⁷ The bond disclosure covers several categories of bonds: unaffiliated bank loans, issuer obligations, residential mortgage-backed securities, commercial mortgage-backed securities, other loan backed and structured securities, SVO identified funds, affiliated bank loans and unaffiliated bank loans. See: TIAA. [2021 Schedule of Investments](#). E.10.200.

³⁸ Here, we are referring to the 2021 Annual Statement and annual 2021 Schedule of Investments filed at the New York State Department of Financial Services and the annual statutorily based audit. See: TIAA. [Audited Statutory – Basis Financial Statements as of December 31, 2021 and 2020 and for the three years ended December 31, 2021](#). Also see: TIAA. [Financial Strength: The TIAA General Account](#). June 30, 2022.

³⁹ The long-term bond filings are found on pages E10 to E10.200 in the end of year 2021 Schedule of Investments. The summary of the broad bond categories is found on page E10.200. Issuer Obligations bonds are further broken down into several classifications of industrial and miscellaneous bonds and revenue bonds. See: TIAA. [Investment Schedule Detail Referred to in Annual Report](#), Schedule D, Part One showing all long-term bonds owned Dec. 31 of current year.

⁴⁰ The proceeds from municipal bonds are largely used for public properties and infrastructure, such as schools, roads, hospitals, water systems. See: U.S. Government Accountability Office. [Tax Policy: Tax Exempt Status of Certain Bonds Merits Reconsideration and Apparent Noncompliance with Issuance Cost Limitations Should be Addressed](#). March 17, 2008. However, there are considerable issuances connected to economic development projects where private entities, particularly those in the energy space, benefit. See: IEEFA. [Truth About Prairie State Energy Campus Part 4: There are ways out of this bad deal](#). April 9, 2015. The use of municipal bonds to finance power plants constitutes about \$53 billion of the nation's \$2.3 trillion bond portfolio. Also see: American Public Power Association. [Municipal Bonds and Public Power](#). June 2022. Further research is needed to isolate the level of TIAA's holdings in the municipal bond market that are exposed to fossil fuels. Also see: IEEFA. [Financial Risks of Coal Export Terminal Mount](#). November 14, 2012.

energy sector,⁴¹ and b) utilities and other electricity providers.⁴² The utilities and other electricity providers were included, based on the industry’s reliance on oil, gas and coal.⁴³

Table 3: TIAA Bonds Owned December 31, 2021 Filed With New York State Department of Financial Services

Description	Amount (\$)
Issuer Obligation	136,460,385,811
Residential Mortgage Backed Securities	20,697,973,066
Commercial Mortgage Backed Securities	10,018,525,824
Other Loan Backed Structured Securities	22,467,895,451
Unaffiliated Bank Loans	8,135,118,347
Total	197,779,898,499

Source: TIAA. *Investment Schedule Detail Referred to in Annual Report, Schedule D, Part One Showing All Long-term Bonds Owned December 31 of current year. December 31, 2021.*

The companies with exposure to fossil fuels were identified by name, since that is the method of bond identification used in the DFS investment schedule filing that provides the most substantive information. Further analysis is necessary to more carefully examine the utility companies identified by IEEFA to gain a better understanding of the percentage of the revenues of these utilities generated by electricity plants powered by fossil fuels. The utility sector, for example, is increasingly relying on renewable energy.⁴⁴

In 2021, TIAA made \$35.6 billion in new bond acquisitions.⁴⁵ TIAA’s corporate bond holdings span the entire scope of the global economy.⁴⁶ A portion of the bond portfolio includes structured securities and loan-backed instruments. Ninety-one percent of the bonds are investment grade.⁴⁷

The fossil fuel subsampling provides a scope of the bonds purchased by TIAA. It is not a comprehensive list of all companies in this bond portfolio that have fossil fuel exposure. Additional research that only TIAA can perform will render more accurate data. The data presented here represents IEEFA’s best efforts to compile information from a statistical compilation that is designed to comply with insurance industry disclosure standards. TIAA’s filings are not meant to be a carbon analysis, and this report does not criticize the company for this lapse. Rather, it is designed to suggest some ways to develop a carbon analysis as TIAA develops the CAP.

⁴¹ MSCI. [GICS Sector Definitions](#). Last visited September 6, 2022.

⁴² IEEFA relied substantially on the Fossil Free Funds analysis of utility and energy company exposure to fossil fuels. We note where we departed from their reporting system. See: [Fossil Free Funds](#).

⁴³ IEA. *World Electricity Generation Mix by fuel, 1971-2019*.

⁴⁴ International Energy Agency. [Renewables 2021](#). December 2021.

⁴⁵ TIAA. [Annual Statement 2021](#). January 22, 2022, p. 13.32.

⁴⁶ TIAA. [TIAA Statutory Audit 2021](#). December 31, 2021, p. 20. (“Annual Audit”)

⁴⁷ *Ibid.* p. 12.

The list of companies where TIAA holds bonds contains some companies that are engaged in significant controversies related to fossil fuels. For example, TIAA holds \$91.5 million in Adani Group Bonds. Adani is host to the Carmichael mine in Australia. The mine is the largest coal mine project in the world and it has been the target of substantial opposition, including more than 100 finance and insurance companies across the world.⁴⁸

General Account Real Estate Holdings⁴⁹

The Climate Action Plan identifies “private direct real estate” for review. The category “private direct real estate” does not appear in either the September (Quarterly) Schedule of Investments or 2021 annual statement prepared for the New York DFS. The annual statutory audit does not include any assets grouped around the category. The statutory audit of the General Account defines real estate holdings as “the Company’s directly owned real estate investments.”⁵⁰

Each of the DFS financial filings also reports on the company’s mortgage holdings. These do not appear to be considered part of the “private direct” category.⁵¹

There is a comprehensive listing of all General Account real estate holdings contained in the DFS 2021 Schedule of Investments.⁵² The listing contains properties used by TIAA for its administrative purposes and some 84 industrial, residential, mixed use, land for income purposes and commercial/retail properties.⁵³ The listings carry a valuation of \$3.7 billion.⁵⁴

The assessment of the carbon footprint for the purpose of TIAA’s CAP appears to be focused on reviewing the emissions profile principally related to electricity and heating systems for each property managed as part of the General Account. These disclosures will then presumably be used to work with property managers to develop a program of emission reductions. TIAA’s position as an owner/investor in real property places it in a unique position to advance climate solutions and to offer critically important financial information on the transition and its impact on this business sector.

The General Account slice of TIAA/Nuveen’s real estate for the purpose of the Climate Action Plan is quite small (see discussion of Nuveen Real Estate below). Nuveen states that its real estate assets under management amount to \$156 billion. One of the future tasks will be for TIAA and Nuveen to clearly define both the scope of properties covered by the CAP and the standards used to determine success or failure.

⁴⁸ See Appendix I.

⁴⁹ TIAA. [Facing the Climate Crisis](#), December 2021.

⁵⁰ TIAA. [2021 Annual Statement](#), p. 24.

⁵¹ TIAA. [Schedule of Investments](#), Schedule 1, Part B, p. E.04.

⁵² TIAA. [Schedule of Investments](#), Schedule A Part 1, p. E01.1.

⁵³ TIAA. [2021 Annual Statement](#), p. 24.

⁵⁴ TIAA. [Schedule of Investments](#), Schedule A Part 1, Book Adjusted Carrying Value, p. E01.1.

*Nuveen Real Estate*⁵⁵

TIAA's climate report identifies Nuveen Real Estate as a category of assets that will receive priority treatment to achieve net zero by 2040. The fact that TIAA/Nuveen has ownership interests in the property gives the company heightened leverage to hold property managers accountable for achieving climate goals. The TIAA CAP outlines Nuveen's real estate net-zero carbon plan which starts from the assumption that all Nuveen properties should be net zero by 2040. The investment thesis is that buildings that do not achieve this goal are failing to mitigate climate risk and will begin to lose value. TIAA defines a net-zero building as one that meets regionally defined energy use intensity standards; uses 100% renewable energy from on- and off-site sources; includes both landlord and tenant procured energy use; and prohibits onsite fossil fuel use and offsetting of residual emissions and offset of remaining emissions. Within the plan, there is a clear expectation of reduced energy usage.

The Nuveen Real Estate website claims \$156 billion assets under management as of September 2022.⁵⁶ The website contains a series of analytical articles concerning topics of interest to real estate investors and Nuveen perspectives on real estate investing. The website does not provide a comprehensive breakdown of how this amount is allocated between products, ownership status, investment advisor, sector or country. A few real estate funds' investments are identified on the website and links are provided to their annual reports, including: TIAA-CREF Real Estate Securities Fund (\$3.2 billion),⁵⁷ Nuveen Global Real Estate and Nuveen Real Estate (\$4.5 billion)⁵⁸ and Global REIT (\$2.1 billion).⁵⁹

TIAA's climate plan refers the reader to Nuveen's Real Estate Net Zero pathway.⁶⁰ The report lays out Nuveen's global plan to reduce emissions in its real estate holdings by 2050. Nuveen's global portfolio is broken down into regional classifications. The overall plan integrates net-zero goals into operations, finance and evaluation. The plan relies heavily on energy efficiency and renewable energy.

TIAA has multiple real estate investments that are not included in the General Account. The TIAA website contains a real estate account with a carrying value of \$28 billion as of December 2021.⁶¹ TIAA's website states the Nuveen real estate "supports" TIAA real estate staff.⁶²

⁵⁵ Nuveen. [Investment Specialists](#). Last visited September 1, 2022.

⁵⁶ Nuveen. [Investment Specialists](#). Last visited August 22, 2022.

⁵⁷ Nuveen. [Real Estate Securities Fund](#). March 31, 2022.

⁵⁸ Nuveen. [Nuveen Equity Funds](#). March 31, 2022.

⁵⁹ *Ibid.*

⁶⁰ Nuveen. [Net Zero Pathway Report](#). 2020.

⁶¹ TIAA. [10K Real Estate Account](#). Last visited July 7, 2022.

⁶² TIAA Real Estate. [Frequently Asked Questions](#). Last visited July 7, 2021.

Table 4: Long Term Asset and Bond Holdings: Selected Timber, Farm and Agricultural Investments 2021

Holding	Amount (\$)
TIAA Global Agricultural Holdings	981,316,512
Mandala Agribusiness Fund	5,709,739
Mandala Agribusiness Fund	14,818,809
Ceres Agricultural Properties	784,782,815
Occator	480,123,909
TGM Agribusiness	233,324,604
Nuveen Agribusiness	8,900,215
Lewis and Clark Timberland	372,880,575
TIAA Timberland I	1,527,605
TIAA Timberland II	49,796,920
730 Texas Timberland	38,608,620
Beckwith Farm Group	105,852,570
FTA Timber Growth	72,371,079
Broadleaf Timberland	65,905,013
Total	3,215,918,985

TIAA/Nuveen also has a broader role to play when assessing its real estate carbon footprint with regard to any agricultural lands it holds. The “other assets” category, for example, contains a substantial amount of investment in timber, farm and agricultural land. In addition to climate issues, the holdings have been the subject of controversy over environmental and human rights issues.⁶³ (See Table 4).

TIAA Administrative Offices

A piece of TIAA’s commitment to climate change is the reduction of its indirect and direct corporate emissions. At the level of new construction and renovation projects, the company seeks and has obtained LEED certification to reduce emissions. In its operations, the company seeks out opportunities to reduce costs and emissions with its energy and environmental impact performance plan. The company has intensified its emissions monitoring and activities in relation to corporate travel, employee commuting and waste and water related reduction. The company is moving toward 100% renewable energy in its operations and in combination with other resources is seeking to achieve net-zero status by 2040.

The expectation is that TIAA will provide a more systematic treatment of the management of its corporate properties in the first installation of the Climate Action Plan.

⁶³ Grain.org. [The global farmland grab goes green](#). May 10, 2021.

As part of the next step, TIAA should provide specific clarification of the properties it intends to address with its CAP, a timetable and metrics for success.

General Account Other Assets

DFS quarterly and annual filings also contain a category of “other invested assets.”⁶⁴ The category contains private equity investments, as well as real estate joint venture investments.⁶⁵ The climate plan places a lower priority on this classification of investments for the first phase of analysis and action. The asset category carries a value of \$34.1 billion and encompasses approximately 2,000 additional investments that also appear to cover the global economy.⁶⁶

The issue of private equity investments and climate change is taking on increasing importance.⁶⁷ This sector of the capital markets has a long history of limited transparency. For example, an investor like TIAA places a tranche of cash with a private equity manager. The manager invests in an array of projects based on an investment plan presented to TIAA and other investors.⁶⁸ Private equity funds promise a higher return than equities or bonds and also are riskier. The actual companies that receive investments from private equity managers are not usually publicly reported unless the fund manager or companies see it in their interest to do so. The information provided by TIAA in its quarterly and annual filings with DFS is quite limited. Additional research tools are needed to evaluate the carbon footprint of these investments. Recently released reports have identified leading financiers in the fossil fuel private equity space.⁶⁹ TIAA has investment partnerships with most of the top fossil fuel private equity players.⁷⁰ The holdings amount to \$176 million. (See Table 5).

Table 5: TIAA Investments With Top Private Equity Fossil Fuel Investors⁷¹

Investment Partner	Amount (\$ millions)
Blackstone	84.6
Brookfield Asset Managers	35.7
Carlyle Group/NGP	13.4
Oaktree Capital	18.8
TPG	6.7
Kayne Anderson	5.2
Warburg Pincus	3.9
CVC Capital	7.7
Total	176.0

⁶⁴ TIAA. [2021 Schedule of Investments](#), Schedule BA Other Invested Assets, E.07-01.

⁶⁵ TIAA. [2021 Schedule of Investments](#), Section BA Other Invested Assets, E.07.16.

⁶⁶ TIAA. [2021 Schedule of Investments](#), Section BA Other Invested Assets, E.07.20.

⁶⁷ Fossil Free Funds. [Nuveen Real Asset Income Funds](#). Last visited September 7, 2022.

⁶⁸ IEEFA. [Private Equity Losing Bet PJM Coal Plants](#). June 2, 2022.

⁶⁹ Private Equity Stakeholder Project (PESP). [The New York Times Covers Private Equity Stakeholder Project's Report on the Climate Crisis](#). October 13, 2021.

⁷⁰ *Ibid.*

⁷¹ *Ibid.*

TIAA invests more broadly in the private equity space. Many of the investments are with fund managers with carbon emissions exposure. IEEFA reviewed the limited information available in TIAA's filings. IEEFA also relied upon reports from nonprofit organizations that identified the names of private equity managers that typically financed fossil fuel investments.⁷²

IEEFA's review of TIAA's filing revealed a number of private equity and other investments in unaffiliated funds with exposure to fossil fuel companies.⁷³ This was determined by the names of the funds. Using these measures IEEFA produced a list with more than \$707 million in fossil fuel exposure. (See Table 6).

⁷² PESP. [Private Equity Propels the Climate Crisis](#). October 2021.

⁷³ As with the bond analysis discussed above, this review missed a material number of investments with carbon exposure.

Table 6: TIAA Unaffiliated Other Invested Assets With High Risk of Carbon Exposure

Name or Description	Amount (\$)
American Industrial Partners Capital Fund	13,731,592
TPG Partners	4,595,759
ActOil Colorado	38,357,000
American Industrial Partners	26,332,759
Beacon Energy Investment Fund II	1,240,109
Brookfield Infrastructure	20,211,731
Cassillas Petroleum Research Partners	1,639,495
DIF Infrastructure	125,953,000
EQT Infrastructure	16,160,275
EQT Infrastructure	45,070,175
Energy Minerals Group	26,107,692
Energy Minerals Group	26,177,692
Energy Minerals Group	55,417,947
EQT Infrastructure	45,070,175
EQT Infrastructure	56,035,704
Foresight Energy	8,201,653
EQT Fund Management	20,054,654
Industrial Growth Partners	24,050,313
Merit Energy Partners	13,933,024
NGP Natural Resources Group	5,411,381
TC Permian Investor	34,248,765
Power Grid Services	3,955,800
Riverstone LLC	28,416,641
Stonepeake Infrastructure	26,827,180
Tenaska Power Fund	1,898,236
Great Western Petroleum	38,357,000
Energy Power Partners	2,359,572
Total	707,455,752

Source: TIAA. 2021 Schedule of Investments, Section BA Other Invested Assets, p. 7-7.200.

Finally, IEEFA also includes in a separate list a number of TIAA and Nuveen affiliated funds that typically have a higher concentration of fossil fuel projects. For example, where disclosures were made, Nuveen's Infrastructure Fund and Real Asset Funds have carbon exposures of 45% and 26% respectively.⁷⁴ Infrastructure funds

typically have a higher concentration of fossil fuel exposure.⁷⁵ The list amounted to \$3.8 billion. (See Table 7).

Table 7: Affiliated Other Invested Assets With Potentially High Risk of Carbon Exposure

Others	Amount (\$)
TIAA Global Public Investments LLC	2,614,153,875
TIAA Diversified Public Investments	85,794,842
Nuveen Opportunities Strategies	58,678,708
Nuveen Strategic Industrial	19,175,778
Nuveen RE US Strategic Industrial	8,689,020
TIAA Stonepeake	389,327,801
TIAA Oil and Gas	29,026,236
TIAA Syngas	36,956,865
TIAA Infrastructure	595,448,933
730 Power Development	113,583,609
730 Transmission	77,012,761
Energy Power Partners	2,359,572
Total	3,837,252,058

Note: TIAA Global Public Investments LLC is listed as a subsidiary of Teachers Insurance and Annuity Association of America.

These figures are conservative since the disclosures are very limited and only those funds with a clear indication of the fossil fuel exposure in the name of the fund or identified in third-party research are included. A private equity investment is often supported by a number of funds and typically uses various partnership legal structures to protect the investors from liability. This makes an already obscure process more difficult to understand.

It should also be noted that the General Account is an insurance account and typically more risk-averse in its investment profile than a standard investment portfolio. In fact, Moody's Investor Service cites the private equity holdings as a credit concern as the investments are exposed to downturns in the economy. Moody's also cites TIAA's unique liability structure discussed above and its overweighting in Treasury bonds as an offset.⁷⁶

In total, the other investments with estimated fossil fuel exposures equal \$4.7 billion, or 14% of the \$34.1 billion investment value.

⁷⁵ Financial Times. [Carlyle merges energy and infrastructure units ahead of investment push](#). May 12, 2022.

⁷⁶ Moody's. [Teachers Insurance and Annuity Association of America: Rising interest rates relieve spread compression](#). June 16, 2022.

Preferred and Common Stock Assets in the General Account

The preferred and common stocks in the General Account identified by the CAP were valued at \$10.1 billion on Dec. 31, 2021. This part of the portfolio is also considered a lower priority for the CAP at this point.

A review of the holdings in this part of the portfolio shows that most of the investments are in Nuveen and TIAA affiliated equity funds.⁷⁷ (see Selected List Table 8).

The equity funds and indexes are listed on both TIAA's and Nuveen's websites under mutual, closed-end, separately managed and exchange traded funds. The equity funds that are carried in the General Account stock section are part of TIAA/Nuveen's overall equity portfolio valued at approximately \$500 billion (See Table 2). The \$10.1 billion equity portfolio covered by the CAP represents a microcosm of TIAA/Nuveen's broad listing of affiliated equity holdings.

The carbon footprint of the TIAA and Nuveen funds is derived by adding together energy and utility stocks from each individual fund. A select group of these funds was assessed by the Fossil Free Fund using a similar methodology (discussed above).

⁷⁷ TIAA. [Schedule of Investments](#), Schedule D, Part 2, Section 2, Total Common and Preferred Stocks, p. E 12-12.7.

Table 8: Selected List of Common Stock Funds Held by TIAA in General Account 2021

Nuveen Dividend Growth ETG	Nuveen ESG Large Cap
Nuveen Small Cap Select	SPDR Nuveen Muni Bond ETF
Nuveen Winslow LG Cap ESG ETF	TC Life Growth and Income Fund #2501
Nuveen Investments Global Real Estate	TC Life Social Choice Equity Fund
TIAA Emerging Markets Debt Fund	TC Life Large Cap Value Fund
TIAA US Bond ESG Fund	TC Real Estate Securities Fund
Nuveen Global Infrastructure	TIAA CREF Life Balanced Fund
Nuveen Churchill - BDC	TC Life Bond Fund
Nuveen Investments Emerging Markets Equity Fund	TC International Equity Index
TIAA US Bond ESG Fund	TC Emerging Markets Equity
Nuveen ESG Yield Corp B ETF	TC Small CAP Blend Index
TIAA Life Insurance Company	TC SP 500 Index
TIAA CREF Tuition Financing	TIAA Life 2055 Return Fund
TIAA FSB Holdings	Emerging Markets Fund Premier Fund
Nuveen Investments Mid CapR6	Lifecycle Index Retirement Income
Nuveen Investments Global Real Estate	TC Lifecycle 2010
Nuveen International Growth R6	TC Lifecycle 2015
Nuveen Investments Winslow International Small CAP	TC Lifecycle 2020
Nuveen Core Impact Bond Management Account	TC International Small CAP Equity Premier
Nuveen Short Term REIT ETF	TC International Bond Premier Fund
Nuveen ESG Yield Corp B ETF	TC Small/Mid Cap Equity Fund
Nuveen ESG Large Cap	TC Lifecycle 2025
SPDR Nuveen Muni Bond ETF	

The review shows that the funds and indexes involved typically have a 7% fossil fuel exposure. TIAA’s review of these same funds may arrive at a different analysis of the fossil fuel exposure level.

The preferred and common stock holdings, though small in size, pose a series of highly significant policy issues with regard to TIAA’s carbon footprint. The \$10.1 billion constitutes only 3.5% of the value of assets covered by the Climate Action Plan. The policy significance of these investments, however, touches almost every aspect of the equities managed by Nuveen and TIAA.⁷⁸ Climate Action Plan financial

⁷⁸ TIAA. [Schedule of Investments](#), Schedule D, Part 2, Section 1 and 2, Preferred and Common Stocks Owned December 31, 2021. The September quarterly filing does not contain a complete list of all holdings. A complete list is carried on the website only once annually in the supplement schedules.

decisions that address TIAA's General Account preferred and common stock offerings actually cover the full scope of its enterprise-wide equity holdings.

Based upon IEEFA's review of Nuveen/TIAA/TIAA-CREF/CREF equity holdings identified on each respective website, in the aggregate there is approximately \$500 billion in mutual fund, closed-end, exchange-traded funds and separately managed equity holdings. Of the \$500 billion, IEEFA could determine there was sufficient data currently available to assess the carbon footprint of \$221.8 billion in holdings.⁷⁹ Fossil fuel holdings in this area amounted to 7.2% of the \$221.8 billion, or \$16 billion.

On Dec. 31, 2021 the Standard and Poor's 500-stock index sector weightings were 2.5% for utilities and 2.67% for energy, or 5.17%.⁸⁰ By this measure, TIAA's equity portfolio with an estimated 7% fossil fuel exposure appears to carry more fossil fuel holdings than a diversified market portfolio including fossil fuels.

Other funds like MSCI's Global Index that exclude fossil fuels typically hold approximately 1.0% of energy investments with fossil fuel exposure.⁸¹

In its upcoming CAP report, TIAA faces a basic policy choice. The General Account equities portfolio mirrors TIAA's broader enterprise-wide equity holdings. A net-zero policy would need to reconstruct the current General Account equities holdings consistent with current fossil free or decarbonization indexes.⁸² Over time, it would need to trade out of the funds that it currently holds and invest in the TIAA/Nuveen ESG funds with fossil fuel exclusions if it chose to maintain the investments in affiliated instruments.

Alternatively, TIAA could adopt an enterprise-wide policy to reconstruct all of the offerings it makes to the public as fossil-free investment vehicles. Such a position would ultimately result in TIAA offering the majority of its investment products as fossil free.

The upcoming CAP will therefore be a bellwether decision that illustrates how TIAA and Nuveen will address the issue of portfolio decarbonization.

⁷⁹ The carbon footprint for the funds included in this portion of the report are based on fund specific annual reports posted on TIAA's and Nuveen's websites. IEEFA simply added the energy and utility weights where they were available. IEEFA then compared this with the weighting done by [Fossil Free Funds](#) (FF). The FF review covered \$221 billion of the \$500 billion of equity holdings or approximately 44%, a robust sampling. IEEFA uses the FF figures for this universe of funds. FF also uses additional external sources for confirmation. If extrapolated against the entire equities portfolio, TIAA's total fossil fuel exposure is \$35 billion. A more comprehensive review by TIAA and its advisors would be instructive and expected to change this amount.

⁸⁰ Sibilis Research. [US Sector Weightings](#). December 31, 2021.

⁸¹ MSCI. [MSCI excluding Fossil Fuels](#). August 2022.

⁸² For a detailed discussion of how one fund is considering a move of substantial investments into fossil free or decarbonized indexes see: CalSTRS. [Board Meeting Memo Item 3a and attachments](#). August 31, 2022.

IV. Recommendations

“Climate risk is investment risk” is a central premise of TIAA’s Climate Action Plan. Once fund managers and boards acknowledge a risk, they should be compelled to manage that risk. One way to address a risk is to rid the portfolio of its presence. Many funds are divesting their fossil fuel holdings, in whole or in part.

The fund would fulfill its fiduciary obligation by considering a fossil-free portfolio. To have fund managers design a portfolio that is free from fossil fuels and still capable of meeting financial return targets is a minimum consideration of a diligent board and manager. To date, TIAA has dismissed the divestment option due to a perceived concern that other investors may buy up the stocks and act irresponsibly. This is at best a speculative matter devoid of the kind of discipline that a full consideration of a fossil fuel portfolio would yield.

Divestment is a defensive measure to protect a fund from losing value as a result of holding fossil fuel stocks and bonds. The last 10 years have shown that a fund can still make its investment target without fossil fuel holdings. The sharp price increases in oil seen in the last year have been driven by the invasion in Ukraine and are unsustainable.

A. Climate Action Plan Priority Areas

Short-Term Bonds

TIAA stands to be an industry leader if its net-zero bond program climate plan captures the dynamic changes that accompany the energy transition. There are several steps that TIAA can take to achieve its net-zero goal in its bond portfolio. The steps include:

1. Do not make new bond purchases from the General Account from companies and utilities with fossil fuel exposure. In 2021, the company bought a total of \$35.6 billion in bonds (inclusive of fossil fuel-exposed companies). An exclusion list can be generated quickly and used to guide TIAA’s annual bond purchasing. The ban can be communicated to Nuveen and TIAA staff and external bond advisors immediately. To round out the policy changes, publish a list of high-carbon emitters in the portfolio, the timing of bond maturations, a strategy for engagement and a policy guide to divestment/investment, new purchases and refinancing.⁸³
2. Conduct a more in-depth analysis of the bond portfolio, producing a more thorough review of the carbon footprint than is contained in this report.

⁸³ One potential methodology could be to categorize the companies as: 1) high emitters, 2) carbon exposed, and 3) low emitters. This classification could be combined with an assessment of the company to determine if its climate plan and implementation are making significant progress toward net zero goals.

TIAA can develop clearer definitions of the companies covered and their fossil fuel exposure since it has greater access to information and resources.

3. An analysis of the utilities involved should be included in a TIAA review to determine if they have meaningful emissions targets that are likely to be achieved. Although various tracking services identify fossil fuel holdings in the utilities space, TIAA's holdings are so broad that it would benefit from existing exclusion lists as well as conducting its own independent analysis.⁸⁴

Medium/Long-Term Bonds

1. TIAA's plan states that it intends to assess the maturation dates of its holdings and make determinations about reinvestment in issuers as the bonds roll off.⁸⁵ It also pledges to move with a sense of urgency. TIAA should publish an exclusion list of company issuers that are at risk of disinvestment due to fossil fuel exposure and transition risk. Based on the maturation lists and TIAA's ongoing analysis, an accurate and meaningful target date can be established to achieve a net-zero portfolio.

The purpose of creating an exclusion list now is to address those issuances that are within a one- to five-year range of maturation.⁸⁶ For those bonds with longer maturation dates, the list serves as notice to the companies. Any final disinvestment policy adopted by TIAA should contain provisions that allow companies to become re-listed with TIAA based on a criteria that demonstrates a credible decarbonization plan.

General Account Real Estate Holdings

1. Clarify the standards to be used in TIAA/Nuveen's real estate fossil fuel assessments and plans for corrective action for the General Account's \$3.7 billion investments.
2. Create a publicly available, regularly updated reporting protocol. The data should guide TIAA/Nuveen's internal goals and fill a large void in current reporting on climate change initiatives. The next Climate Action Plan report should offer clear guidance regarding the implications of these steps on the larger \$156 billion real estate investment portfolio.

⁸⁴ TIAA's Climate Action Plan identifies the work of the Asset Owners Net Zero Alliance, Institutional Investors Group on Climate Change and Climate Action 100 as organizations helpful to TIAA. There are a number of organizations that have developed data-driven, analytically precise exclusion lists or investor tools. IEEFA has relied upon the work of [As You Sow's Fossil Free Funding](#). In addition, [Urgewald](#), a German based non-profit organization has developed exit lists for both the coal and oil and gas sectors. Both organizations are relied on by corporations, investors and investment groups. The organizations have developed analytical tools for companies who wish to conduct their own carbon profiles and analysis.

⁸⁵ TIAA. [Facing the Climate Crisis](#), p. 9.

⁸⁶ TIAA. [2021 Statutory Audit](#), p. 20.

3. Conduct a climate/human rights review of Nuveen/TIAA agricultural, timber and farming holdings. The scope and design of the review should be developed using international best practices and include maximum feasible participation from indigenous and affected communities and stakeholders.

General Account Lower Priorities

Common and Preferred Stock

Although this is seen as a lower priority for the first phase of the Climate Action Plan, the policy issues raised are of the first order and should be a high priority. IEEFA recommends that TIAA:

1. Reduce/eliminate high emitters from TIAA's equity holdings. The \$10.1 billion portfolio in stocks is invested largely in funds and indexes sponsored by TIAA and Nuveen. From a policy and institutional perspective, the treatment of the stocks in the General Account portfolio has significant, long-term implications for TIAA, its customers and the estimated enterprise-wide \$500 billion portfolio. How the company will align these holdings with the broader portfolio requires TIAA to decide now: Will it be offering fossil-free alternatives as their leading products for individual and institutional funds going forward, and/or will it align all of its current equity products and indexes to achieve fossil-free status?

Other Invested Assets

For those unaffiliated money managers and direct partners with fossil fuel exposure, TIAA faces a series of policy choices in the first phase of its Climate Action Plan. For each of the partners and managers, TIAA can signal that they are in favor of fossil-free investments only. Depending on the type of fund and the quality of the manager, this may simply result in future TIAA investments being made with the same manager in fossil free portfolios. For funds that are firmly wedded to fossil fuels, a termination of the relationship may be the best option.

For some funds and investments, TIAA and its money managers may have made investments and a determination that it is in TIAA's interest to keep the investment through the exit plan. TIAA should request a clear time frame detailing the life of the investment and current expectations. Under no circumstances should additional investments be made if requested. Furthermore, there is a robust secondary market for private equity investments in many areas.⁸⁷ Each fund must make its own decisions whether or not this is a sound decision, but selling assets is an option.

TIAA and its lead partners and companies should engage in discussions about future investment funds to ensure that these are designed and offered to TIAA fossil-free.

Finally, IEEFA's review also revealed several TIAA and Nuveen affiliated infrastructure, real asset and other funds that do not disclose fossil fuel (see Table

⁸⁷ CAIA. *Introductory Guide to Investing in Private Equity Secondaries*. 2016.

6). Where disclosures were made, Nuveen's infrastructure fund and real asset funds have carbon exposures of 45% and 26% respectively.⁸⁸

These funds typically have a higher concentration of fossil fuel exposure and should be reviewed as part of TIAA's carbon analysis.

IEEFA recommends that the Climate Action Plan:

- Notify all of TIAA and Nuveen's managers that there are to be no new private equity or other asset purchases in the General Account from companies and utilities exposed to fossil fuels. This can be communicated to Nuveen and TIAA staff and external money managers immediately.
- Compile a list of high emitters in the private equity and other asset portfolio, a strategy for engagement, and standards for divestment/reinvestment. TIAA/Nuveen should begin discussions immediately.

Conclusion

TIAA has announced it will adopt a climate action plan that will allow it to meet net zero standards. This report analyzes TIAA's publicly released plan and argues that it has serious shortcomings. As TIAA proceeds with the plan, it can correct these shortcomings. This report offers an approach as TIAA proceeds with its Climate Action Plan.

This report provides a rationale for TIAA to divest from fossil fuels and the role it can play in TIAA's Climate Action Plan. It offers suggestions on how to think about it in most of the relevant asset categories where TIAA is active. The report contains evidence of other funds pursuing similar paths, funds that have secured the requisite diligence and settled on trading and asset management strategies consistent with the mission of the fund.

This report also points out the current disclosures and reports that are traditionally filed by TIAA and its subsidiaries. Those reports are of limited value to the issues involved with understanding fossil fuel exposure. There are resources available to improve reporting, some of which TIAA has already relied on.

The Board of TIAA is the entity charged with policy and oversight for the assets under management. As discussed above the Board must act in order to fully consider divestment as part of its Net Zero Climate Action Plan. The rejection of divestment of fossil fuel assets in whole or in part by TIAA has been arrived at prior to a full consideration of its scope or impact on TIAA's assets under management. The Board's responsibility is to direct the staff to achieve the goal of a fossil free portfolio.

IEEFA has provided an example of a resolution that the Board might vote on to communicate the underlying policy goals involved:

RESOLVED: TIAA's investment portfolio on an enterprise-wide basis is to be fossil free by January 1, 2030. The board requests the staff and advisors produce a plan that achieves this objective. The plan should be produced no later than April 1, 2023.

As demonstrated in a number of places in this report, there are numerous investment options that are available to the staff and board. The staff and board have chosen to dismiss divestment without fully considering what a fossil-free portfolio that met investment targets would look like, how it would be implemented, how it fits into a net-zero strategy, and over what time frame. Instead, it has treated the issue of divestment as casual, cocktail party chatter. Without a full consideration of divestment, TIAA's statement that climate risk is financial risk is not credible and TIAA as an institution remains an industry laggard on climate change.

As it stands, the board's actions do not align with its statement that climate risk is financial risk. Without recognition of this lapse and the role of divestment in filling it, the CAP will remain an ill-considered initiative. And in the end, it is the board's responsibility and decision to act.

Appendix: Adani Group and Investor Responses

Despite clear market signals that the expected customer base for coal from the Carmichael mines is shrinking,⁸⁹ the Adani Group remains committed to it and continues to be India's largest importer.⁹⁰ The mine is the largest new mine in the world and has been the target of substantial opposition for most of the last decade.

TIAA holds at least \$91.5 million in long-term bonds with the Adani subsidiaries.⁹¹

The Carmichael mine is located in Queensland, Australia, and is owned by the Adani Group. Construction began in 2019, five years later than expected. The original plan projected production of 60 million tons of coal per year. Due to significant public opposition, the site is expected now to produce 10 million tons per year. The coal is to be transported by rail by the Bowen Rail Company (formerly Carmichael Rail Network) to the Queensland North Export Terminal (formerly Abbot Point).

The environmental impact statement projects 200 million tonnes of CO₂ over a 60-year lifespan. The environmental pitfalls for the project include draining scarce water resources, polluted runoff,⁹² and harming endangered species. In addition, opposition to the project was generated due to the potential environmental damage to the Great Barrier Reef.⁹³ Plans to build a standard gauge railway were also reduced.

The mine is the largest proposed coal mine in the history of Australia. From its inception, the project provoked large, persistent, worldwide opposition. The opposition comes from numerous quarters: Climate and environmental organizations, tourist and related businesses, and indigenous communities.

The owner and developer of the mine is a multinational Indian conglomerate, the Adani Group.⁹⁴ The group, founded by Gautam Adani in 1988, runs a diverse set of businesses including mines, port management, electric power generation and transmission, renewable energy, airport operations, natural gas, food processing and infrastructure.⁹⁵ The Adani Group works through partnerships in 130 countries and has a market capitalization of \$170 billion.⁹⁶ It is the second-largest group in India (Tata, Reliance and Adani are the top three groups) and Gautam Adani is the third-richest man in the world.⁹⁷

The opposition organized in Australia has resulted in public meetings and rallies with attendance in the thousands. Domestically, the opposition has resulted in

⁸⁹ IEEFA. [Australian Thermal Coal Exports Outlook Volumes set fall amid accelerating energy prices](#). September 6, 2022.

⁹⁰ Financial Times. [Gautam Adani ramps up share of coal imports as crisis grips India](#). July 19, 2022.

⁹¹ TIAA. [Schedule of Investments](#). December 31, 2021.

⁹² Australian Mining. [Adani's Abbot Point coal gets 12K fine stormwater release](#). August 11, 2017.

⁹³ ABC. [Adani spent a year trying to hide this information on its reef spill](#). August 9, 2018.

⁹⁴ Adani. [Adani](#). Last visited August 31, 2022.

⁹⁵ Adani. [Adani Corporate Brochure: Growth with Goodness](#). Last visited August 31, 2022.

⁹⁶ Adani. [Investor Presentation August 2022](#). Last visited August 31, 2022.

⁹⁷ CNN. [Indian billionaire Gautam Adani is now the world's third richest man](#). August 30, 2022.

contentious regulatory rulings and debates over governmental subsidies. Internationally generated opposition has resulted in hundreds of businesses, particularly banks and insurers, issuing statements that they will not support the project.

The company has also confronted three additional issues that have raised concerns about its business practices.

- The company was named in a controversy in Sri Lanka. The president of India allegedly pressured Sri Lankan officials to award a wind power contract to Adani.⁹⁸ In the wake of the scandal, the head of the nation's electric utility board resigned.
- In Myanmar, the company allegedly made payments to companies connected to the country's military junta. Adani was excluded from Standard and Poor's sustainability index. The company has denied any wrongdoing.⁹⁹
- In August 2022, the NGO Anthropocene Fixed Income Institute complained to the U.S. Securities and Exchange Commission that a recent \$300 million sustainability linked bond disclosure by Adani Electricity Mumbai, Ltd., failed to disclose the company's links to the Carmichael mine and infrastructure projects. The company responding to S&P Global's questions denied the involvement of the Adani Group and said that the Carmichael mine was a different company.¹⁰⁰ According to a July 2022 Adani Group Corporate Brochure,¹⁰¹ the company is identified as the Adani Group on its website. The company also highlights the Carmichael mine, Bowen Rail and North Queensland Export Terminal as part of the operations of the Adani Group.¹⁰²

There is extensive opposition to this project in the finance and insurance sector. Some of the most prestigious global banks and insurance companies have made a no-fund (refuse to provide coverage) pledge regarding Adani and the Carmichael mine. (See Appendix Table 1).

⁹⁸ Scroll. [Sri Lanka official says Modi insisted on power project deal for Adani Group, then retracts statement](#). June 2022.

⁹⁹ S&P Global. [Removal of Adani Ports and Special Economic Zone from the Dow Jones Sustainability Indices](#). April 12, 2021.

¹⁰⁰ S&P Global. [Banks hit by 'fraud' complaint to SEC over Adani SLB coal links](#). October 21, 2021.

¹⁰¹ Adani. [Adani Corporate Brochure: Growth with Goodness](#). Last visited August 31, 2022.

¹⁰² Adani, *op. cit.*, pp. 25-26.

Appendix Table 1: Selected List of Companies Avoiding Business With Adani Group and Carmichael Project¹⁰³

AECOM	General Electric
Allianz	Goldman Sachs
ANZ	HSBC
Arch Capital	ING
Aurecon	J.P. Morgan
AXA	Morgan Stanley
BNY Mellon	Nippon Life
Barclays	PIMCO
BNP Paribas	Royal Bank of Scotland
Citibank	Samsung
Credit Suisse	Santander
Deutsche Bank	Société Générale
Fidelis	U.S. Bancorp

A recent Moody's report finds that the North Queensland Export Terminal Pty Ltd (NQXT), an Adani subsidiary, is highly exposed to environmental, social and governance (ESG) risk related to Adani's Carmichael mine and the general market for coal-powered generation. NQXT carries a Ba2 rating. As of June 2021, Adani's enterprise-wide port ratings are Baa3.¹⁰⁴ The enterprise-wide rating is investment grade, but NQXT's rating of Ba2 is not.¹⁰⁵

Moody's has also expressed concern over the lack of transparency. The multi-layered family business has allowed Adani to self-finance much of the project. At the same time, the lack of transparency provides the company with the means to transfer money between subsidiaries without adequate disclosures. This allows the company to potentially obscure the true financial condition of the mine and related infrastructure.

Despite these controversies, the mine, rail and port projects have moved forward. The mine made its first deliveries in January 2022.¹⁰⁶

Risk Factors

The Adani Group's support of the Australian project has dragged down its enterprise-wide standing. At the outset, the mine faced a marginally profitable investment outlook and an overwhelmingly flawed ESG profile.¹⁰⁷

The weak financial profile is driven by the perception that the global demand for thermal coal will decline over time. The mine was supposed to deliver coal in

¹⁰³ Marketforces.org. [The Adani List](#). Last Visited August 31, 2022.

¹⁰⁴ Moody's Investor Service. North Queensland Export Terminal Pty Ltd, Credit Opinion. March 21, 2022. (Proprietary).

¹⁰⁵ Moody's. [Rating Scale and Definitions](#). Last visited August 31, 2022.

¹⁰⁶ Sydney Morning Herald. [Adani mine ramps up production amid surging coal, energy prices](#). August 25, 2022.

¹⁰⁷ IEEFA. [Adani's \\$7 billion Australian Coal Project Unviable](#). November 25, 2013.

2014.¹⁰⁸ In terms of Australia's domestic needs, there is no real need for the coal. Adani's holdings in India include coal-fired power plants. The plants are old with Purchase Power Agreements that end in the 2030s.¹⁰⁹ India is moving forward aggressively with its renewable energy portfolio, led by Adani Green, a member of the Adani Group enterprise. It is unlikely the plants will require coal from the Carmichael mine as they are slated for retirement. The project continues to have trouble with financing, and Adani announced in 2018 that it would self-fund the project.¹¹⁰

The Adani Group has been on a growth juggernaut over the last several years and has amassed a considerable level of debt as the company moves into industries that it is not familiar with. Under the best of circumstances, the coal mine will take a few years to become profitable. At the same time, the company will be looking to find a path to deleveraging its holdings. If markets turn down, it will be at a time when carrying the mining operation may prove burdensome to the company's plans to pivot into renewable energy. Under these circumstances, a distressed sale becomes more likely as the thermal coal sector declines worldwide.

The International Energy Agency has made it clear that no new fossil fuel facilities can be developed for the world to meet its goals under the Paris Agreement.¹¹¹ And coal-fired power plants can no longer compete economically with renewable energy, absent substantial subsidies.

When Bank of New York Mellon announced that it would not participate with Adani in the Carmichael project, it cited tightened environmental regulations for mines and terminals in Australia. The widespread public expressions of opposition to the mine in Australia and globally reflect the rising concern over climate change.

The persistence and breadth of opposition drove the company to change the name of the mine project from Adani's Carmichael mine to a company named Bravus.¹¹² The name of the primary port, Abbot Point Coal Terminal, has been changed to the North Queensland Export Terminal. The rail project, originally Carmichael Rail Network (CRN), is now the Bowen Rail Company.

The rebranding, a significant response to the governance dilemmas facing the project, has wider implications. Although the mine, rail and port projects are set up under different corporate rubrics, the name changes reflect the interconnectedness of the governance and financial structure.¹¹³ The Adani Group is a family enterprise

¹⁰⁸ IEEFA. [Adani Group: Funding for Carmichael coal and rail plus Abbott Point](#). February 1, 2014.

¹⁰⁹ IEEFA. [As owner of India's most valuable energy company, the Adani Group should lead country's energy strategy](#). November 10, 2020.

¹¹⁰ Australian Financial Review. [Adani to self-fund \\$2b Carmichael mine, construction to start before Christmas](#). November 29, 2018.

¹¹¹ IEA. [Net Zero by 2050](#). May 2021.

¹¹² The company that owns Carmichael is still called Adani Mining Pty Ltd, but the company trades under the name Bravus Mining and Resources. See: Brisbane Times. [Adani mine ramps up production amid surging coal, energy prices](#). August 25, 2022.

¹¹³ Scroll.in. [From 2014 to 2019: How the Adani Group funded its expansion](#). May 16, 2019.

where funds are readily passed between parent and subsidiaries, and between subsidiaries.

The Adani Group has recently begun to downplay the importance of coal to the company's future. The Adani structure is pivoting toward renewable energy with significant investments while simultaneously defending the necessity of coal. Over the long term, the company anticipates renewable energy to win out over coal.

Insurance companies, banks and investment houses are refusing to participate in the project. All have taken a defensive position to avoid the risks to this substantial thermal coal project. Adani's goals for coal in Australia are at odds with global climate goals. They are in fundamental conflict with the IEA's clear warning against new fossil fuel projects.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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