Instructions

CLIMATE RISK
CARD GAME

Context

The impacts of the climate crisis on global markets are complex and unpredictable. But the scale of these future risks will ultimately be determined by the actions taken today by governments, companies and individuals – you!

The disruption caused by the transition to a low-carbon economy, in addition to physical impacts caused by the changing climate, will lead to a variety of risks and opportunities. Companies must identify, manage and disclose these potential positive and negative impacts by incorporating climate change into existing risk management processes. This will enable companies to respond quickly and appropriately to ensure their business is resilient to future climate shocks.

This game is designed to help players understand the range of potential impacts associated with climate change, and how to integrate climate-related risks into business decision-making processes.

Objective:
Players should work together to identify and address climate-related risks that might impact their business and to build climate resilience.

How you succeed:
By the end of the game, the company will be given a resilience score. The higher the score, the more resilient the company is to future climate shocks.

Additional equipment needed:
Pen, Mobile phone

Number of players:
4-10 people

Suggested time:
30 minutes to play the game, and 10 minutes for reflection.

This game can also be played in multiple groups. To play in multiple groups, please ensure each group has all the cards and has chosen a facilitator to manage the game. Facilitators should read the instructions, keep time, and lead group reflection.

How to play:

1. Choose a "Chair" to facilitate group discussions and ensure decisions are made in a timely manner. This "Chair" will have ultimate decision-making power if consensus cannot be reached.
2. Choose a "Resilience Manager" who will be in charge of awarding "resilience" points. This person should keep track of the company's resilience score.
3. Select a "Company" card and read out the company's profile.
4. Based on the profile of the company, the group must prioritise six climate-related risks that are likely to have the most significant impact on the company. Write down each risk you have chosen.

Risk 1	Risk 2	Risk 3	Risk 4	Risk 5	Risk 6

5. Once you have prioritised the risks, the group must then decide on the actions that are needed to manage or mitigate these risks. Choose six actions and write them below.

Action 1	Action 2	Action 3	Action 4	Action 5	Action 6

6. Now you have made your decisions the company can proceed. One by one, turn over six random event cards. Each event card includes a resilience score. The Resilience Manager should make a note of every resilience point scored in the box below.

Resilience score

7. Use the resilience scale to establish how resilient your company is to future impacts from climate change.

Note: Use the QR codes on the event cards to learn about recent examples.

Resilience scale

Not resilient
0–6

Based on the actions you selected, the company was not able to respond adequately to the climate-related risk events as they happened. Therefore the company was not resilient to the climate events and continues to be at high-risk. This leads to financial losses, sudden adjustments in asset values, and an increase in the cost of capital.

Partially resilient
7–12

The company was able to respond to some of the climate-related risk events based on the actions you selected. However the company is still vulnerable to future climate risks and is therefore partially resilient. Without further action, the company will face increased operating costs and asset impairments which could lead to significant financial losses.

Reasonably resilient
13–18

Most of your actions successfully responded to the climate-related risk events that your company faced. Whilst there is still room for improvement, your company is reasonably resilient to physical and / or transition risks. The company must still consider the range of additional events that could occur, and consider whether the company would be resilient with different events.

Highly resilient
19–24

The actions your company took were comprehensive and robust, enabling you to successfully respond to most or all of the climate-related risk events. As a result, the company is now highly resilient to both physical and transition risks in the future. However, the possible range of additional climate-related risks must still be monitored and managed to maintain resilience.

8. Once you have your resilience score, use the questions below to reflect on the outcomes of the game:

- What influenced you when prioritising the risks?
- Would you have received this score with different event cards?
- How can you apply the experience from playing this game to your own organisation?
- If playing with multiple teams, how did your decisions and outcome compare to the other team?

Company profiles

ElectriCo

A multinational energy company that supplies electricity and gas directly to consumers and businesses. ElectriCo has global subsidiaries and generates electricity from coal, nuclear, and thermal plants, and has recently set up an offshore wind farm.

AgriCo

A multinational agricultural company that processes, trades, and distributes food products directly to consumers and businesses for use in industrial products. AgriCo purchases products from third-party entities around the world.

AutoCo

A multinational automobile company that designs, builds, and sells passenger vehicles for consumer retail and directly to fleet customers. AutoCo has manufacturing and assembly plants around the world, including significant operations in Japan.

ChemicalCo

A multinational chemicals company that manufactures a number of products to supply a wide range of industries, including plastics for packaging and pesticides for agriculture. ChemicalCo has a number of production sites globally.

MiningCo

A multinational mining and metals company that specialises in copper, iron ore and aluminium. MiningCo owns a number of mines, smelters and refineries in 24 countries, including South Africa, Australia, and USA.

RetailCo

A multinational retail company that operates superstores in 20 countries. The company sells a wide range of products including packaged food and clothing. RetailCo's global supply chain is highly complex.

Risk cards

A

Introduction of an international carbon price leading to increased operating costs.

B

Increasing expectation from regulators and investors for transparency through enhanced reporting obligations.

C

Growing need for new technologies to improve energy efficiency and lower carbon emissions which leads to write-offs of existing assets.

D

Global shift in market demand due to changes in consumer preferences towards sustainable and lower carbon products.

E

Damage to the company's reputation due to stigmatisation of sector from negative stakeholder feedback.

F

Rising sea levels inundating operations, especially those located in coastal regions.

G

Lack of internal knowledge and skills to address climate-related risks and opportunities.

H

Decreasing water levels in major shipping channels leading to disruptions to the supply chain and distribution routes.

I

More frequent and severe storms and floods, damaging facilities and infrastructure.

Risk cards

J

Changes in precipitation patterns lead to baseline water stress in critical regions.

K

New regulations addressing climate change, increasing compliance requirements.

L

Public displeasure over GHG emissions, resulting in legal challenges.

Action cards

1

Invest in R&D to develop low-carbon technologies and products.

2

Join voluntary industry initiatives and coalitions to improve practices and establish industry standards.

3

Appoint a climate specialist to the board to ensure climate change is considered in strategic planning and financial decision-making processes.

4

Invest in monitoring tools to observe changing customer preferences across the market.

5

Improve the efficiency of operations, particularly in relation to energy and water consumption.

6

Re-evaluate investment decisions, assumptions, and business strategy using an internal carbon price.

7

Fund academic research to improve modelling of impacts from physical climate events.

8

Up-skill the current risk management and finance teams to be able to incorporate climate-risk considerations across the organisation.

9

Develop a climate strategy that includes a roadmap for reducing operational GHG emissions.

10

Engage with NGOs to discuss and receive advice on key climate-related issues.

11

Upgrade existing physical assets, which may include introducing new technologies that prevent damage from physical climate-related risks.

12

Commit to a net-zero emissions target that is science-based, and in line with a global temperature increase of 1.5°C.

13

Register as a supporter of the TCFD and integrate their recommendations into the company's mainstream annual report.

14

Create business continuity plans to ensure alternative suppliers are in place in the event of a major disruption, e.g. severe storms in South East Asia.

15

Conduct scenario analysis using multiple warming scenarios and time horizons to assess the potential impacts of climate change.

16

Recruit an expert to monitor and coordinate the company's response to upcoming climate regulation.

Event cards

The UNFCCC Conference of the Parties (COP) agrees to a 1.5°C commitment, and countries announce an expectation for all companies to have an emissions reduction targets.

Award a resilience point for each action taken:

9 12 15 16

Read how this already impacts companies:

Revised agreements amongst trade blocks increases the price of goods with a high carbon footprint.

Award a resilience point for each action taken:

1 2 6

Read how this already impacts companies:

Government subsidies are introduced for companies that have “green” portfolios and can demonstrate financial investment in low-carbon solutions.

Award a resilience point for each action taken:

1 2 6 16

Read how this already impacts companies:

Customer demand for environmentally-friendly alternative products increases by 40%.

Award a resilience point for each action taken:

1 4

Read how this already impacts companies:

A large-scale boycott initiated by an NGO causes disruption to your operations and you receive negative media attention.

Award a resilience point for each action taken:

2 10 13

Read how this already impacts companies:

Water availability becomes scarce due to temperature rise and increased demand. As a result, companies that are more efficient with water usage avoid the impact of additional rising costs.

Award a resilience point for each action taken:

5 7

Read how this already impacts companies:

A lawsuit is raised by shareholders against the company, as they don’t think the company is doing enough to reduce their GHG emissions.

Award a resilience point for each action taken:

5 8 9 12

Read how this already impacts companies:

Key operational sites are no longer fit for purpose due to increasingly severe and frequent flood events.

Award a resilience point for each action taken:

7 11 14 15

Read how this already impacts companies:

Corporate sustainability initiatives are gaining momentum amongst investors, who are responding positively to companies that are publicly committed to them.

Award a resilience point for each action taken:

2 10 12 13

Read how this already impacts companies:

Event cards

A start-up disrupts the market with innovative low-carbon solutions, capturing the interest of investors and consumers.

Award a resilience point for each action taken:

1 4

Read how this already impacts companies:

Following a recent shareholder resolution that passed with a majority, you are now required to add a climate specialist to the Board.

Award a resilience point for each action taken:

3

Read how this already impacts companies:

The TCFD recommendations become mandatory and it is now a legal requirement for companies to incorporate and report their climate-related risks and opportunities.

Award a resilience point for each action taken:

3 8 13 16

Read how this already impacts companies:

Seasonal changes to precipitation and heat waves result in a drop in water levels in a major shipping channel, disrupting the supply and distribution routes.

Award a resilience point for each action taken:

7 14 15

Read how this already impacts companies:

A global carbon price is adopted, and the company prepares for participation in the carbon market.

Award a resilience point for each action taken:

6 9 16

Read how this already impacts companies: