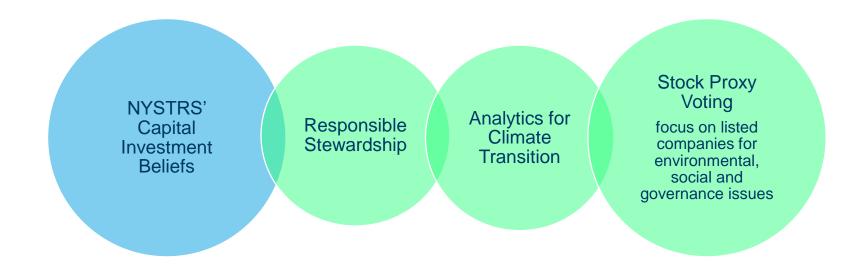


Education Session on Climate Risk and Stewardship

New York State Teachers' Retirement System
November 2021

This report has been prepared for the New York State Teachers' Retirement System (NYSTRS).

Connected Objectives Focus on Stewardship



We started with the objective to define Capital Investment Beliefs, including Responsible Stewardship. Next, Mercer's Analytics for Climate Transition (ACT) and NYSTRS' Stock Proxy Voting will help us focus on listed companies with ESG issues.



Refresher: Operationalizing "Responsible Stewardship" Capital Investment Beliefs

We Believe:

As fiduciaries, we must be **responsible stewards** of the Fund, while acting for the exclusive benefit of NYSTRS' members and beneficiaries.

Responsible stewardship includes:

- Making prudent investment choices, consistent with our fiduciary duties under a disciplined risk-controlled strategy.
- Promoting responsible corporate governance, consistent with our Duty of Loyalty to act for the exclusive benefit of NYSTRS' members
 and beneficiaries.
- Being active owners of public and private companies, including but not limited to:
 - Voting proxies.
 - Participating on Limited Partner Advisory Committees.
 - Capitalizing on the System's assets to achieve investment goals and objectives in a responsible manner.
- Collaborating with other institutional investors to harness collective influence in engagement efforts.
- Actively participating with external organizations to help shape future rules and regulations related to sustainable investing. (e.g., Value Reporting Foundation efforts to advocate for uniform reporting and disclosure templates)

Refresher: Sustainable Investment Pathway

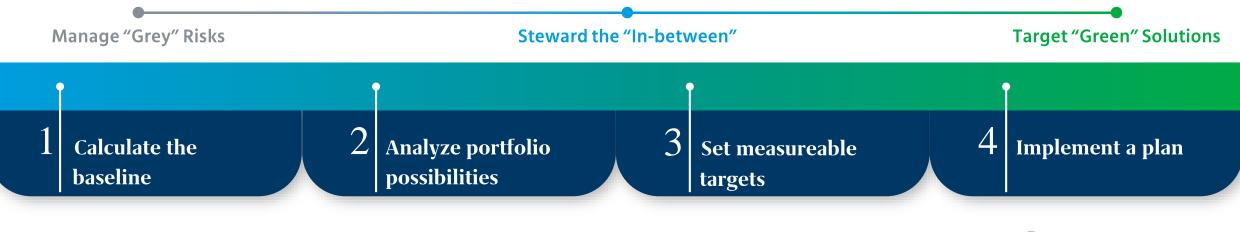
Mercer's Framework





How Does Mercer Help Clients Address Transition Risk in Their Portfolio?

Mercer's climate transition advice, supported by our **Analytics for Climate Transition (ACT)**, follows a step-by-step approach.



Dashboard creation including current emissions; transition capacity; and green exposures across asset classes (draws on ACT)

Analyze portfolio possibilities to implement a portfolio wide transition by asset class with charts and commentary (draws on ACT)

Set measurable targets for reducing emissions and growing transition capacity as aligned with emissions reduction pathways Draw on outputs from each step and our recommended priorities

Decarbonization means emissions are reduced as far as possible, where there are options to do so, with any remaining emissions offset by absorbing an equivalent amount from the atmosphere e.g. in nature (trees and soils) or via <u>carbon capture and storage or use technologies</u>

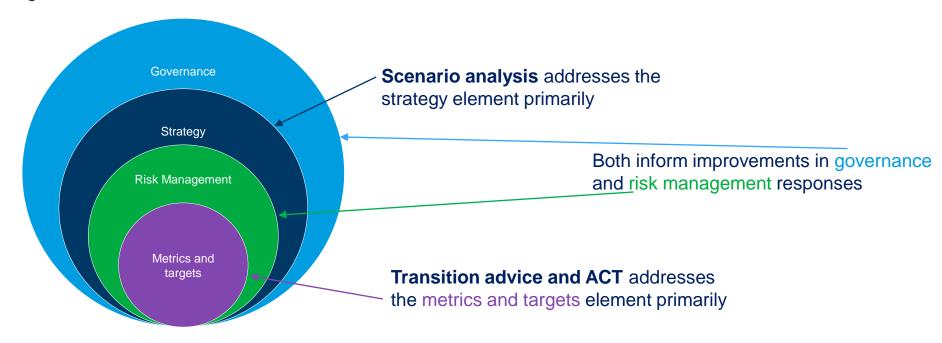


Defining Emissions and Carbon Metrics



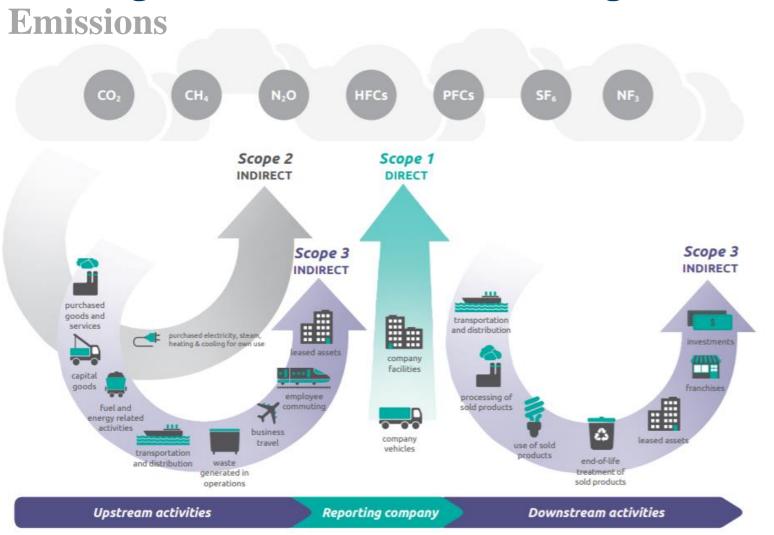
Addressing Climate-Related Risks and Opportunities TCFD framework

 The Task Force on Climate-related Financial Disclosures (TCFD) recommends a framework for disclosing how climate-related risks and opportunities are measured, monitored and managed by companies, asset managers and asset owners.



Mercer applies the TCFD framework to help clients understand, manage and monitor their exposure to climate risks and opportunities, and disclose according to regulator expectations

Evolving Disclosure and Data Coverage



The concerns about the quality of these data include: 1) reporting is voluntary, which lowers data availability and introduces a potential self-reporting bias; 2) no single reporting standard has been adopted, which leads to incomparability of GHG emissions between companies; and 3) reported data are not perfectly consistent across data providers. Despite these drawbacks, the reported data are the best quality information currently available.¹

A key challenge for global institutional investors is gaining access to ESG-related metrics from private market investments, which include private equity, private debt, real estate, infrastructure, and natural resources (among other potential asset classes). By nature, these assets are not typically required to disclose much information publicly -- and while investment managers are increasingly enhancing their capabilities, ESG reporting remains relatively atypical in these asset classes.

Source: https://www.ghgprotocol.org/sites/default/files/ghgp/standards/Scope3_Calculation_Guidance_0.pdf.

¹ Green Data or Greenwashing? Do Corporate Carbon Emissions Data Enable Investors to Mitigate Climate Change? (Vitali Kalesnik, Marco Wilkens, and Jonas Zink, Research Affiliates, LLC, University of Augsburg, November 2020)



Portfolio Key Highlights



Carbon Metrics

Different methodologies can be used to calculate a portfolio's exposure to carbon intensive companies (direct and indirect carbon emissions) and their potential emissions (fossil fuel reserves). The metrics used in this analysis reflect a combination of recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) and Mercer's experience in working with clients.

Weighted Average Carbon Intensity (WACI) is recommended by the TCFD as the primary tracking metric because it can be applied across asset classes and is a fairly straightforward calculation. It measures the efficiency of an investment's carbon emissions, which serves to contextualize the emissions rather than focusing on the binary "existence" of emissions.

Absolute Emissions measures an investor's share of total emissions produced by the underlying issuers, expressed in tons of greenhouse gas emissions. It may be used to communicate a portfolio's total carbon footprint.



NYSTRS' Portfolio

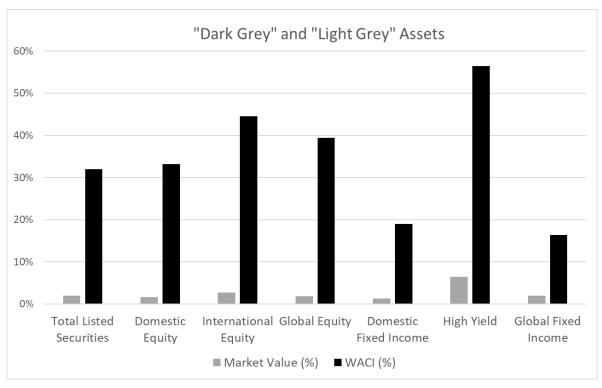
Key Highlights

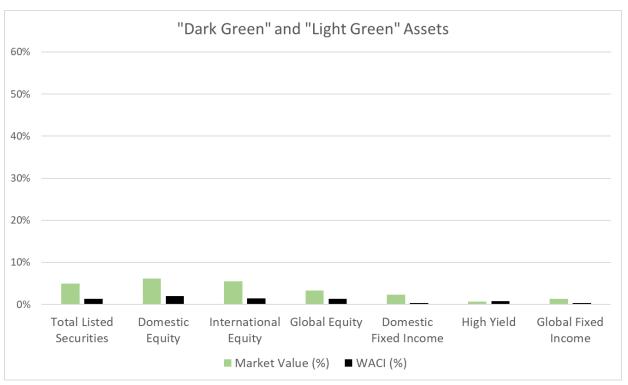
- Methodology: ACT for listed securities (corporate metrics); ACT for sovereign debt (sovereign metrics)
- ACT covers 96.3% of the NYSTRS' \$103B public securities assessed
 - Listed equities have the highest data coverage in our model
 - Over 46% of listed equities received an ACT score in the green range (i.e. dark, light or green/in-between)
- Transition capacity based on ACT scores highlights engagement opportunities in listed equities
 - 2% of listed equities received an ACT score in the elevated transition risk categories of dark grey and light grey, and these holdings contribute 37.9% of the total listed securities' Weighted Average Carbon Intensity (WACI): 171.5 T CO2e/\$M
 Revenue

11

Portfolio Market Value (%) and WACI (%)

Light and Dark "Grey" assets tend to contribute significantly more to portfolio WACI than Light & Dark "Green" assets



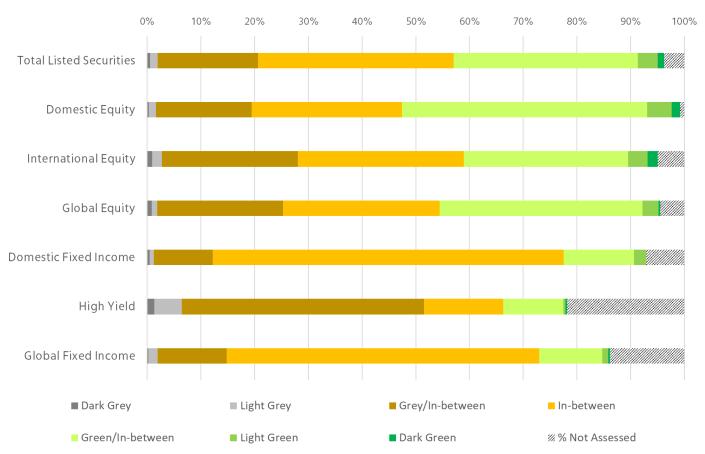


Source: Mercer. Issuer-level metrics data provided by MSCI and ISS where available. Asset allocations as of 6/30/21 and are subject to change. Coverage based on market value, excluding currencies, derivatives, and other liabilities. The funds described do not represent all of the funds purchased, sold or recommended. It should not be assumed that an investment in the funds identified was or will be profitable. Analytics for Climate Transition (ACT) is Mercer's approach to weight absolute emissions and weighted average carbon intensity (WACI) to individual investments. The reader should not assume that an investment in the securities identified was or will be profitable. This does not constitute an offer to purchase or sell any individual securities.



NYSTRS' ACT Analysis

Transition Assessment by Weight (%)



Across NYSTRS' listed equity portfolios, those with the highest proportion of:

- Grey assets are select EM and energy companies
- Green assets are US large-cap and other domestic stock indices
- In-between assets with mixed transition capacity are the bulk of all portfolios

Source: Mercer. Issuer-level metrics data provided by MSCI and ISS where available. Asset allocations as of 6/30/21 and are subject to change. Coverage based on market value, excluding currencies, derivatives, and other liabilities. The funds described do not represent all of the funds purchased, sold or recommended. It should not be assumed that an investment in the funds identified was or will be profitable. Analytics for Climate Transition (ACT) is Mercer's approach to weight absolute emissions and weighted average carbon intensity (WACI) to individual investments. The reader should not assume that an investment in the securities identified was or will be profitable. This does not constitute an offer to purchase or sell any individual securities.



Important notices

© 2021 Mercer LLC. All rights reserved. References to Mercer shall be construed to include Mercer LLC and/or its associated companies.

This contains proprietary information of Mercer and is intended for the exclusive use of the parties to whom it was provided by Mercer. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity without Mercer's prior written permission.

Mercer does not provide tax or legal advice. You should contact your tax advisor, accountant, and/or attorney before making any decisions with tax or legal implications.

This does not constitute an offer to purchase or sell any securities.

The findings, ratings, and/or opinions expressed herein are the intellectual property of Mercer and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets discussed.

For Mercer's conflict of interest disclosures, contact your Mercer representative or see http://www.mercer.com/conflictsofinterest.

This does not contain investment advice relating to your particular circumstances. No investment decision should be made based on this information without first obtaining appropriate professional advice and considering your circumstances. Mercer provides recommendations based on a particular client's circumstances, investment objectives, and needs. As such, investment results will vary and actual results may differ materially.

Information contained herein may have been obtained from a range of third-party sources. While the information is believed to be reliable, Mercer has not sought to verify it independently. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential, or incidental damages) for any error, omission, or inaccuracy in the data supplied by any third party.

Investment management and advisory services for U.S. clients are provided by Mercer Investments LLC (Mercer Investments). Mercer Investments LLC is registered to do business as "Mercer Investment Advisers LLC" in the following states: Arizona, California, Florida, Illinois, Kentucky, New Jersey, North Carolina, Oklahoma, Pennsylvania, Texas, and West Virginia; as "Mercer Investments LLC (Delaware)" in Georgia; as "Mercer Investments LLC of Delaware" in Louisiana; and "Mercer Investments LLC, a limited liability company of Delaware" in Oregon. Mercer Investments LLC is a federally registered investment adviser under the Investment Advisers Act of 1940, as amended. Registration as an investment adviser does not imply a certain level of skill or training. The oral and written communications of an adviser provide you with information about which you determine to hire or retain an adviser. Mercer Investments' Form ADV Part 2A & 2B can be obtained by written request directed to: Compliance Department, Mercer Investments, 99 High Street, Boston, MA 02110.



Important notices

ESG investing refers to environmental, social, and governance considerations that may have a material impact on financial performance, and therefore are taken into account, alongside other economic and financial metrics, in assessing the risk and return potential of an investment. Thematic investing involves investing with a goal, at least in part, to achieve an impact on an environmental, social, or governance issue, alongside generating return and mitigating risk.

As always, the decision to invest in ESG-themed options, like all options, must be in the best financial interest of the plan and its participants. Under a recently proposed ERISA rule, ESG thematic investing may be subject to greater scrutiny; for example, its inclusion in an ERISA plan may trigger a heightened level of review of various objective criteria across all investment options. Active ownership efforts should be considered in light of the cost versus benefit to the plan of engaging in such efforts, as described in a recently proposed ERISA rule. Clients are encouraged to consult with ERISA counsel regarding these recently proposed rules.

MSCI®: Portions of this report are copyright MSCI 2021. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages. MSCI is a registered trademark of MSCI, Inc.



brighter

