LISAM

CLIMATE RISK MANAGEMENT GUIDE

How to Climate-Proof Your Company

Climate change poses serious threats to organizations, and virtually no industry is immune — from food and fashion to cloud computing and banking. Yet a survey of 1,200 CFOs by Deloitte found that only 27% said they had done climate assessments, and even fewer (25%) said they have included the management and monitoring of climate risks in their governance processes. And so, climate change also presents an opportunity: **Organizations that make climate risk management a priority will be in a better position to withstand its effects and seize new business opportunities**. The question now is not whether to manage climate risk, but how to do it. In this guide, we'll give you a birds-eye view of climate risk management, types of climate risk, and how to get climate risk management going in your organization.

In This Guide

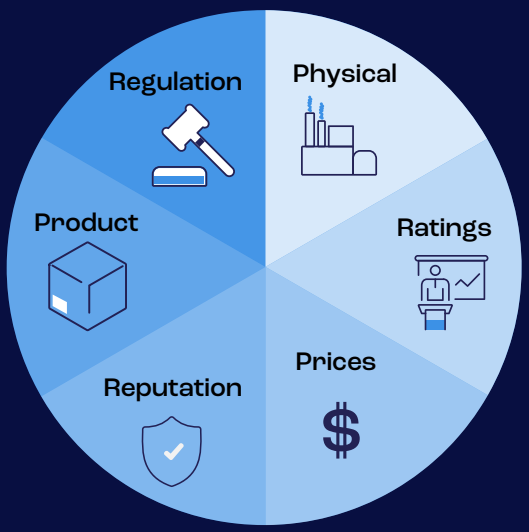
What is Climate Risk Management?

Climate risk management is a formal process to identify potential hazards from climate-related events, trends, forecasts and projections, and to propose controls to avoid or minimize their impact.

Although the term "climate risk management"is fairly new, the concept is not. In fact, many risk managers already practice it every day — from an insurance analyst evaluating flood risk and premiums, to an engineer calculating the effective height of a new sea wall. The same principles you apply to everyday risks also apply to the risks created by greenhouse gases and extreme weather events.

A risk-management approach to climate problems can help your organization incorporate climate information into the decisionmaking and planning process to better prepare for uncertainty.

Not all companies will face the same climate risks. McKinsey has identified 6 different types of risks climate change poses to businesses:



Types of Climate Risks

Physical: damage to infrastructure and assets by extreme weather events like wildfires, floods, or hurricanes
Example: A factory along the coast is damaged by storm surge.

Ratings: higher costs of capital because of climate-related exposure
Example: The additional cost of carbon pricing reduces a company's ability to cover its capital costs and forcesfacilitiesto close.

Prices: increased price volatility of raw materials and other commodities
Example: A drought raisesthe price of water needed for production.

Reputation: the probability of profitability loss following a business's activities or positions that the public considers harmful
Example: Consumers boycott a company that opposes climate action.

Product: core products become unpopular or even unsellable
Example: Alternative cooling technologies displace air-conditioning systems.

Regulation: government action prompted by climate change
Example: A new regulation withdrawsfossil fuelsubsidies.

Benefits of ESG Management

There are many reasons why an organization should take a proactive approach to climate risk management. These include:

- Reduce costs by dealing with business threats before they arise, rather than allowing them to develop into bigger problems
- Demonstrate compliance with current and future climate change regulations
- Improve company reputation among customers, stakeholders, and employees
- Achieve immediate business objectives by incorporating environmental issues into strategic planning
- Identify new business opportunities in shifting markets
- Gain a competitive advantage by operating efficiently

Climate Change Management Strategies

There are three key types of climate change management strategies: climate change mitigation, climate change adaptation, and climate change resilience. Let's take a look at each:

Climate change mitigation focuses on reducing the amount of greenhouse gases in the atmosphere. Reducing vehicle emissions, conserving electricity, switching to renewable energy sources, and capturing landfill gas emissions are all strategies to mitigate climate change impacts.

Climate change adaptation involves adapting to the impacts of climate change like drought, hurricanes, and rising sea levels. Some ways to adapt to climate change include diversifying into climate change resistant crops and finding ways to reuse water in manufacturing.

Climate change resilience is closely related to adaptation, but it's not the same thing. Resilience emphasizes strengthening a system to withstand climate-related effects. For example, building structures that are designed to withstand hurricanes or hardening the electric grid to deal with severe floods. Organizations that develop climate resilience are in a better position to bounce back quickly from the effects of a natural disaster or other climate-related event.

Climate Risk Management Examples

To understand what climate risk management is, it can be helpful to study some real-world examples of climate risk management in action.

1. Utilities: PG&E
Natural disasters like wildfires and hurricanes are increasing, threatening the security of the electric grid. In 2019, PG&E paid $25.5 billion to resolve liabilities from wildfires caused by its power lines. Today, the utility is investing in wildfire mitigation measures including hardening the electric system, clearing vegetation that poses a wildfire risk, and real-time monitoring to allow for rapid emergency response. PG&E's plan also includes preventive power shutoff events in response to severe weather or high wildfire risk. In addition, the utility has secured heavy-lift helicopters to support its emergency response during wildfire events.

2. Oil & gas: Shell Oil and gas
Shell Oil and gas companies face significant risks from the low-carbon transition. Shell has committed to achieving net zero by 2050. Among other things, the energy giant is investing in renewables like solar and wind generation, expanding into electric car charging, and developing advanced biofuels. By diversifying the portfolio of products it sells, Shell is reducing its dependence on fossil fuels like oil, gas, and coal and strengthening its position in the market.

3. Banks: Deutsche Bank
Investors are increasingly relying on climate risk indicators to decide which stocks to add to their portfolios. Deutsche Bank was one of the first banks to recognize the need for climate risk management in its portfolios. By identifying the locations of corporate production and retail sites around the world and their vulnerability to climate change hazards — like sea level rise, droughts, floods and tropical storms — Deutsche bank is working to make its investors' portfolios more resilient against the threats of climate change. Now that we've seen some examples of climate risk management, let's look at how you can started incorporating climate risk management into your organization's strategy.

How Can I Start Incorporating Climate Risk Management at my Corporation

Based on the experiences of companies that are already incorporating climate risk management, C2ES has identified a four-step process for managing climate risk:

1. Build awareness. Reach out to senior managers, facility managers, supply chain planners, and employees. Make sure everyone understands the risks climate change poses to your organization and address common misconceptions.

2. Assess vulnerabilities. Your current risk assessment activities can help you assess future climate risks. The depth of your risk assessment will depend on your resources and the severity of the risks. Here are a few considerations: a top-level screening of potential climate risks across the company, with more in-depth assessments of high-risk facilities and operations, forward-looking assumptions about changes in the risk profile of extreme weather and climate change, information about changes in related factors (land use, population growth, competition for resources, etc.) that could magnify your risks

3. Manage risks and pursue opportunities. For example, an agricultural company might look at ways to use reclaimed water to make its operations less vulnerable to a drought, or to diversify into drought-resistant crops.

4. Assess, review, and report. Look for clear, measurable targets that can be incorporated into your mainstream assessment and reporting. Here are some of the most common metrics used by companies who voluntarily report on climate risk: Total CapEx in low carbon investment, Operational efficiency measures (energy usage, water, etc.), Percentage of production in water-stressed areas

Climate Risk Management Tools : Screening

Quantifying climate-related risks poses a unique challenge. To that end, numerous free climate risk screening tools are available to help identify climate trends, vulnerabilities, climate-related risks, and possible adaptation options.

Climate & Disaster Risk Screening Tools
CRiSTAL
Climate Change Explorer (weADAPT)
ThinkHazard!
Adaptation Wizard
CoastAdapt
SERVIR

Climate Risk Management Tools : Software

Using risk management software to plan and manage your efforts can help you be more effective. Not only will software store all of your risk and environmental data in one place, it will also support collaboration across your organization, improve accountability and transparency, and allow you to report on your performance to key stakeholders. A few vital aspects of climate risk management include carbon management, energy management, environmental data, risk assessments, and mitigation action plans. With Lisam's unified EHS risk management software, you can plan, measure, track, and report on your results all in one place. Here are some of the ways you can use Lisam's ComplyStation solution:

Capture emissions and energy usage data at the source, calculate GHG emissions and trends, and manage carbon reduction plans

Capture and track water usage, manage water reduction plans, and monitor action plans with periodic assessments

Conduct risk assessments to evaluate climate change impacts, and use the risk registry to track ongoing climate risks at a glance

Benchmark your performance to ensure ongoing improvement

Next Steps

It takes time and effort to plan, develop, and implement a climate risk management strategy. By following the steps in this guide and making sure you have the right tools in place, you'll be well ahead of the game.

To get the ball rolling, request a free demo of Lisam's risk management software today at www.lisam.com/request-a-demo or visit our website for more resources at www.lisam.com

Make the right choice for
EHS & Climate Risk Management with

COMPLYSTATION

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