

How your organisation can manage its response to climate change risks

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<u>Risk</u> of climate-related impacts results from the interaction of climate-related <u>hazards</u> with the <u>vulnerability</u> and <u>exposure</u> of human and natural systems

Vulnerability **Natural climate** variability Hazards RISK **Anthropogenic** climate change Exposure

The propensity to be adversely affected

The potential occurrence of a natural or humaninduced physical event / trend / impact

... that may cause loss of life, injury, damage, loss

Presence of people / species / ecosystems ...
... in settings that could be adversely affected

1. Identify and scope risks

Identify and scope risks:

- Pull together current information on nature of risks;
- Assess vulnerabilities, adaptive capacities and enabling/constraining factors;
- Assess potential impact of risks;
- Assess perception of risks and current responses

Forecast range of future climate change parameters for each company location:

- Temperature
- Rainfall & rainfall intensity

Establish impacts of climate change on sectors of the company's operating environment:

- Water
- Human health
- Biodiversity

(as per SA LT Adaptation Scenarios)

Establish impacts on operations & infrastructure:

- Operations
- Value chain: Upstream incl. suppliers
- Value chain: Downstream incl. customers
- Value network *

^{*} Value network : an example of a risk in the value network would be the demise of the use of coal

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Location of risk			
	Operations	Value chain	Value network *
Short-term = 1 year			
Medium-term = 5 -10 years			
Long-term = 25 years			

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2. Build a shared understanding

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Build a shared understanding of each risk and its potential impact and the potential strategies for addressing each risk



3. Determine climate change response strategy for each risk



Determine climate change response strategy for each risk

- 1. Cope (accept consequences)
- 2. Mitigate (physical protection)
- 3. Insure (what cannot be protected)
- 4. Adapt by being resilient (preserve the status quo)
- 5. Adapt by transitioning (incremental change)
- 6. Adapt by transforming (radical change)



Adaptation that:

- Is solution not problem-oriented
- Drives decisions today, not in the distant future
- Plans adaptation pathways
- Promotes risk management, not uncertainty
- Also tackles social and economic issues, not only environmental ones
- Addresses emerging new challenges

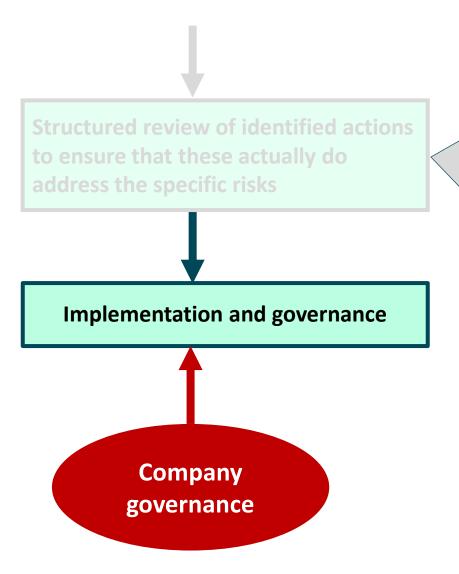
4. Hold a structured review of identified actions



Structured review of identified actions to ensure that these actually do address the specific risks

- Allocate responsibilities, budgets and timelines to each risk and its identified action
- Note warning flags on the viability of an action e.g.:
 - Heavy dependence on key data and technical assumptions;
 - Long lead times and high capital requirements;
 - Major differences between groups benefitting from the intervention and those bearing the costs

5. Implement and ensure governance



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Dave Collins Associate Director

MAC Consulting

8th Floor, The Mall Offices Cradock Ave Rosebank

Cell: +27 83 659 1712

Phone: + 27 11 537 1800

Email: davec@macgroup.co.za

www.macgroup.co.za