

Industries



Consumer goods

For example, apparel, appliance manufacturing, building products and furnishings.



Extractives and mineral processing

For example, coal / oil / gas extraction and production, metals and mining, construction materials.



Financials

For example, asset management, banking, insurance.



Food and beverage

For example, agricultural products, food retailers and distributors, meat, poultry and dairy.





Industries



Health care

For example, pharmaceuticals, medical equipment, health care delivery.



Infrastructure

For example, power and gas utilities and distributors, engineering and construction, waste management.



Renewable resources and alternative energy

For example, biofuels, solar / wind technology and project developers, fuel cells / industrial batteries.



Resource transformation

For example, aerospace and defence, chemicals / packaging, electrical and electronic equipment.





Industries



Services

For example, education, leisure / hotels, professional services.



Technology & communications

For example, technology hardware, software / IT, telecommunications



Transportation

For example, aviation, automotive, marine.





Policy and legal

- · Increased pricing of greenhouse gas emissions trading credits.
- · Enhanced emissions-reporting obligations.
- · Mandates on and regulation of existing products and services.
- · Exposure to litigation.

- Increased operating costs (for example, higher compliance costs, increased insurance premiums).
- Write-offs, asset impairment and early retirement of existing assets due to policy changes.
- Increased costs and / or reduced demand for products and services resulting from fines and judgements.



Technological

- Substitution of existing products and services with lower emissions options.
- · Unsuccessful investment in new technologies.
- · Costs to transition to lower emissions technology.

- · Write-offs and early retirement of existing assets.
- · Reduced demand for products and services.
- Research and development expenditures in new and alternative technologies.
- · Capital investments in technology development.
- Costs to adopt / deploy new practices and processes.



Market

- · Changing customer behaviour.
- · Uncertainty in market signals.
- · Increased cost of raw materials.

- Reduced demand for goods and services due to shift in consumer preferences.
- Increased production costs due to changing input prices (for example, energy, water) and output requirements (for example, waste treatment).
- · Abrupt and unexpected shifts in energy costs.
- Change in revenue mix and sources, resulting in decreased revenues.
- Re-pricing of assets (for example, fossil fuel reserves, land valuations, securities valuations).



Reputational

- · Shifts in consumer preferences.
- · Stigmatisation of sector.
- Increased stakeholder concern.
- · Negative stakeholder feedback.

- Reduced revenue from decreased demand for goods / services.
- Reduced revenue from decreased production capacity (for example, delayed planning approvals, supply chain interruptions).
- Reduced revenue from negative impacts on workforce management and planning (for example, employee attraction and retention).
- Reduction in capital availability.



Physical risks

Acute and chronic

- Increased severity of extreme weather events such as cyclones and floods.
- Changes in precipitation patterns and extreme variability in weather patterns.
- · Rising mean temperatures.
- · Rising sea levels.

- Reduced revenue from decreased production capacity (for example, transport difficulties, supply chain interruptions).
- Reduced revenue and higher costs from negative impacts on workforce (for example, health, safety, absenteeism).
- Write-offs and early retirement of existing assets (for example, damage to property and assets in 'high-risk' locations).
- Increased operating costs (for example, inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants).
- · Increased capital costs (for example, damage to facilities).
- · Reduced revenues from lower sales / output.
- Increased insurance premiums and potential for reduced availability of insurance on assets in 'high-risk' locations.



Opportunities

Resource efficiency

- · Use of more-efficient modes of transport.
- Use of more-efficient production and distribution processes.
- · Use of recycling.
- · Move to more-efficient buildings.
- · Reduced water usage and consumption.

- Reduced operating costs (for example, through efficiency gains and cost reductions).
- · Increased production capacity, resulting in increased revenues.
- Increased value of fixed assets (for example, highly rated energy-efficient buildings).
- Benefits to workforce management and planning (for example, improved health and safety, employee satisfaction) resulting in lower costs.



Opportunities

Energy source

- · Use of lower-emission sources of energy.
- · Use of supportive policy incentives.
- · Use of new technologies.
- · Participation in carbon market.
- · Shift toward decentralised energy generation.

- Reduced operational costs (for example, through use of lowest-cost abatement).
- · Reduced exposure to future fossil fuel price increases.
- Reduced exposure to greenhouse gas emissions and therefore less sensitivity to changes in cost of carbon.
- · Returns on investment in low-emission technology.
- Increased capital availability (for example, as more investors favour lower-emissions producers).
- Reputational benefits resulting in increased demand for goods / services.



Opportunities

Products and services

- Development and / or expansion of low emission goods and services.
- Development of climate adaptation and insurance risk solutions.
- Development of new products or services through research and development and innovation.
- · Ability to diversify business activities.
- Shift in consumer preferences.

- Increased revenue through demand for lower-emissions products and services.
- Increased revenue through new solutions to adaptation needs (for example, insurance risk transfer products and services).
- Better competitive positioning to reflect shifting consumer preferences, resulting in increased revenues.



OpportunitiesMarkets

- Access to new markets.
- · Use of public-sector incentives.
- · Access to new assets and locations needing insurance coverage.

- Increased revenues through access to new and emerging markets (for example, partnerships with governments, development banks).
- Increased diversification of financial assets (for example, green finance and infrastructure).



Opportunities

Resilience

- Participation in renewable energy programmes and adoption of energy efficiency measures.
- · Resource substitutes / diversification.

- Increased market valuation through resilience planning (for example, for infrastructure, land, buildings).
- Increased reliability of supply chain and ability to operate under various conditions
- Increased revenue through new products and services related to ensuring resiliency.



Cost \$3

Action 1 Strategy

Invest in research and development to develop low-carbon products and services.

Further information

For disclosure requirements on changes to the company's business model, refer to paragraph 14(a)(i) of IFRS S2.



Action 2

Risk management and strategy

Monitor the changing views and expectations of customers, suppliers, peers and regulators / policymakers to inform strategy, investment and risk management.

Further information

For guidance and good practice, refer to ISO 26000 at https://www.iso.org/iso-26000-social-responsibility.html.





Strategy and risk management

Join voluntary initiatives and coalitions to set, adopt or improve operational practices and lobby policymakers on the same matters.

Further information

For more information, refer to We Mean Business (https://www.wemeanbusinesscoalition.org), WBCSD (https://www.wbcsd.org), or CDP (https://www.cdp.net/en).



Cost \$1



Contribute to industry- or nationallevel climate change research using data and insights from your company.

Further information

Research initiatives on climate change in your jurisdiction.



Seek guidance and support from national, regional or global authorities on scenario analysis, modelling and tools.

Further information

For disclosure requirements on scenario analysis, refer to paragraph 22 of IFRS S2.





Upskill the Board to ensure appropriate governance processes, controls and procedures are in place to monitor, manage and oversee climate-related risks and opportunities.

Further information

For disclosure requirements on governance, refer to paragraphs 5-7 of IFRS S2.

For guidance and good practice, refer to the COSO framework.





Upskill employees to adopt a more sophisticated approach to climate-related scenario analysis and therefore build a more resilient company and community.

Further information

For disclosure requirements on governance, refer to paragraphs B6-7 of IFRS S2.





Improve operational efficiency—for example, manage or decommission carbon-, energy- and water-intensive operations, reduce other natural capital inputs or increase proportion of renewable energy, in your company and in your supply chain.

Further information

For disclosure requirements on changes to the company's business model, refer to paragraph 14(a)(i) of IFRS S2.

For disclosure requirements on performance trends, refer to paragraph 34 of IFRS S2.

For guidance and good practice, refer to ISO 14001, 50001, 14060, 14080 or 14090.







Measure your GHG emissions and set climate-related targets using science-based pathways linked to the Paris Agreement 1.5°C goal.

Further information

For disclosure requirements on metrics and targets, refer to paragraphs 27-37 of IFRS S2.

For guidance and good practice, refer to ISO 14064







Adopt an internal carbon price to inform internal investment decisions, assumptions and strategy.

Further information

For disclosure requirements on internal carbon pricing, refer to paragraph 29(f) of IFRS S2.

For guidance and good practice, refer to CDP.





Cost **\$2**



Set a strategy for managing climaterelated risks and opportunities, which might include a transition plan, to inform decision-making and taking further actions.

Further information

For disclosure requirements on strategy, refer to paragraphs 8-9 and 14 of IFRS S2.

For guidance and good practice, refer to ISO 14090 https://www.iso.org/news/ref2625.html or the Transition Plan Taskforce https://transitiontaskforce.net/build-your-transition-plan/



cost \$3



Improve business-continuity planning and supply-chain resilience.

Further information

For disclosure requirements on business model and value chain, refer paragraph to 13 of IFRS S2.

For guidance and good practice, refer to ISO 22301 at https://www.iso.org/standard/75106.html.





Strategy and risk management

Assess your company's future prospects from climate change using scenario analysis.

Further information

For disclosure requirements on climate-related risks and opportunities, refer to paragraphs 10-12 and 15-23 of IFRS S2.



Cost \$1

Action 14

Develop a disclosure plan that supports your preparation for ISSB Standards, and / or voluntarily adopt the ISSB Standards, which are useful for investor decisionmaking.

Further information

For information on the objectives and scope of IFRS Sustainability Disclosure Standards, refer to paragraphs 1-4 of IFRS S2 and 1-9 of IFRS S1.

For guidance see the UN Sustainability Stock Exchanges Initiative disclosure plan resource





 $_{\mathsf{cost}}\$2$



Pursue green finance—for example green bond / loan (or reduce the cost of capital) to invest in decarbonisation and climate adaptation.

Further information

For disclosure requirements on sources of funding, refer to paragraphs 15-21 of IFRS S2.





Develop effective internal controls to monitor, manage and oversee climate-related risks and opportunities—for example, data and tools.

Further information

For disclosure requirements on data and methodologies, refer to paragraph 6(b) of IFRS S2.





Prepare for and achieve appropriate third-party certification of your non-financial information.

Further information

Note that the IFRS Standards do not require assurance but are designed to allow assurance to be undertaken if required by national regulators.

For guidance and good practice, refer to ISSA 5000 or ISO 14064



Governance and metrics and targets

Your renumeration committee agrees to incentivise executive management on climate change issues.

Further information

For disclosure requirements on executive renumeration, refer to paragraphs 6(a)(v) and 29(g) of IFRS S2.



Cost \$2

Action 19 Strategy

Invest in direct mitigation and adaptation efforts—for example, through changes in production processes or equipment, relocation of facilities, workforce adjustments and changes in product specifications.

Further information

For disclosure requirements on mitigation and adaptation, refer to paragraph 14 of IFRS S2.

For guidance and good practice, refer to ISO 14090.





cost \$1



Purchase carbon credits to offset greenhouse gas emissions.

Further information

For disclosure requirements on carbon credits, refer to paragraph 36(e) of IFRS S2.



Event(1)

Pensions funds are looking to decarbonise their portfolios and identify companies who are leading their sector and creating new opportunities.

Implications for your company

If you have invested and created new products and services with lower embedded greenhouse gas emissions, you might be more attractive to investors

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):







· Lose one credit if you have not taken any of these actions (penalty credit).





An investor interested in your sector has assessed several company risk profiles and divests from those with poor sustainability-related financial disclosures.

Implications for your company

Your company's reporting strategy gives it a first-mover advantage in its sector, improving its attractiveness and increasing capital, which allows for expansion and improved revenue.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):













· Lose one credit if you have not taken any of these actions (penalty credit).



Event (3)

Customer demand for lowemissions products and services significantly increases.

Implications for your company

If your company is monitoring trends and has repositioned its products or services to support the transition to a low-emissions economy, it is well positioned to respond to new customer demand and increase revenues

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):







· Lose one credit if you have not taken any of these actions (penalty credit).





A large-scale campaign initiated by an NGO leads to a picket at your premises and your key suppliers' premises, disrupting operations.

Implications for your company

If your company has taken action to upskill staff, improve environmental performance or invest in business-continuity planning, it is able to engage with the campaign and the protesters move on to your competitor's premises.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):













Energy crisis leads to increased direct and indirect costs to your company.

Implications for your company

If your company has improved its efficiency and efficiency in its supply chain it avoids most of the direct cost impacts.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):

















Event (6)

Due to the increased frequency and severity of extreme weather events. the cost of finance and insurance has increased.

Implications for your company

If your company has adopted carbon pricing to inform strategy or decision-making or issued a green bond, it can show a growing understanding of its future prospects and a response to these challenges.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):











Natural resource inputs—for example, water or raw materials-become scarce due to drought, forest fire and other weather-related disruption.

Implications for your company

Companies that are more efficient with natural resource inputs minimise the effects of additional rising direct and indirect costs.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):













Your company's key jurisdictions have updated their Nationally Determined Contributions to reach the Paris Goal of 1.5°C faster and your regulator is demanding improved ambition and pace.

Implications for your company

If your company has already begun to measure and reduce its greenhouse gas' emissions, it is well positioned to respond to the changing national policies and expectations of its stakeholders.

Links to action cards

 Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):







Event (9)

A legal claim is raised against your company and others in your sector arguing they are not doing enough to reduce their greenhouse gas emissions.

Implications for your company

The legal action is a distraction for your company and causes reputational damage. Those companies with a better track record of environmental progress as well as strong governance and disclosure will be better placed to mitigate the risk.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):















Some important premises are expected to be written off early due to increasingly severe and frequent extreme weather events, or they are no longer viable due to the transition to a lower emissions economy.

Implications for your company

If your company has invested in understanding its physical and transition risks using scenario analysis to inform its strategy, your company is better prepared to manage these risks and potentially avoid the cost of stranded assets.

Links to action cards

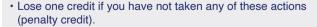
· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):















Corporate sustainability initiatives are gaining momentum among investors and ESG rating agencies, who are responding positively to companies that are publicly committed to these initiatives.

Implications for your company

If your company has voluntarily adopted the IFRS Sustainability Disclosure Standards and information about its climate-related risks and opportunities is available to ratings agencies for assessment then your company is well placed to meet investors' expectations.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):













A 'green swan' event occurs -something that is infrequent, extremely disruptive and predictable (retrospectively).

Implications for your company

If your company fails to respond to a green swan event, it won't be because it didn't see it coming, but because it failed to prepare for it.

Links to action cards

· Gain one bonus credit if you have selected any of the following actions (maximum one bonus credit):









Scoring table

Which actions did you pick and keep?	Risk points awarded	Notes
1	1	
2	4	
3	3	
4	2	
5	3	
6	5	
7	5	
8	3	
9	3	
10	5	
11	5	
12	5	
13	5	
14	5	
15	5	
16	1	
17	2	
18	5	
19	5	
20	1	
Total		

Facilitator

Facilitator instructions

- Follow the flow of the card game (either with printed cards or online).
- Ensure all players advance at the same time through the steps.
- Choose at least two cards at random from the events.
- Encourage a discussion among players as they try to decide how many credits to spend on risk mitigation, versus pursuing opportunities. The opportunities may earn players more credits, which allows players to implement further actions to reduce risks and improve their risk score.
- Boards should spend all their budget, which is between \$10-\$15 depending on the time available and number of participants.
- Bonus (or penalty) credit from actions are listed on the event cards. A maximum of one bonus (or penalty) is awarded for each event and should be added to (or taken away from) the Board's budget.