

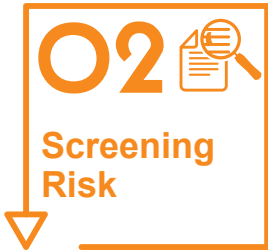
Climate Resilience Framework

A six-step process to help businesses develop and increase resilience to climate-related hazards and review performance against business objectives and sustainability.



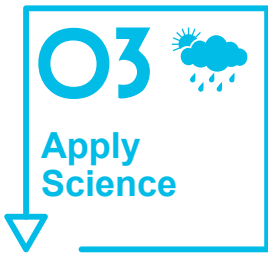
Scoping

- Discuss project drivers with stakeholders to create shared vision.
- Review approach options and requirements and select methodology.
- Define scope for climate variables, hazards, and timeframe (e.g., present, 2030, 2070).
- Determine scope including relevant business and site elements and systems.



Screening Risk

- Consider climate trends for relevant hazards (temperature, precipitation, flooding, drought, sea-level change, wind)
- Screen business, systems and site elements against climate hazards to determine high-level risks and priorities for risk assessment
- Review relevant climate policy, regulatory and planning approvals requirements



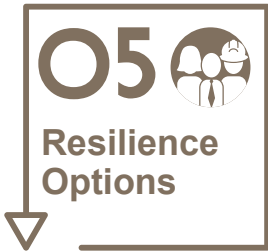
Apply Science

- Determine whether climate data can be gathered and analyzed internally or externally.
- If internal, collect climate projections based on a moderate to high emissions scenarios for years and scale. Gather long-term (100 yrs) and recent (30 yrs) historical climatic data.
- Consider collecting other data studies to support project (e.g., flooding reports, inundation mapping, urban heat island, erosion, etc.)
- Consider GIS to spatially display information.



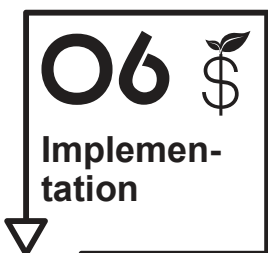
Detailed Risk Assessment

- Select business, systems and site elements with greatest risks to climate impacts. Use results from screening phase to focus analysis.
- Identify stakeholders for determining priority risks or valuing risk implications.
- Conduct assessment of climate risk, site or project. Use spatial and impact modeling data to inform site or project specific risk including future climatic conditions (food, groundwater re-charge, etc.).
- Prepare documentation to meet regulatory, planning, approval and investor requirements
- Ensure climate risks are integrated into wider risk management processes. Assign organizational groups as part of ongoing business process. (e.g., procurement, insurance, capital planning, logistics).



Resilience Options

- Identify stakeholders to determine and implement resilience options, and who may benefit from implementation.
- Review risk assessment for priority options and resilience solutions.
- Research and rank resilience options for: effectiveness in responding to climate risk, value for money, practical implementation. All business benefits should be considered when assessing options.
- Integrate preferred climate resilience measures into business planning, operational procedures and capital design.
- Document how resilience options address climate risks. Where risks are unaddressed, provide rationale.



Implementation

- Justify large climate resilience investments with cost benefit analysis. Allocate resources to implement lower cost/high benefit options.
- Assign responsibility for embedding climate risks into operational plans.
- Document implementation of resilience options and reduced risks achieved for investors, insurers and customers.
- Ensure notes are clear in presenting climate risks in operations.
- Ensure appropriate monitoring and review. Build in review on a five-year basis.