

**TCW**



**TCW Climate  
Disclosure  
Report**

2025

# Introduction

Founded in 1971, TCW is a leading global asset management firm. As of December 31, 2025, TCW managed \$206 billion across a broad range of innovative, actively managed investment products designed to meet the investment objectives of our clients. TCW's clients include many of the largest corporate and public pension plans, financial institutions, insurance companies, endowments, and foundations in the United States, as well as a substantial number of international entities including central banks, sovereign wealth funds, and private banks.

Businesses and investors are increasingly recognizing and responding to the substantial effects that climate-related risks have on their business activities and investments. As dedicated long-term investors, TCW recognizes that a changing climate and efforts to respond to it portend substantial and far-reaching implications for the global economy and therefore capital allocation. Increasingly volatile weather patterns, shifting availability and access to natural resources, and increasing risks related to shifting consumer preferences and regulatory pressures risks are challenging long held assumptions underpinning the way the global economy functions. By adopting the Task Force on Climate-Related Financial Disclosures (TCFD) framework and recommendations, we are committed to advancing our risk management practices and sustainable investing approach. This initiative is aimed at mitigating risks and generating long-term value for our clients.

We expect that climate-related risks and opportunities will emerge in unforeseen ways, affecting a wide array of entities such as firms, sovereigns, and state and local governments, along with issuers, investments, and market participants at large. Global markets have already begun to confront the consequences of climate-related risks, including destructive wildfires, hurricanes, and floods,

among other climate-related disasters. As investors, we recognize that we have a responsibility to stay vigilant and flexible, both as a company and in our investments, to ensure we are acting with our clients' best interests in mind.

We recognize that this is the first step in the process of managing climate-related risks, which are constantly evolving. TCW is committed to continuously enhancing our approach to managing, monitoring, and mitigating climate related risks within our business and investment operations to support our efforts in delivering strong investment performance and ensuring business continuity.

Through our commitment to disclosure, we seek to deepen our efforts to deliver sustainable investment solutions that implement a sustainable and resilient strategy that meets the expectations of our clients.

This report covers all four TCFD pillars: Governance, Strategy, Risk Management, and Metrics & Targets. Certain disclosures, such as quantitative scenario analysis and firm-wide climate targets, are not included due to data limitations. TCW is evaluating approaches to address these in future reports.

In the pages that follow, in line with the recommendations of the TCFD, we will lay out our current strategy with an aim of meeting emerging regulatory requirements and client preferences, while also communicating our comprehensive approach to identifying climate-related financial risks and opportunities

### **Governance**

will articulate how the oversight of climate-related risks and opportunities is built into our governance and management structures.

### **Strategy**

will articulate our current approach to integrating climate-related risks and opportunities into our business operations, investment processes, engagement activities, and proxy voting.

### **Risk Management**

will articulate our current infrastructure for managing and mitigating climate-related risks across the organization.

### **Metrics and Targets**

will articulate and illustrate climate related data and research integrated into our business and compliance systems to support our strategy and risk management processes.

# Governance

- Describe the Board's oversight of climate-related risks and opportunities.
- Describe management's role in assessing and managing climate-related risks and opportunities.

TCW's corporate governance structure reflects that of a well-established, professionally managed investment management firm. Oversight, accountability, and effective risk management are important elements of TCW's business strategy. Additionally, our governance framework has been designed to integrate the identification and management of climate-related risks.

## TCW's Governance Structure

The Board of Directors at The TCW Group, Inc. (TCW) holds the highest level of strategic supervisory and oversight responsibility of the firm. Directors' duties encompass the overall strategic direction and management of the company, ensuring that the company's general guidelines are set and followed. They are tasked with the periodic approval of corporate, business, and financial strategic plans, including strategic operations, the annual budget, and any amendments to them. Importantly, two members of the Board are members of senior management on TCW's investment team and were instrumental in the development of TCW's Sustainable Investment platform.

## Board Overview

TCW's Board of Directors comprises nine members. The Board of Directors holds four regular meetings and one budget meeting each year. At the regular meetings, TCW management reports to the Board on matters regarding the business of the firm as a whole, performance, marketing results, significant trends, management concerns, risk management, compliance, and legal and regulatory issues. From time to time, special meetings may be called to address current business matters. In addition to the Board meetings, TCW informs Board members of material developments as they arise, including climate and sustainability related matters.

## Oversight and Management of Sustainable and Climate Initiatives

Our governance structure is designed, and has evolved, to ensure that sustainability initiatives, including those related to climate, are also overseen by the appropriate individuals and management committees. The Cross-Asset Research & Sustainable Investment Group is responsible for delivering sustainability research, developing business and product strategy, and leading engagement efforts with various stakeholders. With a policy background and experience with sustainable development across global markets and developed economies, TCW's Head of Cross-Asset Research and Sustainable Investment is well positioned to effectively develop and implement our sustainability initiatives. There are also various committees and task forces, such as the Enterprise Risk Management Committee, the Sustainable Investment Executive Committee, the Sustainable Investment Network, the Sustainable Investment Guideline Implementation Group, and the Proxy Voting Committee, which coordinate and oversee sustainable and climate-related initiatives.

TCW has established several committees and groups to facilitate evolving initiatives, each with specific responsibilities:

### **Enterprise Risk Management Committee**

---

This committee has an oversight function for TCW's enterprise risk, monitoring risk factors from every aspect of TCW's business. It reviews areas such as investment activity, IT or cybersecurity incidents, regulatory updates, and climate-related investment risks. The committee includes TCW's Chief Operating Officer, General Counsel, Chief Financial Officer, and Chief Human Resources Officer.

### **Sustainable Investment Executive Committee**

---

Comprises key leaders from across the firm, this committee provides formal oversight of TCW's Sustainable Investment platform and ensures coordination across key workstreams adjacent to Sustainable Investing, including Corporate Sustainability and Governance. It oversees and approves key corporate initiatives, product activities, and strategic plans.

### **Proxy Voting Committee**

---

This committee establishes proxy voting policies, guidelines, and procedures; analyzes and resolves proxy voting conflicts of interest; and oversees proxy voting related matters at the firm. It comprises Equity Research and investment professionals, representatives from Compliance and Legal departments, as well as the Head of Cross-Asset Research and Sustainable Investment. The committee is chaired by the firm's Head of Engagement. Members of the firm's Proxy Voting Working Group, a cross-department group that carries out the firm's day-to-day proxy voting function, supports the Proxy Voting Committee in its decision-making efforts.

### **Sustainable Investment Guideline Implementation Group**

---

This group provides oversight for the implementation of clients' sustainability investment guidelines, and covers topics ranging from interpretive questions, data exceptions, and investment compliance practices and procedures. Representation in this group includes members from Client Services, Investment Compliance, and other teams as necessary.

### **Sustainable Investment Network**

---

With the largest representation of members across the firm, this group provides TCW with an internal forum to coordinate sustainability efforts across investments, operations, distribution and marketing, client services, and other key stakeholders. This network is chaired by the firm's Head of Cross-Asset Research and Sustainable Investment.



## Policy Evaluation and Evolution

Our approach to integrating sustainable and climate-related risks across asset classes is outlined in our [Sustainable Investment Policy](#). The policy highlights our commitment to integrating into the investment process all identifiable financially material information, our procedures to implement effective and coordinated engagement, as well as the governance structures that underpin our Sustainable Investment efforts as a firm.

TCW is committed to reviewing and updating policies and procedures to ensure we are evolving in line with the demands and objectives of our clients and the market. As an extension of our committee-based approach, TCW Compliance works closely with the relevant business units to ensure that policies and procedures appropriately reflect business products, procedures, and industry trends. When applicable, members of the Compliance or Legal departments may determine that it is appropriate to update a policy or procedure because of: (i) internal developments, (ii) new regulatory and other industry developments, (iii) evolving industry practices, (iv) results of testing or monitoring compliance with policies and procedures, (v) new questions being received in RFPs or raised in client due diligence meetings regarding compliance policies and procedures, and (vi) results of regulatory reviews, audits, arbitrations or litigation.

Recognizing the complex and ever-evolving nature of the Sustainable Investment regulatory landscape, TCW actively monitors and adapts to the evolving regulations concerning climate-related issues by engaging on a multitude of standards, guidelines, and requirements from national and global regulators, as well as independent organizations. The firm has established the Global Sustainable Investment Regulatory Group, which is responsible for tracking regulatory and policy-related developments and meets on an ad-hoc basis. This group ensures that compliance measures are in place to implement these requirements and coordinates TCW's engagement with regulators and policymakers. We are committed to refining our proprietary tools and methodologies to identify emerging climate related risks in our investment processes, ensuring we remain responsive to new regulations, market developments, and data insights.

Our commitment to best-in-class governance practices underscores TCW's dedication to ensuring sustainable and climate-related risks are systematically integrated into our business strategy. We are aware of the dynamic nature of a changing climate and will continue to evolve our governance practices to ensure we are best positioned to navigate emerging trends, regulatory requirements, and client expectations.

# Strategy

- Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.
- Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

## Assessing our Exposure to Climate-Related Risks

Over the last few years, global markets have confronted the consequences and realities of destructive natural hazards as well as the impacts of real-world efforts to decarbonize the global economy. Our strategic response focuses on identifying and categorizing exposures across two pillars: (i) TCW's business operations and (ii) TCW's investment portfolios.

For purposes of this disclosure, short-, medium-, and long-term time horizons reflect how climate-related risks may manifest across near-term operational continuity, intermediate business and portfolio positioning, and longer-dated asset and liability outcomes.

We have determined that the most significant climate-related risk to our business operations, as informed by our materiality assessment, is physical disruption from severe weather and other natural hazards, including potential damage to infrastructure and associated financial and productivity impacts.

While TCW does not perform quantitative scenario analyses for firm-level strategic planning, TCW's BCP regularly evaluates and mitigates risks arising from natural disasters and other scenarios that may impede the firm's ability to function normally or cause a loss of TCW's worksite and/or data center.

As we consider the climate-related risks associated with our investments, we understand that confronting both the physical impacts of climate change and the risks associated with the global transition to a lower-carbon economy is an important aspect of our business. Our climate risk assessment is designed to support long-term risk management and investment decision-making across strategies.

In our efforts to effectively manage risk and provide the best risk-adjusted returns for our clients over their full investment time horizon, we are committed to mitigating climate-related risks and capitalizing on potential opportunities that may emerge over short-, mid-, and long-term time horizons.

## Our Strategy to Identify and Mitigate Climate-Related Risks

In identifying, assessing, and managing climate-related risks, we differentiate between transition and physical climate risks. We define transition risks as those risks associated with the process of moving away from traditional, carbon-intensive business models and practices due to the global shift towards a lower-carbon economy. These risks may arise from policy and regulatory changes, such as new compliance requirements, taxes, and incentives aimed at mitigating climate-related impacts, which may affect a company's economics. Other aspects of transition risks include technological changes that may render existing assets or certain operations obsolete (i.e., stranded assets), market-related risks due to changing consumer preferences and shifting supply/demand dynamics, and reputational risks for companies that fail to adapt to the changing landscape. We consider these channels across relevant issuers and sectors, recognizing that materiality varies by industry and business model.

We define physical climate risks as those risks associated with the direct impact of climate events on business operations, assets, or investments, primarily due to the frequency and intensity of extreme weather events. These events include hurricanes, floods, wildfires, sea level rise, and extreme temperatures, which can lead to infrastructure and real asset vulnerability, as well as rising insurance costs and increased operating expenses.

These risks affect companies across a multitude of industries to varying degrees, and can have real-world, financial implications to our organization and portfolio companies.

TCW employs quantitative climate risk data in its investment research process for select asset classes, while recognizing the deficiencies and inconsistencies of the scenario modeling tools currently available in the market. TCW will continue to evaluate such tools and apply them in future reports once reasonable accuracy is achievable.

## Our Business Operations

TCW seeks to limit the impact of physical climate risks on its operations and has implemented measures to safeguard business continuity and our ability to serve clients. To mitigate emerging risks and reduce our exposure, we have taken a multi-pronged approach to managing related risks to our business operations:

### 1. Business Continuity Plan (BCP)

TCW has implemented a comprehensive business continuity plan to maintain critical business operations in the event of a natural disaster or any other situation that may impede the Firm's ability to function normally.

Overseen by the Business Continuity committee, the Business Continuity Plan (BCP) includes system and data redundancy for critical business applications to ensure that TCW's systems infrastructure will not be adversely affected during such events. As part of the business continuity plan, TCW has a contract in place for a flexible alternate recovery work site. TCW has stored equipment offsite to be delivered at the designated recovery space location during an activation, this will allow the Firm to continue critical business operations if the Los Angeles or other offices are not operational. In addition, TCW personnel can operate remotely from any location, accessing critical systems, applications, and data from the firm's primary or redundant data centers.

The firm's Business Continuity Plan is reviewed and updated to ensure a high level of readiness in support of an efficient recovery. Our BCP program has contracted with an Emergency Notification System vendor which will assist with notifications to staff during a response to an interruption. Additionally, we also have an Employee Emergency Help Line, which is updated with the latest information regarding a response. We perform regular tests of the BCP, which include emergency notifications, technology service continuity, relocation, connectivity and crisis response. The goal is to prevent an emergency from escalating into a crisis or disaster and to ensure preparedness and alternatives among critical employees and department heads. Our tabletop exercises, for example, present a disaster type situation where we can test the roles and responsibilities of TCW's Business Continuity Plans.

### 2. Limiting our climate impact

We continue to take steps to measure and manage our operational carbon footprint and identify decarbonization opportunities.

As awareness of corporate environmental impacts grows among consumers, investors, and regulators, TCW recognizes the importance of driving meaningful change. TCW is committed to reducing its environmental footprint through multiple corporate sustainability initiatives. In 2023, we partnered with Watershed, an enterprise climate platform for carbon measurement, reduction, and reporting. This partnership supports measurement of TCW's Scope 1, 2, and 3 operational footprint in line with current and evolving regulatory and client reporting expectations, and helps inform decarbonization opportunities.

In December 2023, we relocated our Los Angeles headquarters to a LEED Platinum building with features that support operational sustainability, including regular e-waste collection and recycling and automated daily reporting of energy and water consumption. Additionally, our parking structures contain EV chargers.

## Our Investments

In integrating material risks into our investment process, TCW increasingly observes how transition and physical climate risks can influence issuer fundamentals, collateral performance, and valuations. Whether assessing policy and regulatory change, shifts in demand, or the operational and productivity impacts of severe weather events, TCW's multi-layered approach is intended to capture the far-reaching implications of climate-related impacts across asset classes.

### 1. Implementing a proprietary approach to assessing climate transition risks related to our investments.

TCW assesses climate transition considerations as part of our responsibility to identify and manage financially material risks and opportunities that may affect issuer fundamentals, collateral performance, and long-term investment outcomes. This work is conducted in alignment with our fiduciary duty, and in response to client-specific mandates.

Across the platform, we apply a consistent, proprietary analytical framework to evaluate how a decarbonizing economy may influence industries, issuers, and underlying assets. Our starting point is identifying where transition risk may be most salient, followed by a relative assessment of positioning and the credibility of actions taken to manage or mitigate that risk. Where appropriate, this includes evaluating emissions intensity, abatement difficulty, and exposure embedded in business models or collateral. These inputs are assessed contextually and comparatively, alongside traditional financial analysis.



How this framework is applied across asset-classes:

#### Equities & Corporate Debt

Transition risk is assessed at both the industry and issuer level. Industries are categorized into low- and high-risk buckets based on inherent carbon intensity and the difficulty of abating emissions. At the issuer level, a company's overall carbon footprint — including Scope 1, 2, and 3 emissions — is evaluated relative to peers, together with evidence of decarbonization plans, green capital expenditures, and revenue diversification or sensitivity to high-risk sectors.

#### Securitized Debt

Analysis focuses on the carbon intensity and transition exposure of underlying collateral, where applicable. Given the role of securitization in financing real-world assets, assessing how collateral may be exposed to a decarbonizing economy is a key input. This work is informed by asset-level data where available, portfolio-level diagnostics, and ongoing efforts to improve measurement standards, including TCW's work with PCAF.

#### Sovereign Debt

Transition considerations are evaluated within a broader assessment of macroeconomic resilience, using a proprietary SDG-aligned scorecard. Analysis incorporates factors such as production-based emissions, fuel subsidies, and natural resource protection, with countries compared within World Bank income buckets to support more comparable assessments, particularly in emerging and frontier markets.

## 2. Translating transition analysis into portfolio decisions.

The same integrated framework used to assess transition exposure also informs how TCW evaluates relative investment opportunities. Transition risk and opportunity are considered jointly, reflecting how policy, technology, and market shifts can alter competitive positioning, cash-flow durability, and long-term fundamentals.

Within this framework, TCW assesses issuer- and asset-level indicators — such as revenue exposure, capital expenditures, and representative collateral — to understand how investments may contribute to, or benefit from, transition dynamics. These assessments inform portfolio construction, monitoring, and client reporting, consistent with mandate objectives.

### How this framework is applied:

#### Equities & Corporate Debt

Companies are evaluated based on whether they are enabling decarbonization through products or services, or credibly improving historically emissions-intensive business models. Assessments emphasize the credibility of transition plans, investment commitments, revenue mix, and evidence of progress over time.

#### Securitized Debt

Sustainable investment opportunities are identified across ESG-labeled securities, unlabeled green assets, and social-oriented investments. A proprietary scoring framework is used to classify qualifying securities as green, social, or sustainable, and to identify best-in-class exposures for portfolio construction and reporting.

#### Client Portfolios

These tools support customization for separately managed accounts, allowing portfolios to reflect client preferences and thematic objectives (e.g., green buildings) while maintaining consistent risk assessment.

## Opportunity

### PLANET

Clean Energy

Sustainable Mobility

Circular Economy

Climate Change Adaptation & Risk Management

Biodiversity, Sustainable Land & Water Use

Sustainable Real Assets & Smart Cities

**Sustainable Themes**

### TRANSITION

Low-Carbon Energy

Pivoting Transportation

Materials in Transition

Carbon Accounting & Green Finance

Improving Agriculture & Forestry

Transitioning Real Assets & Infrastructure

**Transition Themes**

## A Note on TCW's Calculation Methodology for Sovereign Emissions

Calculating sovereign emissions is a complicated undertaking that requires multiple considerations. Investors grapple with issues ranging from double counting to normalization and timeliness of data. TCW has meaningful exposure to government bonds, particularly in our emerging market strategies, and as such, we have evaluated the benefits and drawbacks associated with different sovereign emissions calculation methodologies. Importantly, for funds with both sovereign and corporate exposure, total portfolio emissions figures cannot be aggregated due to different units of measure. Here, we outline TCW's preferred approach and rationale, with additional details in the appendix (slides 34-36).

### Emissions Boundary: Territorial vs. Government Approach

The territorial approach includes emissions from all activities within a sovereign's borders, including private sector emissions. On the other hand, the government approach only considers public sector emissions in scope. *We prefer to use the territorial approach in line with the majority of investors and the PCAF standard.*

### Emissions Boundary: Production vs. Consumption Emissions

The production approach covers emissions associated with domestic economic activity, regardless of where the resulting product or service is consumed. Conversely, consumption emissions reflect demand for economic activity, regardless of where the economic activity occurs. *We use the production approach given data availability and quality. However, where possible, we incorporate the consumption approach as a supporting metric to account for both the supply and demand sides of sovereign emissions.*

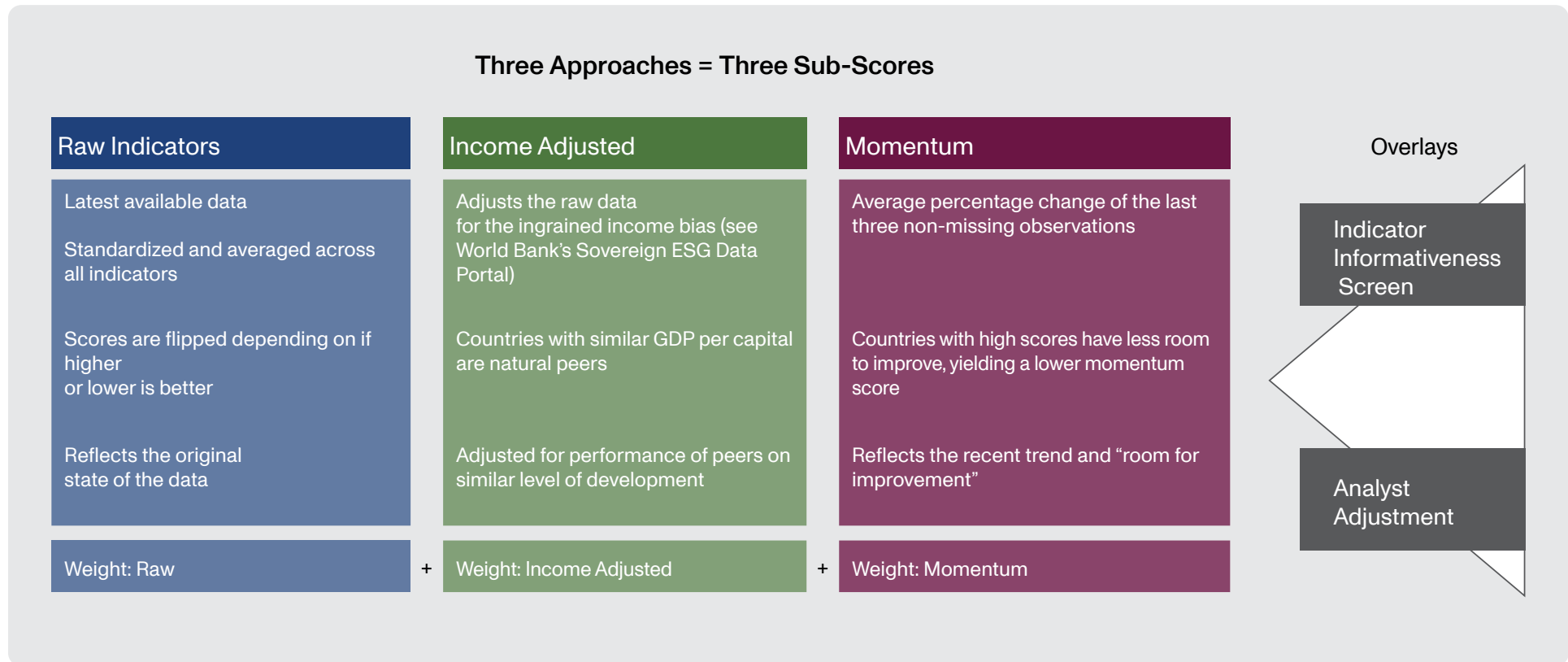
### Normalization: Per Capita vs. GDP vs. GDP PPP (Gross Domestic Product Based On Purchasing Power Parity)

Normalizing emissions calculations is critical to comparing entities of varying sizes. For sovereigns, as with corporates, different normalization metrics have different use cases depending on other methodological choices. *We prefer to use GDP PPP to normalize emissions to enable more accurate comparison between countries at different stages of development.*



### TCW Sovereign Risk Assessment Framework

Our proprietary Sovereign Scorecard integrates sustainability analysis into sovereign credit assessment across developed, emerging, and frontier markets. It evaluates countries against SDG-aligned indicators while explicitly adjusting for income bias by benchmarking peers at similar income levels, incorporating trend analysis and qualitative analyst judgment to capture both current conditions and direction of travel.



### 3. Mapping natural hazard and physical climate risks in our investments

Globally, economic losses from natural disasters in 2025 reached about \$260 billion, with the 5-yr annual average loss for insurers from natural disasters alone having reached \$155 billion given changes in hazard type, societal factors, and economic behavior driving more expensive per event losses. Our approach to understanding and integrating natural hazards and physical climate risks across our portfolios is evolving as additional, more precise, and accurate data becomes available. When identifying natural hazard exposure and effective management by companies and other issuers, we proactively assess existing data and projections related to the likely occurrence of acute and chronic perils, including severe convective storms, tropical cyclones, wildfire, flooding, earthquakes, and drought. We assess the projected occurrence of these events against available data related to asset location and expected revenues, among other financial factors, to evaluate the projected impact and materiality of these events. Risk exposure by issuer against different perils is complemented by our assessment of the mitigation tools issuers employ to reduce potential losses should these risks materialize.

For securitized credit, our investment team routinely reviews climate risk and insurance policies in real estate, with a specific focus on risks dependent upon physical location and anticipated exposure to hazards. We partner with third-party providers of climate and socio-economic demographic data to enhance our climate risk modeling capabilities across commercial and residential properties.

#### Understanding the Opportunity Set

As natural disasters continue to have impacts, investors would be wise to track those companies that are developing the goods, services, and technologies in disaster loss prevention and recovery that may benefit from these trends. In the U.S., investing in disaster preparedness and ex-post repair has already influenced growth in companies with business lines associated with the disaster ‘repair and prepare’ theme. An equity index of about 100 large public companies working on disaster preparedness and response has outperformed the S&P 500 by 6.5% a year over the last decade, according to Bloomberg Intelligence.<sup>1</sup>

At TCW, we have developed an initial resilience-related taxonomy that identifies the companies and other issuers that could stand to benefit from these trends, informed by our active research approaches and dialogue with issuers, industry, policymakers, and academia.

<sup>1</sup> <https://www.bloomberg.com/features/2025-disaster-industrial-complex-us-economy/>

# Case Study

## Integrating Climate Resilience into Fundamental Credit Research

### Key Summary

Climate-related physical risks are embedded in our fundamental research, particularly for infrastructure assets exposed to extreme weather. Prior to investing in a low-lying, coastal transportation asset in a tourism-dependent emerging market, we supplemented our fundamental credit analysis by studying hurricane and flood exposure, governance and concession structure, liquidity and debt service protections, insurance coverage, and operator experience managing climate-exposed assets. This pre-investment work explicitly incorporated climate risk into underwriting assumptions.

Following a major hurricane that caused material operational disruption, we applied the same framework through engagement with government stakeholders and asset operators to reassess physical damage, liquidity adequacy, insurance recoveries, and recovery timelines. This enabled a clear distinction between temporary climate-driven disruption and structural credit deterioration.

### Outcome

Despite significant near-term operational and revenue impacts, our analysis indicated strong resilience, supported by substantial liquidity buffers, comprehensive property damage and business interruption insurance, continued sovereign backing, and a credible recovery plan. While market spreads initially widened due to heightened uncertainty, we maintained exposure based on our assessment of climate resilience. Subsequent stabilization in performance validated our integrated, forward-looking approach to managing climate-related risks within fundamental credit research.

## Our Data and Research Partnerships

In our efforts to integrate climate-related risks in our investment strategy, we utilize a variety of data and metrics to calculate the exposure of our investments. Drawing from multiple sources to inform our risk mitigation approach and measure progress, we leverage climate-related data from third-party data providers such as MSCI, S&P Trucost, Bloomberg, ICE RisQ, and Climate Bonds Initiative. This data is complemented by TCW's own bottom-up research and security underwriting. As further described in the Metrics and Target section, key metrics used in our analysis of risks include absolute emissions, financed emissions, and weighted average carbon intensity. These metrics help us measure the total carbon emissions of portfolio holdings, enable comparison between portfolios of different sizes, compare underlying investments based on company carbon intensity and manage portfolios to targets set by our clients.

## Engagement Initiatives

As we seek to deliver on our clients' financial objectives, engagement is an integral component of TCW's research and investment processes and supports our approach to identifying and managing climate-related risks and opportunities. Our data-informed engagement practices are designed to elicit decision-useful information that strengthens fundamental research,

underwriting, and ongoing monitoring. Where appropriate, engagement may also encourage issuers and other entities to adopt best practices on financially material issues.

TCW's portfolio managers, fundamental research analysts, and sustainable investment analysts collaborate in ongoing dialogue with issuers and other relevant stakeholders. Where feasible, TCW pursues engagement in an integrated fashion, bringing together sustainability and fundamental research perspectives, often across different parts of the capital structure so that insights can be incorporated into investment theses and risk management over time. Engagement is a long-term, iterative process, and a lack of responsiveness or insufficient progress on priority themes may inform our investment decisions as part of broader investment analysis.

Given the materiality of climate-related impacts across industries, TCW increasingly includes focused discussions on climate-related risks and strategic initiatives across priority themes, including financing the energy transition, understanding the implications of more frequent and severe climate events and natural hazards, and assessing risks associated with the growing scarcity of natural resources. The specific focus and means of engagement vary by asset class and issuer type.



# Case Study

## Engaging Issuers to Manage Climate Transition and Physical Risk

### Key Summary

Following the suspension of sector-specific interim financed emissions targets by a U.S. bank in early 2025, we initiated targeted engagement with senior investor relations and sustainability leaders to assess implications for long-term value creation and climate risk management. Through multiple dialogues, we evaluated how the institution is aligning climate-related financing with economic realities, maintaining senior-level commitment to the energy transition, and strengthening its approach to physical climate risk across real asset exposures. Engagement focused on ensuring that changes in public targets did not weaken transition financing discipline or risk oversight relevant to our clients' financial objectives.

### Outcome

The engagement reinforced management's commitment to financing the energy transition through scalable renewable and transition-aligned activities, while sharpening focus on physical climate risks affecting asset values and borrower affordability, including rising insurance costs. As a tangible outcome, TCW introduced the bank's leadership to the Insurance Institute for Business and Home Safety, an insurer-funded think tank that has developed science-based building standards for risk reduction against wind, hail, and wildfire perils. This collaboration is helping to inform resiliency product development in the bank's consumer finance division.

# Case Study

## UN PRI Collaborative Sovereign Engagement on Climate Change

### Key Summary

TCW has had a longstanding sovereign engagement platform that bridges the expertise of our sovereign credit analysts with sustainable investment analysts. However, we also understood that engagements alongside other investors could help sovereign debt managers and other members of government better understand investor preferences for enhanced disclosure of relevant data. As such, in 2024, TCW applied for and was accepted into the UN PRI Collaborative Engagement on Climate Change under its pilot phase. TCW's Head of Engagement joined the sub-national working group to work with the sovereign's debt management authorities, as they prepared their first impact and allocation reporting after the launch of the sovereign's inaugural green bond.

### Outcome

As part of the Working Group, TCW provided written and verbal feedback to the authorities on how we evaluate sovereign labelled securities, and the metrics and data within those reports that inform our understanding of best sovereign disclosure practices. The sovereign was receptive to the group's feedback and incorporated many of our suggestions into their reporting drafts. The report benefitting from these multiple engagements was issued in Q1 2025.

In the context of proxy voting, TCW evaluates shareholder resolutions regarding environmental issues based on the financial materiality of the issue to the company's operations. We generally favor proposals that seek greater disclosure on climate-related initiatives and data, including (where relevant) emissions, environmental metrics, energy usage, and energy-efficiency practices. TCW may also support proposals requesting more information on a company's lobbying activity to assess alignment between stated positions and lobbying practices.

Additionally, TCW engages with industry peers, data providers, and other stakeholders to advance market standards and improve the availability, quality, and decision-usefulness of climate-related data and disclosures. TCW executives and senior staff participate in conferences, meetings, and task forces that support internal awareness and feedback and help inform the development of procedures, processes, and controls to address evolving sustainability standards and regulations, including climate issues.

# Case Study

## Building a Collaborative Engagement on Commercial Real Estate and Insurance

### Key Summary

Our engagements across the commercial real estate property industry in 2023 and 2024 revealed newfound challenges in the sector. Buoyed by inflation, rising reinsurance rates, and increased catastrophe-related risks, real asset owners across the industry reported facing rising insurance rates and uncertain coverage. TCW attended a closed-door roundtable sponsored by a real estate industry group to begin to address these issues. The discussion centered on the ultimate lack of understanding of the types of resiliency features of properties that would be looked upon most favorably by insurers and also the need to understand new coverage options and innovations in the insurance industry. At the same time, insurance is regulated differently in each U.S. state. As such, TCW realized there was a need to better understand the regulatory approaches that affect insurers differently in each state.

### Outcome

TCW participated in a physical risk and insurance engagement comprised of academics, lenders, other commercial property owners, and the insurance community. In 2024, the thematic engagement included a series of webinars focused on clarifying the policy and regulatory environment insurers in California face, as well as a series of conversations on innovative coverage options participants could consider moving forward, including captive insurance as an option. The group then convened with the University of Southern California's Lusk Center for Real Estate in 2025 to convene a roundtable to derive lessons learned about the current state of commercial insurance markets and a path forward.

TCW's efforts in this space are not limited to membership. The firm also takes on leadership roles to help drive progress in market standards and methodologies. For example, TCW's Head of Cross-Asset Research and Sustainable Investment serves on S&P Global Sustainable1's Investor Client Council. In addition, within PCAF, TCW holds leadership roles including Chair of the North America Asset Managers' Working Group and Co-Chair of the Securitized and Structured Products Working Group, which is focused on advancing carbon accounting methodologies for securitized and structured products.

### **Evolving Products and Solutions**

TCW is committed to adapting to evolving regulatory requirements and client demand for sustainable and climate-focused investment solutions. We offer a range of investment solutions and tailored strategies designed to be transparent about their objectives and approach, distinguishing between cases where sustainability and climate-related considerations are incorporated as part of risk underwriting and ongoing monitoring, and cases where these considerations are a more central component of security selection, portfolio construction, and client reporting.

TCW does not impose firm-wide prohibitions on investing in companies associated with certain issues or activities, nor does it set firm-wide climate-specific investment targets. Instead, we integrate financially material risks into our investment process, including climate-related risks where applicable, and maintain internal infrastructure and capabilities to manage client accounts in line with client-specific sustainable and climate-focused objectives and guidelines.

Within TCW's Luxembourg-domiciled UCITS platform, 11 Sub-Funds were available to shareholders as of September 30, 2023. In July 2022, TCW converted 10 UCITS Sub-Funds to SFDR Article 8 and Article 9 classifications, seeking to meet traditional investment objectives alongside (i) the promotion of environmental and social characteristics (Article 8) or (ii) a sustainable investment objective, including carbon-intensity reduction features, as disclosed in the relevant fund documentation. Subsequently, following regulatory review, TCW received approval for UCITS prospectus changes that included Article 9 to Article 8 conversions for certain UCITS funds, with an effective date of March 11, 2025.

As of December 31, 2025, TCW managed approximately \$45 billion in accounts that are subject to specific sustainable investment guidelines, reflecting client demand for solutions that range from guidelines-based



## Summary

Category	Description	Time Horizon	Investment Impact	TCW Business Impact
Transition Risks	<ul style="list-style-type: none"> <li>• Policy and regulatory changes (e.g., taxes, compliance)</li> <li>• Technological shifts (e.g., stranded assets)</li> <li>• Market changes (e.g., consumer preferences)</li> <li>• Reputational risks from non-adaptation</li> </ul>	Short, Medium, Long	<ul style="list-style-type: none"> <li>• Lower revenues and higher operating costs (legal and compliance)</li> <li>• Higher risk of asset impairment and defaults</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced ability to retain existing clients and compete for new mandates</li> <li>• Loss of reputation</li> <li>• Higher compliance costs</li> </ul>
Physical Risks	<ul style="list-style-type: none"> <li>• Direct impacts of extreme weather events (e.g., hurricanes, floods, wildfires)</li> <li>• Sea level rise</li> <li>• Extreme temperatures</li> </ul>	Short, Medium, Long	<ul style="list-style-type: none"> <li>• Business and supply chain disruptions - already affecting some industries, with impact expected to broaden in the mid-to-long term</li> <li>• Loss of labor productivity (heat stress and fatigue)</li> <li>• Higher operating costs (insurance premiums, repairs)</li> <li>• Higher risk of credit defaults and physical asset impairment</li> </ul>	<ul style="list-style-type: none"> <li>• Business disruptions</li> <li>• Loss of worker productivity (heat stress and fatigue)</li> <li>• Higher operating costs (insurance premiums)</li> </ul>
Transition Opportunities	<ul style="list-style-type: none"> <li>• <b>Investment Opportunities:</b> Companies offering decarbonization solutions, or those with credible decarb. plans</li> <li>• <b>TCW Business Opportunities:</b> Operational efficiency measures, engagement &amp; stewardship</li> </ul>	Short, Medium, Long	<ul style="list-style-type: none"> <li>• Potentially lower operating costs and risk exposure</li> <li>• Improved business prospects as global transition needs rise</li> <li>• Access to government incentives and subsidies</li> </ul>	<ul style="list-style-type: none"> <li>• Potentially lower operating costs and risk exposure</li> <li>• Improved reputation and competitiveness for sustainable investment mandates</li> </ul>
Physical Opportunities	<ul style="list-style-type: none"> <li>• <b>Investment Opportunities:</b> Companies offering climate resilience and adaptation solutions, or those with low/mitigated exposure to physical climate risks</li> <li>• <b>TCW Business Opportunities:</b> Business continuity planning (BCP), risk management</li> </ul>	Medium, Long	<ul style="list-style-type: none"> <li>• Potentially fewer weather-related disruptions and recovery costs</li> <li>• Improved business prospects as extreme weather events become more frequent and severe</li> </ul>	<ul style="list-style-type: none"> <li>• Potentially fewer weather-related disruptions and lower recovery costs</li> </ul>

# Risk Management

- **Disclose how the organization identifies, assesses and manages climate-related risks.**

As long-term global investors, we have deep experience in managing emerging risks and implementing risk management structures and oversight to protect our business and our clients' assets. At TCW, our ability to understand and anticipate the potential impact of shifting market and economic dynamics on investment performance strengthens our fundamental research, and, in turn, guides our evaluation of whether we will be adequately compensated for underlying risks. Our risk management structure is designed to integrate emerging risks and protect our people and infrastructure while carrying out our fiduciary duties to our clients.

## Risk Management Structure

TCW's risk management structure is a robust framework designed to effectively manage and mitigate risks that impact the organization. The structure is characterized by a blend of decentralized and centralized risk management approaches. The decentralized aspect involves subject-matter experts who are responsible for managing fundamental risks within their specific areas of expertise. These experts' risk management efforts are subsequently reviewed by independent groups within TCW or by external third parties to ensure thoroughness and objectivity.

At the heart of our centralized risk management is TCW's Enterprise Risk Management Committee, which includes TCW's Chief Operating Officer, General Counsel, Chief Financial Officer, and Chief Human Resources Officer. This committee is tasked with overseeing the decentralized risk functions and convenes quarterly, or as needed, to review risk factors relevant to every aspect of TCW's business, including investment risks, operational risks, product-related risks, human capital risks, and climate-related risks.

Our structure tasks employees within TCW to diligently follow established risk management processes such as risk identification, assessment, reporting, mitigation, and review, enabling the organization to build resilience against risks, including those associated with a changing climate. By continuously monitoring, testing, evaluating, and reassessing TCW's risk profile, the firm maintains a proactive stance in managing 250+ key business risks. The resolution of risks involves the implementation of mitigation strategies, which may include changes to policies and procedures, the imposition of controls, or other actions deemed necessary to address the identified risks. The effectiveness of these mitigation measures is then monitored and evaluated on a regular frequency to ensure that risks are being managed appropriately on a go-forward basis.

## TCW Steps to Risk Management

### 01 | Risk Identification

As a first step to our process, we identify the categories of potential risk that could impact our corporate objective.

### 02 | Risk Assessment

Once the risks have been identified, we assess the probability of each risk, and the severity of its consequences.

### 03 | Risk Reporting

We provide risk analysis and reporting to management and boards of directors, and review those risks to determine the most effective mitigation strategies.

### 04 | Risk Mitigation

We impose controls or take other actions to mitigate the identified risks.

### 05 | Risk Review

We monitor and evaluate the effectiveness of the risk mitigation measures implemented

## Our Operations

TCW mitigates the impact of climate-related risks on its financial and operational resilience and management actions through a comprehensive Business Continuity Plan (BCP). The BCP is designed to maintain critical business operations in the event of natural disasters or other situations that may impede the firm's ability to function normally. It includes system and data redundancy for critical business applications and quarterly tests focusing on scenarios that could prevent employees from accessing TCW offices or resources. TCW's BCP is overseen by the Business Continuity Committee, an executive steering committee, including representation from Operations, Engineering Solutions (IT), Security Driven Infrastructure, Legal, Compliance, Human Resource, and Client Services. Together they oversee the firm's Business Continuity Plan and its Emergency Preparedness Procedures. TCW uses an industry-leading, third-party risk management platform to maintain and evaluate the firm's departmental BCP plans and third-party vendor readiness. This proactive approach assists us in our efforts to stay ahead of the curve in terms of preparedness and resilience, ensuring that the firm can continue its critical business operations without disruption, even in the face of increasing climate extremes.

Climate-related risks are monitored and reviewed quarterly by the Enterprise Risk Management Committee, ensuring adaptation to new data and evolving market conditions. These processes inform TCW's financial planning, including capital allocation and resource prioritization.

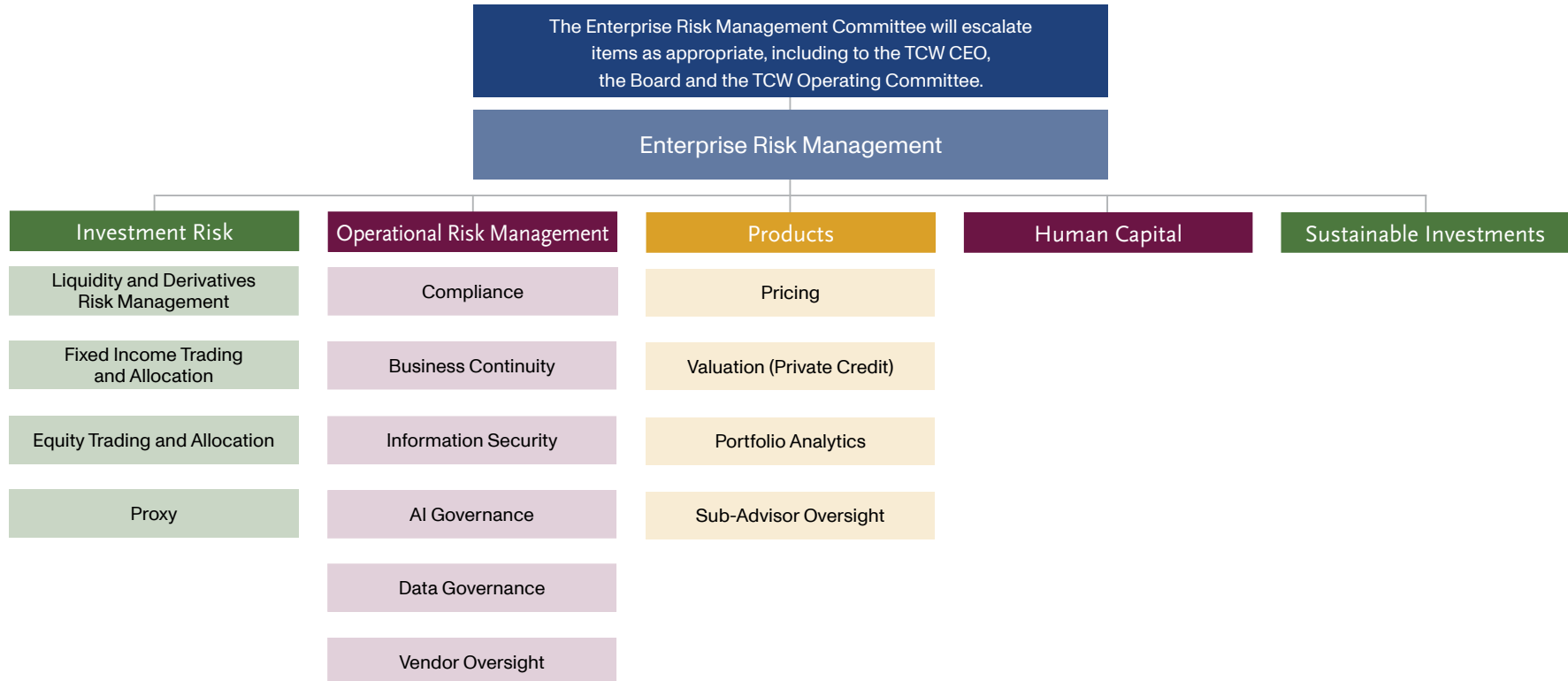
Additionally, TCW conducts thorough risk assessments and stays informed about emerging climate trends as important components of its strategy. The firm focuses on minimizing its operational environmental footprint and engages with suppliers to enhance the efficiency and robustness of its activities.

## Climate Risk Integration in Our Investments

As with all investment risks, material climate-related risks are managed across our portfolios through a comprehensive process that involves multiple functional teams, including investment research, Investment Risk and Quantitative Research (IRQR), Operations, and Compliance. TCW has taken steps to implement controls for managing climate risks, reinforcing our dedicated approach to integrating all material risks into our investment strategies. Recognizing the presence and potential impact of climate-related risks on investment performance, TCW has developed proprietary frameworks that are instrumental in the identification and assessment of climate-related impacts across different asset classes. As discussed in the Strategy section, these frameworks are tailored to capture the material climate risks pertinent to different investments, ensuring a thorough and comprehensive approach to risk management. By incorporating these frameworks into the investment research process, TCW has established a systematic method for evaluating and responding to emerging climate risks, which is further advanced using proprietary tools and comprehensive portfolio management portals.

In addition to our research and analytical tools, TCW employs an enhanced engagement strategy, which is instrumental to effectively understanding climate risks and their potential impact. The firm's investment teams, alongside the Cross-Asset Research & Sustainable Investment Group, engage in ongoing dialogues with companies and issuers to promote best practices in governance, transparency, and risk management. These engagements are aimed at influencing positive change and encouraging the adoption of strategies that mitigate risks. By implementing these controls and fostering a collaborative environment, TCW aims to manage these risks and identify opportunities in this evolving landscape.

## Risk Management Organization Chart: Committee Structure



## Managing Climate Risk in our Investments

This risk management regimen is core to TCW's risk management process across the organization and ensures that material risks are systematically managed across TCW's portfolios with a collaborative approach involving multiple teams and a focus on continuous improvement and adaptation to new information and market developments.

### 01 | Risk Identification

The investment teams and the Cross-Asset Research & Sustainable Investment Group act as the first line of defense, identifying material climate-related risks during the underwriting and due diligence process. This step involves the use of proprietary frameworks and rigorous bottom-up research to pinpoint potential climate risks that could impact investments.

### 02 | Risk Assessment

Cross-asset and sustainable investment analysts, in collaboration with fundamental research analysts across asset classes, conduct thorough due diligence. Supported by various tools, portfolio management portals, and reports utilized across the firm to ensure a comprehensive understanding of the risks, we actively review quantitative and qualitative information to assess the materiality and relevance of climate risks for each asset class.

### 03 | Risk Reporting

Identified and assessed climate risks are reported through established channels within the firm, involving multiple functional teams such as investment research, IRQR, Operations, and Compliance.

### 04 | Risk Mitigation

Engagement with companies and other issuers is a key strategy for mitigating climate-related risks. Portfolio managers, research analysts, and sustainable investment analysts collaborate closely in ongoing dialogues with companies and other issuers to influence and improve their practices in governance, transparency, and risk management. Mitigation actions include catastrophe insurance requirements for select asset classes, and engagement with issuers to improve governance and transparency.

### 05 | Risk Review

The process is iterative, with continuous review and adjustment of risk management strategies based on new information gathered through research or engagement with companies and issuers. The investment teams maintain effective internal controls over investments and risk oversight, regularly reviewing and updating their approaches to ensure that material climate risks are effectively managed and integrated into investment decisions.

## Consideration of Limitations

Identifying and understanding the potential impacts associated with climate risk is an evolving area for TCW. In our assessment, we acknowledge uncertainties and evolving risks that we can only capture based on data availability and the predictive power of current modelling and tools. Within our risk management approach, we focus on staying up to date on factors we believe may have a meaningful impact on our operation and our investments. From the increase in weather-related events to the evolving nature of climate technologies, we regularly monitor the global risk landscape to anticipate potential impacts on our organization and on broader financial markets. At TCW, we regularly monitor the global risk landscape to anticipate potential impacts on our organization and on broader financial markets. We are constantly reassessing and updating our risk assessment and potential adaptation strategies to ensure we are best positioned to protect our organization and our clients' assets.

# Metrics & Targets

- What metrics do you use to measure the potential financial impact of climate-related risks and opportunities?

Climate-related metrics are an instrumental part of our strategy and assessment as they provide a way to quantitatively assess and compare our environmental impact tied to carbon emissions and other climate-related risks. The metrics reflected in this section allow us to identify, measure and mitigate climate exposure, align with regulatory requirements, and meet client expectations regarding their portfolio's climate strategy. Developed in collaboration with our key data and research partners, our calculated metrics help us understand and manage our own climate impact, along with the exposure of our investments.

In the following section, we will use the terms “GHG Emissions” and “Carbon Emissions” interchangeably.

## Consistent and Comparable Metrics

For TCW's own corporate emissions, we rely on our partnership with Watershed, a third-party climate accounting platform, to calculate a bottom up emissions footprint. Inputs to this calculation include energy consumption, travel data, operating expenditures, and revenue along with associated emissions factors.

For the investments we make on behalf of our clients, our approach to calculating portfolio and security-level metrics relies on inputs from multiple sources including third party data providers, our own research, independently sourced publicly available information such as a company's annual reports, sustainability reports, climate reports, industry data/surveys and engagement with portfolio companies.

Data availability and quality continues to be a significant challenge, as data is often not publicly available, and there are limited disclosure practices from companies and other issuers. To overcome these shortcomings, we have built proprietary data infrastructure and methodologies to measure climate metrics through a consistent and best-efforts approach. Our data infrastructure allows us to scale and provide broad coverage of our investment universe, while also enabling us to adjust data to reflect updated information, gathered by investment research analysts, as it becomes available.

Due to the diversity of client objectives and mandates, TCW does not impose firm-wide climate-related targets. Instead, TCW manages client accounts in line with any unique climate-focused investment objectives and preferences. Additionally, TCW continues to take steps to measure and manage its operational carbon footprint and identify decarbonization opportunities.

## TCW Corporate Emissions

Following the standard set by the Greenhouse Gas Protocol, TCW measures and assesses our Scope 1, 2, and 3 emissions. This approach allows us to evaluate our climate impact across TCW's value chain, showing evidence that most of our emissions fall within Scope 3.

### Scope 1: Direct GHG emissions

This includes direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; and emissions from chemical production in owned or controlled process equipment.

### Scope 2: Electricity indirect GHG emissions

This includes GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.

### Scope 3: Other indirect GHG emissions

This includes GHG emissions that are a consequence of the activities of the company but occur from sources not owned or controlled by the company. Some examples of Scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services. Also, upstream emissions of products and services we purchase, plus downstream emissions from customers using our products. This includes business travel, waste, fuel and energy related activities, and purchased goods.

Source: World Resources Institute & World Business Council for Sustainable Development. (2004). The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition [PDF file]. Retrieved from this link.

## TCW Footprint Overview

Operational Metrics (as of December 31, 2025)

INDICATOR	VALUE	UNIT
<b>Total Emissions: Scope 1, 2, 3 (Category 6 - Business travel)</b>	<b>4,699</b>	<b>tCO<sub>2</sub>e</b>
Scope 1	194	tCO <sub>2</sub> e
Scope 2	330	tCO <sub>2</sub> e
Scope 3: Category 6 - Business travel*	4,175	tCO <sub>2</sub> e
Scope 3: Category 15 - Investments	See page 28	

*Note: TCW will continue to review its approach to carbon reporting in the future (particularly Scope 3 emissions), aiming to continually improve the accuracy of its disclosures. When these enhancements lead to a material change in a reported figure, TCW is committed to explaining the nature of the change, its reasoning for its appropriateness, and the variance compared to previous methodologies.*

*\*Scope 3: Category 6 - Business travel includes Flights, Accommodations & Ground transportation*

## Financed Emissions

Measuring the carbon emissions of our portfolio holdings is a critical first step to assessing portfolio transition risk exposure. The figures we report include total financed emissions of assets managed on behalf of TCW clients, where data is available. Data is sourced directly from companies, through sustainability reports or third-party providers, or estimated where data is not readily available. Specifically, our emissions and intensity analytics come from a combination of data providers, including MSCI, S&P TruCost, underlying company and issuer disclosures, or estimates that we have calculated in alignment with the Partnership for Carbon Accounting Financials’ framework using our own methodology, as is the case for securitized assets.

We have developed the capability to measure and report the carbon footprint of our investment portfolios, categorized as Scope 3, Category 15, under the Greenhouse Gas Protocol. We calculate various metrics to assess the carbon exposure associated with our portfolio holdings, such as absolute financed emissions (tCO2e), carbon footprint (tCO2e / \$million invested), and weighted average carbon intensity (tCO2e/\$million revenue). These metrics are sourced and produced by our Cross-Asset Research & Sustainable Investment Group and cover global public equity and debt and bank loans.

## Portfolio Emissions Metrics - Overview

This includes direct GHG emissions occur from sources that are owned or Different emissions calculations have distinct use cases. Absolute financed emissions represent the total portfolio GHG emissions of underlying investments prorated by the value of the investment relative to total enterprise value. Inherent in this measure is the assumption that an issuer’s emissions may be attributed to its investors. Though it can be used as a baseline for absolute emissions reductions, it does not provide for comparability across different funds sizes. Carbon footprints, in comparison, normalize absolute financed emissions per million dollars invested to enable asset allocators to compare different investment managers and funds of different sizes. Weighted Average Carbon Intensity (WACI) is most useful for comparing the relative carbon footprint of underlying investments. It represents a weighted measure of the emissions efficiency of the underlying investments in generating financial revenue and thus provides an ability to compare the relative dependence of an investment mix on emitting carbon.

**FORMULA**

---

<b>Absolute Financed Emissions</b>	$\sum_i \frac{\text{Outstanding Investment}_i}{\text{Total equity + debt or EVIC}_i} \times \text{Emissions}_i$
<b>Carbon Footprint</b>	$\sum_i \frac{\frac{\text{Outstanding Investment}_i}{\text{Total equity + debt or EVIC}_i} \times \text{Emissions}_i}{\text{Portfolio Market Value (\$m)}}$
<b>Weighted Average Carbon Intensity</b>	$\sum_i \frac{\text{Emissions}_i}{\text{Revenue}_i (\$m)} \times \text{Portfolio Weight}_i$

Source: PCAF

## 2025 Carbon Emissions: Corporate Debt, Public Equities, and Bank Loans

		Absolute Financed Emissions (tCO2e)	Carbon Footprint (tCo2e / \$million invested)	WACI
<b>Corporate Debt</b>	Scope 1 +2	4,753,397	138	407
	Scope 3	12,719,713	368	733
<b>Public Equities</b>	Scope 1+2	321,901	23	106
	Scope 3	2,482,001	178	669
<b>Bank Loans</b>	Scope 1+2	353,532	10	249
	Scope 3	2,012,118	45	401

Sources: TCW, MSCI, S&P TruCost

Portfolio Holdings as of December 31, 2025. Across the universe of public equity and debt, and bank loans, carbon footprint coverage is approximately 80%.

## Portfolio Carbon Metrics For Non-Corporate Asset Classes

### Securitized Products

At present, there is no market-standard methodology for calculating financed emissions for securitized products. However, in 2023 TCW developed a proprietary approach to calculate the Weighted Average Carbon Intensity (WACI) associated with securitized products, where applicable. Calculating WACI was an essential first step towards the broader goal of calculating financed emissions of our securitized investments and portfolios. TCW is now taking the lead on developing an approach to calculate financed emissions for securitized and structured products to help fill this knowledge gap. Earlier this year, TCW was selected to co-chair PCAF’s Securitizations and Structured Products Working Group where we are expanding the PCAF Standard to include calculations for financed emissions within this complex and unique asset class. It is our goal to produce a methodology for calculating financed emissions in securitized products that will be accepted by the structured finance industry and included in the next iteration of the PCAF Standard. We view this as an essential part of our broad effort to be a responsible steward of our clients’ capital by engaging across the ecosystem of the financial industry to improve disclosure and build new markets.

Below, we present sample reporting of weighted average carbon intensity for our Global Securitized Fund.

### Sample Securitized Metrics

#### MEASURING CARBON INTENSITY

##### Portfolio Metrics

- Portfolio Carbon Intensity
- Benchmark comparison
- Portfolio Optimization for select metrics

##### Fund Carbon Intensity Coverage of **70%**

30% of portfolio MV is ineligible due to lack of data or inapplicable collateral (such as student loans)

## Sample Portfolio WACI Emissions Report

TCW GLOBAL SECURITIZED FUND				
Securitized Asset Class	Emissions Intensity Factor	Portfolio WACI	Benchmark WACI	Benchmark
ACMBS/CMBS (Multifamily)	tCO <sub>2</sub> e/dwelling #	54.91	174.03	National Average
CMBS (Other)	tCO <sub>2</sub> e/m <sup>2</sup>	0.07	0.09	National Average
Agy MBS & NA RMBS (no TBAs)	tCO <sub>2</sub> e/dwelling #	6.41	7.40	BBG U.S. MBS Index
CLOs	tCO <sub>2</sub> e/M\$	207.11	256.71	US Brdly Syd Loan Index

# Case Study

## From Data Gap to Market Standard - Securitized and Structured Products

### 01 | The Challenge

Securitized and structured products, despite representing a ~\$13 trillion global market, were largely excluded from financed emissions reporting due to complex structures, diverse collateral, and the absence of an accepted methodology. This limited investors' ability to measure carbon exposure and assess transition risk across portfolios financing real-world assets such as real estate, transportation, and business lending.

### 02 | TCW's Approach

TCW identified this gap early as both a material risk management challenge and a structural limitation within existing climate accounting frameworks. Leveraging existing PCAF principles, TCW developed a pragmatic, asset-level approach to measuring carbon intensity across securitized products, emphasizing transparency, consistency, and decision-useful outputs. Early work introduced weighted average carbon intensity (WACI) measures to enable portfolio-level benchmarking while clearly disclosing data limitations and assumptions.

### 03 | From Proprietary Analysis to Industry Standard

Recognizing that long term credibility and comparability required the alignment and support of an industry accepted framework, TCW extended its work beyond internal use and engaged directly with PCAF. TCW was selected to co-chair the PCAF Securitized & Structured Products Working Group in March 2024 and led the multi-year development of the first market-wide methodology for financed emissions in this asset class, applying established emissions accounting principles to securitized products in a way that addressed their unique structural complexity, attribution channels, and data limitations.

### 04 | Outcome

The methodology was ultimately published as part of the PCAF Standard in December 2025, representing a significant step forward in closing a long-standing data gap and improving consistency and comparability in climate reporting for securitized credit.

Today, TCW remains actively involved in supporting the adoption and application of the methodology. Ongoing efforts focus on operationalizing the framework within internal investment and reporting processes, refining data inputs, and continuing engagement with issuers, data providers, and industry peers. Through this work, TCW has not only strengthened its own approach to assessing climate risk in securitized credit, but has played a central role in enabling the broader market to begin incorporating this historically under reported asset class into climate related metrics and analysis.

## Select Physical Climate Metrics

Accompanying our efforts to measure and assess our environmental impact and carbon exposure across various asset classes, we have also made meaningful progress on assessing our exposure to physical climate risk across our securitized holdings. Given the potential impact of direct damage to physical assets that serve as collateral, our securitized products underwriting requires a careful and detailed evaluation of the physical climate risks and the associated costs. To conduct this analysis, TCW's securitized investment team utilizes a variety of data and research. We have partnered with RisQ, a climate analytics platform for catastrophe modeling, systematically layering data into our climate physical risk assessment, particularly for the most vulnerable assets and assets outside of traditional FEMA flood zones. Additionally, the team will routinely evaluate climate risk and insurance policies in real estate by reviewing documents and engaging with borrowers/issuers.

### Managing Physical Risk

#### TCW Global Securitized Fund

ICE Climate Risk Score	1.28
Portfolio Climate Risk Classification	Low
Flood Risk Score	1.49
Wildfire Risk Score	0.81
Hurricane Risk Score	0.97

## Measuring Exposure To Climate-Related Opportunities

As discussed in the Strategy section, TCW uses a proprietary system to identify climate-related opportunities, including exposure to issuers that align with one of 12 sustainable or transition themes, as well as exposure to labeled securities with positive climate-related use of proceeds or other attributes.

### Total Firm Level Exposure to Climate-Related Opportunities

(as of December 31, 2025)

	Planet & Transition Themes	% Total Market Value
PLANET	Clean Energy	0.4%
	Sustainable Mobility	0.2%
	Circular Economy	0.2%
	Climate Change Adaptation and Risk Management	0.1%
	Biodiversity & Sustainable Land & Use	0.1%
	Sustainable Real Assets & Smart Cities	3.7%
	<b>Total Planet Themes</b>	<b>4.7%</b>
TRANSITION	Low-Carbon Energy	1.2%
	Pivoting Transportation	0.7%
	Materials in Transition	0.1%
	Carbon Accounting & Green Finance	1.9%
	Improving Agriculture & Forestry	0.0%
	Transitioning Real Assets & Infrastructure	0.3%
	<b>Total Transition Themes</b>	<b>4.1%</b>
LABELED BONDS	Green	1.4%
	Sustainability Bonds	0.4%
	Sustainability-Linked Bonds	0.2%
	Green/Sustainability-Linked Bonds	0.0%
	Sustainability Bonds/Sustainability-Linked Bonds	0.0%
	<b>Total Labeled Bonds</b>	<b>2.0%</b>
<b>Low Carbon Intensity CLOs</b>	<b>0.8%</b>	
	<b>Total Climate-Related Opportunities</b>	<b>11.6%</b>

## Our Effort to Improve Data and Increase Disclosures

TCW actively collaborates with data providers and companies to develop standards, enhance data quality, and improve disclosure around climate-related metrics. Our Cross-Asset Research & Sustainable Investment Group continuously engages with third-party data providers, and these interactions serve as a platform for TCW to provide feedback and to discuss methodological adjustments on research, data quality, and applicable real-world use of tools and data. Our collaborative approach extends to working with industry partners, clients, and regulatory bodies to refine and enhance the frameworks and methodologies that underpin sustainable investing. This commitment to

understanding and addressing market shortcomings is fundamental to our objective of delivering investment solutions that reflect the shared values and long-term interests of our clients and the broader community.

Through direct engagement we aim to encourage companies to adopt industry-leading practices that improve climate-related disclosures, recognizing that transparent reporting is essential for assessing climate risks and opportunities. By fostering open dialogue and sharing insights on best practices, we aim to drive meaningful change and encourage companies to disclose their climate strategies, risks, and progress in a manner that supports informed investment decisions and sustainable growth.



# Appendix

# TCW Calculation Methodology for Sovereign Emissions

## Emissions Boundary: Territorial vs. Government Approach

The territorial approach includes emissions from all activities within a sovereign’s borders, including private sector emissions. On the other hand, the government approach only considers public sector emissions in scope.

## TCW Perspective

We prefer to use the territorial approach in line with the majority of investors and the PCAF standard. Under this approach, Scope 1 represents all emissions from activities within a country’s borders; Scope 2 represents emissions from electricity or heat imported from abroad; and Scope 3 represents all non-energy imports resulting from activities taking place within a territory. This manner of delineating emissions boundaries corresponds to the GHG Protocol’s guidance for corporate and municipal emissions.

	PROS	CONS
Territorial Approach	<ul style="list-style-type: none"> <li>Recognizes the effect of policy decisions on private sector emissions</li> <li>Aligns with PCAF’s methodology for applying scope 1, 2, and 3 categories to sovereigns</li> </ul>	<ul style="list-style-type: none"> <li>Double counts corporate emissions</li> </ul>
Government Approach	<ul style="list-style-type: none"> <li>Avoids double counting private sector emissions by excluding them from sovereign emission calculations</li> <li>Understates sovereign emissions by ignoring the effects of policy</li> </ul>	<ul style="list-style-type: none"> <li>Inflates emissions footprints for sovereigns with many state-owned enterprises relative to those with few state-owned enterprise</li> </ul>

### Emissions Boundary: Production vs. Consumption Emissions

The production approach covers emissions associated with domestic economic activity, regardless of where the resulting product or service is consumed. Conversely, consumption emissions reflect demand for economic activity, regardless of where the economic activity occurs. It includes emissions consumed domestically as well as emissions associated with imports of goods or services irrespective of where they are produced.

### TCW Perspective

We use the production approach given data availability and quality. However, where possible, we incorporate the consumption approach as a supporting metric to account for both the supply and demand sides of sovereign emissions.

	PROS	CONS
Production Approach	<p>Better reflects a country's transition risk</p> <p>Data tends to be more accurate than consumption-based emissions data</p>	<p>Ignores ultimate responsibility for economic activity</p> <p>Facilitates carbon leakage, whereby higher emitting activities are outsourced to lower income countries</p>
Consumption Approach	<p>Better reflects the demand for and beneficiaries of emission - generating activities</p> <p>Addresses the ingrained income bias, whereby lower and middle-income countries are penalized due to lack of resources to advance sustainability objectives</p>	<p>Relies on consumption data that countries are not required to report</p> <p>Estimation is difficult</p>

**Emissions Boundary: Per Capita vs. GDP vs. GDP PPP**  
*(Gross Domestic Product Based On Purchasing Power Parity)*

Normalizing emissions calculations is critical to comparing entities of varying sizes. For sovereigns, as with corporates, different normalization metrics have different use cases depending on other methodological choices.

**TCW Perspective**

We prefer to use GDP PPP to normalize emissions to enable more accurate comparison between countries at different stages of development.

Given the complexities associated with calculating and reporting emissions associated with sovereign debt holdings and the lack of standardized methodology, we do not report a firm level calculation for this asset class. However, we provide financed sovereign emissions at the fund level for clients who request it.

**References**

Edwards, Charlotte & Ivy, Jordan. *Sovereign emissions: the next frontier*. Barclays Research. 2023.  
 PCAF (2022). *The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.*  
 Ribeiro, H.V., Rybski, D. & Kropp, J.P. *Effects of changing population or density on urban carbon dioxide emissions.*  
*Nat Commun* 10, 3204 (2019). Please refer to this [link](#).

	PROS	CONS
Per Capita Approach	Best for use with consumption emissions to facilitate demand-side calculations	Not reflected in dollar terms  Does not account for the effect of population density on per capita emissions
GDP Approach	Appropriate for use with production-based emissions  Complies with SFDR Article 8 and 9 reporting guidelines GDP PPP	Furtheres the ingrained income bias by penalizing countries with lower GDPs
GDP PPP Approach	Appropriate for use with production-based emissions  Adjusts for purchasing power parity, benefiting developing countries  Aligns with PCAF guidance	Excludes unpriced emissions-generating activities

## General Disclosure

This material is for general information purposes only and does not constitute an offer to sell, or a solicitation of an offer to buy, any security. TCW, its officers, directors, employees, or clients may have positions in securities or investments mentioned in this publication, which positions may change at any time, without notice. While the information and statistical data contained herein are based on sources believed to be reliable, we do not represent that it is accurate and should not be relied on as such or be the basis for an investment decision. The information contained herein may include preliminary information and/or "forward-looking statements." Due to numerous factors, actual events may differ substantially from those presented. TCW assumes no duty to update any forward-looking statements or opinions in this document. Any opinions expressed herein are current only as of the time made and are subject to change without notice. Past performance is no guarantee of future results. © 2026 TCW

## Sustainability Data Risks

TCW uses best efforts to collect data relevant to the indicators and data collated by third-party providers. In certain instances, data is estimated by TCW. Where TCW uses third-party data it does so relying on the due diligence of that provider but cannot guarantee the accuracy of third-party data. There are also limitations with respect to availability of sustainability data in certain sectors. For a number of the indicators there is wide variance amongst the data points provided by third-party data providers, as well as differences between third-party provided data and company disclosure. Additionally, company disclosures for a given indicator may vary in the calculation methodology limiting cross comparability. Market conditions affect certain ratios, calculation methodologies are evolving, and data availability is changing and investor understanding of sustainability risks may be subjective and evolving. Where sustainability data is not available, TCW may need to carry out estimations. In addition, there are many instances where TCW analysts disagree with third party research assessments. Further, TCW's evaluation of sustainability criteria based on this data is subjective and may change over time. Evaluation of data is subjective and may change due to market conditions, developments in methodologies, data coverage or as understanding of Sustainability Risks evolves.

## MSCI Data Disclosures

"This disclosure was developed using information from MSCI ESG Research LLC or its affiliates or information providers. Although The TCW Group Inc's information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "Data Parties"), obtain information (the "Information") from sources they consider reliable, none of the Data Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or re-disseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Further, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the Data Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages."