



What climate-related risks is your organization prepared for?

Climate-related risks and opportunities have grown in prominence over the last few years in response to investor demands, regulatory developments and increasingly extreme weather events. According to *Does your nonfinancial reporting tell your value creation story?*,¹ 47% of investors would reconsider investment based on climate risks. To respond, businesses should be better informed on potential climate-related financial risks, and how they can better manage and communicate their climate-related risks.

While the topic of climate-related risks is becoming more and more prominent, many organizations do not have a clear understanding of the range and magnitude of potential financial impacts resulting from climate change in the short and long term. This is because climate risks are inherently more complex and long-term in nature than most traditional business risks. This can contribute to a lack of clear understanding and measurement capabilities to assess the potential impacts on an organization's operations and performance.

This is a message reflected in the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, which urge organizations to take account of climate-related issues and disclose the financial impact that climate risks have, or could have, on their business.

To solicit decision-useful, forward-looking information on financial impacts of climate-related risks and opportunities, organizations should be conducting a climate-related scenario analysis.

EY Climate Change and Sustainability Service (CCaSS) teams can support organizations as they develop and implement their climate risk strategies, including their scenario analysis.



**The better the question.
The better the answer.
The better the world works.**

¹ "Does your nonfinancial reporting tell your value creation story?," EYG, www.ey.com/en_gl/assurance/does-nonfinancial-reporting-tell-value-creation-story, accessed November 2018.

What is scenario analysis and modeling?

A scenario analysis approach allows organizations to explore some of the impacts of different climate futures on sectors of the economy, the scale of change and (model-dependent) the timing of change. Climate scenarios do not predict the future: rather, their purpose is to offer alternative views of future climate trajectories that:

- ▶ Deal with outcomes that are highly uncertain, medium to long term, with the potential for complex and substantial disruptive effects
- ▶ Enhance organizations' strategic conversations about the future by considering scenarios where climate-related impacts can be significant
- ▶ Assist organizations to frame and assess the potential range of plausible business, strategic, and financial impacts from climate change and policy
- ▶ Assist investors in understanding the robustness of organizations' strategies and financial plans, and in comparing risks and opportunities

Scenario analysis involves:

- ▶ Understanding how organizations should identify their climate change risks and opportunities, including both transition risk and physical risk
- ▶ Identifying and defining a range of scenarios, including a 2°C scenario that provides a reasonable diversity of potential future climate states
- ▶ Evaluating the potential resilience of their strategic plans to the range of scenarios
- ▶ Identifying options for increasing the organization's strategic and business resilience to plausible climate-related risks and opportunities through adjustments to strategic and financial plans

Key considerations

It is important to remember that there is no "one solution fits all," and organizations will have to look at their own circumstances and value chain.

Applying a scenario analysis to better understand climate change is relatively recent, and there is much to be learned and understood. In addition, as more organizations start applying climate risk-related analyses, particularly in response to the TCFD recommendations, an increasing number of challenges are arising, such as:

- ▶ Which scenarios an organization should explore
- ▶ How climate change should be addressed from a business strategy perspective
- ▶ The physical, economic and regulatory connection between climate change and business and supply chain activities
- ▶ What consistent methods and assumptions should be used to support the scenario analysis
- ▶ Apply rigor and sophistication in the use of data sets inputs

Over time, as more relevant data becomes available, organizations will likely be able to improve the key inputs, assumptions and analytical methods. But this shouldn't stop organizations from starting now to understand the risks and opportunities associated with climate change, and applying scenario analysis and modeling.

Organizations should remember that this is a journey and not all scenario analyses and risks assessments should have a concrete quantitative outcome; they can be qualitative as a start.

Where to start?

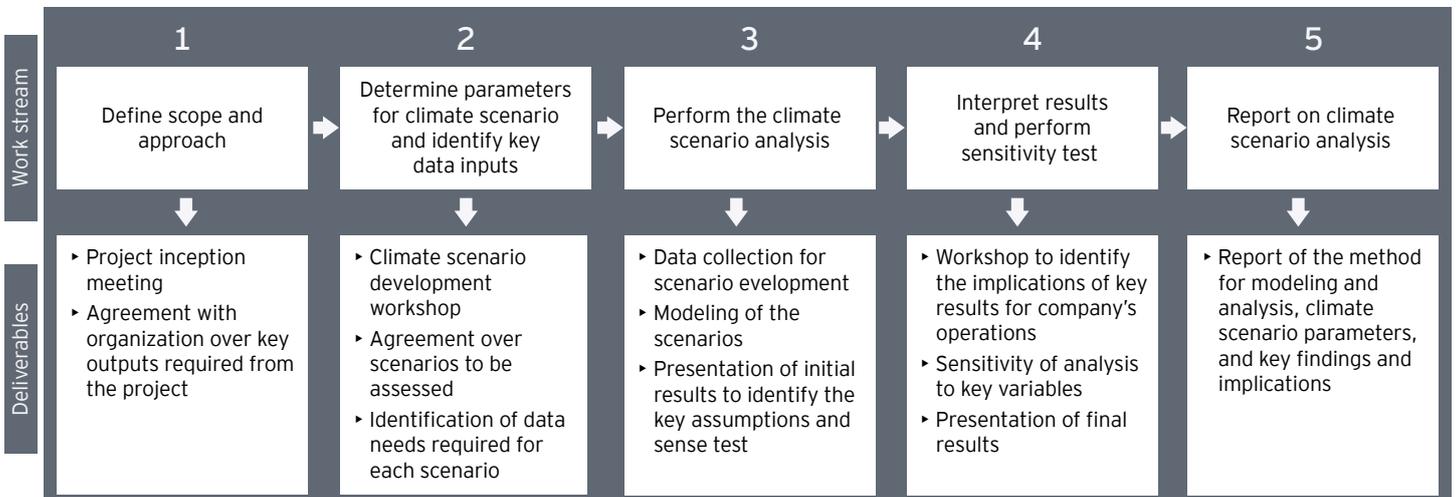
Organizations that seek to understand their climate risks exposure should consider the following:

Questions to ask	Concepts to understand	Misconceptions to forget
<ul style="list-style-type: none"> ▶ Are some of my products or activities at risk regarding the 2°C road map? How can I turn this into a competitive advantage? ▶ What are the biggest emission sources in my value chain? ▶ What type of climate risks will my business be exposed to in the long run (i.e., sectors, geography, assets, structure and dynamics of the organization's supply and demand markets may impact)? ▶ Are the international climate policies and national commitments integrated into my business strategy, supply chain or sourcing strategy? 	<ul style="list-style-type: none"> ▶ An organization may want to familiarize itself with relevant scenarios developed by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC), given they are the most recognized by scientists and policy-makers to assess future vulnerability to climate change. ▶ An organization may need to consider the options and categories related to scenario analysis: parameters used (e.g., discount rate, gross domestic product (GDP), other macroeconomic variables and demographic variable). ▶ An organization should consider available assumptions (e.g., related to policy changes, technology development and deployment, energy mix, price of key commodities or inputs, geographical tailoring of transitional and physical impacts, and timing of potential impacts). 	<ul style="list-style-type: none"> ▶ The scenario analysis has to be perfect and finalized; organizations are embarking on a multiyear journey. Indeed, data does not have to be perfect as long as assumptions and uncertainties are disclosed and understood. ▶ Organizations have to start from scratch; there are a number of scenarios available for organizations to leverage as a starting point.

How EY teams can help

EY CCaSS teams can support organizations as they develop and implement their climate risk strategies, including with their scenario analysis.

The five-step approach to perform a climate scenario analysis is as follows:



What potential benefits can you expect?

Examining climate scenarios can help organizations to assess potential climate-related impacts on their business, value chain and supply chain, including:

- ▶ Supporting internal engagement within the organization with a view to achieving consensus around your organization's position on climate change and climate risk
- ▶ Understanding the key sectors in your organization's value chain and supply chain that are likely to be impacted under different climate scenarios
- ▶ Supporting the integration of climate scenario outcomes into decision-making at a strategic, sectoral and client level
- ▶ Providing a platform for external communication and engagement with investors

Why EY teams

EY multidisciplinary teams combine experience in Assurance, Tax, Transactions and Advisory services with climate change and sustainability knowledge across industries. They have the experience of working on climate and energy issues with governments, industrial corporations and investors.

EY professionals are involved in industry groups leading the way on climate disclosures and green finance, such as TCFD and the Climate Bond Initiative, where EY CCaSS teams are considered as highly-skilled in this area. This involvement means that EY professionals have an understanding about the expectations of investors, and the process organizations have to go through to integrate climate change strategy into their business.

EY teams' knowledge and a broad range of skills, such as data analytics and project financing, means that services can be tailored and teams created to meet your requirements to help you address your organization's climate change challenges.

Certain services and tools may be restricted for EY audit clients and their affiliates to comply with applicable independence standards. Please reach out to your EY contact for further information.

EY contacts

Asia-Pacific

Matthew Bell
matthew.bell@au.ey.com
+61 2 9248 4216

Philippines

Clairma T. Mangangey
clairma.t.mangangey@ph.ey.com
+63 2 894 8272

Benjamin N. Villacorte
benjamin.n.villacorte@ph.ey.com
+63 2 878 7969

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation is available via [ey.com/privacy](https://www.ey.com/privacy). For more information about our organization, please visit [ey.com](https://www.ey.com).

© 2019 EYGM Limited.
All Rights Reserved.

EYG no. 003570-19GbI

BMC Agency
GA 1011400

ED None



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

[ey.com](https://www.ey.com)