PROTECTING YOUR PURPOSE

FM GLOBAL ANNUAL REPORT 2022

FM Global

P R O T E C T
T O D A Y

PROSPER TOMORROW

A resilient future

When we take a moment to look up and look within, we see all that's possible. A newfound optimism. A path to resilience. A purpose that's protected. When we look forward, we see a more prosperous world for us all.

The story of 2022 unfolds with the conviction that protecting your purpose leads to a more resilient world. Read on to hear from leaders who share market updates, investment philosophies, product innovations and how we're empowering the workforce of the future. Be inspired by profiles of clients who are working with purpose to keep people and our planet moving forward. Plus, discover how our climate resilience solutions and global expansions are delivering value like never before.

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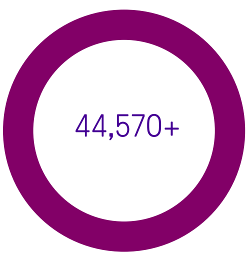
2022 was a year of working with purpose to keep your business going and growing strong.

Malcolm C. Roberts
president and chief executive officer

US$18.5B

surplus in 2022

2022 COMPLETED RISK IMPROVEMENTS



Protecting what matters on the road to resilience

First, a big thank you—to our clients and partners, our colleagues and our communities. Thank you, truly, for leading with purpose and forging ahead during these rapidly evolving times. Never has our work together been more important.

We can all agree: our world experienced a tremendous amount of adversity in 2022. It's taken humble leadership, accountability and a great deal of resilience for us all to stay the course.

To us, resilience isn't simply getting up after you're knocked down. It's running at a challenge, instead of away from it. That's how we work, and it's why we're excited to share all we've done together in 2022 to keep our clients' businesses going and growing strong.

Outstanding financials

Let's get right to it. Despite the challenges, 2022 was also a tremendous year, and we ended it with US$18.5 billion in surplus.

Our combined ratio was 76.7%, which includes policyholder membership credit and resilience credit. Pretax income from insurance operations was US$1.384 billion. These results, combined with navigating a challenging investment market, continued our strong surplus position.

Sharing our success

As a mutual company, everything we do is for our clients. The more risk we mitigate, the lower the losses, which results in more capital going back to work for you. That's the circle of resilience.

One way we share success is through credits, which are applied to offset premiums for eligible policyholders. In 2022, we recognized risk improvement efforts by distributing US$660 million in membership credits.

Guided by our data, research and engineering, you completed more than 44,570 risk improvement recommendations to help protect the value you worked so hard to build. Our like-minded approach to proactively reduce risk is what makes our partnership so successful, and our financial performance so powerful.

We also announced a first-of-its-kind US$300 million resilience credit to help you invest in climate risk improvements. This credit has the potential to reduce total loss expectancies related to wind, flood and wildfire exposure by more than US$120 billion which, in turn, will magnify the positive impact on customers, colleagues and communities around the world.

Building climate resilience

One of the most challenging risks we face today is climate change, and in 2022 we witnessed major weather events causing terrible destruction and loss of life on almost every continent. Extreme events like these remind us why we strive to stay ahead—for you, and all the people and places you serve.

GIVING CREDIT WHERE CREDIT IS DUE

US$4.4B+

in membership credits since 2001

MEMBERSHIP CREDIT HISTORY

US$429.6M	US$418.7M	US$413.3M	US$423.4M	US$660M
2014/2015	2015/2016	2016/2017	2017/2018	2022

The more risk we mitigate, the lower the losses, which results in more capital going back to work for you. That's the circle of resilience.

To help our clients and partners take more control in this ever-changing environment, we introduced a suite of climate resilience solutions to assess climate risk and prioritize improvements, including investments covered by the resilience credit, if eligible. Developed by our engineers and scientists, these data-driven tools are game-changing innovations, and we don't say that lightly. Solving problems with science is our formula for success.

Read page 16 to see how building climate resilience enabled our client, Arthrex, to keep their business going strong during and after Hurricane Ian.

Plus, learn more about our climate resilience solutions on page 36.

Expanding global operations

Even Aristotle believed the best learning comes from doing. And that's exactly what you can expect if you visit our new FM Global Centre in Singapore, our first experiential risk management facility in Asia-Pacific, where visitors engage with simulation laboratories and hands-on learning spaces.

Our hope is the centre will empower regional businesses to take action against increasing climate risk challenges, as well as growth and infrastructure challenges. Read the full story on page 44.

We were also approved to establish our first branch in the Republic of Korea. And coming soon in 2023 is another bold venture, as we break ground on a science, research and innovation facility in Luxembourg that supports risk management for our European clients and partners.

Bright skies ahead

To ensure we live our values and lead with integrity, our corporate governance program remains rigorous. Our board of directors, eight advisory boards and five risk management executive councils empower clients to express their needs directly to us—a vital perspective that inspires our long-term strategy. See page 91 for a full listing of our boards and councils.

2023 will likely challenge us with a volatile market once again. We're here and ready to support you, our clients, every step of the way. Together we're in a position of strength and we're looking forward with more optimism than ever before.

Thank you again for an incredible year.

Malcolm C. Roberts
president and chief executive officer

Thomas A. Lawson
chairperson

INDUSTRY RATINGS

A+
AM Best

AA
Fitch

A+
S&P Global

Grounded in strength and stability

by Bret N. Ahnell
chief operating officer

2022 was one of the best years in FM Global history—and that truly speaks to the resilience you've all worked hard to build.

Yet for the industry, it was a volatile year. Inflation, supply chain issues and rising interest rates affected the economy, while weather-related events and their secondary perils devastated communities. Also, impacts in the reinsurance community filtered down to the primary market.

Despite all of this, you, our clients, experienced less volatility and more financial resilience in terms of pricing, coverage and capacity changes.

We'll keep prioritizing your needs and driving financial resilience to help you minimize your loss and maximize your gain.

2022

Premium trends

In 2022, our consolidated gross in-force premium grew by 12.2% to a high of US$8.8 billion, and new business acquisition was 40% over our goal.

Our large commercial property business grew at a rate of 13.5% to US$7 billion, while AFM, positioned in the commercial property middle market, grew by 8.5% to US$1.4 billion. On a consolidated basis, FM Global and AFM are the sources of 95% of our overall premium in-force, with Mutual Boiler Re and FM Global Cargo representing the balance.

This unprecedented growth speaks to the strength of our partnerships and our like-minded philosophy that the majority of loss is preventable.

Loss trends

Our consolidated loss ratio for the year was 49.9%—significantly lower than the planned ratio of 66%. Our risk loss ratio decreased to 34.6% and was below our plan of 37.3%.

Extreme weather events last year, including Hurricane Ian, caused billions in damage for the industry. There were also wildland fires, hailstorms, tornadoes, floods and more, all of which resulted in billions of dollars in uninsured losses. Yet, our natural hazard loss ratio last year was 12.8%, below our plan of 25.1%.

Helping you feel confident about the unknowns is important to us. And it's why we worked hard last year to protect your purpose by helping you identify, prioritize and then mitigate exposures through our science-based solutions.

Expense trends

Our expense ratio in 2022 was 26.8%, slightly higher than our 2021 result of 26.6%.

Our low expense ratio is due to our increase in operational efficiencies such as business improvements, faster product development and flawless delivery.

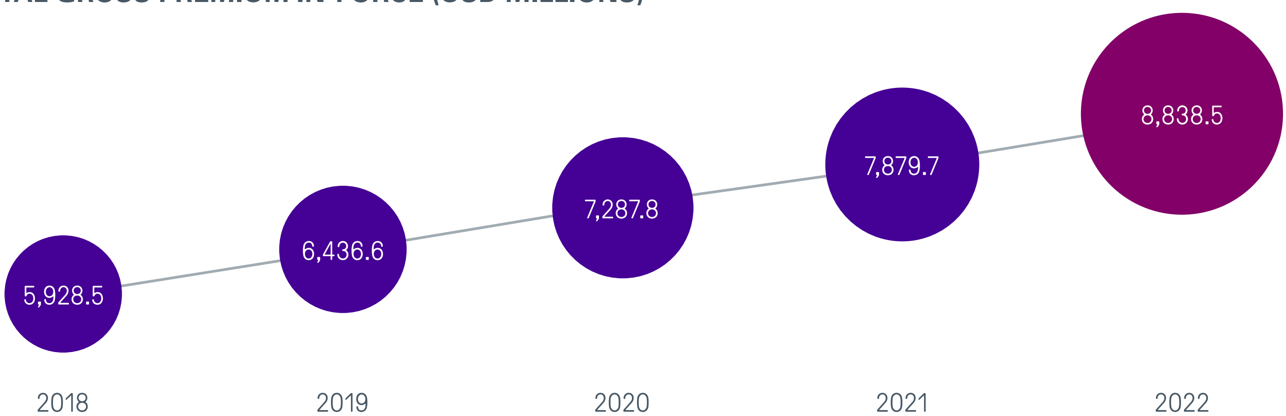
Looking ahead

We anticipate more volatility in 2023, as another year of a hard market. We're likely to see continued pricing, coverage and capacity challenges, as well as significant rises in reinsurance rates.

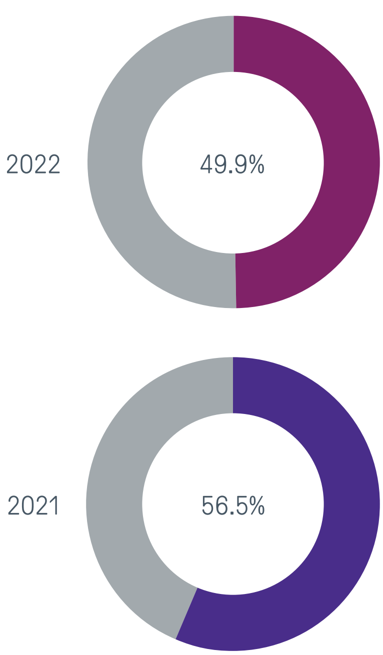
Through it all, we'll continue to deliver strength and stability, both financially and through our science-based solutions. We'll keep prioritizing your needs and driving financial resilience to help you minimize your loss and maximize your gain. At every step, we'll look to raise the bar so that your organization's future remains in your hands. ●

AN UNPRECEDENTED YEAR

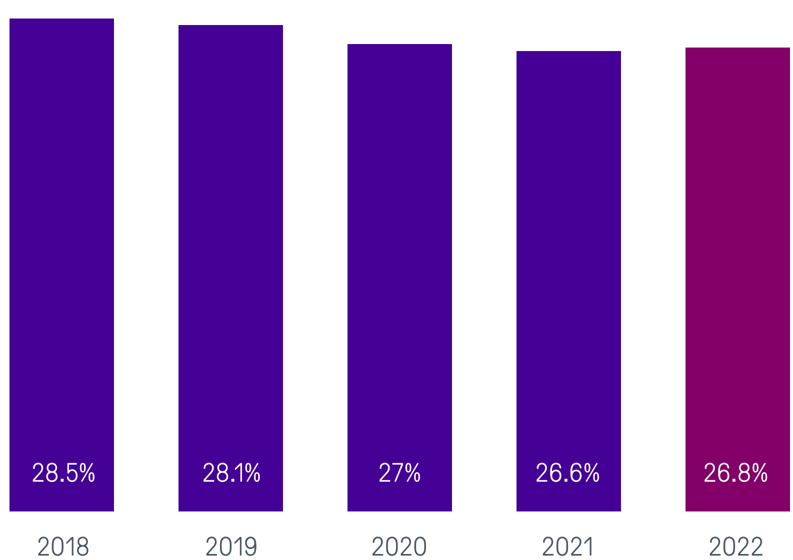
TOTAL GROSS PREMIUM IN-FORCE (USD MILLIONS)



LOSS RATIO



EXPENSE RATIO



WORKING WITH PURPOSE

What does it take to build a more prosperous world? For many of our clients, the answer can be found in how they protect what matters—in pursuit of something greater than just profit. Here are three stories of how working with purpose can keep people and our planet moving forward. Prepare to be inspired.

Arthrex: Helping surgeons treat their patients better

If you're an orthopedic surgeon, chances are, you've heard of Arthrex, the global innovation leader in sports medicine and minimally invasive orthopedics. And if you're a major sports figure, you might have Arthrex technology in your surgically repaired body. The same goes for millions of other people now living happier and more active lives.

Through a purpose-driven mindset, Arthrex continues to pioneer in their field by developing innovative products and procedures and by training surgeons, so they can improve the lives of people around the world.

Surgeons at the ArthroLab in Naples, Florida, USA, gain hands-on skills training on Arthrex product solutions and techniques.

Building resilience to weather any storm

For a company like Arthrex—that is dedicated to helping surgeons treat their patients better—business continuity is critical. The ability to maintain their operations, whatever comes their way, can have a significant impact on the medical device supply chain, hospital scheduling and patient relief.

Avoiding business disruption is especially challenging for companies located in regions susceptible to climate risks—like Arthrex in Florida, USA. Over the years, their facilities have endured violent winds, storm surge and flooding from hurricanes like Andrew, Michael, Irma and more recently, Hurricane Ian in 2022.

With maximum sustained winds of over 150 miles per hour (241.4 kilometers per hour), Hurricane Ian tied the record for the fifth-strongest hurricane to strike the

United States. Despite this tragic, destructive weather event, Arthrex came through unscathed. They never ceased production, missed an order or filed insurance claims. Moreover, employees and their loved ones without power at home were invited to the global headquarters campus in Naples, Florida to take showers, charge electronic devices or simply enjoy a reprieve from the heat.

The efforts didn't stop there. Arthrex and their employees also helped sustain their community. They provided space at their logistics center in Fort Myers, Florida as an emergency staging area for the National Guard and FEMA. Because they were prepared to be up and running no matter what, Arthrex was able to establish an employee assistance hotline and mobilize more than 600 team members to help muck out damaged homes and remove debris, coordinate the delivery of supplies and resources such as food, gasoline and generators, and volunteer for a variety of community efforts.

"We've worked with FM Global for a long time, and we take their risk improvement recommendations very seriously. I think following their recommendations is the reason why we came through the storm unscathed," said Michael Dock, director of environmental health and safety for Arthrex.

A partnership to keep Arthrex moving forward

The commitment Arthrex made—with FM Global by their side—to reinforcing their properties before, during and after they're constructed, makes it possible for them to help their community during times of crisis. For their larger mission: Arthrex understands that continuing to build resilience is vital in order to continue the valuable work they do.

As partners, FM Global is committed to helping Arthrex keep their business going and growing strong, and, in turn, protect their purpose, so that surgeons continue to receive the medical technology or training they require, and patients get the surgery they need.

"Arthrex's experience during Hurricane Ian is the circle of resilience that we talk about. When our clients understand their risk and take steps to become resilient, the good they do goes far beyond their bottom line. It impacts their colleagues, their communities and the world at large," said Randall E. Hodge, executive vice president, staff insurance operations at FM Global. "Our point of connection is to help clients, like Arthrex, solve problems before they happen by understanding their business needs and then applying our data, science and engineering expertise."

The actions Arthrex has taken, whether that's planning for tomorrow, or reinforcing roofs today, have made Arthrex an FM Global "highly protected risk" property, equivalent to an A grade in loss prevention.

Our shared purpose: a passion for what matters most

As purpose-driven companies with a passion for protecting what matters most to their clients, FM Global and Arthrex's partnership has been built on, and sustained by, these shared values. Both believe that taking proactive steps to prepare for the future is critical to keeping their company, colleagues, clients and communities going and growing strong. ●

COMPANY
Arthrex

PURPOSE
Helping Surgeons Treat Their Patients Better

HEADQUARTERS
Naples, Florida, USA

SIZE
5,000+ employees, 3 major properties

PRODUCT DEVELOPMENT
Sports medicine, arthroscopic surgery, orthobiologics, extremities, trauma, spine, shoulder and knee arthroplasty, 4K multi-specialty surgical visualization and OR integration technology solutions

VALUED CLIENT SINCE
2017

Helping Surgeons Treat Their Patients Better® is a registered trademark of Arthrex, Inc.

Talison Lithium: Helping to fuel our net zero future

Reghan Mann, a senior environmental advisor at Talison Lithium, focuses on rehabilitation and biosecurity at their Greenbushes Lithium Operation in Western Australia.

At first glance, Talison's lithium mineral concentrate looks like sand, just like what you'd find on the most pristine beaches around the globe. But don't let this soft alkali metal fool you—despite being the lightest metal, lithium is also a mighty element that's powering our world toward a more sustainable future.

"Lithium plays a big part in people's lives and is used in everything from small electronic devices and power tools to mobile phones and electric vehicles," said Luke Smith, chief financial officer at Talison Lithium, the world's leading producer of hard rock lithium mineral (spodumene) concentrate. "With the global transition to clean energy, there's a high demand for electric cars, and the demand for lithium has followed suit."

Talison Lithium has responded. Located in Western Australia, the company currently produces approximately 20% of the world's lithium. Over the past few years, Talison Lithium has experienced substantial growth, with its workforce expanding from slightly over 400 workers in 2018 to more than 800 employees by the close of 2022. Additionally, Talison Lithium has doubled its production output during this period, with the inclusion of two new processing plants. This has increased the total number of processing plants to four, and a fifth is currently under development.

Driving towards a greener, cleaner future

Talison Lithium is leading in lithium and has been for more than forty years. In 1983 their Greenbushes Lithium Operation became the first mine in Australia to produce lithium mineral concentrate and since then they have been innovators in this field.

The lithium mineral concentrate that Talison Lithium produces at their Greenbushes Lithium Operation is used in a variety of battery types, most notably as a power source for electric vehicles, including electric bikes, scooters, buses, trucks and passenger vehicles. The reason? Lithium batteries offer higher energy density and lighter weight, when compared to nickel-based options.

For this purpose-driven company, what they do isn't as important as why they do it. "We don't think of our work in terms of capitalizing on the boom in the lithium industry," said Smith. "It's more about ensuring the reliability of the supply to help the world transition to cleaner energy sources."

Sustainability at work and beyond

It's not just what Talison Lithium produces that is helping to create a more sustainable future—it's also how they work.

Talison Lithium is supplying a significant proportion of critical product for the global transition to clean energy and is also committed to understanding and minimizing their impact on the planet. The company is actively working to make their operations more sustainable, and a crucial component of this effort involves incorporating sustainability thinking into their decision-making processes.

"From how they work to where they work, Talison Lithium cares greatly about the land and their neighboring communities," said Brendan Ellis, senior account manager at FM Global. "They're committed to sustainable development and thoughtful environmental management and rehabilitation of their sites."

Preparing for the risks of today, and tomorrow

FM Global and Talison Lithium began their partnership in 2009. As the industry and the Greenbushes Lithium Operation have grown, so has their need for additional risk transfer capacity.

Like the majority of FM Global's client partners, business disruption is not an option for Talison Lithium. From bushfires to climate change concerns—completing risk improvement and planning for the future are key to their success. Even just a few days of shutdown could have a massive effect on the global supply chain, resulting in significant impact for consumers.

"We value our relationship with FM Global because of the engineering and consultative services they provide," said Smith. "They've worked with us to reduce our operational risk exposure, but also to ensure our capital projects are extremely resilient from the ground up. I'm sure that's the reason why we haven't had an incident in that time."

Going forward, the partners will continue to identify ways to strengthen Talison Lithium's resilience, especially for their new processing plant, slated to open in 2025.

"Today and into the future, we'll continue to support the success of their business and the value they bring to their communities and the greater world," said Ellis. "We'll also support their ESG goals by recommending forward-thinking solutions that enable sustainable design, construction and operations."

A greater purpose

Empowering people with the ability to make choices about their impact on the world is essential to Talison Lithium's greater purpose—whether that's the cars they drive or the source they use to heat or cool their homes. As deeply embedded as the lithium they extract is the passion to nourish and protect the resources that offer so much promise for a more resilient tomorrow. ●

COMPANY
Talison Lithium

PURPOSE
Helping to fuel our net zero future

HEADQUARTERS
Perth, Australia

SIZE
800+ employees, site operations in Greenbushes, Western Australia

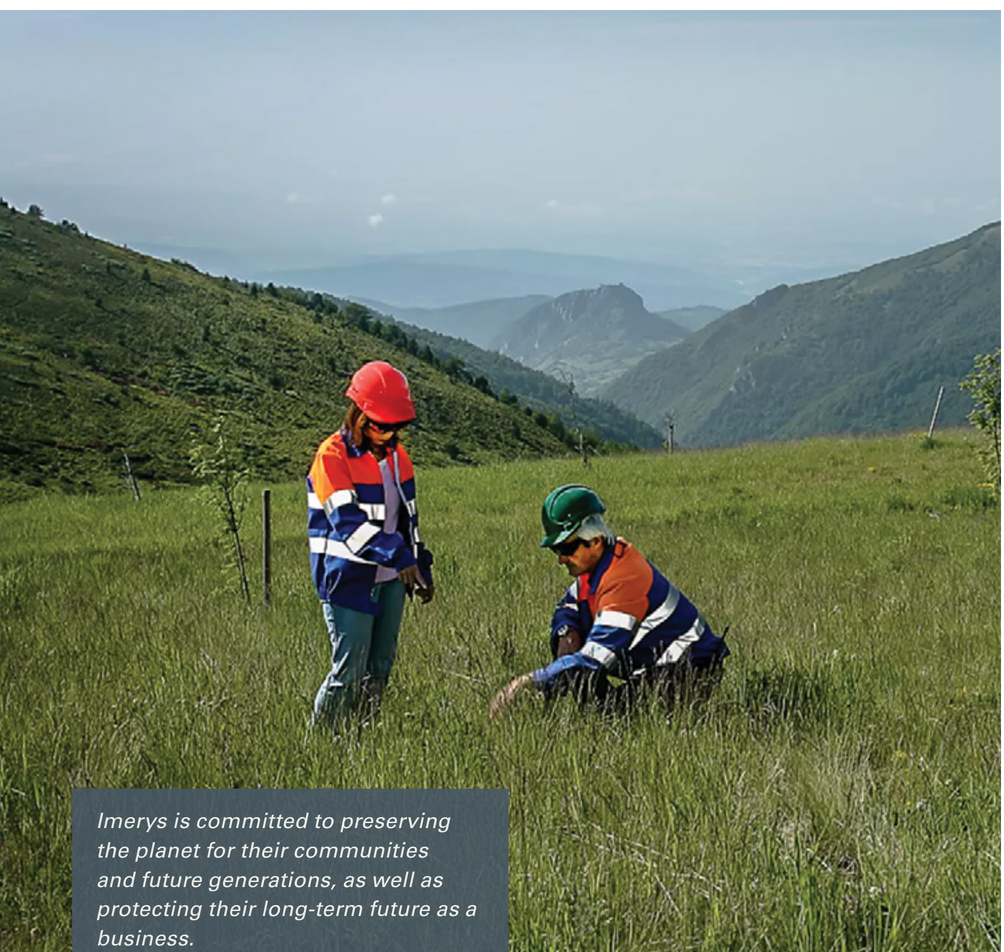
PRODUCT DEVELOPMENT
Lithium

VALUED CLIENT SINCE
2009

Imerys: Forging a sustainable future

In products such as face scrub and toothpaste, and throughout the homes and surrounding infrastructure that provide shelter over decades, Imerys plays a truly significant role in our everyday lives in myriad ways. And in a world that's constantly changing, Imerys is, too.

As the world's leading supplier of mineral-based specialty solutions, Imerys is always looking toward the future to embed sustainable thinking into everything they do. As agents of change, they are driven by a purpose to unlock better futures for their people, their customers and the planet.



Imerys is committed to preserving the planet for their communities and future generations, as well as protecting their long-term future as a business.

Materials for a modern world

The Imerys portfolio spans more than 30 different minerals extracted from over 100 mineral deposits around the world. Their products are used in advanced ceramics and fuel cells, infrastructure and utilities, cosmetics and coatings, and plastics and biotechnology, among others. With decades of experience and technical knowledge, their expertise in mineral solutions for every industry is unsurpassed.

"Minerals are an essential component of our daily lives, but they are also an essential and indispensable component of the transition to a low-carbon, more sustainable economy," said Leah Wilson, chief sustainability officer at Imerys. "Our purpose is really focused on unlocking better futures for everyone through the work we do everyday."

For employees, suppliers and communities, a better future is safer, healthier and more inclusive. For clients, it means creating sustainable value through Imerys' expertise in minerals combined with their ability to innovate for what's next. And for the planet, it's a carbon-free future as well as one where nature and our natural resources are protected.

Expansive environmental impact

Imerys starts with a mineral and reinvents it. Beneficiating its properties and shape, and expanding its utility transforms it into a product that can improve our homes, energize our industries and feed our economies.

A shining example of this transformation is perlite, a naturally occurring mineral that expands under sufficient heat. With a wide range of industrial uses, including as an insulator and fire-retardant additive, perlite is also ideal for lightweight building materials and concrete. Perlite is used for filtering wine and fruit juices and as an environmentally friendly soil amendment that can improve plant growth while also improving resistance to insects and disease.

One of its more remarkable roles is in body wash and exfoliators made with microbeads, where perlite can act as a replacement for the plastic that formerly entered the water supply and followed waste streams into the food chain of fish. Reducing plastic pollution in the ocean and protecting marine life is a small but meaningful part of how Imerys' products improve lives and help create a better world.

A relationship for resilience

While sustainability has long been embedded in their mission, Imerys now pursues an even more climate-conscious approach to their operations and business. With sites around the world, and a responsibility to the communities where they operate, the tools and support provided by FM Global have taken on new significance.

One focus of this collaboration has been Imerys' SustainAgility™ program for which FM Global provides accurate, reliable and consistent data on all Imerys sites that are exposed to climate risks. The resulting detailed analyses have allowed Imerys to establish plans for adaptation to climate risks that help make it possible for them to maintain production. A further contribution has been FM Global's participation in a study group working to identify cyber security vulnerabilities, which has led to the implementation of prevention and security plans based on FM Global's analyses of the control systems industry.

"FM Global has been our property and casualty insurer since 2004, and we have created a real partnership. This is a true collaboration that allows us to reduce the risk of disaster on our sites and to ensure that we can create value over time," says Emmanuelle Henry-Lanier, vice president of climate and portfolio sustainability at Imerys.

Coming full circle

The growing urgency of climate-driven risk and the global focus on sustainability finds Imerys ahead of the curve. Their long collaboration with FM Global has helped them to build on success, pursuing a path of sustainability and stewardship of their resources, while providing game-changing innovation to their customers.

"Imerys, like FM Global, is a purpose-driven company that's founded on science and research, and we are equally passionate about the work we do," said Loïc Le Dréau, manager of operations at FM Global in Paris, France. "We're inspired to work with Imerys as, together, we are building a more resilient and sustainable tomorrow for everyone." ●

COMPANY
Imerys

HEADQUARTERS
Paris, France

SIZE
14,000 employees around the world, 40+ countries across 5 continents

FEATURED MARKETS
Abrasives, batteries and fuel cells, packaging and pulp, building materials, ceramics, cosmetics and personal care, crop production, food and beverage, health, pharma and biotechnology, infrastructure and utilities, paints and coatings, plastics, refractory producers, rubber

VALUED CLIENT SINCE
2004

Q
&
A

Investing in resilience

with Sanjay Chawla
executive vice president and
chief investment officer

A key driver for us is to never forget why we do what we do. And that's making sure FM Global can deliver value and protect the purpose of our clients for the long term.

A global citizen, born in India, educated there and in the United States, with professional stints in Singapore, India and the United States, Sanjay Chawla, executive vice president and chief investment officer knows that a steady approach is what often wins the day. He's settled into his role as the architect of FM Global's investment strategy, and his philosophy is that, while we proceed with confidence, we always remain prepared for a future that holds uncertainty.

How would you describe your investment philosophy?

Our investment philosophy at FM Global incorporates a very long-term-focused set of building blocks. We look to very strategically and thoughtfully construct the portfolio with the same resilience as we do on the insurance business strategy side.

This means we build an all-weather portfolio for the long term that does very well on the upside and limits the detraction during periods of market downside, such as in 2022. I've always believed it's much better to preserve our capital strategically in downside scenarios, which may cost us small incremental gains on the upside. Our laser focus on results is what really drives our team to do the best we can for FM Global and our clients.

Q & A

with Sanjay Chawla

Considering last year's volatile market, how did FM Global do?

2022 was an unprecedented, very volatile year for global financial markets. Equities were down a lot and even fixed-income bonds were down at the same time. We haven't seen a correlation breakdown with that magnitude since the Great Depression era.

FM Global had a relatively strong year on what we call a measuring performance basis. And we did way better than the market did on that front. At the end of last year, we were just under US$22.5 billion in invested assets.

I believe that we're set up to continue to navigate every year very prudently through the construction of the portfolio with diversification and with the top talent, subject matter expertise based, collaborative team we're building.

How do you manage the portfolio from a resilience standpoint?

We're constantly monitoring the long-term structural and cyclical trends in the global economy and financial markets, as we navigate through the economics and geopolitics-led markets' volatility. Our long-term portfolio construction strategy is designed to generate a higher probability of strong absolute and relative results over the long run, including portfolio adjustments as needed.

Historically, our portfolio was set up to primarily include large cap U.S. equities and core U.S. fixed income, and cash. We had minimal other diversifying strategies when I joined in 2018. And that's why I talk about, "Be ready and prepared well in advance as markets, events and volatility unfold." We had already built out an optimal allocation to diversifying strategies including multi-asset, opportunistic fixed income alternatives, with half of that allocation in liquid alternatives. These high-conviction absolute return strategies are expected to generate positive returns in various market conditions. And they certainly delivered strong positive returns in 2022.

How has your diversification strategy produced a winning portfolio?

Every quarter is different; every month is different. On that front, we try to make sure there's enough diversification so that we're not just focused on one bucket. Diversification in our portfolio takes place at the asset class level, and at the strategies level as well. Let's say, if you were heavily focused on technology last year, that sector significantly underperformed in absolute and relative terms compared to other sectors, right? So, within equities, other sectors play the diversifying role. Therefore, while we like technology for the long term, set on differentiated innovation, other sectors help dampen that impact in the near to medium term. The sizing of positions is extremely critical from a risk management perspective, too.

Now, the United States has been the best place to invest in for the last several years but, at some point, the valuations for international assets become so attractive that you've got to have some allocations built out to take advantage of upside in those markets as well. While diversification is critical, it is equally important to not over-diversify, so that the portfolio-level strategy of capitalizing on the upside, while minimizing the downside risk, generates the intended long-term optimal performance.

Are there any trends you've observed in regard to climate that will influence the investment strategy in 2023?

The last few years have seen a visible increase in global capital supporting climate-related investments. We've added climate-related strategies to the portfolio selectively and prudently, and our approach rests on thorough diligence on these strategies.

How does your team help clients protect their purpose?

With very diverse specialized subject matter expertise backgrounds at strategy and portfolio, the investments team looks to invest prudently for positively differentiated long-term results. We are extremely focused on maintaining optimal liquidity and seamlessly enabling the insurance business teams to innovate and adapt to new technologies and engineering advancements, which help to improve loss prevention and risk mitigation for our clients in the long run.

Who has influenced your career?

I grew up in India, where education, particularly math, was a big part of the whole value system that drove us persistently. My dad worked in banking, and my mother was an English teacher at a public school. Watching them work so hard is what inspired me and my siblings during school and beyond. And, throughout my career, I've been very fortunate to have worked with some of the sharpest and most thoughtful minds, leaders in global financial markets and respective industries.

What does resilience mean to you?

A key driver for us is to never forget why we do what we do. At the end of the day, we're ensuring that FM Global, from an insurance company standpoint, can run a very resilient business strategy to deliver value and protect the purpose of our clients for the long term. And to do that we're further enhancing and protecting the financial strength that gives FM Global the power to take on the optimal level of business risk.

Sanjay and his wife, Ritu, are parents to three daughters and a son, and they have one dog. They currently reside in the greater Boston area of Massachusetts, in the United States. ●

Our investment philosophy is to stay optimally invested and be extremely vigilant of the multiple market risk drivers.

Looking ahead to the future of FM Global

by Deanna R. Fidler
executive vice president,
people, strategy and technology

Today, the people, strategy and technology required to lead are far different than they were yesterday. As the pace of change continues to accelerate and the global landscape of business complexity shifts, it's increasingly important for leaders to build a workforce that adapts and thrives for whatever comes our way.

That's why our focus on your success begins with a holistic approach to ensure our colleagues have the right skills, experience and tools to deliver what you need today and anticipate what you need for the future.

While there's more to be said about our strategy or technology plans, it is truly our people who create and deliver the value—and empowering our colleagues is where everything begins. More than ever, we're investing in our colleagues so they can, in turn, help you invest in a more resilient tomorrow. Here are a few ways we achieved that in 2022.

We help protect your purpose by continuing to hire and develop the right people to support your specific business needs.

Fostering inclusivity and strengthening culture

To provide an inclusive space where everyone's differences are respected, we launched a multigenerational business resource group for knowledge-sharing between long-tenured colleagues and younger hires. As part of our diversity, equity and inclusion (DEI) efforts in 2022, this expanded on our already established women's and multicultural business resource groups. To ensure we adapt to the ever-changing needs of the labor market, we also founded a Culture and Employee Experience organization.

Leaders at every level are empowered and held accountable to foster inclusivity and provide support for the unique needs of our colleagues. For us, this means we continue to ensure equity within our talent processes, performance management and talent acquisition. And we continue to ensure we have processes in place to mitigate unintended bias.

Learning with purpose

As a knowledge-based organization, it's important to keep our colleagues informed and engaged, while retaining what makes our culture unique as we grow our business around the globe.

One way we do this is through our FM Global Academy, an advanced learning and development experience that delivers in-person and on-demand programs across the globe for colleagues and clients.

Last year, the FM Global Academy was dedicated to honing colleagues' individual and collective strengths to ensure we're developing a workforce that can understand and align with the scale and pace of change our clients face. We went global with our training, including a holistic approach to leadership development, and launched our first technical engineering program in Singapore.

Going forward, we'll continue to set our sights on broadening our learning and development capabilities in Europe, along with our stateside Learning Center/SimZone and FM Global Research Campus.

Building resilience in our people

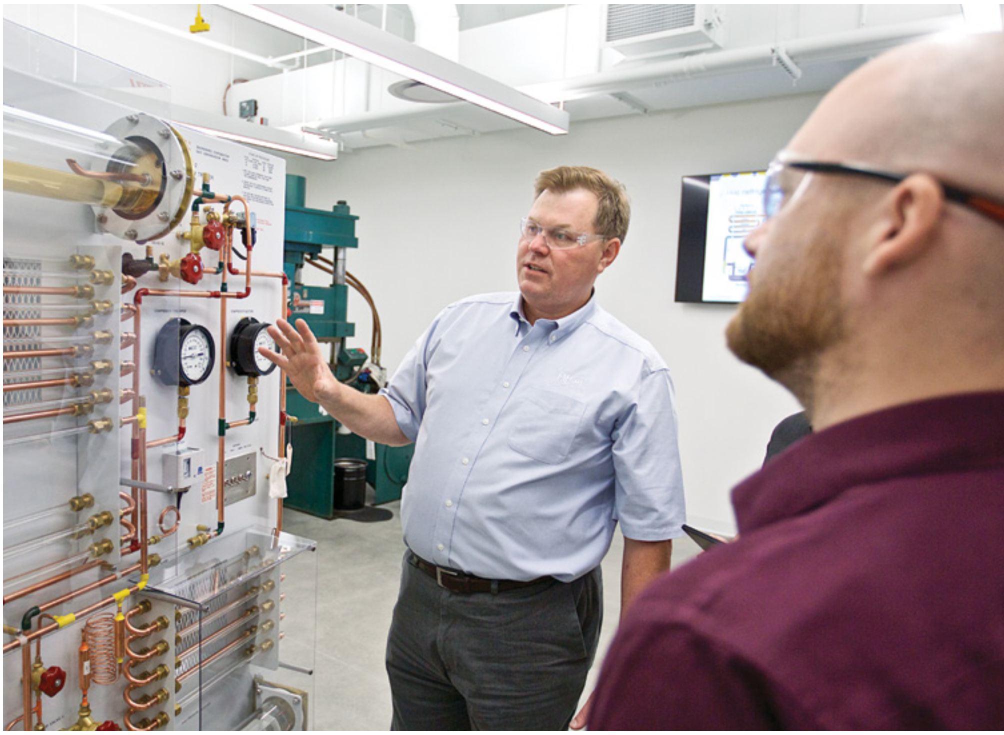
In 2022, to support the personal and professional demands of our colleagues, we expanded our workplace focus on flexibility and emotional and financial well-being. We offered two companywide well-being days off, as well as expanded our workplace mental health and financial education and resources. In addition, we gave all colleagues a one-time lump sum payment—separate from other adjustments or increases—due to the exceptional circumstances we are facing as a result of inflation.

Then, to better understand everyone's experience with our values and culture, we deployed a global employee survey; we'll use that input to identify potential opportunities and strengthen what makes us unique, while driving and delivering more value for you.

I believe this commitment to an environment of care and inclusiveness permeates outward. It allows us to develop long-standing partnerships; focus on our superlative research, unmatched data and science; and provide world-class risk management that's deeply human.

Delivering differentiated value with digital

As a data-driven organization, we're always looking for new and better ways to deliver value so that clients have access to critical information when and how they need it. And it's why we continue to invest in developing our people and leveraging our data and expertise, while integrating connectivity into everything we do.



Over the last year, we've implemented new processes, programs and technologies that facilitate efficiency in delivering our proprietary, first-class digital client experience. As a powerful knowledge hub, our digital client experience will broaden access to a wealth of scientific data and provide tools to help inform clients and manage their loss prevention and insurance programs. Our new client-facing portal offers secure ways to share information and collaborate on work products, such as a transparent view of the renewal process, including steps, schedules, status and documentation.

As a data-driven organization, we're always looking for new and better ways to deliver critical information when and how you need it.

We're investing in our colleagues so they can, in turn, help you invest in a more resilient tomorrow.

Creating a culture of caring

We believe this strong attention to caring for our people is one of our biggest differentiators, and why FM Global enjoys high retention—some of the highest in our industry. The result is a strong commitment to you, our clients and partners—you have to believe in that to work here. And it's why we're focused on hiring and developing the right expertise to help protect your purpose.

Though it's clear that people tend to join us and stay, we know we can't take that for granted. That's why we'll continue this critical work in advancing our colleagues and culture to better support our clients and partners in the coming years. This includes accelerating and deepening our environmental, social and governance (ESG) commitments.

Fostering resilience isn't new to us; it's a business practice we hold in high regard—one that has allowed us to protect our clients and partners and help them prosper for nearly 200 years. When our people feel cared for, they can work as a team to be agile in responding to an ever-evolving world. And, perhaps most important of all, they can grow into the leaders of tomorrow, carrying our values forward and preparing for whatever the future may hold. ●

POWERED BY PEOPLE

Bringing the spirit of innovation to life

by Randall E. Hodge
executive vice president,
staff insurance operations

Innovation isn't just a buzzword we toss around. Always believing there's a better way of doing things is truly woven into the fabric of who we are. One of our biggest strengths—and biggest differentiators—is our ability to solve problems for clients before they happen.

For nearly 200 years, we've been engineering solutions to build your resilience, so history doesn't repeat itself. This spirit of innovation to develop new solutions for the risks and challenges you face—whether it be climate, fire, mechanical, cyber or something as yet unknown—is what drives everything we do.

FM Global Climate Risk Report

Innovation that adds value

In 2022, world supply chains continued to be constricted, due in part to rising inflation, labor shortages, political strife, energy costs and climate change. Many feared, and continue to fear, the supply chain domino effect: When one link goes down, the losses get bigger, and so does the impact on colleagues, customers and communities—and for a longer period of time.

Last year, we helped many of you understand the business impact of risks and exposures to enable better contingency planning. This was especially important in helping to prevent large, mechanical breakdowns, or boiler incidents, that can lead to extended delays. No matter the industry, building resilience isn't a nice-to-have, it's a must-have to preserve today and to prepare for tomorrow. Whether that's producing auto parts in a single facility for an entire country or our client, Imerys, preparing specialty minerals at a flagship site in a flood zone for a global market—prioritized risk improvement efforts continue to play a key role in maximizing value.

With insurance costs climbing higher than ever, and losses felt more keenly, businesses with more resilience are better equipped to prepare for what's ahead. It's why we have an unquenchable thirst to constantly advance our knowledge, to help you better understand your risk, so you can take the most meaningful actions to protect what you've worked hard to build. For more on how Imerys approaches sustainability, read the full story on page 20.

Innovation that gives back

Climate change is part of our reality, but we believe it's a problem that can be mitigated by building resilience. Last year saw more frequent and more severe weather events striking areas around the world. Many of your businesses fared well because of the risk improvement efforts you worked hard to implement.

One example is Arthrex, a global medical device company that was hit by Hurricane Ian. Despite destruction in all directions, our client remained unscathed and never missed an order. This commitment to resiliency meant they were able to fulfill their purpose by providing surgeons with the critical devices they needed to treat their patients. Even more, they opened their facility to serve as a shelter for employees whose homes were affected by the storm. Read the complete story on page 16.

To help more of you take control of your organization's future, we zeroed in on our global product innovation and debuted several climate resilience products in October 2022. Along with our engineers' expertise and advising, these products can help guide your decision-making.

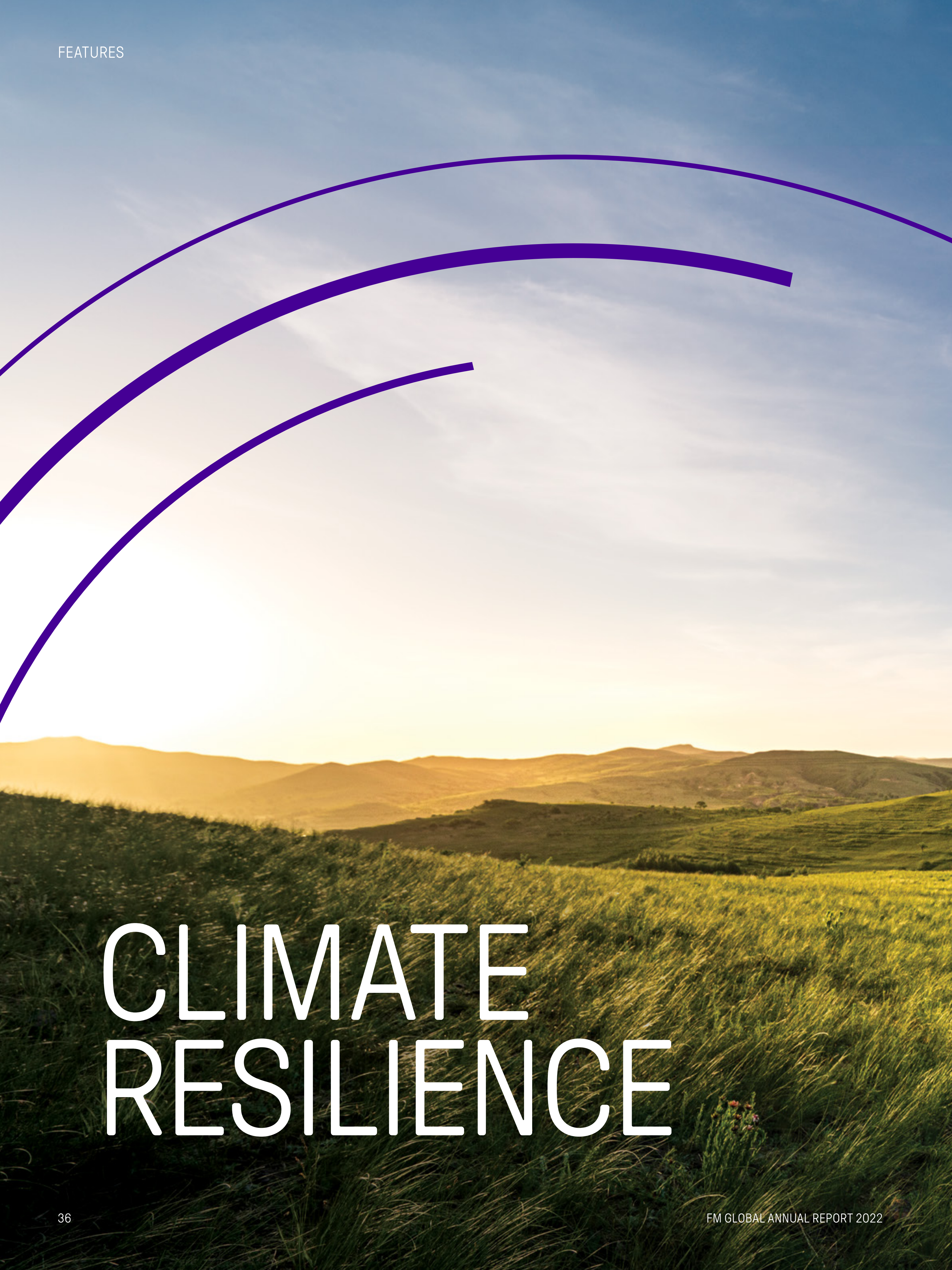
The climate risk report quantifies risk and offers actionable next steps, while the climate reporting aid assists in accurately reporting climate-related financial disclosures. You also benefit from the enhanced FM Global Resilience Index that measures climate risk exposure and climate risk quality to inform growth and expansion opportunities. Plus, a new resilience credit awards 5% of premium to eligible clients to support their climate risk improvements.

A personalized approach

Our relentless spirit of innovation is just one facet of the way we're working together to build a better, brighter future. In 2022, we continued our dedication to focusing on your evolving needs to create customized solutions you can count on. To us, you're not an insurance or business transaction—you're true partners. See page 18 for how we're partnering with Talison Lithium as they continue to expand to meet the demands of a growing lithium market.

We have an unquenchable thirst to advance our knowledge to help protect what you've worked hard to build.

As we move forward in 2023, we'll continue our work together with passion and purpose. Because the impact of protecting what we value goes far beyond the bottom line—it strengthens the communities that surround us, making a more prosperous world for us all. ●



CLIMATE RESILIENCE

In 2022, the ever-changing climate gripped attention on the global stage as never before. A new sense of urgency ignited governments and organizations to take unprecedented global action, and the year saw real progress in envisioning what's possible for the future.

Protecting purpose in a changing climate

As property risk consultants, we innovate for both the challenges and possibilities to protect our clients' purpose. That's why we introduced pioneering solutions to help our clients better understand their climate risk.

"Many of our clients make pharmaceuticals, food and other critical supplies that their communities rely on after a loss," explained Randall E. Hodge, executive vice president of staff insurance operations. "They have to be resilient. They have to be up and running. They want advice on how to navigate successfully through all of the events the climate can throw at them."

A first-of-its-kind credit to invest in resilience

To support our clients' climate resilience, we announced a US$300 million resilience credit, where eligible clients receive a 5% premium credit to allocate toward climate risk improvements, especially flood, wind and wildland fire exposures. If each of our eligible clients accesses the credit in 2023, more than US$120 billion in loss due to property damage and business interruption could be eliminated.

Hodge explained, "As a mutual company, we give money back to our clients to make investments for the future, and that pays its way through to our clients' benefit and the community's benefit as well."

US$300M

in climate resilience credits

US$120B+

in loss eliminated if each eligible client accesses the credit in 2023

Groundbreaking products to tackle climate risk

Giving our clients the money to invest in their future was just the beginning. Our new, groundbreaking climate resilience products can help clients understand and prioritize their risk so their investments will be effective.

Climate Risk Report: Know the score

Our report uses billions of property-risk data points collected in thousands of annual engineering visits to client sites. Powered by artificial intelligence, machine learning and predictive analytics, it creates a customized score based on actionable and inherent risks to help clients identify and prioritize their climate risk improvement efforts.

Climate Reporting Aid: Disclose with confidence

Many businesses today must disclose their climate risk as part of environmental, social and governance (ESG) reporting. We designed the climate risk report to provide businesses with climate risk data that is needed for regulatory purposes.

FM Global Resilience Index: Enhanced for today’s climate

Our Resilience Index helps leaders make strategic decisions on how to manage and grow their businesses. Last year, we added two new climate measures. Climate risk exposure reflects threats like floods and wind, and climate risk quality reflects building codes and enforcement, and facilities improvements. With insights drawn from 130 countries, this data helps clients plan for new facilities, improved supply chains and possible mergers and acquisitions.

2023 Climate Change Impact Report

In 2023, we will launch our climate change impact report, a predictive tool that provides insight on unique chronic risk from the evolving impact of drought, extreme temperatures, increased precipitation, intensifying winds and rising sea levels.

A new commitment to ESG leadership

Kashia Moua joined FM Global as our first chief sustainability officer in 2022 and is working to assess and advance our long-term environmental, social and governance (ESG) strategy.

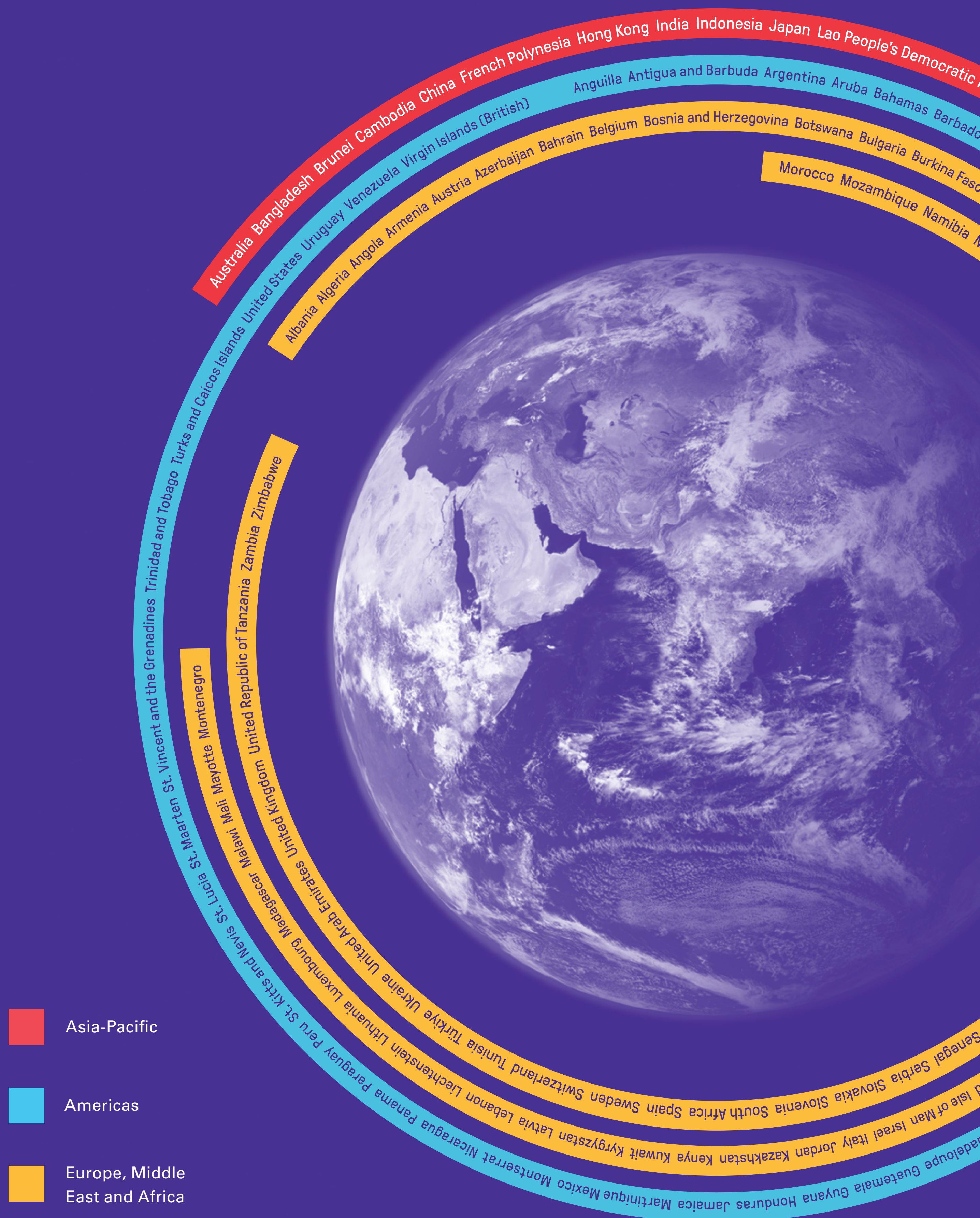
She'll help accelerate our focus on resilience; diversity, equity and inclusion (DEI); and organizational culture and responsible offerings. Under her guidance, we increased the availability of hybrid vehicles as part of our company transportation, and continued to prioritize green design and construction. A major focus for Moua going forward will be supporting our clients and partners with business ESG strategies and reporting requirements.

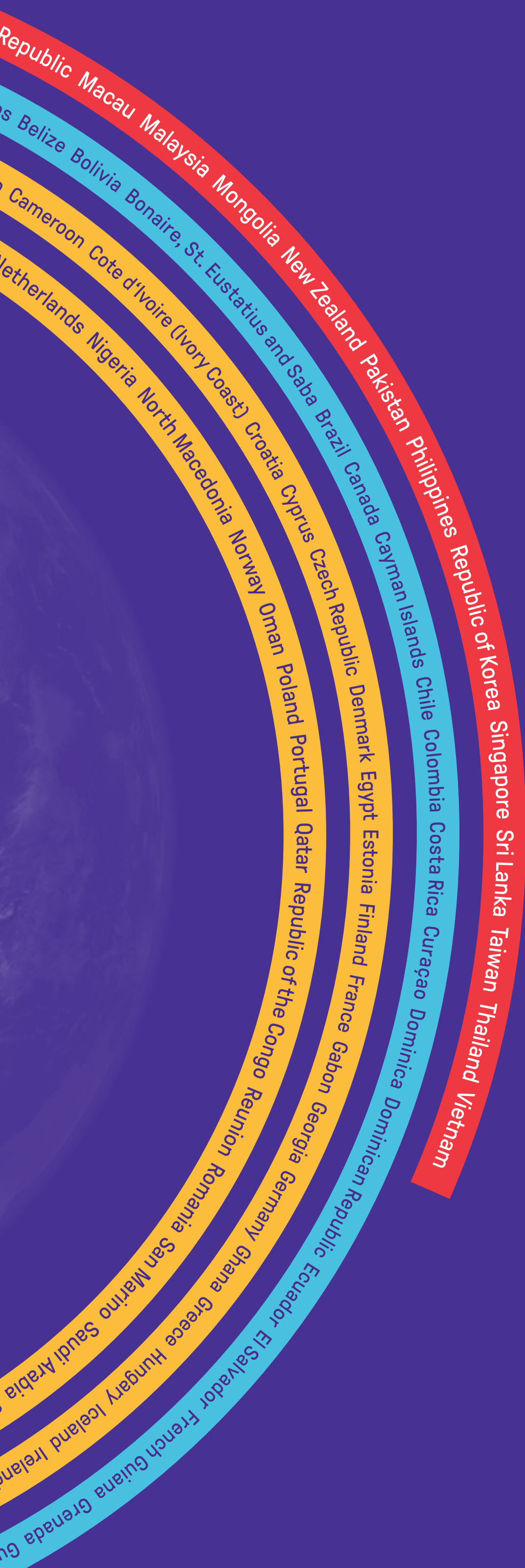
"Though we've been leading in this space for nearly two hundred years," Moua noted, "now we have an even greater focus on creating new and meaningful value for our clients and partners, our colleagues and our communities."

Building resilience is critical to long-term prosperity and peace of mind. And it's why we'll continue to protect your purpose at every turn.

AROUND THE WORLD

While the world continues to face levels of uncertainty, there is a renewed hope for the future. This evolved global mindset embraces the fact that change is a constant, and it empowers us all to reimagine and refocus how we are building a better tomorrow.


Australia Bangladesh Brunei Cambodia China French Polynesia Hong Kong India Indonesia Japan Lao People's Democratic
Anguilla Antigua and Barbuda Argentina Aruba Bahamas
Virgin Islands (British) Venezuela Uruguay United States Turks and Caicos Islands Trinidad and Tobago St. Vincent and the Grenadines St. Maarten St. Lucia St. Kitts and Nevis Peru Paraguay Panama Nicaragua Montserrat Mexico Martinique Jamaica Honduras Guyana Guatemala
Albania Algeria Angola Armenia Austria Azerbaijan Bahrain Belgium Bosnia and Herzegovina Botswana Bulgaria Burkina
Morocco Mozambique Namibia
Montenegro Mayotte Mali Malawi Madagascar Luxembourg Lithuania Liechtenstein Latvia Lebanon Kyrgyzstan Kuwait Kenya Kazakhstan Jordan Italy Israel Isle of Man
Zimbabwe Zambia United Republic of Tanzania United Kingdom United Arab Emirates Ukraine Türkiye Tunisia Switzerland Sweden Spain South Africa Slovenia Slovakia Serbia Senegal
Asia-Pacific
Americas
Europe, Middle East and Africa



Our FM Global products and services are available around the world. The countries listed here represent those where we can provide legally admitted coverage via a combination of licenses and a partner network.

Americas

Anguilla
Antigua and Barbuda
Argentina
Aruba
Bahamas
Barbados
Belize
Bolivia
Bonaire, St. Eustatius and Saba
Brazil
Canada
Cayman Islands
Chile
Colombia
Costa Rica
Curaçao
Dominica
Dominican Republic
Ecuador
El Salvador
French Guiana
Grenada
Guadeloupe
Guatemala
Guyana
Honduras
Jamaica
Martinique
Mexico
Montserrat
Nicaragua
Panama
Paraguay
Peru
St. Kitts and Nevis
St. Lucia
St. Maarten
St. Vincent and the Grenadines
Trinidad and Tobago
Turks and Caicos Islands
United States
Uruguay
Venezuela
Virgin Islands (British)

Europe, Middle East and Africa

Albania
Algeria
Angola
Armenia
Austria
Azerbaijan
Bahrain
Belgium
Bosnia and Herzegovina
Botswana
Bulgaria
Burkina Faso
Cameroon
Cote d'Ivoire (Ivory Coast)
Croatia
Cyprus
Czech Republic
Denmark
Egypt
Estonia
Finland
France
Gabon
Georgia
Germany
Ghana
Greece
Hungary
Iceland
Ireland
Isle of Man
Israel
Italy
Jordan
Kazakhstan
Kenya
Kuwait
Kyrgyzstan
Latvia
Lebanon
Liechtenstein
Lithuania
Luxembourg
Madagascar
Malawi
Mali
Malta
Mayotte
Montenegro
Morocco
Mozambique
Namibia
Netherlands
Nigeria
North Macedonia
Norway
Oman
Poland
Portugal
Qatar
Republic of the Congo
Reunion
Romania
San Marino
Saudi Arabia
Senegal
Serbia
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Tunisia
Türkiye
Ukraine
United Arab Emirates
United Kingdom
United Republic of Tanzania
Zambia
Zimbabwe

Asia-Pacific

Australia
Bangladesh
Brunei
Cambodia
China
French Polynesia
Hong Kong
India
Indonesia
Japan
Lao People's Democratic Republic
Macau
Malaysia
Mongolia
New Zealand
Pakistan
Philippines
Republic of Korea
Singapore
Sri Lanka
Taiwan
Thailand
Vietnam

A new global mindset

In 2022, the global community reemerged and reconnected. As we came together, we saw a world transformed by change, calling out for engaged partnership. For us, this meant new opportunities to expand our presence and strengthen our partnership with clients.

Experiential risk management arrives in Asia-Pacific

In November 2022, we opened the doors of the FM Global Centre in Singapore, our first client-centered experiential risk management facility in Asia-Pacific and a first for the sector in this region.

Singapore's strong governance and global connectivity, as well as its status as a leading financial and business gateway, makes it a natural home for our new global centre, fittingly located in Science Park.

"We want our clients to experience and internalize their own story here—seeing is believing," explained Seek Ying Yong, engineering manager for the Asia-Pacific division. "We're here to offer advice and solutions that meet their unique business needs."

For many people and cultures, the FM Global Centre is a harmonious place and symbolizes our intention to the community. The building's location and interiors reflect balanced feng shui—the traditional Chinese art of arranging space to create positive energy.

Created with lush greenery and rolling curves, its goal is harmony between engineering and loss prevention, between building and landscape, and ideally, between FM Global and the community.

The centre includes an immersive media theater that demonstrates how investment in risk improvement can prevent losses and deliver business value.

Our hope is to inspire clients to act on what they learned at our FM Global Centre and to improve their resilience.

These insights can help organizations make the best decisions to strengthen supply chains, protect owned locations or identify new facilities and, ultimately, generate business value. Active learning classrooms and interactive simulation laboratories feature real-world scenarios that show how a focus on greater climate resilience can reduce the impact from natural hazards.

"This part of the world is more catastrophe-exposed than anywhere," said James Thompson, senior vice president, Asia-Pacific division manager. "Our hope is to inspire clients to act on what they learned at our FM Global Centre and to improve their resilience."

The centre also plays an important role in carrying out the revitalized mission of the FM Global Academy.

"Our goal is to inspire clients to act and be prepared to turn their operational risks into opportunities whether at a plant level or across their global supply chain," explained Philip Johnson, senior vice president, chief learning officer, FM Global Academy. "We accomplish this by deploying a team of learning specialists who understand our clients' processes, their people and their values."

Looking forward to 2023, we'll be breaking ground on our new Luxembourg centre to offer the same experiential opportunity to our European clients and partners.

A new branch in East Asia is open for business

Last year, we were granted permission to establish our first branch in the Republic of Korea, allowing us to support a business environment with a rapidly growing interest in loss prevention. With the official opening in early 2023, we'll broaden our support of existing reinsurance clients. At the same time, we'll actively seek local, like-minded partners who share our philosophy of risk management to promote resilience.

"As a global economic force with a strong manufacturing base, the Republic of Korea presents an evolving insurance and loss prevention need that FM Global is uniquely placed to fulfill," said Shim Yong-Ju, assistant client service manager. "In addition to continuing to serve our global clients here, we are actively seeking to work with clients with a similar philosophy towards risk and loss prevention and contribute towards a growing loss prevention culture."

Celebrating committed global partnerships

We were incredibly proud to reach two important milestones in 2022—the 50th anniversary of our office in Australia and 25 years of doing business in New Zealand. These are achievements we share with our colleagues, clients and partners, and reflect the breadth of our own purpose—to help manage risk and build resilience all over the world. ●

FM Global is a leading commercial property insurer that forms long-term partnerships with clients around the world to support their risk management and business resilience strategies. We consult with clients to protect the value they've worked hard to build through a unique combination of capital strength, scientific research capability and engineering expertise. Our clients are policyholders—and together we share the belief that the majority of loss is preventable.

Overview

In addition to its large-risk property insurance line of business, the FM Global Group comprises a number of other key business operations. Several of those are described in this section.

AFM specializes in commercial property insurance for the middle market. AFM provides tailored underwriting expertise and property loss control engineering through a select international network of broker partners. Tailoring the knowledge and experience of large international companies to build real resiliency into any middle market company. The organization has offices in Australia, Canada, Europe and the United States, providing coverage in more than 90 countries.

FM Global Cargo provides cargo insurance coverage, automated certificate issuance and risk engineering services tailored to the international trade and transportation needs of FM Global and AFM clients.

Corporate Insurance Services (CIS) is FM Global's wholly owned brokerage operation, maintaining relationships with a variety of U.S. domestic insurers, Lloyd's of London, excess and surplus lines insurers and specialty companies.

FM Approvals is an international leader in third-party testing and certification services for property loss prevention products used in commercial and industrial facilities. Backed by scientific research and extensive experience, the FM APPROVED certification mark is globally recognized by regulators and end users. FM Approvals certifies products that make businesses more resilient by meeting rigorous standards of quality, technical integrity and performance.

Mutual Boiler Re provides boiler and machinery insurance in North America, specializing in mechanical, electrical and pressure systems breakdown treaty reinsurance and support services to the commercial property insurance marketplace. Today, it works with nearly 300 insurance companies, providing coverage to their policyholders.

2022 was a year marked with significant uncertainty and volatility in the financial markets, as geopolitical developments, soaring inflation, and a steady series of federal funds rate hikes led to unprecedented detraction in parallel across equities and fixed income markets. Market sentiment shifted repeatedly from positive to negative throughout the year as economic data points were absorbed and investors attempted to gauge the Federal Reserve's response to evolving inflation, growth, and employment trends. Rapidly rising interest rates, increasing recession fears and stubborn inflation all contributed to the markets' and asset values decline, driving significant multiple contraction. Both equities and fixed income ended the year with meaningfully negative returns, a highly unusual outcome not seen in more than fifty years. S&P 500 experienced its worst calendar year return since 2008, and U.S. Treasury bonds delivered their worst return on record going back to the 1920s.

In the face of these external challenges, FM Global's investments portfolio demonstrated relative resilience. FM Global's investment strategy is set on long term portfolio construction, based on strategic allocations providing optimal diversification, and diligent focus on downside risk management. The long-term portfolio construction framework as updated in 2019, includes investments in public markets, and private and liquid alternatives. Asset allocation adjustments, relative outperformance from internally managed U.S. equity large cap strategy and resilient absolute return and private alternatives performance helped dampen the downside impact from global markets. While the equity and fixed income correlations reversed in 2022, reducing the diversification effect, the alternatives allocation in private markets and liquid strategies contributed positively to diversification. The liquid alternatives allocations provided the necessary and as expected risk management with strong positive absolute returns, dampening the downside impact from the public equities and fixed income markets.

Dedicated focus on optimal risk management was essential and contributed positively on a relative basis. The alternatives allocation served as a critical source of diversification relative to public markets holdings and helped to buffer the impact of concurrent stock and bond drawdowns with more stable return outcomes. While overall investment return was negative, given the broad markets performance, FM Global's investment strategy resulted in appreciably better surplus protection compared to a traditional diversified portfolio comprising stocks and bonds alone could have produced.

Financial markets experienced marked turbulence over the year, as both equity and fixed income assets struggled under the weight of stubborn inflation and aggressive monetary policy tightening. Equity and fixed income markets began their decline early in the year, as the after-effects of COVID-related monetary and fiscal accommodations and persistent inflation carried over from 2021, stirring apprehension that the Federal Reserve would soon begin hiking interest rates. Russia's invasion of Ukraine in February heightened geopolitical risks, sending energy prices soaring, feeding volatility and casting uncertainty on prospects for global growth. Many of the high-growth stocks of 2021 came under increased selling pressure as market participants began to factor in the impact of potentially higher rates and slower growth on the valuation of long-duration growth companies.

The Federal Reserve's decision to hike rates in March was the first in a series of increasingly aggressive rate hikes that dominated financial markets throughout the year. As the year progressed, markets oscillated between optimism that inflation might subside enough to allow the Fed to slow its pace of tightening, and pessimism in response to Fed affirmations of its commitment to beat inflation, even at the expense of an economic contraction. Hopes of a soft landing gained some footing mid-year, but stocks declined further, and yields rose sharply in August with the realization that the hiking cycle was far from over. The U.S. dollar reached a 20-year high in September, and the S&P 500 index hit its low for the year in October. Towards the end of the year, the Fed finally began to suggest that the pace of rate hikes could shift lower, yet continued to stress its resolve to bring inflation down to 2%.

Equities allocation transitioned cautiously in the first half to an underweight position, as expectations for growth began to deteriorate. We maintained our quality bias in core fixed income, but overall fixed income was held at an underweight position throughout the year given the rising rate and inflation environment and our view of a limited opportunity set in core fixed income. Private high grade and opportunistic credit originations, benefiting from higher yields, healthy bottom-up fundamentals and for certain part of the portfolio, shorter duration, were prudently scaled up. The alternatives portfolio was distinctly additive to overall portfolio results. The private markets allocation produced positive returns throughout 2022 despite severe public markets headwinds. The absolute return portfolio also benefited from careful portfolio construction and employing high conviction managers that were able to capitalize on market volatility, delivering results that surpassed traditional public markets and the broad hedge fund universe as well. The multi-assets bucket includes global asset allocation strategies, broad markets exposure including through sector exchange traded funds, and a liquidity sleeve through short duration high quality fixed income strategies. Money market yields moved sharply higher through the year, restoring cash as a viable investment option and leading to a modestly higher cash position.

The investment portfolio ended the year with an underweight to fixed income and slight underweight to equities, balanced by an overweight in alternatives. While the transition to a slower pace of hiking has provided some relief, uncertainty remains around the duration of sustained higher rates and the ability of companies to manage through challenging financial and economic conditions in the coming year.

At the total portfolio level, we remain vigilant to changing market conditions, with continuous focus on investing optimally to support long-term surplus growth while managing risk and liquidity needs. Our portfolio remains well-positioned with diversified exposures and strategic and tactical positioning to capitalize on opportunities and lessen any potential downside market impacts. With this approach, FM Global Investments continues to play a key role in preserving and growing FM Global's financial position and leadership in the property insurance business.

Real Estate

Hobbs Brook Real Estate ("HBRE") invests in and manages real estate assets on behalf of FM Global Investment Management throughout the United States. Additionally, HBRE's Construction Management Department provides functional support to FM Global's business operations globally to meet ongoing real estate requirements. The investment and management of commercial assets provides an additional element of diversification for FM Global's investment portfolio. The acquisition, construction, development and areas asset management departments of HBRE work to optimize returns and align the real estate investment portfolio with FM Global standards in risk mitigation. In 2022, HBRE managed 4.7 million ft^2 (437,000 m^2) of commercial properties, which produced $167.1 million† in total revenue and $71.9 million† in cash flow. In May 2022 HBRE onboarded new leadership with the hiring of a new President & CEO, who is working closely with FM Global Investment leadership to develop optimal asset-level and portfolio strategies.

Pretax Contribution to Surplus (in millions) †	2022	2021
Investment income	$ 446	$ 358
Realized gains	508	1,576
Unrealized (losses) / gains	(3,374)	396
Total	$ (2,420)	$ 2,330

As of Dec. 31, Holdings (in millions) †	2022 Total	2022 Percentage	2021 Total	2021 Percentage
Equities:				
Equity securities	$ 9,771		$ 10,894	
Other – equity funds	146		487	
Total equities	$ 9,917	44.1%	$ 11,381	46.7%
Debt securities:				
Taxable debt securities	$ 6,864		$ 7,483	
Municipal debt securities	1,386		1,665	
Total debt securities	$ 8,250	36.7%	$ 9,148	37.5%
Other – alternative investments:				
Private equity	$ 1,211		$ 1,027	
Hedge funds	845		879	
Other alternative investments	125		104	
Total other – alternative investments	$ 2,181	9.7%	$ 2,010	8.2%
Short-term funds and cash	2,132	9.5%	1,840	7.6%
Total	$ 22,480	100.0%	$ 24,379	100.0%

† All financial values in U.S. dollars.

The management of FM Global is responsible for establishing and maintaining adequate internal control over financial reporting and for the preparation and integrity of the accompanying financial statements and other related information in this report. The consolidated financial statements of the Company and its subsidiaries, including the notes to consolidated financial statements, were prepared in accordance with U.S. generally accepted accounting principles and include judgments and estimates, which, in the opinion of management, are applied on an appropriate basis. The Company maintains a system of internal and disclosure controls intended to provide reasonable assurance that assets are safeguarded from loss or material misuse, that transactions are authorized and recorded properly, and that the accounting records may be relied upon for the preparation of the financial statements. This system is tested and evaluated regularly for adherence and effectiveness by the Company's staff of internal auditors.

The audit committee of the Board of Directors, which comprises directors who are not employees of the Company, meets regularly with management and the internal auditors to review the Company's financial policies and procedures, its internal control structure, the objectivity of its financial reporting and the independence of the Company's independent public accounting firm. The internal auditors have free and direct access to the audit committee, and they meet periodically, without management present, to discuss appropriate matters.

Because of inherent limitations, a system of internal control over financial reporting may not prevent or detect misstatements and even when determined to be effective, can only provide reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are also subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

These consolidated financial statements are subject to an evaluation of internal control over financial reporting conducted under the supervision and with the participation of management, including the chief executive officer and chief financial officer. Based on that evaluation, conducted under the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, management concluded that its internal control over financial reporting was effective as of December 31, 2022 and December 31, 2021.

Malcolm C. Roberts

Malcolm C. Roberts
President and Chief Executive Officer

K. S. Ingram

Kevin S. Ingram
Senior Executive Vice President
and Chief Financial Officer

The Board of Directors and Policyholders of Factory Mutual Insurance Company and Subsidiaries

We have audited the consolidated financial statements of Factory Mutual Insurance Company and Subsidiaries (the Company), which comprise the consolidated balance sheets as of December 31, 2022 and 2021, and the related consolidated statements of income, comprehensive income, changes in policyholders' surplus and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2015-09, *Financial Services—Insurance (Topic 944): Disclosures about Short-Duration Contracts*, requires that the short-duration insurance contract disclosures for years prior to 2022 presented in Note 6 be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the FASB, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Ernst & Young LLP

Boston, Massachusetts
February 27, 2023

CONSOLIDATED BALANCE SHEETS
(in thousands)

Dec. 31,	2022	2021
Assets		
Investments:		
Debt securities	$ 8,250,500	$ 9,147,800
Equity securities	9,770,700	10,893,700
Other securities	2,326,800	2,497,000
Real estate	1,067,100	982,400
Total investments	21,415,100	23,520,900
Cash and cash equivalents	2,132,000	1,839,900
Recoverable from reinsurers	2,902,200	3,077,400
Premium receivable	1,557,500	1,406,100
Prepaid reinsurance premium	386,000	362,900
Premises and equipment	643,700	535,500
Other assets	1,697,200	1,417,800
Total assets	$ 30,733,700	$ 32,160,500
Liabilities		
Unpaid losses and loss adjustment expenses	$ 6,500,800	$ 7,064,200
Reserve for unearned premium	3,942,900	3,762,100
Current and deferred income taxes	239,300	632,200
Other liabilities	1,572,400	1,332,900
Total liabilities	12,255,400	12,791,400
Policyholders' Surplus		
Accumulated other comprehensive loss	(1,145,400)	(541,700)
Retained earnings	19,623,700	19,910,800
Total policyholders' surplus	18,478,300	19,369,100
Total liabilities and policyholders' surplus	$ 30,733,700	$ 32,160,500

See accompanying notes.

(in thousands)

Year ended Dec. 31,	2022	2021
Gross premium earned	$ 7,941,400	$ 7,601,000
Ceded premium earned	(2,168,600)	(2,096,700)
Net premium earned	5,772,800	5,504,300
Investment-related income	603,000	482,000
Fee-related income	78,900	78,800
Total revenue	6,454,700	6,065,100
Net losses and loss adjustment expenses	2,877,600	3,111,100
Insurance-related expenses	1,511,500	1,411,900
Investment-related expenses	364,800	203,500
Fee-related expenses	65,600	65,500
Total losses, loss adjustment and other expenses	4,819,500	4,792,000
Income from operations	1,635,200	1,273,100
Net realized investment gains	507,800	1,576,400
Net unrealized investment (losses) / gains on equity securities	(2,570,200)	633,100
(Loss) / income before income taxes	(427,200)	3,482,600
Income tax (benefit) / expense	(131,500)	640,200
Net (loss) / income	$ (295,700)	$ 2,842,400

See accompanying notes.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

Year ended Dec. 31,	2022	2021
Net (loss) / income	$ (295,700)	$ 2,842,400
Other comprehensive income:		
Change in net unrealized appreciation on investments in debt securities (available for sale), net of income tax benefit of $171,800 in 2022 and $49,300 in 2021	(631,500)	(188,300)
Change in benefit plan assets and liabilities, net of income tax expense of $69,000 in 2022 and $78,400 in 2021	242,300	296,700
Foreign currency translation adjustment, net of income tax benefit of $19,800 in 2022 and $3,100 in 2021	(214,500)	(76,000)
Other comprehensive (loss) / income	(603,700)	32,400
Comprehensive (loss) / income	$ (899,400)	$ 2,874,800

CONSOLIDATED STATEMENTS OF CHANGES IN POLICYHOLDERS' SURPLUS
(in thousands)

Year ended Dec. 31,	2022	2021
Retained earnings at beginning of year	$ 19,910,800	$ 17,068,400
Adoption of new accounting pronouncements	8,600	–
Net (loss) / income	(295,700)	2,842,400
Retained earnings at end of year	19,623,700	19,910,800
Accumulated other comprehensive loss at beginning of year	(541,700)	(574,100)
Other comprehensive (loss) / income	(603,700)	32,400
Accumulated other comprehensive loss at end of year	(1,145,400)	(541,700)
Policyholders' surplus at end of year	$ 18,478,300	$ 19,369,100

See accompanying notes.

(in thousands)

Year ended Dec. 31,	2022	2021
Operating activities		
Net (loss) / income	$ (295,700)	$ 2,842,400
Adjustments to reconcile net (loss) / income to net cash provided by operating activities:		
Depreciation	109,600	104,800
Increase in premium receivable	(151,400)	(67,600)
(Decrease) / increase in gross unpaid losses and loss adjustment expenses	(563,400)	1,359,200
Increase in gross reserves for unearned premium	180,800	325,400
Decrease / (increase) in recoverable from reinsurers	175,200	(596,000)
Decrease in current and deferred income taxes	(481,900)	(290,200)
Net realized investment gains	(507,800)	(1,576,400)
Net unrealized investment losses / (gains) on equity securities	2,570,200	(633,100)
(Increase) / decrease in prepaid reinsurance premium	(23,100)	8,100
Other	375,000	(5,600)
Net cash provided by operating activities	1,387,500	1,471,000
Investing activities		
Net sales of short-term investments	10,100	6,600
Purchases of debt, equity and other securities	(12,897,300)	(11,809,600)
Sales and maturities of debt, equity and other securities	11,973,400	10,678,000
Capital expenditures	(158,300)	(243,500)
Other	(23,300)	30,200
Net cash used by investing activities	(1,095,400)	(1,338,300)
Increase in cash and cash equivalents	292,100	132,700
Cash and cash equivalents at beginning of year	1,839,900	1,707,200
Cash and cash equivalents at end of year	$ 2,132,000	$ 1,839,900

See accompanying notes.

Note 1. Significant Accounting Policies

Basis of Presentation

The consolidated financial statements are stated in U.S. dollars and have been prepared on the basis of U.S. generally accepted accounting principles, which differ in some respects from statutory accounting practices prescribed or permitted by the State of Rhode Island, Department of Business Regulation, Insurance Division. On the basis of statutory accounting practices, consolidated policyholders' surplus was $17,560,400 and $17,858,300 at December 31, 2022 and 2021, respectively; net income for the respective years then ended was $1,337,900 and $1,542,200.

The process of preparing financial statements in conformity with U.S. generally accepted accounting principles requires the use of management's estimates and assumptions regarding certain types of assets, liabilities, revenues and expenses. Such estimates primarily relate to unsettled transactions and events as of the date of the financial statements. Accordingly, upon settlement, actual results may differ from estimated amounts.

The Company provides comprehensive lines of property coverage and supporting services for industrial and institutional properties throughout the world.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions were eliminated in consolidation.

Reclassification

Certain amounts reported in the notes to the 2021 consolidated financial statements have been reclassified to conform to the 2022 presentation.

Cash Equivalents

Cash equivalents are short-term, highly liquid investments that are both readily convertible into known amounts of cash and so near to maturity that they present an insignificant risk of changes in value due to changing interest rates. Cash equivalents include money market funds and debt securities purchased with maturities of three months or less at acquisition, and are carried at fair value.

Investments

Equity securities are carried at fair value, with the unrealized appreciation or depreciation reported on the Consolidated Statements of Income.

Debt securities are classified as available-for-sale and are stated at fair value, with the unrealized appreciation or depreciation, net of tax, reported directly in other comprehensive income. The cost of securities sold is based upon the specific identification method.

The amortized cost of debt securities is adjusted for amortization of premium and accretion of discounts to maturity, or in the case of mortgage and asset-backed securities, over the estimated life of the security adjusted for anticipated prepayments. This amortization and accretion is included in investment-related income. For mortgage and asset-backed debt securities, the Company recognizes income using a constant effective yield based on anticipated prepayments over the economic life of the security. The mortgage and asset-backed debt securities are accounted for under the retrospective method and prepayment assumptions are based on market expectations. When actual prepayments differ significantly from anticipated prepayments, the effective yield is recalculated to reflect actual payments to date and anticipated future payments, and any resulting adjustment is included in investment-related income.

Other securities consist of partnerships, hedge funds, equity funds and other alternative investments, which are accounted for under the equity method. As a result of the timing of the receipt of valuation data from the investment managers, these investments are generally reported on up to a three-month lag. Changes in the Company's equity in the net assets of these investments are included in income as net realized investment gains.

Note 1. Significant Accounting Policies *(continued)*

Impairments in debt securities deemed to be other than temporary are segregated into credit risk and non-credit risk impairments. Credit risk impairments are reported as a component of income before income taxes. Non-credit risk impairments are recognized in other comprehensive income. Securities are reviewed for both quantitative and qualitative considerations in the determination of impairments.

In the normal course of business, the Company has investments in variable interest entities (VIEs) primarily as a passive investor in residential mortgage-backed securities, commercial mortgage-backed securities, and private equity limited partnerships issued by third-party VIEs. The Company is not the primary beneficiary of these VIEs. The Company's maximum exposure to loss with respect to these investments is limited to the investment carrying values included on the Company's Consolidated Balance Sheets and the unfunded commitments related to partnerships and private equity investments. The Company has unfunded commitments of $664,700 and $875,500 as of December 31, 2022 and 2021, respectively.

Income Taxes

The Company files consolidated U.S. and foreign income tax returns as required by law. The income tax expense is based on income before taxes reported on the consolidated financial statements. Deferred income taxes are provided, when appropriate, for the effects of temporary differences in reporting income and expenses for tax and financial reporting purposes. Deferred income taxes are also provided for unrealized appreciation or depreciation of investments, for pension and postretirement liabilities and for foreign currency translations.

The Company's tax returns for tax years 2015 – 2018 are currently under examination by the IRS. The statute of limitations for examination of tax years 2015 and later is still open.

Deferred Costs

Premium taxes and commissions, the principal business acquisition costs, are deferred to the extent recoverable and are amortized over the period during which the related premium is earned. Deferred costs are included in other assets on the Consolidated Balance Sheets.

Certain pre-rental and other expenses incurred by the Company's real estate limited liability corporation subsidiaries are deferred and amortized over the lives of the various tenant leases.

Real Estate and Premises and Equipment

Premises and equipment are stated at net book value, and depreciation is recorded on a straight-line basis over the estimated useful lives of the respective assets. Upon retirement or sale, the cost of the asset disposed of and its related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in net realized investment gains. The net book value of the Company's investments in land and buildings is included in real estate, whereas the net book value of the Company's owned and occupied land and buildings, furniture, fixtures and equipment are included in premises and equipment.

Unpaid Losses and Loss Adjustment Expenses

Liabilities for unpaid losses and loss adjustment expenses are based on case estimates or reports from ceding companies. Estimates of incurred-but-not-reported (IBNR) reserves are based on historical experience and management analysis.

Although the above-described amounts are based on estimates, management believes the recorded liabilities for unpaid losses and loss adjustment expenses are reasonable to cover the ultimate settlement cost of losses incurred. These estimates are continually reviewed and adjustments to such estimates are reflected in current operations.

Premium

The Company issues term premium policies. The term premium is earned on a daily pro-rata basis over the life of the policy, which is typically one year. Unearned premium is the amount of unexpired written premium related to policies in-force.

Note 1. Significant Accounting Policies *(continued)*

Translation of Foreign Currency

The Company translates the financial statements of its foreign operations into U.S. dollars from the functional currency applicable for each foreign unit, which is the currency of the country representing the primary economic environment in which each operation conducts business. Foreign currency balances are re-measured to the respective functional currencies, and the resulting foreign exchange gains or losses are reflected in earnings. Functional currency assets and liabilities are then translated into U.S. dollars at the exchange rates in effect at the end of the period, while income and expenses are translated at average rates. Foreign currency translation adjustments are recorded as a separate component of the Consolidated Statements of Comprehensive Income, net of income taxes.

Reinsurance

In the normal course of business, the Company seeks to reduce losses that may arise from catastrophes or other events by reinsuring certain levels of risk with other insurance enterprises. Reinsurance premium, losses, and loss adjustment expenses ceded under these arrangements are accounted for on bases consistent with those used in accounting for the original policies issued and the terms of the reinsurance contracts.

Retirement Income Plans and Postretirement Benefit Plans Other than Pensions

Noncontributory retirement income plans cover the vast majority of employees. The Company's funding policy is generally to contribute the net periodic pension cost each year, as determined pursuant to the guidance in *Compensation – Employee Benefits (ASC 715)*. However, the contribution for any year will not be less than the minimum required contribution, nor greater than the maximum tax-deductible contribution allowed in each country with plans in place.

The Company provides certain healthcare and life insurance benefits for retired employees and their dependents. The plans are contributory, with retiree contributions adjusted annually, and contain other cost-sharing features, such as deductibles and coinsurance. Current service and interest costs of postretirement healthcare and life insurance benefits are expensed on an accrual basis.

Investment-Related and Fee-Related Income

Investment-related income primarily consists of interest and dividends from the Company's investment portfolio and income from leased office space, which is earned as services are provided or over the term of applicable leases. Fee-related income primarily consists of fees for ancillary services, which is earned as the Company completes performance obligations.

Derivatives

The Company began to use derivatives during 2022 with the intent to manage certain economic risks inherent to the investment portfolios. There were no material transactions that occurred during the year ended December 31, 2022. The Company expects to utilize derivatives to mitigate investment related risks. These risks include market risk and interest rate risk. The Company has not designated any derivative contracts as accounting hedges under *Derivatives and Hedging (ASC 815)*, but instead the derivatives are classified as economic hedges. The positions are marked to fair value at the end of each reporting period and the related gain or loss is included in investment-related income on the Consolidated Statements of Income. The fair value of derivative assets and derivative liabilities are reported as other assets or other liabilities on the Consolidated Balance Sheets.

Leases

Under *Leases (ASC 842)*, the Company determines if an arrangement is or contains a lease at inception. For variable payment leases or leases with a term of 12 months or less, the Company does not recognize a right-of-use asset or lease liability. The Company's operating and finance leases are recognized on the Consolidated Balance Sheets as premises and equipment, and other liabilities.

Note 1. Significant Accounting Policies *(continued)*

Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating and finance lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Many of the Company's lease agreements contain renewal options; however, the Company does not recognize right-of-use assets or lease liabilities for renewal periods unless it is determined that the Company is reasonably certain of renewing the lease at inception or when a triggering event occurs. Certain lease agreements contain rent escalation clauses, abatements, capital improvement funding or other lease concessions.

In determining its right-of-use assets and lease liabilities, the Company applies a discount rate to the minimum lease payments within each lease agreement. ASC 842 allows the Company to utilize a discount rate framework based on the risk-free rate. The risk-free rate is the respective sovereign/treasury rate for the specified maturity term of the lease. The Company uses the retrospective government bond rates as the risk-free rate for the specified maturity term of the lease and adds a corporate credit spread to arrive at the discount rate. The corporate credit spread is determined by taking into consideration the comparable credit spread, the maturity term of the lease and the risk factors inherent to the specific geographic location. For the measurement and classification of its lease agreements, the Company groups lease and non-lease components into a single lease component for all underlying asset classes. Variable lease payments include payments for non-lease components of maintenance costs.

Recent Accounting Pronouncements Adopted

In August 2018, the FASB issued ASU 2018-14, *Compensation – Retirement Benefits - Defined Benefit Plans (Subtopic 715-20)*. ASU 2018-14 eliminates the requirement for certain disclosures related to defined benefit pensions that are no longer cost effective, while clarifying the specific requirements of disclosures and adding other relevant disclosure requirements as applicable. The update is effective for annual reporting periods ending after December 15, 2021. The Company adopted this standard as of January 1, 2021. The adoption did not have an effect on the Company's consolidated financial statements and the related disclosures have been modified accordingly.

In August 2018, the FASB issued ASU 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. ASU 2018-15 aligns the accounting for implementation costs incurred in a software hosting arrangement (i.e., a cloud computing arrangement) that is a service contract with the guidance for capitalizing implementation costs incurred to develop or obtain internal-use software. Accordingly, the updated guidance requires an entity to determine whether these costs should be expensed as incurred or capitalized. The updated guidance also requires the entity to amortize the capitalized implementation costs as an expense over the term of the hosting arrangement. The update is effective for annual reporting periods beginning after December 15, 2020. The Company adopted this standard as of January 1, 2021. The adoption did not have a material impact on the Company's consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. which supersedes existing lease guidance. Under the new guidance, leases are to be recognized in the statement of financial position as a right-of-use asset and a lease payments liability that represent the right to use the underlying asset and the related obligations over the lease term. The guidance is required to be applied using the modified retrospective approach for all leases existing as of the effective date and provides for certain practical expedients. The Company adopted ASU 2016-02 and related amendments as of January 1, 2022. The Company has also elected a package of practical expedients, under which an entity need not reassess whether any expired or existing contracts are or contain leases, the lease classification for any expired or existing leases, or initial direct costs for any existing leases. The Company also elected not to separate lease and non-lease components. The adoption of this ASU on January 1, 2022 resulted in an increase of $8,600 to beginning retained earnings.

(in thousands)

Note 1. Significant Accounting Policies *(continued)*

Accounting Standards Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 amends the guidance on the impairment of financial instruments. The updated guidance amends the current other-than-temporary impairment model for available-for-sale debt securities by requiring the recognition of impairments relating to credit losses through an allowance account and limits the amount of credit loss to the difference between a security's amortized cost basis and its fair value. This guidance also applies a new current expected credit loss model for determining credit-related impairments for financial instruments measured at amortized cost, such as reinsurance recoverable.

The Company will adopt this standard as of January 1, 2023. The adoption will not have a material impact on the Company's consolidated financial statements.

Note 2. Investments

Debt and Equity Securities

The following is a summary of securities at December 31, 2022:

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities:				
U.S. treasury securities and obligations of U.S. government agencies	$ 1,400,500	$ 32,700	$ (122,000)	$ 1,311,200
Obligations of states and political subdivisions	1,427,100	5,400	(49,900)	1,382,600
Mortgage and asset-backed securities:				
Agency	1,333,200	25,700	(145,400)	1,213,500
Commercial	240,500	–	(19,500)	221,000
Other mortgage and asset-backed securities	439,000	1,000	(19,100)	420,900
U.S. corporate securities	2,037,600	24,600	(171,000)	1,891,200
Foreign government securities	809,100	–	(41,000)	768,100
Bond funds	804,100	–	(121,700)	682,400
Other debt securities	387,300	–	(27,700)	359,600
Total debt securities	8,878,400	89,400	(717,300)	8,250,500
Equity securities:				
Communication services	386,900	241,000	(43,200)	584,700
Consumer discretionary	332,400	281,200	(66,900)	546,700
Consumer staples	210,900	223,600	(2,100)	432,400
Energy	95,700	194,200	(100)	289,800
Financials	331,900	257,000	(5,500)	583,400
Healthcare	502,800	395,200	(27,500)	870,500
Industrials	206,600	267,300	(12,400)	461,500
Information technology	431,700	865,600	(35,100)	1,262,200
Mutual funds (international and emerging markets)	4,509,300	231,900	(455,300)	4,285,900
Foreign	209,200	10,400	(25,900)	193,700
All other sectors	166,100	102,900	(9,100)	259,900
Total equity securities	7,383,500	3,070,300	(683,100)	9,770,700
Total debt and equity securities	$ 16,261,900	$ 3,159,700	$ (1,400,400)	$ 18,021,200

(in thousands)

Note 2. Investments *(continued)*

The following is a summary of securities at December 31, 2021:

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities:				
U.S. treasury securities and obligations of U.S. government agencies	$ 1,435,100	$ 35,700	$ (12,600)	$ 1,458,200
Obligations of states and political subdivisions	1,616,900	59,300	(3,600)	1,672,600
Mortgage and asset-backed securities:				
Agency	1,287,900	31,200	(7,500)	1,311,600
Commercial	256,400	6,900	(900)	262,400
Other mortgage and asset-backed securities	363,800	4,300	(1,400)	366,700
U.S. corporate securities	1,899,600	74,200	(9,600)	1,964,200
Foreign government securities	698,000	9,200	(5,300)	701,900
Bond funds	889,500	4,800	(12,200)	882,100
Other debt securities	525,000	7,000	(3,900)	528,100
Total debt securities	8,972,200	232,600	(57,000)	9,147,800
Equity securities:				
Communication services	281,500	569,500	(8,100)	842,900
Consumer discretionary	339,000	633,700	(14,500)	958,200
Consumer staples	178,700	250,900	(3,300)	426,300
Energy	103,500	103,700	(3,900)	203,300
Financials	290,600	424,300	(300)	714,600
Healthcare	490,000	423,300	(7,600)	905,700
Industrials	247,300	328,700	(2,500)	573,500
Information technology	346,900	1,469,500	(700)	1,815,700
Mutual funds (international and emerging markets)	3,316,600	630,400	(49,900)	3,897,100
Foreign	132,500	21,500	(2,400)	151,600
All other sectors	209,900	195,800	(900)	404,800
Total equity securities	5,936,500	5,051,300	(94,100)	10,893,700
Total debt and equity securities	$ 14,908,700	$ 5,283,900	$ (151,100)	$ 20,041,500

During the years ended December 31, 2022 and 2021, purchases of debt securities were $8,743,800 and $7,175,200, respectively; purchases of equity securities were $3,791,800 and $3,773,200, respectively; proceeds from the sale of debt securities were $8,368,900 and $6,326,400, respectively; and proceeds from the sale of equity securities were $2,836,100 and $3,468,300, respectively.

The gross realized gains and (losses) on sales of debt and equity securities totaled $749,000 and ($359,900) in 2022, and $1,282,900 and ($71,700) in 2021.

The net gains and (losses) recognized on equity securities during the years ended December 31, 2022 and 2021, totaled ($2,038,800) and $1,809,700, respectively. At December 31, 2022, $531,400 is related to securities sold during the period and ($2,570,200) is related to unrealized losses on equity securities still held. At December 31, 2021, $1,176,600 is related to securities sold during the period and $633,100 is related to unrealized gains on equity securities still held.

The amortized cost and fair value of debt securities at December 31, 2022, by contractual maturity are shown below. Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to call or prepay obligations with or without call or prepayment penalties.

(in thousands)

Note 2. Investments *(continued)*

	Amortized Cost	Fair Value
Due in one year or less	$ 283,600	$ 280,700
Due after one year through five years	2,764,400	2,647,400
Due after five years through ten years	2,514,400	2,313,900
Due after ten years	1,303,300	1,153,100
Subtotal	6,865,700	6,395,100
Mortgage and asset-backed securities	2,012,700	1,855,400
Total debt securities	$ 8,878,400	$ 8,250,500

Included in the Company's debt security portfolio are securities with unrealized losses deemed to be temporary. The total unrealized loss on these securities was $717,300 (fair value of $7,540,100) at December 31, 2022, and $57,000 (fair value of $3,381,500) at December 31, 2021. The unrealized loss position that existed for 12 months or more was $336,700 (fair value of $2,075,400) at December 31, 2022, and was $20,200 (fair value of $562,500) at December 31, 2021. In reaching its conclusion that these impairments are temporary, the Company considered market conditions and issuer-specific circumstances as well as the fact that the Company does not intend to sell these securities and it is unlikely that the Company will be required to sell before they recover in value or mature.

During the years ended December 31, 2022 and 2021, net realized investment gains on other securities were $148,100 and $452,900, respectively.

Credit Risk

All debt security investments have credit exposure to the extent that a counter party may default on an obligation to the Company. To manage credit risk, the Company focuses on high-quality debt securities, reviews the credit strength of all companies in which it invests, limits its exposure in any one investment and monitors the portfolio quality.

Note 3. Fair Value

The valuation techniques required by the *Fair Value Measurements (ASC 820)* guidance are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions determined by the Company.

These two types of inputs create the following fair value hierarchy:

Level 1 Quoted prices for identical instruments in active markets.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3 Significant inputs to the valuation model are unobservable and utilize assumptions or judgement.

The Company retains independent pricing vendors to assist in valuing invested assets. In compliance with the *ASC 820* guidance, the Company conducted a review of the primary pricing vendor, validating that the inputs used in the vendor's pricing process are deemed to be market-observable as defined in the standard.

When available, the Company uses quoted market prices to determine the fair value of investment securities, and they are included in Level 1.

(in thousands)

Note 3. Fair Value *(continued)*

When quoted market prices are unavailable, the Company uses quotes from independent pricing vendors based on recent trading activity and other relevant information. Debt securities are priced by an independent vendor using evaluated market pricing models that vary by asset class. These models incorporate available trade, bid and other market information, and for structured securities, also incorporate cash flow and, when available, loan performance data. The pricing models apply available market information through processes such as benchmark curves, benchmarking of similar securities and sector groupings. The vendors also integrate observed market movements, sector news and relevant credit information into the evaluated pricing applications and models. These investments are included in Level 2.

For certain Level 3 securities, valuations are developed using discounted cash flow models that require the use of unobservable inputs, where the significant unobservable input is the discount rate. These valuations are determined by independent third-party valuation vendors and are reviewed to ensure reasonableness.

The following table presents the Company's invested assets measured at fair value as of December 31, 2022:

Invested Assets, at Fair Value	Total	Level 1	Level 2	Level 3
Debt securities	$ 8,250,500	$ –	$ 8,064,300	$ 186,200
Equity securities	9,770,700	9,770,700	–	–
Total	$ 18,021,200	$ 9,770,700	$ 8,064,300	$ 186,200
Other Items Measured at Fair Value				
Cash equivalents	$ 180,100	$ 174,200	$ 5,900	$ –
Other assets (1)	1,500	1,500	–	–
Other liabilities (1)	600	600	–	–

(1) Other assets at fair value represent variation margin receivable for futures and exchange-traded options at fair value. Other liabilities represent variation margin payable for futures.

The following table presents the Company's invested assets measured at fair value as of December 31, 2021:

Invested Assets, at Fair Value	Total	Level 1	Level 2	Level 3
Debt securities	$ 9,147,800	$ 14,200	$ 9,133,600	$ –
Equity securities	10,893,700	10,893,700	–	–
Total	$ 20,041,500	$ 10,907,900	$ 9,133,600	$ –
Other Items Measured at Fair Value				
Cash equivalents	$ 20,900	$ 11,800	$ 9,100	$ –

In 2022, the Company's Level 3 investment activity included the following: purchases of $185,000, sales of ($22,700), paydowns of ($1,000), net losses of ($5,000), and transfers in of $29,900. There were no transfers out of Level 3 during the period. Transfers into Level 3 were primarily due to changes in the observability of pricing inputs.

Level 1 securities include money market funds, equities and the Company's derivative positions in exchange-traded futures and exchange-traded options. See Note 2 for a breakout of equity securities by category.

All debt securities are measured at fair value and are classified as Level 2 with the exception of certain short-term securities held at December 31, 2021, which were priced using quoted market prices and therefore classified as Level 1. Cash equivalent positions in debt securities that are purchased with maturities of three months or less at acquisition are also classified as Level 2. See Note 2 for a breakout of debt securities by category.

(in thousands)

Note 4. Policyholders' Credits

In 2021, the Company's Board of Directors approved a membership credit to eligible policyholders with renewal or anniversary dates from January 1, 2022 through December 31, 2022 in the form of a premium offset at the time of policy renewal. The impact of the membership credit for the year ended 2022 was a reduction to earned premium of $334,500.

In 2022, the Company's Board of Directors approved a resilience credit to provide eligible policyholders with additional financial means to invest in climate resilience. The resilience credit will be applied as a premium offset against policies with renewals or anniversaries between October 1, 2022, and September 30, 2023. The impact of the resilience credit for the year ended 2022 was a reduction to earned premium of $64,600.

Note 5. Reinsurance

The Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk to minimize its exposure to significant losses from potential reinsurer insolvencies. While such evaluations are intended to minimize the Company's exposure, the ultimate collection of reinsurance recoverable depends on the financial soundness of the individual reinsurers. The reinsurance contracts do not relieve the Company from its obligations to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company; consequently, allowances are established for amounts deemed uncollectible.

The effect of reinsurance on written premium is as follows:

	Year ended Dec. 31,	
	2022	2021
Gross written premium	$ 8,895,100	$ 7,959,200
Ceded written premium	(2,279,700)	(2,160,300)
Net written premium	$ 6,615,400	$ 5,798,900

Ceded losses and loss adjustment expenses incurred for the years ended December 31, 2022 and 2021, were $1,086,800 and $1,574,300, respectively.

Note 6. Unpaid Losses and Loss Adjustment Expenses

Activity in the net liability for unpaid losses and loss adjustment expenses (LAE) is summarized as follows:

	Year ended Dec. 31,	
	2022	2021
Gross unpaid as of January 1	$ 7,064,200	$ 5,705,000
Less: unpaid reinsurance recoverable	2,851,000	2,194,400
Net unpaid as of January 1	4,213,200	3,510,600
Net incurred related to:		
Current year	2,717,300	3,354,900
Prior years	160,300	(243,800)
Total net incurred	2,877,600	3,111,100
Net paid related to:		
Current year	662,500	816,900
Prior years	2,562,500	1,591,600
Total net paid	3,225,000	2,408,500
Gross unpaid as of December 31	6,500,800	7,064,200
Less: unpaid reinsurance recoverable	2,635,000	2,851,000
Net unpaid as of December 31	$ 3,865,800	$ 4,213,200

Note 6. Unpaid Losses and Loss Adjustment Expenses *(continued)*

The 2022 increase in net incurred on insured events for prior years was due to adverse development on a small number of individual losses. The 2021 decrease in net incurred on insured events for prior years was due to the reduction of IBNR reserves based on actual experience.

The Company's liability is categorized as either continuing (commercial property) or discontinued lines of business (asbestos, environmental and other mass tort-related claims, which applies to business that is in runoff).

In establishing the liability for continuing losses and LAE, there is uncertainty in management's estimates that may cause these estimates to differ from ultimate payments. In establishing the liability for unpaid losses and LAE related to discontinued lines of business, management considers facts currently known and the current state of the law and coverage litigation. Liabilities are recognized for known claims (including the cost of related litigation) when sufficient information has been developed to indicate the involvement of a specific insurance policy and management can reasonably estimate the Company's liability. Liabilities have also been established to cover additional exposures on reported and IBNR claims. Developed case law and adequate claims history typically do not exist for the discontinued lines of business, primarily because significant uncertainty exists about the outcomes of coverage litigation and whether past claims experience will be representative of future claims experience.

The Company is the subject of various asserted and unasserted claims and lawsuits covering a wide variety of claims-related issues that arise out of the normal course of its business activities. Contingent liabilities arising from litigation and other matters are not considered material in relation to the consolidated financial position or operations of the Company.

The disclosures below reflect only commercial property insurance from the Company's continuing book of business and excludes other short-duration lines of business that are considered immaterial and discontinued lines of business.

The Company's liability is segmented into three major categories: reserves for reported claims (estimates made by claims adjusters), IBNR representing reserves for unreported claims, and supplemental reserves for reported claims, including LAE.

In addition to discussions with claims representatives, the Company generally uses the cumulative incurred development method to establish IBNR loss reserves. This method assumes that the future change (adverse or redundant) in cumulative incurred losses will be consistent with historical patterns.

LAE reserves represent management's estimate of future expenses for investigating and settling claims. The LAE reserve is based on a historical ratio of actual loss adjustment expenses paid in comparison to the actual loss payments.

There have been no significant changes to the methodology used to establish IBNR during 2022 or 2021.

Due to the short-tail nature of commercial property insurance, the disclosures below reflect the undiscounted information as of December 31, 2022, and for each of the four previous accident years.

All amounts have been translated from the local currency to U.S. dollars using the December 31, 2022 foreign exchange rates for all years presented to isolate changes in foreign exchange from loss development.

The Company compiles and aggregates its claims data by grouping claims according to the year in which the claim occurred (accident year). With respect to the cumulative number of reported claims, the amount represents the accumulation of individual claims, which is measured by individual claimant. Individual claims that do not result in a liability are excluded from the calculation of the cumulative claim frequency.

(in thousands)

Note 6. Unpaid Losses and Loss Adjustment Expenses *(continued)*

	Incurred Losses and LAE, Net of Reinsurance, as of Dec. 31,					As of Dec. 31, 2022	
Accident Year	2018	2019	2020	2021	2022	IBNR	Cumulative Reported Claims
	Supplemental and Unaudited						
2018	$3,825,000	$3,446,600	$3,325,400	$3,308,600	$ 3,408,800	$ 20,100	10,291
2019		2,483,100	2,435,400	2,424,400	2,478,800	20,900	8,741
2020			3,165,800	2,980,700	3,041,500	45,000	8,271
2021				3,136,600	2,892,000	25,900	6,602
2022					2,511,800	471,900	4,448
Total					$ 14,332,900		

	Cumulative Paid Losses and LAE, Net of Reinsurance, as of Dec. 31,				
Accident Year	2018	2019	2020	2021	2022
	Supplemental and Unaudited				
2018	$1,077,300	$2,630,900	$3,072,000	$3,243,600	$ 3,380,700
2019		853,300	2,195,200	2,256,200	2,397,200
2020			1,146,100	2,384,900	3,091,200
2021				602,200	2,127,000
2022					389,600
Total					$ 11,385,700
Unpaid losses and LAE prior to 2018, net of reinsurance					$ 212,300
Total unpaid losses and LAE, net of reinsurance					$ 3,159,500

The following disclosure presents the average annual payout of incurred claims by age, net of reinsurance, as of December 31, 2022:

	Average Annual Percentage of Payments on Incurred Claims by Age, Net of Reinsurance				
Years	1	2	3	4	5
	Supplemental and Unaudited				
	28.0%	48.3%	12.9%	5.4%	4.0%

The following is a reconciliation of the information in this disclosure to the consolidated gross liability for unpaid losses and LAE reported on the Consolidated Balance Sheets:

	As of Dec. 31, 2022
Commercial property	$ 3,159,500
Other short-duration insurance lines of business	72,300
Foreign exchange	(76,800)
Unpaid losses and LAE, net of reinsurance	$ 3,155,000
Commercial property	$ 2,083,000
Reinsurance recoverable on unpaid losses and LAE	$ 2,083,000
Discontinued lines of business	$ 1,262,800
Other gross unpaid losses and LAE	$ 1,262,800
Total gross unpaid losses and LAE	$ 6,500,800

(in thousands)

Note 7. Real Estate and Premises and Equipment

Real estate and premises and equipment at December 31, 2022 and 2021, are summarized as follows:

	2022	2021
Land and buildings	$ 2,163,300	$ 1,874,600
Furniture, fixtures and equipment	766,800	730,100
Accumulated depreciation	(1,219,300)	(1,086,800)
Total	$ 1,710,800	$ 1,517,900

During 2022 and 2021, depreciation expense for real estate and premises and equipment was $109,600 and $104,800, respectively.

Note 8. Leases

In connection with its various operating offices located throughout the world, the Company leases office space, automobiles, and equipment. These leases provide the right to use the underlying asset and require lease payments for the lease term, however, the Company has elected to only recognize a right-of-use (ROU) asset and corresponding lease liability for office space in accordance with ASC 842. The Company's office lease portfolio consists of multiple operating leases and a single finance lease which expire at various dates through 2048.

The components of lease expense were as follows for the year ended December 31, 2022:

	2022
Operating lease cost:	
Fixed rent expenses	$ 45,400
Finance lease cost:	
Amortization of ROU asset	3,500
Interest expense	3,000
Short-term lease cost	13,700
Total net lease cost	$ 65,600

Supplemental cash flow information related to the Company's leases was as follows for the year ended December 31, 2022:

	2022
Operating cash flow from operating leases	$ 47,800
Operating cash flow from finance lease	4,100
ROU assets obtained in exchange for operating lease liabilities	200,300
ROU assets obtained in exchange for finance lease liability	97,400

(in thousands)

Note 8. Leases *(continued)*

The following table presents the lease balances on the Company's Consolidated Balance Sheets, weighted average remaining lease term, and weighted average discount rates related to the Company's leases as of December 31, 2022:

Operating leases:

Assets:	
ROU assets from operating leases	$ 169,600
Liabilities:	
Operating lease liabilities – current	41,500
Operating lease liabilities – non-current	142,200
Total operating lease liabilities	$ 183,700
Weighted average remaining lease term	6.68
Weighted average discount rate	2.44%

Finance lease:

Asset:	
ROU asset from finance lease	$ 93,800
Liability:	
Finance lease liability – current	4,300
Finance lease liability – non-current	92,000
Total finance lease liability	$ 96,300
Weighted average remaining lease term	25.87
Weighted average discount rate	3.33%

As of December 31, 2022, the future minimum lease payments for the Company's lease liabilities for each of the years ending December 31, were as follows:

	Operating Leases	Finance Lease
2023	$ 55,100	$ 4,300
2024	51,900	4,400
2025	43,300	4,500
2026	26,000	4,600
2027	22,100	4,800
Thereafter	50,900	131,500
Total lease payments	249,300	154,100
Less: future interest expense	65,600	57,800
Total lease liabilities	$ 183,700	$ 96,300

Note 9. Income Taxes

The Inflation Reduction Act (IRA) was enacted on August 16, 2022, and included a new corporate alternative minimum tax (CAMT). The IRA and the CAMT come into effect for tax years beginning after 2022. The Company will recognize the effect of the CAMT when applicable.

(in thousands)

Note 9. Income Taxes *(continued)*

The following is the current and deferred income tax (benefit) / expense for the years ended December 31, 2022 and 2021:

	2022	2021
Current income tax expense	$ 126,200	$ 926,000
Deferred income tax benefit	(257,700)	(285,800)
Total income tax (benefit) / expense	$ (131,500)	$ 640,200

A reconciliation of income tax (benefit) / expense computed at U.S. Federal statutory tax rates to the income tax expense as included on the Consolidated Statements of Income follows for the years ended December 31, 2022 and 2021:

	2022	2021
Income tax (benefit) / expense at U.S. Federal statutory tax rate	$ (89,800)	$ 731,300
Tax effect of:		
Nontaxable investment income	(18,800)	(15,300)
Effect of foreign operations	24,900	(14,700)
Tax credits	(35,000)	(80,300)
Other	(12,800)	19,200
Actual income tax (benefit) / expense	$ (131,500)	$ 640,200

The significant components of the net deferred tax liability at December 31, 2022 and 2021, are as follows:

	2022	2021
Deferred tax liabilities:		
Deferred acquisition costs	$ (19,600)	$ (19,200)
Unrealized appreciation	(341,500)	(1,032,000)
Deferred foreign income	(38,000)	(53,500)
Operating lease ROU asset	(58,200)	–
Benefit plan expenses	(68,900)	(7,800)
Other	(68,100)	(126,200)
Total deferred tax liabilities	(594,300)	(1,238,700)
Deferred tax assets:		
Unpaid claims discounting	20,100	20,900
Unearned premium reserve	120,800	116,900
Compensation accruals	88,300	86,400
Operating lease liability	59,500	–
Mixed service costs	2,000	396,600
Research & experimental expenditures	40,800	–
Unrealized investment losses	44,600	36,800
Tax credits	30,000	43,400
Unrelieved foreign tax	36,300	39,900
Deferred foreign losses	15,600	17,600
Unrealized foreign exchange	23,000	2,800
Other	13,500	13,600
Total deferred tax assets	494,500	774,900
Valuation allowance	(55,200)	(71,800)
Net deferred tax assets	439,300	703,100
Net deferred tax liability	$ (155,000)	$ (535,600)

Note 9. Income Taxes *(continued)*

At December 31, 2022 and 2021, the Company established a valuation allowance for its foreign subsidiary's unrelieved foreign tax, foreign net operating losses and discretionary reserves in jurisdictions with insufficient evidence of future income.

Income tax paid during 2022 and 2021 was $360,900 and $920,900, respectively. In addition, the Company received income tax refunds of $12,000 during 2022 and $7,500 during 2021.

The Company invests in partnerships which make equity investments in projects eligible to receive historic, energy, low-income housing and new market tax credits, collectively referred to as investment tax credits. The investments are accounted for under the equity method and reported within other assets on the Consolidated Balance Sheets. The tax credits, when realized, are recognized as a reduction of tax expense under the flow-through method, at which time the corresponding equity investment is written-down to reflect the remaining value of the future benefits to be realized. For the years ended December 31, 2022 and 2021 the Company recognized investment tax credits of $37,900 and $90,800, respectively. The equity investment write-down is reflected within net realized investment gains on the Consolidated Statements of Income. There are no investment tax credit carry forwards at December 31, 2022 or 2021.

The calculation of the Company's tax liability involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across its global operations. A tax benefit is recognized when it is more likely than not that the position will be sustained on examination, on the basis of technical merits. The Company records unrecognized tax benefits as liabilities in accordance with *ASC 740* and adjusts these liabilities when its judgment changes as a result of the evaluation of new information not previously available. Because of the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from the Company's current estimate of the unrecognized tax benefit. These differences will be reflected as increases or decreases to income tax expense in the period in which new information is available.

The Company's unrecognized tax benefits are not material and it does not expect any material changes within 12 months of the reporting date.

Included in other assets on the Consolidated Balance Sheets are current income taxes recoverable of $333,000 and $121,500 at December 31, 2022 and 2021, respectively.

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions

The Company sponsors certain noncontributory retirement income plans. For the vast majority of employees, the benefits are generally based on years of service and the average of the highest consecutive 60 months of the employee's compensation within the 120 months prior to retirement. The Company's funding policy is to maintain a sufficiently funded level to ensure benefit security and to vary contribution levels as appropriate to business conditions. The Company also has supplemental retirement plans that are noncontributory defined benefit plans covering certain employees.

The Company provides healthcare and life insurance benefits for certain retired employees and their dependents. Employees hired on or after January 1, 2000, and employees that were active employees on January 1, 2000, and had not reached the age of 30 as of January 1, 2000, are not eligible for retiree medical benefits. Eligibility of other employees hired prior to January 1, 2000, and retiring subsequent to that date depends on whether they meet certain age and service requirements at retirement. The plan is generally contributory, with retiree contributions adjusted annually. Certain retirees transitioned to the individual Medicare market effective January 1, 2014, and January 1, 2019. Certain other retirees transitioned on January 1, 2020. Retirees and dependents enrolled in the individual Medicare market participate in a Retiree Health Reimbursement Account.

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

Obligations and funded status are as follows:

	Pension and Supplemental Benefits		Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Benefit obligations	$ 2,722,400	$ 3,825,000	$ 140,400	$ 192,600
Fair value of plan assets	3,037,400	3,830,200	152,500	194,300
Funded status, end of year	$ 315,000	$ 5,200	$ 12,100	$ 1,700

During 2022 and 2021, the overall decreases in the Company's global pension and other postretirement benefit plan obligations were primarily due to increases in discount rates.

The accumulated benefit obligations for the pension and supplemental benefit plans were $2,369,500 and $3,189,000 at December 31, 2022 and 2021, respectively.

The net amounts recognized in other assets and other liabilities are as follows:

	Pension and Supplemental Benefits		Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Asset	$ 621,700	$ 466,100	$ 45,700	$ 56,100
Liability	(306,700)	(460,900)	(33,600)	(54,400)
Total	$ 315,000	$ 5,200	$ 12,100	$ 1,700

Pretax amounts included in accumulated other comprehensive loss are as follows:

	Pension and Supplemental Benefits		Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Net actuarial loss	$ 241,600	$ 547,400	$ 100	$ 8,000
Prior service cost / (credit)	4,400	5,300	(3,700)	(7,100)
Total	$ 246,000	$ 552,700	$ (3,600)	$ 900

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets for pension and supplemental benefit plans with an accumulated benefit obligation in excess of plan assets are as follows:

	Dec. 31, 2022	Dec. 31, 2021
Projected benefit obligation, end of year	$ 306,600	$ 524,200
Accumulated benefit obligation, end of year	247,500	384,000
Fair value of plan assets, end of year	–	63,300

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

The projected benefit obligation and fair value of plan assets for pension and supplemental benefit plans with a projected benefit obligation in excess of plan assets are as follows:

	Dec. 31, 2022	Dec. 31, 2021
Projected benefit obligation, end of year	$ 306,600	$ 524,200
Fair value of plan assets, end of year	–	63,300

Other changes in plan assets and benefit obligations recognized on the Consolidated Statements of Comprehensive Income are as follows:

	Pension and Supplemental Benefits		Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Current year actuarial gain	$ (268,100)	$ (285,400)	$ (5,500)	$ (26,500)
Amortization of actuarial loss	(37,700)	(63,500)	(2,400)	(2,100)
Amortization of prior service cost / (credit)	(900)	(1,000)	3,400	3,400
Total recognized in other comprehensive income	(306,700)	(349,900)	(4,500)	(25,200)
Net periodic benefit cost / (income)	45,600	81,100	(5,500)	(4,700)
Total recognized in net periodic benefit cost / (income) and other comprehensive income	$ (261,100)	$ (268,800)	$ (10,000)	$ (29,900)

The net periodic benefit cost consists of service costs and other periodic benefit costs, which include interest expense, expected return on assets, and amortization of gains and losses. The other periodic benefit components represent a benefit of $79,600 and $48,500 in 2022 and 2021, respectively, and are included as part of total losses, loss adjustment and other expenses on the Consolidated Statements of Income.

Assumptions

Weighted-average assumptions used to determine benefit obligations are as follows:

	Pension and Supplemental Benefits		Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Discount rate	5.41%	2.87%	5.29%	2.69%
Rate of compensation increase	4.65%	4.20%	4.60%	4.13%

Assumed healthcare cost trend rates:

	Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021
Initial rate	6.55%	5.86%
Ultimate rate	4.56%	4.95%
Years to ultimate	7 years	5 years

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

Weighted-average assumptions used to determine net periodic benefit cost are as follows:

	Pension and Supplemental Benefits		Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Discount rate	2.87%	2.58%	2.69%	2.25%
Expected long-term return on plan assets	6.55%	6.54%	6.00%	6.00%
Rate of compensation increase	4.20%	4.21%	4.13%	4.14%

Assumed healthcare cost trend rates:

	Other Benefits	
	Dec. 31, 2022	Dec. 31, 2021
Initial rate	5.86%	5.87%
Ultimate rate	4.95%	4.96%
Years to ultimate	5 years	6 years

Pension and Supplemental Benefit Plan Assets

The Company's pension and supplemental benefit plan asset allocation and target allocation are as follows:

	Target Allocation	Percentage of Plan Assets	
Asset Class	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2021
Equity securities	50%	56%	59%
Debt securities	39	31	32
Cash equivalents	2	1	2
Other	9	12	7
Total	100%	100%	100%

The maturities of debt securities are as follows:

	Dec. 31, 2022	Dec. 31, 2021
Maturity range	0 – 99 years	0 – 60 years
Weighted-average maturity	19.36 years	23.99 years

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

The fair value measurements of pension and supplemental benefit plan assets at December 31, 2022, are as follows (refer to Note 3 for the valuation techniques):

Asset Class	Total	Level 1	Level 2
Equity securities:			
Communication services	$ 15,000	$ 15,000	$ –
Consumer discretionary	22,600	22,600	–
Consumer staples	14,500	14,500	–
Energy	12,100	12,100	–
Financials	43,500	43,500	–
Healthcare	33,900	33,900	–
Industrials	40,900	40,900	–
Information technology	42,000	42,000	–
Materials	10,700	10,700	–
Mutual funds	479,800	329,800	150,000
Foreign	22,600	22,600	–
All other sectors	7,500	7,500	–
Total equity securities	745,100	595,100	150,000
Debt securities:			
U.S. treasury securities and obligations of U.S. government agencies	153,900	–	153,900
Mortgage and asset-backed securities			
Agency	13,800	–	13,800
Commercial	900	–	900
Residential	200	–	200
Other mortgage and asset-backed securities	2,200	–	2,200
U.S. corporate securities	252,500	–	252,500
Mutual funds	265,300	–	265,300
Foreign	400	–	400
Total debt securities	689,200	–	689,200
Common collective trusts	1,204,400	–	1,204,400
Cash equivalents	17,500	17,500	–
Total	$ 2,656,200	$ 612,600	$ 2,043,600

Pension assets as of December 31, 2022, include $381,200 of partnerships and hedge funds measured under the equity method using net asset value (NAV).

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

The fair value measurements of pension and supplemental benefit plan assets at December 31, 2021, are as follows (refer to Note 3 for the valuation techniques):

Asset Class	Total	Level 1	Level 2
Equity securities:			
Communication services	$ 19,300	$ 19,300	$ –
Consumer discretionary	26,200	26,200	–
Consumer staples	15,700	15,700	–
Energy	5,800	5,800	–
Financials	47,400	47,400	–
Healthcare	33,900	33,900	–
Industrials	43,300	43,300	–
Information technology	54,000	54,000	–
Materials	11,400	11,400	–
Mutual funds	747,600	476,000	271,600
Foreign	30,500	30,500	–
All other sectors	11,000	11,000	–
Total equity securities	1,046,100	774,500	271,600
Debt securities:			
U.S. treasury securities and obligations of U.S. government agencies	163,400	–	163,400
Mortgage and asset-backed securities			
Agency	9,500	–	9,500
Commercial	600	–	600
Residential	100	–	100
Other mortgage and asset-backed securities	9,300	–	9,300
U.S. corporate securities	352,700	–	352,700
Mutual funds	345,700	–	345,700
Foreign	500	–	500
Total debt securities	881,800	–	881,800
Common collective trusts	1,574,900	–	1,574,900
Cash equivalents	76,000	76,000	–
Total	$ 3,578,800	$ 850,500	$ 2,728,300

Pension assets as of December 31, 2021, include $251,400 of partnerships and hedge funds measured under the equity method using net asset value (NAV).

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

Other Postretirement Benefit Plan Assets

The Company's other postretirement benefit plan asset allocation and target allocation are as follows:

Asset Class	Target Allocation Dec. 31, 2023	Percentage of Plan Assets Dec. 31, 2022	Percentage of Plan Assets Dec. 31, 2021
Equity securities	90%	84%	85%
Cash equivalents	10	16	15
Total	100%	100%	100%

The fair value measurements of other postretirement benefit plan assets at December 31, 2022 and 2021, consisting of all Level 1 assets, are as follows (refer to Note 3 for the valuation techniques):

Asset Class	Dec. 31, 2022	Dec. 31, 2021
Equity securities:		
Communication services	$ 11,900	$ 19,200
Consumer discretionary	12,700	20,700
Consumer staples	10,900	10,800
Energy	8,000	5,200
Financials	12,600	15,700
Healthcare	18,700	19,700
Industrials	8,700	11,400
Information technology	27,900	38,500
Mutual funds	12,000	15,500
All other sectors	4,200	8,000
Total equity securities	127,600	164,700
Cash equivalents	24,900	29,600
Total	$ 152,500	$ 194,300

Pension and Postretirement Plans Asset Investment Narrative

The investment policy of the pension and postretirement plans specify the broad asset classes used by the pension plan for investment purposes and the general principles used in managing the plans' assets. The strategic asset allocation framework includes the asset classes that may be used and the ranges for each of the asset classes and sub-classes. The overriding objective for managing pension investments is to optimize plan surplus and long-term total return of plan assets within constraints established to control risk and volatility. The strategic asset allocations and ranges were updated for 2022 and are segregated across five primary asset categories. The broad categories are equities, fixed income, alternatives, multi-assets, and cash and cash equivalents. The equities allocation includes ranges for U.S. and international equities categories. The fixed income allocation includes long duration and opportunistic fixed income. The alternatives asset allocation includes absolute return and private investments. The current approved ranges for the five asset categories in the U.S. pension fund, which is also the largest of the retirement plans, are as follows:

Asset Class	Range
Equities	35 – 65%
Fixed income	25 – 60%
Alternatives	0 – 20%
Multi-Assets	0 – 20%
Cash and cash equivalents	0 – 20%

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

The portfolio construction is based on prudent investment principles, including diversification across asset classes and across external fund managers, and liability risk management with long term considerations. Institutional investment firms are employed to manage the investments and generally perform ongoing analysis of the fundamental, technical and valuation factors underlying the securities owned.

The equities allocation includes separately managed accounts with individual common stocks, and equity commingled and mutual funds with active and passive implementations. Diversification has been emphasized with measured allocations across equity strategies with different styles and capitalization ranges, managed by investment managers, and include U.S. and international equities. Investment returns are benchmarked and monitored against standard indices, including S&P 500, Russell U.S. indices, and MSCI global stock indices.

The fixed income allocation consists of professionally managed long duration debt investment strategies held in separately managed accounts and commingled trusts, as well as mutual funds and opportunistic fixed income strategies, managed by institutional investment managers and teams. Debt securities are actively managed, using best practice investment disciplines and for the majority of the fixed income portfolio, provide a high-quality long duration complement to the total pension investment portfolio.

The alternatives allocation includes private equity; private credit; real assets, including real estate and infrastructure; and absolute return liquid alternatives strategies.

The multi-assets allocation incorporates diversified strategies across various asset classes and includes global tactical asset allocation and a dynamic pension management strategy with a focus on asset liability management.

The cash and cash equivalent category includes short-term investments, defined as debt securities with a maturity of less than one year, and are held primarily for liquidity purposes and secondarily to reduce the duration of fixed income securities when warranted by interest rate levels. Capital preservation is the primary consideration of investment in this asset class; therefore, only the highest quality investments are used. This allocation primarily includes money market funds, commercial paper carrying the highest quality ratings, and cash.

Expected rate of return assumptions are created based on assessments of long-term behavior and performance expectations of asset classes. As part of the process, historical relationships of asset classes and risk-free rates are considered. The analysis incorporates historical returns and long-term forward-looking return assumptions for the strategic asset allocations framework and mix, along with the baseline risk-free rate. The long-term expected rate of return is adjusted based on structural moves, if any, in the underlying market conditions, or any material changes to the strategic asset allocation mix. The expected return for the plan blends the return assumptions for the strategic asset allocation mix, including equities and other growth assets, and fixed income allocations, along with a nominal allocation to cash and cash equivalents.

Cash Flows

Employer Contributions	Pension and Supplemental Benefits	Other Benefits
2021	$ 4,600	$ –
2022	5,000	–
2023 (expected)	4,200	–

(in thousands)

Note 10. Retirement Income Plans and Postretirement Benefit Plans Other than Pensions *(continued)*

Contributions by participants to the other benefit plans were $700 for each of the years ended December 31, 2022 and 2021.

Benefit Payments	Pension and Supplemental Benefits	Other Benefits	Other Benefits (Government Subsidy)
2021	$ 110,200	$ 11,200	$ 400
2022	118,300	11,200	400

Estimated Future Payments	Pension and Supplemental Benefits	Other Benefits	Other Benefits (Government Subsidy)
2023	$ 123,500	$ 11,700	$ 400
2024	128,000	11,200	300
2025	133,100	10,900	300
2026	139,100	10,600	300
2027	145,900	10,600	300
2028 – 2032	836,300	47,300	1,000

The Company also sponsors a 401(k) savings plan whereby eligible employees may elect annually to contribute from 1% to 50% of their base pay on a pretax or after-tax basis. Employee contributions are restricted to Internal Revenue Service limits. The Company matches pretax and after-tax contributions up to 6% of the employee's base pay. Company contributions to the plan were $26,800 in 2022 and $25,700 in 2021.

Note 11. Components of Accumulated Other Comprehensive Loss

The changes in accumulated other comprehensive loss by component, net of income tax, for the year ended December 31, 2022, are as follows:

	Unrealized Appreciation on Investments in Debt Securities	Benefit Plan Assets and Liabilities	Foreign Currency Translation Adjustment	Accumulated Other Comprehensive Loss
Balance at January 1, 2022	$ 137,300	$ (438,000)	$ (241,000)	$ (541,700)
Other comprehensive (loss) / income before reclassifications	(733,900)	212,600	(214,500)	(735,800)
Amount reclassified from accumulated other comprehensive loss	102,400	29,700	–	132,100
Net current period other comprehensive (loss) / income	(631,500)	242,300	(214,500)	(603,700)
Balance at December 31, 2022	$ (494,200)	$ (195,700)	$ (455,500)	$ (1,145,400)

(in thousands)

Note 11. Components of Accumulated Other Comprehensive Loss *(continued)*

The following are reclassifications out of accumulated other comprehensive loss to net income for the year ended December 31, 2022:

Unrealized appreciation of investments in debt securities:		
Net realized investment losses	$ (129,300)	
Other than temporary impairment losses	(500)	
Total before tax	(129,800)	
Income tax benefit	27,400	
Net of tax	$ (102,400)	
Amortization of benefit plan amounts:		
Actuarial losses	$ (40,100)	(a)
Prior service cost	2,500	(a)
Total before tax	(37,600)	
Income tax benefit	7,900	
Net of tax	$ (29,700)	

(a) These accumulated other comprehensive loss components are included in the computation of net periodic cost (see Note 10).

The changes in accumulated other comprehensive loss by component, net of income tax, for the year ended December 31, 2021, are as follows:

	Unrealized Appreciation on Investments in Debt Securities	Benefit Plan Assets and Liabilities	Foreign Currency Translation Adjustment	Accumulated Other Comprehensive Loss
Balance at January 1, 2021	$ 325,600	$ (734,700)	$ (165,000)	$ (574,100)
Other comprehensive (loss) / income before reclassifications	(164,900)	246,800	(76,000)	5,900
Amount reclassified from accumulated other comprehensive loss	(23,400)	49,900	–	26,500
Net current period other comprehensive (loss) / income	(188,300)	296,700	(76,000)	32,400
Balance at December 31, 2021	$ 137,300	$ (438,000)	$ (241,000)	$ (541,700)

(in thousands)

Note 11. Components of Accumulated Other Comprehensive Loss *(continued)*

The following are reclassifications out of accumulated other comprehensive loss to net income for the year ended December 31, 2021:

Unrealized appreciation of investments in debt securities:		
Net realized investment gains	$ 32,500	
Other than temporary impairment losses	(2,700)	
Total before tax	29,800	
Income tax expense	(6,400)	
Net of tax	$ 23,400	

Amortization of benefit plan amounts:		
Actuarial losses	$ (65,600)	(a)
Prior service cost	2,400	(a)
Total before tax	(63,200)	
Income tax benefit	13,300	
Net of tax	$ (49,900)	

(a) These accumulated other comprehensive loss components are included in the computation of net periodic cost (see Note 10).

Note 12. Subsequent Events

Subsequent events were evaluated through February 27, 2023, the date the Company's consolidated financial statements were available to be issued. No material transactions occurred after the balance sheet date that would impact the Company's consolidated financial statements.

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First Quality Enterprises, Inc.

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and Corporate Secretary
Tredegar Corporation

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Chairman and
Chief Executive Officer
Teknor Apex Company

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Executive Vice President
and Chief Financial Officer
Universal Health Services, Inc.

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Treasury, Taxation
and Administration
Mannington Mills, Inc.

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Senior Vice President
and Chief Financial Officer
American Woodmark

Jeanne Jones
Executive Vice President
Chief Financial Officer
Exelon Corporation

Kenneth H. Kaiser
Senior Vice President
and Chief Operating Officer
Temple University

Richard S. Lindahl
Executive Vice President
Chief Financial Officer
and Treasurer
Emergent BioSolutions, Inc.

Shawn Neuman
Senior Vice President
General Counsel
Brandywine Realty Trust

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Executive Vice President
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Victaulic Company

Reuben E. Slone
Executive Vice President
Supply Chain
Advance Auto Parts

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Philadelphia Eagles
Limited Partnership

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