

Climate Risk Assessment Checklist

1. Project Overview

- ☐ Define project scope, location, and timeline.
- ☐ Identify stakeholders and asset types (buildings, infrastructure).

2. Climate Hazards Identification

- ☐ Assess historical and projected temperature trends.
- ☐ Evaluate flood risks using FEMA/local flood maps.
- ☐ Check exposure to sea-level rise and storm surges.
- ☐ Consider wildfire, drought, landslides or permafrost melt risks.

3. Scenario Planning

- ☐ Select relevant RCP/SSP pathways (RCP2.6, RCP4.5, RCP8.5).
- ☐ Run simulations using ensemble models.
- ☐ Account for compound hazards (e.g., flood + heat).

4. Structural and Design Resilience

- ☐ Analyze thermal, wind, and water load tolerances.
- ☐ Evaluate drainage, insulation, and elevation levels.
- ☐ Consider retrofitting or material substitution.

5. Financial Impact Analysis

- ☐ Estimate potential damage and repair costs.
- ☐ Assess insurance shifts and premium implications.

Climate Risk Assessment Checklist

☐ Calculate ROI of adaptation investments.

6. Adaptation Strategies

☐ Propose green roofs, reflective surfaces, or raised platforms.

☐ Integrate smart systems (drainage, sensors, renewable energy).

☐ Align with sustainability certifications (LEED, Envision).

7. Regulatory & ESG Compliance

☐ Ensure TCFD/SFDR/SEBI compliance.

☐ Integrate disclosures in investor or government reports.

8. Review & Update

☐ Schedule annual reassessments.

☐ Monitor changes in climate science or local conditions.

☐ Maintain version control and documentation.