How to measure and mitigate the costs of climate change

Unlock the strategic insight your company needs to maximize growth and help money work harder

GET STARTED

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What's your business strategy for managing climate risk?

Around the world, climate change continues to increase the frequency and severity of extreme weather events. As rising temperatures and shifting rainfall patterns take effect, what was once considered an end-of-century risk is now creating very near and present dangers – not least for corporate value chains.

From tropical cyclones and flooding to wildfires and storm surges, extreme weather can damage critical business facilities, disrupt operations and supply chains, and inflict substantial financial costs a company.

With revenue and share prices under threat, no business can afford to ignore the climate risks it faces and the clear and growing implications for its bottom line. Plus, as climate reporting becomes mandatory in several jurisdictions, the largest corporations must not only assess but also disclose the associated financial risks to regulators.

However, climate risk management is about far more than compliance. To protect your company's money and help it work harder, it's high time you factored the financial impacts of climate change into your strategic decisions.

In July 2024, luxury car manufacturer Porsche issued a profit warning following flood-related aluminium supplier disruptions. Shares fell 3% following the news.

Source: Financial Times, Porsche warns on profits as flooding hits aluminium supplier, July 23, 2024

Multinational snacks giant Mondelēz International is diversifying its supplier network as part of its climate resiliency plans, following flood-related delays and disruptions in Australia, India and Thailand.

Source: Supply Chain Digital, Extreme weather prompts supply chain action at Mondelēz, November 29, 2023

Why it pays to count the costs of climate change

As a modern business, you need to understand the financial risks that climate change holds not only for your physical assets and operations, but also those of your suppliers. Only with that awareness can you take appropriate action to manage and mitigate climate risks – and build climate resilience into your strategy and supply chains.

Insurance is one form of mitigation that is becoming increasingly difficult to afford or, in some areas, even find. As climate risks increase, insurers are reacting by charging higher premiums or simply withdrawing from the riskiest regions. But foresight into the changing nature of climate risk doesn't just allow you to assess the affordability of your insurance program, now and into the future. It could also help unlock savings, value and growth.

To keep their own money hard at work, investors must keep a close eye on the risks – and opportunities – of climate change, too. After all, a company's climate risk is an investor's reputational risk. For the investor, that means getting a clear understanding of the financial exposure that potential investments and portfolio companies have to climate risks, both today and in the future.

But modeling the financial impacts of climate change, three decades or more ahead, is no mean feat for any business. Read on to explore exactly what it takes to cost your exposure to climate risk. And discover how an innovative new solution from FIS will help you both meet your modeling challenges and take strategic action to make money work harder.

Challenge #1:
Climate change is an unprecedented risk

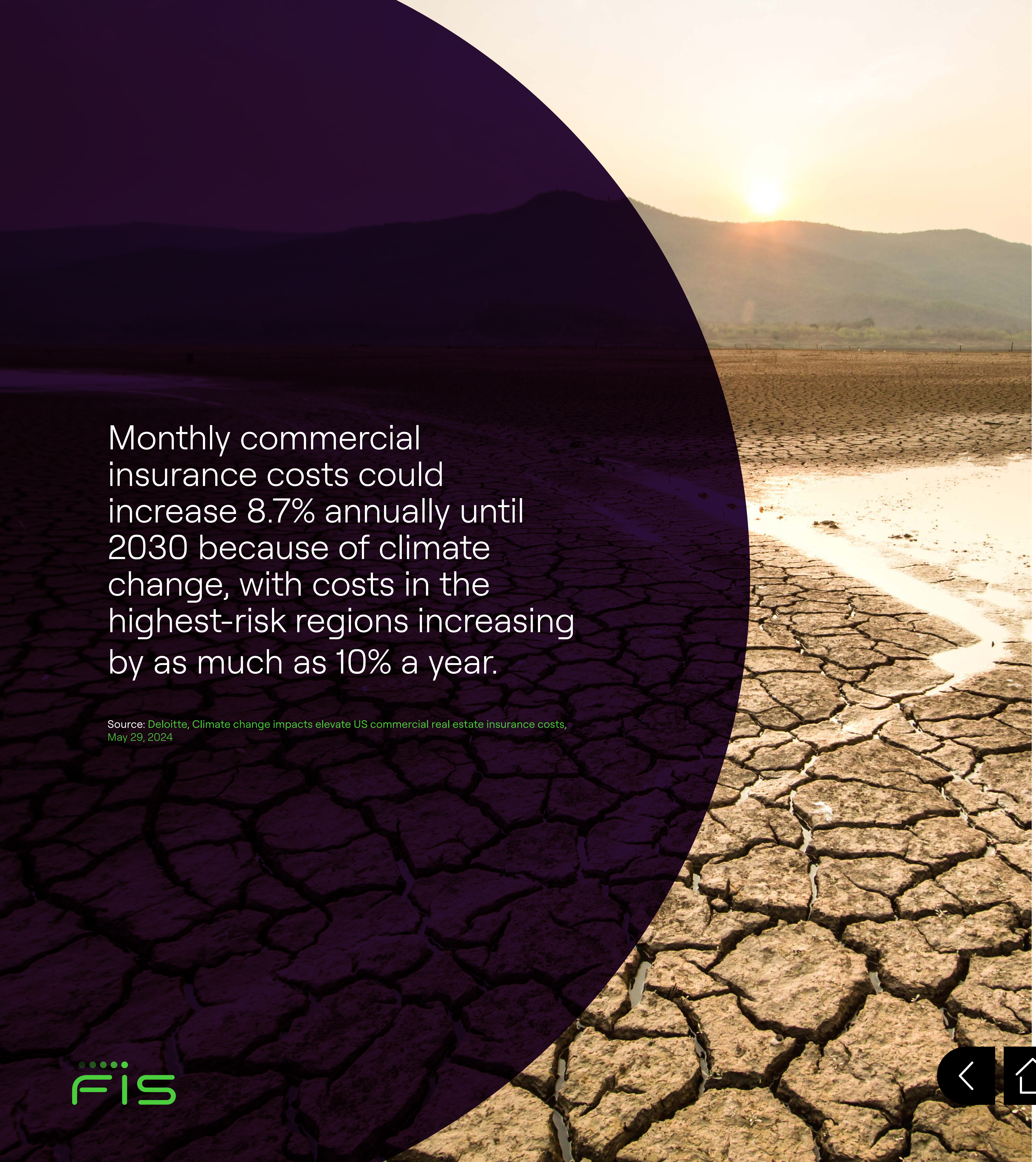
You urgently need to understand the climate risks your company faces. Quantifying the impacts of climate change will help you make effective plans to adapt, continue to operate effectively in the short term and keep growing your business in the long term.

Climate risks, though, are markedly different from any risk you're likely to have measured before. Specifically, they require a deep understanding of the underlying science and the ability to translate that knowledge into complex, credible models.

And if you're using siloed or aging technology, or processing data manually, it's almost impossible to get a handle on your true financial exposure.

In September 2024, flooding caused by Hurricane Helene severely damaged key ultra-pure quartz mines, threatening the global semiconductor supply chains.

Source: Financial Times, Global chipmaking hit as Hurricane Helene disrupts quartz mining, October 4, 2024



Monthly commercial insurance costs could increase 8.7% annually until 2030 because of climate change, with costs in the highest-risk regions increasing by as much as 10% a year.

Source: Deloitte, Climate change impacts elevate US commercial real estate insurance costs, May 29, 2024

Action #1:
Define a modern climate modeling framework

With climate data provided by PwC US, FIS® Climate Risk Financial Modeler makes it easy to financially quantify your firm's exposure to the physical risks of climate change. Now you can take steps to protect your operations and keep money at work, whatever the future holds.

By combining state-of-the-art climate modeling with sophisticated financial modeling, the solution provides a repeatable and auditable way to understand the degree of financial risk you face under different climate change scenarios and timescales. It also helps uncover blind spots in your supply chain to weather-related hazards.

Modeled impacts include damage to or loss of physical assets, business interruption and, critically, the cost of any mitigations like insurance contracts. You need to know the impact on your cash flows – a critical capability that's missing from many current approaches to climate risk management.

With Climate Risk Financial Modeler, you can upload data for physical assets located anywhere in the world – and visually project on detailed dashboards the modeling outputs for each asset over a long-term horizon.

By calculating the financial implications under different climate change stress-test scenarios and levels of carbon emissions, you can then build a full, clear picture of what climate risk could cost your firm in the future.

And when your money's hard at work, that's a picture you can't afford to obscure.

Challenge #2: Climate analysis is complex

The larger your company and the more distributed its operations, the more data you'll need to gather so you can quantify and analyze the climate risks you face.

An analysis of your climate vulnerabilities should not stop just at the assets that you own. Your business likely relies on a complex, global supply chain that may have its own unique exposure to extreme weather. In fact, many climate-related disruptions originate not within a company's own operations but within its supplier network.

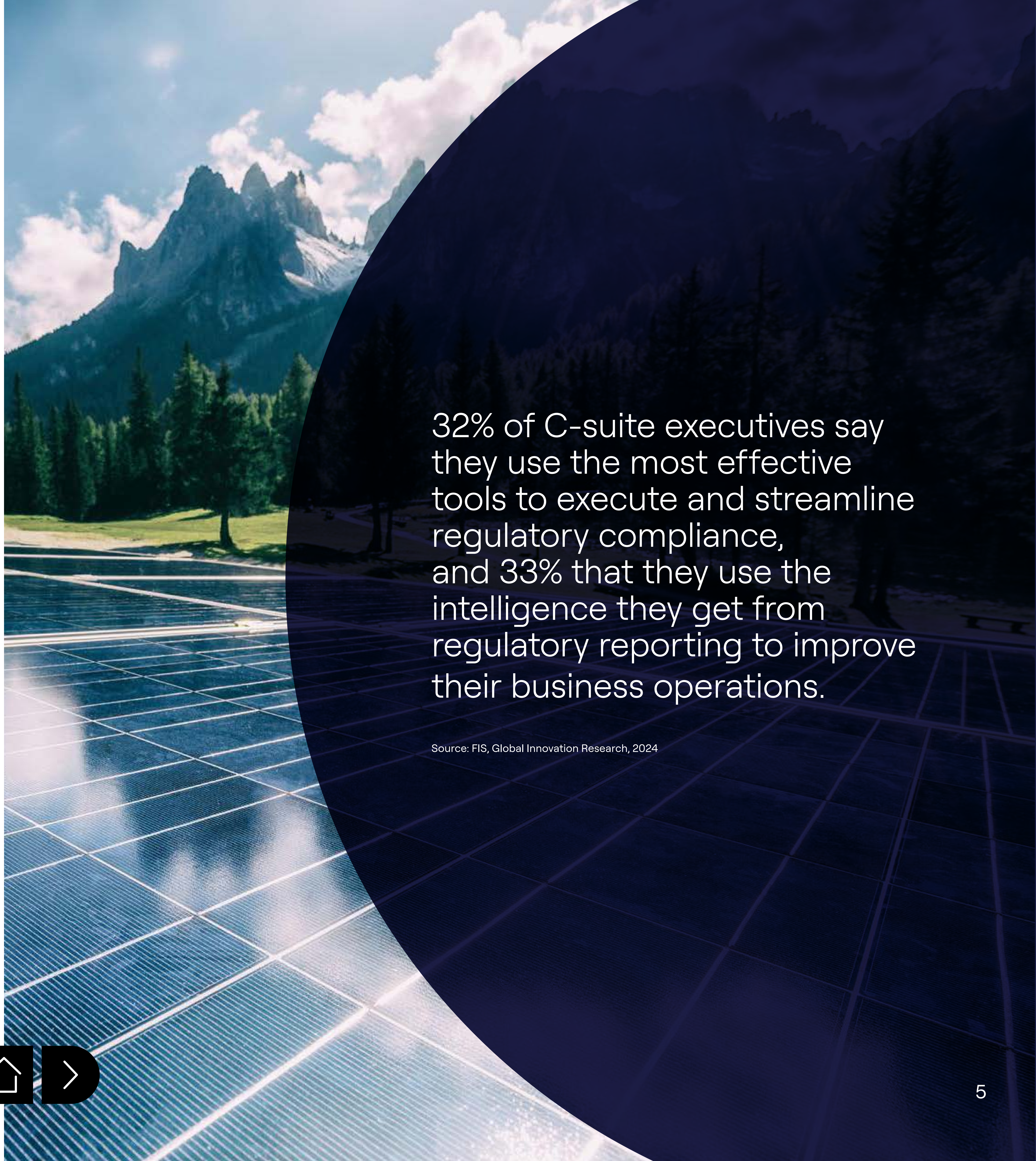
So, you are far from alone in the challenge to gather all the right data for climate risk management. The world's largest companies are currently collecting information about both their own assets and those of their suppliers. Even businesses that have been collecting data for some time will regularly update the scope of their analysis to fill any gaps.

Most companies take a pragmatic approach and don't boil the ocean. They start small to understand their own operations first before moving onto their broader supply chain. This first step unlocks an understanding of the most impactful data for a climate risk analysis.

A comprehensive assessment not only protects your business but also helps meet regulatory requirements for financial disclosures. Climate reporting frameworks, such as the Taskforce on Climate-related Financial Disclosures (TCFD), used to be voluntary. But jurisdictions across the world are increasingly making it mandatory for large companies to disclose the financial impact of the climate risks they face, with some required to comply as early as 2025.

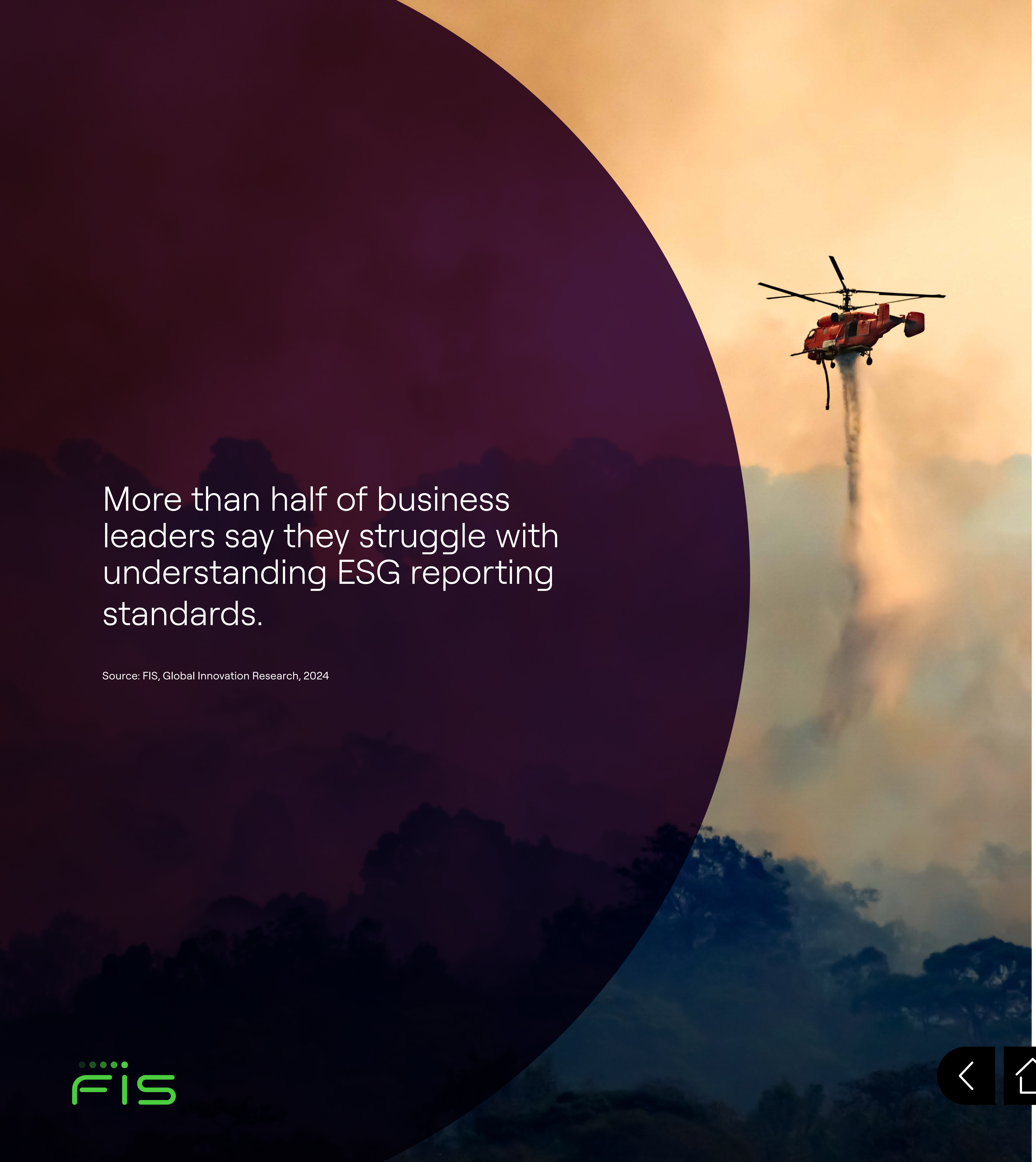
Although your business may not be in the first wave of companies required to comply with global regulation, the time to prepare is now. You won't want to wait until the deadline to determine where and how to collect all the right data.

Above all, think of regulatory reporting as an opportunity to gain valuable insight on climate risk and its realities for your business. Beyond compliance, climate disclosures can provide a helpful lens through which to view all future business decisions – and help you build a foundation for due diligence processes, too.



32% of C-suite executives say they use the most effective tools to execute and streamline regulatory compliance, and 33% that they use the intelligence they get from regulatory reporting to improve their business operations.

Source: FIS, Global Innovation Research, 2024



More than half of business leaders say they struggle with understanding ESG reporting standards.

Source: FIS, Global Innovation Research, 2024

Action #2:
Transform analysis into strategic input

Climate Risk Financial Modeler enables your company to efficiently analyze your extreme weather risks, and consolidates the most important insights in an easy-to-understand dashboard. By cutting through the noise, you get more time to focus on strategic decision making and putting your money to work.

With the solution, you can rapidly assess the climate risks of a new site, supplier, investment or business strategy and the possible cost to your company. Or as you develop enterprise-level risk mitigation strategies, you can more easily identify and prioritize your riskiest assets and maximize the impact of your mitigation plans, including relocation or retrofitting.

Projections of insurance premiums and recoveries in the solution enable companies to test the financial impact of adjusting policy limits and deductibles. These analyses of alternative structures may reveal a more optimal balance of coverage and premium, not only today but into the future.

For financial planning and financial statements, Climate Risk Financial Modeler allows you to compare the impact of climate risk on cash flows with the impacts of other key risks that face your business. Analysis of tail risk and climate stress tests also help you project and prepare for the potential of extreme losses.

Plus, our alliances and partnerships with consultants and data providers gives you access to a more comprehensive suite of professional services that address broader and environmental, social and governance (ESG) challenges.

Challenge #3:
Climate risks keep changing

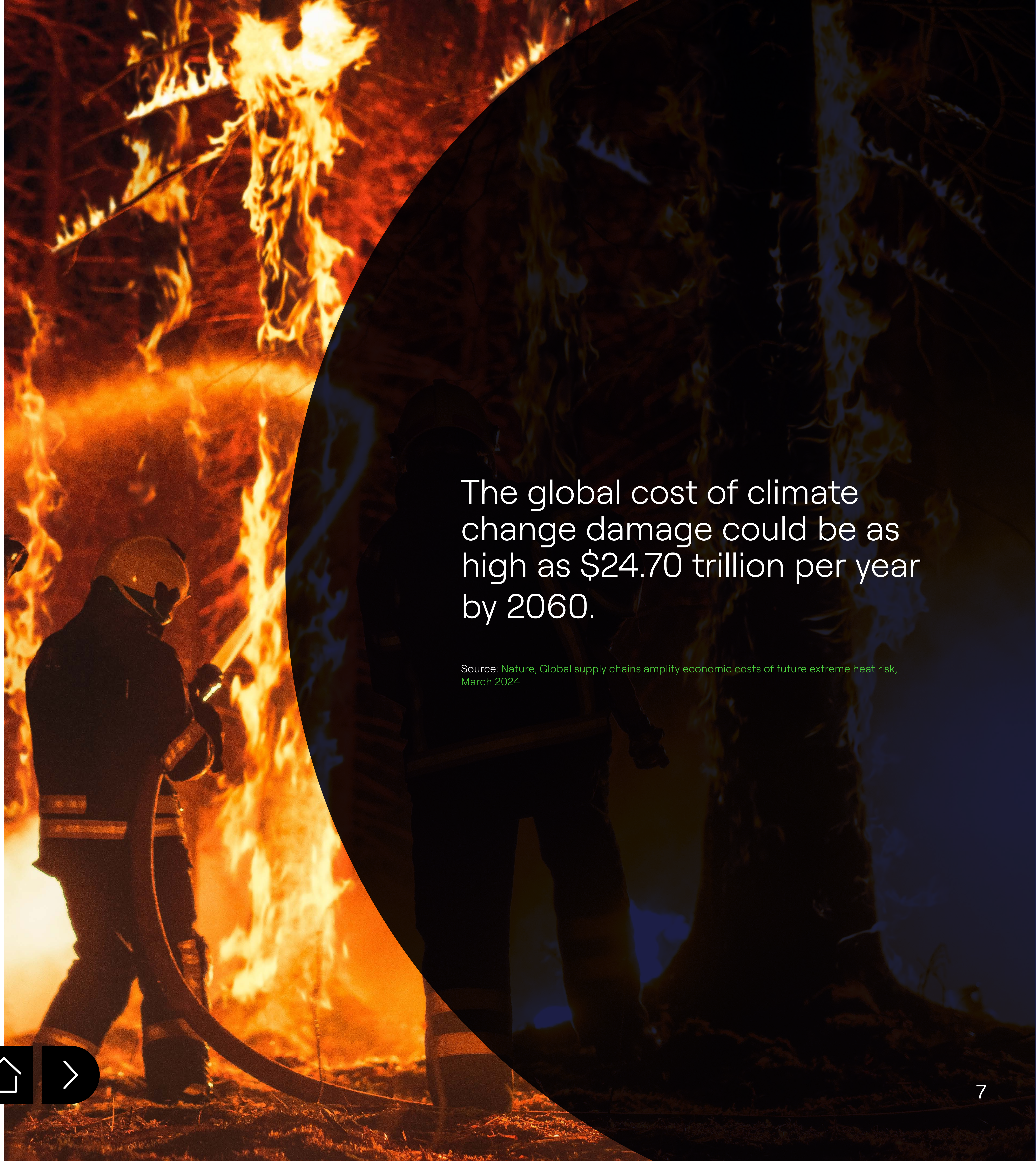
Every year, climate change brings more severe, unpredictable and frequent extreme weather events. To stay ahead of the impacts on your business, it's crucial to understand your true financial exposure not only today but also over the next 10, 20 or 30 years and beyond. Areas considered at low risk today may become hotspots in the decades ahead.

Forward-looking analysis allows you to think more strategically about the future and plan accordingly – but it can also put a huge strain on your modeling operations.

You'll be reporting asset values at a highly granular level, running large numbers of models and creating even larger numbers of results. But at the same time, you must carefully maintain all your input data and assumption sets.

So, you need a powerful but well-governed modeling environment that can handle vast amounts of data, calculate financial risks for multiple assets and scenarios – and store the results for future comparisons and reporting.

That's difficult to accomplish alone, in a landscape of legacy modeling technology. Without a modern cloud-based infrastructure behind you, your operational costs could soar, and you will struggle to achieve the scale you need to project financial exposure way into the future. And without the right technology partner, where will you turn for detailed documentation and follow-the-sun support?



The global cost of climate change damage could be as high as $24.70 trillion per year by 2060.

Source: Nature, Global supply chains amplify economic costs of future extreme heat risk, March 2024

38% of C-level executives believe that embracing cloud computing will have a major impact on their business operations, while 37% are optimistic about the value that cloud and edge computing can bring to their business.

Source: FIS, Global Innovation Research, 2024

Action #3: Model exposure efficiently in the cloud – and export results easily

Built on secure, cloud-native technology, Climate Risk Financial Modeler helps you centralize and efficiently handle large sets of data, so you can easily and cost-effectively calculate the long-term financial impacts of climate change.

With SaaS-based tools and services providing and managing the data, models and calculations for you, you can rapidly evaluate climate risk for thousands of assets globally. And you gain a repeatable and auditable way to project financial exposure as far ahead as 2050 and even 2100.

Efficient runtimes mean that you'll also be able to easily run multiple "what if" analyses to virtually test the climate-related financial impacts of investments, divestments, supply chain reconfigurations or strategic adjustments.

At the same time, you can also lock down all inputs, assumptions and models, and store results sets in a structured way for future retrieval. Climate Risk Financial Modeler makes it easy to export every detail of each analysis, ready for incorporation into internal and external reports, including regulatory disclosures.

Climate science is an ever-evolving area, with new datapoints, techniques and models emerging on a regular basis. So, you'll want the confidence that you're using the most up-to-date information for climate risk management. Our alliances and partnerships with leading providers ensure that our solution always reflects the latest science, while its SaaS-based setup means it seamlessly delivers updates to you.

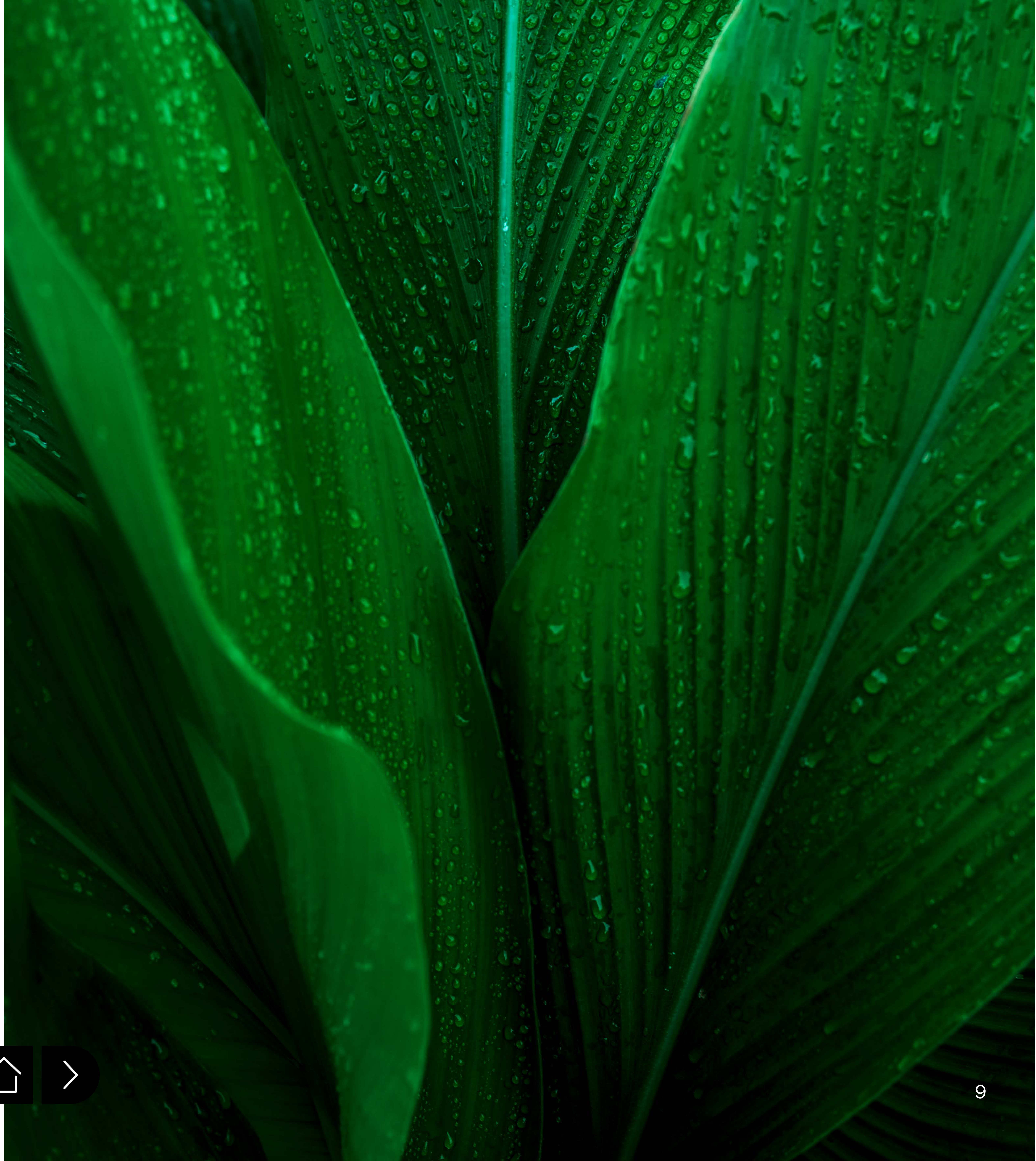
It takes a strong, sophisticated modeling operation to predict the financial risks of climate change with any certainty, over many decades and without considerably increasing your costs. With Climate Risk Financial Modeler, you can afford to produce all the results you need to inform your decisions, protect your operations, maximize growth and enable your money to work harder.

Unlock insight into the financial risks of climate change with FIS

Climate Risk Financial Modeler offers companies a cost-effective way to understand and financially quantify their exposure to the physical risks of climate change. Now you can analyze how future climate change is likely to impact your business, project the financial cost under different emissions scenarios, test your mitigation strategies and make informed strategic decisions that help your money work harder.

Get in touch with FIS to find out how our cutting-edge, SaaS-based technology can help inform your financial risk plans for the future.

FIND YOUR UNLOCK



FIS climate risk solutions help quantify your true exposure to climate risk, for informed decisions that help your money work harder.

Our technology powers the global economy across the money lifecycle.

Money at rest

Unlock seamless integration and human-centric digital experiences while ensuring efficiency, stability, and compliance as your business grows.

Money in motion

Unlock liquidity and flow of funds by synchronizing transactions, payment systems, and financial networks without compromising speed or security.

Money at work

Unlock a cohesive financial ecosystem and insights for strategic decisions to expand operations while optimizing performance.

About FIS

FIS is a financial technology company providing solutions to financial institutions, businesses and developers. We unlock financial technology that underpins the world's financial system. Our people are dedicated to advancing the way the world pays, banks and invests, by helping our clients confidently run, grow and protect their businesses. Our expertise comes from decades of experience helping financial institutions and businesses adapt to meet the needs of their customers by harnessing the power that comes when reliability meets innovation in financial technology. Headquartered in Jacksonville, Florida, FIS is a member of the Fortune 500® and the Standard & Poor's 500® Index. To learn more, visit FISglobal.com. Follow FIS on LinkedIn, Facebook and X (@FISglobal).

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