

WHAT IS SCENARIO ANALYSIS?

A strategic planning tool to:

- ▼ Enhance **critical strategic thinking** by challenging 'business-as-usual' assumptions
- ▼ Help organizations understand how they could perform in **different future scenarios**
- ▼ Improve companies **understanding of future risks** and develop suitable resilience strategies aligned with a 1.5°C world
- ▼ Offer **insight into opportunities** including energy efficiency, changes in energy sources and/or technologies, new products and services, new markets or assets, and increased resilience.



For stakeholders:

- ▼ Can assist to understand the robustness of an organization's strategies and financial planning
- ▼ Aid in the comparability of climate-related risks and opportunities across organizations.



Ultimate goal

Enable decision makers to evaluate potential outcomes based on a variety of assumptions, and to understand how adjusting one or more of these variables impacts the organization's business

KICKSTART PROCESS

KEY CHARACTERISTICS

- ▼ **Plausible:** events explored in the scenario should be possible and the narrative credible
- ▼ **Distinctive:** each scenario should focus on a different combination of the key factors
- ▼ **Consistent:** should have a strong internal logic
- ▼ **Relevant:** should contribute specific insights into the future that relate to strategic and/or financial implications of climate related risks and opportunities
- ▼ **Challenging:** should challenge conventional wisdom and simplistic

Just starting?

Conduct a **qualitative** scenario analysis

- ▼ Relies on descriptive, written narratives
- ▼ Explores relationships and trends for which little or no numerical data is available
- ▼ Helps management explore the potential range of climate change implications

More experienced?

Conduct a **quantitative** scenario analysis

- ▼ Relies on numerical data and models
- ▼ Assesses measurable trends and relationships using models and other analytical techniques
- ▼ Illustrates potential pathways and outcomes

Iterative process - companies are encouraged to revisit their analysis regularly by widening the set of assumptions, and exploring additional scenarios when relevant.

Applying Scenario Analysis to Climate Related Risks and Opportunities - TCFD Recommendations

TCFD Strategy recommendation C.:

Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios.

1

Ensure governance is in place: integrate scenario analysis into **strategic planning and/or enterprise risk management processes**. Assign oversight to relevant board committees/sub-committees. Identify which internal (and external) stakeholders to involve and how.

2

Assess materiality of climate-related risks

Market and Technology

Supply and demand shifts related to innovations in support of a low-carbon economy.

Reputation

Growing expectations for responsible conduct from stakeholders, including investors, lenders and consumers.

Policy and Legal

An evolving patchwork of requirements at international, national and state level.

Physical risks

Physical changes and extreme weather events related to climate changes.

What are the current and anticipated organizational exposures to climate-related risks and opportunities? Do these have the potential to be material in the future? Are organizational stakeholders concerned?

3

Identify and define range of scenarios

Scenarios inclusive of a range of transition and physical risks relevant to the organization.

What scenarios (and narratives) are appropriate, given the exposures? Consider input **parameters, assumptions, and analytical choices**. What reference scenario(s) should be used? Key parameters and assumptions help organizations identify and understand the material drivers for their business, key parameters and assumptions, and then build these into their scenarios.

- ▶ **Parameters used:** macro trends; GDP, macro-economic variables, demographic and societal changes.
- ▶ **Assumptions made:** policy changes, technological developments, energy mix, pricing of key commodities, and how these are reflected by micro-economic factors.
- ▶ **Analytical choices:** choice of scenarios (publicly available scenarios or organizational specific scenarios), qualitative vs. quantitative analysis, time horizons, supporting data and models.

4

Evaluate business impacts

Impact on:

- ▶ Inputs costs
- ▶ Operating costs
- ▶ Revenues
- ▶ Supply chain
- ▶ Business interruption
- ▶ Timing

Evaluate the potential effects on the organization's strategic and financial position under each of the defined scenarios, identify key sensitivities.

5

Identify potential responses

Responses might include

- ▶ Changes to business model
- ▶ Changes to portfolio mix
- ▶ Investments in capabilities and technologies

Use the results to identify applicable, realistic decisions to manage the identified risks and opportunities. What adjustments to strategic/ financial plans would be needed?

6

Document and disclose: Document the process; communicate to relevant parties; be prepared to disclose key inputs, assumptions, analytical methods, outputs, and potential management responses.



CDP Climate Change questionnaire 2023

C3.2 on conducting scenario analysis
C3.2a on providing scenario analysis details
C3.2b on focal questions and results

Best practices: conduct **qualitative** and **quantitative** scenario analysis, explore both **transition** (<1.5°C) and **physical** scenarios (>2°C) + sector-specific recommendations on the scenarios to use