



The Dialogue

Leading the conversation

**Climate Risk Disclosure –
financial institutions feel the heat**

Sharanjit Paddam and Stephanie Wong

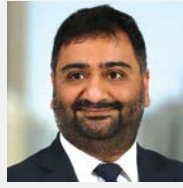
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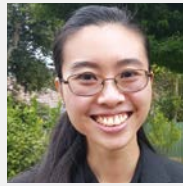
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About the authors



Sharanjit Paddam MA, FIA, FIAA

Sharanjit is a Principal at Deloitte Actuaries & Consultants, and has been appointed actuary to several APRA regulated institutions. He has contributed numerous papers on the impact of climate risk on financial institutions, and regularly advises banks, insurers and investors on climate risk. He is the convener of the Actuaries Institute's Climate Change Working Group.



Stephanie Wong FIAA, CERA

Stephanie is an Actuary with experience across general insurance pricing and capital modelling, and currently leads a life insurance experience investigation team. She has co-authored a paper on climate risk management for financial institutions, and is the secretary of the Actuaries Institute's Climate Change Working Group.



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Climate Risk Disclosure – financial institutions feel the heat

Sharanjit Paddam and Stephanie Wong

Introduction

Climate change raises real risks and opportunities for financial institutions which need to be identified, managed and disclosed. As many Australian financial institutions have yet to understand the scope of the risk and their opportunity, we recommend an eight-point strategy to address climate change.

Background

There are five factors driving financial institutions, including banks, general insurers¹ and investors,² to respond to climate-related risks and opportunities:

1. **Investors** are concerned about the impact of climate change on investment risk and returns.
2. **Directors** have legal obligations to disclose and manage material financial risks and climate change is increasingly perceived as a significant risk.
3. **Customers** increasingly want financial institutions to offer products that manage their current and future exposure to climate change.
4. **Regulators** are concerned about the **systemic threat** that climate risk could pose to financial stability, as well as the threat to individual financial institutions.
5. **Regulators** have developed **disclosure standards** for climate risks, supported by companies, investors, ratings agencies and other stakeholders.

Stakeholder impacts

1. Investors

Investment managers are increasingly incorporating climate risks, as well as broader Environmental, Social and Governance (ESG) risks, into their core investment decisions. Investment funds like Norway's sovereign wealth fund³ and the asset manager AXA⁴ have announced divestment from companies with coal-related activities. BlackRock, the world's largest fund manager, is threatening to vote out directors who fail to adequately address the threats posed by climate change.⁵

Climate Action 100+⁶ is a new five-year investor initiative to engage with the world's largest corporate greenhouse gas emitters to curb emissions, strengthen climate-related financial disclosures and improve governance on climate change.

Under the Paris Agreement⁷ of 2015, countries committed to limiting global temperature increases since pre-industrial times to well below 2°C. To achieve this target, only a limited amount of fossil fuels

can be burned. Existing reserves of fossil fuels far exceed this limit, and so signatories have signalled that significant fossil fuel assets will never be utilised. In the short-term, these stranded assets⁸ and potential investment losses are the driving concern for investors.

2. Directors

In 2016 an influential legal opinion⁹ stated that climate risks are foreseeable, and that directors who fail to consider the risks could be personally held liable for breaching their duty of care and diligence under the Corporations Act.

For example the Commonwealth Bank recently faced legal action from shareholders who alleged that the board did not adequately disclose the financial risks posed by climate change in the 2016 annual report.¹⁰ The claim was withdrawn when the bank committed to further disclosures on climate change.¹¹ If there is a finding in favour of such a shareholder action¹² providing a legal precedent, we anticipate a deluge of similar claims being triggered, giving rise to a systemic legal risk for financial institutions.¹³

3. Customers

Affordability and availability of financial products

Insurers are moving towards risk-based pricing at increasing levels of granularity, so that premiums accurately reflect the risks associated with each insured property. While this reduces cross subsidies between low risk and high risk properties, it can impact the affordability of insurance premiums for those customers in high risk areas.

Over the longer term we expect that climate change will increase the risk of losses from natural hazards¹⁴ which may result in increased premiums for home and property insurance, especially for customers in high risk areas.¹⁵ If premiums become unaffordable for even a small group of customers, even if they accurately reflect the underlying risk, insurers may face significant reputational damage, and potential government intervention,^{16,17} resulting in a shrinking insurance market.

Some properties may become too risky for insurers even with an increased premium. This can present opportunities for governments and financial institutions to work with the community as in Roma, Queensland, where after three successive years of floods, Suncorp had to place an embargo on new home and contents insurance policies. The insurer then worked with the local government to build a levee to protect the town which, once completed, made homes insurable again.

Customers who continue to pay rising insurance premiums as a condition of their home loan, or who fund repairs and maintenance to their home out of their own pockets, may also be subject to financial stress and so increasingly unlikely to be able to service loan repayments. This may result in an inability to obtain home loans or other credit products from banks.



Coverage and exclusions

Actions of the sea – including coastal inundation¹⁸ not caused by cyclones or storms – are excluded by many property insurers in Australia. Such exclusions might leave the customer and any lender exposed. While Australian banks may require and check for buildings insurance when the loan is written, most do not specify what coverage is required, or routinely verify continued insurance coverage over the life of the loan. Lenders mortgage insurance generally does not provide cover against physical losses.

In 2009, the Department of Climate Change and Energy Efficiency estimated that coastal erosion posed a potential \$63 billion¹⁹ threat to Australian property. Allowing for substantial house price inflation, further development, and additional extreme weather risks, that figure would be substantially higher today, which emphasises the significant financial risk and the need for responsible coastline development.

Impacts on economy and employment

At the same time as the increased exposure to physical events and increased insurance premiums, customers will also be affected by the transition to a low-carbon economy. This includes the risk of reduced employment opportunities for people currently working in carbon intensive industries, or other industries exposed to climate risk such as mining, agriculture, fisheries, transport and tourism. This disruption of the labour market could lead to increased defaults on home loans, a reduced ability of such customers to purchase insurance, and a reduction in savings and investment levels.

Conversely, opportunities may be driven by growth in renewable energy and demand for new resources, such as lithium and cobalt.

4. Regulators

Regulators are recognising that climate risk poses a financial risk to financial institutions, with the potential for adverse systemic impacts on financial stability,²⁰ and have begun to undertake supervisory activity,^{21 22} on regulated entities.

APRA


In February 2017, APRA member for insurance Geoff Summerhayes described climate risk as, “distinctly financial in nature,” as “foreseeable, material and actionable now” and having “potential system-wide implications.”²³ He noted that climate risks are relevant and important for all APRA-regulated entities, and need to be considered as part of prudential risk management for the financial sector.

Financial Stability Board (FSB)

In recognition of the threat posed by climate risk to global financial stability, the FSB, which reports to the G20, formed the Taskforce on Climate-related Financial Disclosures (TCFD). In 2017, the TCFD produced its final report,²⁴ recommending a single international cross-industry standard for disclosing climate risk in the mainstream financial reporting of companies. These recommendations aim to improve transparency, assist financial markets to allocate capital more efficiently, and create more resilient economies.

The TCFD recommendations have gained widespread support from:

- Companies, including major financial institutions and rating agencies:²⁵ Allianz SE, ANZ Bank, Aviva, AXA Group, BNP Paribas, CBUS Super, Citigroup, HSBC, Moody's, Morgan Stanley, S&P, Swiss Re, UBS, and Willis Tower Watson.
- Regulators, including APRA as a member of the Sustainable Insurance Forum of the UN Environment, have actively supported adopting the recommendations, and in some jurisdictions, are considering mandating their adoption.²⁶
- Investors, including 390 investors representing more than US\$22 trillion in assets.²⁷

A night cityscape with a large lightning bolt striking down from a dark, stormy sky. The city lights are visible in the foreground and middle ground, while the sky is filled with dark clouds and several bright lightning bolts. One particularly large and prominent lightning bolt strikes down from the upper right towards the center of the frame. The overall scene conveys a sense of extreme weather and potential risk.

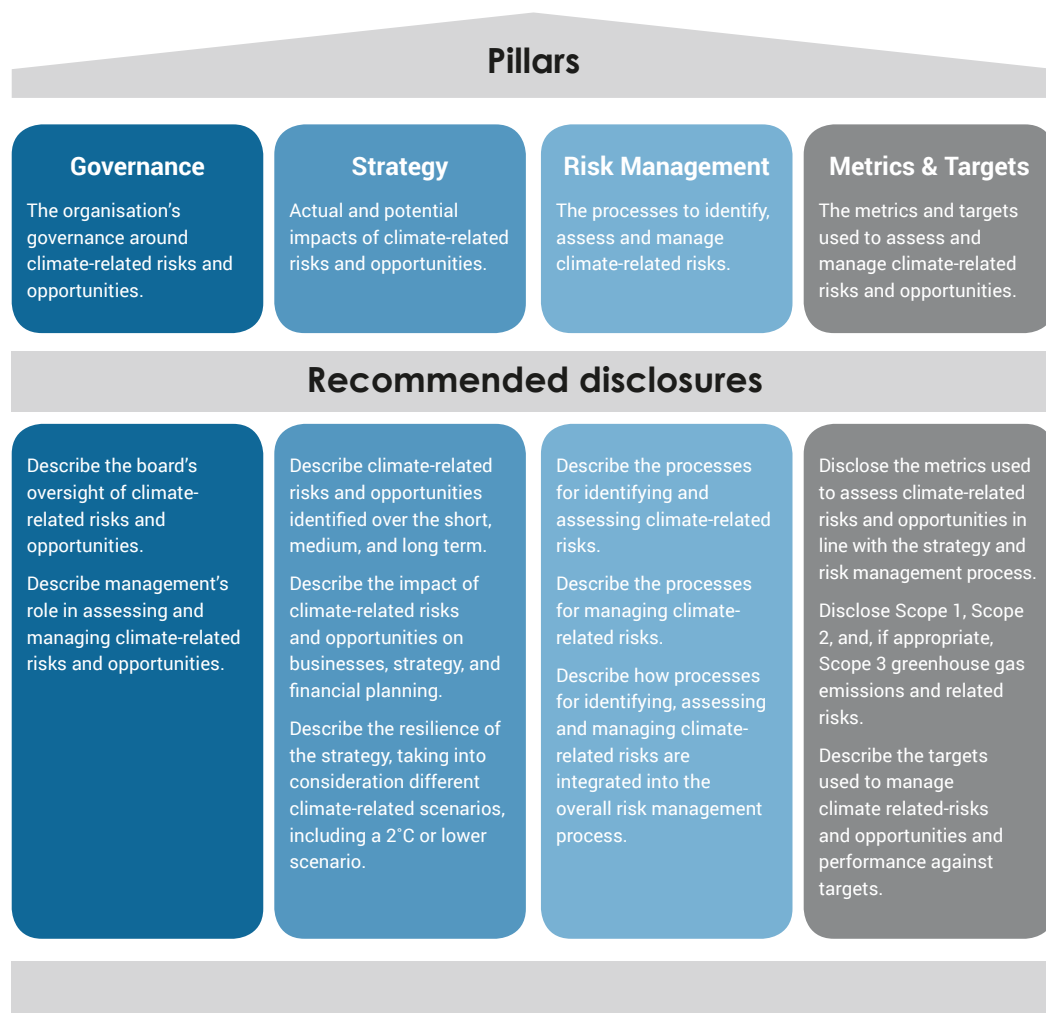
Increased severity of extreme weather events may lead to increased costs or insurance premiums which can reduce customers' ability to service loans; and weather-related property damage can lead to negative equity and increased credit risk.

Aviva Investors, overseeing \$437 billion in investments, has said it will vote against annual reports and accounts of companies that do not adopt the TCFD recommendations.²⁸

ANZ bank has already begun to disclose under the TCFD recommendations.²⁹

So, while the TCFD recommendations are voluntary, it seems likely that financial institutions will respond to pressure from investors and regulators to adopt them.

Figure 1: TCFD disclosure requirements



Impacts on financial institutions

Banks

Australian banks have some of the highest concentrations of residential lending assets in the developed world. Home loan contracts are long-term, typically up to 30 years, which means banks are already potentially exposed to climate risk.³⁰ House prices could suddenly fall once climate risks are recognised, and homeowners may be unable to sell their home without crystallising losses. Climate risk may also change the credit risk of existing and new loans.

Banks are exposed to **acute physical risk** – increased severity of extreme weather events such as cyclones and floods – through lending secured by property, where increased maintenance costs or insurance premiums can reduce customers' ability to service loans, and severe damage to properties can lead to negative equity and a corresponding increase in credit risk.

Chronic physical risk – longer-term shifts in climate patterns such as higher temperatures causing sea level rise or chronic heat waves, droughts, or other changes – will increase the frequency of acute losses, and exacerbate perils such as coastal erosion, inundation and bushfires.

Temperature rises may lead to the loss of tourist attractions such as the Great Barrier Reef³¹ and associated economic sectors, increasing credit risk and reducing lending volumes from affected businesses and local residents.

The changing climate will affect yields and viability of agricultural, fishery and associated economic sectors in different geographies, again increasing credit risk and reducing lending volumes.

Transition to low-carbon energy through government **policies** to mitigate greenhouse gas emissions, accelerated by **technological** improvements or innovations such as battery storage, will increase credit risk on lending to customers in affected industries such as coal mining, power generation and distribution, and also reduce lending volumes.



Transition may also bring about **legal** action due to the failure of companies and governments to mitigate against climate change and to adequately disclose material financial risk, putting at risk both the institution and its commercial customers.

Transition will also lead to **market** risk – shifts in supply and demand for certain commodities, products and services – and banks may see increases in credit risk and reductions in lending volumes for the transport and aviation sector.

Lastly, **transition** may also see increases in **reputation risk** – changing customer or community perceptions of an organisation's contribution to a lower-carbon economy. Banks have already faced negative media attention for doing business with (or not doing business with) carbon-intensive projects. Banks that foreclose on customers who have just suffered physical losses also risk further reputational risk.

Opportunities

Climate change will also give rise to opportunities including:

- New **energy sources** through transitioning to clean energy sources.
- New **products and services** that improve resilience to climate risk.
- New **markets** that enable diversification and sustainable business growth.

For banks these opportunities include increased lending to renewable energy companies, new products to fund adaptation by customers, governments and communities, and new markets through bundling and securitising adaptation finance products into green bonds. In addition, those banks that are first movers and best understand the potential impacts on credit risk will have a competitive advantage that can be used both to reduce risk and to offer preferential terms to potential customers poised to benefit from climate change.

General insurers

Despite the expectation of more severe extreme weather events, insurers are better able to manage exposure to physical risk than banks. This is because general insurance contracts are typically limited to 12 months' coverage. This gives them the opportunity to review pricing, product design and cover in response to shifts in claims experience from climate change. However, strategic and reputational risks remain.

Physical risks will increase claims costs and premiums, increase insurance risk, increase reputational risk from unaffordable premiums, and decrease premium volumes from increasingly uninsurable risks. **Chronic physical risks** such as coastal inundation and erosion could increase the risk of ex-gratia payments, or increase reputational risk as insurers increasingly face public pressure to pay claims involving damage that sit outside policy coverage.

Transition risk will reduce premium volumes from the sectors discussed above, and the impact will vary by geography. **Legal** action on transition may increase losses from directors and officers, and other liability insurance from affected customers.

These reductions in premium volumes need to be considered alongside other trends expected to affect the insurance market in the same timeframe, including driverless cars.

Insurers may suffer **reputational loss** for either doing business or not, with carbon intensive industries. Or when denying claims to customers without appropriate cover or without an appreciation for exclusions such as coastal erosion. The alternative of ex-gratia payments may be more palatable to insurers in the short run in order to reduce reputational damage, but is not sustainable in the long-term without charging for coverage.

Opportunities

New opportunities exist to provide insurance for renewable energy projects, develop new risk management products such as weather derivatives for wind farms, develop new products such as term insurance products for properties exposed to chronic physical risks, add resilience features to products, allow premium reductions for adaptation work undertaken,³² and lastly issue climate bonds, which include resilience financing features within a catastrophe bond.



Investors

Investment companies (as well as the investment arms of insurers and banks) are exposed to climate risk through their investments in companies and assets that are exposed to the physical and transition risks discussed above. These include investments in property and infrastructure, coal mining, power generation and distribution, agriculture, fisheries, tourism, transport and aviation.

Opportunities

There are growing opportunities for investment in sectors of the economy that are expanding in response to climate change, such as battery storage and renewable energy as well as demand for rare earth minerals. Investment managers, such as superannuation funds, can offer their customers products that reduce or avoid climate risk. This

is particularly important for Australian customers, many of whom work in carbon-intensive industries, and who would benefit from diversifying away from climate risks inherent in their sources of income or in their homes.

The remedy – what financial institutions should do

To address climate risk, financial institutions should take actions that fall into three areas:

1. **Risk management** – develop processes for identifying, assessing and managing climate risks.
2. **Strategy** – develop, test and implement strategies to manage climate risks and exploit new business opportunities.
3. **Disclosure** – develop reporting for stakeholders on managing climate risk.

On the next page we describe eight steps that form a road map to develop an effective response to climate risk. These steps follow closely the TCFD recommendations, and prepare financial institutions to report under those recommendations.

Financial institutions that are regulated by APRA are required to comply with APRA's Prudential Standard CPS 220 on Risk Management. In our view, climate risk is not an additional risk to be considered in isolation, but should be integrated within the existing risk management framework.

We recommend the following steps:

- 1** *Identifying climate risks and opportunities to the financial institution across all its operations, including lending, underwriting, investments and business strategy.*
 - Ideally this analysis will be separated by economic sector, geographical area and risk type.
- 2** *Reviewing how these risks are managed within the overall risk management framework for the financial institution.*
 - Consider the allocation of climate risk to credit risk, market and investment risk, liquidity risk, insurance risk, operational risks, and strategic (including reputation) risks.
 - Consider integration into: Risk appetite statement, risk management strategy, business plan, Internal Capital Adequacy Assessment Process, Reinsurance Management Strategy or purchase of Lenders Mortgage Indemnity insurance, management information systems, risk management reviews, scenario analysis.
- 3** *Developing or acquiring the capability to measure the financial impact of climate risk*
 - Extend catastrophe models to longer time horizons and individual properties, and develop new models for uninsured perils like coastal inundation.
 - Economic models (such as Computable General Equilibrium models³³) for economic sector and geographic specific impact of transition, including carbon abatement measures.
- 4** *Ensuring and documenting appropriate governance and controls for the financial institution's management of climate risks and opportunities, including regular oversight by the Board.*
 - Integration into existing risk management controls and documentation.
- 5** *Developing a strategy to manage climate risk and any opportunities on the financial institution's business, strategy and financial planning.*
 - Assess financial impact of transition and physical risk on business plans, and test adaptation and mitigation strategies.
- 6** *Undertaking scenario testing, including a 2 °C or lower scenario, and assessing the impact on the financial institution's business plan.*
 - For different temperature increase scenarios,³⁴ consistently evaluate physical and transition risk impacts on business plans.
- 7** *Developing metrics and targets to measure the financial institution's performance in line with its strategy and risk management process.*
 - As well as the recommended metrics from the TCFD,³⁵ consider metrics that provide insight to investors, as well as those that enable operational implementation, e.g. restricted lending/insurance to carbon intensive industries.
- 8** *Disclosing the above items to all stakeholders in line with the TCFD recommendations.*
 - Recommended to be within annual reports and accounts.
 - Gap analysis between current disclosures and required disclosures, including integration into existing reporting controls and frameworks.
 - Closer collaboration between sustainability, risk management, strategy and finance teams. ▲

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**Actuaries
Institute**

Institute of Actuaries of Australia
ABN 69 000 423 656
Level 2, 50 Carrington Street,
Sydney NSW Australia 2000
t +61 (0) 2 9239 6100
f +61 (0) 2 9239 6170
e actuaries@actuaries.asn.au
w www.actuaries.asn.au