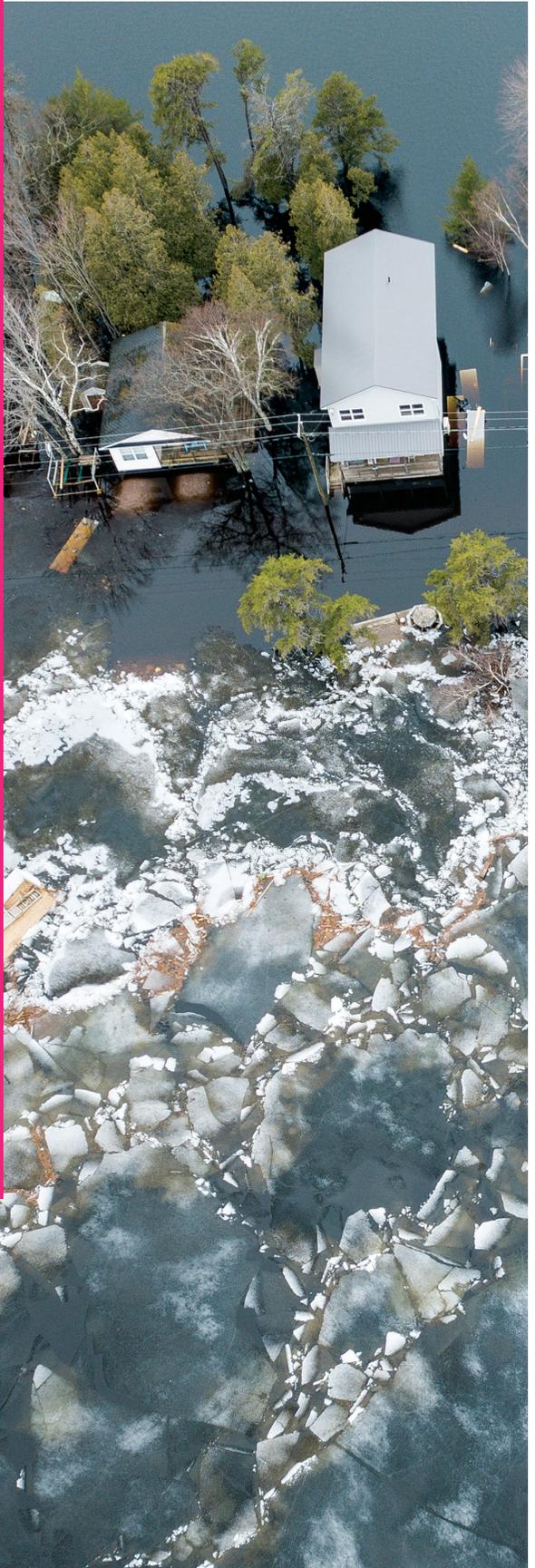


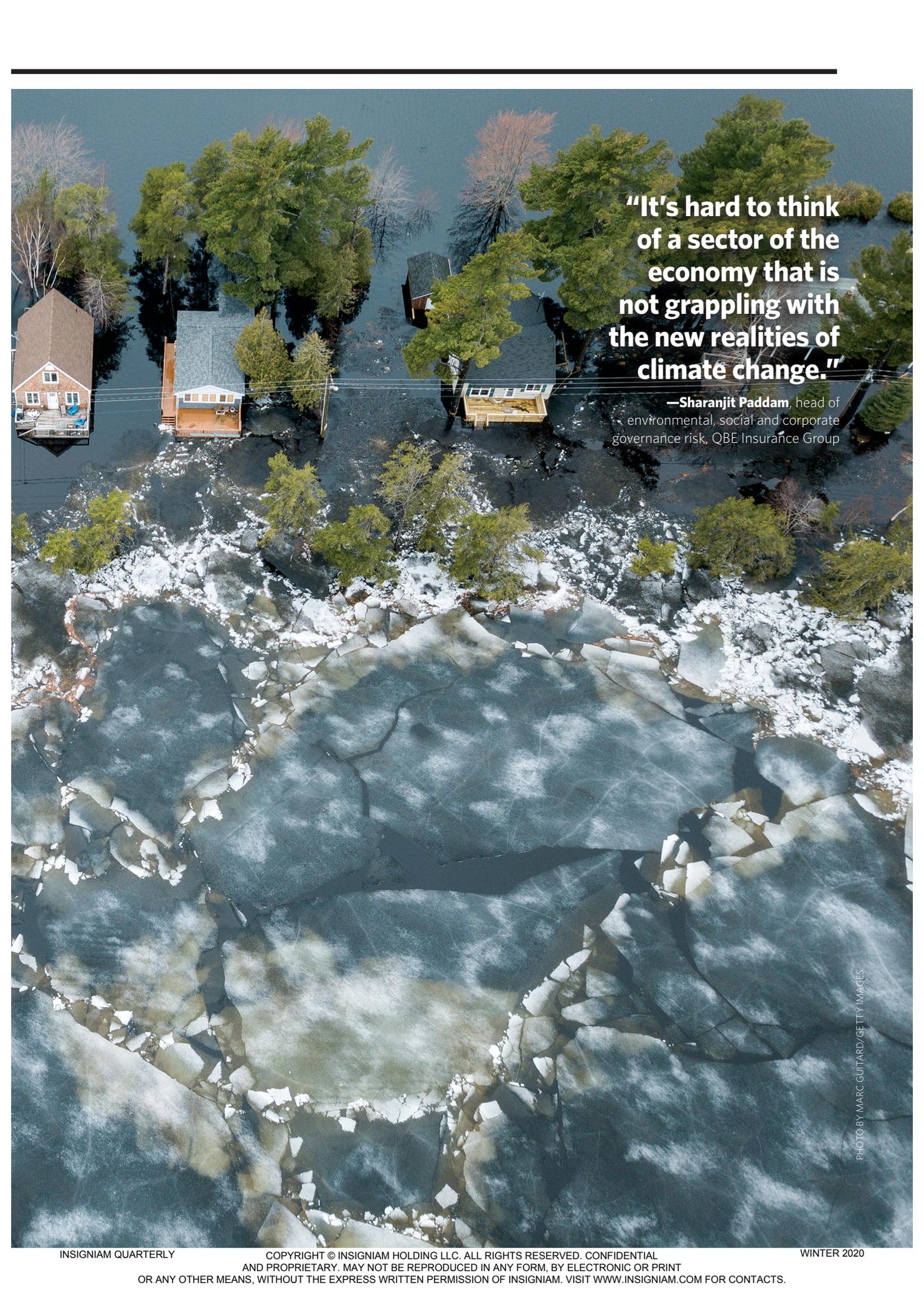


**CLIMATE CHANGE**  
**ADAPT AND**  
**THRIVE**

A changing climate offers businesses new opportunities to seize.

**BY JOE GUINTO**





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PHOTO BY MARC GUITARD/GETTY IMAGES

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**€20 billion** by the 2020s and **€46 billion** by 2050.

Last year, a coalition of top executives calling themselves the CEO Climate Dialogue urged the U.S. government to impose *more* regulation on their businesses and industries. The reason? “Unabated climate change is a major threat to the U.S. economy,” they explained. For them, stiffer regulations are critical to slowing the trend before it is too late.

These leaders, at companies ranging from Unilever to Ford, are not the only ones predicting dire economic consequences. The Fourth National Climate Assessment, published by U.S. government agencies in late 2018, notes that annual losses in some economic sectors will reach hundreds of billions of dollars by the end of this century if emissions continue at historic rates. In November 2019, more than 11,000 scientists declared a “climate emergency,” stating that “climate chain reactions could cause significant disruptions to ecosystems, society and economies, potentially making large areas of Earth uninhabitable.”

Around the world, companies are taking action, adapting to increasingly unpredictable weather patterns by both mitigating risks and seizing new opportunities. “It’s hard to think of a sector of the economy that is not grappling with the new realities of climate change,” says Sharanjit Paddam, head of environmental, social and corporate governance risk at QBE Insurance Group, an Australia-based insurer operating in 31 countries. “Whether that’s governance risk and how to tackle climate-related disclosures, transition risks from policy change, technological innovations and asset-related risks or potential liability risks, there are myriad issues for businesses to work through. That presents both challenge and opportunity.”

### Insurers Lead the Way

In 2018, the United States experienced an es-



timated \$91 billion in climate change-related damage related to events including wildfires, droughts and hurricanes—just three other years were more costly. In Europe, the estimated damage of river flooding—to take just one type of climate change-related event—is projected to rise to €20 billion by the 2020s and €46 billion by 2050. This growing environmental volatility has forced many in the insurance industry to reimagine their business.

“The insurance industry is at the forefront of the climate change evolution,” says Ellen Cousins, chief science officer of Athenium Analytics, a company that makes risk analysis software with a special focus on weather forecasting. “Few industries are as exposed to weather risk as property carriers—and the carriers realize that the old ways of doing business are going out of business.”

Many insurers are ditching the now-obsolete 100-year flood forecasts that were once the industry standard, instead turning to firms like Athenium for modern analytical models that can track global severe weather events to produce much more accurate and granular results. For example, in 2018 QBE bought a stake in Jupiter, an analytics firm that employs artificial intelligence models with satellite and sensor data to price individual climate risks (e.g., flooding or wildfires) for any building in a given company’s portfolio. Companies with pow-

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er plants, hotels or residential properties in areas now deemed to be higher risk may choose to relocate their holdings—moving employees out of harm’s way and reducing risk exposure.

“As other industries work to catch up,” Ms. Cousins says, “insurers are analyzing weather and peril data by calculating risk scores and writing and renewing policies that factor in climate trends, or at least more recent conditions, in addition to historical weather.”

Businesses outside of the insurance industry take note: To adopt climate risk response strategies, organizations should conduct a holistic risk analysis and begin scenario planning accordingly. Will new suppliers be needed to ensure continuity in the event of a weather emergency? How will environmental changes affect customer behavior? Does the organization have a response plan for power outages, property destruction or loss of communications infrastructure? To optimize these plans and understand what the future will likely hold, Ms. Cousins says, “members of the response team need to understand past severe weather events, their fallout, the business implications and any possible outcomes that may arise.”

### The Opportunities

Companies around the world are not just revising their risk plans, but reimagining their missions in response to climate change. Oil and gas giant To-



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#### THE TAKEAWAY

No company can dodge the gamut of risks brought by climate change. Faced with mounting societal and economic pressure, leaders—in every industry—must examine supply chains, customer behavior and infrastructure needs in response. Looking to not only protect but grow their businesses, future-focused executives will take ownership of climate change by creating opportunities in this changing market—even if it requires a radical reimagining of their culture and vision.

tal recently redefined itself as an “energy player” because it now produces low-carbon electricity along with refined fossil fuels. “Climate issues are central to our strategy in all ... our priority areas,” Patrick Pouyanné, CEO of Total, told *The New York Times* in October. As a member of the Oil and Gas Climate Initiative (OGCI), Total is trying to reduce methane emissions in part through investment in new technologies. OGCI’s more than \$1 billion Climate Investments fund supports development and implementation of technologies (e.g., carbon capture, carbon dioxide recycling) to reduce carbon footprints in the energy and industrial sectors.

But the biggest new opportunities may lie in the construction industry. Buildings—materials and construction activities, and operations—generated nearly 40% of all energy-related carbon dioxide emissions in 2017, according to Architecture 2030. The nonprofit group pushes climate responsibility among builders, noting that much of the current total global building stock will be built or rebuilt in urban areas by 2050, creating a huge opportunity for companies specializing in sustainable, low-emission construction.

LafargeHolcim is among them. This \$27.5-billion Switzerland-based multinational company, which is a member of the CEO Climate Dialogue, makes building materials, specializing in cement and concrete products. In partnership with a cement and concrete tech startup, LafargeHolcim introduced a patented cement product in 2019 that reduces the carbon footprint of precast concrete by 70%. Production is ramping up as demand increases, underscoring the ROI on climate change-related innovation efforts.

“Our vision for 2050,” LafargeHolcim CEO Jan Jenisch has said, “is that the built environment will be carbon neutral and fully recyclable with a positive environmental impact.” **IQ**