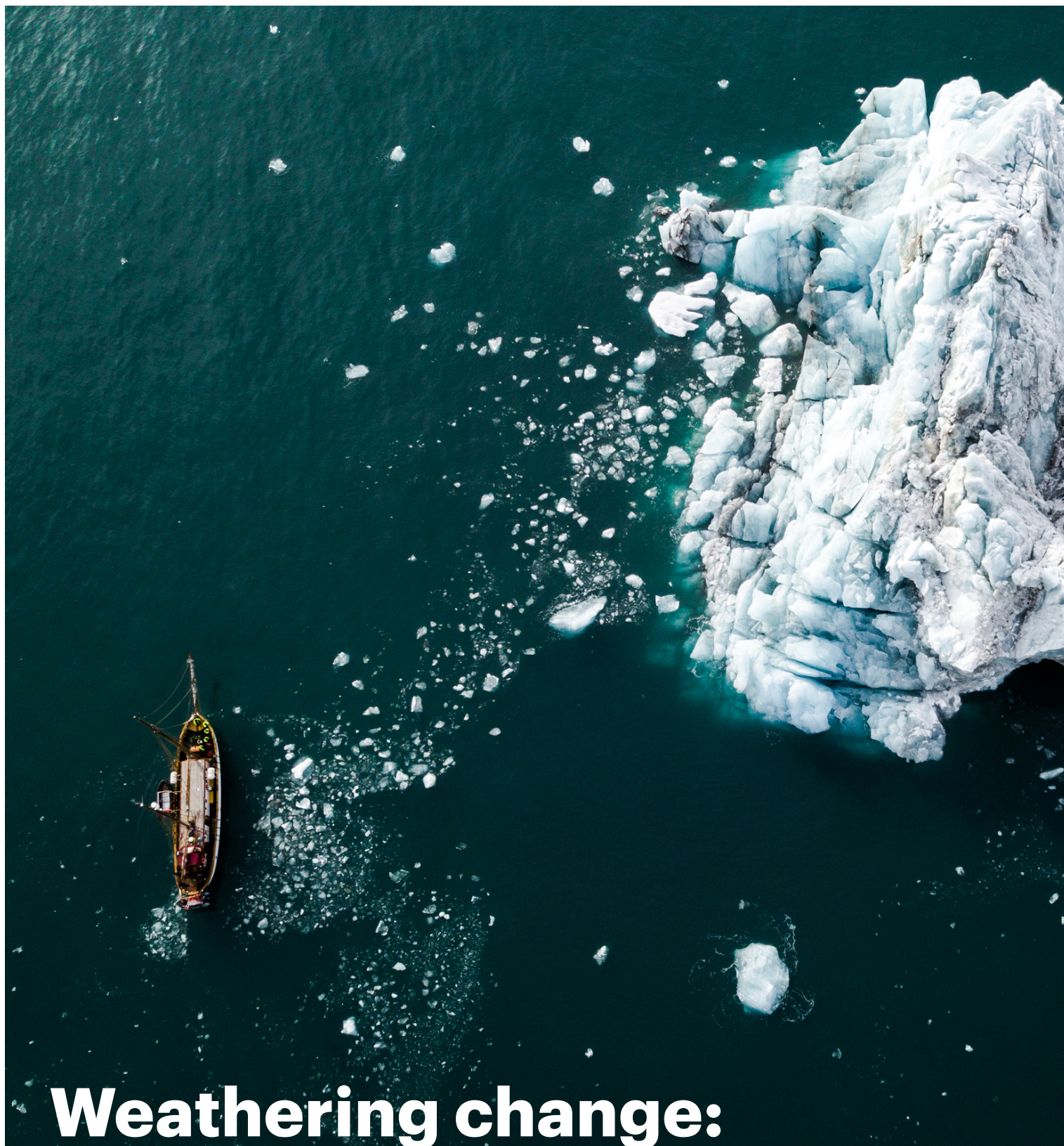




Weathering change: Climate risk and resilience

 **accenture**

Companies across the globe must address environment-related risks, and the urgency has never been greater.

Rising emissions and global warming are disrupting business. Regulators, customers, and investors are increasingly pressuring businesses to be transparent about climate-related risks, taking measurable steps to protect long-term value. Consequently, corporate decision-makers at every level are now explicitly and meaningfully considering how climate-related physical and transition risks can affect their businesses.

Lowering emissions at speed and scale is expected to change the foundations of the global economy, including how we produce things, how we plug in, how we move, and how we eat.

Physical Climate Risks

Between the two broad classes of climate-related risks, physical climate-related risks are often those most easily identified, as their impact on companies are tangible and increasingly evidenced. Extreme weather events are becoming ubiquitous in headlines, and climatologists expect the frequency and severity of climate-related events to increase.

In 2021, 432 disaster events were experienced globally, costing \$252 billion in economic damage (see Figure 1 and Figure 2). This is a 24% increase in the number of catastrophic events and a 64% increase in economic losses when compared to the annual averages for 2001-2020. The global failure to sufficiently curb emissions increases the likelihood of having more high-cost disaster events such as:

More frequent hurricanes, cyclones, tornadoes, and floods. Extreme weather events displace thousands of people and result in substantial costs for individuals, companies, and communities.

Widespread wildfires. The increasing intensity and frequency of fires damage forests, create unbreathable air, and destroy communities.

Increased drought conditions. More frequent water scarcity impacts critical agricultural regions and disrupts food supply chains.

Unprecedented heat waves. Record-high temperatures test countries' electrical grid capacity, endangering essential temperature control for families.

Identifying, mitigating, and adapting to climate-related physical risks is no longer optional for companies. Companies need to re-think continuity and resiliency plans to ensure climate-related physical risks are appropriately considered.

(2021) Top 10 worst natural disasters by financial impact

\$65.0 billion	Hurricane Ida	USA
\$40.0 billion	Flood	Germany
\$30.0 billion	Winter Storm	USA
\$16.5 billion	Flood	China
\$9.0 billion	Drought	USA
\$7.7 billion	Earthquake	Japan
\$5.6 billion	Cold Wave	France
\$5.2 billion	Tornado	USA
\$3.3 billion	Wildfire	USA
\$3.1 billion	Drought	China
\$3.1 billion	Storm	USA
\$3.3 billion	Flood	India

Figure 1. Source: EM-DAT The International Disaster Database.

Total natural disasters in 2021 (by continent) and top 10 affected countries (by number of disasters)

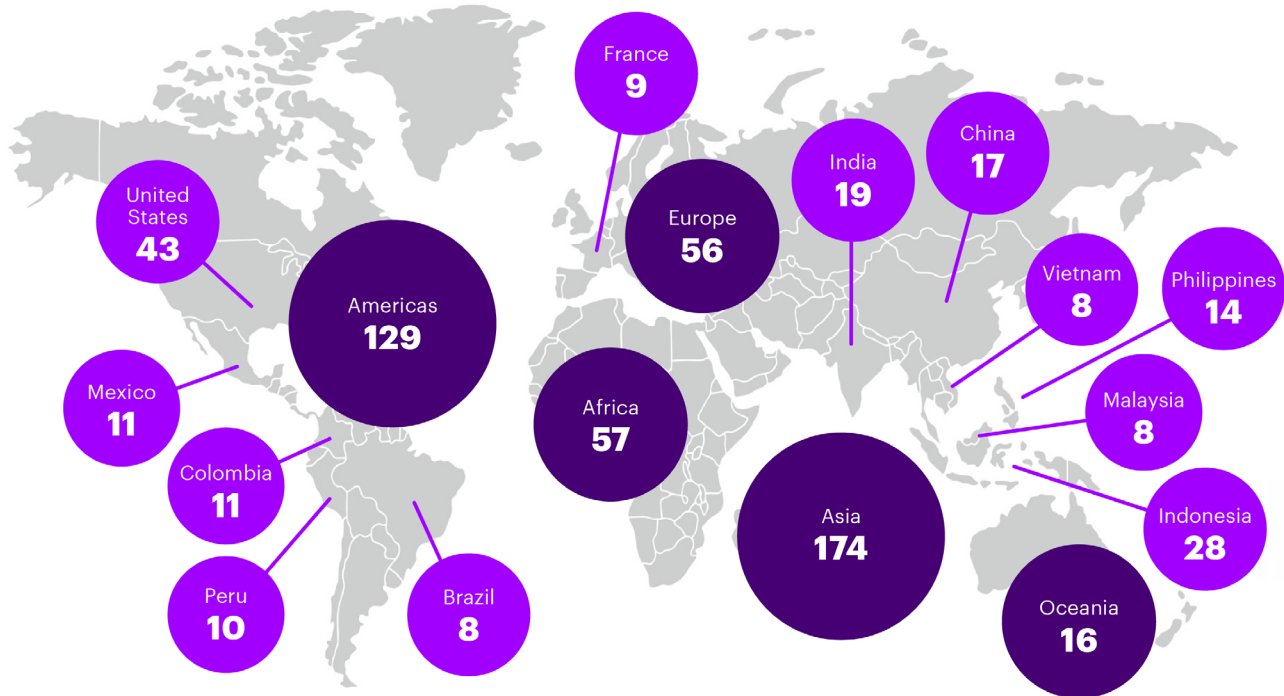


Figure 2. Source: [EM-DAT The International Disaster Database](#).

Transition risks in a net zero economy

Across the globe, climate-related transition risks are also becoming more salient as societies begin the urgent task of shifting to a low-carbon economy. Though mitigating future climate impacts requires disruptive, widespread, and coordinated action toward net zero emissions, firms need to consider how a low carbon energy transition will affect their business models. Transition risks include the following:

Shifts in market forces. The [Intergovernmental Panel on Climate Change \(IPCC\)](#) predicts that the degree of international coordination toward net zero could dramatically impact gross domestic product (GDP). Fragmented policies could result in regional rivalries, and future GDP per capita could fall as low as \$20k, as opposed to a coordinated transition which could result in a 7 fold increase in GDP per capita.

Policy and legal developments. As climate-related policies, regulations, and disclosures are formalized, regulatory scrutiny and enforcement is also increasing. [Grantham Research Institute's Global trends in climate change litigation: 2022 snapshot](#) highlighted that about 25% of global climate-related litigation cases since 1986 were filed between 2020 and 2022.

Both physical and transition risks are likely to have material impacts on companies regardless of what the future holds. The costs of transition risks could be high if we aggressively reduce emissions and minimize physical climate impacts. Conversely, lower transition costs should likely result in unabated emissions, higher global temperatures, and high physical climate financial impacts.

Companies face accelerating climate-related disclosure requirements.

As consensus grows around climate risks being material for businesses, stakeholders are demanding greater transparency and consistency around how companies report on their climate-related goals and progress. Investors recognize the material impact climate risks can have on returns and are seeking a standardized way to compare these risks across companies. As a result, companies need to comply with new regulations, standards, and reporting requirements around climate risks. Many companies, including those with the best intentions of making good on their climate commitments, are struggling to make sense of an ever-shifting disclosure landscape.

On November 3, 2021, the [International Sustainability Standards Board \(ISSB\)](#) announced that they would deliver a comprehensive global baseline of sustainability-related disclosure standards. This consolidation of reporting frameworks is expected to bring much needed focus, transparency, and consistency to sustainability reporting across companies.

TCFD as the leading climate framework

The ISSB is underpinned by the voluntary but widely adopted framework [Taskforce for Climate-Related Financial Disclosures \(TCFD\)](#), created by the Financial Stability Board. Organized around the pillars of governance, strategy, risk management, and metrics and targets, the framework provides guidance on assessing and disclosing climate-related risks and opportunities, resulting in a robust and regulatory-ready climate program (see Figure 3).

This approach helps companies capture a two-way view of climate impacts: (1) disclosures examine how the company impacts climate change (greenhouse gas emissions, energy and water usage, waste generation, etc.) and (2) how climate can financially impact the company (extreme weather events, policy changes, global markets, etc.).

TCFD Framework Guiding Principles

Governance. The organization's governance of climate-related risks and opportunities, including board oversight and management's role in assessment and implementation.

Strategy. The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. Companies will define processes for identification, management, and integration of climate-related risks into overall risk management.



Risk Management. The processes used by the organization to identify, assess, and manage climate-related risks in the short, medium and long term. Based on climate scenarios, companies analyze the impact on strategy and financial planning, in addition to the strategy's resilience.

Metrics and Targets. The metrics and targets used to assess and manage relevant climate-related risks and opportunities. Companies measure Scope 1, 2, and if appropriate, Scope 3 GHG emissions.

Figure 3.

Source: [Task Force on Climate-related Financial Disclosures](#).

Countries with proposed or existing legislation aligned to TCFD

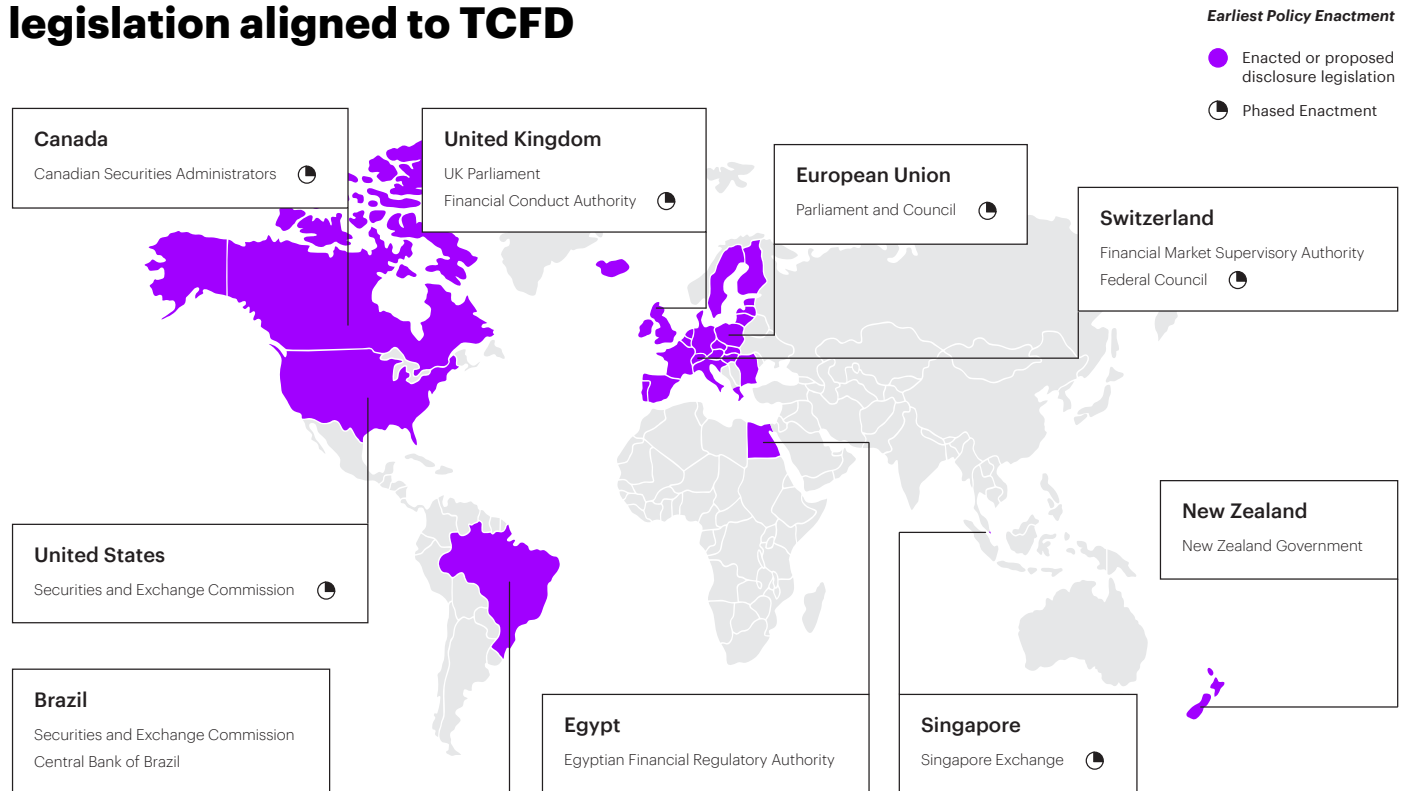


Figure 4. Source: [Task Force on Climate-related Financial Disclosures](#).

Global regulators are aligning to TCFD

Governing authorities are formalizing requirements for climate-related disclosures. In particular, the [U.S. Securities and Exchange Commission \(SEC\)](#) has proposed a rule that would require companies to disclose climate-related risks and opportunities that are material to companies. Similar rules have been proposed by the European Commission and Canadian Securities Administrators. These proposals follow final requirements in Brazil, Egypt, New Zealand, Singapore, Switzerland and the United Kingdom (see Figure 4). Many of these requirements map closely to the TCFD framework and include:

Governance of climate. Businesses should report on the Board's oversight and management of climate-related risks and risk-management processes. This includes climate roles and responsibilities, in addition to reporting and incentive structures.

Plans to achieve climate commitments. Disclosures should include specific plans to comply with the company's advertised environmental claims, such as its net zero or water positive commitments.

Climate risks. The business should evaluate prospective climate-related risks and material impacts on its strategy. It should also address planned measures to mitigate and adapt to those risks.

Financial impacts of climate. Disclosures should include qualitative and quantitative analysis of the financial impacts of severe weather events, natural conditions, and transition risks.

Scope 1 and 2 emissions. Scope 1 emissions are direct greenhouse gas (GHG) emissions that occur from controlled sources owned by the company. Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat or cooling.

Scope 3 emissions. These indirect emissions are also referred to as value chain emissions, often representing most of a company's total GHG emission. These need to be disclosed if material or if the registrant has set a GHG emission reduction target that includes scope 3 emissions.

Data assurance: Reasonable assurance is required for reported data.

Effective climate strategy is at the core of long-term business resilience.

Companies are finding that the preparation of their TCFD-aligned climate disclosures is a complex task. The [TCFD's 2022 Status Report](#) found that among the 226 respondents preparing disclosures, 91% have implemented or are implementing the TCFD recommendations, and they are doing so primarily because they feel these issues are material for the company. However, these companies are facing challenges in the implementation of these frameworks.

For example, although both the TCFD and the ISSB consider climate-related scenario analysis as a crucial component of climate-related risk management and reporting, many companies experience [difficulty conducting climate-related scenario analysis](#), including selecting relevant scenarios and identifying key inputs and parameters. [Developing processes](#) for identifying, assessing, and managing climate-related risks remains equally challenging. Leading companies are using climate risk evaluation to capture new forms of data, but the processes take time and resources, especially when integrating into business decisions and risk management.

Integrating climate into business strategy can lead to greater business resiliency, cost savings, and revenue generating opportunities.

Preparing climate-related disclosures is more than a box checking exercise; it reflects the company's commitment to its climate goals, the mechanisms it has in place to progress towards those goals, and the company's ability to capture its risk exposure and manage it.

As companies build a portfolio of climate risk management frameworks that capture the breadth and complexity of climate-related risks, they can leverage that information across the company in multiple ways, including:

Strategy planning. Climate scenario modeling can demonstrate the return on investment from a net zero strategy under different climate futures.

Supply chain planning. Teams can identify and manage critical risks in supply, logistics, resource, and labor availability.

Business continuity. Scenario analysis helps to mitigate risks, plan for crises, and enable business continuity.

Investment planning. Climate risks are increasingly factored into investment decisions. Scenario analysis can identify exposure to climate risks in investment, insurance, and lending portfolio, as well as for corporate events such as mergers and acquisitions.

Innovation. Physical and transition risks can highlight changing market needs, addressable by new products, services, ways, and places of working.

Financing opportunities. Investors now expect transparency around climate risks and performance. Careful and complete climate risk disclosures and risk mitigation plans will be essential for those seeking new funding opportunities.

The more deeply and broadly companies evaluate climate risk, the more companies can transform through enhanced resource efficiency, cost avoidance, and opportunity value creation.



Accenture helps companies operationalize their climate-related business performance.

Accenture is a leader in sustainability and has a team of professionals dedicated to developing climate risk management programs across industries. We have guided many companies on their individual journey to building a climate risk management program that delivers on performance commitments, appropriately and confidently manage risk, and prepares for regulatory compliance. We work with companies to identify the people, processes, data, and technology capabilities needed to support and sustain a climate program to address present and future needs.

From gaps to opportunities

Given the rapidly changing regulatory landscape, most companies first seek to understand their maturity and climate performance relative to other peers in the industry. Working with you, Accenture can deliver these insights at speed and scale through a gap assessment exercise, industry experts, and the use of our proprietary tool, Climate.MAP (see Figure 5). The insights and learnings from this exercise can help identify disclosure gaps. Through targeted activities, these gaps can be addressed which, in turn, delivers enhanced performance. We also offer guidance and recommendations to help you improve the maturity of your climate program.

Accenture's Climate.MAP platform combines third-party datasets with qualitative analysis and modeling to accelerate strategy engagement around climate risks and opportunities.

Accenture's approach to building a leading climate change program



Figure 5. Source: Accenture

Accenture's climate scenarios better predict business impacts

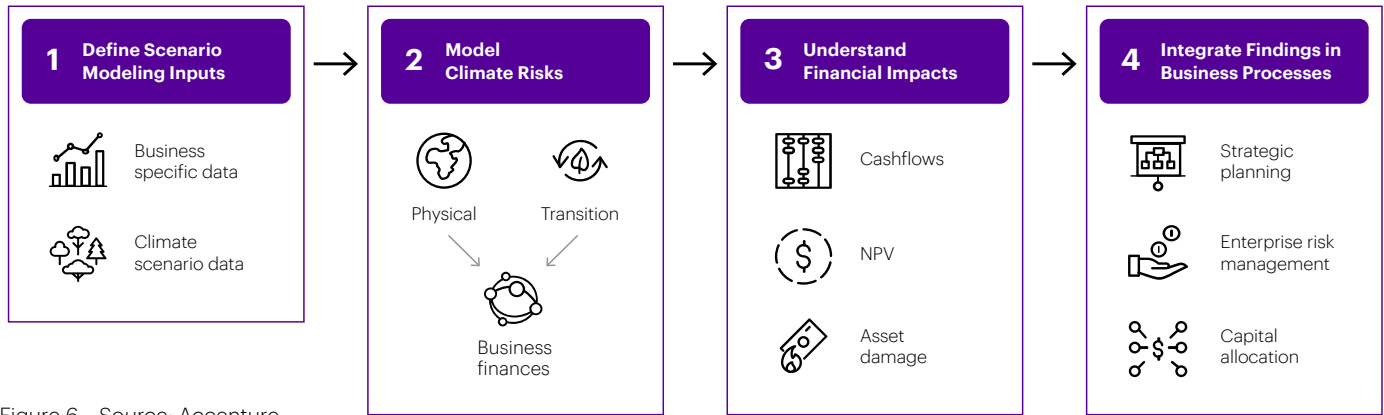


Figure 6. Source: Accenture

Climate scenario analysis

We collaborate with companies to identify and manage climate-related risks, integrating ongoing climate risk management into existing processes. Through our partnerships with leading climate data providers, industry experts, and teams of environmental scientists and macroeconomists, we help you select relevant climate scenarios and identify key data inputs and underlying assumptions.

These climate scenario exercises help companies develop a portfolio of climate risk models that are disclosure-ready and decision-useful (see Figure 6).

Most importantly, they identify key business vulnerabilities and opportunities in the different future climate scenarios.

We work with climate data partners on physical risk modeling to strengthen the resiliency of owned and managed assets. One of our third-party climate data partners has dynamic platforms and advanced analytics which allows clients to understand physical risk across their portfolio and improve business decision making.



As companies progress in their journey, Accenture can help build operational roadmaps to embed climate risk into everyday business risk evaluation and decision making. The insights from ongoing risk evaluation and stakeholder engagement help to build a disclosure strategy and assemble content for external communication. We leverage our technological assets to support companies in building the framework necessary to automate, govern, and track the company's data-driven risk management and performance.

As examples of our work, we helped banking clients design portfolio decarbonization strategies that streamline data collection and incorporate a holistic view of risks vs. returns. We also support them in creating sustainable banking organizations that both better manage climate risk and take advantage of the the transition economy's funding needs.

We have also advised energy clients seeking to “green” their operations by reducing methane leaks, using more renewable power, and investing in biodiversity where they invest and operate. The resulting integrated scenario analysis helps senior executives understand targetted financial and non-financial outcomes, in addition to prioritizing needed decisions and their relevant funding.

Accenture is a trusted ally to companies navigating their business transformations. Ask us how climate will transform your company and how we can help you identify, disclose, and manage climate-related risks. Please contact us to find out more.



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