

# NAIC Climate Risk Survey Response

This report applies to The Guardian Life Insurance Company of America (Guardian) and its insurance subsidiaries, including The Guardian Insurance & Annuity Company, Inc. (GIAC) and Berkshire Life Insurance Company of America (Berkshire or BLICOA).

Note: Beginning in 2024, Guardian refers to ESG as Sustainability ("Sustainability"), which includes climate-related matters, and has integrated this important body of work into its Corporate Impact efforts. This 2023 report uses both terms—"ESG" and "Sustainability."

## Governance<sup>1</sup>

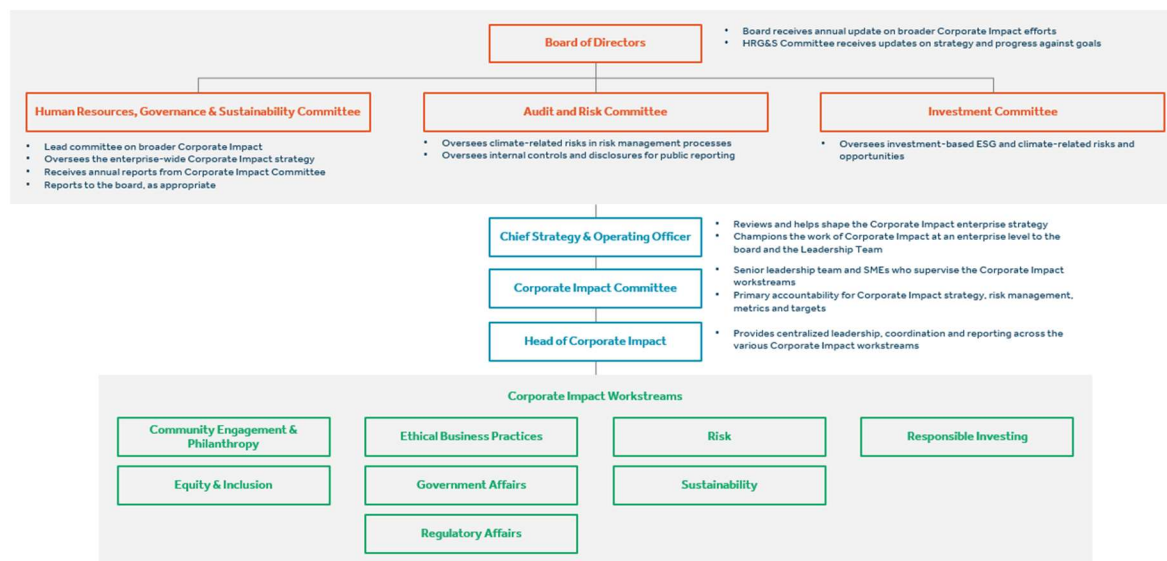
### a) Describe the board's oversight of climate-related risks and opportunities

Three Guardian Board Committees oversee various aspects of climate-related risk.

The Human Resources, Governance, and Sustainability Committee leads oversight of all Sustainability efforts and ensures that Sustainability strategy is aligned with Guardian's vision and values. This committee reviews the progress and challenges of various sustainability initiatives and provides updates<sup>1</sup> to the full Board.

- The Audit and Risk Committee has primary responsibility for oversight of climate risks including internal controls and disclosures for public reporting. This committee receives updates on developments related to policy compliance, regulatory guidance, and key physical and transition risks.
- The Investment Committee oversees how climate risk considerations are incorporated into Guardian's investment strategy.

### ESG Governance Structure



<sup>1</sup>Consistent with the evolution of our Sustainability Initiatives

## **b) Describe management's role in assessing and managing climate-related risks and opportunities**

Guardian's management assesses and manages climate-related risk within its enterprise risk management framework.

In 2021, when Guardian developed its ESG program, the company launched an executive-level ESG Council and conducted a materiality assessment to identify key areas of opportunity for Guardian to build on — and to lay a foundation to build out — an ESG structure and climate risk management program. Before 2021, Guardian's business areas were responsible for managing climate-related risks and opportunities within their respective areas.

In late 2023, Guardian initiated steps to optimize and streamline our separate approaches to ESG and Corporate Social Responsibility across the enterprise. The result is a new function known as Corporate Impact with a single member of Guardian's executive leadership team responsible for stewarding the work (the Chief Strategy and Operating Officer), eliminating duplicative efforts, driving better expense management, and providing a more efficient organizational structure.

Through this new Corporate Impact function, Guardian has developed one integrated, enterprise-wide strategy that bundles and elevates our many efforts to do good while creating value. The Corporate Impact team intentionally partners across workstreams to create an ecosystem that encourages community engagement and philanthropy, advances equity and inclusion, fosters sustainability, champions ethical business practices, and effectively integrates and manages climate-related risks.

We also simplified our Corporate Impact governance.

- The Head of Corporate Impact provides centralized leadership, coordination and reporting across the various Corporate Impact workstreams, which meet monthly or quarterly to share updates and to ensure alignment across our relevant efforts and activities.
- A Corporate Impact Committee, comprised of senior leaders and subject matter experts, supervise the Corporate Impact workstreams and together provide primary accountability for the integrated strategy, overall risk management, and progress towards metrics and targets.
- The Chief Strategy & Operating Officer reviews and helps shape the overall Corporate Impact strategy and champions the work at an enterprise level to the Guardian Board and to Guardian's Executive Leadership Team.
- Annual reports to the Guardian Board:
  - The Head of Corporate Impact provides annual reports to the Human Resources, Governance, and Sustainability Committee, which receives yearly updates on the broader corporate impact strategy and efforts.
  - The Chief Risk Officer provides annual reports to the Audit and Risk Committee on how Guardian integrates climate-related risk into our business risk framework; and
  - The Chief Investment Officer provides annual reports to the Investment Committee on how Guardian's incorporates risk factors related to sustainability into our investment decisions.

## Climate Risk Oversight

The governance structure in the diagram above reflects Guardian's belief that board-level oversight of climate-related risks serves the long-term interests of the company, its consumers, and other stakeholders.

Guardian's executive officers, including the CEO and the Guardian Leadership Team, share responsibility for oversight of climate-related risks, which are governed by Guardian's enterprise risk management committees, as reflected in the relevant components of Guardian's management-level Risk Committee structure shown below:



## Strategy

### a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

Guardian recognizes that climate change may present risks and opportunities to its business, policyholders, colleagues, and other stakeholders.

Guardian continues to identify several physical risks – event-driven (acute) or longer-term shifts in climate patterns (chronic) – and transition risks of climate. These impacts span business and functional areas, including operational areas such as business resiliency, people risk, third-party risk management, transaction processing, and regulatory compliance. Guardian has also identified potential impacts to real estate and facilities management, product underwriting, sourcing, and investment management processes.

Within investments, the company anticipates there will be opportunities associated with the transition to a low carbon economy, specifically in the form of investable funds and companies. As part of its larger asset allocation strategy, in the medium- to long-term, Guardian expects to identify the relevant asset classes and investment structures that allow involvement in this trend without giving up return. In the near term, Guardian has already made investments in renewable energy and continues to consider other ways to participate in the sustainable energy transition.

In 2022, Guardian established a sustainable procurement function. The company anticipates that sustainable procurement will present opportunities to strengthen climate-related risk mitigation

practices in its supply chain. In 2023, Guardian updated its Supplier Code of Conduct to include sustainability requirements. The company also analyzed its supply chain to identify material suppliers and product/service areas to develop sustainability criteria that will allow the design of a climate-resilient, lower-impact supply chain. In the short term, these criteria are used to evaluate new suppliers and to review select existing suppliers annually. In 2023, Guardian began to implement a new tool to enable capturing supply chain greenhouse gas emission data. Over the long term, Guardian expects to expand the program to cover a larger set of the company's suppliers.

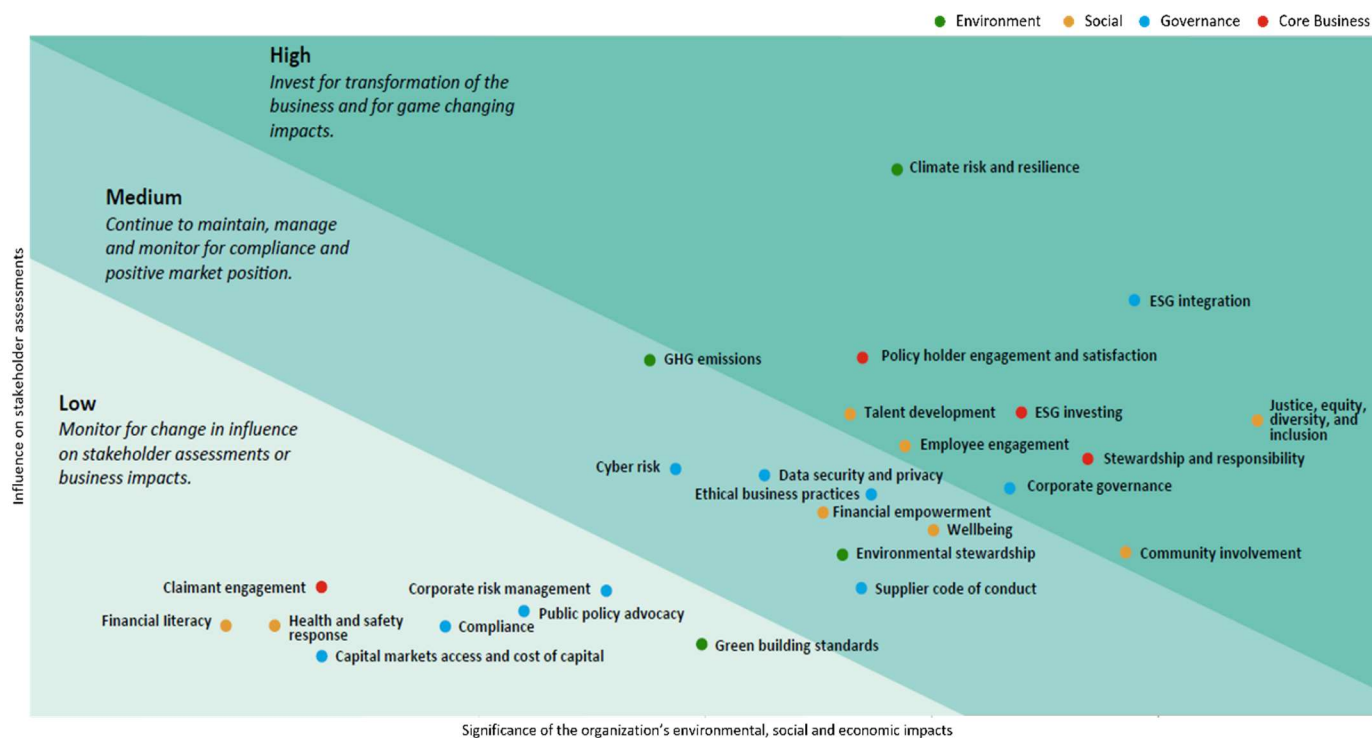
The chart below includes examples of climate-related impacts driving considerations for assessing risks and opportunities over the short, medium, and long term. The following list is not intended to be comprehensive, but it illustrates many of the significant areas of climate-related risks and opportunities for Guardian's business.

Identified Impacts	Risk Type	Real Estate and Facilities	Operational	Underwriting/ Product	Investment	Sourcing/ Procurement
Increased energy costs	Transition	X			X	X
Low-carbon technology market maturation	Transition	X			X	X
Policy changes incentivizing low-carbon technology	Transition		X		X	
Carbon taxation or similar regulation impacting carbon-intensive industries	Transition		X		X	X
Health impacts and premature fatalities due to climate-related risks	Physical		X	X		
Impacts to the health and well-being of employees and policyholders as a result of changing weather patterns	Physical	X	X	X		X
Business interruptions due to severe weather events	Physical	X	X			X
Increases in drought and pest infestation resulting in reduced air quality and disease susceptibility	Physical	X	X	X		
Milder winters may result in a major reduction in cold-related deaths and illnesses	Physical		X	X		
Harsher winters may result in a significant increase in cold and flu-related deaths and illnesses	Physical		X	X		
Health impacts from extreme heat waves	Physical		X	X		

**b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.**

To ascertain potential climate-related risks and opportunities facing the company, Guardian continuously reviews the potential impacts of climate-related risk on our policyholders, investment portfolio, and businesses. The company has engaged key stakeholders, including employees, industry associations, and suppliers, to help evaluate its climate-related risk and resilience. Guardian identifies opportunities to discuss sustainability matters across business and functional areas including education and training, to empower colleagues across the enterprise to identify and navigate risks in their areas of expertise.

In 2021, Guardian conducted an ESG materiality assessment, engaging stakeholders to gather insights on the most material ESG topics to our business. The company engaged a third-party consultant to collect input from internal and external stakeholders through interviews, surveys, and focus groups. These stakeholders included rating agencies, regulators, industry associations, employees, customers, and Guardian leadership. The materiality assessment identified climate risk and resilience, ESG integration, and ESG investing as high priority areas for Guardian. We intend to begin updating our materiality assessment in the 4th quarter of 2024.



**Sourcing and Procurement:**

In 2023, a group of Guardian's suppliers was assessed on their ESG risk performance to enable Guardian to develop insights into the materiality of the supply chain on sustainability. Guardian is a member of the Sustainable Purchasing Leadership Council and participates in meetings with other members to collaborate on programs to develop and share best practices for sustainable procurement.

**Real Estate and Facilities Management:**

Extreme weather events, specifically in highly concentrated regions, pose the highest risk to Guardian's real estate and facilities footprint. Guardian has a well-developed resiliency program to mitigate these risks and has partnered with industry-leaders to integrate mass notification systems, threat/risk intelligence analysis, and severe weather forecasting into its business processes.

**Underwriting/Product Risk:**

As an insurance company offering primarily life, disability, and dental insurance, Guardian is not as significantly exposed to physical climate risks as, for instance, property and casualty insurance companies. However, climate change may have tangible impacts on the health of our policyholders, and the company continues to evaluate this risk accordingly. Insurance risk assessments include ongoing mortality and morbidity reviews, scenario analysis and related drivers/factors, which may be directly or indirectly related to climate risk.

**Operational Risk:**

Climate risk is incorporated into ongoing operational risk assessments as an overlay to existing risk categories, as it can be a driver of risk across multiple categories. Examples include physical impacts of climate as a driver of business interruption, people risk, third-party and transaction execution risks. Transition risk impacts of climate change have also been built into the operational risk taxonomy as potentially driving regulatory, compliance, and legal risk.

**Investments:**

Through the investment and portfolio management processes, Guardian considers a wide range of risk factors, including climate risk. To that end, Guardian hired a Head of Investments ESG Strategy and Integration in 2022 to lead responsible investing efforts. The investments team is considering material climate criteria as part of its investment decision-making process, with the goal of maintaining the right balance between financial returns and responsible investment. Initially, a third-party investment-focused consultant conducted a portfolio-level scenario analysis for Guardian in 2022 to inform Guardian of its exposure to transition and physical climate-related risks within its corporate bond portfolio. Since then, Guardian has been building its own climate analytics capability and starting to implement processes to regularly assess both its portfolio carbon footprint and scenario analysis results. It is anticipated that investment portfolio climate updates, based on those assessments, will be provided to the Financial Risk Management Committee on a regular cadence.

To augment our understanding of market developments, the Head of Investments ESG Strategy and Integration founded a group of around twenty peer life insurance companies in the US and Canada to regularly convene and learn from one another and from experts in the field of ESG integration. Groups like the Geneva Association, United Nations Environment Programme Financial Initiative (UNEP FI) and others have presented to the group, answered questions and engaged in discussion on developments in relevant areas.

### **Employee Engagement:**

To engage our employees on climate-related issues, the company's "Green Guardians" program (environmental sustainability employee groups) partners with organizations to educate and engage employees regarding the impact of human activity on the environment through Earth Month campaigns, webinars, and community volunteerism throughout the year.

### **c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario**

Guardian is evaluating its exposure to future potential climate-related impacts, including analyses of physical and transition risks to the company's operations and investments. The results of these analyses will inform Guardian's future overall strategy – including policies and actions – to continue to build resiliency to potential climate impacts. The "Risk Management" section of this report details some of the resiliency measures currently in place.

In 2023 and 2024, Guardian performed its second and third annual scenario analysis on its corporate bond portfolio as of the end of 2022 and 2023 respectively using a third-party vendor tool, quantifying financial climate value-at-risk (climate VaR) and opportunities related to climate change. The corporate bond portfolio included in this analysis represents approximately 40% of Guardian's total portfolio holdings by market value.

Guardian's scenario analysis considers both physical and transition risks. To analyze transition risk, the analysis consisted of five climate scenarios aligned with the Network for Greening the Financial System (NGFS): 1.5°C Orderly, 1.5°C Disorderly, 2°C Orderly, 2°C Disorderly, and 3°C Hot House World. To analyze physical risks, the analysis used two scenarios: average and aggressive.

Each of these scenarios includes plausible assumptions about the future state of the world across multiple economic, environmental, and social variables, such as population, GDP, electricity generation, GHG (greenhouse gas) emissions, carbon sequestration rates, and global temperatures. Each scenario model incorporates projections for these variables considering long-term time horizons, with some variables projected out to the year 2100. The results of this analysis are expressed in this report as a 'heat map', representing the present value of the aggregated future costs of climate-related risks and profits from technology opportunities, expressed according to the below key. The models used are updated regularly from a methodology and data perspective which impacts outcomes. This highlights the evolving nature of the tools available and the limitations that scenario analysis poses in influencing investment decisions.





This analysis assumes no active portfolio management over the time horizon assessed. It offers foresight to vulnerabilities from transition and physical risks based on a snapshot of a dynamic portfolio.

### Transition Risk

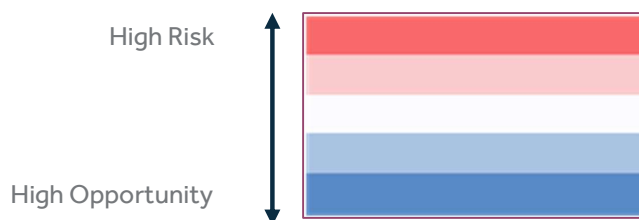
Scenario	Value at Risk
1.5°C Disorderly	
1.5°C Orderly	
2°C Disorderly	
2°C Orderly	
3°C Hot House World	

Among the climate scenarios evaluated, the 1.5°C Disorderly scenario represents the highest potential transition risk, followed by the 1.5°C Orderly scenario. This is to be expected, as Disorderly scenarios project policies that are delayed or divergent across countries and sectors, leading to a more drastic response to mitigate temperature rise. Orderly scenarios represent less financial risk, as climate policies in these scenarios will be rolled out promptly. The 3°C Hot House scenario represents low levels of policy action by governments leading to the lowest transition risk; however, this scenario will pose the highest physical risks as the climate warms to unprecedented levels.

Value at Risk by Transition Risk Type					
Risk Type	1.5°C Disorderly	1.5°C Orderly	2°C Disorderly	2°C Orderly	3°C Hot House
Direct Emissions Policies					
Indirect Emissions Policies					
Value Chain Emissions Policies					
Technology Opportunities*					

\*Note that the blue color is used here to represent positive values associated with technology opportunities, differentiating from negative values associated with risk.





The major risk drivers are direct (Scope 1) emissions reduction policies, followed by value chain (Scope 3) and indirect emissions (Scope 2) policies. This result is due to portfolio holdings with high Scope 1 emissions, such as those in the energy or utilities industries, being the most susceptible to transition risks.

As governments implement policies to halt or slow the increase of global temperatures, new opportunities will become available, such as low-carbon products and the transition to renewable energy alternatives. In these scenarios, businesses Guardian invests in that make this transition will see competitive advantages and mitigate associated transition risks.

Value at Risk by GICS Sector					
GICS Sector	1.5°C Disorderly*	1.5°C Orderly	2° C Disorderly	2°C Orderly	3°C Degrees Hot House
Energy					
Utilities					
Materials					
Consumer Staples					
Financials					
Consumer Discretionary					
Industrials					
Communication Services					
Information Technology					
Health Care					
Real Estate					

The results of the analysis of portfolio transition risk have been summarized at the sector level (Global Industry Classification Standard (GICS) classification) to highlight where transition risks will be most apparent by scenario. The industries representing the highest overall transition risk are energy and utilities. These results are to be expected as carbon-intensive industries will be most affected by climate policies and other transition risks. Results are relative and may vary over time based on model and data updates.

## Physical Risk

Overall Scenario Analysis Risk Results		
Scenario Type	Scenario	Value at Risk
Transition	1.5°C Disorderly	
Transition	1.5°C Orderly	
Transition	2°C Disorderly	
Transition	2°C Orderly	
Transition	3°C Hot House World	

Overall Scenario Analysis Risk Results		
Scenario Type	Scenario	Value at Risk
Physical	Average Physical Risk	
Physical	Aggressive Physical Risk	

The above tables show the relative risk associated with both average and aggressive physical risk scenarios relative to the five transition risk scenarios discussed above. The climate VaR from the aggressive scenario is approximately 1.4 times greater than the average scenario. The financial risks associated with the physical impacts of climate change alone are low relative to transition risks. However, it is important to note that these risks will not materialize in isolation, physical risks are likely to be greater in scenarios with higher global temperatures (closer to an aggressive physical risk scenario).

	Physical Risk Scenario	
GICS classification	Average	Aggressive
Consumer Staples		
Industrials		
Financials		
Utilities		
Energy		
Health Care		
Communication Services		
Consumer Discretionary		
Information Technology		
Materials		
Real Estate		

Physical risks have been evaluated at the industry level to gain insight into the industries most exposed to physical hazards. Industries with significant physical infrastructure footprints are the most susceptible to physical risks.

## Conclusion

This scenario analysis exercise provides Guardian an initial assessment of our investment portfolio's climate-related risks and opportunities. Guardian intends to conduct further scenario analyses on other asset classes, moving from qualitative to quantitative assessments, depending on data and tool availability.

## Risk Management

As reflected throughout this report, Guardian takes a holistic approach to managing climate risk that considers both current and forward-looking risks and identifies actions required to manage those risks proportionate to the nature of the risk and the potential scale and impact on Guardian's business, policyholders, colleagues, and other stakeholders. Guardian is building capabilities across functional areas to embed climate change considerations into existing functions, including Real Estate and Facilities Management, Third-Party Risk Management, Sourcing, and Investment Management. Guardian also recognizes that climate-related risks cut across the Enterprise Risk Management (ERM) framework including a wide range of operational, underwriting, and investment risks. The responses below illustrate the process Guardian has utilized to identify and assess potential impacts of climate change, evaluate current mitigants and actions, and integrate climate risk into the overall ERM framework and Risk Committee structure. Guardian has also established an annual process to analyze climate risks across risk areas and incorporate as applicable into risk assessments and scenario analysis to ensure mitigants and action plans evolve as needed as the evolution of climate change continues. The company expects these efforts to continue to mature as data availability improves.

**a) Describe the organization's processes for identifying and assessing climate-related risks**

**b) Describe the organization's processes for managing climate-related risks**

The section below provides a combined response to risk management questions a and b.

As federal and state policymakers work to mitigate risks related to climate change, Guardian tracks existing and emerging regulatory requirements and determines how those requirements may impact Guardian's businesses and functional areas. The company also engages state regulators – directly and through industry groups – to understand evolving guidance and its potential impact to Guardian.

### **Real Estate and Facilities Management:**

Guardian recognizes that climate change risks are increasing due to continued changes in weather patterns. An increased frequency of severe weather events may, therefore, present risks to the company's real estate and facilities. Guardian Corporate Security Operations monitors our office and employee locations for business continuity.

Guardian considers and manages real estate and facilities-related risks based on the scale of the financial, social, and environmental effects, potential consequences of those risks, likelihood and frequency of the occurrence, as well as mitigating controls that can be implemented to reduce potential impacts. For example, Guardian's operations are concentrated in the northeastern United States and India; a severe weather event in these regions could result in property damage, injury, loss of life, and/or significant business interruption. To mitigate this risk, among others, Guardian continuously strives to create a culture of resiliency. The company maintains documented operational responses for critical events and can transition to remote work when needed.

To address and respond to acute physical risks impacting operations, Guardian has identified industry-leading partners to incorporate their expertise in mass notification systems, threat/risk intelligence analysis, and severe weather forecasting platforms. The company subscribes to services that provide actionable information and data regarding potential disruptive events, including severe weather, that have the potential to impact colleagues, facilities, and/or business operations. The company assesses the intelligence provided by these partners to evaluate the necessity/benefit of notifying colleagues about potentially impactful events through a mass notification system or as needed, targeted communication for specific events/colleagues. This advanced assessment of threats enables Guardian to prepare in advance and mitigate, to the extent possible, potential disruptive hazards. This preparedness strategy has allowed Guardian to both keep colleagues safe and provide continuous and uninterrupted service to consumers.

### **GHG Emission Reduction Efforts:**

Guardian is focused on opportunities to reduce GHG emissions and has estimated its Scope 1 and 2 GHG emissions since 2019. Starting in 2022, this effort was expanded to include an estimate of Scope 3 Category 15 (investments) emissions for the 2021 – 2023 calendar years. Also, Guardian estimated emissions for other Scope 3 Category 1 value chain emissions sources. Building on Guardian's prior successful emissions reduction projects in 2023, Guardian began implementation of a new platform to enable better GHG data management to bring the systems and tools up to date with the latest standards.

### **Sourcing and Procurement:**

Guardian's sustainable procurement initiative works to create long-term environmental, social, and economic benefits for all stakeholders across our business operations and supply chain, the environment, and society. In 2022, Guardian updated its Supplier Code of Conduct to include Sustainability requirements to enhance supplier governance. Additionally, in 2023 analysis was performed to identify material Scope 3 categories. Guardian expects to develop sustainable procurement criteria across business operations over the medium term to address high impact opportunities within Category 1 (Purchase Goods and Services) and Category 6 (Business Travel). Additional sourcing and procurement projects are ongoing. For instance, Guardian performed a Sustainability assessment of select suppliers that may further identify opportunities to mitigate climate risk and increase Third-Party Risk Management sustainable practices within the company's supplier base, and in 2023 the company began implementation of a third-party solution that may enable increasing the scope and number of suppliers assessed in the long term.

### **Operational Risk:**

Climate risk impacts have also been incorporated into the annual business and functional area operational risk assessments. Scenario analysis on business resiliency and climate risk, focused on Guardian India operations and third-party Philippines operations was conducted, and incorporated into the 2023 operational risk scenarios for Economic Capital Modeling. This analysis will continue to be refined and mitigants will be evaluated over time, as this risk and the impact of unknown events is expected to accelerate.

The operational risk taxonomy includes climate as a driver of risk across several operational risk categories:

Operational Risk	
Risk Category	Climate Risk Considerations
Business Interruption	Failure of firm to plan for and adapt workplace to changing climate
Conduct, Ethics and Sales Practices	Mis-selling of green products; Mis-advice to clients on green portfolio selection Improper market practices connected with divesting of carbon or brown assets
People	Failure of firm to plan for and adapt workplace/internal policy to changing climate
Premises and Physical Security	Damage to firm's premises due to storm made more severe by climate change Failure of firm to plan for and adapt workplace to changing climate
Third Party	Failure of Third Party to adapt policy to changing climate requirements Damage to third party's premises, systems, assets due to storm made more severe by climate change
Transaction Processing and Execution	Critical staff are unable to reach workplace due to climate change related weather/events

The assessment of climate risk as part of Guardian's annual operational risk assessment process determined that the residual risk impact was low to moderate after considering mitigants in place or planned. However, as the risk and impact of unknown events is expected to accelerate, the company is focusing additional attention on geographical concentration risks for business-critical processes and the third parties critical to those processes. As a result, risk management efforts include scenario analysis work focused on stress test impacts of accelerating climate risks and an India-wide go dark tabletop assessment to identify potential additional mitigants that may be needed. The assessment also drove development of a roadmap to prioritize actions to enhance resiliency, such as the establishment of a backup location for third-party dependencies in Philippines and a further evaluation of potential concentration risks with other third parties in locations at risk of increased climate impacts. As part of business resiliency planning, the company tests the status of business continuity plans for key business processes and measures and manages metrics associated with those risks to the extent they relate to global climate risk trends through a variety of sources (e.g., <https://coastal.climatecentral.org/>).

Guardian's Third-Party Risk Management (TPRM) program addresses climate risk through due diligence control reviews, including analysis of vendors' Business Continuity/Disaster Recovery (BC/DR) plans and tests, country risk, as well as active monitoring of critical third-party locations. The assessment validates third-party service providers have documented and tested contingency plans to ensure continuity of operations, reducing potential impacts of climate-related threats that could impair the provision of required services. This is complemented with documented internal contingency plans for critical third parties operating in high climate risk locations. Our program also leverages external tools to actively monitor critical suppliers for environmental behaviors. In addition to control reviews and monitoring, Guardian also performs concentration risk analysis to evaluate exposure to potential amplified climate-related hazards that could disrupt critical third-

party services. Leveraging external sources (e.g., University of Notre Dame Global Adaptation Data, ND-GAIN, FEMA (Federal Emergency Management Agency) US Natural Hazards, etc.) to identify potential climate-related threats, we then create geographic heat maps of our third-party locations. These heat maps help us to identify the “most likely” event types (e.g., Hurricane/Typhoon/Monsoon, Wildfires, Winter Storms, Earthquakes, Tornadoes, Mudslides, flooding, etc.) and enable us to proactively work with business partners and third parties to ensure contingency plans are available and/or in place to maintain required service levels during active events. To strengthen these partnership and plans, we conduct deep-dive reviews of country/regional failover capabilities for critical third parties supporting Guardian from high climate risk locations to understand site specific failover capabilities.

### **Underwriting/Product Risk:**

To identify and assess our climate-related underwriting risks, Guardian conducted an initial climate risk assessment in 2022. Guardian reviewed, with the support of an external advisory firm, the product, industry, and geographic diversification of our in-force business, as well as current mitigants, such as the ability to re-price group products and to reinsure group and individual products. The company also considered the industries in which policyholders work to evaluate potential climate-related impacts; both physical and transition risks were assessed for the industries in which policyholders are most concentrated. Leveraging the FEMA National Risk Index, the company identified California and Florida as two of the highest exposure states for acute physical risk potential related to Life and Disability products. In addition to the targeted review in 2022, ordinary course insurance/underwriting/product risk assessments include ongoing mortality and morbidity reviews and regular evaluation of related drivers/factors, which may be directly or indirectly related to climate risk. Risk exposure over the long term requires ongoing analysis and evaluation because of the uncertainty of potential climate impacts and overall climate risk.

In 2023, Guardian conducted a quantitative assessment leveraging external studies<sup>2</sup> to generate stress scenarios on mortality and morbidity. The scenarios applied increases over current mortality and morbidity levels ramping up to a 4.5% incremental increase from current levels over 50 years, and an extreme scenario of 13%. Both scenario impacts were within risk tolerance and materiality threshold of 5% Surplus or 0.5% total assets. We plan to continue to refine stress scenarios as research on climate risk health impacts continues to evolve.

### **Investments:**

The investments team engaged a third party to conduct a scenario analysis of Guardian’s investment portfolio in 2022 to better understand its exposure to climate-related risks. In 2023 and 2024, Guardian conducted the analysis itself which confirmed a very similar set of industries and assets most exposed to climate-related risks, both transition and physical, as well as potential opportunities in our investment portfolios. The analysis identified the financial risks to our investment portfolio across five plausible climate scenarios. More details regarding Guardian’s investment scenario analysis can be found in the Strategy section.

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<sup>2</sup>Sources include “The Effects of Heat Exposure on Human Mortality Throughout the United States” published by AGU (Advancing Earth and Space Sciences); “The risk of a lifetime: mapping the impact of climate change on life and health risks”, published by Swiss Re Institute; and “Climate’s Effects on Human Health”, published by the Society of Actuaries.

**c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.**

Guardian maintains an enterprise-wide risk management approach that assesses a variety of environmental threats, including climate change. This approach enables the company to continually increase the sophistication of in-house capital measurement models, strategy, and practices. Functional areas within Guardian conduct risk assessments on an ongoing basis. Climate-related issues, as applicable, are included. As risks are identified as material in particular functional areas, those risks can be escalated through the risk reporting structure outlined in the Governance section above.

Guardian continues to manage to our Climate Risk Policy, which provides a framework for identification and mitigation of climate-related financial and operational risks as part of Guardian's commitment to proactively manage the impact of climate-related risks across all business areas. The policy establishes a climate-related risk management framework under the overall Enterprise Risk Management (ERM) framework to enable systematic and proactive identification, assessment, measurement, monitoring, mitigation, and reporting of climate-related risks. The Policy aligns with Guardian's overall risk appetite and was approved by the Corporate Risk Management Committee. The Chief Risk Officer reviews this policy at least annually and presents any material modifications to the Corporate Risk Management Committee.

As described above and referenced specifically in the Governance section of this report, climate risk oversight is also embedded within relevant Guardian Risk Committees, including the Corporate Risk Management Committee (CRMC). The Operational Risk Management Committee (ORMC) is responsible for ensuring that the identification and mitigation of climate risk impacts on operational risks are assessed and effectively incorporated into the Operational Risk Management (ORM) framework. ORMC also oversees climate risk impacts on product/underwriting, engaging the Insurance Risk Management Committee (IRMC) as needed should materiality of impact require pricing actions. The Financial Risk Management Committee (FRMC) has responsibility for evaluation of investment, credit, liquidity, and market impacts of climate. Additionally, CRMC would oversee any climate-related responsible investing pledges and/or exclusions that may become incorporated into Guardian's investment portfolio management.



## Metrics and Targets

### **a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.**

In addition to the various analyses described above, Guardian has developed a core set of metrics for assessing climate-related risks and opportunities that are most material to our business. Work conducted and described in this report will help guide Guardian's process to track core metrics. For instance, Guardian has assessed Scope 1 and 2 GHG emissions since 2019 and, with the help of external consultants, validated its GHG inventory based on GHG Protocol/ISO 14064. In 2023, Guardian began to transition to a new GHG data management platform and expanded to include assessment of Scope 3 – Category 1 Purchased Goods and Services emissions.

To manage and reduce GHG emissions, Guardian practices sustainable office decommissioning and on average diverts 95 percent of waste from landfills. Guardian's Managed Print Program has continuously focused on reduction of enterprise-wide paper usage resulting in a 35% decrease in consumption in 2023 from the prior year.

Guardian began conducting Scope 3 emissions inventory in 2021 (based on a partial inventory of Guardian's investments) which provides a useful foundation for identifying key metrics and attendant pathways to reduce financed emissions over time. To quantify the results of climate-related scenario analysis performed on the investment portfolio, Guardian utilized the climate value-at-risk metric. The climate value-at-risk metric uses a fully quantitative model to offer insights as to how specific climate scenarios may affect company and industry valuation. Validation of the climate value-at-risk results is in progress as it pertains to Guardian's primarily fixed-income portfolio, along with other economic or risk mitigating factors such as corporate transition plans, site specific mitigants, insurance offset, etc.

In 2023, Guardian developed a climate risk dashboard, incorporating measures on Guardian's Investment portfolio transition and physical risk, underwriting mortality/morbidity risk, physical climate risk impacts on business operations/delivery of services, third-party dependencies, and GHG emissions management/sustainability. The dashboard facilitates assessing and measuring climate risk.

### **b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.**

#### **2023 emissions:**

Guardian GHG Emissions Inventory – Scopes 1 and 2	
Scope	t CO <sub>2</sub> e
Scope 1 Emissions	914
Scope 2 Emissions	6,674

In 2022, an initial effort was made to estimate Scope 3 Category 15 (investments) emissions for the 2021 calendar year, based on a partial inventory of Guardian's investments. In 2023, we migrated from the use of consultants to calculating our own partial Scope 3 Category 15 (investments) emissions. We plan to continue to monitor methodological developments and assess third-party tools and data that might enhance our ability to measure and report on Scope 3 Category 15 (investments) emissions across additional asset classes in the future.

**c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets**

Guardian currently does not have set targets regarding its management of climate-related risks and opportunities; however, as described above, the company has begun to track and measure in a range of areas that may provide context for target-setting in the future. Guardian will continue to assess the feasibility of a GHG reduction target across all scopes.