



# Building a sustainable future:

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How can financial institutions navigate climate risk?

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# How can financial institutions navigate climate risk?



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Ecosystems and economies increasingly are exposed to climate change risks, creating unpredictable business and operational environments for financial institutions, alongside more regulatory scrutiny.

The physical risks of climate change are severe. According to Aon's latest Weather Climate and Catastrophe Insight 2020 Annual Report, direct economic losses and damage from natural disasters in 2020 were estimated at USD 268 billion, with insured losses of USD 97 billion – 40% higher than average.

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Financial institutions maintain a critical role in a transitioning global economy, navigating a complex network of first- and third-party climate-related risks. Mortgage portfolios are increasingly exposed to the physical impact of climate change, and clients across multiple industries focus on their own decarbonization pressures and transition risks. To ensure a functioning global economy, financial institutions must continue to provide liquidity while also successfully managing a host of risks, including:



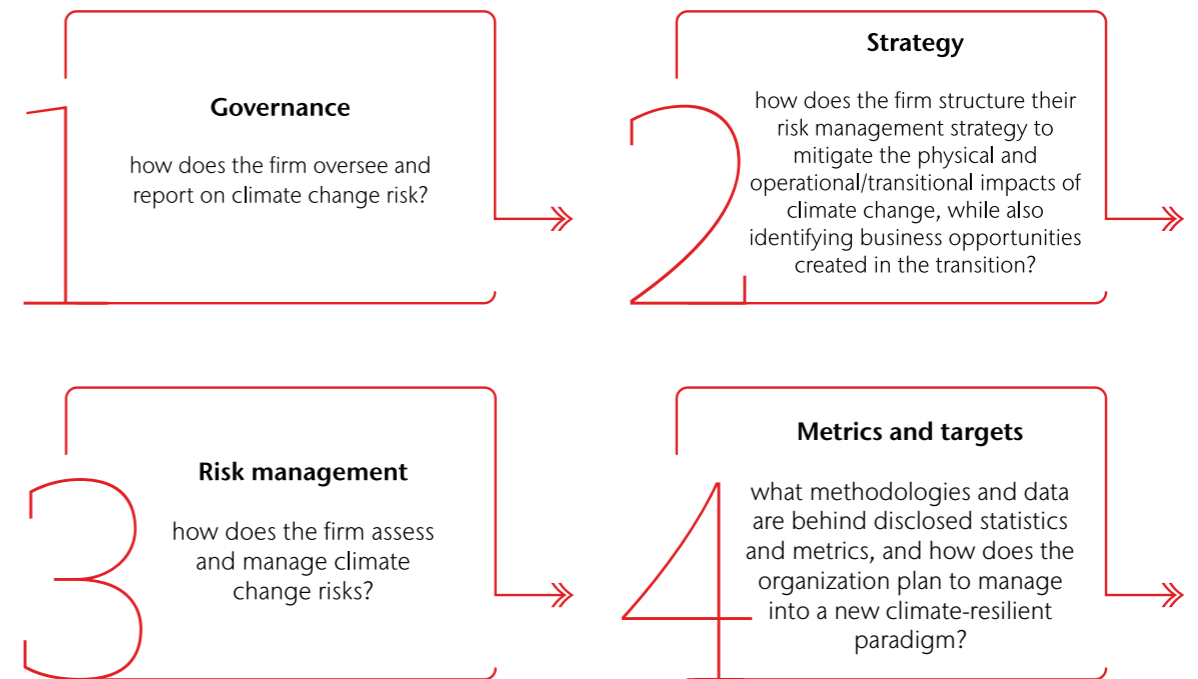
# From the outside in and the inside out – pressures driving climate action

Before the outbreak of COVID-19, regulatory and investor pressure was primarily focused on reducing the environmental impact of commercial operations. With the onset of the COVID-19 pandemic, the focus on tail risk has accelerated and expectations from investors, regulators, clients and other stakeholders has increased. Financial institutions are now expected to be able to quantify, disclose, strategize and adapt corporate strategy in contemplation of climate risk.

## 1. Regulatory pressures

Although European regulatory and disclosure regimes are more established, regulatory pressures across North America are gaining momentum under the new administration. Financial institutions face a host of regimes, including the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the Carbon Disclosure Programme (CDP), and the Taskforce for Climate-Related Financial Disclosure (TCFD), among others.

TCFD is rapidly becoming the dominant global framework, enabling firms to structure their approach to climate risk around four primary pillars:



### Thoughts from our expert:

All too often, we see firms that begin their TCFD journey by disclosing metrics and setting targets. This leads to an inefficient and ineffective long-term approach, and can even increase organizational liability as well if their stated objectives cannot be met. By first identifying material climate change risks and building a robust risk management strategy, and creating senior-level and board oversight of those risks, firms can avoid business challenges that come from a ready, fire, aim approach.

Failure to take a methodical approach to climate change can result in decreased corporate financial profitability, increased shareholder activism, demotivated employees and even the loss of a business' social license to operate.

**Meredith Jones**

Partner, Global Head of ESG at Aon

## 2. Stakeholder pressures – investors and employees

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While TCFD and other disclosure regimes provide a critical framework for firms to evaluate and quantify the financial impacts from climate change-related risks, these disclosures can also increase legal jeopardy and activist interest. From a legal perspective, failure to mitigate emissions, comply with environmental regulations, or meet stated objectives could drive litigation in the future. In addition, shareholders are increasingly weighing in on the adequacy of climate change mitigation plans.

In most cases, a generic climate policy is no longer sufficient for most investors. Since institutional investors such as pension funds are investing across multiple generations, the long-term viability of investments is a core concern and driving investor focus on resiliency and sustainability. Moving forward, financial institutions will need to quantify their exposures at corporate and commercial levels and make specific disclosures about climate change risk to investors.

Alongside external stakeholder pressures, shifting demographics and sociocultural values are directly impacting workforce behaviours. The financial services sector is a people business and research indicates that multigenerational employees – both current and prospective – are actively measuring firms' climate commitments against their own values. Millennials, which are now the dominant portion of the workforce, are particularly aligned to environmental, social and governance issues, so the firms that embrace sustainability and respond to employee demand for action and disclosure are more likely to attract and retain talent and boost employee engagement.



# The journey: risk quantification

For financial institutions that are responding to these internal and external pressures, risk quantification will be a critical component underpinning TCFD-aligned analysis and reporting. In response to the uptick in demand for risk management tools, the market for climate models is expanding rapidly. Despite the growing market, many quantification tools and models are in nascent stages of development and sophistication.

Quantification tools can deliver meaningful insights – particularly for physical risks. The data-driven insights produced by quantification tools have enabled insurers to make informed decisions on risk selection, underwriting, pricing, and portfolio management. Now, demand for access to these tools is accelerating across the financial sector. Current quantification models fall largely into two categories – catastrophe models and global climate models.

1. Catastrophe models are the traditional modelling frameworks which harness historical data, alongside current surface and atmospheric observation data to simulate hundreds of thousands of events against a portfolio. Catastrophe models typically provide fairly accurate insights into physical risks at individual asset level, taking into account the vulnerability of particular buildings and locations, against natural catastrophes. Since catastrophe models rely almost exclusively on historical data to predict losses from catastrophe risk, they are reliable predictors of near-term acute physical risk, but are less equipped to provide meaningful insights into longer-term risks.
2. Global climate models are designed to provide large-scale simulation and identify links between global mean temperature change, individual events and hazard characteristics to gauge longer-term climate risk. While global climate models offer a valuable tool to inform decisions for the long term, the data can introduce uncertainty into climate risk strategies. In looking ahead, variables such as timelines, linkages between the mean temperature change and the actual physical risks, and various emission pathways must be clearly articulated to create meaningful actions for the firm.

## Thoughts from our expert:

Momentum to merge high-resolution simulation catastrophe models with global forward-looking climate models is creating more robust frameworks for climate change modelling.

In the meantime, financial institutions are navigating a somewhat fragmented market of quantitative tools, but the importance of bolstering quantitative data with qualitative insights remains a constant. By leveraging available quantification tools and adding an overlay of qualitative information about firm-specific challenges, commitments and objectives, firms can create a meaningful narrative about their climate risk exposures and strategy.

Although some firms have been unwilling to take action until models can give them a definitive answer – particularly in regions where there is no regulatory imperative – pressure to act is growing. Globally, financial institutions need to quantify, disclose and manage the exposures in their loan and investment portfolios, so many firms are implementing their first-generation catastrophe and climate risk models to uphold their ESG commitments and regulatory obligations. Start considering the challenges and opportunities that climate change may bring to your firm, use the tools that you have at hand, work with experts in the insurance sector to fully understand the benefits and limitations of those tools. Only by exploration can firms begin to move forward.

**Liz Henderson**

Senior Managing Director Reinsurance Solutions at Aon

## The journey: integration

Climate-related exposures and events have the potential to impact multiple risk categories – from reputation, to credit, to operational and beyond.

# The journey: integration

Firms which take a coordinated approach to climate risk management by establishing a central climate or sustainability team will be best positioned to navigate the rapidly changing and complex challenges associated with climate risks. A centralized team focused primarily on sourcing data, modelling and

implementing the analytics across the firm, can work more efficiently and effectively to respond to demands and provide objective insights which can be leveraged in a meaningful way across multiple risk categories.

### Credit risk

Climate change has the potential to directly impact market and credit risks in several ways, including:

1. reductions in the value of financial assets;
2. uncertainty concerning financial assets' future payoffs;
3. credit losses due to reductions in the borrower profitability, and;
4. reductions in the value of collateral.

At the asset level, catastrophe models may be used to try and uncover the latent physical risk that is carried within loan portfolios. In addition, banks and investment managers have been exploring newer climate modelling tools to forecast the value of properties and assets under various climate scenarios. These insights are building a more robust due diligence process and enable firms to make informed investment decisions.

Meanwhile, financial institutions should also incorporate financial, litigation and other models to identify the industries most likely to be impacted by the transition to a low carbon economy, and over what timeframe.

With these insights, firms can take active measures to prepare for credit risk exposures by either reducing lending or managing the impact over time.

As financial institutions respond to regulatory obligations, convergence in approaches to modelling the credit risk impacts from climate will accelerate. Already, firms are using macroeconomic assumptions about climate risk, and in some cases using these assumptions to perform initial climate change stress testing.

### Operational risk

From an operational risk perspective, it is imperative that banks and other financial institutions assess and address their own carbon footprint. Despite increasing digitalization and the transition to remote working environments reducing the need for physical space, financial institutions' offices and branches are likely to maintain a substantial footprint, at least for the foreseeable future. Firms which focus on building these considerations into their operational risk taxonomies will be well positioned to make strategic decisions about sustainable and future-ready operating models that maximize business continuity.

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**Thoughts from our expert:**

Regulators are asking banks and other financial institutions to do two things in parallel: evolve their quantification capabilities; and remain responsive to regulators' model validation expectations.

The availability of data and modelling is not yet uniform around the globe and banks may have to prioritize their most material exposures and regions. Be strategic with the data rather than striving for complete coverage.

And while focusing on the most material risks and regions may be a short-term necessity, moving forward, the best way to manage this interconnected risk will be to establish a coordinated approach – with a dedicated team – across regions, business lines and risk types rather than permitting different divisions to follow their own approaches. A fragmented approach will lead to inconsistencies which will be challenging to address retroactively. Different approaches could also leave a firm open to legal jeopardy.

**Derrick Oracki**

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# Key Takeaways

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## Avoid analysis paralysis

Amid the current uncertainty, aligning stakeholders into a consistent approach will take time, but starting now and committing to steps to continue moving forward, is essential. Regulatory guidelines, investor perspectives and modelling tools are all fragmented across industries, providers and geographies. This could lead some to want to take a “wait and see” approach before diving in. Unfortunately, with such a rapidly changing landscape, a delayed approach could lead to a scramble down the road.

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## Remain focused on your firm

It can be very tempting to try to manage the firm’s ESG and climate change risk to a particular environmental, social and governance scoring system or disclosure regime, but ultimately, there is no one-size-fits-all approach or shortcut when it comes to ESG and climate change. External pressures such as ratings systems, disclosure requirements (or the lack thereof) should not rule ESG and climate change risk and opportunity analysis. Completing a robust materiality assessment, getting stakeholder feedback, building a business and risk strategies,

setting targets, communicating with stakeholders and establishing governance over these ongoing tasks should be a top priority. By doing this, a firm can define their climate change journey and that drives disclosures, rather than the other way around. Certainly, ESG and climate change frameworks can be helpful in thinking through the issues, but ultimately, there’s no substitute for substantial homework and understanding of how your firm works.

## About Aon

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

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