2024 Sustainability Report

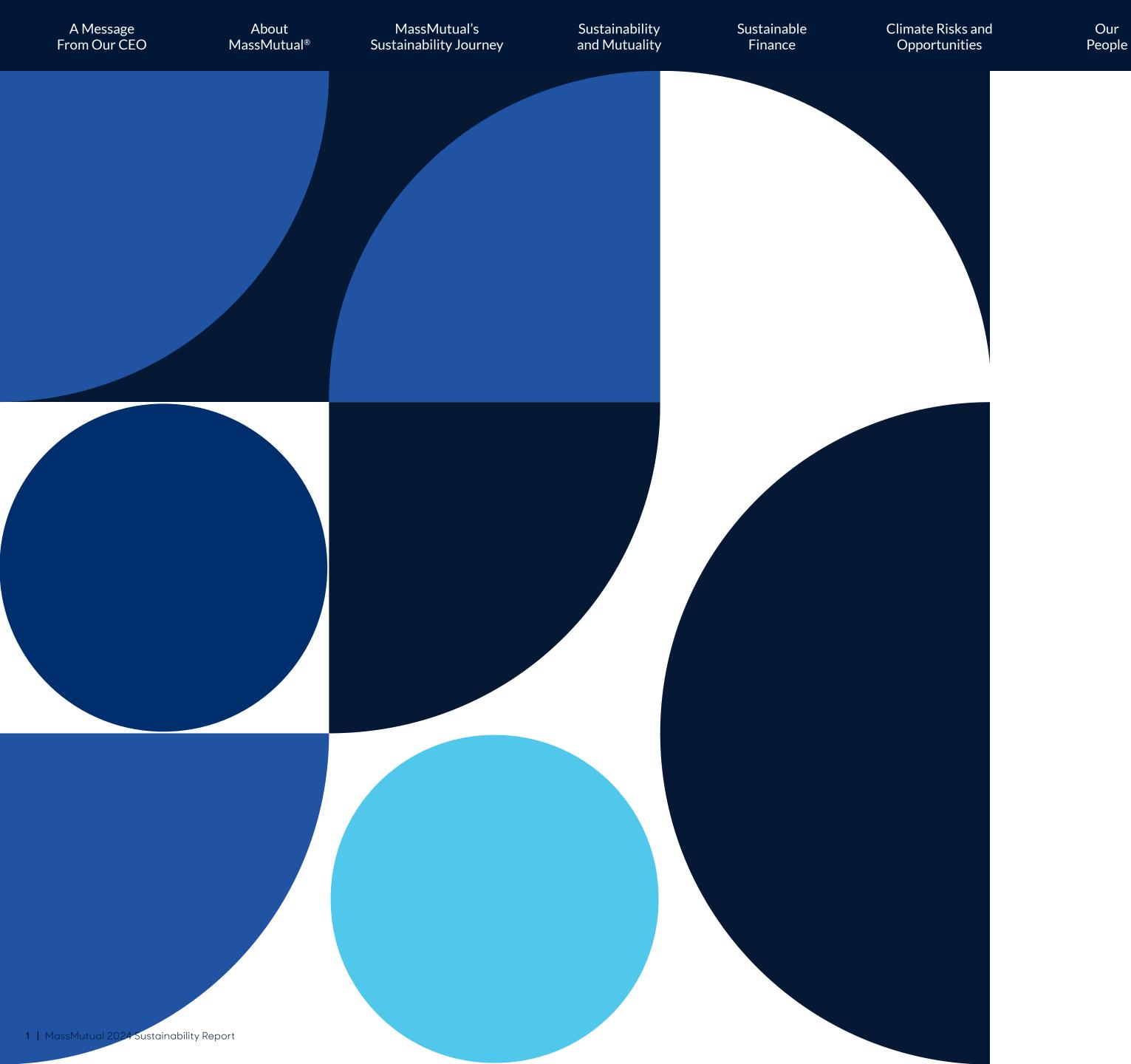


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A Message From Our CEO

Dear Fellow Stakeholders,

From the moment we issued our first policy in 1851, people have entrusted MassMutual with an enormous yet humbling responsibility: to help them secure their future and protect the ones they love. This has been our purpose since the day we were founded, and it drives everything we do as a mutual company that operates for the benefit of our members and policyowners.

This clarity of purpose also fuels our commitment to sustainability.

The decisions we make are centered around our ability to deliver value to those who rely on us not just today, but decades from now. That's why we take a long-term approach to building a better world for all of our stakeholders, including our policyowners, customers, financial professionals, employees, and communities.

This perspective helps us guide our policyowners through life's biggest moments with confidence and peace of mind, backed by our enduring financial strength and stability. It extends to the way we support our employees' well-being so they can live happier, more fulfilling lives. It underlies our efforts to strengthen the neighborhoods where we live and work, as we aim to expand economic opportunities for all. And in everything we do, we hold ourselves to the highest standards of ethics, integrity, and good governance, led by our unwavering belief in saying what you mean and doing what you say.

"The decisions we make are centered around our ability to deliver value to those who rely on us not just today, but decades from now. That's why we take a long-term approach to building a better world for all of our stakeholders, including our policyowners, customers, financial professionals, employees, and communities."

- Roger Crandall, Chairman, President & CEO

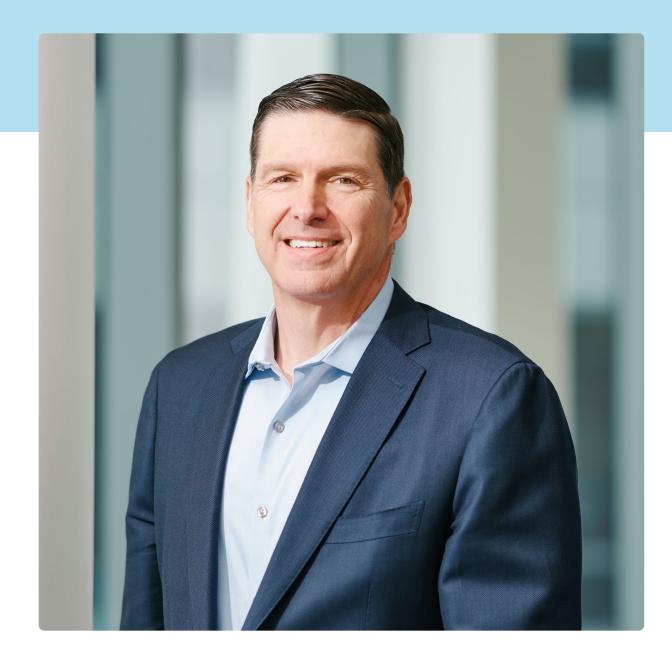
One benefit of being around for 174 years is that it has given us a deep appreciation and respect for those who came before us at MassMutual. We view ourselves as stewards of the important work they started, and we look forward to carrying on their legacy – while leaving our own mark – as we help build a better world for generations to come.

Sincerely,

Roger W. Crandall

My W. Mr

Chairman, President & Chief Executive Officer



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About MassMutual®

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Our

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MassMutual is a leading mutual life insurance company that is run for the benefit of its policyowners, members, and other customers. Founded in 1851, the company has been continually guided by one purpose: we help people secure their future and protect the ones they love. With a focus on delivering long-term value, MassMutual offers a wide range of protection, accumulation, wealth management, and retirement products and services. For more information, visit MassMutual.com.

Purpose

Climate Risks and

Opportunities

Sustainable

Finance

Our

People

We help people secure their future and protect the ones they love

2024 at a Glance

~11,400

full-time employees1

\$9.4B

insurance and annuity
benefits paid to
policyowners and customers²

~6,500

financial professionals in our network

life insurance in force

157th

consecutive dividend payout to eligible participating policyowners approved³ ~138,400

lives newly insured

- 1 Includes Massachusetts Mutual Life Insurance Company and its subsidiaries.
- ² Consolidated statutory results of Massachusetts Mutual Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: C.M. Life Insurance Company, MML Bay State Life Insurance Company, as well as MassMutual Ascend Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: Manhattan National Life Insurance Company and Annuity Investors Life Insurance Company as of December 31, 2024.
- ³ The dividend and dividend interest rate are determined annually, subject to change, and are not guaranteed.

Awards and Recognitions

World's Most Admired Companies⁴
- FORTUNE

2024 Best Places to Work Awards

- Built In⁵

Top Charitable Company

- Boston Business Journal

2024 Top Places to Work in Massachusetts

- The Boston Globe

2024 Best's Review Standing the Test of Time: Rated A or Higher for 75 Years
- AM Best⁶

⁴ From FORTUNE. ©2025 FORTUNE Media IP Limited. All rights reserved. FORTUNE 500 and FORTUNE World's Most Admired Company are registered trademarks of FORTUNE Media IP Limited and are used under license. FORTUNE is not affiliated with, and does not endorse products or services of, MassMutual.

U.S. Best Places to Work, U.S. Best Large Places to Work, Best Places to Work in Boston, Best Large Places to Work in New York, and Best Large Places to Work in New York.

Best ratings are as of May 1, 2025, and apply to Massachusetts Mutual Life Insurance Company and its subsidiaries, C.M. Life Insurance Company and MML Bay State Life Insurance Company. Ratings are subject to change. MassMutual has received different ratings from other ratings services.

2025

Provided a record estimated

\$2.5 billion dividend

payout to participating

policyowners, the 19th

consecutive year we have

paid an industry-leading

dividend interest rate

companies⁸

among our mutual peer

MassMutual's Sustainability Journey

Guided by our unwavering commitment to the long-term interests of our policyowners, members, and other customers, we have achieved many milestones over the past 174 years. As our business continues to grow and evolve, sustainability remains essential to how we deliver value for our policyowners, customers, affiliated financial professionals, employees, and communities.

2002

Developed MassMutual LifeBridgeSM, a first-of-itskind, free life insurance product⁷

Established the

2021 2022

Opened our new office at 10 Fan Pier in Boston, a LEED Platinum® certified building

> Launched signature partnership with the Boston Red Sox, including teaming up with the Red Sox Foundation on shared community initiatives

Launched the MassMutual

Technology Fund to invest

in early- and growth-stage

companies across North

mitigate, and manage the

impact of climate change

America that measure,

Ventures Climate

2023

Expanded total impact investment commitment to \$300 million with our First Fund Initiative and MassMutual Catalyst Funds, launched in 2021, which invest in historically overlooked emerging managers and businesses across the United States and Canada, including rural

startups in Massachusetts

Purchased a majority interest in Counterpointe Sustainable Advisors LLC, a leader in commercial property assessed clean energy (C-PACE), sustainable real estate, and energy solutions financing

2024

Invested in the development of sustainable real estate through innovative transactions that combine construction mortgage loans and C-PACE financing, arranged by Barings LLC and Counterpointe

Continued to deploy capital from our \$150 million MassMutual Ventures Climate Tech Fund, investing in five new companies

MassMutual Foundation entered five-year partnership with Opportunity Finance Network to launch the CDFI Innovation Initiative, to ensure that communities underserved by mainstream finance have access to affordable financial products and services

Reduced operational greenhouse gas (GHG) emissions 6/ percent from 2019

Launched Sustainability Knowledge Hub, an e-learning platform to upskill employees on key topics, such as GHG emissions, net zero, and climate risk

1851

MassMutual founded

Issued 60,000 loans totaling more than \$26 million to policyowners

to help them through

the Great Depression

1968 1932

Introduced flextime to help employees achieve balance in their work and life

2016

MassMutual Foundation

⁷ MassMutual pays the premiums.

8 The dividend and dividend interest rate are determined annually, subject to change, and are not guaranteed.



Sustainability and Mutuality

Our purpose – to help people secure their future and protect the ones they love – is foundational to our business. Guided by this purpose, we have continued to provide enduring value for our policyowners and customers through nearly 174 years, including through times of profound economic and social change.

As a mutual company, we operate for the benefit of our policyowners, members, and other customers, which allows us to manage the company with a focus on their long-term interests. This means that our integration of sustainability is fundamentally aligned with how we operate and deliver value to the people who depend on us and the planet we share.

Our Approach

At MassMutual, we view sustainability as integral to how we deliver long-term value and stability for our policyowners, customers, investors, employees, affiliated financial professionals, business partners, and communities. We focus on the sustainability factors that are material to our long-term success. Integration of these factors into our business supports long-term growth, aligns with our steadfast commitment to risk management, sparks innovation, and helps us build the culture and attract the talent we need to succeed in a changing world. We regularly engage with key stakeholders through a variety of mechanisms to help inform our sustainability strategy.

In 2024, demonstrating the success of our long-term approach, we approved a record estimated \$2.5 billion dividend payout to participating policyowners, the 19th consecutive year we have paid an industry-leading dividend interest rate among our mutual peer companies.9 We continuously advance our sustainability approach and performance in support of our business goals.

Sustainability Governance

Our sustainability governance structure is designed to ensure integrity, accountability, transparency, and sound decision-making. Strong oversight enables us to deliver long-term value and stability to our policyowners, customers, affiliated financial professionals, employees, and communities.

Our Board of Directors acts as a steward for the interests of stakeholders of the company and is responsible for overseeing the business and affairs of the company, including sustainability-related issues. The Board receives regular updates. MassMutual's senior management oversees sustainability strategy, including climate risks and opportunities. Our Global Sustainability Office develops and deploys MassMutual's sustainability strategy, working closely with functional leaders, business units, and cross-functional working groups to drive integration and engage employees.

For more information about our climate risk governance, see page 12, and about our corporate governance practices, see page 29.

Core Elements of Our Sustainability Strategy



Capturing opportunities and managing risk in the transition to a low-carbon economy to succeed in a rapidly changing world



Fostering an inclusive workplace that empowers our employees to reach their personal and professional goals



Investing in our communities to help create access to social and economic opportunities and financial well-being for people from all backgrounds



Operating our facilities sustainably

Progress

- · Continued driving progress toward our 2030 interim targets for our commercial mortgage loan and public corporate power and energy portfolios
- · Invested in the development of sustainable real estate through innovative transactions that combine construction mortgage loans and C-PACE financing, arranged by Barings LLC and Counterpointe
- · Continued to deploy capital from our \$150 million MassMutual Ventures Climate Tech Fund, investing in five new companies in 2024

- · Continued to foster an inclusive workplace, driven by strategies to attract, hire, develop, and retain a workforce aligned with our purpose
- · Continued to help employees bring their best selves to work with a holistic, robust suite of healthcare, retirement, and protection benefits
- · Entered into a five-year, \$25 million partnership with Opportunity Finance Network to advance opportunities in the Community Development Financial Institution industry
- · Awarded \$2 million to support Way Finders' City of Homes program, which renovates properties and offers them to first-time homebuyers at an affordable price
- · Continued to provide access to microloans through partnerships with organizations such as People Trust and **Epicenter Memphis**

- · Reduced operational GHG emissions 67 percent from 2019 as we work toward our 2027 interim target
- · Further enhanced our carbon management software platform to better calculate, track, and report GHG emissions

Sustainable Finance

Our Policyowners

and Customers

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Our customers and policyowners entrust us with their long-term financial security and peace of mind, and for more than 170 years, we have delivered on our purpose, helping people secure their future and protect the ones they love. Our integration of sustainability directly stems from our obligation to manage the company with a focus on the long-term interests of our policyowners, members, and other customers. Integrating material sustainability factors enables us to pursue consistent, long-term returns by mitigating risks and identifying new opportunities.

At MassMutual, sustainable finance encompasses the management of our General Investment Account (GIA), insurance products, and asset management offerings. We view sustainability as a lens through which we can identify and manage risks and opportunities, and we tailor our approach to each line of business in support of long-term growth.

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Sustainable Investing

Our GIA backs the obligations to those who depend on us. As of year-end 2024, our GIA totaled \$306 billion of invested assets across MassMutual and MassMutual Ascend, our wholly owned subsidiary and leading annuity provider. MassMutual, as a mutual life insurance company, is a long-term investor focused on meeting commitments that stretch far into the future. We seek to generate long-term, stable performance to support MassMutual's financial strength and ability to meet our financial obligations to our policyowners.

Investing Responsibly

Considering material sustainability factors in the overall management of our GIA supports risk mitigation and long-term value creation. Our Sustainable Investment Policy outlines our overall approach to integrating sustainability factors into our investment process, and the Investment Committee of our Board of Directors maintains oversight of this policy.

MassMutual is a signatory of the Principles for Responsible Investment (PRI). As a signatory, we aim to incorporate sustainability considerations into our own investment analysis and decision-making. By the end of 2024, 97 percent of our GIA assets under management were managed by signatories of the PRI.

Dedicated staff in Investment Management and the Global Sustainability Office are responsible for analyzing and integrating material sustainability factors into our investment processes, in line with our overall company strategy. We actively engage with our asset managers on their sustainable investment capabilities, including through a survey of their policies and practices.

Our Investment Management team evaluates our asset managers' sustainable investment practices as part of standard due diligence and annual monitoring across asset classes. For more information on our sustainable investment practices, see our 2024 PRI report. For more information on how we manage climate risks and opportunities in our investments, see page 13.

We continue to implement our sustainable investing approach with our wholly owned global asset manager subsidiary, Barings LLC, which manages the majority of our GIA assets. Barings integrates its proprietary sustainability scoring methodology as one of many factors in its investment strategies. In 2024, nearly 85 percent of our Barings-managed assets were assigned a sustainability score, including assets in our public corporate fixed income and real estate investment portfolios. See <u>Barings' sustainability</u> website for more information about its approach.

Expanding Economic Opportunities

MassMutual leverages our capital to expand access to economic opportunity, strengthening the communities where we operate while furthering our efforts to help more people achieve financial security. We apply this investment approach in a variety of ways. In 2024, we invested \$1.2 billion in affordable housing debt and equity, bringing our total investment in this sector to \$3.1 billion. In addition, through MassMutual Ventures (MMV), we invest in a range of businesses, some of which generate social and economic benefits. For example, in 2024, MMV led the investment for Kismet Healthcare, a healthtech company based in Sydney, Australia, that is helping to improve access to disability and healthcare services. Through MassMutual's impact investments, which are part of our GIA, we focus on investing capital in companies and funds that are historically overlooked. In doing so, we aim to generate positive, measurable social and environmental impact alongside financial returns. Our strategy leverages innovative approaches in deal sourcing, selection, diligence, and investments to reduce barriers to capital.

MassMutual has committed a total of \$300 million in impact investment capital since beginning this work in 2021, with more than \$51.6 million deployed in 2024.

We pursue these opportunities through two unique initiatives:

- MassMutual Catalyst Funds I and II (MMCF) are a \$150 million commitment to increase access to venture capital and invest in innovative products and services that advance economic and social mobility. MMCF focuses on investing in Massachusettsbased companies, while selectively investing with fund managers in our First Fund Initiative, detailed below, across the United States and Canada. Since launching the MMCFs, we have invested nearly \$45 million in 25 businesses across a range of industries.
- First Fund Initiative is MassMutual's commitment to help address historic barriers to capital. First Fund's allocation strategy centers on investing in funds that are systemically overlooked by financial institutions, have a differentiated investment thesis, and present the ability to generate positive social impact alongside financial returns. Since launching our initial \$50 million commitment in 2021, we have dedicated an additional \$100 million to this initiative, bringing our total allocation to \$150 million. As of 2024, First Fund had committed \$108 million across 15 funds.

Consolidated statutory results of Massachusetts Mutual Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: C.M. Life Insurance Company and MML Bay State Life Insurance Company, as well as MassMutual Ascend Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: Manhattan National Life Insurance Company and Annuity Investors Life Insurance Company, as of December 31, 2024. Consolidated GIA results for MassMutual Life Insurance Company, its U.S.-domiciled life insurance subsidiaries as well as MassMutual Ascend account for MassMutual's equity holding in MassMutual Ascend Life Insurance Company via Glidepath Holdings, Inc.

Sustainable Product Offerings

MassMutual is committed to helping our clients meet their financial goals and to reaching people on their terms. To do this, we offer a wide range of products and services that enable our customers to choose solutions based on their individual priorities and objectives. We provide several options across our variable annuities and variable life product lineups, as well as through our MML Investors Services' (MMLIS) brokerage and investment advisory platforms, for clients who are interested in sustainable investing strategies. For example, we offer the MML Sustainable Equity Fund as an option within our variable annuities and variable life insurance products. The MML Sustainable Equity Fund is sub-advised by American Century Investment Management and aims to deliver competitive returns over the long term by investing in companies that exhibit improving business fundamentals and implement sustainable corporate practices.

Our MMLIS clients also have access to hundreds of sustainable investment opportunities offered by third-party asset managers through our Wealth Management advisory platform. By the end of 2024, assets under management for clients investing in sustainability funds — including mutual funds, exchange-traded funds, separately managed accounts, and fund strategist providers — was approximately \$1 billion out of a total of \$274 billion.

Investing in Artificial Intelligence (AI) Solutions to Expand Access to Finance

MassMutual is committed to expanding access to financial opportunities. In 2024, we amplified this work by partnering with firms in our First Fund Initiative Portfolio to help fund two MMCF investments in innovative companies.

The first was Ocho, an insurance agency that leverages Al and cultural competence to provide insurance services to underserved communities.

Ocho was founded with the goal of providing financing to make auto insurance affordable. Through its services, Ocho offers lower or even \$0 down payments, split payments, more time to pay, and helps borrowers build their credit scores — making insurance coverage more accessible and supporting pathways to financial resilience.

The second, GreenLyne.Al, is a developer of an inclusive finance-as-a-service platform designed to make home equity loans more accessible and affordable for low- or moderate-income households. The company's platform utilizes an Al-based search technology to tailor loan size and price to meet the individual needs of borrowers, while simultaneously providing lenders with automated technology that can be used to offer these customized loans.

Climate Risks and Opportunities

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Our approach to managing climate risks and opportunities serves our long-term business interests and encompasses our investments, operations, and products. This entails maintaining robust governance, integrating climate-related factors into our enterprise strategy and risk management, and engaging in targeted efforts to achieve our net zero goals.

Our Progress

2021

Announced goals to achieve net zero greenhouse gas (GHG) emissions in our operations by 2030 and investment portfolio¹¹ by 2050

Developed multiyear net zero implementation roadmaps

Published Sustainable Investment Policy Statement

Became a signatory to the Principles for Responsible Investment (PRI)

Opened our LEED Platinum® certified office at 10 Fan Pier Blvd. in Boston

Established Global Sustainability Office (GSO) and appointed Head of Sustainability 2022

Published first sustainability report, including climate risk management section informed by the recommendations of the Task Force on Climaterelated Financial Disclosures (TCFD)

Disclosed first annual operational GHG emissions inventory

Launched the MassMutual Ventures' (MMV) Climate Technology Fund to invest in early- and growth-stage companies across North America that measure, mitigate, and manage the impacts of climate change

Joined the Partnership for Carbon Accounting Financials (PCAF)

2023

Disclosed interim targets for our commercial mortgage loan portfolio, our public corporate power and energy portfolios, and our operations

Began deploying a carbon management software platform to calculate, track, and report GHG emissions

Purchased majority interest in Counterpointe Sustainable Advisors, LLC

Co-led a \$14 million investment in Cultivo, a public benefit corporation accelerating finance toward nature-based carbon removal projects, as part of our MMV Climate Technology Fund

2024

Invested in the development of sustainable real estate through innovative transactions that combine construction mortgage loans and Commercial Property Assessed Clean Energy (C-PACE) financing, arranged by Barings LLC and Counterpointe

Continued to deploy capital from our \$150 million MMV Climate Technology Fund, investing in five new companies

Further advanced climate risk capabilities and integration into our enterprise risk management for our investments and operations

Reduced operational GHG emissions 67 percent from 2019, working toward our 2027 interim target

Expanded use of carbon management software platform for operational and financed emissions

Launched Sustainability
Knowledge Hub, an e-learning
platform to upskill employees
on key topics, such as GHG
emissions, net zero, and
climate risk

Governance

Our governance structure embeds climate-related considerations into our company strategy and processes to ensure accountability, transparency, and sound decision-making.

Board of Directors Oversight

MassMutual's Board of Directors provides independent oversight of our enterprise risk management, including of climate risks. Our directors possess broad and extensive experience from a range of industries and backgrounds, offering guidance, perspectives, and expertise that helps inform our work to deliver strong, long-term financial performance.

The Board oversees our Enterprise Risk Management (ERM) framework and receives updates on our risk management processes, policies, and guidelines at least annually. Climate risks, including transition and physical risks, are integrated into our ERM framework. For more information on how we identify, assess, and manage climate-related risks, see page-15.

The Board and its committees engage with management, including our Chief Risk Officer (CRO), Chief Investment Officer, and Head of Sustainability, on climate-related activities, climate risks and opportunities, and our net zero goals. In addition, the Board, through its Investment Committee, oversees our Sustainable Investment Policy, which includes climate considerations. Each year, the Board or its committees receive updates on key topics, such as the climate-and sustainability-related regulatory landscape, evolving disclosure requirements, MassMutual's enterprise sustainability strategy and roadmap, and the progress of our ERM program.

Investment portfolio refers to MassMutual's and MassMutual Ascend's combined GIA, which held \$306 billion of total invested assets as of December 31, 2024. These are consolidated statutory results of Massachusetts Mutual Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: C.M. Life Insurance Company and MML Bay State Life Insurance Company, as well as MassMutual Ascend Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: Manhattan National Life Insurance Company and Annuity Investors Life Insurance Company, as of December 31, 2024. Consolidated GIA results for MassMutual Life Insurance Company, its U.S.-domiciled life insurance subsidiaries as well as MassMutual Ascend account for MassMutual's equity holding in MassMutual Ascend Life Insurance Company via Glidepath Holdings, Inc.

Management Oversight

Senior management at MassMutual oversees our sustainability strategy, including climate risks and opportunities, progress toward our net zero goals, and associated disclosures. Our Enterprise Risk Committee (ERC) is chaired by our CRO and includes the Executive Leadership Team. The ERC is responsible for establishing MassMutual's ERM policies and procedures, approving our risk appetite and associated tolerance levels, and identifying top and emerging risks. This includes the assessment of climate risks, which we continue to integrate into our ERM framework.

Our Global Sustainability Office (GSO), led by the Head of Sustainability, is responsible for developing and implementing our climate strategy in collaboration with key business units throughout the company. The GSO leads our work on climate risks and opportunities, our net zero goals, and our sustainability disclosures, supported by projectbased, cross-functional working groups. For example, a team comprised of representatives from ERM, GSO, and Investment Management collaborated in 2024 to pilot approaches to incorporate physical climate risks into our investment risk frameworks. Our GSO partners with business units across our company to strengthen the overall capabilities needed to drive progress on our goals and prepare our sustainability and climate disclosures. For more on MassMutual's corporate governance, see page 29.

Strategy

MassMutual's climate strategy centers on capturing opportunities and managing risks in the transition to a low-carbon economy to succeed in a rapidly changing world. This approach aligns with the way we deliver long-term value and stability for our policyowners, members, and other customers. We are integrating climate considerations into our investment processes, operations, and ERM framework in support of our long-term strategic resilience.

Emissions From Investments

MassMutual aims to reach net zero emissions in our investment portfolio by 2050. We have done so in support of our strategy to manage climate risks and capture investment opportunities in the transition to a low-carbon economy.

In 2023, we published 2030 interim targets for our commercial mortgage loans and public corporate power and energy portfolios. We started with these carbon-intensive sectors because they represent meaningful emissions from our General Investment Account (GIA) and have credible data, methodologies, and transition pathways. In setting these targets, we considered guidance from leading frameworks, including those developed by the Science Based Targets initiative (SBTi) and the Partnership for Carbon Accounting Financials (PCAF). We will continue to evolve our target-setting approach over time based on the availability of credible data and methodologies. For more information on our targets, see page 15.

Our priority is to safeguard our long-term investment performance objectives. We seek to deliver attractive risk-adjusted returns and proactively mitigate potential impacts to asset performance resulting from climate risk. As an asset owner, we engage with asset managers and other stakeholders to invest in the global energy transition. Because there are many factors both within and outside our control, such as technological advancements, that may affect our ability to achieve our targets, we take a transparent and data-driven approach, monitoring and reporting our progress and recalibrating our targets as needed based on best practices.

Implementation of our net zero goals is supported by a multiyear roadmap and annual action plans. Our roadmap is informed by voluntary frameworks like PCAF and SBTi, as well as by relevant regulatory requirements, including the National Association of Insurance Commissioners Climate Risk Disclosure Survey and the California Corporate Data Accountability Act. We will continue to monitor and respond to developments in the regulatory space.

Our roadmap includes steps to enhance our companywide capabilities, such as the implementation of new data management tools and learning resources.

Further, we are incorporating our interim targets and metrics into standard processes to more effectively manage risks, monitor performance, and facilitate reporting. For more details on how we integrate climate and sustainability considerations into our investment approach, see page 9 and page 15.

Investing in the Global Energy Transition

MassMutual's investment approach is rooted in diversification, with a focus on creating long-term value. We pursue investment opportunities arising from the transition to a low-carbon economy that support this approach. For information on our approach to GIA portfolio construction and investment decisionmaking, see our Investment Philosophy.

One example is our 2023 purchase of a majority interest in Counterpointe Sustainable Advisors LLC, an investment firm focused on real estate financing for sustainable buildings and energy efficiency, renewable energy, and resiliency measures in commercial properties. In 2024, through Barings and Counterpointe, we began investing in innovative transactions that combine construction mortgages with C-PACE to enable the development of green buildings. For example, Barings and Counterpointe teamed up to provide financing for the development of Habitat, a new work-live-thrive complex in Los Angeles with creative office space, a multifamily building, as well as restaurant, retail, and amenity spaces. The Habitat financing incorporates sustainable debt capital, and the integrated offering of C-PACE and construction mortgage financing encourages borrowers to construct green buildings and finance sustainable projects. The transit-oriented development is targeting LEED certifications for both the residential and commercial components and is pursuing net zero emissions for construction and operations, benefiting future tenants, owners, and other stakeholders.

In addition, MassMutual continues to invest in early-and growth-stage climate technology companies through MassMutual Ventures' (MMV) \$150 million Climate Technology Fund. In 2024, MMV invested in Transaera, a company that is developing a new class of ultra-efficient air conditioning systems for residential and industrial applications. Their advanced materials remove moisture from the air before cooling it and then repurpose heat from the system to power the cycle. The innovative process reduces electricity consumption by 40 percent, lowers costs, and minimizes greenhouse gas emissions. To learn more about the companies that the MMV Climate Technology Fund invests in, see MMV's website.

MassMutual also continues to deploy our capital to support the development of low- and zero-carbon energy as part of our sustainable investing strategy. In 2024, we invested over \$800 million in renewable energy, bringing our total direct investment in this sector to \$2.5 billion. For more information on our sustainable investing approach, see page 9.

Alongside pursuing low- and zero-carbon investment opportunities, we remain focused on identifying, assessing, and managing emerging climate-related risks that have the potential to impact our business strategy and operations. We have conducted both transition and physical risk scenario analyses to assess our long-term business resilience.

Emissions From Operations

Decarbonizing our operations is a key component of our overall approach to managing climate risks, and in 2021, we set a goal to reach net zero emissions in our operations by 2030. To drive progress toward this goal, we set an interim target to reduce our absolute Scope 1 and Scope 2 emissions by 72 percent by 2027, compared to a 2019 baseline. We considered available frameworks in setting this target, including the SBTi's Corporate Net-Zero Standard.

MassMutual's emissions are primarily driven by energy use in our owned and leased facilities. Our operational emissions reduction strategy is centered on improving energy efficiency and increasing the use of renewable energy. MassMutual has a long history of working to reduce energy costs and minimize the impact of our operations on the environment through energy conservation and efficiency within our facilities.

We collaborate cross-functionally to identify emissions reduction opportunities, guided by our multiyear roadmap and annual work plans. In addition, we track our emissions and regularly review and report on our progress. Our Environmental Policy Statement outlines our environmental priorities and actions, demonstrating our commitment to environmental stewardship.

After reducing energy consumption where feasible, we identify opportunities to increase our use of renewable energy. This includes acquiring energy attribute certificates, such as renewable energy certificates (RECs) and International-RECs, to reduce market-based emissions. We then use verified carbon removal credits to offset any residual emissions. For further information about MassMutual's operational net zero 2030 goal, see page 17.

We also continue to build our internal capabilities to support our efforts toward meeting our goals. This includes work to refine our data management systems to support the ongoing measurement and management of our progress against our interim targets. We utilize a software platform to facilitate the calculation of emissions from both our operations and our investment portfolio, enhancing our ability to calculate, track, and report on our progress. We also launched and internally promoted a company-wide training site to improve climate literacy and enable our employees to integrate climate considerations into their day-to-day work.



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Risk Management

As a life insurance and financial products company, our most significant exposure to climate-related risks is associated with our GIA, although climate risks may also affect our physical operations, suppliers, and products.

MassMutual monitors a broad range of strategic, financial, and operational risks, including those related to sustainability and climate change. Climate risks are integrated into our ERM framework, enabling the identification, assessment, and management of these risks across our organization. This includes transition risks such as market, technology, reputational, and policy and legal risks, as well as acute and chronic physical risks.

We manage enterprise risks, including climate-related risks, using a three lines of defense model, which defines roles and responsibilities to engage employees at every level. Our GSO collaborates with operational business units to serve as the first line of defense, with responsibility to manage climate risks in standard business processes. Our ERM team is our second line of defense and is responsible for independently ensuring that climate risks are identified, understood, and managed effectively, supported by our GSO. Our Internal Audit team acts as the third line of defense,

providing assurance that the company is appropriately managing these risks.

MassMutual conducted a climate risk assessment in 2023 to document potential climate-related risks to our business over short-, medium-, and long-term time horizons. This assessment, informed by the Task Force on Climate-related Financial Disclosures (TCFD) framework, considered transition and physical climate risks across our GIA, insurance products, and operations. Following the assessment, we conducted both transition and physical risk scenario analyses to better understand how a range of potential climate outcomes may impact our business.

In 2024, we conducted a proof-of-concept exercise to identify and incorporate physical risk-related scenarios into our existing investment risk frameworks and to develop a path forward for integrating these risks into our overall ERM framework. We also took initial steps to integrate physical risk considerations into our operational procedures, such as business resiliency planning and third-party risk assessments. The results of these assessments continue to inform the integration of climate risks into our ERM framework, including key indicators to measure and monitor risk. As we advance this work, we expect to gain additional insights and adapt our metrics and processes accordingly.

Metrics and Targets

To drive progress toward our net zero goals, we set interim targets and track key performance metrics, which are detailed in this section.

Emissions From Investments

In 2023, we announced 2030 interim targets for our commercial mortgage loans and our public corporate power and energy portfolios, as part of our goal to reach net zero emissions in our portfolio by 2050. Our priority in implementing these targets is safeguarding our long-term investment performance objectives. For more information on how we implement these targets, see page 13. We set targets using physical intensity metrics. Our 2030 interim targets and target performance, relative to our 2019 baseline, are shown in the table on page 16.

In addition to physical intensity metrics, we disclose absolute financed emissions for our commercial mortgage loans and our public corporate power and energy portfolios. Our calculation approach follows the Partnership for Carbon Accounting Financials (PCAF) financed emissions standard, to align with industry best practices.

We use data from several sources to calculate absolute financed emissions and physical intensity target performance. We strive to use the highest-

quality GHG data available in our calculations, as defined by PCAF guidance. For our commercial mortgage loans, we calculate GHG emissions from estimated building energy consumption based on building size, location, and type. For our public corporate power and energy portfolios, we use issuer-reported emissions data, where available, and supplement with estimated emissions data from third-party data providers where reported data is not available.

We recognize that carbon accounting, particularly for financed emissions, is in its initial stages of development. Given this evolving landscape, we anticipate that our methodologies will be subject to change over time, especially as the quality of emissions data improves; new sources of data, guidance, and methodologies are developed; and climate scenarios evolve. Over time, we aim to continue improving our data quality and to expand the scope of our financed emissions inventory as data availability and estimation methods mature. We will continue to monitor new developments, report on our progress, and when necessary, update our goals to reflect refinements in methodology or data quality.

Net Zero Portfolio Emissions Targets and Financed Emissions

Asset class and sector ¹²		Physical intensity target			Physical intensity target progress			Absolute financed emissions ¹³				
Asset class	Sector	GHG scopes included	Reference scenario	2019 baseline	2030 target calculated emissions	2030 target % change from 2019 baseline	202214	202314	2023 % change from 2019 baseline	2022¹⁴ (thousand tCO2e)	2023¹⁴ (thousand tCO2e)	2023 PCAF GHG data quality score ¹⁵
Public corporate debt and equity	Power (Power generation companies)	Scope 1	IEA Net Zero Emissions 2050	495 kg CO₂e/MWh	149 kg CO₂e/MWh	-70%	442 kg CO₂e/MWh	424 kg CO₂e/MWh	-14%	2,428	2,175	3.4
	(Upstream 1 & 2 production, refiners, integrated companies in the oil and gas	Scopes 1 & 2	IEA Net Zero Emissions 2050	9.8 g CO₂e/MJ	5.7 g CO₂e/MJ	-42%	10 g CO₂e/MJ	9.7 g CO₂e/MJ	-1%	472	516	3.7
		Scope 3, Category 11	IEA Net Zero Emissions 2050	76 g CO₂e/MJ	54 g CO₂e/MJ	-29%	74 g CO₂e/MJ	73 g CO₂e/MJ	-4%	2,430	2,811	3.8
Mortgage loans	Commercial real estate ¹⁶	Scopes 1 & 2	IEA Energy Technology Perspectives Beyond 2°C Scenario	55 kg CO₂e/m²	24 kg CO₂e/m²	-56%	56 kg CO₂e/m²	56 kg CO₂e/m²	2%	319	288	4.0

Targets collectively cover 9 percent of MassMutual's and MassMutual Ascend's combined GIA, which held \$306 billion of total invested assets as of December 31, 2024. These are consolidated statutory results of Massachusetts Mutual Life Insurance Company and its U.S.-domiciled life insurance subsidiaries:

C.M. Life Insurance Company and MML Bay State Life Insurance Company, as well as MassMutual Ascend Life Insurance Company and Annuity Investors Life Insurance Company, as of December 31, 2024.

Consolidated GIA results for MassMutual Life Insurance Company, its U.S.-domiciled life insurance subsidiaries as well as MassMutual Ascend Life Insurance Company via Glidepath Holdings, Inc.

Absolute financed emissions are calculated using the same asset class, sector, and GHG Scope boundaries as physical intensity target metrics.

The timing of emissions data availability presents a challenge due to an inherent lag in public GHG accounting and reporting by issuer companies. MassMutual aims to align our portfolio data with issuer emissions and production data from the same year. Consequently, we are disclosing 2022 and 2023 performance in our 2024 report as more recent emissions and production information is not yet available. This type of data lag is common when calculating and reporting emissions associated with financing activities.

PCAF provides a scoring mechanism for emissions calculations to evaluate data quality. Under this system, the use of verified emissions achieve a score of 2, and emissions estimated based on the issuer's production achieve a score of 3. Emissions estimated based on the issuer's economic activity receive a score of 4 or 5, depending on the informations.

¹⁶ Commercial mortgage loan emissions represent whole building energy consumption.

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Emissions From Operations

To advance progress toward our net zero 2030 operational emissions goal, we set an interim target to reduce our absolute Scope 1 and Scope 2 GHG emissions by 72 percent by 2027, with 2019 as our baseline year.

To date, we have achieved a 67 percent reduction in absolute Scope 1 and Scope 2 GHG emissions against our 2019 baseline. Changes in our emissions over the disclosed periods are driven by energy efficiency, our use of renewable energy, and expanding our organizational boundary.

Our approach to ensuring the integrity of our data and reporting is informed by industry standards. Our carbon management software platform consolidates data from owned and leased facilities and vehicles to track our energy consumption and carbon footprint. This approach allows us to regularly assess our performance against our targets and make necessary adjustments to stay on course.

We calculate our GHG emissions in accordance with the Greenhouse Gas Protocol, supporting transparency and consistency in reporting.

Our emissions inventory for Scope 1 and Scope 2 covers emissions sources relevant to MassMutual, including:

- Scope 1 emissions: Direct GHG emissions from our owned and leased facilities, as well as vehicles and equipment under MassMutual's operational control.
- Scope 2 emissions: Indirect GHG emissions from purchased energy consumed at MassMutual's facilities, with market-based emissions reflecting the impact of energy attribute certificates.

Our ongoing efforts continue to be guided by robust data management and reporting practices, enabling us to remain on track to meet our decarbonization goals.

Operational Greenhouse Gas Emissions¹⁷

Market-based emissions (tCO₂e)¹8	2019 baseline	2022	2023	2024
Scope 1	8,991	8,495	7,776	8,228
Scope 2 (market-based) ¹⁹	20,210	13,537	8,470	5,324
Carbon removal credits retired	_	_	-1,538	-3,902
Total emissions	29,201	22,032	14,708	9,650
Location-based emissions (tCO ₂ e)	2019 baseline	2022	2023	2024
Scope 1	8,991	8,495	7,776	8,228
Scope 2 (location-based) ²⁰	20,210	17,572	15,919	14,627
Total emissions	29,201	26,067	23,695	22,855

MassMutual is committed to continually evaluating our processes to ensure we use high-quality data and follow industry-recognized procedures and calculations. Our 2019 baseline year reflects a typical year for our operations. In 2024, we adjusted GHG inventory boundaries to include our MassMutual India and MassMutual Romania subsidiaries. All updates were retroactively applied to previous years, including our 2019 baseline year. Consequently, emissions presented in this report differ from those published previously. The scope of our GHG emissions inventory is Massachusetts Mutual Life Insurance Company, MassMutual Ascend Life Insurance Company, MassMutual India, and MassMutual Romania.

Scope 2 market-based emissions account for energy a company has actively chosen through contracts and instruments such as RECs.

We prioritize the reduction of emissions from our operations and source renewable energy where possible. However, we acknowledge there are likely to be emissions we are unable to reduce. We address these emissions through purchasing applicable energy attribute certificates (EACs) and verified carbon removal credits. Our Scope 2 market-based emissions incorporate the impact of EACs, including Green-e certified renewable energy certificates (RECs) for our U.S. facilities and EKOenergy certified International-RECs and Guarantees of Origin (GOs) for our international facilities. In 2024, we purchased 28,910 MWh of renewable electricity. For more information on our carbon removal credit purchases, see MassMutual Voluntary Carbon Market Disclosure.

Scope 2 location-based emissions reflect the average emissions intensity of electric grids on which the electricity consumption occurs. This method uses grid-average emission factor data.

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Mutuality is at the center of all that we do, including how we support the people who drive our progress every day. We continually work to cultivate a flexible, collaborative, and inclusive environment where all employees are seen, valued, and respected – and our culture is a key reason exceptional people join and stay with MassMutual.

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Building an Inclusive Workplace

We have a robust governance structure overseeing our talent efforts, including our long-standing commitment to valuing people and inclusion. Our Executive Leadership Team (ELT) regularly receives updates on our priorities and progress from our Head of Human Resources, who has management oversight of the MassMutual talent management program.

Recruiting Exceptional Talent

We look for employees who thrive in a culture based on trust and accountability, where different backgrounds, experiences, and perspectives are valued. This approach is embedded in our recruitment strategy, which includes building a dynamic talent pipeline.

Having a workforce that reflects our customers and communities enables us to serve them most effectively. Foundational to this is creating access to talent pools that include people with varied experiences and backgrounds, building awareness of our approach as we recruit new talent, and bringing a range of perspectives to the interview process. We monitor how we reflect the changing external world within our workforce.

Embedding a Culture of Belonging

Our culture is built on a foundation of mutuality and shared purpose. We put our people first, fostering a flexible, collaborative, and inclusive environment where everyone can thrive personally and professionally. At MassMutual, our eight Business Resource Groups (BRGs) support initiatives that drive organizational results, increase employee engagement, and foster awareness, respect, and inclusion within the workplace. Open to all employees, our BRGs are a vital vehicle for our employees to support our business, find community, and engage outside their immediate teams. Our BRGs also provide programs and tools to enable growth and promote development, including educational events and mentorship opportunities. In 2024, over 40 percent of employees participated in MassMutual BRGs, representing the following communities: Black/African American, Asian, Hispanic/Latino, LGBTQ+, members of the armed forces, veterans, and military family members, individuals with disabilities, young professionals, and women.

Similar employee affinity groups are present throughout our organization and open to all employees. For example, MassMutual Ascend launched the Ascending Professionals Network in 2024 to create opportunities for young leaders to build relationships, expand their skills, and enhance their professional development. In addition, MassMutual India leverages employee committees, led by its executives, that are focused on topics aimed at

bringing employees together, from health and wellness to the arts and sports. These committees regularly plan and host events for employees.

Maintaining Workplace Standards

Our workplace standards reinforce MassMutual's expectations for maintaining a professional and respectful work environment, where we operate ethically, with integrity, and in compliance with applicable laws. These efforts are essential to creating an inclusive workplace and culture.

Our Code of Conduct, Equal Employment Opportunity Policy, and our Statement of Respect and Anti-Discrimination and Harassment Policy (Statement of Respect) define for our employees the expectations and principles for establishing and maintaining a professional work environment free of discrimination and harassment. We hold employees responsible for being respectful of others' differences, acting professionally and with honesty and integrity, and immediately reporting any behavior that violates the Statement of Respect.

Our commitment to ethics and integrity extends to how our employees are compensated. As a standard practice, each time we make a pay recommendation for a new employee, promotion, or otherwise, we review the pay of employees who perform similar work. To promote transparency in pay, we publish salary ranges in most of our job postings, regardless of whether it is a requirement in that location.

This information is also shared with employees through our internal human resources platform and as part of most annual compensation reviews.

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For the past 17 years, we have engaged an independent human resources risk management firm to conduct annual adjusted pay gap reviews. These reviews compare compensation by gender and between minority and non-minority employees in the United States, looking for differences within comparable work that could suggest a bias. The analysis looks at pay equity across base pay, bonus, and long-term incentives, and it considers factors such as type of role and work experience. We review results and work with managers to adjust compensation packages as appropriate.

We conduct quarterly internal audits and risk assessments and periodic third-party audits on a variety of human capital topics, such as annual compensation, time off, and compliance with anti-harassment trainings. The Human Resources Committee of the Board also periodically reviews the pay programs of MassMutual's subsidiaries on a staggered annual basis.

For more on our approach to ethics and compliance, including avenues for employees to report concerns, see page 30.

Equipping People to Grow and Succeed

At MassMutual, we invest in our people so they can grow, develop, and deliver their personal and professional best. We offer a range of resources and programs to equip our employees with the knowledge and skills they need to succeed in their position, and we partner with employees to support their development. Our learning resources, performance management processes, and job-specific training programs are designed to support development opportunities that are aligned with our business objectives and the needs of our employees.

Enabling Career Development

Our talent management strategy guides our investments in the workforce to ensure we have an engaged and highly skilled talent pool to support our company's key objectives. We embed personal ownership in our approach to career development to ensure that our people feel empowered and supported to learn and grow.

Across functions and levels, we have set internal goals to create development plans for all eligible employees. For all full and part-time employees who have been in their roles for at least three months, we offer a thorough performance feedback process with their manager that includes stakeholder and peer feedback, with a goal of two documented check-ins annually for 100 percent of eligible employees. We monitor this metric and report it to the ELT, which includes our CEO.

In addition, we provide training to help employees and managers complete the check-in process, enabling employees to demonstrate their progress, receive feedback, and better understand how their efforts contribute toward organizational goals.

We continue to strengthen our internal leadership pipeline, focusing on talent mobility, talent retention, and succession planning. To support the advancement of potential leaders into critical roles across the company, we conduct formal talent management assessments at the start of each year, with active engagement from senior executives. Employees identified through this process are provided with tailored data-driven assessments, programs, and coaching to ensure they have the skills to succeed in future leadership roles.

Our leadership development training focuses on continuous learning, honest conversations, adaptable thinking and behaviors, and a solid understanding of our business. Examples include:

- · Our Leadership Forum, which brings together over 200 of our top leaders to network and to deepen their understanding of MassMutual's strategy and their role in executing it.
- · Our Business Immersion Experience, which engaged nearly 100 leaders in 2024 through simulated decision-making exercises on critical issues to hone their core leadership competencies.

We prioritize mentorship as another way of strengthening collaboration and broadening

career pathways across our organization. In 2024, our BRGs continued to sponsor mentorship programs.

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For example, our Armed Forces, Veterans, and Families mentoring program helps develop and retain veteran employees. In addition, our Truth to Power Reverse Mentoring Program, co-sponsored by our disability inclusion and young professionals BRGs, connects leaders with early-career professionals to gain powerful insights and perspective into a variety of topics ranging from company culture to career development.

Our job-specific training programs are designed to support development opportunities that are aligned with our business objectives and the needs of our employees. For example:

- · Our Cyber Security Career Pathfinder Program guides early-career employees toward a longterm career in cyber security. Participants, or "Pathfinders," are placed in three job roles over two years and receive a development plan and mentoring throughout each stage of the rotational program. In 2024, the first cohort graduated into longer-term, strategic roles in our cyber organization.
- · Our Actuarial Leadership Development Program, which includes an internship component, supports early-career actuarial staff as they obtain their certifications and provides internal mobility, development, and networking opportunities.
- · MassMutual Ascend rotational programs broaden exposure and experience for employees. In 2024, we established Accelerate, a rotational job program

for operations employees, including those in the early stages of their career.

Offering Educational and Training Opportunities

We invest in employee upskilling and education to amplify agility and innovation in a rapidly changing business environment. All employees at all levels have access to education and training opportunities offered in person, virtually, and via online platforms, including formal, informal, and self-directed programs to support different learning styles and delivery methods.

To reinforce the importance of employee learning, we set clear training goals and communicate these expectations with employees. For example, 100 percent of managers are required to complete our Manager Essentials courses.

Our online learning platform enables all employees to pursue self-paced learning modules based on individual competency needs, with new learning pathways released on a regular basis.

We also have partnerships with various external training and educational organizations that offer development and engagement opportunities. For example, we began a partnership with Cornell University and the Center for Advanced Human Resource Studies in 2024 for development opportunities for our human resources organization.

In 2024, our employees spent 32,800 hours participating in corporate training,²¹ for approximately five hours of training per employee.

In addition, we encourage and support continued education and professional accreditations alongside our training offerings, offering tuition reimbursements to full and part-time employees. In 2024, we distributed approximately \$950,000 in reimbursements for tuition and certification programs, with employees receiving up to \$8,500 depending on the type of program in which they participated.

Providing Holistic Employee Benefits

At MassMutual, we offer a comprehensive suite of benefits to our employees to help meet their evolving needs. Our robust healthcare, retirement, and protection benefits provide a range of support through all of life's big moments. We invest in health and wellness benefits that support holistic well-being, improve access and outcomes for everyone, and provide flexibility to meet our employees' and their families' unique needs.

Following are examples of the broad <u>suite of</u> <u>benefits</u> we provide our employees.

- Our Employee Assistance Program (EAP)
 is available to all MassMutual employees
 and their household members and provides
 mental health support, including 12 free
 counseling and 12 free coaching sessions
 annually and access to a licensed health
 clinician to further connect them with the
 care they need.
- Our medical-plan participants have access
 to a medical ally team that can help them
 better navigate treatment options for
 themselves or their family members who
 are facing conditions like anxiety, depression,
 or addiction.
- We provide up to eight weeks of leave for working caregivers to tend to their loved ones each year, in addition to five "take care days" to care for themselves or others with physical or mental health challenges.
 Further, we offer one-on-one coaching to all employees caring for those with acute, chronic conditions.

- Our flexible work model provides the
 foundation for our employees to balance
 the demands of their home and work lives.
 Most employees spend at least three days in
 the office per week, with the option to work
 remotely for the remaining two. We also
 institute company-wide remote weeks and
 give employees a bank of flexible remote
 weeks that can be used throughout the year.
- · MassMutual's Well-Being Wallet provides all MassMutual and MassMutual Ascend employees, including most part-time employees, with \$1,250 per year to invest in their total well-being. From ergonomic office furniture to elder care, exercise equipment to financial planning, this digital wallet reimburses employees for a wide range of eligible expenses. More than 95 percent of employees used our Well-Being Wallet in 2024, with over \$8 million reimbursed to approximately 7,000 employees, and we continue to receive positive feedback on this program.

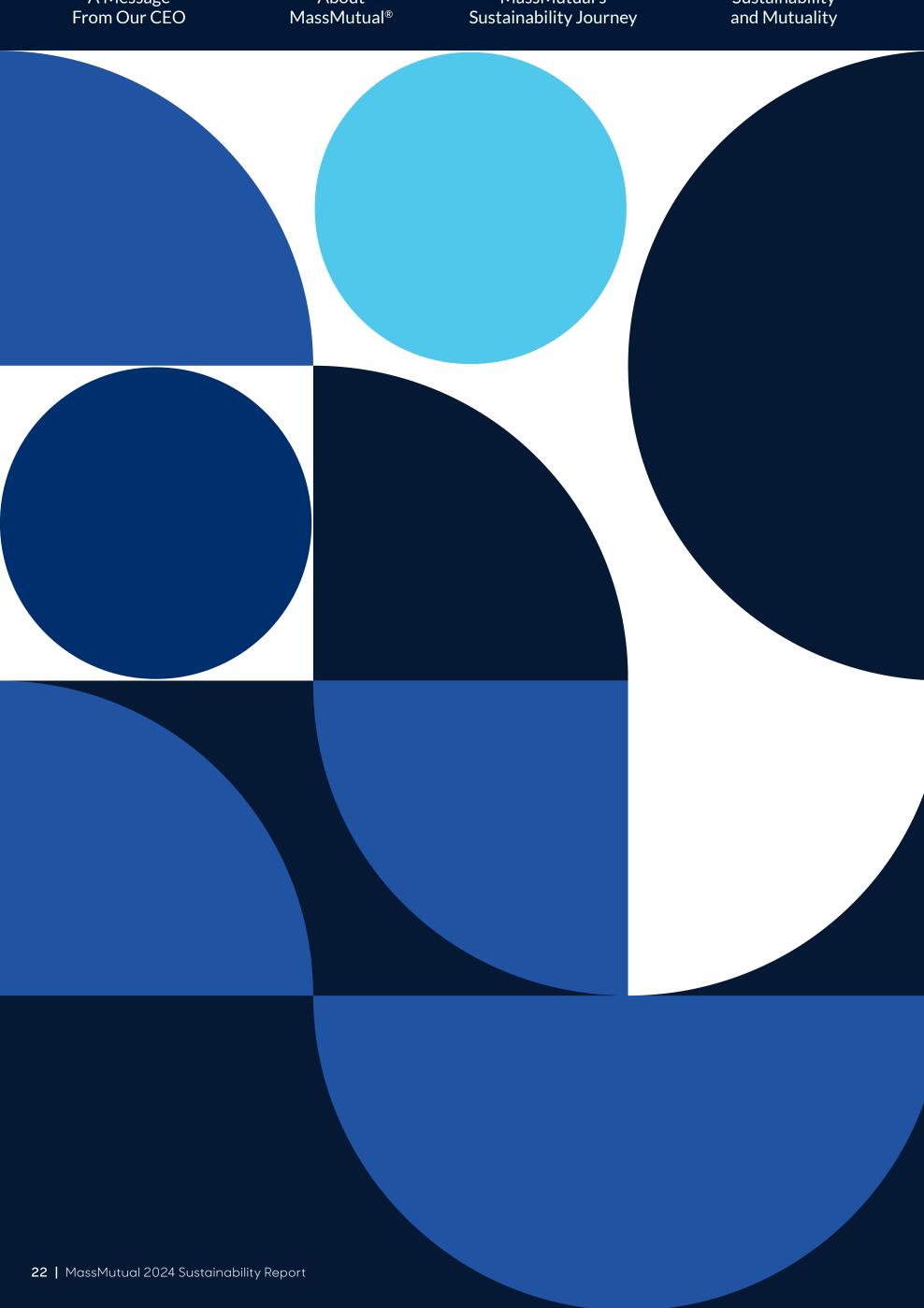
Listening to Our Employees

In 2024, 92 percent of employees responded to our annual employee engagement survey, continuing more than a decade of exceptional participation.

Our overall engagement score was 84 percent, and we outperformed many of our external benchmarks.

The survey is one of the many ways we listen to our employees to understand what is working and where we can improve. To gather even more timely feedback, we conduct confidential pulse surveys throughout the year. Pulse survey questions are informed by results from the annual employee engagement survey.

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As a mutual company, we operate for the benefit of our policyowners, members, and other customers, with an enduring focus on providing them financial security, stability, and long-term value. MassMutual connects Americans with the financial tools they need to thrive.

\$9.4B

paid in insurance and annuity benefits to policyowners and customers in 2024²² \$2.5B

estimated dividend payout to policyowners for 2025, the largest in our history²³

\$274B

in client assets managed by MMLIS²⁴



~138,400

life insurance in force

lives newly insured

Consolidated statutory results of Massachusetts Mutual Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: C.M. Life Insurance Company, MML Bay State Life Insurance Company, as well as MassMutual Ascend Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: Manhattan National Life Insurance Company and Annuity Investors Life Insurance Company as of December 31, 2024.

²³ The dividend and dividend interest rate are determined annually, subject to change, and are not guaranteed.

 $^{^{\}rm 24}$ $\,$ Includes total client assets for MML Investors Services, LLC and MassMutual Private Wealth & Trust.

Providing a Comprehensive **Portfolio of Solutions**

We offer a wide range of protection, accumulation, wealth management, and retirement products and services. Our network of financial professionals supports clients with their insurance protection, investment, and investment advisor needs throughout all life stages and for future generations. Through MML Investors Services (MMLIS), our wealth management subsidiary, we are focused on helping clients achieve their financial goals and growing their wealth, offering thousands of investment solutions, and representing \$274 billion in client assets, including broker-dealer accounts and investment advisory programs. We also offer products through non-affiliated institutions and financial professionals via MassMutual Strategic Distributors, as well as lifetime income solutions offered through our subsidiary MassMutual Ascend. In addition, we offer voluntary benefits through our Worksite business, to help companies provide their employees easier ways to access insurance protection products, such as life, critical illness, accident, and disability income insurance. At the same time, we consistently seek to enhance our ways of connecting with people to best reach them on their terms.

Our long-term, diversified approach to investing enables us to be there for our policyowners and customers, whether they need us today, tomorrow, or generations from now. This approach is integral to the management of our General Investment Account (GIA), which backs the obligations we make

to our policyowners and customers. We provide the framework for our GIA portfolio construction and investment decision-making in our <u>Investment</u> Philosophy and detail our financial performance in our 2024 Annual Report.

Underpinning all of this is our unwavering focus on long-term stable performance, which enables us to deliver on our commitments to those who rely on us when they need us the most.

Focusing on Customers' Needs

Maintaining an awareness of how we are succeeding and how we can improve is a critical component of building long-term relationships with our customers. In 2024, we continued to focus on customer journey analytics to better understand our customers' needs and elevate their overall experience with MassMutual.

We are committed to continually understanding how customers and financial professionals experience working with MassMutual. We use Net Promoter Scores (NPS) to drive customer satisfaction across our insurance, annuities, and wealth management businesses, and we integrate NPS as an annual enterprise performance factor. Given their crucial role in serving our customers, we also incorporate our financial professionals' satisfaction as a component of annual goals.

Our customer service employees take part in customer experience principles training. In 2024, 100 percent of our digital operations customer service roles participated in this training. We also conduct regular studies to understand our customers' and financial

professionals' overall sentiment, needs, and experience drivers, and we incorporate these insights into our day-to-day engagements with them. We regularly monitor and respond to customer feedback at key touchpoints, such as sales, service calls, claims, and online self-service.

These efforts help us drive enhancements to improve overall customer experience and inform our efforts to meet customers where they are with the financial solutions they need.

Compliance and Robust Information

Our ongoing work to provide policyowners and customers with the solutions to meet their needs is supported by an unwavering commitment to ethics, oversight, governance, and risk management.

MassMutual's Product Advisory Committee (PAC) is responsible for the company's insurance product development pipeline and strategic alignment, for product approval, and for ensuring that the overall product portfolio's risk profile is acceptable. The PAC is chaired by MassMutual's Chief Actuary and includes members of the Executive Leadership Team (ELT), including our CEO, Chief Financial Officer, and Chief Risk Officer.

Our Legal and Compliance teams partner closely with our businesses on new product development, customer acquisition, service, and claims processes. These teams thoroughly review our marketing materials to check that they comply with applicable laws and regulations,

accurately describe our products and services, and appropriately reflect associated financial goals.

Managing Customer Feedback

MassMutual maintains a Compliance-led program to monitor for risk, improper sales practices, and potential consumer complaints. As part of this, our Compliance & Ethics team continues to expand the processes it uses to assess and mitigate overall risk. In addition to analyzing sales and market practice trends, the team implemented a data-based model in 2024 to evaluate regulatory market conduct findings across the industry as a means to highlight areas for addressing risk within MassMutual.

Customers can report concerns anonymously by phone, email, or through our website. We also conduct customer surveys to collect this feedback, and documented complaints are referred to our Compliance department. Customer Relations professionals within our Compliance department provide regular updates to senior business leaders on customer complaints, including an assessment of contributing factors. Our Compliance team then works closely with our business leaders to implement corrective measures to address these root causes. In addition, through our supervisory program, we review our insurance professionals' communications to guard against the sharing of misinformation with clients and to uncover and investigate potential complaints. We also regularly train our employees on how to identify and refer complaints to our Compliance department for review.

Encouraging Responsible Business Practices

Each year, our affiliated financial professionals are required to complete training on responsible product offerings and marketing. In 2024, this training covered content on marketing, social media and text messaging practices, protection of customer privacy, awareness of elder abuse, detection and prevention of fraud and money laundering, and specific training focused on certain types of annuity products.

Our affiliated financial professionals and their supervisors are provided with a comprehensive online Field Compliance Manual covering all aspects of compliance for business practices, customer privacy, and recordkeeping, as well as product

sales and marketing. Our Field Compliance Manual provides the policies, standards, and guidelines for responsible marketing by our financial professionals. These resources are updated throughout the year to ensure that our policies are kept current with the most up-to-date regulatory requirements. To read more on our compliance programs, see page 30.

In addition, we have an extensive program to safeguard our policyowners' and customers' personal and financial information. Our program includes dedicated compliance, risk, privacy, and data ethics associates. For more information on our cyber security and data privacy practices, see page 32.

Advancing Innovation to Better Serve Our Customers

MassMutual supports innovative technological developments through the MassChallenge Financial Technology (FinTech) and HealthTech programs, which focus on accelerating impact through partnerships with startups, entrepreneurs, financial institutions, and healthcare companies. Since 2018, nearly half of startup engagements through these initiatives involve MassMutual as a pilot partner, customer, or investor, highlighting our continued commitment to fostering innovation, financial and educational inclusion, and digitalization.

MassMutual helped spearhead the creation of the Mass Fintech Hub, a public-private partnership between the state of Massachusetts and leaders from industry, academia, startup, and investor communities focused on making the state a global hub for financial technology. In addition, we sponsor Boston FinTech Week, an event that attracted nearly 4,000 attendees from around the globe in 2024, focusing on topics related to financial inclusion and the need for the rapid advance of innovation.

We expanded our support of innovation opportunities in 2024, announcing a three-year commitment to support Western New England University's inaugural FinTech + Al 413 Startup Launch Series. The goal is to equip participants with training and resources to bring their innovative ideas to life.

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MassMutual and the MassMutual Foundation are dedicated to advancing social and economic opportunities so that all individuals and families can build their financial capabilities and thrive. Supporting the communities we serve is central to our Live Mutual philosophy and integral to our vision to provide financial well-being for all Americans.

The MassMutual Foundation

The MassMutual Foundation is dedicated to helping create financially healthy futures for all.

Building Financial Resilience: The MassMutual Foundation Approach

Mission

The MassMutual Foundation fuels initiatives that increase financial resilience within our communities and fosters a culture of community engagement for MassMutual's employees and affiliated financial professionals.

Strategic Focus

We invest in programs that help people access the support that they need and help them earn, protect, and grow their money. The ability of households to affordably cover a \$400 financial emergency is the key measure of financial resilience the Foundation uses to guide its work.

We support organizations working to drive progress in four strategic areas that are essential for individuals and families to build — and sustain — financial resilience



Use of Networks

Building social capital within communities by helping people connect with each other as well as with community and financial resources



Financial Health

Investing toward financial
well-being for all – supporting
programs that increase savings,
reduce debt, improve
credit, and more



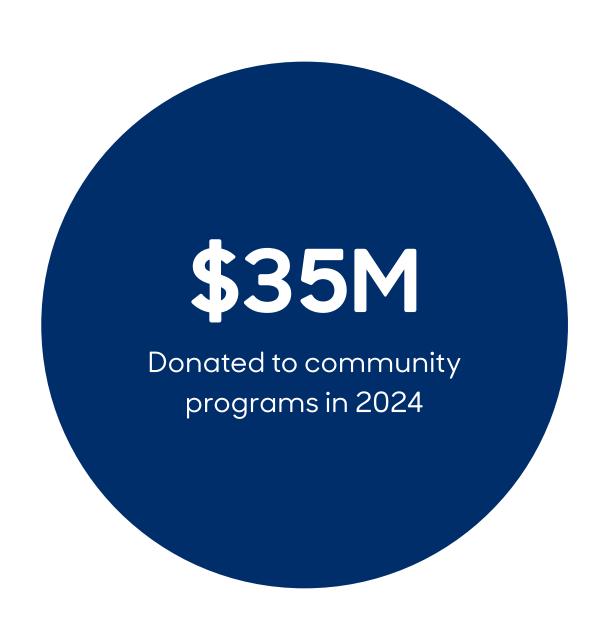
Basic Financial Needs

Expanding access to adequate housing, childcare, and other core needs



Employment and Income

Building skills-based knowledge and employment opportunities to help people become more financially stable in the long term



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Supporting Financial Inclusion

In 2024, the MassMutual Foundation continued its long-standing support of organizations working to help people develop, secure, and grow their financial capabilities. This work includes making multiyear investments in capacity building for financial institutions in communities, partnering with organizations to expand access to capital for new and existing entrepreneurs, investing in affordable housing, and expanding access to financial education tools that work. As part of a commitment to building financial resilience in communities, the MassMutual Foundation expanded its work with microloan providers in 2024. The Foundation provided grant funding to People Trust, a Certified CDFI that offers personal loans to low and moderateincome communities in Arkansas.

We also provided funding to Epicenter Memphis, a nonprofit organization working to fuel economic development through support to new and existing entrepreneurs. We worked with Epicenter Memphis to provide small businesses and entrepreneurs in underserved communities with forgivable microloans of amounts between \$1,000 and \$20,000. In doing so, we helped to increase access to financial resources, while supporting

the organization's goal of building a more inclusive economy.

We recognize that safe and affordable housing has a direct impact on individual financial health and well-being. In 2024, the MassMutual Foundation invested \$2 million to support the expansion of Way Finders' City of Homes homeownership program that it helped to launch two years ago. City of Homes takes vacant or abandoned residential properties in our headquarter city of Springfield, Massachusetts, renovates them, and offers them to first-time homebuyers at an affordable price.

We support expanding access to financial education, recognizing its vital role in promoting economic empowerment. Through FutureSmartSM, a program that has been running since 2015, the MassMutual Foundation offers a national online education program that empowers middle and high school students as well as their caregivers and educators – to effectively manage their finances, make sound decisions, and become financially responsible. In 2024, we were proud to celebrate a major FutureSmart milestone: five million students reached in communities across the country. This achievement brings us one step closer to meeting our goal of reaching six million students across all 50 states and Puerto Rico by 2025.

Investing in Community Development Through Opportunity Finance Network

In October 2024, the MassMutual Foundation announced a five-year strategic partnership with Opportunity Finance Network (OFN). OFN is the nation's leading network of Community Development Financial Institutions (CDFIs), which are private financial institutions dedicated to expanding economic opportunity and making financial products and services more accessible in low-income communities. Through its CDFI network, OFN strives to provide affordable and responsible financial products and services to communities traditionally underserved by mainstream financial institutions.

Together, the MassMutual Foundation and OFN will establish the CDFI Innovation Initiative, a first-of-its-kind program designed to support and invest in the infrastructure needed to help CDFIs grow, evolve, and scale. Funded by a \$25 million grant from the MassMutual Foundation, the CDFI Innovation Initiative will focus on three core pillars:

- · Creating an Innovation Industry Advisory Council, a group focused on thought leadership and using data to identify and develop scalable solutions.
- Establishing an Innovation Center, a hub for turning ideas into action by providing capital and support for promising innovations.
- · Launching an Innovation Fund, a blended capital fund to help scale innovative solutions.

In supporting the growth and expansion of the CDFI industry, this partnership reinforces our dedication to fostering financial health and resilience in low-income communities, creating opportunities where they are most needed, and supporting entrepreneurship and homeownership.

Engaging Our People

Our employees play a vital role in strengthening the communities where we live and work. giving their time, talent, and resources to local organizations in many ways.

Full-time employees continue to receive up to 24 hours of paid time off annually to volunteer. In 2024, we hosted our second annual Live Mutual Week, a dedicated week of community service for MassMutual employees and affiliated financial professionals. Over 700 employees volunteered almost 1,400 hours to nearly 40 nonprofits on a wide range of projects throughout the week.

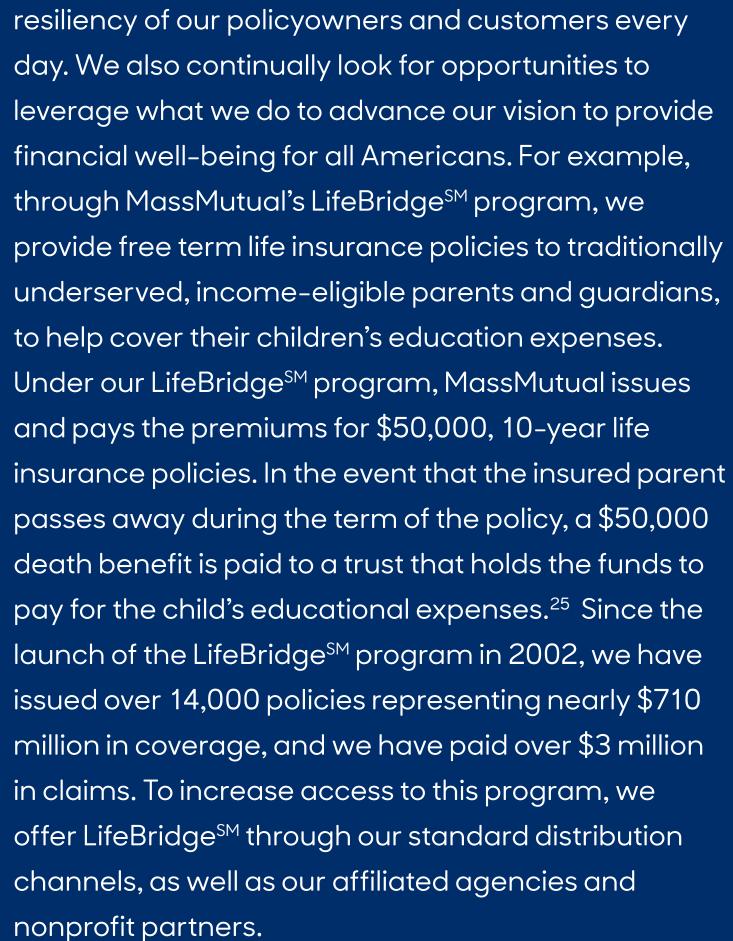
Additionally, the MassMutual Foundation contributes up to \$6,500 per employee each year to eligible nonprofits, based on the volunteer hours they track and the personal donations they make, which we match. This year, our employees, together with the Foundation match, contributed nearly

\$3 million to over 2,000 nonprofits, amplifying our collective impact and commitment to community well-being.

In 2024, examples of our community volunteer work included:

- · During Live Mutual Week, volunteers served food and sorted clothes at a rescue mission; sanded and painted playground equipment for a child development center; weeded, harvested, and watered plants for a food bank farm; and much more.
- · MassMutual Romania employees "adopted" a green space in the city of Cluj-Napoca to support the restoration, investment, and upkeep of the adopted green space for five years.
- · MassMutual Ascend launched a partnership with a nonprofit serving young people, where participants visit our offices monthly for mentoring.







Governance and Ethics

For more than 170 years, we have upheld a commitment to policyowners and customers to be there in times of need. This lasting promise is rooted in our dedication to conducting business ethically and in compliance with governing laws and regulations.

MassMutual's dedication to integrity, ethics, and sound governance begins with our leaders and Board of Directors. Our Corporate Governance Guidelines lay out the policies and practices of our Board, which require that at least 75 percent of our directors be independent. Information on our Board committee charters can be found on our website.

Our governance stems from, and supports, our mutual ownership structure. As a mutual company, MassMutual does not have shareholders, so we are able to conduct business and make decisions with the long-term interests of our policyowners and customers in mind. Our structure also enables eligible participating policyowners to receive dividends, which we have paid each year since the 1860s. We approved an estimated dividend payout of more than \$2.5 billion to our eligible participating policyowners in 2025, maintaining an industry-leading dividend interest rate for the 19th consecutive year.²⁶

²⁶ The dividend and dividend interest rate are determined annually, subject to change, and are not guaranteed.

Compliance & Ethics

MassMutual's Compliance & Ethics program is designed to protect our company, employees, policyowners, and customers and promote ethics and values in the workplace. MassMutual's Chief Compliance & Ethics Officer (CCEO) is responsible for these programs at the executive level, including our anti-bribery and anti-corruption policies and practices. Our CCEO provides updates five times a year to the Audit Committee of the Board, which is responsible for oversight of ethics issues, regarding compliance risks, mitigation activities, regulatory developments, and employee conduct matters.

MassMutual is also committed to maintaining the highest standards of integrity and regulatory compliance across its operations. We have established an effective compliance program that includes employee education, customer due diligence, transaction monitoring, and suspicious activity reporting, among other practices, to detect, prevent, and respond to unethical behavior and other potential compliance violations.

Promoting Responsible Practices

Our Code of Conduct underlies our enterprise-wide standards of behavior at MassMutual, including the importance of respecting each other and acting with ethics and integrity. We require all employees to acknowledge that they have read, understand, and commit to adhering to our Code of Conduct annually and require temporary personnel to attest to our

Temporary Personnel Code of Conduct. We also expect our suppliers to operate according to the same standards of ethics and integrity we uphold. Our <u>Code</u> of Conduct for Suppliers outlines the principles, values, and expectations we have for them.

Our Anti-Money Laundering (AML) Policy and accompanying procedures lay out common "red flags" for potential money-laundering activities. Procedures include requirements for investigation, reporting, and disciplinary actions for employees who fail to report suspicious activity.

To ensure compliance with our AML Policy and economic sanctions, our Financial Crimes and Fraud Prevention Compliance team monitors international sanctions requirements, together with company transactions and existing client relationships. Transactions are also monitored for other potential indicators of suspicious activity, including those that may indicate tax evasion. MassMutual conducts customer due diligence related to illegal activities before starting a relationship and implements enhanced due diligence for certain higher-risk customers. Our Financial Crimes and Fraud Prevention Compliance team provides annual training on AML to a broad set of employees.

Our Anti-Bribery and Anti-Corruption Policy provides guidance to employees on legal and ethical standards for activities such as interactions with government officials, business gifts and entertainment, political and charitable contributions, and more. The policy also outlines responsibilities around recordkeeping,

reporting of potentially unethical conduct, and disciplinary actions for noncompliance. All employees and temporary personnel complete an annual acknowledgment of our Anti-Bribery and Anti-Corruption Policy as part of their Code of Conduct attestation. We monitor operational and escalation processes across affected business units for compliance and to operationalize appropriate mitigations as needed to help ensure that these standards are upheld.

We undertake annual audits of our AML program in key areas of the business, as well as periodic assessments of bribery and corruption risks facing the organization.

Monitoring Our Approach to Compliance

Using a risk-based approach, MassMutual conducts regular assessments of compliance and business ethics across all of our operations, using a variety of methods, including monitoring, testing, and auditing. In addition, our Compliance & Ethics Department and MassMutual's Corporate Audit Department conduct a variety of reviews of compliance and ethics risks, including business ethical conduct and anti-corruption. These include:

- · Periodic compliance assessments or audits of business gifts and entertainment, conflicts of interest, and charitable contributions, to assess compliance and ethics risks
- · Targeted geographic assessments of ethics and anti-corruption controls for certain international business operations

- · Annual audits of MassMutual agencies to ensure they are complying with regulatory mandates and customer best interest requirements
- Regular monitoring of ongoing priorities such as ethical business practices and anti-corruption

The Compliance & Ethics organization performs an annual assessment of its top compliance risks. On a quarterly basis, the Compliance organization reviews metrics that are indicators of ethical culture, such as hotline call volume and employee ethics training completion rates.

Maintaining an Ethical Culture

MassMutual empowers our employees to speak up at work, regularly emphasizing the importance of taking action whenever there are concerns about compliance, ethics, or risks. We provide our employees and contractors with a range of tools to identify compliance and ethics issues and to report concerns confidentially and anonymously.

In 2024, we continued our "Speaking Up" campaign to encourage employees to report concerns and to further promote our culture of openness and accountability. This shared commitment underscores our dedication to creating an ethical workplace where concerns are not only heard but acted upon effectively. We make our policies around reporting concerns and non-retaliation easily accessible to our employees through a variety of different internal communication channels. We also provide our managers with detailed guidance on how to encourage employees to speak

up and raise concerns, anonymously if they choose, when a potential compliance, ethics, or risk violation is observed. Additionally, we made the importance of speaking up a central theme during our celebration of Ethics Awareness Month in March 2024.

To promote a clear understanding of ethical practices throughout our organization, all employees and contractors are required to complete annual training on ethics and compliance topics. Our corporate-wide Compliance and Regulatory Education program emphasizes compliance, regulatory, and ethics topics that are relevant for our workforce. This program requires all employees – including part-time employees and contractors – to complete annual training modules on our Code of Conduct, data protection, and cyber security. Other compliance training topics include acting ethically and with integrity, reporting concerns, the Health Insurance Portability and Accountability Act, protecting senior and vulnerable adults, and anti-fraud practices.

Our Compliance & Ethics Reporting toll-free hotline is administered by an independent third party and is available to all employees, suppliers, customers, and other third parties globally, 24/7, and in local languages. Our Corporate Compliance team collaborates with relevant internal teams to specifically review and address each report, with investigations generally completed within 30 days. We track all reports made by potential whistleblowers and the actions taken in response. We also maintain a non-retaliation policy to protect employees who

speak up to report concerns. Anyone who engages in retaliatory conduct against a person who has in good faith raised a compliance, ethics, or risk issue or concern will face disciplinary action, up to and including termination of employment.

Risk Management

Our Enterprise Risk Management (ERM) Framework is integral to serving our policyowners' and customers' long-term interests. Our comprehensive approach to risk identification and management is guided by principles set by our Board and considers strategic, financial, and non-financial risks, including sustainability-related risks. Our Risk Appetite Statement defines our risk tolerance and enables us to execute our strategic objectives. We identify, assess, manage, and monitor enterprise risk exposures in line with our long-term strategy, to ensure we can deliver on our commitments to our policyowners and customers.

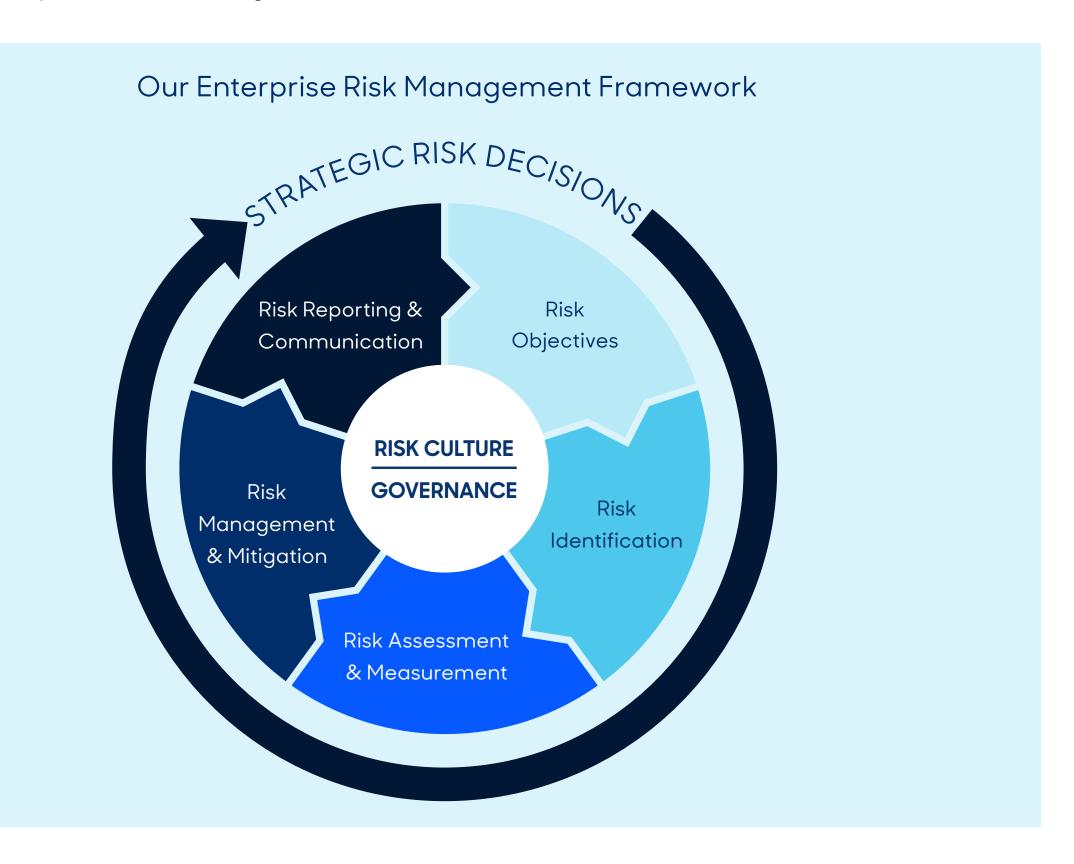
Our Chief Risk Officer (CRO), a member of the Executive Leadership Team, oversees our ERM function and reports directly to our Chief Executive Officer. The CRO also chairs our Enterprise Risk Committee (ERC), which meets at least quarterly to review the management of material risks, approve significant risk decisions and policies, and ensure robust oversight. The Board regularly receives updates on risk-related matters from the CRO. Additional details about our approach to risk management are available on our website.

We take a broad view of risk identification, from analyzing trends in the business environment to studying key performance metrics and assessing the capabilities of key competitors. Our risk management approach is guided by three lines of defense, to clearly identify roles and responsibilities and ensure all employees are engaged in risk management at some level. The first line of defense, composed of our operational business lines, owns and manages risk, and utilizes risk frameworks and indicators to guide their management of risks. Our second line of defense includes specialized risk managers, and

our Internal Audit team is our third line of defense, providing assurance that the company is managing risks appropriately.

We use centralized technology to document our risks and ensure consistent management and reporting.

The assessment of climate-related risks is integrated into our ERM framework. For more information on MassMutual's climate risk management, see <u>page 15</u>.



Cyber Security and **Data Privacy**

To help ensure safe and responsible handling of our policyowners', customers', and employees' data, MassMutual maintains robust cyber security and data privacy programs. Our Enterprise Technology division takes a comprehensive, risk-based approach to cyber security and data privacy.

Our Head of Enterprise Technology and Experience is accountable for our cyber security and data privacy programs at the executive level and reports directly to our CEO. Our ERC receives updates at least quarterly on our cyber security program, with privacy, data, and artificial intelligence program risks also reviewed regularly. We also conduct data privacy and cyber security assessments on a risk-prioritized, periodic basis. Cyber and data privacy risks are included in our top enterprise risk report reviewed by the full Board, which also receives a detailed update on cyber risk semiannually. The Technology & Governance Committee of the Board maintains direct oversight of MassMutual's information and cyber security risks.

Cyber Security

Our Enterprise Cyber Security program is aligned with the National Institute of Standards and Technologies (NIST) Cybersecurity Framework, a widely used approach created by the United States Department of Commerce. We rely on protective controls such as encryption, multi-factor authentication, real-time

monitoring and alerting, as well as industry-standard cryptographic algorithms. Data transmissions have implemented protocols to improve security of emails to external recipients, including Transport Layer Security (TLS), Domain-Based Message Authentication, Reporting, and Conformance (DMARC), and DomainKeys Identified Mail (DKIM). Additionally, MassMutual maintains a set of Data Loss Prevention (DLP) technologies and controls, with a data-driven approach to security.

Our Cyber Security Team includes a dedicated cyber incident response team to investigate and manage potential security incidents, and maintains a formal cyber security Incident Response Plan, which includes our breach notification process. In addition to response protocols, we have:

- Proactive security processes to test security controls and response procedures and to address any vulnerabilities
- · Risk-based controls embedded into our cloud environment, aligned with our enterprise approach to security
- · Identity and access management controls to manage access to data and technology
- · A disaster recovery program, including defined testing requirements

Annually, elements of our Cyber Security program are audited internally and externally on an at-risk basis. Our Corporate Audit team conducts internal audits

annually based on a risk-based plan, which includes input from our Enterprise Risk Management (ERM) function to continually improve our overall cyber security program. External audits are done on an as-needed, risk-identified basis.

Cyber security training is required annually for all MassMutual employees and contractors. This includes all new hires, who are required to complete this training within their first 30 days as a MassMutual employee. The content is reviewed and updated every year to align with the current risk environment.

In addition, we educate employees on cyber security and data protection throughout the year, with initiatives such as phishing simulation testing, on demand online training programs, and regular employee communication.

For more information on our cyber security program, visit our website.

Data Privacy

MassMutual is committed to strong data stewardship. Our Privacy and Information Security programs align with privacy and security laws and industry best practices to safeguard the security, confidentiality, and integrity of personal information we receive from policyowners, customers, and employees. We have systems and procedures designed to protect against unauthorized access, loss, misuse, or modification of confidential or restricted information, including personal information.

In 2024, we furthered our commitment to strengthening and protecting the data we use by automating our email policy to prevent excessive storage of information. Additionally, we use realtime monitoring, to limit how much personal information can be included in a single email sent from MassMutual, to further safeguard personal data.

Our procurement policy requires third-party service provider contracts to align with MassMutual's data privacy and cyber security policies and to specify privacy, data protection, and information security approaches whenever personal information is processed. We complete regular reviews of thirdparty contracts on a risk-assessed basis, including but not limited to data privacy, cyber security, and other business risks.

We also continue to enhance MassMutual's approach to supporting consumer data privacy preferences related to marketing purposes. We provide a tollfree number for policyowners and customers to raise concerns about data privacy, which is publicly available through MassMutual's Privacy Notice.

For more information on our data privacy practices and policies, see our online Privacy and Security Center.

About This Report and Indices

Our

Communities

Our Policyowners

and Customers

This is MassMutual's annual sustainability report, covering our sustainability approach, activities, and performance for our fiscal year from January 1 to December 31, 2024. In some instances, activities from previous years and early 2025 are included and clearly noted. This annual report focuses on the most relevant sustainability issues that matter to our business and our stakeholders.

Climate Risks and

Opportunities

People

We report on related disclosure topics identified by versions 2023–12 of the Insurance and Asset Management & Custody Activities standards developed by the Sustainability Accounting Standards Board (SASB), which is now overseen by the International Sustainability Standards Board (ISSB), a part of the International Financial Reporting Standards (IFRS) Foundation. The report content is also informed by the recommendations of the Task Force

on Climate-related Financial Disclosures (TCFD), which have been incorporated into the ISSB's Standards, a part of the IFRS Foundation.

Governance

and Ethics

About This Report

and Indices

The scope of this report is Massachusetts Mutual Life Insurance Company (MassMutual); subsidiaries are not included unless otherwise stated. This aligns with our statutory financial report filing. For more information, visit MassMutual.com.

For more information on MassMutual's sustainability initiatives, visit our <u>website</u>.

Contact Information:

MassMutual
1295 State St.
Springfield, MA 01111
sustainability@massmutual.com

A Message From Our CEO Sustainability Our Policyowners About This Report MassMutual's Sustainable Climate Risks and Our Our About Governance and Mutuality Opportunities People and Customers and Ethics MassMutual® Sustainability Journey Finance Communities and Indices

Sustainability Accounting Standards Board (SASB) Index

Our sustainability report includes relevant disclosure topics identified by the Insurance and Asset Management & Custody Activities standards developed by SASB and overseen by the ISSB, which is a part of the IFRS Foundation. We are committed to continually reviewing the metrics we disclose in line with SASB recommendations and best practices. All data is as of and for the year ended December 31, 2024, unless otherwise noted.

Topic	SASB Accounting Metric	Code	MassMutual Response
Industry: Insurance			
Transparent Information & Fair Advice for Customers	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	FN-IN-270a.1	MassMutual currently does not have material legal proceedings associated with marketing and communication of insurance product-related information to new and returning customers. For further information about legal proceedings generally, see Note 16d in MassMutual Statutory Financial Statements , page 86.
	Complaints-to-claims ratio	FN-IN-270a.2	MassMutual does not disclose this specific metric. We maintain a robust program to monitor for improper sales practices and potential consumer complaints. For additional information, please review the National Association of Insurance Commissioners (NAIC) Consumer Insurance Search.
			Our Policyowners and Customers, <u>pages 22-24</u>
	Customer retention rate	FN-IN-270a.3	MassMutual does not disclose this specific metric. We measure customer satisfaction with a variety of metrics, including lapse ratio, and net promoter scores that track referrals from existing customers.
			Our Policyowners and Customers, <u>pages 22–24</u>
			2024 Quality and Performance Report, page 19
	Description of approach to informing customers about products	FN-IN-270a.4	For individuals considering the purchase of an insurance product, applicants receive information about the policy through product disclosures, illustrations, and client guides, all of which are designed to provide fair and accurate information and are reviewed and approved by our Legal and Compliance teams. Please see Our Policyowners and Customers section on pages 22-24 of this report for more information on our approach.
			We also provide consumers with a range of tools on our website, such as the <u>Life Insurance Product</u> <u>Comparison</u> , the <u>Annuities Product Comparison</u> , and the <u>MML Investors Services Disclosure Center</u> .
Incorporation of	Description of approach to incorporation of environmental,	FN-IN-410a.2	Sustainable Finance, pages 8-10
Environmental, Social, and Governance Factors in Investment Management	social, and governance (ESG) factors in investment management processes and strategies		MassMutual Sustainable Investment Policy Statement

Topic	SASB Accounting Metric	Code	MassMutual Response
Industry: Insurance			
Policies Designed to Incentivize Responsible Behavior	to Incentivize safety, or environmentally responsible actions and/or behaviors Responsible		Sustainability and Mutuality, pages 6-7 Sustainable Finance, pages 8-10 MassMutual Wellness MassMutual Becomes First U.S Insurer to Offer Policyowners Free Access to Al-guided Mental Health Support 2024 Annual Report, page 24
	Absolute gross financed emissions, disaggregated by (1) Scope 1, (2) Scope 2, and (3) Scope 3	FN-IN-410c.1	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>
Financed Emissions	Percentage of gross exposure included in the financed emissions calculation	FN-IN-410c.3	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>
	Description of the methodology used to calculate financed emissions	FN-IN-410c.4	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>
Physical Risk Exposure	Description of approach to incorporation of environmental risks into (1) the underwriting process for individual contracts and (2) the management of entity-level risks and capital adequacy	FN-IN-450a.3	Climate Risks and Opportunities, <u>pages 11-17</u>
Systemic Risk Management	Exposure to derivative instruments by category: (1) total exposure to non-centrally cleared derivatives, (2) total fair value of acceptable collateral posted with a central clearinghouse, and (3) total exposure to centrally cleared derivatives	FN-IN-550a.1	See note 5i in MassMutual Statutory Financial Statements, pages 42-45
	Description of approach to managing capital- and liquidity-related risks associated with systemic non-insurance activities	FN-IN-550a.3	See note 16 in MassMutual Statutory Financial Statements, pages 83-86 Governance and Ethics, pages 29-32

Topic	SASB Accounting Metric	Code	MassMutual Response
Activity Metric: Insur	ance		
	Number of policies in force, by segment: (1) property and casualty, (2) life, (3) assumed reinsurance	FN-IN-000.A	As of year-end 2024, 1,971,291 individual and group life insurance policies are in force. For further information, see MassMutual Annual Statement — Exhibit of Life Insurance, page 113.
Industry: Asset Mana	agement & Custody Activities		
Transparent Information & Fair Advice for Customers	Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of financial product-related information to new and returning customers	FN-AC-270a.2	MassMutual currently does not have material legal proceedings associated with marketing and communication of financial product-related information to new and returning customers. For further information about legal proceedings generally, see Note 16d in MassMutual Statutory Financial Statements , page 86.
	Description of approach to informing customers about products and services	FN-AC-270a.3	For individuals considering the purchase of an insurance product, applicants receive information about the policy through product disclosures, illustrations, and client guides, all of which are designed to provide fair and accurate information and are reviewed and approved by our Legal and Compliance teams. Please see Our Policyowners and Customers section on pages 22–24 of this report for more information on our approach. We also provide consumers with a range of tools on our website, such as the Life Insurance Product Comparison, the Annuities Product Comparison, and the MML Investors Services Disclosure Center.
Incorporation of Environmental, Social, and Governance Factors	Amount of assets under management, by asset class, that employ (1) integration of environmental, social, and governance (ESG) issues, (2) sustainability themed investing, and (3) screening	FN-AC-410a.1	Sustainable Finance, pages 9-10 MassMutual Sustainable Investment Policy Statement
in Investment Management & Advisory	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment and/or wealth management processes and strategies	FN-AC-410a.2	Sustainable Finance, pages 9-10 MassMutual Sustainable Investment Policy Statement
	Description of proxy voting and investee engagement policies and procedures	FN-AC-410a.3	Sustainable Finance, <u>pages 9-10</u> <u>MassMutual Sustainable Investment Policy Statement</u>

A Message	About	MassMutual's	Sustainability	Sustainable	Climate Risks and	Our	Our Policyowners	Our	Governance	About This Report
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From Our CEO	MassMutual [®]	Sustainability Journey	and Mutuality	Finance	Opportunities	People	and Customers	Communities	and Ethics	and Indices

Topic	SASB Accounting Metric	Code	MassMutual Response
Industry: Asset Mana	gement & Custody Activities		
	Absolute gross financed emissions, disaggregated by (1) Scope 1, (2) Scope 2, and (3) Scope 3	FN-AC-410b.1	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>
Financed Emissions	Percentage of total assets under management (AUM) included in the financed emissions calculation	FN-AC-401b.3	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>
	Description of the methodology used to calculate financed emissions	FN-AC-410b.4	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, antitrust, anticompetitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations	FN-AC-510a.1	For further information about legal proceedings generally, see <u>Note 16d in MassMutual Statutory Financial Statements</u> , page 86.
	Description of whistleblower policies and procedures	FN-AC-510a.2	Governance and Ethics, <u>pages 29-32</u> <u>Code of Conduct</u>
Activity Metric: Asset	t Management & Custody Activities		
Total assets under management (AUM)		FN-AC-000.A	2024 Annual Report, page 11
Total assets under custody and supervision		FN-AC-000.B	2024 Annual Report, page 16

A Message From Our CEO Sustainability Our Policyowners About This Report MassMutual's Sustainable Climate Risks and Our Our About Governance and Mutuality People MassMutual[®] Finance and Customers Communities and Ethics and Indices Sustainability Journey Opportunities

Task Force on Climate-related Financial Disclosures (TCFD) Index

Our sustainability report includes content that is informed by the recommendations of the TCFD, which has been subsumed by the International Sustainability Standards Board (ISSB), a part of the International Financial Reporting Standards (IFRS) Foundation. We are continuing to develop and expand our climate reporting in line with TCFD recommendations and best practices.

Core Element	TCFD Recommended Disclosure	Location of Disclosures
Governance		
Disclose the organization's governance around climate-related risks and opportunities	 Describe the board's oversight of climate-related risks and opportunities Describe management's role in assessing and managing climate-related risks and opportunities 	Climate Risks and Opportunities – Governance, pages 12-13 Sustainability and Mutuality, pages 6-7
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material	 Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario 	Climate Risks and Opportunities – Strategy, pages 13-14 Sustainable Finance, pages 8-10 MassMutual Sustainable Investment Policy Statement
Risk Management		
Disclose how the organization identifies, assesses, and manages climate-related risks	 Describe the organization's processes for identifying and assessing climate-related risks Describe the organization's processes for managing climate-related risks Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management 	Climate Risks and Opportunities – Risk Management, page 15 Governance and Ethics – Risk Management, page 31
Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	 Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets 	Climate Risks and Opportunities – Metrics and Targets, <u>pages 15-16</u>

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