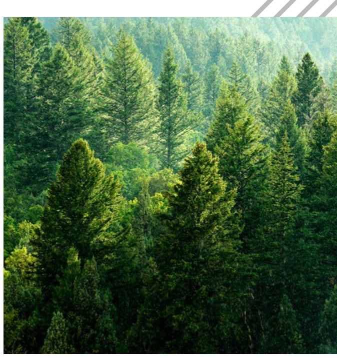
TD Asset Management

TD Asset Management Inc.
Task Force on Climate-Related Financial Disclosures

2022 Report



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Management

Introduction

TD Asset Management Inc. (TDAM) is a leading asset manager in North America with an expanding global presence and directs $356 billion in assets on behalf of retail and institutional investors as of October 31, 2022. TDAM offers a diversified suite of investment solutions to corporations, pension funds, endowments and foundations. Additionally, TDAM manages assets on behalf of almost two million retail investors through affiliated and third-party dealers, and offers a broadly diversified suite of investment solutions, including mutual funds, professionally managed portfolios and corporate class funds.

About This Report

We are pleased to share our 2022 climate report documenting our continued efforts towards implementing the recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD) within the Financial Stability Board (FSB), an international body which monitors and makes recommendations about the global financial system. We released our statement on Climate Change-Related Investment Risks and Opportunities in 2021, and we are formal supporters of the TCFD and frequent end users of our investee companies' TCFD reporting. This report describes our data-driven approach to monitoring, evaluating and managing material climate-related risks and opportunities in TDAM- managed assets. We recognize that preparing disclosures aligned with the TCFD's recommendations is a journey which will evolve, as data, metrics, methodologies and understanding around climate risks advance over time. The information contained in this report is a point- in- time understanding of current approaches, methodologies and relevancy and is purely for informational purposes.

Scope

All information contained in this report is specific to TDAM, except where noted otherwise. This report does not contain information related to Epoch Investment Partners, Inc., TDAM's affiliated registered investment advisor in the United States. For more information on Epoch's sustainability practices and disclosures, please visit its ESG reporting page. All numbers and figures in this report cover the reporting period between November 1, 2021 and October 31, 2022. The majority of the qualitative information also covers the same period, except in a few instances where relevant information after October 31, 2022 has been included. In this document, references to integration or incorporation of ESG factors exclude certain strategies and asset classes, including but not limited to non-ESG related index-tracking funds and certain third-party sub-advised strategies. Further, the extent of integration or incorporation of ESG factors varies across TDAM funds and mandates. For certain TDAM funds where ESG factors do not form part of a fund's investment objective or principal investment strategy, ESG factors may still be considered by a fund's portfolio manager from time to time if those ESG factors are expected to have a material financial impact on the value of a security held by that fund.

2022 Climate Highlights

- Launched TD *Emerald* Low Carbon Global Equity Index Non-Taxable Investor Pooled Fund Trust, allowing investors to track index returns, with a lower carbon footprint.
- Published thought leadership on TDAM's distribution channels on topics such as carbon pricing, inclusion of nuclear energy in the green transition, and investment opportunities driven by climate change.
- Expanded our Climate Focus List for engagements from six to 22 companies, which deepened our understanding of climate risks within a larger section of our portfolio companies.
- Introduced ESG integrated quarterly performance reviews for our active equity and alternative asset strategies covering $116.3 billion of our overall AUM.
- Held 134 climate-focused engagements with 104 companies in 2022, up from 84 engagements with 70 companies in 2021.*
- Supported 69 climate-focused shareholder proposals at Annual General Meetings, leveraging our shareholder rights to push for stronger action, where required, at our investee companies.
- Through industry associations, TDAM participated in consultations on ESG-related disclosures with several other regulatory and standard setting bodies, including the Canadian Securities Association (CSA), Securities and Exchange Commission (SEC) and the International Sustainability Standards Board (ISSB).
- Completed a preliminary climate risk education and assessment exercise with management teams for assets within the TD Greystone Global Infrastructure Strategy,** including identification of sector-specific physical/transition risks and current asset preparedness (i.e., existing mitigation and adaptation measures).

Governance

We recognize the importance of governance structures with regard to the oversight of climate risks and opportunities within our core business of investment management. As such, in 2021, TDAM formally included climate change as a standalone focus area within our overall sustainable investing approach and governance structures. At TDAM, governance of sustainable investing starts with our CEO, who is responsible for establishing and maintaining progress on overall strategic priorities for TDAM. Climate-related items of strategic importance are brought before TDAM's Operating Committee, which consists of executive leaders from across TDAM.

TDAM's Chief Investment Officer (CIO) and the Head of ESG Research and Engagement (ESG R&E) have executive accountability for climate strategy and risk management within the investment function as part of their broader ESG integration responsibilities. The components of TDAM's ESG governance are further described below.

TDAM's ESG R&E Team

The mandate of TDAM's ESG R&E team includes supporting the investment teams and providing subject matter expertise; leading the firm's proxy voting activities, including developing the firm's proxy voting guidelines; leading the firm's ESG-specific engagement efforts, including dedicated engagements with our annual Climate Focus List companies; providing research and thought leadership, often in collaboration with colleagues from the investment team; advising on development of new sustainability-focused products; acting as ESG subject matter experts within the firm and conducting knowledge sharing sessions with other teams across the firm; and leading the firm's climate strategy activities.

*One meeting with a company can include multiple topic engagements. We may have multiple meetings with a company in any given year where warranted.

**TD Greystone Canadian Real Estate Strategy refers to TD Greystone Real Estate LP Fund and TD Greystone Real Estate Fund Inc. TD Greystone Global Real Estate Strategy includes TD Greystone Global Real Estate Fund L.P. and TD Greystone Global Real Estate Fund (Canada Feeder) L.P. TD Greystone Infrastructure Strategy refers to TD Greystone Infrastructure Fund (Canada) L.P., TD Greystone Infrastructure Fund (Canada) L.P. II, and TD Greystone Infrastructure Fund (Global Master) LP.

TDAM’s ESG Committee

TDAM has a dedicated ESG Committee that oversees the firm’s overall ESG strategy and integration efforts. The Committee facilitates discussion around ESG issues, engagements and policy direction. The Committee includes members of the investment management, external distribution and investment risk teams. The Committee meets on a quarterly basis, in addition to ad hoc meetings, where necessary. Under the Committee’s Terms of Reference, items that require additional discussion are escalated to TDAM’s Operating Committee and TDAM’s Risk Committee.

The TDAM ESG Committee strives to ensure that the sustainable investment approach is implemented in accordance with the applicable mandate(s) and is clearly communicated across the business. TDAM ESG Committee members also receive feedback from various engagements with clients and consultants, combining it with industry trends and research to inform TDAM’s ESG strategy and engagement efforts. The work of the ESG Committee is communicated to senior management, including the CEO, CIO and portfolio managers, all of whom serve critical roles in advancing sustainability across the firm and within applicable portfolios TDAM manages.

The purpose of TDAM’s ESG Committee is to:

a. Establish TDAM's firm-wide ESG approach, policies, objectives and commitments to applicable strategies.

b. Provide advice and oversight of TDAM's ESG approach and policies.

c. Define ESG objectives, track progress and monitor effectiveness of stated approaches and commitments.

d. Act as a liaison with TD to align as appropriate with TD’s ESG policies, given TDAM’s fiduciary responsibility to its clients and its ESG obligations and objectives.

The ESG Committee has sub-committees that oversee the workings of underlying functions where relevant, such as the Proxy Voting Sub-Committee and the Alternatives ESG Committee. The ESG Committee supports creation of working groups on different areas of implementation on an as-needed basis. The ESG Committee is chaired by the CIO and Head of ESG R&E.

Proxy Voting Sub-Committee

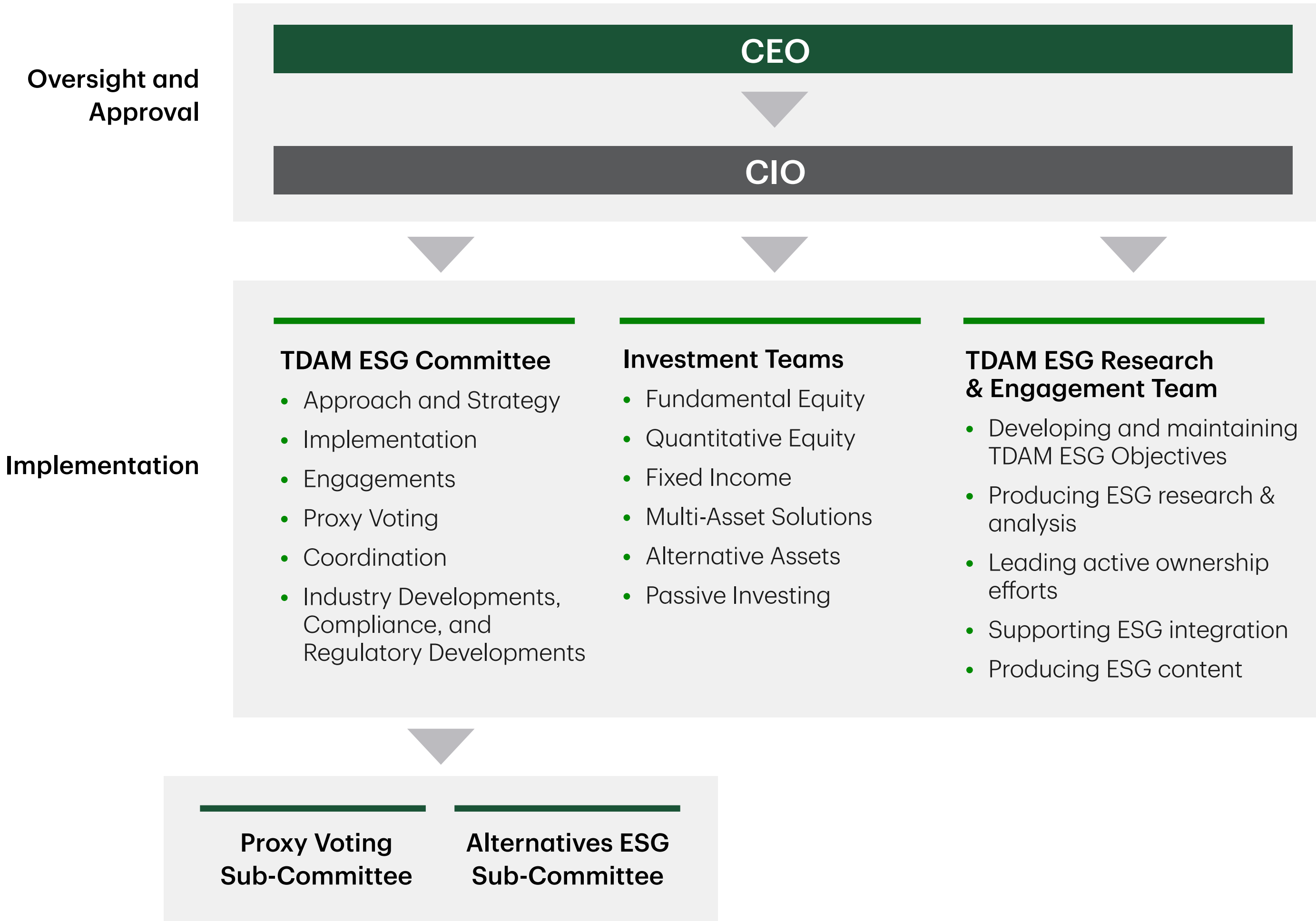
Proxy voting at TDAM is overseen and governed by its dedicated Proxy Voting Sub-Committee. The Proxy Voting Sub-Committee is responsible for reviewing and approving TDAM’s proxy voting guidelines and its custom voting instructions on ESG issues, identifying key or emerging proxy issues and deliberating and deciding on any deviations or overrides of TDAM’s vote recommendations. This includes overseeing TDAM’s framework for evaluating climate-oriented shareholder proposals, (e.g. Say-on-Climate proposals). The Proxy Voting Sub-Committee is comprised of members from TDAM’s investment and ESG teams, including the CIO and Head of Equities.

Alternatives ESG Committee

In 2022 TDAM established its Alternative Investments ESG Committee as a sub-committee of the TDAM ESG Committee, allowing for an approach that is fit for purpose for private markets and real assets. The mandate of the committee is to:

- Provide advice and oversight of TDAM’s Alternative Investments ESG approach, strategies, policies, objectives and commitments.
- Define and approve alternative asset class ESG priorities.
- Track progress and monitor effectiveness of stated objectives and commitments.
- Review and approve updates that will be provided to TDAM’s ESG Committee on an as-needed basis, of which the Alternative Investments ESG committee reports into.
- Act as a decision-making body for significant alternative investments-focused ESG initiatives and budgetary approvals.

Figure 1: TDAM ESG Governance Structure



Strategy

As an asset manager with investments in both public and private financial markets that span different geographies, we recognize climate risks are wide-ranging and can impact both TDAM as an entity, as well as the underlying assets in which TDAM invests. Most of TDAM's public market investments are held for periods spanning one to five years or more than five years. The impacts of climate change are typically considered over these periods.

For a full description of different types of climate-related risks that TDAM and the assets we manage may be exposed to and information on the steps TDAM takes to mitigate these risks, please **see the Risk Management section**.

In general, TDAM's approach to addressing the climate-related risks and opportunities within our business strategy is grounded in our approach to climate change and net-zero by 2050, detailed below.

TDAM's Approach to Climate Change and Net-Zero by 2050

At TDAM, we believe that asset managers have a role to play in the global ambition to achieve net-zero greenhouse gas emissions (GHG) by 2050 to limit further global temperature increases. As such, we support the principles and outcomes of the 2015 Paris Agreement and continue to monitor ongoing developments in subsequent meetings of the Conference of Parties (COP), the ultimate decision-making body within the UN Framework Convention on Climate Change. We continue to review and evolve our approach towards a net-zero transition by referring to climate science frameworks. Those frameworks include the Intergovernmental Panel on Climate Change (IPCC) Assessment reports and U.S. Global Change Research Program (USGCRP) National Climate Assessment reports.

Our Operational Net-Zero Target

The Toronto-Dominion Bank (TD[1]) measures and reports on GHG emissions, including those related to TDAM's operations. TD has been carbon-neutral since 2010, and in 2020, TD announced its Climate Action Plan, including a target to achieve net-zero GHG emissions associated with its operations and financing activities by 2050. In 2021, TD announced its first science-based interim target to achieve an absolute reduction in Scope 1 and Scope 2 GHG emissions by 25% by 2025, relative to a 2019 baseline. This target includes the GHG emissions related to TDAM's operations. For more details on TD's operational carbon footprint, see **TD's Climate Action Plan >**.

Physical climate risks arise from the consequences of a changing climate, including acute physical risks stemming from extreme weather events happening with increasing severity and frequency (e.g. wildfires and floods) and chronic physical risks stemming from longer-term progressive shifts in climatic and environmental conditions (e.g. rising sea levels and global warming).

Transition risks arise from the process of shifting to a low-carbon economy, influenced by new and emerging climate-related public policies and regulations, technologies, stakeholder expectations and legal developments.

Efforts to mitigate and adapt to climate change also produce opportunities for organizations, for example, through resource efficiency and cost savings, the adoption of low-emission energy sources, the development of new products and services, access to new markets, and building resilience along the supply chain.

https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf

[1] TD Asset Management Inc. is a member of TD Bank Group and is a wholly-owned subsidiary of The Toronto-Dominion Bank. For more information on TD's approach to climate change, including its 2022 TCFD Report, please visit its ESG Publications page. Throughout this report, "TD" or "the Bank" refers to TD Bank Group. "We" refers to TDAM.

Our Investment Approach

To address climate change related risks and opportunities within applicable portfolios, we are focused on achieving the following principles:

1. **Monitoring climate risks and opportunities in investments:** We continue to monitor and evaluate material climate-related risks and opportunities where data allows for it. In 2022, we introduced ESG quarterly performance reviews for our active equity and alternative asset strategies covering $116.3 billion of our overall assets under management (AUM).

   Where aligned with the investment objective or strategies of a fund or mandate, TDAM has made investments that contribute positively to the energy transition, and we will continue to look for these opportunities where risk and expected returns align with the firm's profile, particularly through our alternative investment strategies (infrastructure and real estate). For example, renewable energy currently represents over 50% of the investments of the TD Greystone Infrastructure Strategy.

2. **Increasing transparency:** Subject to data availability, we continue to track and disclose the GHG emissions associated with our investments on an aggregate level, following TCFD guidance for asset managers.

3. **Contributing to industry dialogue:** TDAM participates in policy engagements with regulators as they develop new corporate standards on measuring, managing and reporting on climate risk. We also publish regular thought leadership pieces and participate in relevant conferences on climate issues. Additionally, where methodologies for measuring GHG emissions and climate risk metrics are still under development, we plan to continue to participate in industry conversations through organizations such as Partnership for Carbon Accounting Financial (PCAF)[2] and the United Nations Environment Programme Finance Initiative (UNEP FI)[3] and integrate the developments into our investment thinking.

4. **Focusing on climate change through our engagement program:** We encourage companies in our portfolios to set science-based, time-bound, GHG reduction targets, and to be aligned to net-zero by 2050 or sooner. For investee companies where climate change is deemed to be a material financial risk, we may add these companies to our annual Climate Focus List and engage with them with defined goals for the outcome of the engagement. Where possible, we conduct these engagements directly. We also engage through industry initiatives, such as Climate Action 100+[4] and Climate Engagement Canada (CEC).[5]

5. **Engaging in climate-supportive proxy voting:** In the absence of requisite disclosures, TDAM generally supports proposals seeking basic and enhanced disclosures on how investee companies identify, measure and manage their climate-related risks, as well as proposals calling on investee companies to reduce GHG emissions and set science-based targets. We evaluate advisory votes on climate, often referred to as Say-on- Climate – either proposed by management itself or requested of management by shareholders – on a case-by-case basis.

6. **Supporting our clients' climate objectives:** When our institutional clients set their own climate objectives and targets, we work with those clients and strive to deliver solutions to support such objectives.

[2] PCAF is a global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.

[3] United Nations Environment Programme Finance Initiative (UNEP FI) is a partnership between UNEP and the global financial sector to mobilize private sector finance for sustainable development.

[4] Climate Action 100+ is an investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.

[5] Climate Engagement Canada is a finance-led initiative that drives dialogue between the financial community and corporate issuers to promote a just transition to a net-zero economy.

Investment Integration and Increasing Transparency

Incorporating ESG factors within applicable investment strategies is compatible with our goal of seeking to provide strong risk-adjusted returns. As such, we believe that consideration of ESG factors help to provide us with a more robust view of potential risks and opportunities.

Under this approach, financially material ESG factors, including climate factors, are weighed alongside other traditional investment criteria, with investment implications determining if an ESG issue or event changes the intended risk/return profile of an investment.

Additional information on our approach to ESG integration can be seen in our Sustainable Investment Approach and our annual **Sustainable Investment Report >**.

Figure 2: Integration of Sustainability Factors Across Asset Classes

Integration of sustainability factors across asset classes

Fundamental Equities

- Systematic ESG reviews
- Thematic ESG research
- Active ownership
- Sustainable equity fund solution

Alternative Assets

- Environmental impact
- Health and welfare
- Integrity and accountability

Quantitative Equities

- Quantitative ESG signals
- ESG data dialogue
- Proxy voting
- Low-carbon / low volatility fund solution

Fixed Income

- ESG credit review and exposure scores
- Issuer engagement
- Sustainable balanced fund solution

Sustainability

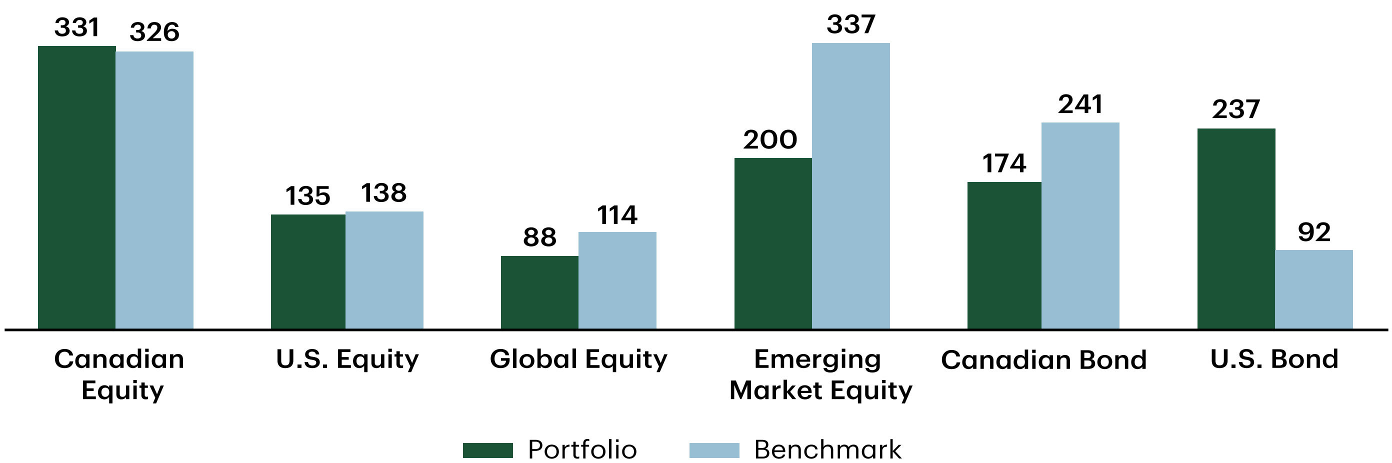
Given the systemic risks posed by climate change, we measure and benchmark climate metrics for our investments where data and methodologies are available.

Measuring and Actioning on Emissions

To understand the carbon footprint of our public equities and corporate fixed income holdings, we use point-in-time financed emissions metrics, including Weighted Average Carbon Intensity (WACI) and Emissions/$M Invested. Financed emissions are the GHG emissions associated with the investments TDAM makes, rather than emissions resulting directly from TDAM's operations. Below we show the year-end performance of our holdings on these two metrics.

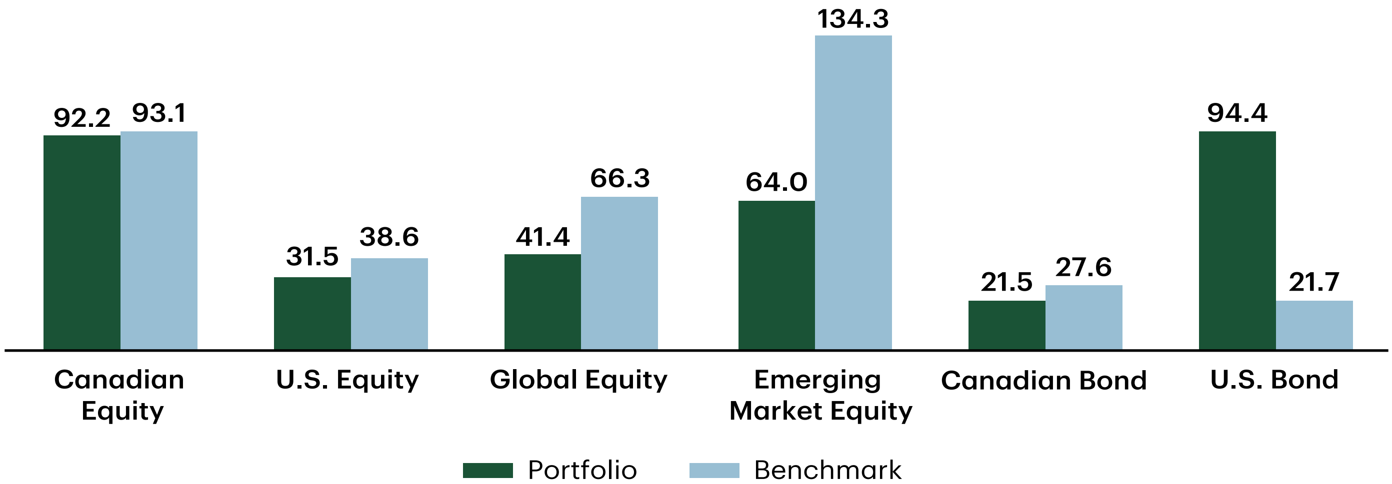
For the assets included in this report, the performance of TDAM's portfolios is generally aligned with their benchmark. Overall, the performance of TDAM's Canadian equity holdings, while closely aligned with the benchmark, stands out as having a higher carbon intensity relative to the other portfolios assessed. We believe this reinforces our focus on high-emitting Canadian companies through our engagement program and magnifies the potential positive impact of remaining engaged with these companies. Our Climate Focus List, a key part of our engagement strategy, is made up primarily of Canadian companies and is further detailed in the Engagement section of the report. U.S. corporate bonds are the smallest piece of our overall exposure assessed in this report, representing 1.2% of our total AUM. Its performance against the benchmark is driven by having a higher overall exposure to higher-emitting industries such as oil and gas and utilities.

Figure 3: TDAM's 2022 Weighted Average Carbon Intensity Across Regions and Asset Classes at Year-End 2022



Metric	Category	Unit	Definition
Weighted Average Carbon Intensity	**Carbon Emissions**	tCO2e/$M Revenue	Measures a portfolio's exposure to carbon-intensive companies. It is computed as the sum product of the portfolio companies' carbon intensities (normalized over sales) and portfolio weights. $\sum \left\{ \frac{\textit{Current value of investment}}{\textit{current portfolio value}} \times \frac{\textit{issuer's Scope 1 and 2 GHG emissions}}{\textit{issuer's \$M Revenue}} \right\}$
Emissions per Million Dollars Invested	**Carbon Emissions**	tCO2e/$M invested	Measures the carbon efficiency of a portfolio, defined as the total carbon emissions of the portfolio normalized per million dollars of portfolio value. $\sum \left\{ \frac{\frac{\textit{Current value of investment}}{\textit{enterprise value including cash}} \times \textit{issuer's scope 1 and 2 GHG emissions}}{\textit{Current portfolio value (\$M)}} \right\}$

Figure 4: TD Asset Management's 2022 Emissions/ $M Invested Across Regions and Asset Classes at Year-End 2022



Portfolio Alignment

We recognize that these point-in-time calculations do not tell the whole story of a portfolio or an individual company's approach to climate change. Portfolio alignment tools can help gauge how a company's future climate plans reflect against global climate goals. The portfolio alignment tools detailed below help inform our strategy at a firm level, particularly how to prioritize engagements with our investee companies and our positions on key shareholder proposals.

Where data is available, assessing our investee companies that have their climate targets approved by the Science Based Targets Initiative (SBTi) or have committed to having their targets verified by the SBTi[6] is one way we can gauge the overall alignment of our portfolios towards a 1.5 or 2 degree Celsius warming scenario. The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).

At the end of 2022, more than 4,000 companies, covering over a third of the global economy's market capitalization, were setting targets or committing to do so via the SBTi.[7]

The Science Based Targets initiative (SBTi):

- Defines and promotes best practices in emissions reductions and net-zero targets in line with climate science.
- Provides technical assistance and expert resources to companies which set science-based targets in line with the latest climate science.
- Brings together a team of experts to provide companies with independent assessment and validation of targets.

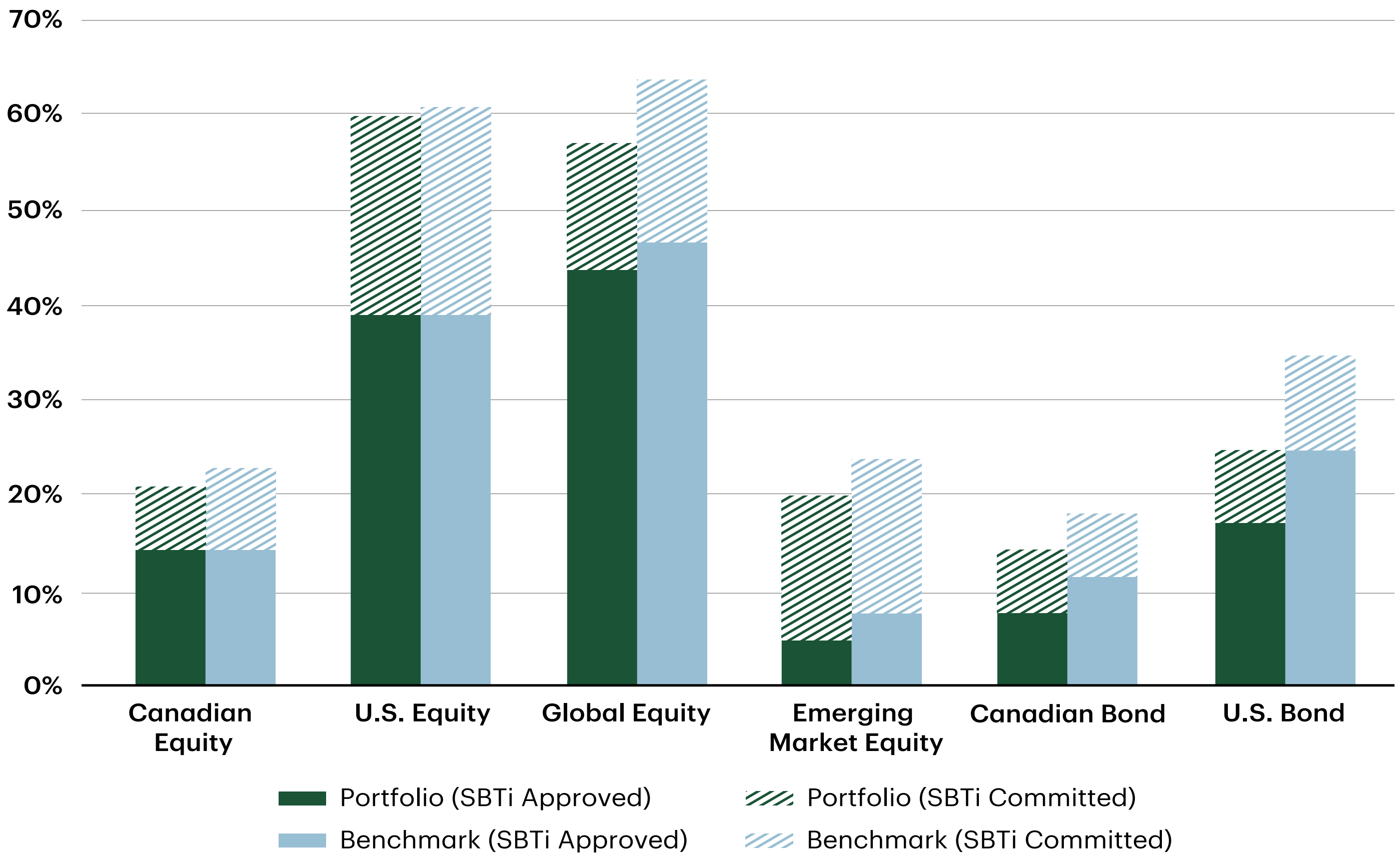
[6] Commitments demonstrate an organization's intention to develop targets and submit these for validation with the SBTi within 24 months. These organizations do not yet have validated science-based targets. From March 2nd 2023, organizations that fail to submit targets within 24 months of their commitment will be identified as 'Commitment removed'

[7] Science Based Targets Initiative https://sciencebasedtargets.org/about-us

It is important to note that SBTi is just one way we can gauge overall portfolio alignment. It is not the sole indicator of whether a company we are invested in is aligned with a 1.5 or 2 degree Celsius warming scenario, or whether a company has put together a strong climate plan. Additionally, SBTi target frameworks are not yet developed for all sectors, limiting their applicability across the entire range of TDAM's holdings.

We are including our overall SBTi alignment within the portfolios assessed as part of this year's TCFD disclosures, and moving forward we will continue to monitor developments related to SBTi. Overall, U.S. and global equity assets both have a majority of the assets that are either SBTi committed or aligned. As investors, this gives us a certain degree of confidence that these companies have put together (or are in the process of putting together) transition plans that are aligned with the goals of the Paris Agreement. Both the Canadian portfolios and the Emerging Market portfolio have a significantly lower exposure to companies with SBTi alignment or commitment. In general, U.S. and European companies have been quicker to adopt SBTi verification than other jurisdictions. Getting targets verified by SBTi is something we have encouraged our investee companies to do through engagements, where it is appropriate.

Figure 5: Percentage of the Portfolio Assets That Are SBTi Aligned or Committed Versus the Benchmark at Year-End 2022



Implied Temperature Rise (ITR), from MSCI ESG Research, is an additional metric that assesses the overall alignment of a specific security or portfolio, where applicable. ITR is an intuitive forward-looking metric, expressed in degrees Celsius, designed to show the temperature alignment of companies, portfolios and funds with global temperature goals.[8]

ITR Categories	ITR Band	Range	Description
Misaligned	**Strongly Misaligned**	> 3.2	This company/portfolio is misaligned even by business-as-usual standards. Its contribution to catastrophic climate change is higher than most companies/portfolios.
	Misaligned	> 2 – 3.2	This company/portfolio does not comply with the 2015 Paris Agreement goals. Its pace of decarbonization is too slow to mitigate catastrophic climate change. The threshold is determined by the "Current Policies" scenario of the Network for Greening the Financial System Regional Model of Investment and Development (NGFS REMIND), yielding an estimated 3.24°C at the 2100 horizon (rounded 3.2°C).
Aligned	**2°C Aligned**	> 1.5 – 2	This company/portfolio meets the 2015 Paris Agreement's minimum objective of +2°C global mean temperature compared with pre-industrial levels. It is engaged in the low-carbon transition.
	1.5°C Aligned	< 1.5	This company/portfolio is in line with the 2015 Paris Agreement's maximal objective of keeping global mean temperature to +1.5°C compared with pre-industrial levels. It is a transition leader, significantly contributing to mitigating catastrophic climate change.

Key to understanding the ITR is the concept of a carbon budget, i.e., how much the world can emit so that global warming does not exceed 2°C by 2100 and, by analogy, how much a company can emit for its fair share of global decarbonization. A company whose projected emissions are below budget can be said to undershoot, while those whose projected emissions exceed the budget can be said to overshoot.

The calculation of the company-level ITR involves four key steps:

1. Transpose a 2°C carbon budget at company level.
2. Project companies' future emissions, considering their targets (Scope 1, 2 and 3 emissions).
3. Calculate the companies' over/undershoot of their carbon budgets.
4. Convert the relative over/undershoot to a degree of temperature rise.

[8] Implied Temperature Rise description provided by MSCI. See more at https://www.msci.com/our-solutions/climate-investing/implied-temperature-rise

TDAM interprets the ITR figures below more directionally at this point in time, given that our portfolios change over time and with that, investee companies' climate plans are evolving, and we expect they will continue to be updated throughout our holding period. The figures help inform our conversations with our investee companies and aid our understanding of how their plan benchmarks against their peers'. It also allows us to understand where there might be climate risks across TDAM's holdings and where we may be able to leverage our position as shareholders to encourage companies to strengthen their transition plans.

Figure 6: ITR Alignment of TDAM's Investments Versus the Benchmark at Year-End 2022

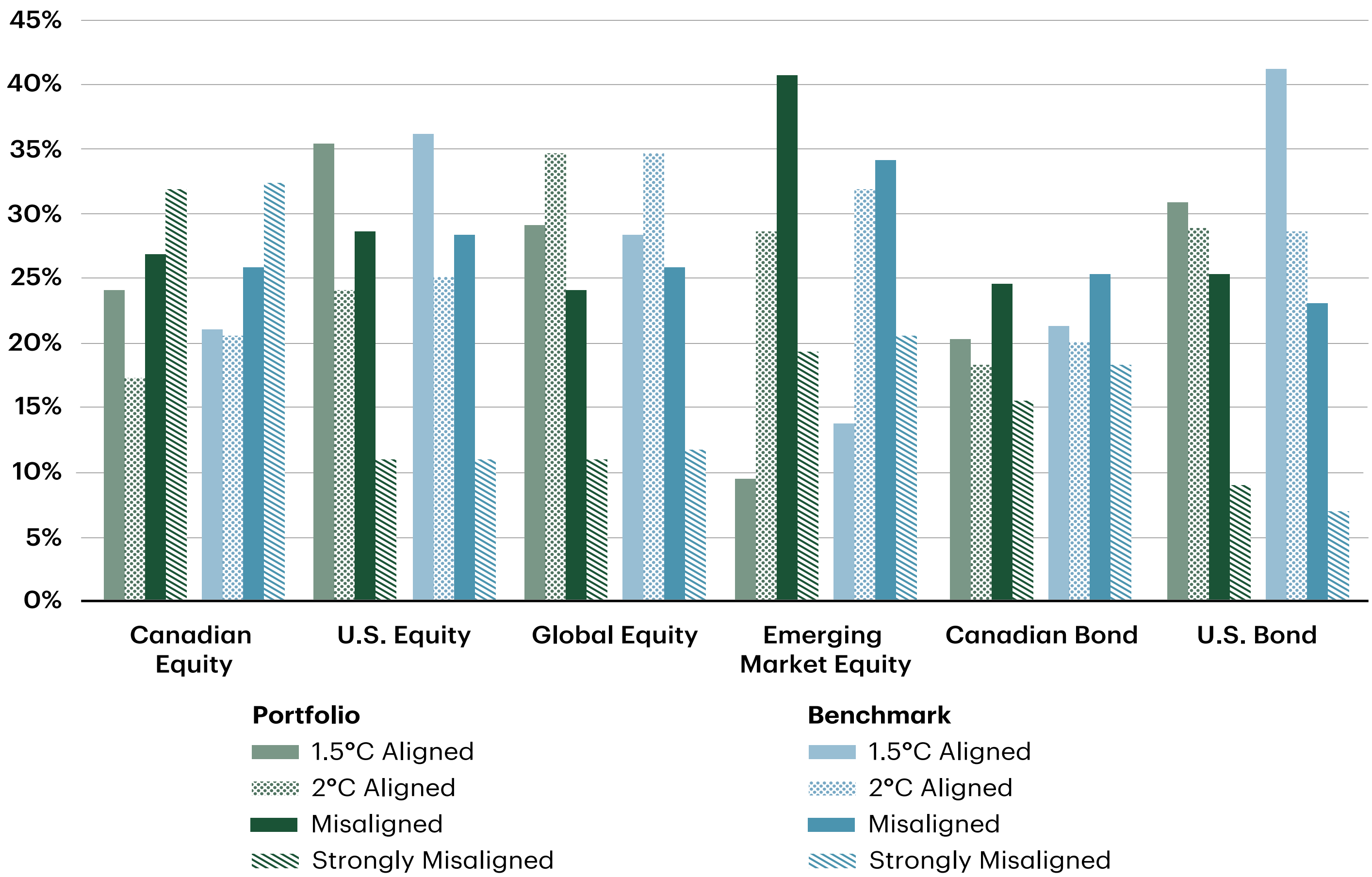
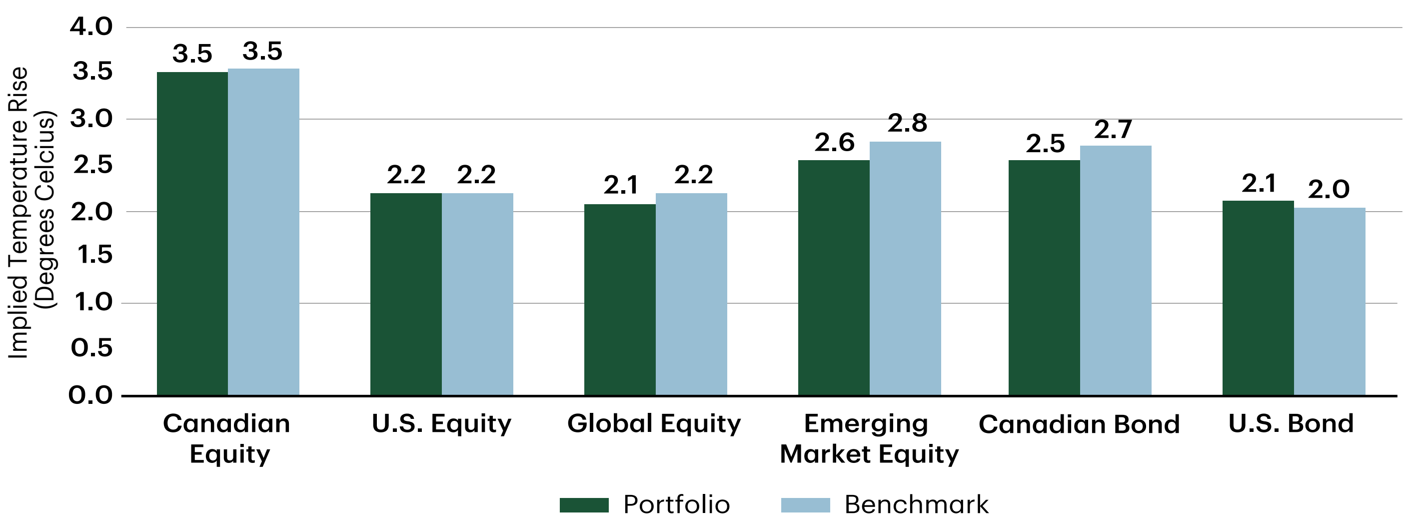


Figure 7: ITR of TDAM's Investments Versus the Benchmark at Year-End 2022



Scenario Analysis

Given the limitations of point-in-time metrics, TDAM also uses forward-looking climate scenario analysis to help us understand the potential impact of climate change on our investee companies and informs TDAM's assessment of the potential downside risks climate change poses across the portfolios we are including in this report. Conducting climate scenario analysis involves assessing the climate risks and opportunities posed by and to our investee companies through the lens of various future warming scenarios, including scenarios where there is global warming of 1.5°C, 2°C and 3°C. To conduct this scenario analysis, we leverage MSCI's Climate Value-at-Risk (Climate VaR) tool.

Climate VaR is designed to provide a forward-looking and return-based valuation assessment to measure climate-related risks and opportunities. The model offers insights into how climate change could affect company valuations. Climate VaR reflects the stressed market value of a company's issued securities under a specific climate change scenario. Climate VaR aggregates exposure from policy risk, technology opportunities and physical climate risk to deliver a comprehensive understanding of climate change risk exposure.[9]

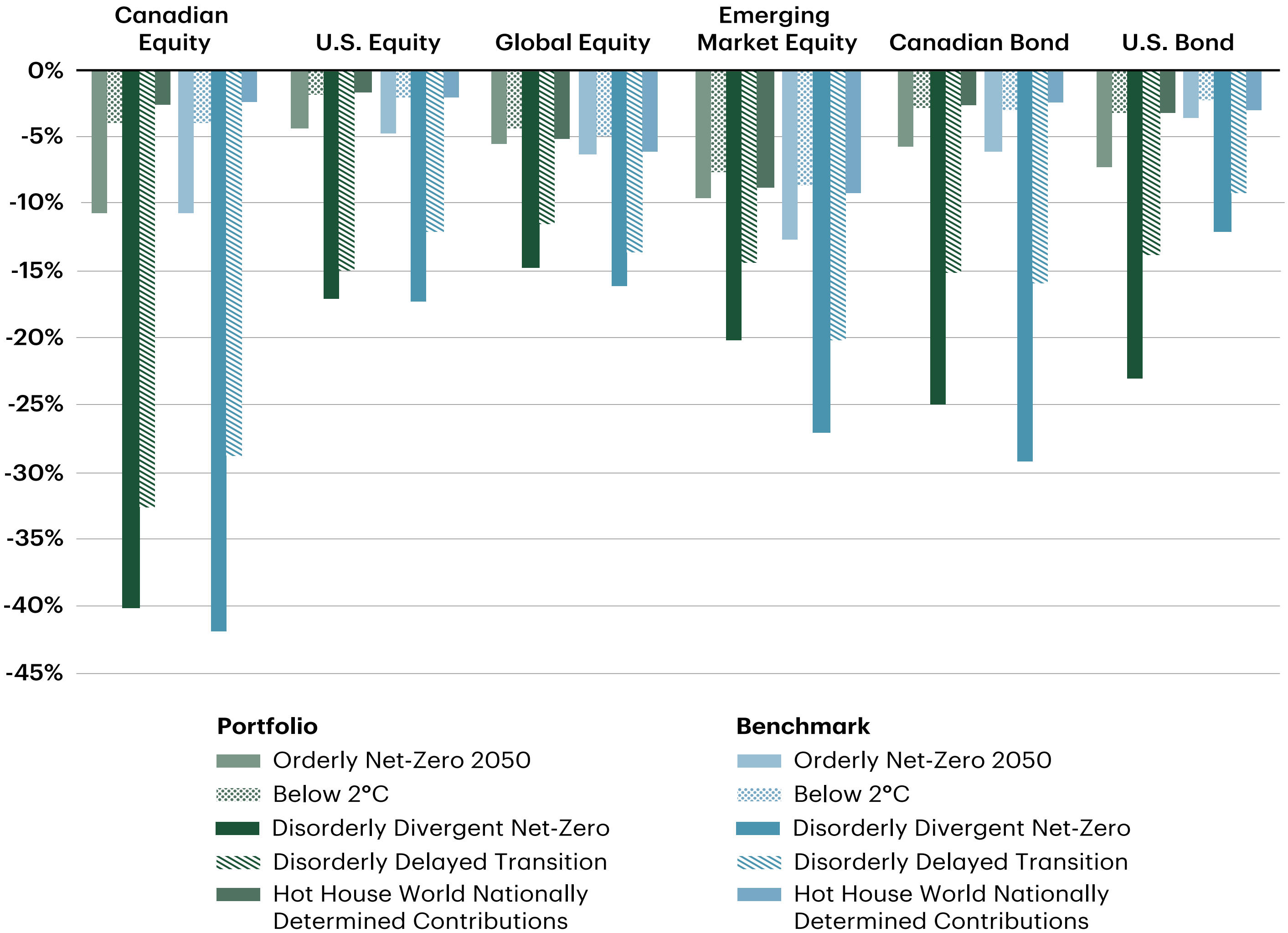
Using MSCI's Climate VaR tool, TDAM's scenario analysis leverages the scenarios developed by the Network for Greening the Financial System (NGFS). The NGFS is a group of Central Banks and Supervisors willing, on a voluntary basis, to share best practices, contribute to the development of environment and climate risk management in the financial sector, and mobilize mainstream finance to support the transition toward a sustainable economy. Below is a brief description of the five scenarios.

	NGFS Scenario[10]	Summary
Orderly	Net-Zero 2050	Net-Zero 2050 is an ambitious scenario that limits global warming to 1.5 °C through stringent climate policies and innovation, reaching net-zero CO_2 emissions around 2050.
	Below 2°C	Below 2 °C gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2 °C.
Disorderly	Divergent Net-Zero	Divergent Net-Zero reaches net-zero by 2050 but with higher costs due to divergent policies introduced across sectors and a quicker phase-out of fossil fuels.
	Delayed Transition	Delayed Transition assumes global annual emissions do not decrease until 2030. Strong policies are then needed to limit warming to below 2 °C. Negative emissions are limited.
Hot House World	Nationally Determined Contributions	Nationally Determined Contributions (NDCs) includes all pledged policies even if they are not yet implemented.

[9] Climate Value at Risk definitions provided by MSCI. See more at: https://www.msci.com/our-solutions/climate-investing/climate-and-net-zero-solutions/scenario-analysis

[10] Network For Greening the Financial System (NGFS). NGFS Scenario data is available under a public license, here. NGFS Scenario Explorer is available here.

Figure 8: Climate VaR of TDAM's Investments Versus the Benchmark at Year-End 2022



Similar to ITR, TDAM interprets Climate VaR figures more directionally than literally at this time due to the high degree of fluidity in the transition plans being developed by our investee companies and the regulatory environments they are operating in. In general, the stressed market value of the assets under each scenario is closely aligned with the benchmark. The U.S. corporate bond portfolio reflects more value at risk under four of the five scenarios assessed. Again, this is due to the higher exposure to oil and gas in the portfolio versus the benchmark. Similar to the emissions and portfolio alignment metrics, the Canadian portfolios stand out as having a higher amount of VaR than the other portfolios assessed in this report. We acknowledge that Canada is a resource-heavy economy, with a higher concentration of oil and gas than other jurisdictions assessed here, which contributes to the higher VaR than the other portfolios.

Alternative Assets

ESG considerations are integrated into how we execute our Canadian and global real estate strategies. From an environmental standpoint, a growing list of factors are evaluated throughout our sourcing, underwriting and asset management process. We are also committed to protecting asset value and mitigating climate risk within our portfolios, as the countries where our assets are located transition to a low-carbon economy. This includes measuring our sustainability performance, such as energy and water consumption, GHG emissions and waste reduction annually.

Working Towards Canada's First Zero Carbon Certified Hotel

TDAM is excited to be involved in a first of its kind project to decarbonize the historic Fairmont Royal York Hotel in Toronto. In partnership with its co-owner, TDAM is targeting Canada Green Building Council's (CaGBC) Zero Carbon Building Standards Certification™ for year-end 2023. Additionally, the project received Canada Infrastructure Bank (CIB) financing in the amount of $46.5 million to support the major renovation, with a focus on energy efficiency and GHG reductions. It is anticipated that the retrofit will not only enhance the operational performance of the hotel, but that it will also attract significant customer and corporate support by hosting climate-friendly corporate functions and conferences.

The building is targeting a 66% reduction in total energy consumption and an 85% reduction in GHG emissions by the end of 2026, using 2019 as its base year. The extensive retrofit will involve updating the building's heating and cooling systems, back-up power and laundry facilities, and a move to smart, digitally enabled Building Automation Systems (BAS).

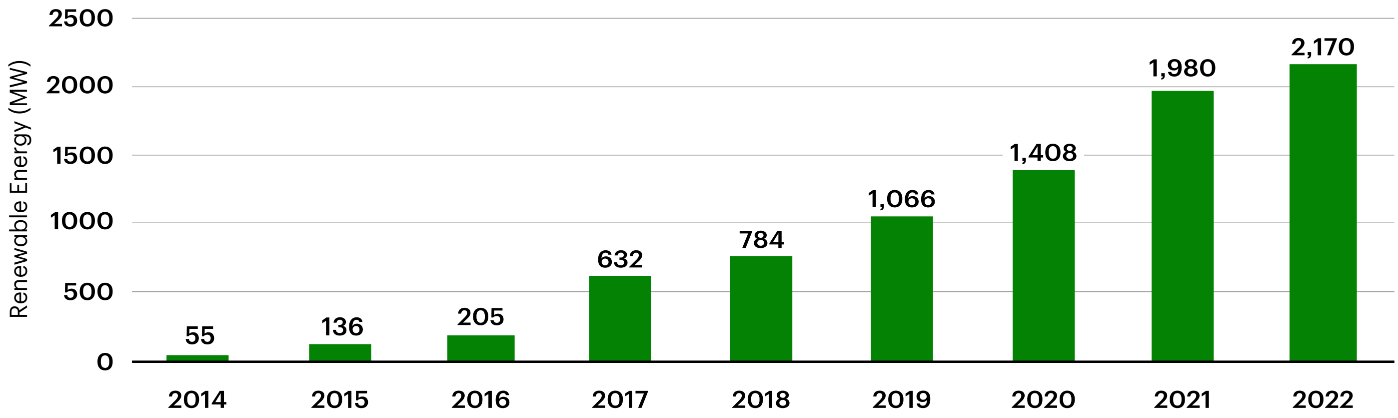
The TD Greystone Infrastructure Strategy is committed to the integration and benchmarking of ESG throughout its portfolio. We employ our ESG strategy throughout the investment lifecycle. During sourcing and due diligence, we employ an ESG Toolkit with over 100 questions to rate the ESG characteristics of an investment and determine the risks associated with ESG. ESG due diligence is highlighted as a section of our investment committee approval memos, and it is a key part of our decision-making process. Our ESG Toolkit for each sector includes questions separated into specific environmental, social and governance considerations. The energy transition to low-carbon generation that is underway around the globe is one of the largest opportunities for private investment in infrastructure and a great example of how infrastructure investment can interact with local economies and communities to support sustainability goals.

Infrastructure Opportunities in the Energy Transition

The TD Greystone Infrastructure Strategy remains strategically aligned with the energy transition taking place worldwide. Government and private sector commitments to decarbonize have emphasized the need for renewable energy and power infrastructure, with over US$140 trillion of new investment anticipated to be required to reach current net-zero targets. In 2022, we continued to reach new milestones across our North American Solar (Silicon Ranch Corporation), European Wind (Rabbalshede Kraft AB) and Battery Storage (Enfinite) platform investments:

- Silicon Ranch added 675 MW of operating capacity across 17 solar projects and is currently operating a total of 2.4 GW of capacity across 148 projects.
- Rabbalshede Kraft AB has a total operating capacity of 253 MW across 17 wind projects and is actively looking at diversifying its presence by geography and renewable energy source.
- Enfinite now operates the largest fleet of battery storage facilities in Canada at 60 MW with 120 MW of late-stage developments in Alberta.

Figure 9: Renewable Energy (MW) for Global Infrastructure Strategy[11]



The TD Greystone Mortgage Fund has developed a multi-faceted approach to incorporating ESG into its underwriting and portfolio management practices. During origination, each mortgage opportunity has its own dedicated ESG Due Diligence Checklist where ESG factors are evaluated. The ESG integration process during origination and underwriting is then bolstered by a physical ESG property tour, where sustainability-focused property features - e.g., Electric Vehicle charging stations, energy efficient lighting, low flow fixtures, direct digital controls (DDC), heating/cooling systems etc. - are assessed alongside tenant and occupant engagement programs and property management operating procedures for additional context. ESG is also integrated into our portfolio management process through the Fund's ESG Borrower Survey and the Annual ESG Review.

Since 2016, we have been an active participant in external ESG benchmarking for real asset portfolios through the Global Real Estate Sustainability Benchmark (GRESB). GRESB is an investor-led organization and the leading ESG benchmark for real estate and infrastructure investments across the world, used by 140 institutional and financial investors. The GRESB Score is an overall measure of ESG performance – represented as a percentage, where 100% is the maximum score.

Figure 10: TDAM's 2022 GRESB Scores Compared to the GRESB Average

GRESB Score	2022 Score	2021 Score	GRESB Average
Real Estate Assessment			
TD Greystone Canadian Real Estate Strategy - Standing Investment	80	73	78
TD Greystone Canadian Real Estate Strategy - Development	81	79	81
TD Greystone Global Real Estate Strategy – Standing Investment	84	82	79
Infrastructure Assessment			
TD Greystone Infrastructure Strategy	87	85	82

[11] Source: TDAM. As of December 31 of each year.

TDAM strives to continually strengthen our investing approach and enhance our ESG integration. We aim to score above our global peer group average. Find more information regarding GRESB and the methodology behind these scores on the GRESB website >.

Industry Dialogue - Regulatory Engagements and Thought Leadership

Financial policymakers around the globe, including in the jurisdictions TDAM operates and invests in, are moving to regulate how corporate issuers report on climate risks. As stakeholders in the regulatory and reporting ecosystem, TDAM considers contributions to policy discussions on climate change to be important as regulators continue to refine the standards used to measure, manage and report on climate risk.

In 2022, through organizations that TDAM is a member of, we engaged or participated in consultations on climate reporting frameworks with several regulatory and standard setting bodies, including:

- Participation in discussion led by the UN Principles for Responsible Investment (UN PRI)[12] with the **AMF (Autorité des marchés financiers) on climate-related disclosures**.
- Feedback to the Canadian Coalition for Good Governance (CCGG), the Investment Company Institute (ICI), PRI and the Responsible Investment Association (RIA) on each of their responses to the **International Sustainability Standards Board (ISSB) consultation on Exposure Draft International Financial Reporting Standards (IFRS) S1** General Requirements for Disclosure of Sustainability-Related Financial Information and **Exposure Draft IFRS S2** Climate-Related Disclosures.
- Participation in PRI-led discussion with the **Ontario Securities Commission (OSC)** on the climate-related disclosures proposed by the CSA.
- Feedback to the Investment Funds Institute of Canada on the Canadian Investment Funds Standards Committee (CIFSC) **Responsible Investment Identification Framework**.
- Feedback to PRI on the **U.S. SEC climate disclosure requirements**.

Industry Initiatives

In 2021, TDAM became a founding member of **CEC**, which aims to drive dialogue between the financial community and Canadian corporations to promote a just transition to a net-zero economy. In 2022, TDAM kicked off engagements with five companies on the CEC Focus List. CEC focuses on 40 select Toronto Stock Exchange-listed companies that are strategically engaged in relation to climate risk governance, disclosure and the transition to a low-carbon economy in Canada.

TDAM is a signatory and active investor participant in the **Climate Action 100+** initiative. Climate Action 100+ is an investor-led initiative to ensure the world's largest corporate GHG emitters take necessary action on climate change. Almost 700 investors, responsible for over $68 trillion in assets under management, are engaging companies on improving climate change governance, cutting emissions and strengthening climate-related financial disclosures. In 2022, as part of a group of Canadian asset managers, TDAM engaged with two Canadian companies on the CA100+ Focus List to encourage stronger climate action.

[12] The Principles for Responsible Investment is a United Nations-supported international network of financial institutions that promotes responsible investments.

Thought Leadership, Conferences and Continuing Education

TDAM regularly publishes thought leadership on a wide variety of subjects through both external publications and our own channels. Given the importance of climate change to our business and our clients, the systemic risks associated with climate change, and our belief that we have a role to play in shaping the industry's approach to climate change, we have made climate a focus area for our thought leadership program. TDAM leverages expertise from across the firm to contribute to our climate-focused thought leadership. Below is a sample of the climate-focused pieces we contributed to in 2022:

- **Carbon Pricing: Why Should Investors Care >**
- **Science vs Perception: Why Nuclear Energy Should Be Part of the Green Transition >**
- **The Role of Infrastructure in the Energy Transition >**

In the spirit of staying on top of developments at the intersection of climate change and investing, TDAM occasionally hosts climate-focused educational sessions for its investment professionals and colleagues from other areas of the firm. The aim of these sessions is to provide team members with investment-relevant information with help from external subject matter experts. In 2022, TDAM held sessions on carbon credits and offsets, as well as the managed phaseout of fossil fuel assets, among other topics. In 2023, all of TDAM's investment team members will be taking a course offered by the PRI to further enhance the team's understanding of the materiality of ESG issues.

TDAM professionals also attend relevant conferences throughout the year to share ideas and insights and learn from industry leaders. Some of the conferences TDAM team members attended in 2022 include:

- 2022 United Nations Climate Change Conference (COP27), Sharm el-Sheikh, Egypt
- 2022 United Nations Biodiversity Conference (COP15), Montreal, Canada
- Responsible Investor (RI) Canada Conference, Toronto, Canada
- ICGN Proxy Season Review 2022; Annual Evaluation and Future Trends, London, England

Engagement

In 2022, TDAM conducted a total of 134 climate-focused engagements with 104 companies, up from 84 climate-focused engagements with 70 companies in 2021

TDAM considers its engagements with its investee companies to be a primary way to help manage climate-related risk and positively influence the transition to a low-carbon economy. Our engagement activities serve as an input into relevant investment analysis across both public and private markets, where applicable.

TDAM develops an annual Climate Focus List of companies for engagement priorities. The methodology behind the Focus List involves a combination of the issuer's historical environmental performance, assessment of the issuer's climate targets, as well as the market value of TDAM's investment in each issuer. We prioritize issuers based on our investment exposure (AUM), and level of shareholding that can help achieve better outcomes through ongoing discussions with company directors and management. Our practice has been to engage with each issuer that gets added to the list for a minimum of two years before assessing its continued place on the list. In 2022, our Climate Focus List grew from six to 22 companies. While every engagement is unique to each issuer, its industry and its region, TDAM generally encourages companies to publish Scope 1 and 2 emissions figures as well as material Scope 3 emissions figures with limited or reasonable assurance. We also generally encourage the companies we engage with to set science-based targets that are aligned with a net-zero-by-2050 pathway; detail the tactics they will use to achieve their emissions targets, including disclosing capital expenditure towards low-carbon initiatives; have appropriate board oversight of climate-related matters; and tie executive compensation to ESG metrics where appropriate.

Figure 11: TDAM's 2022 Climate Focus List by Sector

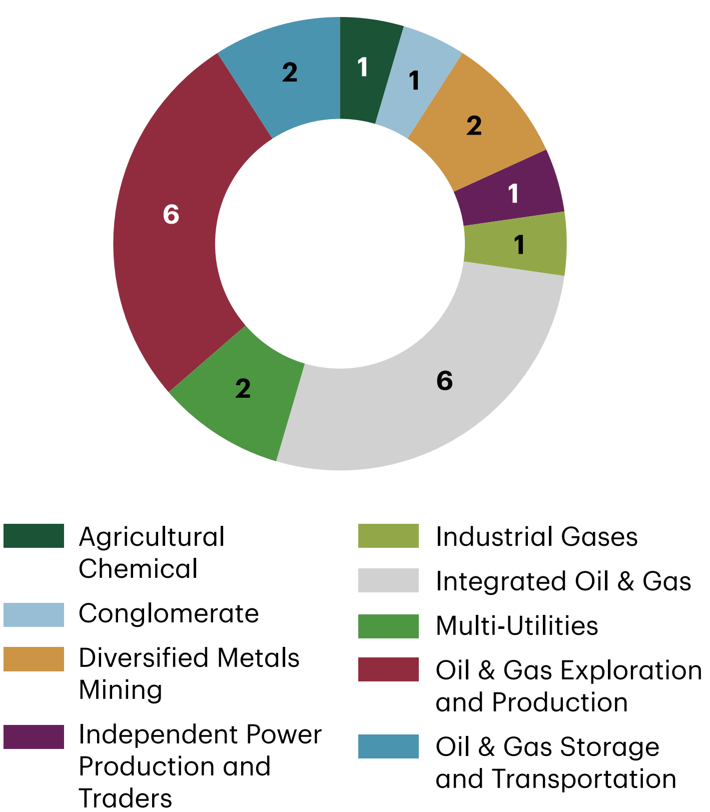


Figure 12: TDAM's 2022 Climate Focus List by Country of Issuer

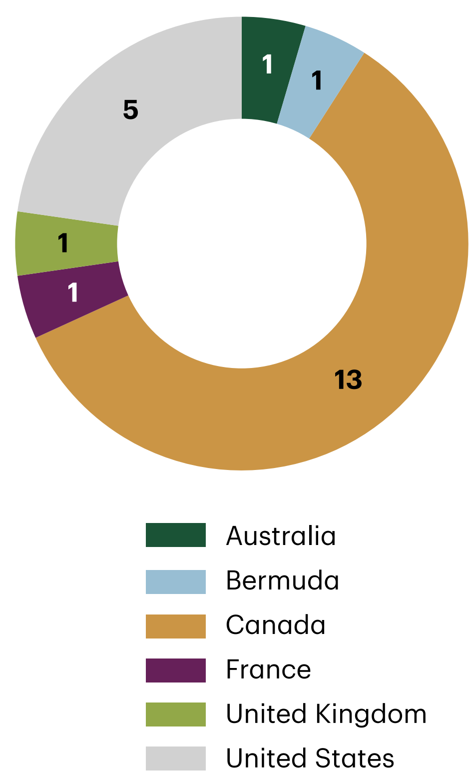
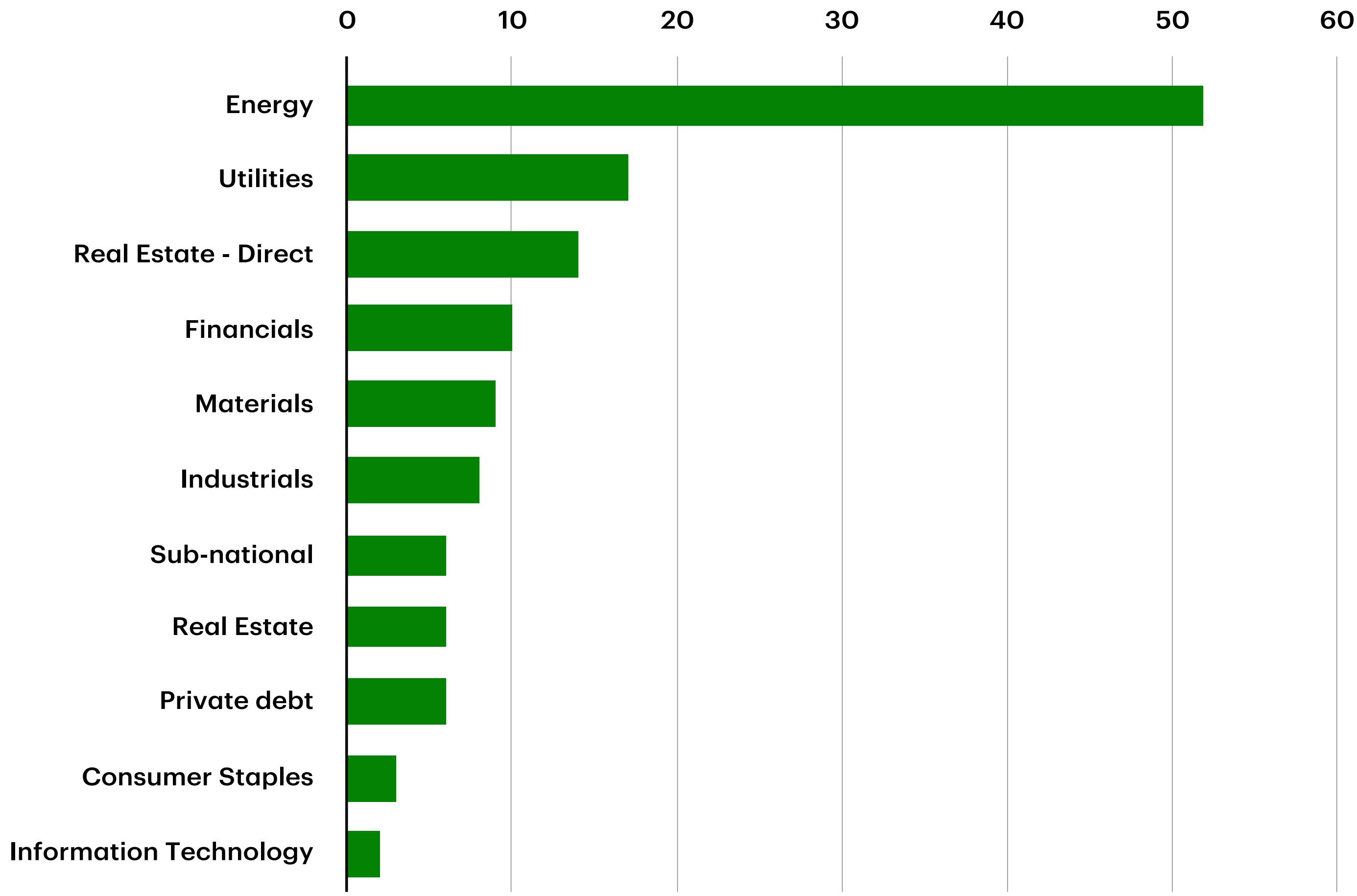


Figure 13: Climate Engagements by Sector



Source: TDAM, for the fiscal year of 2022 (from Nov 1st, 2021 to Oct 31st 2022)

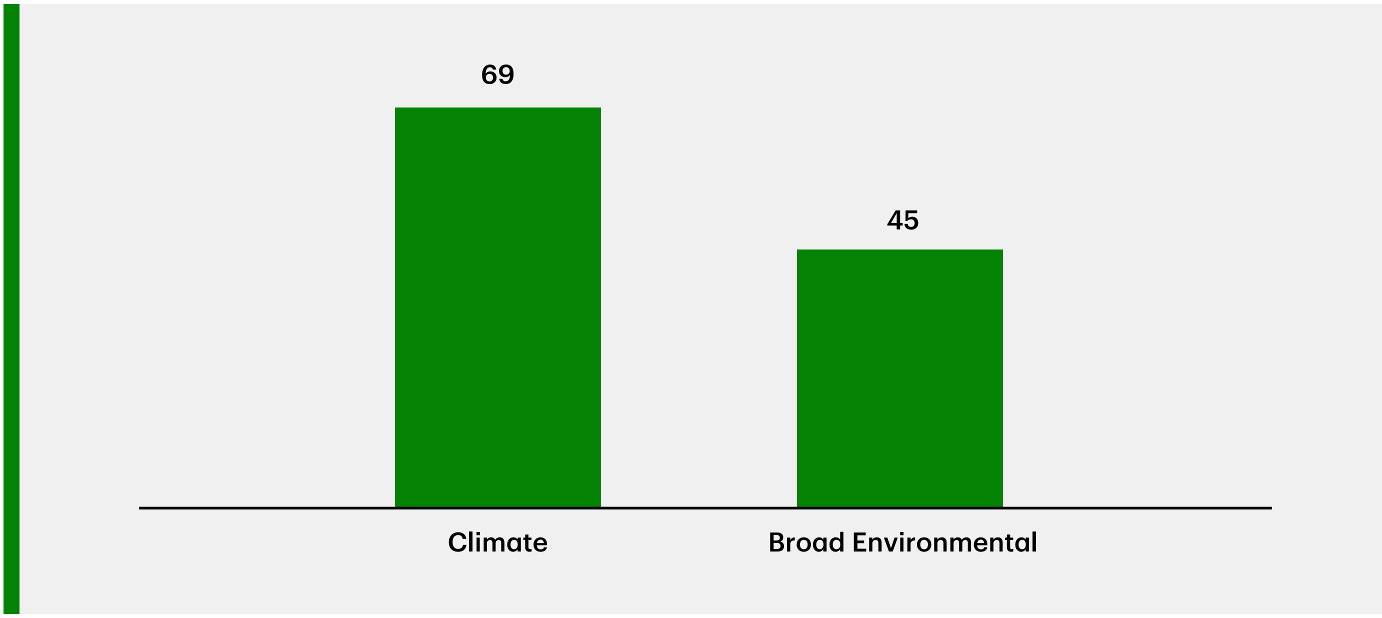
TDAM is also involved in several industry initiatives such as CEC, Climate Action 100+, and the CDP (formerly known as the Carbon Disclosure Project), among others. These initiatives broaden our ability to reach as many of our investee companies as possible.

Engagement in Action:

The Fundamental Equity team, in collaboration with the ESG R&E team, had several important engagements over the course of 2022. One cornerstone engagement involved several meetings with a large Canadian energy company that is on the Climate Focus List. We identified that the company lacked an interim emission reduction target on its path to net-zero by 2050. Our team members worked with the company to explain our position and make a case for advancing management's disclosure. Most of the company's peers had specific targets in the 2030 to 2035 timeframe to measure their progress on decarbonization, and we felt it was appropriate for the company to meet this level of standard. Our efforts culminated in a positive decision: in late 2022, the company announced a new target to reduce absolute Scope 1 and 2 GHG emissions by 40% by 2035 relative to the 2020 baseline.

Proxy Voting

Figure 14: Climate and Environmental Shareholder Proposals Supported by TDAM in 2022



At TDAM, it is our fiduciary duty to exercise our voting rights as shareholders on matters material to the companies in which we invest. Proxy voting is a central part of our stewardship toolbox, and we approach this responsibility with a commitment to long-term value on behalf of our clients.

TDAM is committed to remaining transparent about its proxy voting policies and practices. We recently updated our Proxy Voting Guidelines >, which outline our voting policies across several areas, including the environment.

TDAM will generally support proposals seeking basic and enhanced disclosures on how the company identifies, measures and manages its climate-related risks, as well as those calling on companies to reduce their GHG emissions and set targets aligned with the 2015 Paris Agreement, taking relevancy, materiality, cost, existing climate strategy and reporting practices into consideration.

TDAM will vote on **Say-on-Climate** proposals proposed by management or requested of management by shareholders on a case-by-case basis. For management proposals, our assessment of a company's climate action plan may include, but is not limited to, the strength of targets within the climate plan and related duration of such targets, TCFD-based disclosures to investors, pathways toward achieving set targets, alignment of lobbying activities with targets, as well as our engagement with companies where applicable.

For more information on TDAM's proxy voting activities, please see our quarterly proxy voting reports, which are available on our Sustainable Investing webpage >.

Environmental

Stewardship in Action – Engaging North American Rails on Say-on-Climate

Two prominent railways with operations across North America put forward Management Say-on-Climate proposals this year. These non-binding votes ask the shareholders of the company to evaluate and approve the company's climate plan.

Company A's climate plans were the most ambitious in the peer group, with GHG reduction targets covering all three scopes of emissions over the short, medium and long term. The company had detailed pathways for how it would achieve its goals, and it provided investors with transparent disclosures in line with the TCFD recommendations. Company B's plan had its strong points; however, it was not as ambitious as its primary competitor's plan. Company B's plan covered Scope 1 and 2 emissions, and partial Scope 3 emissions, only over the medium term. It had also outlined pathways towards achieving its mid-term goals.

TDAM supported the climate plan of Company A and voted against the climate plan of Company B. The absence of long-term targets and the partial coverage of Scope 3 emissions were the notable differences in their plans. Given this, TDAM felt it was prudent to leverage peer benchmarking and vote against the climate plan of Company B. We have since engaged with Company B and communicated the rationale supporting our vote and our expectations for the year ahead. We will continue to engage with this group to encourage stronger action and ambition as it relates to climate.

Client-Driven Solutions

The development of ESG-themed products continues to offer opportunities for our firm to grow, while playing a positive role in the transition to a low-carbon economy. In 2022, we launched one new climate-themed product: the **TD *Emerald* Low Carbon Global Equity Index Non-Taxable Investor Pooled Fund Trust >**.

While we advocate for engagement rather than divestment, for clients with a different philosophical view on ESG, we do provide and continue to develop screened investment products, where feasible. This is part of our commitment to support clients as they develop their own transition plans. In 2022, we worked with a group of clients to implement climate themed exclusionary screens in their investments.

Risk Management

TDAM's approach to climate risk management is comprised of four key processes: risk identification and assessment, measurement, control, and monitoring and reporting.

1. **Risk Identification and Assessment** is focused on defining, recognizing and understanding climate risks as they relate to TDAM's investments.
2. **Measurement** practices continue to evolve and will support TDAM's ability to provide timely and accurate quantification of the risks assumed.
3. **Control** is supported through integrating climate considerations into applicable investment processes, investee engagement and proxy voting activities.
4. **Monitoring and Reporting** represents ongoing monitoring and reporting of relevant climate metrics related to our investments, subject to data availability.

The responsibility for identification, assessment and management of climate-related risks sits at the management level and is executed with assistance from various teams across TDAM. TDAM understands that climate-related risks can have a wide range of impacts, and has summarized below the actions taken to identify, assess and mitigate the potential resulting impacts.

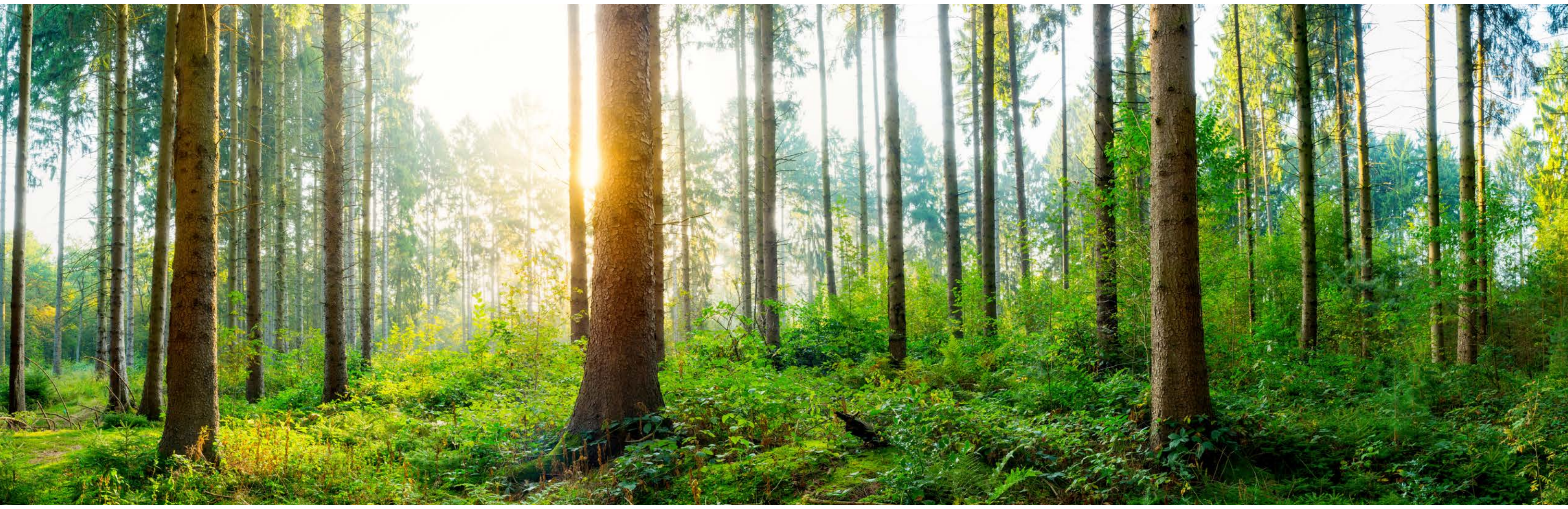
Risk Category	Climate-Related Risk	Actions to Identify, Assess and Mitigate
Market Risk	Impact of physical and transition risk on market factors such as equity prices, commodity prices and credit spreads.	Depending on the materiality of climate risk to the investment and subject to data availability: • TDAM integrates climate-related considerations into investment processes across applicable asset classes. The approach to integration varies across asset classes but may include: – Evaluating assets on climate-related indicators such as absolute GHG emissions, emissions' intensity and energy consumption. – Considering the strength and scope of our investee companies' climate targets and climate-focused reporting. – Conducting physical climate risk assessments of our investments in physical assets within our alternative asset funds • ESG integrated quarterly performance reviews for active equity and alternative asset strategies, covering $116.3 billion of TDAM's AUM. Conducting annual scenario analysis using Climate VaR, where data is available, to assess the risk to our investments under a number of different climate scenarios. • Within our equity* and fixed income assets, we actively engage with investee companies to promote stronger climate risk management and greater transparency through reporting. Where applicable, we will exercise our rights as shareholders through supporting climate-focused shareholder proposals.

* TDAM's stewardship program is conducted on an aggregated exposure basis and spans fundamental equity, quantitative equity and equity index funds.

Risk Category	Climate-Related Risk	Actions to Identify, Assess and Mitigate
Legal, Regulatory Compliance and Conduct Risk	Increased potential for climate-related litigation and/or legal or regulatory enforcement action. Introduction of new laws; changes to existing laws and regulations; novel application of current laws and regulations in the environmental and social domains; and issuance of judicial or regulatory decisions that may result in new or unanticipated legal requirements. Increase in international policy and standard-setting initiatives concerning climate action and the management and disclosure of climate-related risk and opportunities.	• Climate-focused regulations impacting TDAM, its clients and investee companies are evolving at a rapid pace. TDAM Regulatory and Policy Governance, Legal, Compliance, and the ESG R&E team share responsibility for monitoring and evaluating regulations in the jurisdictions where TDAM operates and invests. • Where applicable, TDAM has participated in, and will continue to participate in, Canadian and international regulatory and standard-setter consultations related to climate risk in the asset management industry.
Reputational Risk	Stakeholder perceptions of TDAM's action or inaction in relation to climate change. Increased focus from NGOs to apply sustainable investment and business practices.	• TDAM strives to communicate its approach to climate change to all relevant stakeholders. TDAM has made reporting and transparency a priority in 2022 and this TCFD report serves to communicate the firm's actions to a broad group of stakeholders. TDAM will strive to improve transparency as it relates to its approach to climate change. • The firm believes in transparency in its proxy voting and engagement activities. Our full proxy voting records are available online, **here >**. TDAM also publishes quarterly proxy voting reports, available **here >**.
Strategic Risk	Risk of not being able to meet changing client and consumer expectations for ESG products and services.	• TDAM regularly seeks to improve the solutions it offers and introduce new solutions to meet the changing needs and expectations of existing and potential clients. • TDAM provides tailored climate reporting to clients on an as-requested basis.
Operational Risk	Impact of extreme weather events on physical operations.	• TDAM is subject to TD's enterprise-wide Business Continuity and Crisis Management program, to support management's ability to operate TD's businesses and operations in the event of a business disruption incident.

2022 Infrastructure Climate Risk Assessment:

- In December 2022, TDAM completed a preliminary climate risk assessment exercise with the management teams for assets within its TD Greystone Global Infrastructure Strategy.
- The aim of the exercise was to:
  - Educate teams on key climate terms and concepts, such as climate risk management, climate resilience/adaptation and scenario analysis.
  - Identify the most significant climate risks to assets that could pose business risks — and self-assess their preparedness to address these risks.
  - Increase awareness amongst management teams on how to address both climate-related transition (e.g., carbon pricing, regulatory, legal, technology) and physical (e.g., severe storms, sea-level rise, etc.) risks, which have the potential to be material risks/opportunities to TDAM's assets.



Metrics and Targets[13]

The metrics below are evaluated on 53% of TDAM's overall AUM on October 31, 2022, across both public markets and our alternative asset classes. All government bonds, which make up a sizable amount of TDAM's AUM, are excluded from the calculations. PCAF released guidance for measuring emissions related to sovereign bonds at the end of 2022. In 2023, TDAM will be assessing the carbon footprint of its sovereign bond holdings using the PCAF methodology. Other assets that are not included in the analysis below due to lack of data are cash, derivatives, private debt, mortgages and asset-backed securities.

[13]The metrics cover all TDAM equity and corporate fixed income holdings as of October 31, 2022, subject to data availability, including the following sub-advised funds: TD Canadian Small Cap Equity Fund, TD Emerging Markets Fund, TD US Blue Chip Equity Fund, TD US Mid Cap Growth Fund, TD US Small Cap Equity Fund, TD Health Sciences Fund, TD Science and Technology Fund, TD Global Entertainment & Communications Fund, and legacy TDAM USA accounts.

Public Market Metrics: Equities[14]

Category	Metric	Canadian	Canadian Benchmark	U.S.	U.S. Benchmark	Global	Global Benchmark	Emerging Markets	Emerging Markets Benchmark
	Emissions Coverage	99%	99%	99%	99%	98%	99%	98%	99%
Emissions	WACI	331.4	326.0	135.4	137.7	87.6	113.8	199.6	336.6
	Emissions/ $M Invested	92.2	93.1	31.5	38.6	41.4	66.3	64.0	134.3
	Weighted Average Quality Score	2.1	2.2	2.1	2.1	2.1	2.1	2.3	2.4
ITR	ITR	3.5	3.5	2.2	2.2	2.1	2.2	2.6	2.8
	1.5°C Aligned	24%	21%	35%	36%	29%	28%	9%	14%
	2°C Aligned	17%	20%	24%	25%	35%	34%	28%	32%
	Misaligned	27%	26%	28%	28%	24%	26%	40%	34%
	Strongly Misaligned	32%	32%	11%	11%	11%	12%	19%	20%
SBTi	SBTI Approved	14%	15%	38%	39%	43%	47%	4%	8%
	SBTI Committed	7%	8%	21%	22%	14%	17%	16%	16%
Climate VaR	Net-Zero 2050	-10.6	-10.6	-4.1	-4.6	-5.3	-6.2	-9.3	-12.5
	Below 2°C	-3.8	-3.7	-1.7	-1.9	-4.1	-4.7	-7.5	-8.5
	Divergent Net-Zero	-40.1	-41.8	-17.0	-17.2	-14.5	-16.0	-20.1	-26.9
	Delayed Transition	-32.5	-28.8	-14.8	-12.0	-11.4	-13.5	-14.1	-20.0
	Nationally Determined Contributions	-2.4	-2.3	-1.5	-1.9	-4.9	-5.9	-8.7	-8.9

[14] All emissions, Climate VaR, ITR, and SBTi data are provided by MSCI. Note that not all emissions and measured and reported on by the companies that we are invested in, and where data is not available, an estimation model may be used to determine the company's emissions.

Public Market Metrics: Corporate Fixed Income

Category	Metric	Canadian	Canadian Benchmark	U.S.	U.S. Benchmark
	Emissions Coverage	88%	91%	96%	99%
Emissions	WACI	174.3	240.8	236.8	92.4
	Emissions/ $M Invested	21.5	27.6	94.4	21.7
	Weighted Average Quality Score[15]	2.3	2.25	2.4	2.1
ITR	ITR	2.55	2.72	2.1	2.0
	1.5°C Aligned	20%	21%	31%	41%
	2°C Aligned	18%	20%	29%	28%
	Misaligned	25%	25%	25%	23%
	Strongly Misaligned	15%	18%	9%	7%
SBTi	SBTI Approved	8%	11%	17%	25%
	SBTI Committed	6%	7%	8%	13%
Climate VaR	Net-Zero 2050	-5.6	-5.8	-7.1	-3.4
	Below 2°C	-2.7	-2.8	-3.0	-2.11
	Divergent Net-Zero	-24.9	-29.1	-22.8	-11.87
	Delayed Transition	-15.0	-15.8	-13.7	-9.05
	Nationally Determined Contributions	-2.4	-2.3	-3.0	-2.81

[15]Based on PCAF guidance for their data quality scores, which help institutions rate the reliability of their information. The score itself ranges from one to five, with one being the highest-quality data and five being the lowest quality. Quality score data is provided by MSCI.

Limitations

- There is a lack of consistency among different companies in GHG emissions data because data is self-reported and calculated using varying methodologies. In many jurisdictions, GHG emissions data is not required to be assured or verified by a third party. Where companies do not disclose GHG emissions data, estimation models based on assumptions are used. Over time, as regulatory regimes evolve, we expect there will be greater transparency and assurance with respect to self-reported emissions data, which in turn will improve the quality and quantity of GHG emissions data.
- GHG emissions data is predominantly disclosed on an annual basis for the previous fiscal year, meaning that there is a potential for misalignment between the GHG emissions data used in calculations and the corresponding financial metrics such as enterprise value and revenue.
- GHG emissions are a point-in-time calculation. They do not capture any quantitative or qualitative data about a company's approach to lowering its carbon footprint over time.
- Metrics such as WACI and Carbon Emissions Per/$M invested can fluctuate due to non-emissions-related factors such as changes in company revenue, enterprise value and market capitalization.

Alternative Assets Metrics

Strategy	GHG Emissions[16]
TD Greystone Canadian Real Estate Strategy	184,341 tonnes CO2e
TD Greystone Global Real Estate Strategy	399,461 tonnes CO2e[17]
TD Greystone Infrastructure Strategy	192,086 tonnes CO2e[18]

GRESB Score	2022 Score	2021 Score	GRESB Average
Real Estate Assessment			
TD Greystone Canadian Real Estate Strategy – Standing Investment	80	73	78
TD Greystone Canadian Real Estate Strategy – Development	81	79	81
TD Greystone Global Real Estate Strategy – Standing Investment	84	82	79
Infrastructure Assessment			
TD Greystone Infrastructure Strategy	87	85	82

[16] Reported GHG Emissions for Alternative Asset Strategies are from 2021

[17] The GHG emissions data presented (as provided by GRESB's Portfolio Analysis tool) is an aggregate sum of the absolute GHG emissions of each of the TD Greystone Global Real Estate Fund's underlying funds that submits into GRESB. As at year-end 2021, the Fund was invested in 11 funds, 9 of which made a submission to GRESB. As a result, this GHG emissions figure is not representative of all holdings in the Fund. However, it does represent >93% by gross asset value (GAV) of the Fund's investment holdings as at year-end. GHG emissions are not pro-rated according to TDAM's investment/ownership or aligned with the financed GHG emissions accounting approach of the Partnership for Carbon Accounting Financials (PCAF).

[18] The Fund's 2022 GRESB submission included data from the following assets: Connecticut Service Plazas, Alberta PowerLine Limited Partnership, Enfinite, Ballycadden Wind Farm Ltd., Silicon Ranch Corporation, and Rabbalshede Kraft AB. GHG emissions for the Fund are weighted according to GAV ownership of each asset. The following assets were operational for less than 6 months during the reporting year and were therefore excluded form GRESB: Canadian Airport Development and Sweden Vind. The operation of the Fund's assets (e.g., its renewable energy generation exports) also resulted in total avoided GHG emissions of 177,958 tonnes of CO2e.

TDAM's Operational Carbon Footprint

At an operational level, TDAM's Scope 1 and 2 emissions are included in TD Bank's climate reporting. Additionally, TDAM's operational emissions (Scope 1 and 2) are covered by TD's net-zero target.

Looking Forward

In 2023, we will continue to refine our work of integrating climate risks and opportunities into our ESG integration and stewardship efforts. As we near the mid-decade, the importance of moving from the current low-carbon transition goal setting phase into actually demonstrating measurable progress against those goals is expected by investors at large. We will echo these expectations in our engagements with our portfolio companies.

In parallel, we will continue to monitor for opportunities to support the energy transition through our public and private investments. In 2023, TDAM's Canadian real estate portfolio will be building out a decarbonization roadmap and establishing interim (e.g., 2030) and long-term GHG reduction targets. The exercise will ensure the portfolio has a decarbonization target that is right-sized in terms of scope and ambition and is aligned with a science-based approach to achieving net-zero GHG emissions by 2050.

Additionally, in recognition of the links between biodiversity loss and climate change, we have added biodiversity as a new theme to our group of engagement focus lists. The Kunming-Montreal Global Biodiversity Framework, signed at the end of 2022 at the Conference of Parties to the UN Convention on Biological Diversity, hosted in Montreal, will serve as a guide to our engagements with our companies. By doing this, we hope to grow our understanding of the risks posed by and to our investee companies as a result of biodiversity loss.

We are committed to the practice of continuous improvement, and we look forward to sharing the progress we achieve over the coming year in our next TCFD report.

Additional Resources:

1. TD ESG Reporting >
2. TDAM Sustainable Investing Policy >
3. Proxy Voting Guidelines >
4. Thought Leadership >

Forward

Appendix: List of Climate-Shareholder Proposals Supported

Company Name	Proposal Text
BHP Group Limited	Approve Climate-Related Lobbying
BHP Group Limited	Approve Capital Protection
Sysco Corporation	Report on GHG Emissions Reduction Targets
AutoZone, Inc.	Report on Annual Climate Transition
Westpac Banking Corp.	Approve Transition Planning Disclosure
Australia and New Zealand Banking Group Limited	Approve Transition Planning Disclosure
National Australia Bank Limited	Approve Transition Planning Disclosure
Costco Wholesale Corporation	Report on GHG Emissions Reduction Targets
Honeywell International Inc.	Report on Climate Lobbying
Charter Communications, Inc.	Disclose Climate Action Plan and GHG Emissions Reduction Targets
Marathon Petroleum Corporation	Report on Climate Strategy Consistent with the International Labour Organization's "Just Transition Guidelines"
Valero Energy Corporation	Disclose Climate Action Plan and GHG Emissions Reduction Targets
The Boeing Company	Report on Net-Zero Indicator
Berkshire Hathaway Inc.	Report on Climate-Related Risks and Opportunities
Berkshire Hathaway Inc.	Report on GHG Emissions Reduction Targets
Santos Limited	Approve Capital Protection
Santos Limited	Approve Climate-Related Lobbying
Santos Limited	Approve Decommissioning
Enbridge Inc.	Strengthen the Company's Net-Zero Commitment with a Science-Based Net-Zero Target
DTE Energy Company	Revise Net-Zero by 2050 Goal to Include Full Scope 3 Value Chain Emissions
QBE Insurance Group Limited	Approve Climate Risk Management
United Parcel Service, Inc.	Report on Corporate Climate Lobbying Aligned with Paris Agreement
United Parcel Service, Inc.	Adopt Independently Verified Science-Based GHG Reduction Targets
Occidental Petroleum Corporation	Report on Quantitative Short, Medium and Long-Term GHG Emissions Reduction Targets
ConocoPhillips	Report on GHG Emissions Reduction Targets
Dominion Energy, Inc.	Adopt Medium Term Scope 3 GHG Emissions Reduction Target
Dominion Energy, Inc.	Report on the Risk of Natural Gas Stranded Assets

Company Name	Proposal Text
Equinor ASA	Instruct Company to Set Short, Medium and Long-Term Targets for GHG Emissions of the Company's Operations and the Use of Energy Products
Equinor ASA	Introduce a Climate Target Agenda and Emission Reduction Plan
Phillips 66	Adopt GHG Emissions Reduction Targets Aligned with the Paris Agreement Goal
JPMorgan Chase & Co.	Report on Absolute Targets for Financed GHG Emissions in Line with Net-Zero Commitments
JPMorgan Chase & Co.	Report on Absolute Targets for Financed GHG Emissions in Line with Net-Zero Commitments
US Foods Holding Corp.	Adopt Short, Medium and Long-Term GHG Emissions Reduction Targets
Chubb Limited	Report on Efforts to Reduce GHG Emissions Associated with Underwriting, Insuring and Investing
Woodside Petroleum Ltd.	Approve Contingent Resolution - Capital Protection
Woodside Petroleum Ltd.	Approve Contingent Resolution - Climate-Related Lobbying
Woodside Petroleum Ltd.	Approve Contingent Resolution - Decommissioning
Amazon.com, Inc.	Report on Retirement Plan Options Aligned with Company Climate Goals
Chevron Corporation	Adopt Medium and Long-Term GHG Emissions Reduction Targets
Chevron Corporation	Issue Audited Net-Zero Scenario Analysis Report
Chevron Corporation	Oversee and Report on Reliability of Methane Emission Disclosures
Exxon Mobil Corporation	Set GHG Emissions Reduction Targets Consistent with Paris Agreement Goal
Exxon Mobil Corporation	Report on Low Carbon Business Planning
Exxon Mobil Corporation	Report on Scenario Analysis Consistent with International Energy Agency's Net-Zero by 2050
The Travelers Companies, Inc.	Report on Efforts to Measure, Disclose and Reduce GHG Emissions Associated with Underwriting
Alphabet Inc.	Report on Climate Lobbying
Alphabet Inc.	Report on Physical Risks of Climate Change
Comcast Corporation	Report on Retirement Plan Options Aligned with Company Climate Goals
Caterpillar Inc.	Report on Long-Term GHG Targets Aligned with Paris Agreement
Monster Beverage Corporation	Report on GHG Emissions Reduction Targets Aligned with the Paris Agreement Goal
The Kroger Co.	Report on Efforts to Eliminate Hydrofluorocarbons in Refrigeration and Reduce GHG Emissions
Mitsubishi Corp.	Amend Articles to Disclose GHG Emission Reduction Targets Aligned with Goals of Paris Agreement
Mitsubishi Corp.	Amend Articles to Disclose Evaluation concerning Consistency between Capital Expenditures and Net-Zero GHG Emissions by 2050 Commitment

Company Name	Proposal Text
Chubu Electric Power Co., Inc.	Amend Articles to Require Disclosure of Asset Resilience to a Net-Zero by 2050 Pathway
Electric Power Development Co., Ltd.	Amend Articles to Disclose Business Plan through 2050 Aligned with Goals of Paris Agreement
Electric Power Development Co., Ltd.	Amend Articles to Disclose Evaluation Concerning Consistency between Capital Expenditures and GHG Reduction Target
Electric Power Development Co., Ltd.	Amend Articles to Disclose How Executive Compensation Policy Contributes to Achievement of GHG Emission Reduction Target
The Kansai Electric Power Co., Inc.	Amend Articles to Add Provisions Concerning Management Based on Corporate Social Responsiblity (Withdrawal from Coal-Fired Power Generation Business)
The Kansai Electric Power Co., Inc.	Amend Articles to Realize Zero Carbon Emissions by 2050
The Kansai Electric Power Co., Inc.	Amend Articles to Disclose Transition Plan through 2050 Aligned with Goals of Paris Agreement
The Kansai Electric Power Co., Inc.	Amend Articles to Ban Conclusion of Agreements to Purchase Coal Power Generated Electricity
Tokyo Electric Power Co. Holdings, Inc.	Amend Articles to Require Disclosure of Asset Resilience to a Net-Zero by 2050 Pathway
Sumitomo Mitsui Financial Group, Inc.	Amend Articles to Disclose Plan Outlining Company's Business Strategy to Align Investments with Goals of Paris Agreement
Dollar Tree, Inc.	Report on GHG Emissions Reduction Targets Aligned with the Paris Agreement Goal
Tesla, Inc.	Report on Corporate Climate Lobbying in line with Paris Agreement
AMERCO	Adopt GHG Emissions Reduction Targets Aligned with the Paris Agreement Goal
FedEx Corporation	Report on Climate Lobbying

Appendix