

CLIMATE CHANGE RISK FOR ASSET MANAGEMENT

We simplify climate change risk for asset managers by using actionable storylines that integrate directly into your existing risk processes.



» CHALLENGE

Climate change is a material risk

Asset owners transparently integrating climate change into established systems, despite the associated complexity and uncertainty. Traditional risk and asset management processes struggle with the long-term, probabilistic nature of climate data and climate change forecasts, leading to inaction. The result is poorly managed risk, more vulnerable assets and increased future organisation and public exposure.

» SOLUTION

A practical, streamlined integration

Ricardo has developed a streamlined approach to managing climate change risk for assets. We translate the complex climate data at the front end of risk management as storylines and time dependent asset risks. This is integrated into your existing risk (ISO 31000) and asset management (ISO 55001) processes. We make your systems climate change risk aware, so you can be more climate resilient.

» OUR DIFFERENTIATED APPROACH

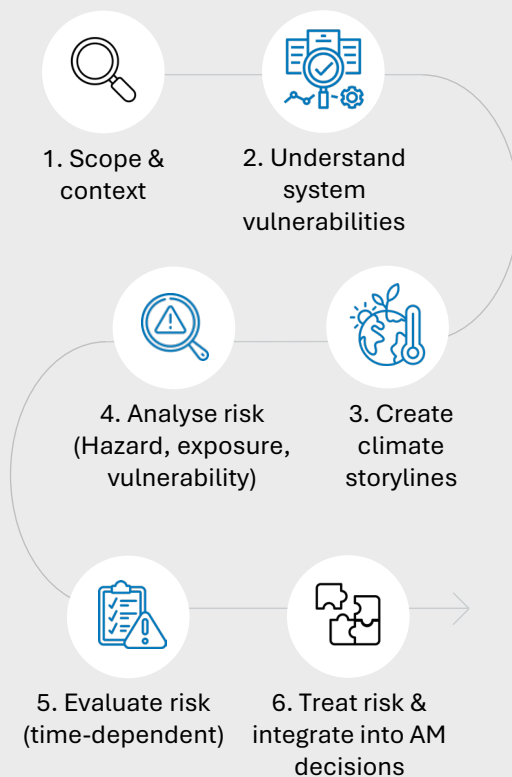
We adapt the proven ISO 31000 risk assessment process with two key innovations to demystify climate risk:

Understand the system & create storylines

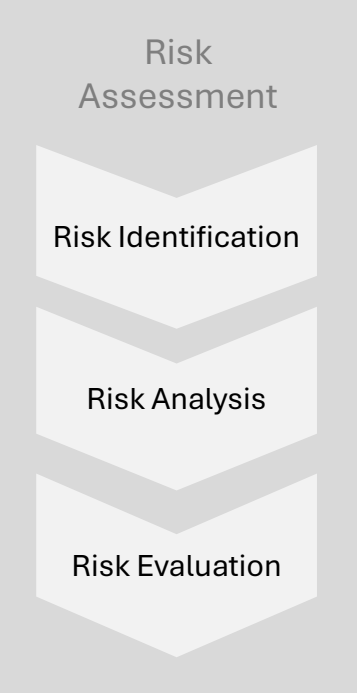
We move from overwhelming climate projections to actionable "storylines." These are plausible, narrative scenarios of future climate impacts (e.g., "Sea levels rise by 0.5m by 2050," or "Extreme heat days >40°C will double by 2040"). Storylines provide a clear, communicable basis for assessing impacts and planning adaptation.

Time-dependent risk evaluation

We incorporate a time-dependent likelihood scale into your risk matrix. This allows you to see how risk levels evolve over an asset's lifecycle, transforming a future uncertainty into a manageable timeline for action.



» HOW IT FITS INTO THE ISO31000 RISK ASSESSMENT PROCESS

ISO31000 Risk Assessment process	ISO31000 Step	Ricardo Step	What Has Changed?
	Risk Identification	Understand the System	Need to understand how the ‘system’ works using existing observations to identify vulnerabilities, important thresholds and system priorities and the climate characteristics that drive the system.
		Create Storylines	Storylines help to decide how best to use future climate projections for the risk-based assessment & communication of plans.
	Risk Analysis	Climate Change Risk Analysis	Climate change risk is a function of climate hazard (the storyline), the degree to which assets are exposed and their vulnerability (pre-disposition)
	Risk Evaluation	Risk Evaluation	Use your existing risk assessment matrix by using your existing Consequence (or CoF) axis and adding a time scale to Likelihood (or PoF) axis.

» FROM THEORY TO ACTION



Water pipeline risk
Pipelines are exposed to increased flooding and vegetation growth. Using our approach, a cost-effective adaptation path can be developed: enhanced patrols, targeted vegetation management, plinth refurbishment, and a robust repair plan, integrating climate change risk to build resilience into their Asset Management Plan.



Critical infrastructure protection
If Programmable Logic Controllers (PLCs) were failing in extreme heat, then by mapping asset exposure against future climate scenarios, we can create a prioritised plan from simple sun shields to hardware replacement, ensuring continuous operation.

CONTACT US

Let’s start the conversation and turn climate risk into a managed outcome.

Want to talk to an expert? Contact us at info@ricardo.com.



Scan the QR code to find out more or visit www.ricardo.com/asset-climate

» WHY PARTNER WITH RICARDO?

- ✓ **Seamless integration:** Plug into your ISO 31000/55001 systems.
- ✓ **Start simple, then mature:** Begin with qualitative assessments and advance.
- ✓ **Optimise decisions:** Integrate climate risk with traditional capital planning.
- ✓ **Fund actionable resilience:** Move from theory to practical, funded actions.