2021 Sustainability Accounting Standards Board Report

Liberty Mutual has published an annual ESG report since 2019. We consistently align our reports to global reporting standards and frameworks, including the Sustainability Accounting Standards Board (SASB). This report incorporates the disclosures aligned with the Sustainability Accounting Standards Board (SASB) standards for the insurance industry.

Transparent Information & Fair Advice for Customers

FN-IN-270a.1

Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of insurance product related information to new and returning customers

Discussion of legal contingencies and legal proceedings are disclosed in Liberty Mutual's quarterly financial statements.

FN-IN-270a.2

Complaints-to-claims ratio

Liberty Mutual Group is committed to providing our customers with services of the highest quality. We view complaints as an opportunity for service recovery and customer retention. Our Presidential Service Team utilizes a tracking and monitoring system to capture and analyze complaints to determine root cause(s) and partners with our operational teams to identify trends and process improvements.

As a multi-line and global insurance carrier, Liberty Mutual Group is subject to insurance regulation in all 50 states and other jurisdictions. In the United States, state insurance departments voluntarily provide consumer complaint data to the National Association of Insurance Commissioners (NAIC). The NAIC does not calculate or report out on a complaints-to-claims ratio but instead provides a summary listing of all closed confirmed complaints for specific business lines for each underwriting company in the U.S., available on their website: https://content.naic.org/consumer.htm. The ratio is calculated by dividing each underwriting company's share of closed confirmed complaints within the U.S. market by that underwriting company's premium market share in the U.S. Note, the NAIC does not provide a single complaint ratio for all of Liberty Mutual Group. Complaint ratios are at the individual underwriting company level. We believe that the NAIC's overall complaint ratio based upon market share is a more holistic ratio as it is not exclusive to claims. The NAIC provides expertise, data and analysis for insurance commissioners to effectively regulate the industry and protect consumers across all 50 states, DC and its five territories.

FN-IN-270a.3

Customer retention rate

Retention rates are reported as part of our financial reports in our Quarterly Earnings presentations.

2021 GRM U.S. Retention Rates	
Personal Lines — U.S. private passenger auto	79.1%
Personal Lines — U.S. homeowners	81.3%
U.S. Business Lines	78.2%

2021 GRS Retention Rates	
Specialty	79.8%
Reinsurance	83.9%
Casualty	81.6%
Property	83.3%

Notes:

Personal Lines: Retention is calculated as the percent of policies in-force renewed on a rolling 12-month basis.

Business Lines: Retention is calculated as the percent of expiring premium retained on a month-to-month basis.

FN-IN-270a.4

Description of approach to informing customers about products

Liberty Mutual and Safeco Insurance provide a wide range of commercial and personal property and casualty insurance products and services to businesses, associations and individuals. We have processes in place to ensure the information we provide to existing and potential customers is transparent, complete and understandable. The relevant business unit, marketing department and legal department are all involved in the development and review of any communication sent to customers that describes Liberty Mutual and/or Safeco's product offerings. Since Liberty Mutual and Safeco have a wide range of customers, we customize the information provided to meet the needs of the particular customer class. Information we provide to individuals includes specific product and policy scope information, terms and conditions, suitability of the product for the customer's needs, billing and claims information. Information we provide to business customers can include specific product and policy scope information, proof of insurance, terms and conditions, suitability of the product for the customer's needs, billing and claims information, premium audit information, risk/claims management guidance and updates on open claims.

See 2021 GRI Index: 2-29 for detail on the mechanisms used to communicate with customers (p. 10)

See 2021 ESG Annual Review: Engaging customers responsibly (p. 15)

Incorporation of Environmental, Social, and Governance Factors in Investment Management

FN-IN-410a.1

Total invested assets, by industry and asset class

The Company's investment strategy seeks long-term returns through disciplined security selection, portfolio diversity and an integrated approach to risk management. The Company selects and monitors investments to balance the goals of safety, stability, liquidity, growth and after-tax total return with its need to comply with regulatory investment requirements. A relatively safe and stable income stream is achieved by maintaining a broadly-based portfolio of investment grade bonds. As of December 31, 2021, approximately 71% of the Company's total invested assets based on market value were fixed income securities. The weighted average credit rating of the fixed income portfolio is A+. These holdings are supplemented by investments in additional asset types with the objective of further enhancing the portfolio's diversification and expected returns. Risk management is accomplished through asset liability management (including both interest rate risk and foreign currency risk), diversification, credit limits and a careful analytical review of each investment decision.

For further discussion of our investment portfolio, including the portfolio detail by industry and asset class, please refer to Liberty Mutual Holding Company Inc.'s Management's Discussion & Analysis of Financial Condition and Results of Operations (MD&A) for the year ended December 31, 2021.

Information regarding our investments for each of our domestic insurance writing subsidiaries are provided in our statutory Annual Statements, available on our website.

FN-IN-410a.2

Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment management processes and strategies

Liberty Mutual's investment group, Liberty Mutual Investments, integrates ESG factors into our investment process. We formalized an Energy Transition Investment Strategy and a dedicated Energy Transition and Infrastructure (ET&I) team within our private investments group. Liberty Mutual's Investment's Energy Transition Investment Strategy is built at the intersection of driving returns for our financial performance and capital growth goals, while supporting the global energy transition and capitalizing on the overall market environment.

See 2021 ESG Annual Review: Investments (p. 19)

See 2021 ESG Annual Review: Advancing the energy transition (p. 21)

See 2021 TCFD Report: Energy transition in our investments (p. 12)

Policies Designed to Incentivize Responsible Behavior

FN-IN-410b.1

Net premiums written related to energy efficiency and low carbon technology

Premium data is not currently being captured based on energy efficiency and low carbon technology. Liberty Mutual provides premium data, as required by insurance regulators, by segment and line of business in quarterly financial reports.

FN-IN-410b.2

Discussion of products and/or product features that incentivize health, safety, and/or environmentally responsible actions and/or behaviors

Liberty Mutual provides products and services that include features designed to incentivize health, safety and/or environmentally responsible actions or behaviors.

Liberty Mutual's property coverage offering for both Personal and Commercial Lines includes a coverage extension for Ordinance or Law Coverage. This coverage helps protect customers from increased costs associated with repairs or replacement of damaged property caused by laws or ordinances enacted to regulate energy efficient or low carbon construction or repair. Examples of laws or ordinances covered by this policy extension are those mandating compliance with sustainable building practices. All Liberty Mutual policies that have property coverage include the ordinance or law coverage extension. For Commercial policies, we also offer pollutant clean up and removal coverage that encourages our customers to address the accidental release of pollutants to the land or water. In a limited number of states, we offer a "green upgrade endorsement" that increases the coverage amount available for increased costs for green upgrades.

Our base property offering includes coverage for charges incurred for fire department services and expenses related to fire protective equipment recharging after the equipment is used to fight a fire. We also include coverage for expenses incurred to preserve property from a loss or damage and, for Commercial Lines, to install temporary plates or board up openings if repair or replacement of damaged glass is delayed.

Our Builders Risk policies includes coverage for green building construction costs as well as coverage for pollutant clean up and removal, charges incurred for fire department services, expenses related to fire protective equipment recharging after the equipment is used to fight a fire and preservation of property coverage.

Our Auto policies include opportunities for credits related to qualified antitheft devices and vehicle safety features. In Personal Lines, we offer discounts to customers based on the number of miles they drive in a year while on Commercial Lines we also offer pollution liability coverage to preferred risks which provides an additional limit to cover costs or expenses related to bodily injury, property damage and clean-up costs or expenses resulting from the release of pollutants from auto cargo.

Our Commercial Lines Cyber policies include a collection of risk management tools that help to prevent cyber-attacks and promote future loss avoidance by providing coverage for hardware and software upgrades after a covered computer attack. We also include broadened coverage for business income and extra expense to contemplate a voluntary shutdown of the customer's computer system to stop, mitigate the effects of or recover from a computer attack. On Personal Lines, we offer an ID Theft product that matches a customer with a case manager to coordinate steps needed for remediation and also pays for indirect financial damages like lost wages and attorney fees.

Our commercial policyholders have access to a wide range of risk prevention and risk engineering services. Services offered include (and are not limited to) disaster recovery and business continuity, preparing for climate change implications, employee health and well-being, supply chain management and sustainability. We are continuing to enhance our offerings to meet evolving Environmental, Social, and Governance (ESG) risk and sustainability needs.

We offer parametric insurance cover for climate impacted perils in at risk regions, including tropical cyclones, snow, frost, wildfire and hail. Products are also offered to a number of industries pivotal to supporting the climate transition, e.g. solar and wind farms. Liberty Mutual's agricultural parametric insurance has grown in the past years, in both size and the products offered, and aims to provide climate resilient solutions to those who may not otherwise be able to source insurance. This year we formed a strategic partnership with FloodFlash to expand access to commercial flood insurance in historically under-covered areas.

We are also supporting the energy transition — through proactively addressing climate change and energy-transition risks, providing risk advisory services to those developing credible transition plans and expanding our portfolio of products to provide asset and revenue protection for solar, wind, geothermal, biomass and hydroelectric energy. Through Liberty Special Markets, we support the Climate Transition Pathway (CTP) solution — an accreditation framework developed by Willis Towers Watson.

Environmental Risk Exposure

FN-IN-450a.1

Probable Maximum Loss (PML) of insured products from weather-related natural catastrophes

Liberty Mutual's catastrophe management strategy is guided by principles that ensure that catastrophe exposures remain within acceptable risk tolerance levels and that pricing incorporates all costs associated with catastrophe risks and earns acceptable, risk-adjusted returns. These strategies are implemented through regular monitoring of catastrophe exposures via metrics such as average annual loss ("AAL"), probable maximum loss ("PML") and conditional tail expectation ("CTE"), which is a measure equivalent to tail value at risk ("TVaR").

The process for reviewing and managing catastrophe risk utilizes multiple internal and external tools at the strategic business unit and enterprise level to allow management to make business decisions that keep the company within established risk tolerances. These tools, when used together, provide the company with a comprehensive understanding of the catastrophe risk exposure across the enterprise.

Liberty Mutual rigorously manages its natural catastrophe exposures through its Enterprise Risk Management program, utilizing the latest loss simulation models from third-party catastrophe modeling firms along with proprietary modeling processes. As part of its natural catastrophe modeling and exposure management, Liberty Mutual incorporates the most up to date scientific advances in the estimation of the Company's natural catastrophe loss exposure.

The Company closely monitors changes to the frequency and severity of weather-related natural catastrophes as well as changing demographic patterns (e.g., coastal migration) which could increase potential exposure to climate risk.

Liberty Mutual has a catastrophe modeling Research and Development (R&D) team which evaluates the catastrophe models for alignment with Liberty Mutual's view of risk. In particular, the team considers a range of event frequency and severity assumptions beyond those embedded in standard models and builds bespoke models using Liberty Mutual's historical data, third party tools, new scientific research and technologies and input from expert consultants. The R&D team also regularly participates in industry and academic conferences to keep current with the latest scientific understanding of climate change.

The table below provides the probabilities that estimated catastrophe losses from a single hurricane or earthquake event, occurring in a one-year timeframe, will equal or exceed the indicated loss amounts after reinsurance and net of tax based on the company's view of risk using proprietary and third-party catastrophe models as of December 31, 2021. Estimated losses comprise claims and allocated claim adjustment expenses (but excluding unallocated claim adjustment expenses), net of reinsurance recoveries and reinstatement premiums.

Likelihood of Exceedance (Occurrence)[1]	**Dollars (in billions)** North America		**Percentage of total policyholders equity as of 12/31/2021**[2] North America	
	Hurricane Net	Earthquake Net	Hurricane Net	Earthquake Net
1 in 50 Year PML (2.0%)	939	694	3.5%	2.6%
1 in 100 Year PML (1.0%)	1,204	925	4.5%	3.5%
1 in 250 Year PML (0.4%)	1,921	1,289	7.2%	4.8%

1 The probabilities in the table represent the likelihood of losses from a single event equaling or exceeding the indicated loss amount in a one-year timeframe. The 1 in 100 year PML refers to a 1% chance of a loss equaling or exceeding the indicated amount. Also, the modeled loss represents the single event occurrence perspective and does not reflect the aggregation of multiple events that can occur in a single year timeframe.

2 The percentage of total policyholders equity is calculated by dividing the indicated loss amounts by the total policyholders equity less unrealized gains and losses on certain investments in debt securities, net of tax and related deferred acquisition costs, as of December 31, 2021.

FN-IN-450a.2

Total amount of monetary losses attributable to insurance payouts from (1) modeled natural catastrophes and (2) non-modeled natural catastrophes, by type of event and geographic segment (net and gross of reinsurance)

Table 1 below details estimated ultimate catastrophe losses, net of reinsurance and inclusive of reinstatement premium, incurred in accident years 2019, 2020 and 2021 as of December 31, 2021. Table 2 shows the estimated ultimate catastrophe losses as initially reported for those accident years in Liberty Mutual's MD&A. Additionally, subsequent favorable development which represents the difference between the initial reported loss and the current estimated ultimate is displayed. Table 3 details the estimated ultimate catastrophe losses by major geographic region.

Liberty Mutual defines a catastrophe as natural events, civil unrest or terror events exceeding $25 million in estimated ultimate losses, including loss adjustment expenses, net of reinsurance and before taxes, aggregated across the business for both U.S. and International Events. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

Liberty Mutual recognizes that catastrophe modeling continues to evolve and available models reflect varying levels of maturity and sophistication. As a result, Liberty Mutual regularly evaluates and incorporates the most up to date scientific advances in the estimation of the Company's natural catastrophe loss exposure.

The Company closely monitors changes to the frequency and severity of weather-related natural catastrophes as well as changing demographic patterns (e.g., coastal migration) which could increase potential exposure to climate risk.

For more information on how Liberty Mutual manages climate-related risks, please see our 2021 Task Force on Climate-Related Financial Disclosures (TCFD) report.

Table 1: Estimated Ultimate Catastrophe Losses, Net of Reinsurance and inclusive of reinstatement premium, by Accident Year evaluated as of December 31, 2021. (in $ millions)

Peril Category	Accident Year 2021	Accident Year 2020	Accident Year 2019
Tornado, Hail, and Wind	1,269	1,155	1,022
Winter Storm	845	44	170
Tropical Storms/Hurricanes	771	593	32
Typhoons/Europe Floods	315	–	122
Wildfires	123	399	5
Earthquake	–	–	–
Other	–	133	–
Net Catastrophe Losses[3]	**3,057**	**2,324**	**1,351**

Table 2: Estimated Ultimate Catastrophe Losses, Net of Reinsurance and inclusive of reinstatement premium, by Accident Year evaluated as initially reported. (in $ millions)

Peril Category	Accident Year 2021	Accident Year 2020	Accident Year 2019
Net Catastrophe losses as originally reported at the end of each accident year	3,057	2,523	1,478
Favorable development in subsequent calendar years	–	(199)	(127)

Table 3: Estimated Ultimate Catastrophe Losses by Region, Net of Reinsurance and inclusive of reinstatement premium, by Accident Year evaluated as of December 31, 2021. (in $ millions)

Region	Accident Year 2021	Accident Year 2020	Accident Year 2019
North America	3,007	2,324	1,229
Europe	315	–	–
Latin America	–	–	–
Asia Pacific	–	–	122
Net Catastrophe Losses[3]	**3,057**	**2,324**	**1,351**

3 Net Catastrophe Losses include recoveries on the Global CAT Aggregate cover

Systemic Risk Management

FN-IN-450a.3

Description of approach to incorporation of environmental risks into (1) the underwriting process for individual contracts and (2) the management of firm-level risks and capital adequacy

We assess climate-related risk at an enterprise-level and within each business line. The effort is led by the Enterprise Risk Management team and is coordinated through our Emerging Risks Committee and Climate Council. Our internal risk management processes are aligned with our ESG priorities and informed by our understanding of climate-related risks.

See 2021 TCFD Report: Risk management (p. 15)

FN-IN-550a.1

Exposure to derivative instruments by category: (1) total potential exposure to non-centrally cleared derivatives, (2) total fair value of acceptable collateral posted with the Central Clearinghouse, and (3) total potential exposure to centrally cleared derivatives

The Company utilizes various over-the-counter (OTC) derivatives as part of its overall risk management strategy.

OTC derivatives are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market clearing transactions, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. All derivatives are recognized on the balance sheet at fair value and reported as other invested assets, other assets or other liabilities. The Company participated in foreign exchange forward contracts, exchange traded futures, swaps and options for the year ended December 31, 2021. These derivatives were not material to the Company's financial statements.

FN-IN-550a.2

Total fair value of securities lending collateral assets

The Company participates in a securities lending program to generate additional income, whereby certain domestic fixed maturity securities and equity securities are loaned for a short period of time from the Company's portfolio to qualifying third parties via a lending agent. Terms of the agreement are for borrowers of these securities to provide collateral of at least 102% of the market value of the loaned securities. As of December 31, 2021, the fair value of fixed maturity securities and equity securities loaned was approximately $4,714 million.

FN-IN-550a.3

Description of approach to managing capital and liquidity-related risks associated with systemic non-insurance activities

Enterprise risk governance starts at the Board level Risk Committee which has oversight responsibilities to reasonably assure that the Company maintains adequate policies, controls and practices within its Enterprise Risk Management framework to continuously identify, measure, manage and mitigate critical risks that could have a material impact on the Company.

Liberty Mutual's Enterprise Risk Management function and ERM Committees have oversight responsibilities for identified key risks of the Company, its affiliates and subsidiaries including Liberty Mutual Insurance Company and any other insurance company whose policyholders are by law entitled to be members of Liberty Mutual Holding Company Inc. The fundamental objective of Enterprise Risk Management is to manage risks to ensure sufficient liquidity and capital to fulfill the Company's financial obligations under both normal and stressed conditions.

Risk identification and prioritization is an integral part of the ERM process. Key risks are defined and organized in a manner that is consistent with how management views and manages risks across the organization. Key risk categories that may, from time to time, affect liquidity and/or capital levels include, but are not limited to, market risk, catastrophe underwriting risk, attritional underwriting risk and credit risk.

Stress testing is an important tool in evaluating sufficiency of resources to meet obligations.

The market value of Liberty's investment portfolio may be affected by volatility in interest rates, credit spreads and equity markets. These market events may result in permanent impairments or defaults of specific securities. However, as evidenced by recent market stress events, the majority of the impact of market volatility will likely result in temporary changes to the carried value of impacted securities.

Liberty evaluates market risk by assessing the impact on the Company's investment portfolio for a set of deterministic stress scenarios including interest rate shocks, credit spread shocks, market correction and recession. These impacts are evaluated across multiple capital-based metrics on a quarterly basis. Capital metric thresholds are established annually and generally contemplate a two-year time horizon.

Liberty assesses and monitors its liquidity by evaluating its liquidity positions under stress scenarios (e.g., severe natural catastrophes). To support the Company's liquidity risk appetite, Liberty maintains a conservative liquidity stress testing regime. Scenarios evaluate cash positions as well as available liquidity from select sources under current and stressed conditions. Available liquidity is assessed over different intervals. Stress scenarios include modeled natural catastrophes, as they are the largest short-term liquidity stress event, and the analysis includes various conservative assumptions (e.g., no asset sales, no reinsurance recoveries, reduced borrowing facility capacity, etc.).

The Company maintains capital contingency plans to address a potential capital shortfall from a significant stress event. These contingency plans consider the nature of the extreme stress events and include, but are not limited to, the sale of capital-intensive assets, the purchase of reinsurance to reduce ongoing exposure and access to public financial markets.

Activity Metrics

FN-IN-000.A

Number of policies in force by segment: (1) property and casualty, (2) life, (3) assumed reinsurance

The policies in force data represents the number of policies with coverage in effect as of the beginning of the period. Policies in force is a metric used for our Personal Lines customers and is affected by both new business growth and policy count retention. We do not use policies in force for our Business Lines customers as we manage these relationships on an account basis. Instead, we monitor metrics such as retention, renewal premium change and new business statistics for our small commercial lines of business. The policies in force as of 12/31/2021 for U.S. Personal Lines is summarized below:

Policies in force (in thousands)	
Personal Lines — Automobile	5,854
Personal Lines — Property	6,274