A framework for best practice in financial risk assessment, governance and disclosure

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Aims of the project

The problem

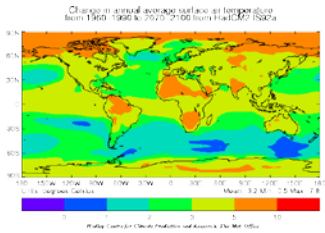
- The Australian business community has long been aware of the risks and opportunities associated with greenhouse gas mitigation and climate change policies.
- Some have taken initial steps to adapt to the expected effects of climate change.
- Most are only vaguely aware of the breadth of adaptation required.
- How to manage the financial and operational risk, corporate governance and financial impact disclosure to investors?

Project aims

- To provide a **framework** for boards and executives to develop their climate change adaptation governance, climate change risk assessment and financial disclosure.
- Assess likely **impacts on company finances** and outline a matrix of **disclosures** required by investors to enable them to evaluate corporate exposure to climate change risk.

Within existing governance principles and requirements…

Guiding research principles



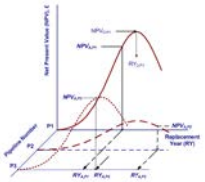
- Research outputs and framework must offer both a **strategic vision of adaptation** actions as well as **tangible tools that firms can use** to measure, cost, finance and govern.

- Where possible the framework must be **aligned with existing accounting standards, risk management principles, board activities, public reporting requirements and company disclosure laws**.

- The framework must reconcile the interests of the main governing bodies and laws (Corporations Act (2001), listing rules governed by the ASX, reporting guidelines under Australian Accounting Standards Board (AASB), compliance with International Financial Reporting Standards (IFRS), reporting requirements of the Australian Taxation Office (ATO) and governance principles advocated by the Australian Institute of Company Directors (AICD).

- The framework is designed for the Australian corporate context but **must be easily adaptable to small and medium sized enterprises** (SMEs), not-for-profit companies and government bodies, as well as firms with international interests.

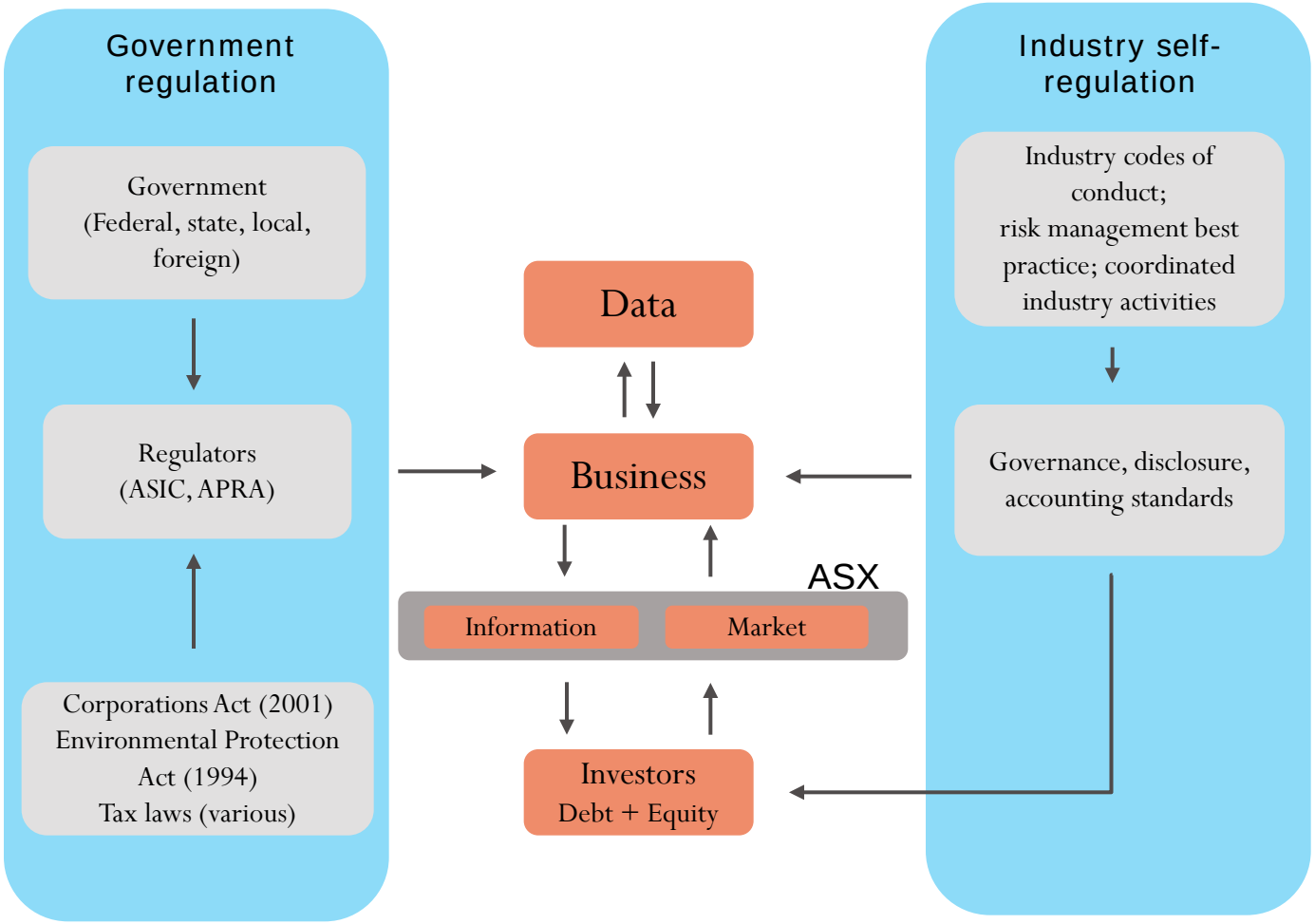
Project workshops



- **Workshop 1** - Current approaches to adaptation, scenario development using quantitative techniques
- **Workshop 2** - Climate change risks, financial performance impacts, case studies
- **Workshop 3** - Cost of adaptation to climate change, investor disclosures
- **Workshop 4** - Governance, risk, disclosure and best practice, scenario testing

- Participants included representatives from the following bodies:
  - Minerals Council of Australia (MCA)
  - Energy Supply Association of Australia (ESAA)
  - Investor Group on Climate Change (IGCC)
  - Australian Business Council for Sustainable Energy (ABCSE)
  - Financial Services Institute of Australia (FINSIA)
  - Australian Bankers Association (ABA)
  - Association of Superannuation Funds of Australia (ASFA)
  - Australian Shareholders Association (ASA)
  - Australian Securities Exchange (ASX)
  - Australian Institute of Company Directors (AICD)
  - CPA Australia
  - Selected companies (Rio Tinto, Origin Energy, AECOM, QR National (Aurizon))

First step – Recognition that external regulation and internal self-regulation pressures drive firm behaviour.



Adaptation measures

Social costs

Corporate costs

- **Share losses.** Public relief, rehabilitation and reconstruction paid for from public funds as well as from insurance (insurance only mitigates the risk of those who choose to absorb premiums as an expense while those who choose to partially- or self-insure indirectly and substantially add to the wider social cost).
- **Bear losses:** All adaptation measures may be compared with the baseline response of 'doing nothing' except bearing or accepting the losses (no capacity to respond or the costs of adaptation measures are high compared with the risk/expected damage).
- **Modify the threat.** Exercise control over the environmental threat itself (flood control works such as dams, dikes, and levees).
- **Prevent effects.** Prevent the effects of climate variability (crop management, irrigation, additional fertiliser use and pest and disease control).
- **Change use.** Substituting a more drought-tolerant crops or switching varieties with lower moisture. Similarly, crop land may be returned to pasture or forest or other uses may be found such as recreation, wildlife refuges or national parks.
- **Change location.** An extreme response is to change the location of economic activities.
- **Research.** The process of adaptation can also be advanced by research into new technologies and new methods of adaptation.

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These climate change adaptation measures are already well known!

Companies and other entities don't need to be told HOW to adapt to climate change...

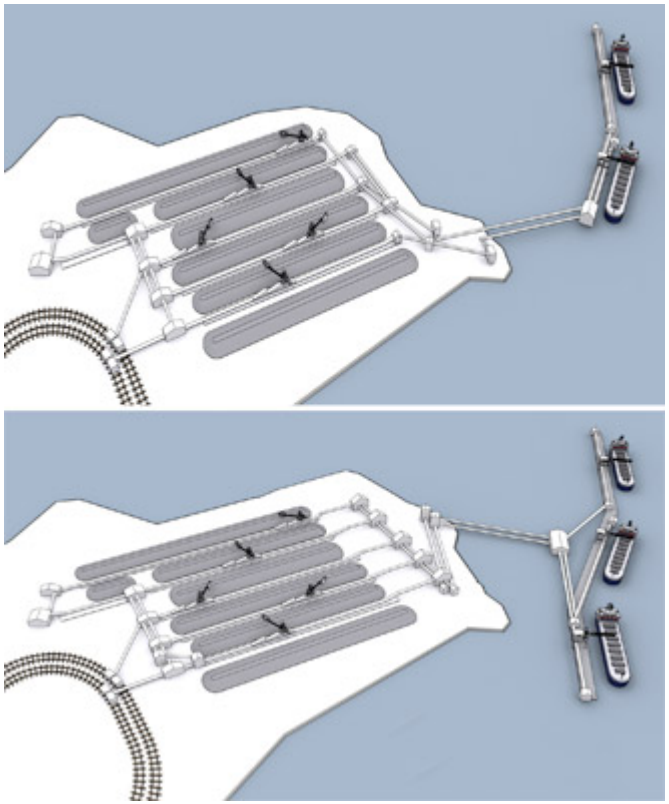
Companies need advice on what to tell their investors and creditors

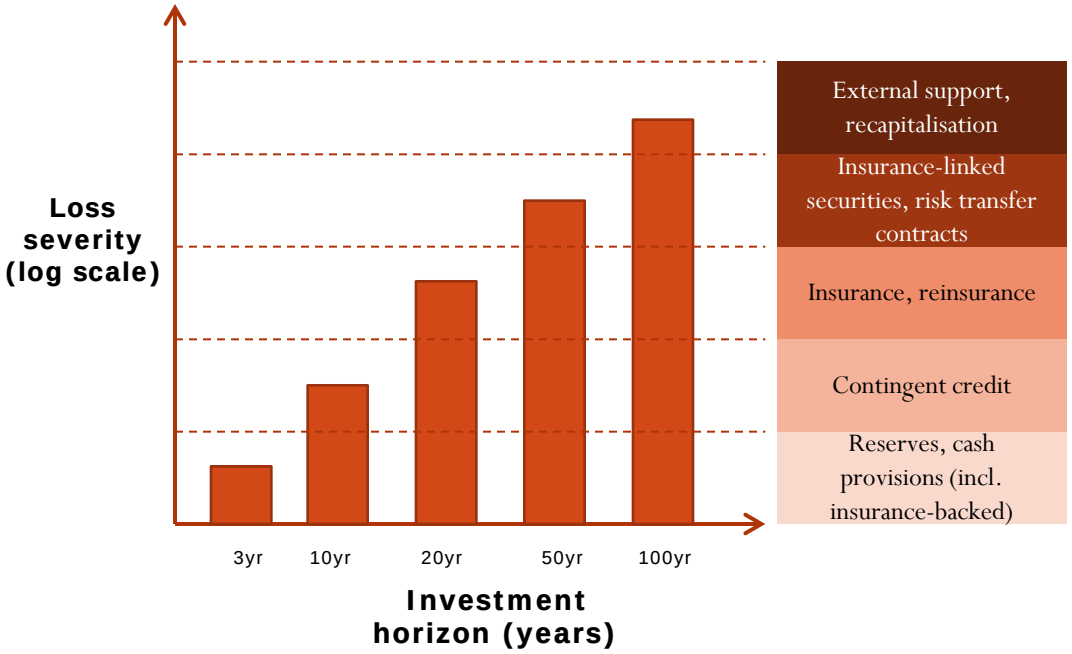
And company boards need to know what questions to ask of their executives

So what is the problem (for companies)?

Take Hay Point coal terminal near Mackay, QLD operated by BMA:

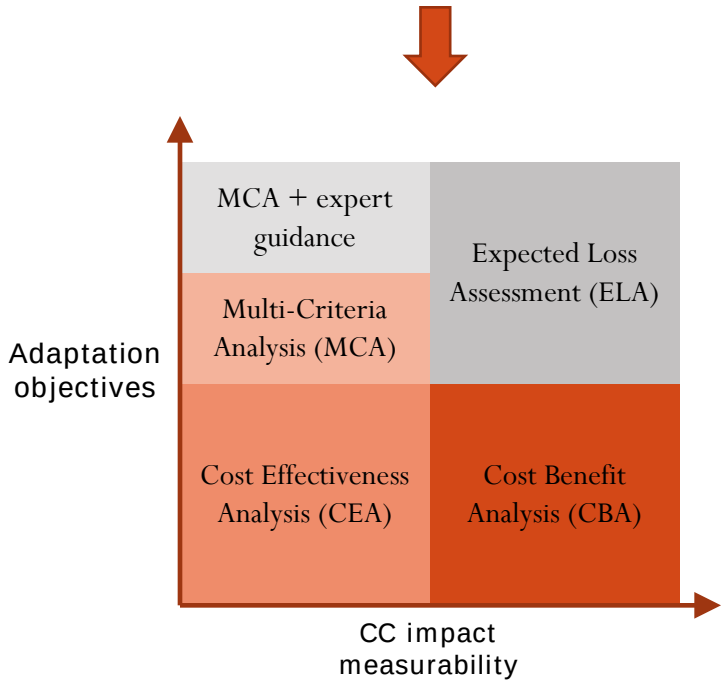
- Higher intensity cyclones and storm surges are washing over conveyors – terminal loses 20 days p.a. to weather.
- Expansion plans aim to replace existing conveyors with a higher wharf to contend with current conditions AND future conditions.
- Expansion will have a life of 100 years
- Most of the capital outlay will protect against current conditions and some will protect against future conditions.
- <u>Main questions therefore are:</u>
    - Adaptive capacity is fine but it decreases our return on assets (ROA)
    - If we finance it privately how do we justify the additional capital cost at the same average cost of capital?
    - Or should we just insure the asset?
    - How does it affect our balance sheet (asset may need to be written down, liabilities will be higher than otherwise, etc.)
    - If we build adaptive capacity how do we disclose it to investors through time?
    - How do we govern the risk and the asset management through time?

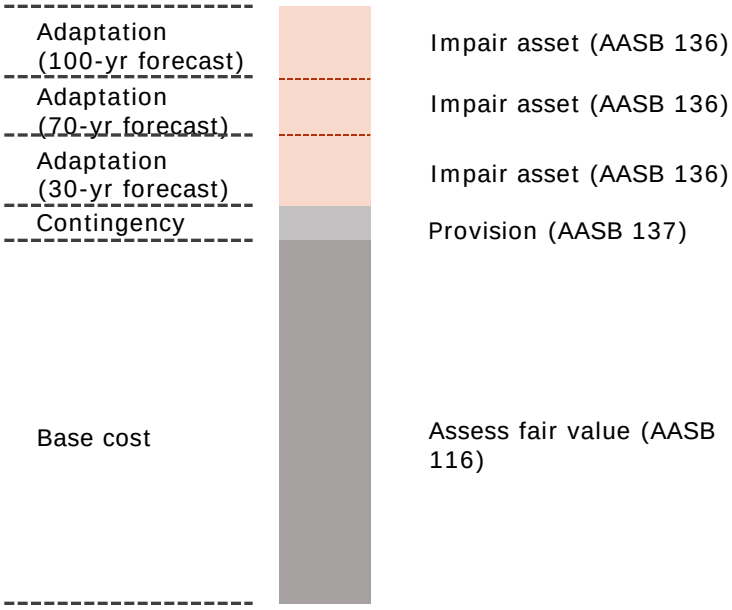




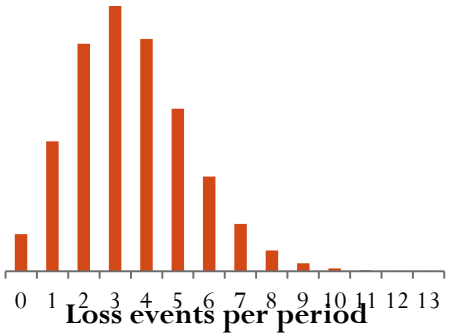
An example

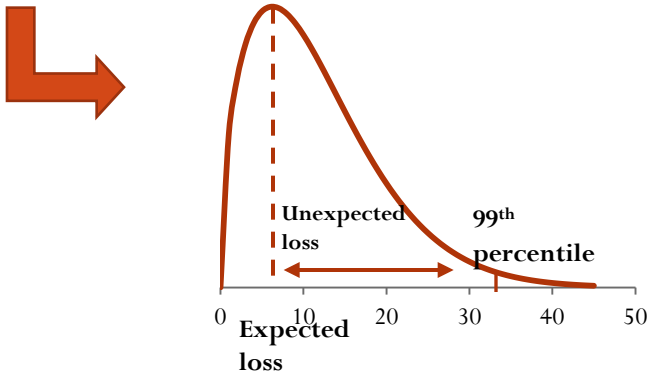
Infrastructure, land, crops, water resources and other assets that undertake adaptation will need to account for adaptation costs.

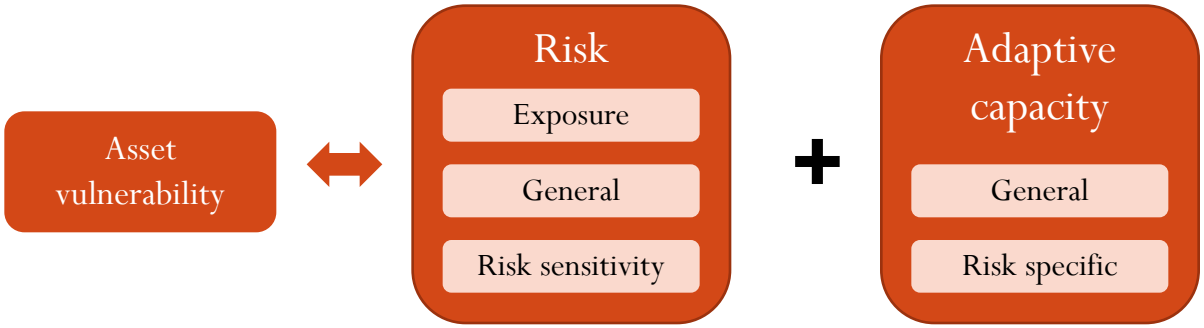




Loss modelling – can be simple (or complex) but it still must integrate with the firms existing risk management processes







Accounting rules

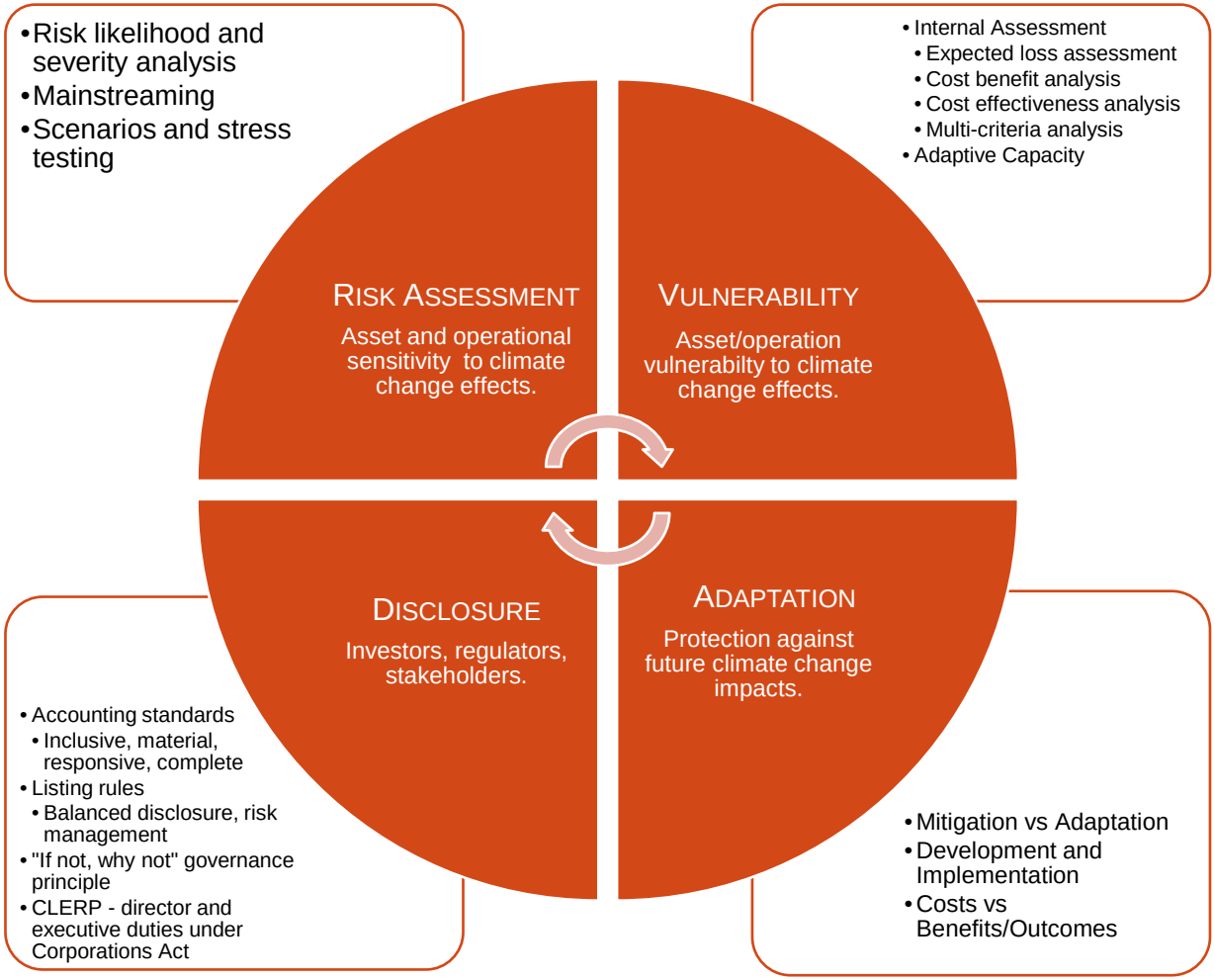
- The major issues of accounting for adaptation are:
  - Initial accounting for adaptive capacity;
  - Impairment and provisioning of adaptive capacity assets;
  - Financing adaptive activities;
  - Defining additional financing costs for adaptive capacity; and
  - Revaluation of assets with adaptive capacity through time.
- The non-financial reporting of costs:
  - *Inclusivity* – A commitment to be accountable to those stakeholders that the organisation impacts and those stakeholders who have an impact on it.
  - *Materiality* - An issue is deemed 'material' if it will influence the decisions, actions and performance of a firm or its stakeholders.
  - *Responsiveness* – This is defined as how a firm demonstrates its response and accountability to its stakeholders.
  - *Stakeholder inclusiveness* – The firm should identify its stakeholders and explain how it has responded to their expectations and interests.
  - *Completeness* - Completeness is the coverage of the material topics, adaptation indicators and the definition of the reporting process.

Governance framework

- Only prescriptive for businesses listed on the ASX but are widely recognised as 'best practice' corporate governance guidelines for all types of businesses.
  - *ASX Corporate Governance Principle 5* - **Make Timely and Balanced Disclosure**
  - *ASX Corporate Governance Principle 6* - **Respect the Rights of Shareholders**
  - *ASX Corporate Governance Principle 7* - **Recognise and Manage Risk**
    - Establish policies for the oversight and management of material business risks and disclose a summary of those policies.
    - Management to design and implement the risk management and internal control system to manage the company's material business risks and report to it on whether those risks are being managed effectively.
    - Board to disclose that management has reported to it as to the effectiveness of the company's management of its material business risks.
    - Board to disclose whether it has received assurance from the chief executive officer and the chief financial officer that the declaration provided in accordance with section 295A of the Corporations Act is founded on a sound system of risk management and internal control and that the system is operating effectively in all material respects in relation to financial reporting risks.

Plus the 'if not, why not?' reporting principle…

Investor Disclosure Framework



Investor Disclosure Matrix

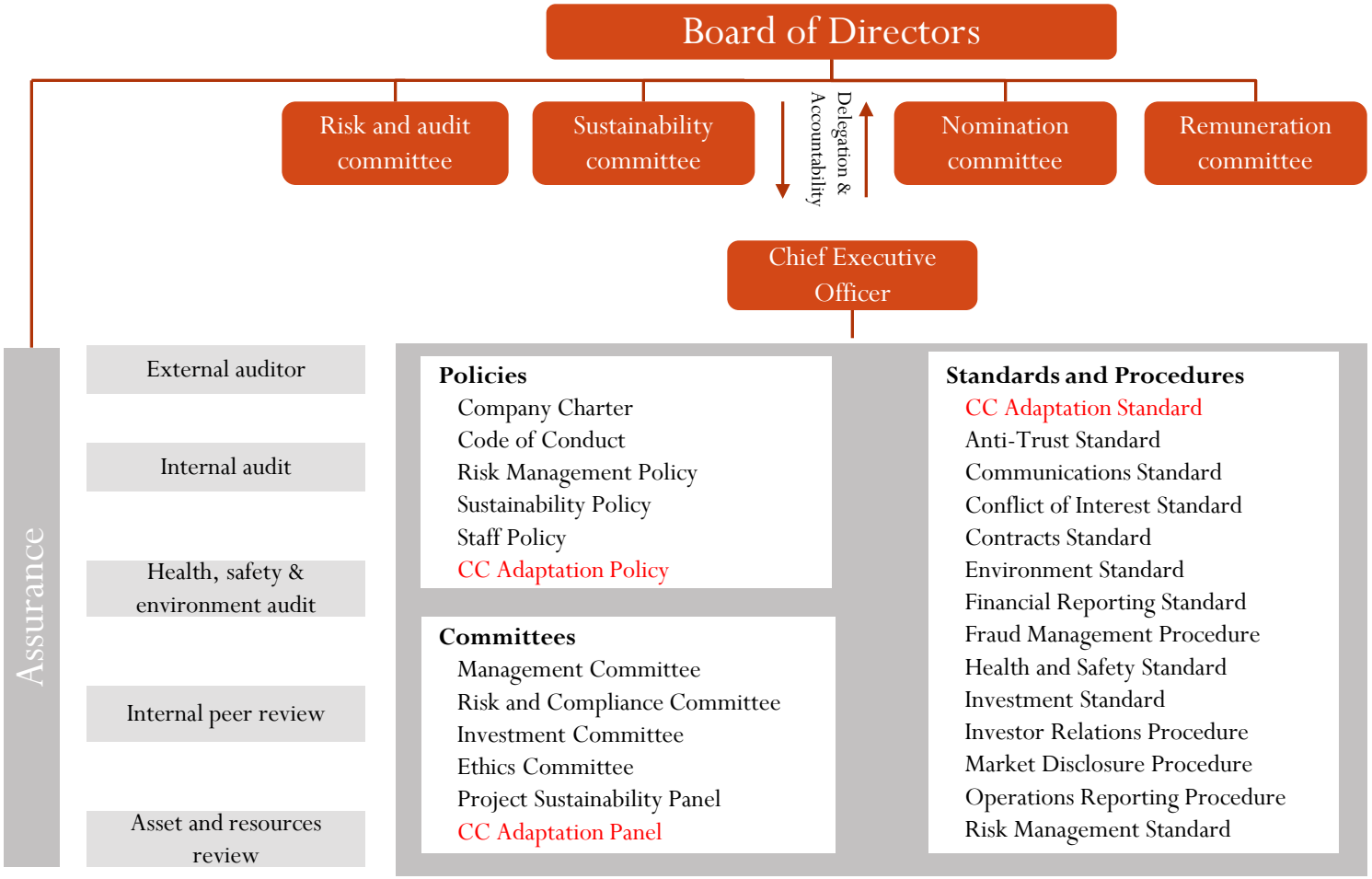
Adaptation objectives	Adaptation costs	Cost estimate quality	Vulnerability assessment	Disclosure rules	Governance
Single	Monetised	Accurate forecast	ELA CBA	AASB116 AASB136	ASX Principles 5 & 7
		Uncertain forecast	CEA	AASB116 AASB137 AASB136	ASX Principles 5, 6 & 7
	Un-monetised	Uncertain forecast	MCA	AASB137 AASB136	ASX Principles 6 & 7
		Unknown costs	MCA plus expert advice	AASB137 AASB136	ASX Principles 6 & 7
Multiple	Monetised	Accurate forecast	ELA CBA	AASB116 AASB136	ASX Principles 5 & 7
		Uncertain forecast	MCA	AASB116 AASB137 AASB136	ASX Principles 5, 6 & 7
	Un-monetised	Uncertain forecast	MCA	AASB137 AASB136	ASX Principles 6 & 7
		Unknown costs	MCA plus expert advice	AASB137	ASX Principles 6 & 7

Information quality

Assessment approach

Disclosure & governance

A typical governance structure: Climate change adaptation activities can be easily integrated with the existing governance and management structures of the firm.



CC adaptation does not necessarily need to be a separate consideration unless the severity and/or likelihood of climate change exposures is extreme.

So what did we deliver?

- The final report provides the following:
  - Investor disclosure framework (to assess adaptation measures)
    - Risk Assessment
    - Vulnerability
    - Adaptation
    - Disclosure
  - Climate change adaptation cost – benefit assessment options (a how to guide)
    - Expected loss assessment (ELA)
    - Cost benefit analysis (CBA)
    - Cost effectiveness analysis (CEA)
    - Multi criteria analysis (MCA)
  - Investor disclosure matrix (how to report and manage adaptation measures)
    - Adaptation objectives
    - Adaptation costs
    - Cost estimate quality
    - Vulnerability assessment
    - Disclosure rules (AASB, IFRS, etc.)
    - Governance (ASX principles and other best practice mechanisms)
  - Case studies
    - One generic example
    - Four specific examples

Questions?

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