New York State
Teachers' Retirement System
*Over a century of providing
retirement security*

March 2024

Stewardship Report

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NYSTRS.org

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Stewardship Report

Executive Summary

As fiduciaries, NYSTRS' Board must be responsible and thoughtful stewards of the fund and act for the exclusive benefit of NYSTRS members and beneficiaries. This deliberate approach is essential to help ensure the System meets the retirement benefit payroll and therefore fulfills its fiduciary obligation to provide our members with a secure retirement.

NYSTRS approaches this from the starting point that we are universal owners with a long-term view of the markets. To ensure we can meet our fiduciary responsibility, we identify long-term risks to our portfolio through independent measurement and assessment.

To manage these risks, the System engages with the companies in which we invest, vote our proxies, and seeks opportunities to invest in companies and areas that can help mitigate the risks we have identified.

Throughout 2023, the System did the following:

- Continued monitoring companies within our directly held public equity portfolio from companies deriving more than 10% of their revenue from thermal coal, given the likelihood of "stranded asset" risk.
- Performed risk assessments of the 25 companies on our Restricted List and focused on engagement with these companies either directly or as part of a collective.
- Conducted a climate scenario analysis on the impact of different energy transition scenarios on the long-term performance of the NYSTRS portfolio.
- Made two new fund commitments in the private equity allocation of our portfolio within the energy transition space.
- Achieved LEED certification for each of our office properties within the real estate allocation of our portfolio. LEED certification for our own headquarters in Albany improved from Silver to Gold during 2023.
- Developed a global carbon transition credit strategy within the fixed income allocation of our portfolio, which was approved by the NYSTRS Board and funded in the fourth quarter of 2023.

Thomas K. Lee
Executive Director & CIO

The Board's Fiduciary Duties, Investment Beliefs and a Responsible Investment Pathway

NYSTRS' Board has strict fiduciary duties under New York State regulations (11 NYCRR §136-1.6) and applicable law:

> The administrative heads are fiduciaries and as such shall act solely in the interests of the members and beneficiaries of the systems they administer. They shall perform their responsibilities in a manner consistent with those of a reasonably prudent person exercising care, skill and caution.

The Board remains committed to its fiduciary duties to act in the best interest of the System's members and to prudently manage System assets using appropriate skill, care and diligence. The Board's unequivocal focus at all times is to ensure the System is sufficiently funded in order to fulfill its mission of providing our members with a secure pension.

Our View on Responsible Stewardship

As fiduciaries, NYSTRS' Board must be responsible and thoughtful stewards of the fund and act for the exclusive benefit of NYSTRS members and beneficiaries. This deliberate approach is essential to help ensure the System meets the retirement benefit payroll and therefore fulfills its fiduciary obligation to provide our members with a secure retirement.

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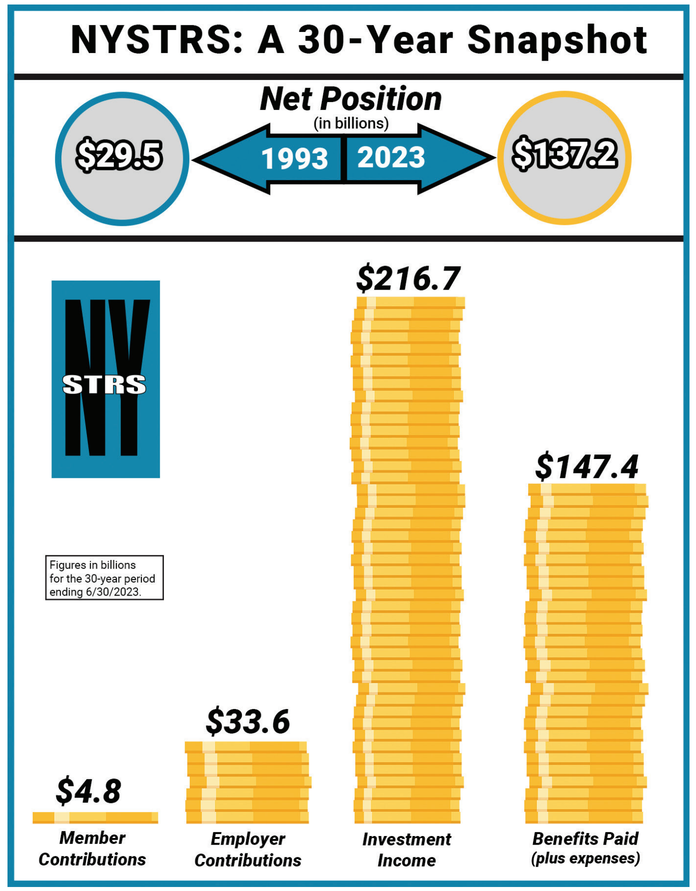
What are universal owners?

Universal owners are investors with highly diversified and long-term portfolios that are representative of global capital markets.

NYSTRS' Mission:
To Provide Our Members with a Secure Pension

Our status as one of the best-funded public pension plans in the nation is a distinction the System holds in very high regard.

NYSTRS is a defined benefit pension plan with three sources of funding with which to pay promised benefits: employer contributions, member contributions and income from investments. The System has a well-diversified and prudently managed investment portfolio that provides appropriate long-term risk adjusted returns. This diversification of assets helps us earn the highest possible long-term rate of return within appropriate risk levels.



NYSTRS' total fund performance results for the 30-year period ending June 30, 2023 are at the 10th percentile compared to peers, according to a survey of public fund sponsors[1].

As such, the System is nearly 100% funded based on the actuarial value of assets as of June 30, 2023.

NYSTRS serves nearly 449,000 active members, retirees and beneficiaries. During the last fiscal year, the System paid $8.2 billion in benefit payments. Over the 30-year period from July 1, 1993 to June 30, 2023, the System paid $147.4 billion in benefit payments and expenses. During that same period, approximately 85% of the System's income was generated from investments, far exceeding the industry average of approximately 63%.[2]

[1] Callan, NYSTRS Asset Allocation and Performance Statistics as of June 30, 2023. The "Callan Public Fund Sponsor Very Large Peer Group" consists of 47 constituent funds with average Assets Under Management (AUM) of $46.8 billion and a median AUM of $35.5 billion. The peer group includes Callan clients and anonymously shared data from BNY Mellon and Investment Metrics.

[2] National Association of State Retirement Administrators (NASRA) Public Fund Survey for FY 2022 (published in November 2023).

Responsible Stewardship and Climate Risk

NYSTRS Retirement Board's Investment Beliefs, detailed in the Board Governance Manual, provide a consistent and transparent framework to guide the System's investment decision-making processes. Stewardship is one strategic component within our Investment Beliefs. Under this pillar, key areas include:

- Risk – Make prudent investment choices under a disciplined risk-controlled strategy.
- Ownership – Be active owners of the companies we invest in through efforts such as direct engagement and proxy voting.
- Collaboration – Work together with other long-term institutional investors to engage with companies.
- Rules and Frameworks – Participate with external investor organizations to shape future regulation and disclosure standards related to identified key long-term portfolio risks.

It is through this framework that NYSTRS has approached an independent analysis of climate risk and the challenges posed by the energy transition and assessed the specific impact on the System's ability to continue securing the pensions of our members and beneficiaries.

Why is Climate a Risk?

As part of our disciplined risk-controlled strategy, NYSTRS examines a number of risk factors that can impact the long-term financial performance of the portfolio. Climate risk is one of those risk factors, and we look at it through two lenses: physical risk and transition risk.

- Physical risk, such as environmental events, includes heatwaves, wildfires and flooding. Physical risk poses a threat to the physical assets (i.e., real assets) of a business or in our portfolio (i.e., our real estate holdings and investments) as well as to financial companies that insure and re-insure these risks.
- Transition risk is the risk posed by changing policies or advances in technology. This is the risk that a sector or industry can change in terms of their long-term outlook due to changes in government policy or technological advancement.

These factors, along with all the risk factors we analyze and assess, pose material, financial risks to our portfolio.

Responsible Stewardship: The Energy Transition

Risk

Identifying the measures driving climate risk (GHG/carbon emissions) and estimating the impact on our portfolio through scenario analysis.

Collaboration

Joining organizations such as Climate Action 100+, an investor-led global coalition that engages with the top 100+ greenhouse gas emitters to take necessary action; and the Ceres Investor Network, which works with institutional investors to advance sustainable investing practices.

Ownership

Engaging actively with companies we own on their transition plans and progress towards those plans, and voting proxies in line with addressing the risks identified.

Rules and Frameworks

Working with organizations like the International Financial Reporting Standards Foundation, which brings together asset owners, asset managers and standard setters on material and important metrics for disclosure.

Mitigating Risk: An Investor's Perspective

NYSTRS has been successful in providing secure pensions for our members for over one hundred years through an investment program designed to maintain the sustainability of retirement benefits members have earned. The System has accomplished this as universal owners – owning assets across the U.S. (and global) economy. Diversification is key to maintaining the sustainability of retirement benefits. We achieve risk-adjusted returns through a well-diversified portfolio comprised of investments in multiple sectors and areas. Although some sectors and companies may perform better than others during certain periods of time, over the long term, diversification has proven to be among the most effective in balancing portfolio risk and return.

In terms of investor actions on the issue of climate risk in publicly-traded companies, the two most common actions discussed are divestment and engagement. It is important to note that divestment does not actually address overall climate risk as one investor simply sells their holdings to another investor.

Our perspective is that the System can more effectively address identified risks by maintaining a voice as owners of a company (as shareholders). Maintaining ownership provides an opportunity to engage with portfolio companies to encourage them to develop plans to mitigate the risks we have identified.

Divestment is a last resort, considered if:

a) companies fail to address identified risks after engaging with us over a period of time; or

b) when engagement has not resulted in a meaningful risk mitigation plan.

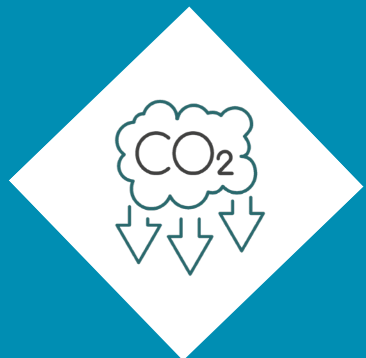
The System has divested from directly held public equity securities in companies that derive more than 10% of their revenue from thermal coal (i.e., the "Divestment List"). We continue to monitor the portfolio to ensure compliance with the Divestment List policies in the directly held public equity strategies.

For directly held public equity securities in the System's internally managed portfolios and externally managed passive portfolios, NYSTRS ceased further purchase of shares in companies that meet the following criteria (i.e., the "Restricted List"):

- The 10 largest positions held by the System in companies that have more than 0.3 gigaton of potential CO_2 emissions from thermal coal reserves;
- The 10 largest positions held by the System in companies that (i) derive more than 20% of their revenue from oil and gas, or (ii) have more than 0.1 gigaton of potential CO_2 emissions from oil and gas reserves; and
- Companies that derive more than 10% of their revenue from oil sands.

These companies have also been prioritized for engagement and additional scrutiny regarding their proxy votes. During 2023, the System conducted independent risk assessments of these companies using our Key Performance Indicators (KPIs), as described on the ensuing page.

NYSTRS' CLIMATE KEY PERFORMANCE INDICATORS (KPI)



Reduction Target(s):

To assess if short-, medium- and long-term GHG reduction targets or Net Zero by 2050 pledges have been established.

Decarbonization Strategy:

To assess if there are clearly defined action plans that align with proposed reduction targets.

Climate Governance – Executive Compensation:

To assess executive compensation alignment with stated climate goals, further supporting a firm-wide adoption of a transition plan.

Climate Governance – Board Oversight:

To assess whether a firm's board has clear oversight of climate change and sufficient capabilities to manage climate risk and opportunities.

Standardized Disclosure:

To assess whether the firm follows best practice Task Force on Climate-related Financial Disclosures (TCFD) as it pertains to climate reporting and disclosure.

The System's independent assessments have three key features:

1. Transparency: They allow the companies we invest in and the public to know our KPIs.
2. Measurability: The KPIs are both reportable and measurable, to allow for continued monitoring, achievement of milestones by companies, and to measure the success of our engagement.
3. Actionable: The System can act on the success (or failure) of engagement, by removing companies that have shown progress and improvement in their KPIs from the Restricted List or divesting from companies that have shown an unwillingness to engage or a lack of progress toward stated goals.

2023 Engagement

During 2023, we conducted risk assessments on all 25 Restricted List companies. We held direct engagements with a number of companies on the list as well as participated in collective engagement with a number of other companies as well. The purpose of these engagement meetings was to present our approach to Responsible Stewardship, outline the relevant risks we identified and to present the findings of our risk analysis for each individual company. The idea behind the engagement efforts was to allow companies to respond to our assessments and to explore their plans to address the risks we identified.

KPI Assessment of the 25 Restricted List Companies by Catgory

NYSTRS' Climate KPI	Oil Sands (5 Companies)			Oil & Gas (10 Companies)			Thermal Coal (10 Companies)		
	Satisfied	Partially Satisfied	Not Available	Satisfied	Partially Satisfied	Not Available	Satisfied	Partially Satisfied	Not Available
Reduction Targets		●●●●●		●●●●	●●●●●	●	●●●●	●●●●●	●
Decarbonization Strategy		●●●	●●	●●●●●	●●●●	●	●●●	●●●●●●●	
Climate Governance Initiatives	●●	●●	●	●●●●	●●●●	●●	●●●●●●●		●●●
Climate Governance Oversight	●●	●●●		●●●●●●●●	●	●	●●●●●●●	●●	●
Reporting Frameworks	●●●●	●		●●●●●●●●●		●	●●●●●●●●	●●	

Companies that derive more than 10% of their revenue from oil sands (5 companies)

Reduction Targets: 5/5 Partially Satisfied
Decarbonization Strategy: 3/5 Partially Satisfied, 2/5 Not Available
Climate Governance Initiatives: 2/5 Satisfied; 2/5 Partially Satisfied; 1/5 Not Available
Climate Governance Oversight: 2/5 Satisfied; 3/5 Partially Satisfied
Reporting Frameworks: 4/5 Satisfied; 1/5 Partially Satisfied

- Direct engagement meetings were held with four of the five companies in this category.
- The one that declined did so because of scheduling conflicts. Follow-up was completed through the collective engagement front. This company is prioritized for 2024 direct engagement.
- On the Decarbonization Strategy KPI, one company assessed as Not Available provided an updated plan that detailed an absolute emissions reduction strategy. A second company viewed carbon capture technology as its primary strategy to decarbonize. This company reinforced that its targets were set as goals, not just ambitions.
- One of the companies set up a follow-up with their CEO to directly address strategic plans to enact their decarbonization strategy.

2023 Engagement (cont.)

The 10 largest positions held by the System in companies that (i) derive more than 20% of their revenue from oil and gas, or (ii) have more than 0.1 gigaton of potential CO_2 emissions from oil and gas reserves (10 companies)

Reduction Targets: 4/10 Satisfied; 5/10 Partially Satisfied; 1/10 Not Available
Decarbonization Strategy: 5/10 Satisfied; 4/10 Partially Satisfied; 1/10 Not Available
Climate Governance Initiatives: 4/10 Satisfied; 4/10 Partially Satisfied; 2/10 Not Available
Climate Governance Oversight: 8/10 Satisfied; 1/10 Partially Satisfied; 1/10 Not Available
Reporting Frameworks: 9/10 Satisfied; 1/10 Not Available

- Direct engagement meetings were held with four of the 10 companies in this category.
- Three of the 10 companies were engaged with through our collective partnership efforts.
- Most meetings were with Investor Relations departments. Follow-up meetings in 2024 will prioritize meetings with sustainability officers and corporate strategy team members.

The 10 largest positions held by the System in companies that have more than 0.3 gigaton of potential CO_2 emissions from thermal coal reserves (10 companies)

Reduction Targets: 4/10 Satisfied; 5/10 Partially Satisfied; 1/10 Not Available
Decarbonization Strategy: 3/10 Satisfied; 7/10 Partially Satisfied
Climate Governance Initiatives: 7/10 Satisfied; 3/10 Not Available
Climate Governance Oversight: 7/10 Satisfied; 2/10 Partially Satisfied; 1/10 Not Available
Reporting Frameworks: 8/10 Satisfied; 2/10 Partially Satisfied

- Direct engagement meetings were held with one of the 10 companies in this category.
- Six of the 10 companies were engaged with through our collective partnership efforts.
- Collective engagement efforts were utilized due to the high prioritization of addressing thermal coal activities among partnership and coalition members.

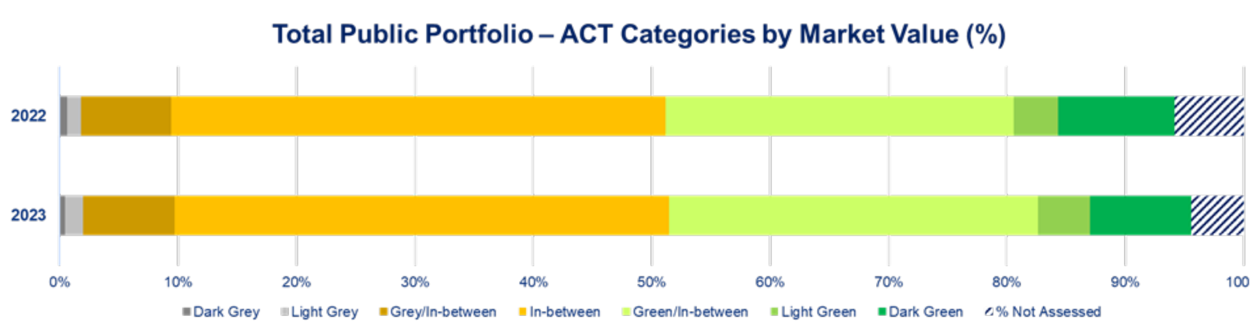
The KPI with the best results was in Reporting Frameworks. Twenty-four of the 25 companies on our Restricted List have adopted the TCFD framework with only one company not currently reporting on this. The company not in compliance will be prioritized for direct engagement in 2024.

Climate Transition Via Asset Ownership of Public Markets

As universal owners of the broad market, NYSTRS participates in the evolution of the global economy that is adapting to the risks and opportunities posed by climate change. For example, NYSTRS' public equities portfolios include investments in renewable energy; wind turbines; biofuels; liquefied natural gas; lithium-ion batteries; and electric vehicles. NYSTRS' portfolios also reflect many of the industry leaders that are embracing the transition to a more sustainable future.

The integration of climate change-related risks and opportunities into our investment process is an exceedingly complex and intricate undertaking. Mercer completed the third annual assessment of the climate transition readiness of the System's public markets portfolio as of June 30, 2023, using a proprietary tool called Analytics for Climate Transition ("ACT"). Mercer's ACT tool is a forward-looking multi-factor model that aims to assess the transition capacity of NYSTRS' portfolio along a spectrum ranging from high carbon intensity assets with low capacity to transition ("Grey" assets), to assets that have relatively low carbon intensity or have high capacity to transition ("Green" assets), and assets that are in between ("In-between" assets). Compared to the results from June 30, 2022, Mercer's analysis found an increase in the amount of Grey to Grey/In-between assets (from 9.4% last year to 9.8% this year) and an increase in Green assets (from 43.0% to 44.5%) of NYSTRS' public markets portfolio as of June 30, 2023.

Mercer's ACT Transition Assessment of NYSTRS' Public Markets Portfolio as of 6/30/23



The modest increases can be attributed to the mixed actions taken by corporations and households that have had an impact on the climate, influenced by uncertainties surrounding energy security. According to the International Energy Agency (IEA) CO_2 Emissions in 2022 report, global energy-related CO_2 emissions experienced a growth of 0.9% in 2022.[3] However, there is an encouraging trend of more corporations expressing a higher level of climate ambition. In 2022, the Science Based Targets initiative (SBTi) reported that over 1,000 new companies had their climate targets validated by the initiative, and the total number of companies with approved science-based targets or commitments now account for over one third of the global economy as of the end of 2022.[4] These contrasting factors of headwinds and tailwinds have resulted in a greater dispersion in companies' ambitions and their climate actions.

[3] *IEA. (March 2023). CO_2 Emissions in 2022. Retrieved from https://www.iea.org/reports/co2-emissions-in-2022.*

[4] *Science Based Targets initiative. (2022). SBTi Monitoring Report 2022. Retrieved from https://sciencebasedtargets.org/resources/files/SBTiMonitoringReport2022.pdf.*

The ACT analysis examines the transition readiness of NYSTRS' entire public markets portfolio, rather than solely being focused on specific holdings in the fossil fuel industry. As universal owners, NYSTRS' portfolio will continue transitioning in line with the broader economy. NYSTRS believes that maintaining universal ownership of public markets preserves its exposure to the transition to a more sustainable economy.

Climate Scenario Analysis

In July 2023, the System evaluated the potential impacts on the portfolio using the target asset allocation across a 30-year horizon under four climate scenarios: Rapid transition (equivalent to a 1.5°C of warming by 2100 scenario), Orderly Transition (<2°C), Limited Transition (2.8°C) and Failed Transition (>4°C), using Mercer and Ortec Finance's climate scenario modeling. The four climate scenarios represented a range of plausible projections and may support the System's risk management. Among the various scenarios modeled, the "Failed Transition" scenario demonstrated the greatest climate-related risks driven by expected elevated physical climate risks (e.g., droughts, floods) that are not currently fully reflected in capital market pricing of investment securities. Under this scenario, it was modeled that the System's projected annual return would be lower than under the "Rapid Transition" and the "Orderly Transition" scenarios in the 15- to 30-year horizon.

The results of this quantitative modeling validates our analysis of climate risk as a material, long-term risk to our portfolio.

Climate Disclosure Frameworks & Alliances

Access to clear, consistent and reliable climate-related disclosures from companies help asset owners such as NYSTRS evaluate climate change-related risks and opportunities in their investment portfolios and make informed investment decisions. As noted in the Board's Stewardship Investment Beliefs, the System is actively participating with external organizations to help shape future rules and regulations related to sustainable investing.

One such example is the System's active participation with groups such as The International Financial Reporting Standards Foundation ("IFRS") in this developing area. NYSTRS supports the IFRS Sustainability Disclosure Standards and participates as an active member of the International Sustainability Standards Board Investor Advisory Group ("IIAG"). The IIAG comprises leading global asset owners, asset managers, and investment intermediaries who recognize the need for consistent, comparable, and reliable disclosure of financially-material, decision-useful sustainability information to investors. The IIAG serves as an advisory body to the International Sustainability Standards Board ("ISSB") by providing strategic guidance on developing IFRS Sustainability Disclosure Standards and by helping to ensure that the investor perspective is articulated clearly and is considered in the ISSB's standard-setting process. The IIAG also helps achieve widespread adoption of IFRS Sustainability Disclosure Standards by encouraging organizations to use the Standards to communicate performance to investors on sustainability-related issues that affect enterprise value. As part of the System's engagement efforts, NYSTRS expects companies to align their financial reporting disclosure with the newly released IFRS S1 standards and to adopt IFRS S2 for their climate-related disclosures.

Another key organization of which NYSTRS is a member is Climate Action 100+, an investor-led initiative to ensure that the world's largest corporate greenhouse gas emitters take necessary action on climate change. At present, the initiative is comprised of over 700 investors managing approximately $68 trillion in assets and is focused on engaging 166 companies which make up 80%+ of global historical industrial emissions. Climate Action 100+ has three main requests of companies with which they engage:

- Implement a strong governance framework which clearly articulates the board's accountability and oversight of climate change risk.
- Take action to reduce greenhouse gas emissions across the value chain, consistent with the Paris Agreement's goal of limiting global average temperature increase to well below 2 degrees Celsius above pre-industrial levels, aiming for 1.5 degrees. Notably, this implies the need to move towards net-zero emissions by 2050 or sooner.
- Provide enhanced corporate disclosure in line with the final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and sector-specific Global Investor Coalition on Climate Change (GIC) Investor Expectations on Climate Change guidelines (when applicable), to enable investors to assess the robustness of companies' business plans against a range of climate scenarios, including well below 2 degrees and improve investment decision-making.

Of the 25 companies on NYSTRS' Restricted List, 17 of them are on the Focus List of Climate Action 100+.

In addition, NYSTRS has been working to engage relevant Restricted List companies with The Oil & Gas Methane Partnership 2.0 (OGMP 2.0) in order to encourage companies to more accurately track and mitigate their methane emissions.

Private Equity: Investing in the Energy Transition

As detailed on the previous pages, addressing climate risk involves both reducing existing emissions and transitioning to new sources of energy, production and manufacturing that can replace current methods. NYSTRS' private equity portfolio previously had or currently has exposure to a number of energy transition assets such as:

- A company commercializing one of the first at-scale carbon capture, sequestration, utilization and storage projects in North America.
- A company developing a greenfield produced water treatment and recycling platform in North America.
- A leading provider of outsourced energy efficiency and demand response program management services, product fulfillment, and customer engagement software to utility clients.
- A company that produces exhaust and emissions systems for commercial vehicles to help original equipment manufacturers meet more stringent emissions standards.
- A supplier of sustainable plating systems, which is approaching sustainability through reducing the use of toxic chemicals and reduced usage of water, energy and raw materials.
- One of the world's largest manufacturers of gearboxes, generators and services for wind turbines. To ensure a sustainable production process, they have taken a large number of measures to reduce energy requirements and have also switched to carbon-neutral electric power. This has already enabled them to reduce the carbon footprint of the remaining energy requirements by about 83% in the last four years.
- A leading vertically integrated platform for ultra-low and carbon negative fuel development, production, operating and environmental credit marketing. The company is a pioneering player in the dairy renewable natural gas industry and currently processes waste from nearly 100,000 cows across 12 dairies into ultra-low carbon renewable transportation fuel.
- A battery company providing smart, high-performance and cost-effective energy storage solutions to small industrial and commercial enterprises.
- A manufacturer of water sterilization and decontamination devices intended to provide low-cost, clean energy-powered water purification.
- An alternative energy company, employing a unique technology for plasma generation of electricity.
- A company specializing in electrical vehicle charging infrastructure.

During 2023, NYSTRS made the following two fund commitments to funds in the energy transition space:

- $100 million to EIV Capital Fund V, L.P., a small/medium buyout fund focused primarily on control-oriented buyouts of midstream energy, energy transition, and alternative energy and decarbonization companies.
- $300 million to OIC Credit Opportunities Fund IV, L.P., a direct lending fund focused on loans to companies with high-quality assets in select segments of the infrastructure value chain, with an expectation that roughly two thirds of the final portfolio will be committed to investments that supports the energy transition.

Real Estate: Investing in the Energy Transition

The Real Estate team at NYSTRS is implementing several strategies for reducing energy usage and emissions at our directly owned properties, such as:

- Achieving LEED Certification for each of our office properties. LEED Certification is sponsored by the U.S. Green Building Council and focuses on efficient energy and water usage as well as implementation of best practices in efficient operations. All of our existing office properties (five million sq ft) have LEED Certifications. In addition, NYSTRS headquarters has also achieved LEED certification (Silver last year, Gold this year). We are also pursuing additional certifications that focus on occupant health and wellness such as Fitwel, which was developed by the Center for Active Design in collaboration with the U.S. General Services Commission and the U.S. Centers for Disease Control and Prevention. Our four fully stabilized office properties have all achieved one- or two-star Fitwel certifications.
- Working with our advisors and consultants to measure our greenhouse gas emissions from our office properties as a baseline from which to track future improvements.
- Using software (i.e., Yardi Energy Services) to track and analyze energy use at our multi-family properties, as well as engaging consultants to perform ASHRAE Level 2 energy audits initially at several multi-family properties. In addition, we have been actively installing energy efficient appliances, low flow plumbing fixtures, LED and motion activated lighting, and recyclable carpets. We are also installing EV charging stations for tenant usage. We are analyzing opportunities to replace fossil fuel/gas powered heating and cooling units with electric/air source heat pump systems in both the common areas and in the units. Three garden-style apartment communities have already converted the Clubhouse and individual units to heat pumps.
- Implementing similar initiatives at our industrial properties such as replacement of HVAC units with energy efficient units, conversion to LED lighting, installing and maintaining white roofs on certain properties and including "green lease" language in all new leases requiring tenants to report energy usage. We have installed a white silicone roof coating and solar panels on one industrial property and are currently assessing additional buildings for solar panels.
- Specific to our mixed-use development property, we have installed a small solar array on the roof which powers hot water serving the residential amenity space. The residential units and retail spaces are served by heat pumps.
- In addition to implementing energy efficiency strategies at our properties, NYSTRS also invests in roughly 110,000 acres of Timberland in the Southeast United States. Our timber advisor (Forest Investment Associates) has a commitment to implementing sustainable forestry practices and our plantations are 20% to 30% more productive than the legacy plantations we acquired. The forest carbon cycle is a natural process through which carbon cycles from the atmosphere into forests. Harvested wood products store carbon while forests are replanted in a positive feedback loop that accumulates carbon in forests and wood products. Our timberland currently sequesters 9.8M CO_2 equivalent metric tons of above ground carbon.

- In addition to these property level initiatives, the Real Estate team has engaged with both the Global Real Estate Sustainability Benchmark (GRESB) and MSCI to identify additional areas of focus, including climate risk assessments and other opportunities to collect and measure energy usage and emissions data to assess opportunities for improvement.
- The Real Estate department has reviewed 42 opportunities across infrastructure equity and credit strategies. NYSTRS continues to review investment opportunities across infrastructure strategies focused on alternative energy as well as larger diversified strategies which include a component of alternative energy investments.

Fixed Income: Economy in Transition

After developing and presenting a carbon transition strategy in late 2022, the NYSTRS Fixed Income team conducted a Request for Information (RFI) for one or more external managers for a global carbon transition credit strategy. After reviewing the RFI submissions and conducting due diligence, the Fixed Income team selected two managers that were later approved by the NYSTRS Board. The two portfolios were established in the fourth quarter of the calendar year, with approval for an aggregate initial allocation of $300 million.

The carbon transition strategy is based on fundamental credit analysis with an added focus on assessing the risks and opportunities of decarbonization at a company level. This includes investing in bond issuers that are:

- Climate solution providers.
- Already well-positioned for the carbon transition.
- High emitters that have a comprehensive transition plan that requires debt financing.

Another key aspect of the carbon strategy is that the two managers will engage with bond issuers to improve transition planning, disclosure and bond security design.

In terms of the internally managed portfolios, the Fixed Income team continues to build its research and knowledge related to decarbonization at macroeconomic (top-down) and bond issuer (bottoms-up) levels. This includes improvements in data availability, analysis, and visualization. In addition, the team participates in seminars, conferences, and education on the topic of climate change and the fixed income markets.

Finally, the Fixed Income team is collaborating with other investment funds and organizations on issues such as establishing frameworks for bond issuance related to methane emissions reduction.

The Year Ahead: A Look Forward

NYSTRS' thoughtful and deliberative approach to stewardship and risk mitigation continues in earnest. The System's foremost actions are as follows:

Continued engagement (both directly and through collaborative initiatives) with the Restricted List companies regarding their risk mitigation plans.

Continued collaboration and partnership with other asset owners and asset managers looking to address commonly identified risks.

The System pledges to continue working with industry groups in support of ongoing regulatory efforts to develop climate disclosure frameworks and standards that promote clear, consistent, reliable and decision-useful climate disclosures.

The Board is committed to helping develop the path to a climate-friendly future. The Board's deliberative process is ongoing and will continue to evolve given many possible factors (e.g., geopolitical, regulatory, technological innovation, etc.).

Opportunities in the energy transition space will continue to be analyzed and invested in by the Fixed Income and Private Equity teams.

Opportunities for measurable, relatable improvements within our directly owned real asset portfolio (e.g., installation of heat pumps, insulation, energy efficiency improvements, etc.).

The Retirement Board and NYSTRS staff are committed to actively engage in investigating how to best integrate the risks and opportunities associated with climate change into its investment analysis and portfolio construction, including any potential portfolio adjustments or enhancements, and they are doing this in a methodical and prudent manner consistent with their fiduciary responsibilities.

Appendix: Highlighted 2023 Proxy Votes

Chevron

Shareholder proposal: Adopt medium-term Scope 3 greenhouse gas reduction target (failed with 10% support)

Shareholders request the Company to set a medium-term reduction target covering the greenhouse gas emissions of the use of its energy products (Scope 3) consistent with the goal of the Paris Climate Agreement: to limit global warming to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

NYSTRS' Vote: FOR – NYSTRS believes companies with significant greenhouse gas emissions or other negative environmental impacts should disclose plans for transitioning to a more sustainable business model, including greenhouse gas emissions and explicit reduction targets where such emissions are material. Chevron has set a Portfolio Carbon Intensity emissions target which encompasses certain aspects of Scope 1, 2, and 3 emissions. Proxy voting advisory firms note concern over the complexity of the calculation of this target and that other companies may not be using this methodology. While we recognize the challenge of setting Scope 3 or absolute emissions targets for a business that relies on the sale of Scope 3 emissions, support for this proposal may encourage the company to consider other methods for reducing emissions such as increasing investment into alternative energy sources.

Shareholder proposal: Report on social impact from plant closure or energy transition (failed with 19% support)

The shareholders of Chevron Corporation request that the Board of Directors create a report regarding the social impact on workers and communities from closure or energy transition of the Company's facilities, and alternatives that can be developed to help mitigate the social impact of such closures or energy transitions. The report should be prepared at reasonable cost, omitting proprietary information, and be available on the Company's website by the 2024 Annual Meeting of Shareholders.

NYSTRS' Vote: FOR – The System supports reasonable requests for corporate accountability related to human rights and human capital management. Chevron will have a significant role to play in the transition to a lower carbon future. The company's employees and communities in which it operates should understand how they could potentially be impacted by this transition. As Chevron's Climate Change Resilience report does not seem to address risks to workers or communities, the report requested by this proposal could provide meaningful information to stakeholders.

Exxon

Shareholder proposal: Issue a report on worst-case impacts of oil spills from operations offshore of Guyana (failed with 13% support)

Shareholders request that the Company issue a report evaluating the economic, human, and environmental impacts of a worst-case oil spill from its operations offshore of Guyana. The report should be prepared at reasonable expense, omit proprietary or privileged information, and clarify the extent of the Company's cleanup response commitments given the potential for severe impact on Caribbean economies.

NYSTRS' Vote: FOR – NYSTRS believes that significant risks and opportunities related to climate change and other environmental factors should be disclosed, as well as how the company identifies, measures and manages these risks and opportunities. Several concerns have been raised about Exxon's relatively new oil and gas drilling projects in Guyana. Safety experts have warned that the company has inadequately planned a response if there were to be an oil spill in the country. While Exxon does disclose scenario analysis for oil spills in Guyana, this disclosure is not simple to analyze. The requested report calling for an evaluation of the economic, human, and environmental impacts of a worst-case oil spill from Exxon's operations offshore of Guyana would provide more meaningful information for shareholders to assess the possible risks associated with Exxon's oil drilling in the country.

Shareholder proposal: Report on asset retirement obligations under the International Energy Agency Net-Zero Scenario (failed with 16% support)

Shareholders request that the Board provide an audited report estimating the quantitative impacts of the International Energy Agency net-zero scenario on all asset retirement obligations. The report should disclose, as the Board deems appropriate, the estimated undiscounted costs to settle, in aggregate, related upstream and downstream asset retirement obligations, and separately, identify both recognized and unrecognized amounts, as applicable.

NYSTRS' Vote: FOR – Asset retirements at oil and gas companies are expected to become more prevalent as the transition to less carbon intensive fuel sources persists. While Exxon is currently reporting Asset Retirement Obligations ("AROs") in accordance with accepted accounting standards, there are questions whether the disclosures required by these standards provide truly meaningful information to stakeholders. Adding disclosures inclusive of the undiscounted costs to settle AROs would provide more useful data for stakeholders to evaluate potential liabilities of the company.

Shareholder proposal: Report on potential costs of environmental litigation (failed with 9% support)

Shareholders request an actuarial assessment, omitting confidential information and prepared at a reasonable cost, of the potential cumulative risk to Exxon Mobil Corporation from current environment-related litigation against the Company and its affiliates.

NYSTRS' Vote: ABSTAIN – While NYSTRS believes that significant risks and opportunities related to climate change and other environmental factors should be disclosed, the System will also withhold support from proposals when the company already substantially complies with the resolution. Although environment-related litigation does pose a risk to Exxon, the company is adequately managing this risk through consistent litigation reviews with corporate and outside counsel to determine if pending court cases will materially affect the company. Environmental litigations with potential payouts greater than $1 million are disclosed by Exxon in its Form 10-k, and litigation contingency liabilities are accrued when a loss is probable and can be reasonably estimated.

Imperial Oil Limited

Shareholder proposal: Adopt an absolute greenhouse gas reduction target (failed with 4% support)

Shareholders request that Imperial Oil adopt a midterm corporate-wide target to reduce absolute greenhouse gas emissions (scope 1 and 2). Such a target should be announced before the end of January 2024.

NYSTRS' Vote: FOR – Imperial Oil has set a goal to achieve net zero by 2050, which will require absolute emissions reductions. The company's main competitors in the Canadian integrated energy industry have already set Scope 1 and Scope 2 absolute greenhouse gas emission reduction targets. To better measure progress towards its net zero goals and keep on pace with its peers, Imperial Oil would be well served in setting absolute Scope 1 and 2 GHG emissions reduction targets.

Shell Plc

Management proposal: Approve the Shell Energy Transition Progress Update (passed with 80% support)

Shell Plc is seeking shareholder approval for its energy transition progress update, which gives details of its progress against its climate objectives, as set out in its 2021 Energy Transition Strategy.

NYSTRS' Vote: FOR – This vote is for the purpose of gauging shareholders' views on Shell's progress towards its climate strategy, not to set the actual strategy. The company has made progress on its reduction of Scope 1 and 2 emissions, increased research and development ("R&D") expenditures on projects that contribute to decarbonization to approximately 41% of total R&D and invested $8.2 billion in low-carbon energy and non-energy products. Shell made notable acquisitions of Nature Energy, which makes Shell the leading world producer of renewable natural gas, and Sprng Energy, a $1.6 billion solar and wind platform. It appears to be following the commitments made and is making measurable progress towards the goals set in the 2021 Energy Transition Strategy. A new transition plan will be put to vote at the 2024 annual general meeting.

Shareholder proposal: Request Shell to align its existing 2030 reduction target covering the greenhouse gas emissions of the use of its energy products (Scope 3) with the goal of the Paris Climate Agreement (failed with 20% support)

Request the Company to align its existing 2030 reduction target covering the greenhouse gas emissions of the use of its energy products (Scope 3) with the goal of the Paris Climate Agreement: to limit global warming to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

NYSTRS' Vote: FOR – Although currently being appealed, a 2021 court case in the Hague ruled that Shell must reduce its CO_2 emissions activity by 45% by 2030 compared to 2019. While the company has set absolute emissions targets for Scope 1 and 2, it only has set intensity targets for Scope 3, stating that absolute targets for Scope 3 would not be in the financial interests of its shareholders. The majority of the company's emissions are Scope 3 in nature as they are from the use of petroleum by consumers. Support for this proposal will encourage the company to focus on absolute targets for Scope 3, which will help address the potential necessity to comply with the court ruling in the Hague and better align Shell with the goals of the Paris Agreement.

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