

TCFD Report for NAIC Climate Survey Response

November 2022

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).

Governance

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

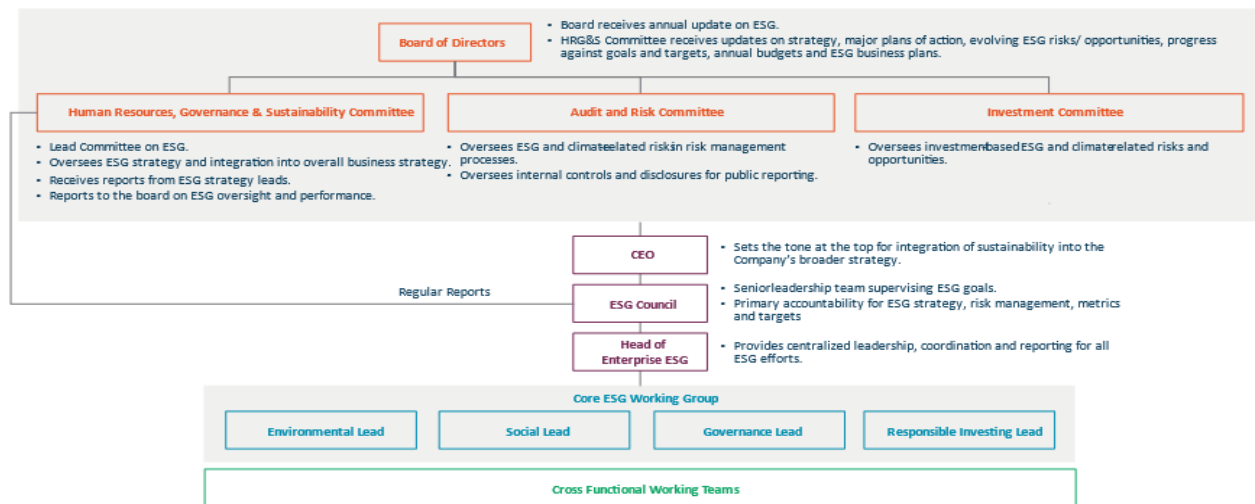
Beginning in 2022, three Guardian Board Committees oversee various aspects of climate-related risk. This structure is the result of a 2021 benchmarking assessment Guardian conducted to inform the development of its ESG program structure.

- Key responsibility for oversight on climate risks lies in the Audit and Risk Committee. This committee oversees the management of climate-related risks in risk management processes as well as oversight on applicable and relevant internal controls and disclosures for public reporting. This committee receives reports on developments related to policy compliance, regulatory guidance, and key physical and transition risks.
- The Human Resources, Governance, and Sustainability Committee is the lead committee for ESG, broadly speaking, overseeing ESG strategy and integration across overall business strategies. This committee receives reports from various ESG strategy leads and reports to the Board quarterly on ESG oversight and performance.
- The Investment Committee has purview over the integration of ESG in investment decision-making, as well as climate-related risks and opportunities as they relate to our portfolio investments. As the responsible investing program develops, this committee will receive regular climate analytics reporting.

Guardian's ESG management teams are currently coordinating a deeper benchmarking process designed to set specific metrics for the Board's review.

See our [2021 Annual Report, page 34](#) for more details on our governance structure.

ESG Governance Structure:



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

Guardian management assesses and manages climate-related risk within its robust enterprise risk management framework. Since 2021, the company has also developed an ESG program structure that supplements that broader framework with targeted focus on climate-related risks and opportunities as well as other ESG-related matters.

Specifically, 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 capacities. Prior to 2021, Guardian business areas had assumed responsibility for managing climate-related risks and opportunities within their respective areas. For instance, Guardian built its first LEED Gold office building in 2015, and has since occupied two additional LEED offices.

In 2022, Guardian implemented a formal reporting structure to manage ESG matters, including climate-related matters, throughout the organization. Multiple key positions and groups are responsible for various aspects of ESG oversight. Most notably:

- The ESG Council, which includes Guardian's Chief Information and Operations Officer, Chief Human Resources Officer, Chief Legal Officer, and Chief Investments Officer, has primary accountability for ESG strategy, risk management, metrics, and target-setting. Additional attendees of ESG Council meetings include the Chief Risk Officer, Chief Financial Officer, and Corporate Secretary. The ESG Council's directives are passed on to the broader Guardian Leadership Team. The ESG Council reports to the CEO and to the Human Resources, Governance, and Sustainability Committee of the Guardian Board.
- The CEO and Guardian Leadership Team play a critical role coordinating the integration of ESG topics into Guardian's broader business strategy.

- The Head of Enterprise ESG oversees company-wide ESG efforts, coordinates ESG integration through cross-functional ESG Working Groups, and coordinates communication of ESG-related information, such as climate-related risks and opportunities, across the enterprise.

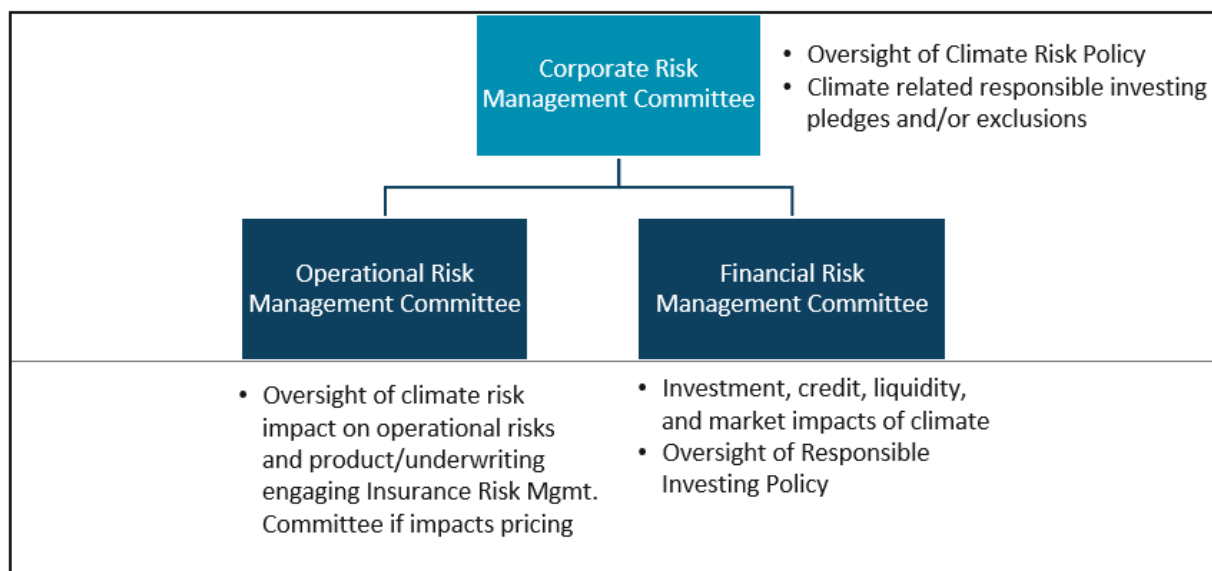
Guardian has four core ESG Working Groups: Environment, Social, Governance, and Responsible Investing. Each of these Groups has a designated lead, reporting to the Head of Enterprise ESG, with distinct responsibilities covering each group's respective subject matter. The Environment Lead manages Guardian's corporate sustainability practice, working closely with Guardian's Enterprise Risk Management team, Sustainable Procurement Lead, and Responsible Investing Lead on enterprise climate-related risks and opportunities. The Social and Governance Leads work with a variety of teams across multiple corporate functions, including for instance Human Resources and the Office of the Corporate Secretary, to integrate ESG considerations into Guardian's ongoing operations. The Responsible Investing Lead is responsible for incorporating ESG criteria into Guardian's investment strategy.

Guardian's enterprise risk management committees also consider aspects of climate-related risks that fall within their purview. For instance, the Corporate Risk Management Committee approves and oversees Guardian's Climate Risk Policy and would be responsible for oversight of any future climate-related responsible investing pledges.

Climate Risk Oversight

The ESG Governance structure in the diagram above reflects Guardian's belief that both board-level and management oversight of climate-related risks serves the long-term interests of the company, its consumers, and other stakeholders. Guardian leadership, including the Board, the CEO, and the Guardian Leadership team, share responsibility for management of climate-related risks.

Climate risk oversight responsibilities held by Guardian's enterprise risk management committees are reflected in the management-level Risk Committee structure 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 has identified several physical risks – event-driven (acute) or longer-term shifts in climate patterns (chronic) – and transition risks of climate change as we transition to a lower carbon economy. These impacts span business and functional areas, including operational areas such as business resiliency, people risk, third party risk management, transaction processing, and regulatory oversight. 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. This year, Guardian updated its Supplier Code of Conduct to include ESG requirements. The company is analyzing its supply chain to identify material suppliers and product/services areas to develop sustainability criteria that will allow the design of a climate-resilient, lower-impact supply chain. In the short term, these criteria will be used to evaluate new suppliers and to review select existing suppliers annually. Over the long term, Guardian expects to expand the program to cover a larger set of the company's suppliers.

The below chart includes examples of climate-related impacts driving 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.

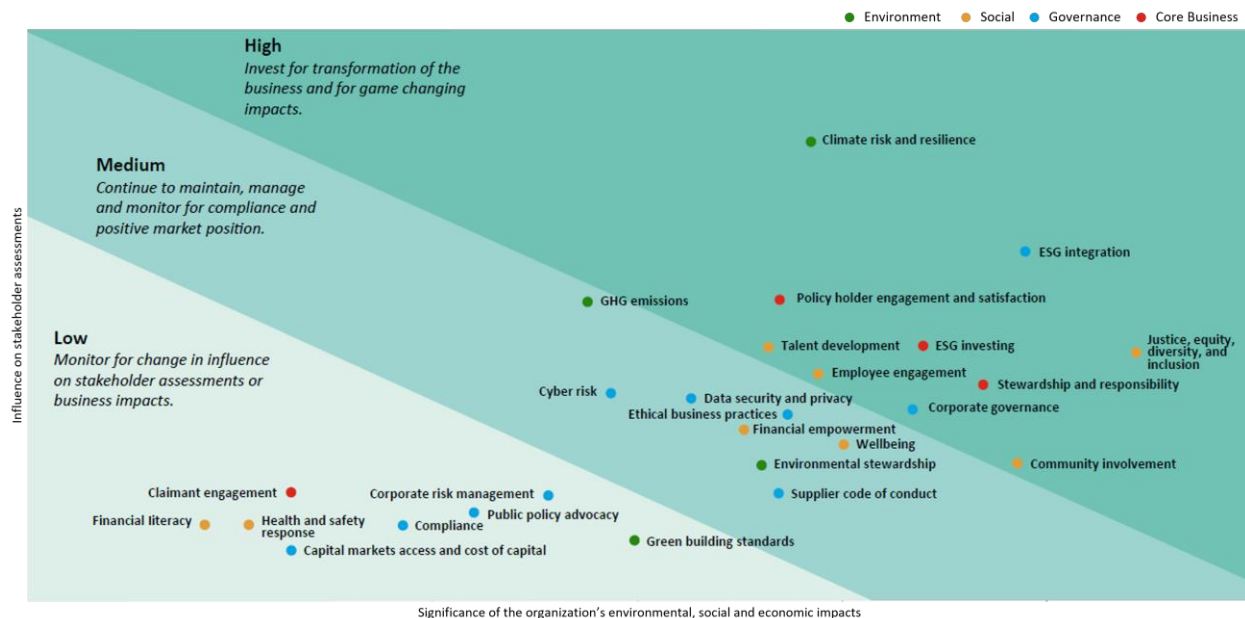
Identified Impacts	Risk Type	Real Estate and Facilities	Operational	Underwriting /Product	Investment	Sourcing/ Procurement
Increased energy costs	Transition	X			X	X
Low-carbon technology market maturation	Transition	X			X	X
Policy changes incentivizing low-carbon technology	Transition		X		X	
Carbon taxation or similar regulation impacting carbon-intensive industries	Transition		X		X	
Health impacts and premature fatalities due to climate-related risks	Physical			X		
Impacts to the health and well-being of employees and policyholders as a result of changing weather patterns	Physical	X	X	X		X
Increased pressure on water resources resulting in shortages of drinking water and poor-quality drinking water	Physical		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		
Milder winters may result in a major reduction in cold-related deaths and illnesses	Physical			X		
Harsher winters may result in a significant increase in cold and flu-related deaths and illnesses	Physical			X		
Health impacts from extreme heat waves	Physical			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 to understand the overall impact of climate change on the Company. The company has engaged key stakeholders, including employees, industry associations, and suppliers, to

help evaluate its climate-related risk and resilience. Discussion of ESG matters is embedded into Guardian's culture across business areas through education and training opportunities, empowering colleagues across the enterprise to identify and navigate risks and opportunities in their areas of expertise. Additionally, full-time ESG roles have been filled in priority areas including communications, investments, and procurement.

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 in order to identify and understand key material topics. These stakeholders included rating agencies, regulators, industry associations, employees, customers, and Guardian leadership. Climate risk and resilience, ESG integration, and ESG investing were all identified as high priority areas in our materiality matrix.



Sourcing and Procurement:

In 2021, Guardian hired a Head of Supplier Diversity & Sustainable Procurement to lead the integration of supply chain diversity and sustainable procurement consideration across the enterprise. A select set of the supplier base is being assessed for alignment to ESG goals. The results of the assessment will be used to create a program to monitor and assist suppliers in meeting the company's new ESG requirements. Guardian recently joined the Sustainable Purchasing Leadership Council which advocates for the development of programs to standardize sustainable purchasing efforts. The Sustainable Procurement program also collaborates with several industry organizations that focus on sustainable business development opportunities in underrepresented business communities.

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 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 and related drivers/factors, which may be directly or indirectly related to climate risk.

Operational Risk:

Climate risk is incorporated into annual 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 in the process of incorporating material ESG criteria into investment decision-making, with the goal to maintain the right balance between financial returns and responsible investments. 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. Guardian plans to build a climate analytics capability and to implement processes to regularly assess both its portfolio carbon footprint and scenario analysis results.

To date, Guardian has made \$350 million in private debt investments in renewable energy projects – including solar, wind, and hydroelectric power generation. Among those investments have been tax equity investments in several Lightsource bp solar farms that provide 100% of the electricity they generate to Penn State University.

Guardian's investment team participates in a range of organizations and associations at an industry level (e.g., ACLI) as well as at an asset class level (e.g., Institutional Limited Partners Association (ILPA), Mortgage Bankers Association (MBA), and the Private Placement Investors Association (PPIA)), most of which have ESG-focused efforts that Guardian supports. In addition, Guardian leverages these groups' ESG-related work as the company continues to strengthen its own integration of ESG factors, including climate-related factors, into investment processes.

Employee Engagement:

To engage our employees on climate-related issues, in 2021, Guardian partnered with EarthShare, an environmental nonprofit organization, to educate and engage employees in the United States, India, and Canada on the impact of human activity on the environment through an Earth Month campaign. Leveraging technology, the smartphone app-based sustainability campaign challenged employees to track their "green" behaviors to better understand the impact of their daily decisions on water saved, waste diverted, and carbon dioxide kept out of the atmosphere. In addition, in 2022, Guardian hired an ESG Communications Lead to partner with the Head of Enterprise ESG to educate and engage employees across the company on the ESG program.

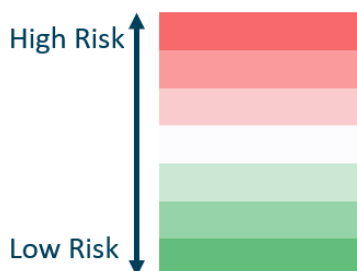
c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

Guardian is in the process of 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 2022, Guardian performed scenario analysis on its corporate bond portfolio using a third-party vendor tool, quantifying financial climate value-at-risk (climate VaR) and opportunities related to climate change. Specifically, the analysis focused on the company’s corporate bond portfolio based on a Scope 3 inventory finding that this asset class accounts for 99% of all quantifiable investment-related emissions. 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 utilized 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 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.



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. With active portfolio management, the risks presented in this analysis may be mitigated as they develop.

Transition Risk

Overall Portfolio Transition Risk Results	
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 2°C Disorderly 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 significantly less financial risk, as climate policies in these scenarios will be rolled out in a timely manner. 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 for all scenarios 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 transportation 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 Industry					
GICS Category	1.5°C Disorderly	1.5°C Orderly	2° C Disorderly	2°C Orderly	3°C Degrees Hot House
Energy					
Transportation					
Utilities					
Materials					
Food, Beverage & Tobacco					
Food & Staples Retailing					
Commercial & Professional Services					
Automobiles & Components					
Telecommunication Services					
Capital Goods					

The results of the analysis of portfolio transition risk have been summarized at the industry level (GICS classification) to highlight where transition risks will be most apparent by scenario. The industries representing the highest overall transition risk are energy, transportation, and utilities. These results are to be expected as carbon-intensive industries will be most affected by climate policies and other transition risks.

Physical Risk

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

The above table shows 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 five times greater than the average scenario. The financial risks associated with the physical impacts of climate change alone are low relative to transition risks from disorderly transition scenarios. 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).

Value at Risk by Physical Risk Type		
Risk Type	Average	Aggressive
Extreme Cold		
Extreme Heat		
Precipitation		
Extreme Snowfall		
Extreme Wind		
Coastal Flooding		
Fluvial Flooding		
Tropical Cyclones		
River Low Flow		
Wildfire		

The greatest physical risks to our portfolio companies come from extreme heat, coastal flooding, and tropical cyclones. The analysis has identified the most exposed companies to these risks, as well as the facilities most exposed to these hazards.

GICS Category	Physical risk Scenario	
	Average	Aggressive
Utilities		
Telecommunication Services		
Energy		
Food, Beverage & Tobacco		
Food & Staples Retailing		
Insurance		
Banks		
Transportation		
Health Care Equipment & Services		
Capital Goods		

Physical risks have been evaluated at the industry level to gain insight into the industries most exposed to physical hazards. Unsurprisingly, industries with significant physical infrastructure footprints are the most susceptible to physical risks. Utilities, telecommunication services, and energy are the three industries with the highest risk exposure. Compared to transition risk, the telecommunication services industry has significantly higher physical risks while the energy and utilities industries are among the most exposed industries to both physical and transition risk.

Conclusion

This scenario analysis exercise provides Guardian a baseline 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, based on data availability. In addition, as climate risk modeling techniques continue to develop, the company intends to conduct analyses on combined physical and transition risks, rather than evaluating these risk types separately.

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, employees, and communities. Guardian is building capabilities across functional areas to embed climate change considerations into existing functions, including Real Estate and Facilities 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 below responses 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

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 concerns are increasing with continued changes in weather patterns resulting in increased frequency of severe weather events that may present risks to the company's real estate and facilities. In 2019, Guardian conducted a physical risk assessment across our North American office locations for risk categories including: Earthquake; Hurricane; Tornado; Wildfire; Flood; Airports; Rail; Nuclear; Hazmat. Through this assessment, which the company uses to inform its resilience planning, Guardian has rated our offices based on their risks aligned to these categories and identified those of high risk within each category.

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 heavily concentrated in the northeastern United States and California; 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 is able to 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. 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. In 2022, this effort was expanded to include an estimate of Scope 3 Category 15 (investments) emissions for the 2021 calendar year. Also, Guardian estimated emissions for other value chain emissions sources. Building on Guardian's prior successful emissions reductions projects, these baselines will allow the company to track the impact of emissions reduction initiatives over time.

Guardian's 2021 Annual Report at pages 30-31 also includes detailed information regarding the company's GHG emission reduction efforts.

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 ESG requirements to enhance supplier governance. Additionally, 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 is performing an ESG assessment of select suppliers that may further identify opportunities to mitigate climate risk and increase sustainable practices within the company's supplier base, and the company is evaluating options to implement a third-party solution that may enable increasing the scope and number of suppliers assessed in the long term.

Operational Risk:

In 2021, a cross-functional team assessed climate impacts on the operational risk profile of several of Guardian's business areas, including Individual Markets, Operations, India, and Enterprise Shared Services and the Primary focus was on physical risks

A scenario analysis on business resiliency and climate risk impacts, focused on our India operations, was conducted and incorporated into the 2022 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.

To incorporate climate risk impacts into operational risk assessments, issues management, and event management on an ongoing basis, the operational risk taxonomy has been updated to include climate as a driver of risk across several operational risk categories:

Operational Risk	
Risk Category	Climate risk considerations
Business Interruption	Damage to firm's premises due to storm made more severe by climate change Failure of data center due to extreme heat Failure of utility power grid to cope with climate change, leading to failure. 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	Failure of firm to plan for and adapt workplace to changing climate
Regulatory and Compliance	Failure of firm to plan for and adapt policy 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 climate risk assessment Guardian undertook focused on operations supporting our Group and Individual Markets businesses and determined that the current impact on residual risk 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.

Guardian's Third-Party Risk Management process addresses climate risk through due diligence control assessments, including analysis of vendors' business continuity/disaster recovery plans and tests, as well as active monitoring of their critical locations of operations. The control assessments validate that critical third parties have formally documented and tested contingency plans to ensure continuity of operations, reducing the potential impacts of climate-related threats that could impair the provision of required services to Guardian. The company actively monitors third-party concentration risk to evaluate potential climate-related hazards that could disrupt critical third-party services. This process includes creation of geographic heat maps of third parties that are compared against [US Natural Hazards](#) and [Worldwide Natural Hazards](#) to identify potential climate-related threats. These heat maps help Guardian

identify the “most likely” event types (e.g., Hurricane/Typhoon/Monsoon, Wildfires, Winter Storms, Earthquakes, Tornadoes, Mudslides, flooding, etc.) and helps Guardian prioritize proactive 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.

Underwriting/Product Risk:

To identify and assess our climate-related underwriting risks, Guardian conducted a climate risk assessment in 2022. Guardian reviewed 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. Risk exposure over the long-term requires ongoing analysis and evaluation because of the uncertainty of potential climate impacts and overall climate risk. 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.

Investments:

The investments team has engaged with a third party to conduct a scenario analysis of Guardian’s investment portfolio to better understand its exposure to climate-related risks. This analysis has revealed the 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 business across five plausible climate scenarios. More details regarding Guardians investment scenario analysis can be found in the Strategy section.

In addition to a climate risk-specific assessment through scenario analysis, the investments team is developing capabilities to conduct portfolio assessment using a wider range of ESG criteria. Development of an ESG investments policy is also underway to guide portfolio assessment activities.

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.

In 2022, Guardian developed a Climate Risk Policy that 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 reviewed by the ESG Council and approved by the Corporate Risk Management Committee. The Chief Risk Officer and ESG Council plan to review this policy at least annually and present 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 risks impacts on operational risks are assessed and effectively incorporated into the ORM framework. ORMC will also oversee 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 is in the process of developing a core set of metrics for assessing climate-related risks and opportunities that are most material to our business. Work already 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.

To manage and reduce GHG emissions, sustainable office decommissioning was initiated in 2022, diverting about 90 percent of waste from landfills. Through paper use reduction efforts in 2021, approximately 6,684 trees, 5.6 million gallons of water, and more than 600,000 pounds of carbon have been saved. Guardian has also undergone a transition to a hybrid workplace model, an effort that began in 2018 and accelerated in 2021, with 4,429 colleagues transitioning to remote work. This transition has reduced GHG emissions by 1,614 metrics tons and saved more than 1 million gallons of gasoline per calendar year.

The Scope 3 emissions inventory Guardian conducted for the 2021 calendar year (based on a partial inventory of Guardian's investments) will provide 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, developed by Carbon Delta. 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 work 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. The company is also assessing third-party data vendors that provide quantitative metrics including ESG ratings and projections to determine whether those data sources and metrics can be useful considerations for Guardian's ongoing analysis. The company intends

to vet specific metrics to identify and leverage those that accurately reflect the economic risks born by both transition and physical risks.

In 2022, as noted above, Guardian is beginning to align around core metrics related to climate risk, including tracking various measures that may form the basis for developing targets. For example, in the underwriting/product area, the company is tracking the percentage of new and in-force business in higher climate risk states (e.g., California and Florida). As noted above, existing metrics like mortality and morbidity trends are monitored as part of regular actuarial and product reviews and may be useful metrics for assessing and measuring climate risk as information evolves. In the area of operational risk, 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/>).

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

2021 emissions:

Guardian GHG Emissions Inventory – Scopes 1 and 2	
Scope	t CO ₂ e
Scope 1 Emissions	609
Scope 2 Emissions	7446

In 2022, an effort was made to estimate of Scope 3 Category 15 (investments) emissions for the 2021 calendar year, and we plan to improve on those efforts in 2023 with additional data covering more asset classes.

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.