

**TCFD Climate Risk Survey**  
**Church Mutual Insurance Company, S.I.**  
**For Reporting Year 2022**  
**NAIC: 18767**

**I. Introduction**

Climate change presents an urgent concern for all insurers, including Church Mutual Insurance Company, S.I. (Church Mutual). Climate change poses a significant risk to our insurance operations and our ability to protect our policyholders. In addition, Church Mutual is committed to doing its part in the global effort to combat climate change and reducing its ecological footprint.

**II. Governance**

- a. Describe the board's oversight of climate-related risks and opportunities.
  - i. Church Mutual has implemented a multifaceted approach to enterprise risk management (ERM) to ensure an effective risk culture and governance structure. Risk culture and governance begin with Church Mutual's Board of Directors (BOD) and extend throughout all levels of the organization. Catastrophe losses, which encompass the impact of climate change, have been recognized by the BOD as a top risk of the Company for the past several years.
  - ii. The Risk Management Committee (RMC) of the Church Mutual BOD has oversight of management's standards, controls, limits, guidelines and policies relating to risk tolerance, assessment and management of exposures that could have a material impact on the organization, including climate change. The RMC updates the BOD on a quarterly basis.
- b. Describe management's role in assessing and managing climate-related risks and opportunities.
  - i. Church Mutual's enterprise risk management is a process, not a function. This means that the entire organization is involved in managing risk.
  - ii. Starting with the ERM Committee, members of senior leadership oversee enterprise risk management and liaison with the BOD. In 2017, the ERM Committee approved adoption of the COSO ERM framework to integrate strategy and risk management. As part of the ERM framework, climate change, along with all other significant risks, follows a standardized process which includes 1) risk identification, 2) risk assessment, 3) risk response, and 4) risk monitoring/reporting.

- iii. An ERM function, led by the Chief Risk Officer, facilitates use of the ERM framework throughout the organization from the highest levels of management cascading down to each employee. To ensure full participation in the ERM process, Church Mutual has employed a classic three lines model for risk management:
  - 1. First line: Church Mutual's operations management are the first line. They bear primary responsibility for identifying, controlling and monitoring risks and maintaining appropriate management and internal controls within their areas of responsibility.
  - 2. Second line: ERM, Legal and Compliance, Internal Controls/Model Audit Rule (MAR), Continuous Improvement, and IT Risk are support functions. They guide and support line management in terms of managing risk, internal controls and legal/regulatory compliance. They also support senior management by providing periodic reports to ensure awareness.
  - 3. Third line: The Internal Audit function is responsible for developing and executing a comprehensive risk-based internal audit program, which provides independent assurance that the organization's internal control infrastructure is properly designed and operating effectively.

### **III. Strategy**

- a. Describe the climate-related risks and opportunities the insurer has identified over the short, medium, and long term.
  - i. Climate change could have an impact on weather events which lead to an increased level of property losses. This impact could occur geographically across the entire United States, with the areas of greatest impact to the company being those susceptible to severe convective storms and named storms. An increased level of property losses could in turn result in the need to increase prices and/or pay more for reinsurance. Increased weather-related losses could also create an opportunity for new insurance products to protect insureds' property.
  - ii. Opportunities exist in additional risk control services Church Mutual offers to its policyholders. The Risk Control function encourages policyholders to have safety programs in place to address potential loss exposures involving their properties, visitors, and employees. For example, policyholders are encouraged to have a disaster response plan in place to address major events like fires, earthquakes, weather related events, etc. Risk Control has also partnered with IBHS. In addition, a variety of safety reference materials are available online and in hardcopy, DVD, and YouTube formats that provide policyholders with important information on how to prepare for loss causing events, how to conduct inspections of their properties, and how to train staff on specific types of loss exposures. Risk Control Representatives conduct on-site surveys to assist customers with identifying

potential loss exposures, and they provide recommendations intended to help reduce or eliminate these exposures. On-site training programs are also conducted by our Risk Control Representatives to help train policyholders about various types of loss exposures and preventative actions to consider.

- b. Describe the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning.
  - i. The company's financial plan each year considers the impact of climate risks based on modeled catastrophe losses and impacts of any de-risking initiatives. The cost of reinsurance is a consideration in identifying areas of growth or retraction. Risk mitigation programs such as CM Wildfire Solutions are reviewed annually to determine potential areas of expansion.
  - ii. The Company's RMC is responsible for directing the Company's investment activity in accordance with the investment policy that is reviewed and updated on a regular basis by the BOD. The RMC considers climate-related risks to the extent it is necessary to fulfill its responsibilities.
- c. Describe the resilience of the insurer's strategy, taking into consideration different climate-related scenarios, including a 2 degree Celsius or lower scenario.
  - i. The company has an ongoing process to manage property exposure concentrations within established risk tolerance levels for both individual events and the aggregation of all events. Multiple industry catastrophe models are used for individual perils such as severe convective storms, hurricanes, earthquakes, wildfire and winter storms. These models are updated on a regular basis by the modeling firms. In the past, the company has worked directly with one modeling firm to provide risk specific exposure and loss data that has helped to validate the model parameters. The output from the catastrophe modeling is used within our pricing and financial planning processes. It is also used as a key input into the quantification of prospective required economic capital. In addition, the company uses deterministic evaluation of loss potential by analyzing specific actual weather-related events and estimating the impact of similar events in other geographic locations. Mitigation strategies include geographical limitations on total insured value, policy terms, conditions and deductibles, and the use of reinsurance.

#### **IV. Risk Management**

- a. Describe the insurers' processes for identifying and assessing climate-related risks.
  - i. Church Mutual identifies risks that impact the performance of its strategy and objectives. It undertakes risk identification activities to first establish an inventory of new and emerging risks, and then to confirm existing risks as still being applicable and relevant. The results of the risk identification process are recorded and

maintained in Church Mutual's risk register, along with the names of the risk owners who are responsible for managing the risks.

- ii. Risks related to climate change are identified as part of the company's annual risk assessment process. Climate change is not a separate, isolated risk. It is implicitly part of catastrophe losses, a consistent top risk to the success of our insurance operations. Climate change risks are also identified as part of the company's review of external studies by industry groups and reinsurance brokers.
- b. Describe the insurer's processes for managing climate-related risks.
- i. Church Mutual uses a dual approach for all risk identification.
    - 1. First, a top-down approach is utilized, where risks are identified by executive management.
    - 2. Second, a bottom-up approach is used, where risks are identified and managed by department heads, front-line supervisors, internal control/MAR compliance specialists, IT managers, and the Enterprise Project Management Office.
- c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management.
- i. Given Church Mutual's approach to ERM, climate-related risks are embedded in risk management processes from identification to management/reporting.

## **V. Metrics and Targets**

- a. Disclose the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process.
- i. The company has an ongoing process to manage property exposure concentrations within established risk tolerance levels for both individual events and the aggregation of all events. Multiple industry catastrophe models are used for individual perils such as severe convective storms, hurricanes, earthquakes, wildfire and winter storms. These models are updated on a regular basis by the modeling firms. In the past, the company has worked directly with one modeling firm to provide risk specific exposure and loss data that has helped to validate the model parameters. The output from the catastrophe modeling is used within our pricing and financial planning processes. It is also used as a key input into the quantification of prospective required economic capital. In addition, the company uses deterministic evaluation of loss potential by analyzing specific actual weather-related events and estimating the impact of similar events in other geographic

locations. Mitigation strategies include geographical limitations on total insured value, policy terms, conditions and deductibles, and the use of reinsurance.

- ii. Specific metrics used include property value geographical concentration thresholds to ensure Church Mutual is not overly exposed to any one catastrophe event and to identify potential growth areas; modeled loss to surplus ratios to measure against risk tolerance; catastrophe reinsurance limit purchased linked to specific return periods on the modeled loss curve.
- b. Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
- i. The company monitors natural gas and electrical usage, reducing usage of diesel fuel oil, reducing landfill output, and selecting fleet vehicles that have low emissions.
  - ii. The company has installed solar panels to reduce the natural gas usage for domestic hot water heating. The company has completed a building retro commissioning project with the local utility company to reduce natural gas and electricity usage. The company has also retro fit all of its parking lot lights to LED to reduce energy cost. The company has replaced over 400 light fixtures and is in the process of replacing more with energy efficient fixtures to reduce electricity usage. With the new lighting, the company is consuming nearly 300,000 kilowatts less power per year.
  - iii. The company continues its transition to paperless processes and introduced new printing efficiency software in 2022.
  - iv. The company has reduced the use of natural gas and electricity usage at the facilities it leases by reducing the number of leased facilities.
  - v. The company has implemented a recycling program to reduce the landfill output
  - vi. The company has replaced fleet vehicles with newer vehicles that have higher estimated miles per gallon. The company continues to research hybrid or electric lease vehicles for its field staff and plans to implement the transition from gas- or diesel-powered vehicles as supply-chain shortages decrease.
- c. Describe the targets used by the insurer to manage climate-related risks and opportunities and performance against targets.
- i. Church Mutual recognizes that extreme weather events are becoming more common and that action is needed to further reduce year-over-year volatility from catastrophic weather events. The following actions are underway to limit catastrophic loss:

1. Hurricane: There is an intentional effort to reduce exposure in Tier 1 and Tier 2 counties along the Gulf and East Coasts, targeting the most vulnerable risks. Since year end 2020, exposure in the areas closest to the coast have been reduced by almost 30%.
2. Wildfire: There is an intentional effort to reduce exposure in high wildfire risk areas, mostly impacting our Camps Center of Excellence. Camps tend to be in more remote areas that have been difficult for the wildfire suppression team to navigate to during active wildfires. Since midyear 2020, exposure in the highest wildfire risk category has been reduced by over 60%.
3. Earthquake: The new policy administration system and Premier™ product gives Church Mutual the ability to sublimit earthquake coverage. There is no plan to increase the number of policies with earthquake coverage, but instead, reduce the exposure of current policyholders with earthquake coverage from full limits to a sub-limited amount. In addition, new underwriting guidelines were deployed in 2021 that place restrictions based on Modified Mercalli Intensity (MMI) scale and construction. Since year end 2020, exposure in the highest MMI regions has been reduced by 40%.
4. Severe Convective Storm (SCS): New underwriting guidelines were implemented in 2021 for 14 states with the highest SCS exposure. The changes include special considerations for locations with high hail risk scores, increased use of percentage deductibles, cosmetic roof damage exclusions and ACV roof limitations. The average incurred SCS event in 2021-2022 is 30% lower than the average incurred SCS event in 2017-2020.
5. Catastrophic losses are compared to plan monthly to identify trends and improvement opportunities. For each major peril, geographical concentrations are monitored quarterly to ensure Church Mutual is not overly exposed to any one catastrophe event. Annually, portfolio modeled catastrophe losses are compared to the level of catastrophe reinsurance purchased to ensure alignment with our risk tolerance.

## ii. Sensors

1. Temperature and Water Sensors: Church Mutual has adopted the use of temperature and water sensor monitoring systems as part of its loss mitigation strategy. These sensors send alerts via text to a smartphone app, e-mail, or phone when temperatures dip below normal or water is threatening a building. More than 164,000 units have been installed based on occupancy and size of risk. For the life of the program through December 31, 2022, these sensors have provided more than 23,000 water leak alerts and 29,000 temperature (freeze) alerts, with approximately \$79M of losses averted.

2. ALARM ALERT™ Smoke Alarm Notification Service: For Church Mutual customers, fires are one of the leading causes of property claims. Another extension to the sensor platform is the ALARM ALERT™ Smoke Alarm Notification Service added in 2021. The device detects the sound of a smoke alarm and sends an alert of a potential fire, allowing customers to take appropriate action. The contact can verify a fire through a 24/7 monitoring service, which can then reach out to local fire departments. This service is intended for House of Worship organizations of less than 25,000 square feet with residential-type smoke detectors that are not centrally monitored. According to a recent customer survey, almost 50 percent of our House of Worship customers would be eligible based on this criterion alone.

iii. CM Wildfire Solutions

1. Church Mutual has partnered with seven fire response companies for a wildfire mitigation program in the states of California, Colorado, and Oregon. Eligible policyholders are automatically enrolled in the program at no additional cost. Currently, over 7,800 accounts are monitored in California, Colorado, Oregon, and Washington. Enrolled policyholders have access to 24/7 wildfire monitoring, expert wildfire prevention recommendations, and free mitigation services (such as the clearing of flammable materials and application of fire retardant) in the event of imminent danger. For the life of the program, 1,395 fires have been tracked, resulting in truck deployments to 664 fires and applications of fire retardant on properties at 31 fires. Church Mutual estimates that \$162M of Property losses have been averted as a result of this program. In addition to the partnership with fire response companies, Church Mutual has implemented RedZone RZRisk (<https://www.redzone.co/rzrisk/>) hazard scoring within the Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, North Dakota, New Mexico, Nevada, Oregon, South Dakota, Texas, Utah, Washington and Wyoming portfolios. RZRisk is an underwriting tool that rates wildfire hazard by evaluating historical fire frequency and severity in addition to several factors that correlate to structure loss. Church Mutual has scored each California risk with this tool and has taken immediate action to mitigate wildfire hazard. Risks with hazard scores in the “High” to “Very High” range are being inspected. Church Mutual has implemented defensible space requirements and 100% compliance is mandatory. This approach has proven effective, as those insureds that had implemented this strategy (prior to the recent wildfires) had only minor losses. Accounts are monitored for action and if a risk is not fully compliant with recommendations, the policy will be cancelled. In 2023, Church Mutual has implemented a new risk inspection service for certain moderate risks within the California portfolio. If defensible space concerns are identified during the inspection process, corrective mitigations efforts may be performed right away by certified wildland firefighters to help protect risks. In addition, Church Mutual will score every risk within Alaska, Arizona, Hawaii, Idaho, Montana, North

Dakota, New Mexico, Nevada, South Dakota, Texas, Utah, and Wyoming by 2024.