

NAIC # 38970

Company Name: Markel Insurance Company

Group #: 0785

Line of Business: Property & Casualty

Group Filing: N

Closed ended questions directly correspond to the narrative, allowing for explanation and qualification of the yes/no answers.

Closed ended questions are voluntary for reporting year 2023.

Governance – narrative

1. Disclose the insurer's governance around climate-related risks and opportunities.

In disclosing the insurer's governance around climate-related risks and opportunities insurers should consider including the following:

- Identify and include any publicly stated goals on climate-related risks and opportunities.
- Describe where climate-related disclosure is handled within the insurer's structure, e.g., at a group level, entity level, or a combination. If handled at the group level, describe what activities are undertaken at the company level.

A. Describe the board and/or committee responsible for the oversight of climate-related risks and opportunities.

In describing the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks, insurers should consider including the following:

- Describe the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks.

B. Describe management's role in assessing and managing climate-related risks and opportunities.

Markel's approach to risk governance and accountability on the issue of climate change is comprehensive, with responsibility distributed throughout the organization at appropriate levels of management.

Markel's leadership approach is a "forever and right now" mindset that informs day-to-day decision-making throughout the company, and reinforces our long-term commitment to the development, sustainability, and governance of Markel as one of the world's great companies.

With this long-term framework in mind, the Markel Executive team is at the center of setting Markel's strategic direction and determining its risk tolerance, always mindful of its responsibility to build value for our stakeholders.

Under the leadership of the Executive team's guidance, management has taken steps to identify and anticipate climate-related risks to Markel, including quantifying risks related to climate change and our underwriting decisions related to this issue. These steps take place within the enterprise risk management (ERM) structure established by Markel.

The Risk Management Committee (RMC) is the senior management-level committee that oversees Markel's enterprise risk management (ERM) and determines risk tolerances. In the area of climate change, the RMC is specifically tasked with monitoring how the company should strategically approach the emerging transitional and physical risks and opportunities associated with climate change, as well as the potential impact of climate change on Markel's underwriting portfolio. Individual product line owners report to the Risk Management Committee on an annual basis; this regular reporting cycle allows Markel to adjust product offerings and pricing to more comprehensively reflect risks in our insurance portfolios.

Supporting the ERM work of the RMC is the Insurance Emerging Risks Committee (IERC), which meets quarterly. The IERC continuously scans the horizon for emerging risks and new product possibilities associated with climate change. Climate change risks are taken into consideration in specific portfolios, such as construction as an example, that may be more susceptible to third-party lawsuits arising out of extreme weather-related events related to climate change. In this context, the IERC reviews physical, transition and liability risks related to climate change.

Markel has established the Climate Change Leadership Team, which reports to the RMC and supports it in climate-related areas. The Climate Change Leadership Team comprises Risk Owners from the company's Property, Casualty, Professional and Cyber product lines.

To help fulfill its mission, the Climate Change Leadership Team developed a climate change underwriting strategy; compiled property, transition and liability scenarios; and explored the potential impact on Markel. It shared this strategy with the Risk Management Committee, which approved the implementation of underwriting initiatives for Markel products impacted by climate change. Having adopted this guidance, Markel can continuously:

- Enhance underwriting actions to manage the impacts of climate change;
- Modify product growth when appropriate; and
- Initiate product-specific underwriting strategies, including risk selection.

These foundational underwriting benchmarks provide the flexibility required to innovate and respond to emerging risks and opportunities.

Governance – closed ended questions answered in addition to the narrative

- Does the insurer have publicly stated goals on climate-related risks and opportunities?
(Y/N) N
- Does your board have a member, members, a committee, or committees responsible for the oversight of managing the climate-related financial risk? (Y/N) Y

- Y • Does management have a role in assessing climate-related risks and opportunities? (Y/N)
- Y • Does management have a role in managing climate-related risks and opportunities? (Y/N)

Strategy – narrative

2. Disclose the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy, and financial planning where such information is material.

In disclosing the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy and financial planning, insurers should consider including the following:

- Describe the steps the insurer has taken to engage key constituencies on the topic of climate risk and resiliency.*ⁱ
 - Describe the insurer's plan to assess, reduce, or mitigate its greenhouse gas emissions in its operations or organizations.*
- A. Describe the climate-related risks and opportunities the insurer has identified over the short, medium, and long term.*

In describing the climate-related risks and opportunities the insurer has identified over the short, medium, and longer term, insurers should consider including the following:

- Define short, medium, and long-term, if different than 1-5years as short term, 5-10years as medium term, and 10-30years as long term.

B. Describe the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning.

In describing the climate-related risks and opportunities the insurer has identified over the short, medium, and longer term, insurers should consider including the following:

- Discuss if and how the insurer provides products or services to support the transition to a low carbon economy or helps customers adapt to climate-related risk.
- Discuss if and how the insurer makes investments to support the transition to a low carbon economy.

C. Describe the resilience of the insurer's strategy, taking into consideration different climate-related scenarios, including a 2 degree Celsius or lower scenario.

Establishing a strategic approach to measuring, monitoring and managing risk throughout our operations, while also adjusting our underwriting approaches to minimize climate-related financial impact, is integral to Market's ongoing success. Equally important is recognizing opportunities presented by the changing environment.

The Prudential Regulation Authority (PRA), a financial services regulatory body associated with the Bank of England, recommended to organizations a series of time horizons as the basis for considering how climate change might affect assets and infrastructure. The TCFD adopted those

recommendations, as did Markel, to enumerate short-term, medium-term and long-term business implications as the global environment changes.

As Markel considers climate risks and opportunities across this range of time horizons, it looks at a range of considerations; specific types of climate risks (both transition and physical); and specific types of climate opportunities.

Markel considers climate risks and opportunities across a range of time horizons. Based on these time horizons, executive leaders from Markel product and underwriting teams have been tasked with developing scenarios to assess exposure, with utilization of internal and external resources to validate those findings. Scenario-building plays a critical role in forecasting how climate-related issues may manifest themselves. Markel utilizes internal and external resources to model situations that may impact the organization's portfolios.

Short-term Strategic Activity

Short-term scenario feedback and trendspotting are of particular significance for Markel's Property and Marine insurance products. Because of the short-tail, or relatively brief, duration of the claims process, we can adjust our exposures annually based on modeling data and projections.

For Markel's Casualty and Professional lines, the short-term impact of climate change has evidenced itself within the industry as an uptick in third-party liability lawsuits, most noticeably against numerous oil and gas insureds.

Property. Climate-specific model views and transition scenarios were initiated with Markel's Property and Marine products exposed to North American hurricanes, and included modeling for increased hurricane frequency, intensity and sea-level rise based on developed scenarios that is refreshed quarterly.

Professional Lines and Casualty. For our third-party products, the climate change analysis is focused on developed scenarios for specific industry verticals, considering direct legal action risks, indirect risks and transition risks.

Medium-term and Long-term Strategic Activity

Casualty and Professional Lines typically have a longer-tail duration for claims settlement, meaning that policies we write today will potentially be liable for claims several years from now. During this time, the legal and social environment surrounding climate issues may have altered significantly.

As a result of current policies and regulatory guidelines, medium-term financial impacts for Casualty may include third-party liability climate change lawsuits against classes of insureds, such as automobile manufacturers and construction products manufacturers. Among the other medium-term financial impacts for Casualty are third-party construction defect lawsuits related to projects degraded by extreme weather during the Products-Completed Operations period, or "PCO tail."

Going forward, based on analyses of scenarios that identify possible climate-related risks and opportunities, Markel actively seeks to address various aspects of the broader portfolio, including:

- 1) Outward reinsurance purchases: Physical risk impacts from climate change and how they affect Markel's need for reinsurance purchases.;
- 2) Occupancy risk selection: Assessment of risks that are prone to the impact of climate change, e.g., for specific types of properties.;
- 3) Peak zone capital deployment: Markel's deployment of capital in locations such as Florida, Houston, Louisiana and others based on the effects of climate change and whether returns are commensurate with investments.;
- 4) Product development: Potential investment in opportunities including renewables and in innovative solutions, such as revenue protection, that help clients hedge against the impacts of climate change.;
- 5) Portfolio optimization: Identification of risks in geographic locations more prone to exposure to the impacts of climate change, and rebalancing of portfolios into locations less prone to such exposure.

The changing environment requires that organizations not only identify risks, but also be agile enough to seize opportunities. Woven into our corporate DNA, as reflected in the company's timeless culture, the Markel Style, is the constant ambition to find a better way to conduct business. For our customers, shareholders, employees, and communities, this translates to having the innovation mindset required to generate the products and services that are needed now. For more than a decade, we have maintained a renewable energy portfolio of business in our Markel International division, and we also support businesses that mitigate the financial exposures arising from increasing weather and climate volatility. These products are routinely enhanced, as appropriate, based on emerging opportunities. A number of our product lines, including Commercial Directors & Officers and Casualty, insure green and/or sustainable risks, such as solar installations. In addition, Markel is expanding or modifying existing products to meet customers' forecasted risks.

In 2018, Markel acquired Nephila, the pre-eminent insurance-linked securities (ILS) manager. Nephila focuses on the convergence of catastrophe reinsurance and weather risk transfer markets with capital markets. Nephila Climate, its dedicated weather and climate risk transfer and ESG-driven division, offers weather derivative products in partnership with Markel Specialty and Markel International. In addition, Nephila Climate has partnered with Demex, a climate risk focused insurtech start-up, to offer weather risk capacity that backs the financial products that Demex creates for its climate clients. Markel has also partnered with New Energy Risk to provide business performance reinsurance and fronting services supporting the development of fuel cell and other renewable energy technologies.

In the sphere of community activity, Nephila Climate's leadership is also engaged with CERES, a nonprofit organization transforming the economy to build a just and sustainable future for people and the planet. This type of engagement is indicative of Markel's forward-looking interest in collaborating with nonprofit and financial partners to promote solutions for climate-related problems through capital allocation and investment decisions.

Strategy - closed ended questions answered in addition to the narrative

- Has the insurer taken steps to engage key constituencies on the topic of climate risk and resiliency? (Y/N) * Y
- Does the insurer provide products or services to support the transition to a low carbon economy or help customers adapt to climate risk? (Y/N) Y
- Does the insurer make investments to support the transition to a low carbon economy? (Y/N) N
- Does the insurer have a plan to assess, reduce or mitigate its greenhouse gas emissions in its operations or organizations? (Y/N)* Y

Risk Management – narrative

3. Disclose how the insurer identifies, assesses, and manages climate-related risks.

In disclosing how the insurer identifies, assesses, and manages climate-related risks, insurers should consider including the following:

- Describe how the insurer considers the impact of climate related risks on its underwriting portfolio, and how the company is managing its underwriting exposure with respect to physical, transition and liability risk.*
- Describe any steps the insurer has taken to encourage policyholders to manage their potential physical and transition climate related risks, if applicable.*
- Describe how the insurer has considered the impact of climate-related risks on its investment portfolio, including what investment classes have been considered.*

A. Describe the insurers' processes for identifying and assessing climate-related risks.

In describing the insurers' processes for identifying and assessing climate-related risks, insurers should consider including the following:

- Discuss whether the process includes an assessment of financial implications and how frequently the process is completed.*

B. Describe the insurer's processes for managing climate-related risks.

C. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management.

In describing how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management, insurers should consider including the following:

- Discuss whether climate-related risks are addressed through the insurer's general enterprise-risk management process or a separate process and how frequently the process is completed.
- Discuss the climate scenarios utilized by the insurer to analyze its underwriting risks, including which risk factors the scenarios consider, what types of scenarios are used, and what timeframes are considered.

- Discuss the climate scenarios utilized by the insurer to analyze risks on its investments, including which risk factors are utilized, what types of scenarios are used, and what timeframes are considered.

Underwriting, Pricing and Mitigation of Climate-related Risks

In general, Markel's approach to underwriting and risk management emphasizes product returns and profitable growth over the long term, rather than premium volume or market share. In order to determine our risk appetite, we seek to fully understand the risks we underwrite, and to avoid exposures that either cannot be fully evaluated or that carry unacceptable levels of uncertainty. Factors generally considered in pricing our property and casualty insurance products, as well as our professional lines, include an estimate of expected losses; the expenses associated with producing, issuing, and servicing the business, as well as managing claims; the time value of money related to expected loss and expense cash flows; and a reasonable profit margin that takes into account the capital needed to support Markel's business.

Evaluating climate-related risks and opportunities associated with our insurance divisions—ranging from products and services to supply chain and selection of brokers—ranks as a top priority, and is an important aspect of the underwriting and pricing of risks for many of our property, casualty and professional lines products. In both our underwriting evaluation process and our underwriting strategies, we consider environmental factors, including weather trends and patterns, climate-related effects on weather perils, and other relevant risk variables.

Organizationally, we have initiated reviews that clarify best practices for adapting our processes to mitigate potential adverse financial impact due to climate change. Among the steps instituted thus far:

- We have reduced our exposure to property catastrophe risks due to the increasing volatility of this business, in part due to climate change. In 2021, we took steps to implement this strategy by transferring the Markel Global Reinsurance property catastrophe book to our Nephila insurance-linked securities (ILS) business, and by closing the operations of Lodgepine, a retrocessional fund manager.
- In the construction sector, we are focusing on risk selection and working towards developing tolerances for writing aggregated risks in certain geographies.
- As we monitor outcomes of climate-related litigation, we may add climate change exclusions to policies.

Risk Management – closed ended questions answered in addition to the narrative

- Does the insurer have a process for identifying climate-related risks? (Y/N) Y
 - If yes, are climate-related risks addressed through the insurer's general enterprise-risk management process? (Y/N) Y
- Does the insurer have a process for assessing climate-related risks? (Y/N) Y
 - If yes, does the process include an assessment of financial implications? (Y/N) Y
- Does the insurer have a process for managing climate-related risks? (Y/N) Y

- Has the insurer considered the impact of climate-related risks on its underwriting portfolio? (Y/N/Not Applicable)* Y
- Has the insurer taken steps to encourage policyholders to manage their potential climate-related risks? (Y/N)* N
- Has the insurer considered the impact of climate-related risks on its investment portfolio? (Y/N)* Y
- Has the insurer utilized climate scenarios to analyze their underwriting risk? (Y/N) Y
- Has the insurer utilized climate scenarios to analyze their investment risk? (Y/N) N

Metrics and Targets – narrative

4. Disclose the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material.

In disclosing the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material, insurers should consider including the following:

Discuss how the insurer uses catastrophe modeling to manage the climate-related risks to your business. Please specify for which climate-related risks the insurer uses catastrophe models to assess, if any.

A. Disclose the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process.

In disclosing the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process, insurers should consider including the following:

- In describing the metrics used by the insurer to assess and monitor climate risks, consider the amount of exposure to business lines, sectors, and geographies vulnerable to climate-related physical risks [answer in absolute amounts and percentages if possible], alignment with climate scenarios, [1 in 100 years probable maximum loss, Climate VaR, carbon intensity], and the amount of financed or underwritten carbon emissions)

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

C. Describe the targets used by the insurer to manage climate-related risks and opportunities and performance against targets.

Through the Climate Change Leadership Team, assessment of the short, medium and long term impacts of climate change related risks across the insurance and reinsurance portfolios was evaluated starting in 2019. Metrics were developed based on climate related scenarios and are updated on an annual basis. Underwriting actions are varied based upon a particular product's exposure which consist of portfolio management to pricing enhancements based on risk profile. Evaluating the longer-term impact of climate change presents the greatest challenge. We generally forecast the company's performance 2-5 years into the future with reduced confidence in the outer years. Evaluating impacts further out (10, 20, 50 years) are significantly more challenging for establishing a reasonable baseline.

The scenario analyses developed focus on addressing the physical, transition and liability risks over a variety of time horizons. These scenarios have focused on the most adverse impact to the Company and are updated on an annual basis. An example of physical risks anticipated as a result of climate change would be increased frequency and severity of weather-related catastrophes which could result in additional catastrophe-related losses along with trending of risk amplification as a result of climate change. Climate change impacts are also being incorporated into our pricing with a focus on the impacts of hurricane and sea level rise within our Property products.

Climate change modeling has been completed against our insurance portfolio for various durations to determine the impacts to our PML's which yields a potential increase of +10% in our PML's for short term duration scenarios. Given the short tail nature of Property insurance we can adjust our portfolio based on changes to the exposure base on an annual basis as the predominance of our climate related exposures are to North Atlantic Hurricane. We do not currently reflect the impacts of climate change in our annual PML's due to the uncertainty from year to year but rather as a proxy for what the future impact may be our organization for PML management. The current PML's are compared against PML's which incorporate future impacts as a result of climate change, specifically focused on North Atlantic Hurricane frequency, severity and sea level rise.

Metrics and Targets – closed ended questions answered in addition to the narrative

- Does the insurer use catastrophe modeling to manage your climate-related risks? (Y/N) Y
- Does the insurer use metrics to assess and monitor climate-related risks? (Y/N) Y
- Does the insurer have targets to manage climate-related risks and opportunities? (Y/N) N
- Does the insurer have targets to manage climate-related performance? (Y/N) N