MinterEllison

Environment-schmironment: Climate change risk through a finance & liability lens

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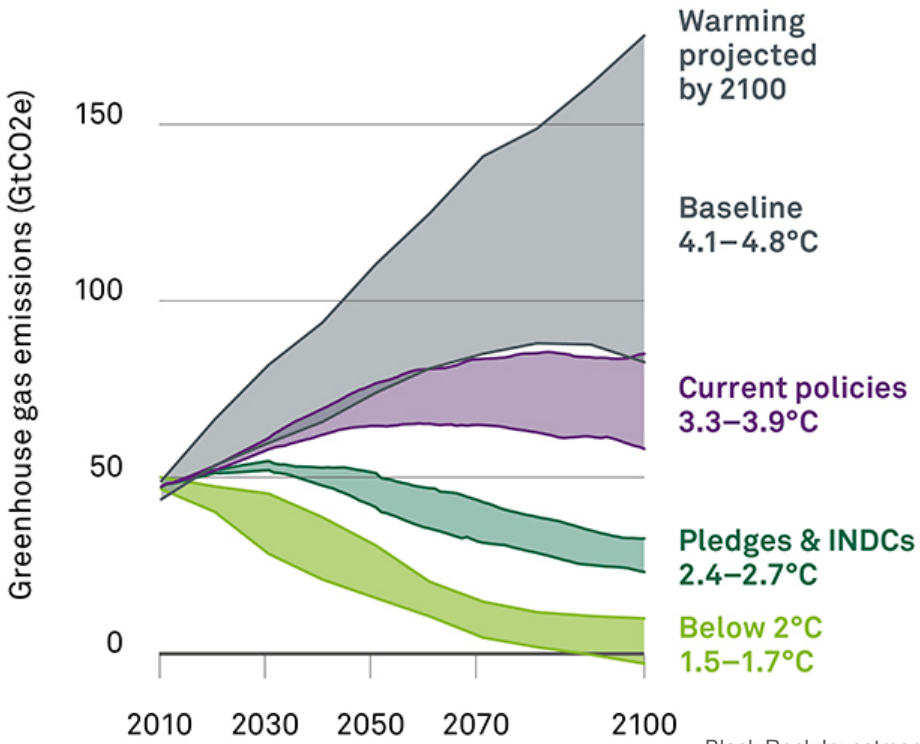
Stanthorpe, 3 April 2019

There are three main categories of climate-related risk

BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

- Referencing climate risk framework adopted by Bank of England Prudential Regulation Authority (*MinterEllison – legal brief)*
  - Physical – ecological impacts: gradual onset and extreme catastrophic
  - Economic transition – market impacts driven by policy, technology, social responses to those physical risks
  - Liability consequences – failure to mitigate, adapt or disclose
- ***These risks manifest within mainstream decision-making, development and finance horizons – including the shorter term***

Potential climate pathways to 2100



Black Rock Investment Institute, Sept 2016

Economics

Transition risks

World Economic Forum – Global Risks Report 2016

Top 10 risks in terms of
Likelihood

1. Large-scale involuntary migration
2. Extreme weather events
3. Failure of climate-change mitigation and adaptation
4. Interstate conflict
5. Natural catastrophes
6. Failure of national governance
7. Unemployment or underemployment
8. Data fraud or theft
9. Water crises
10. Illicit trade

Top 10 risks in terms of
Impact

1. Failure of climate-change mitigation and adaptation
2. Weapons of mass destruction
3. Water crises
4. Large-scale involuntary migration
5. Energy price shock
6. Biodiversity loss and ecosystem collapse
7. Fiscal crises
8. Spread of infectious diseases
9. Asset bubble
10. Profound social instability

WORLD ECONOMIC FORUM

Transition risks

- Market impacts driven by:
  - **policy and regulatory** responses
  - **technology**
  - **shifting social preferences and market stakeholder expectations**

BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY

- *Who says?*
  - *Beyond the 'fossil fuel divestiture debate'* - transition risk recognition continues to rapidly increase amongst asset owners, asset managers, insurers, banks, regulators
  - Regulators in Australia: APRA, RBA, ASIC and ASX
  - *And your accountants and insurers*

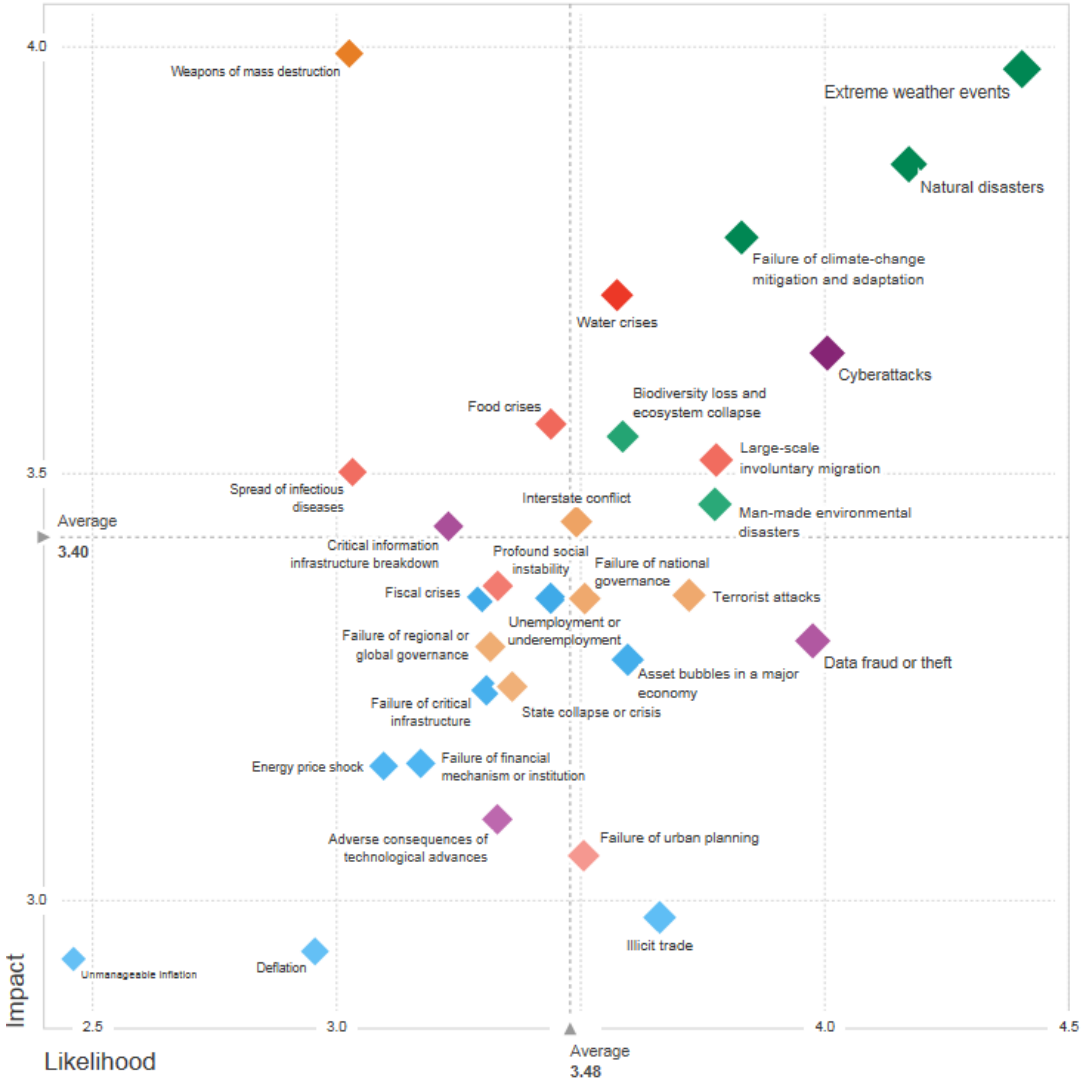
Australian Government
Australian Accounting Standards Board

Climate-related and other emerging risks disclosures: assessing financial statement materiality using AASB Practice Statement 2
December 2018

World Economic Forum –Global Risk Landscape 2018

2018

- Weapons of mass destruction
- Extreme weather events
- Natural disasters
- Failure of climate-change mitigation and adaptation
- Water crises



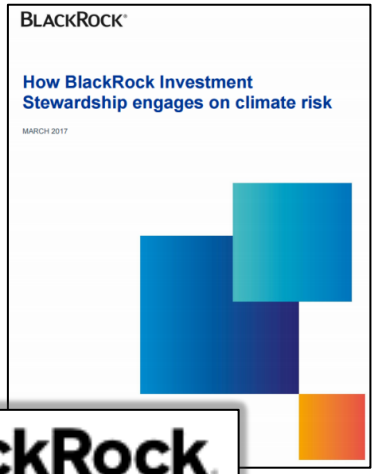
2018

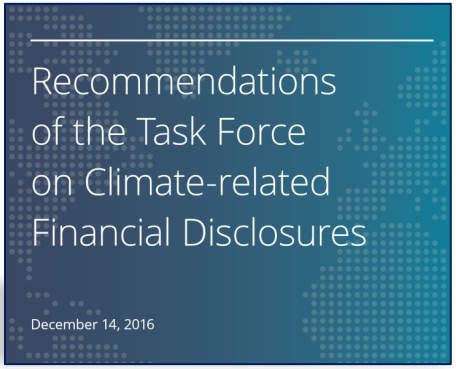
- Extreme weather events
- Natural disasters
- Cyberattacks
- Data fraud or theft
- Failure of climate-change mitigation and adaptation

The impact of a scary American…?

Be very afraid….

‘Demonstrable fluency’





Credit ratings?

Bloomberg Markets Tech Pursuits Politics Opinion Businessweek

Moody's Warns Cities to Address Climate Risks or Face Downgrades

By Christopher Flavelle
29 November 2017 08:00:00 pm

Climate Change Is A Global Mega-Trend For Sovereign Risk

STANDARD & POOR'S RATINGS SERVICES
McGRAW HILL FINANCIAL

Vulnerability To Climate Change

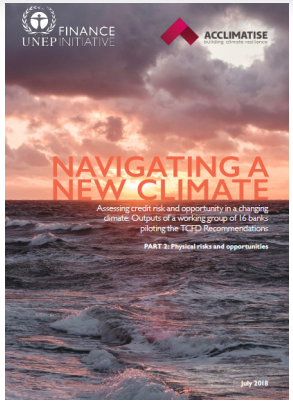
Overall ranking	Sovereign	Population living below five meters altitude (2000)		Agriculture as share of GDP (2012)		GAIN Vulnerability Index (2012)	
		Rank	(%)	Rank	(%)	Rank	Index
116	Cambodia	90	10.6	113	35.6	106	0.500
115	Vietnam	112	42.8	103	19.7	90	0.381
114	Bangladesh	98	14.0	100	17.7	104	0.495
113	Senegal	100	14.8	96	16.7	100	0.472

….and banks are right behind them

CLIENT	RATING (S&P)	RISK (R$ MM)	NUMBER OF STATES	NUMBER OF CROP TYPES
Client 1	BBB	391.8	1	5
Client 2	BB+	129.3	1	3
Client 3	BBB	115.5	1	2
Client 4	BB-	112.3	1	2
Client 5	BB	108.7	1	4
Client 6	BB-	107.6	1	3
Client 7	BB	84.1	1	
Client 8	B	55.7	2	
Client 9	BB-	55.3	1	
Client 10	B	44.1	3	
Client 11	BB-	42.0	1	
Client 12	BB-	41.2	4	
Client 13	B	39.5	1	
Client 14	B	17.2	2	

Table 3.3. Impact of incremental climate change risk on the financial variables of the sample of agricultural sector clients for the 2040s 4°C scenario compared to the present-day (baseline)

CLIENT	REVENUE CHANGE (%)
Client 1	-12
Client 2	-4
Client 3	22
Client 4	-16
Client 5	-14
Client 6	-13
Client 7	-3
Client 8	-2
Client 9	-4
Client 10	-2
Client 11	-10
Client 12	-8
Client 13	-11
Client 14	-8

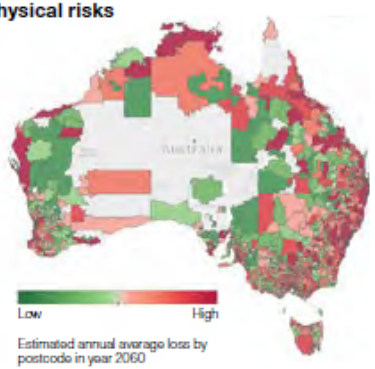


CBA FY18

- Annual Report
- 8 August 2018

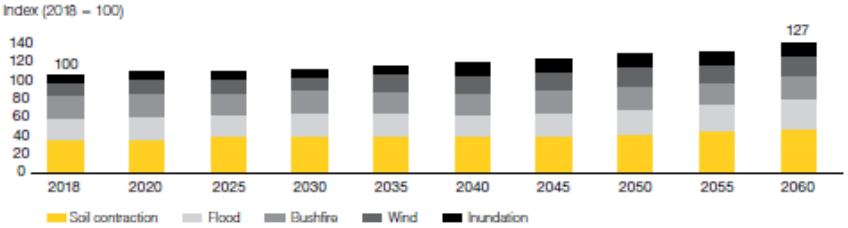
Estimated annual average losses to customers from physical risks

Impact	Customers facing increasing repair and replacement costs for physical damage to their properties.
Findings	Under the high emissions (RCP 8.5) scenario, if we were to continue to lend in these areas, the estimated annual average losses to customers across our home lending portfolio are expected to increase by 27% by 2060 – this is less than 1% per annum. The largest contributor to these losses currently arises from soil contraction, but the modeling shows that coastal inundation losses could increase by 71% by 2060, primarily due to sea level rises.



Estimated annual average loss by postcode in year 2060

Estimated annual average loss by peril

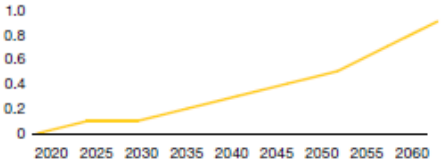


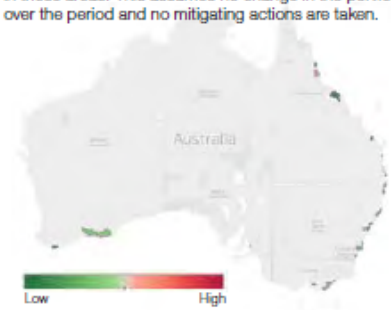
High risk properties

To better understand our potential credit risk, we have estimated the part of our current portfolio which may be high risk, where this is located and how it could change over time. We have considered high risk to be properties where the increase in insurance costs from 2018 as a result of climate change have the potential to create financial strain for customers and their property values.

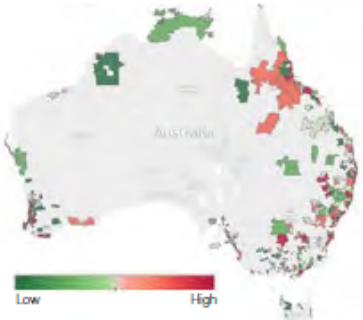
High risk properties make up only 0.01% of our portfolio (by outstanding balance) in 2020 and rises to be around 1% in 2060 if there are no changes in the way we lend in these areas. This assumes no change in the portfolio over the period and no mitigating actions are taken.

Estimated % of portfolio (outstanding balance) considered high risk



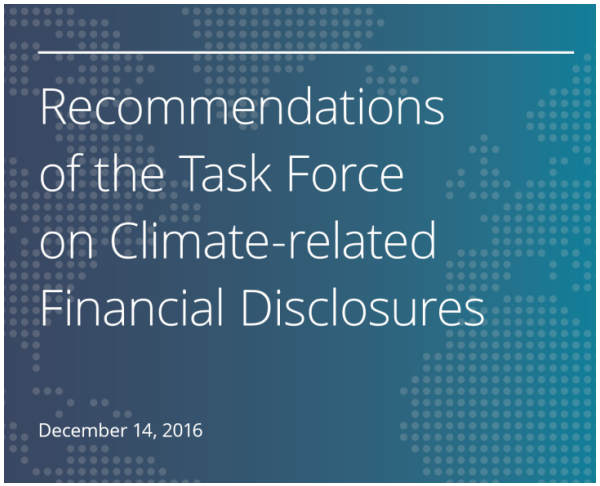


Estimated average annual loss for high risk properties by postcode (in year 2020)



Estimated average annual loss for high risk properties by postcode (in year 2060)

Significant driver of analysis and disclosure across the economy



- *What makes these voluntary standards so significant?*
- Governance, strategy, risk management, metrics & targets
- Specific additional 'supplemental guidance' for financial services + 12 non-financial sectors
- Stress-testing and scenario planning are central themes
- Investors from BlackRock, ACSI and Climate Action 100+ seeking disclosure by investees consistent with TCFD Recommendations

The good news: finance *opportunities* for the ag sector

Green / sustainable finance: the evolution

GREEN BONDS

GREEN LOANS

SDG BONDS/LOANS

CLIMATE - LINKED MORTGAGES

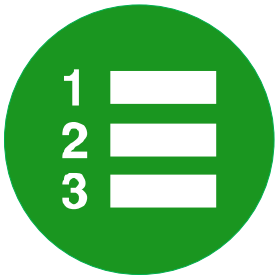
POSITIVE INCENTIVE FACILITIES

The PIF difference: *sustainability-based margin adjustment mechanisms*

- Interest rate payable: reference currency index/ bank rate + credit-based margin **+/- sustainability premia/discount**
- What size discount/premia are we talking about?
  - Typically 5-10% of unadjusted rate
  - *Eg Iberdola*

- Adjustment triggers?
  - Inherently bespoke (broad 'ESG' rating to specific quant targets)
- Assurance?
  - Third party sustainability auditing (eg Sustainalytics, Vigeo Eiris)

Margin adjustment triggers



General ESG

Tied to 3P ESG rating

Specific metrics, stretch targets

Eg. emissions intensity reductions, percentage supply chain audits

Agri sector examples

Danonino	Dairy + plant-based products	€2b	ESG score Sustainalytics + Vigeo Eiris
BARRY CALLEBAUT	Cocoa & chocolate	€750m	ESG score Sustainalytics
storaenso	Pulp & Paper	€600m	Science-Based Targets per tonne pulp, paper board
bel	Dairy	€520m	Reduce carbon footprint, Foster healthier consumption habits and lifestyles, & Accelerate the sustainable transformation of dairy upstream. Penalty to a NGO or for internal investments allowing to achieve the objective.
Olam	Food processor / manufacturer	US$500m	ESG score Sustainalytics
wilmar	Tropical Oils, Oilseeds, Grains, Sugar	US$150m US$200m US$100m	Tiered adjustments based on Sustainalytics assessment of biodiversity and greenhouse gas reduction programmes, renewable energy use, freedom of association policy
SOCFIN Responsible tropical agriculture	Rubber & palm oil	€15m	Sustainability improvements

Liability & insurance consequences?

FINANCIAL REVIEW

NEWS WEBSITE OF THE YEAR

Directors' climate liability exposure increasing 'exponentially'

Ben Potter
Senior Reporter

Mar 29, 2019 — 12.15am

Save Share

The exposure of individual company directors to the risk of "climate change litigation" is increasing, probably exponentially, a new legal opinion asserts.

Sydney SC Noel Hutley and barrister Sebastian Hartford Davis write that it is obvious that climate change is affecting the economy, "and it is increasingly difficult in our view for directors of companies of scale to pretend that climate change will not intersect with the interests of their firms".

They conclude that there are now "significant and well publicised risks associated with climate change and global warming that would be regarded by a court as foreseeable", and that "it is apparent that regulators now expect much more from companies than cursory acknowledgement and disclosure of climate change risks.

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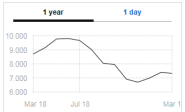

Updated: Mar 29, 2019 — 1.22pm

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ORE $12.43 +0.08 (+0.65%)

42 Accounting & Consulting

Climate risk disclosure escapable no longer

Vesna Poljak

Climate risk is no longer a sustainability issue and only has to meet the definition of "materiality" to require disclosure in what is believed to be a leading initiative as far as global audit and accounting standards go, originated by Australia's key bodies.

The Australian Accounting Standards Board (AASB) and the Auditing and Assurance Standards Board (AUASB) are stepping up the profile of their jointly written guidance around emerging risks, issued in December, which is not mandatory but would represent best practice in applying the mandatory definition of materiality.

It is timed with the forthcoming annual financial statements being prepared for companies with June 30 balance dates in mind.

The effect, if applied faithfully, is to limit the ability of entities to be evasive around risks mostly related – but not restricted – to climate. It also puts the onus on companies to explain the true extent of any impact, as opposed to having investors, creditors or other intrigued parties rely and act on their own speculation.

"It's been very important that we help companies, and particularly directors and CEOs, start to think about the impact of climate risk and other emerging risks in their financial statements. That's the real purpose for us – you need to have a very broad conversation when you're starting to think about these risks," Kris Peach, chairman of AASB, said.

"[Investors are] actively telling entities that these types of disclosures are impacting their decisions."

Even if there is no financial impact to quantify, simply the fact that investors might have an expectation that climate matters will have a significant impact on a company is enough to either compel disclosure or articulate why there is no such actual impact despite a market expectation.

A climate risk can be the potential for natural disaster, or the consequence of how technology, markets, the law or policy responds to climate-related matters. The guidance can be used to frame any relevant risk.

Several key aspects of financial statements will be enriched including those relating to fair value, impairments, provisions for restoration, and significant estimates and judgments. Ms Peach disagrees that it would raise the risk of impairment by forcing entities to recognise emerging risks. The guidance is crafted with the intention of promoting disclosure of the relevant assumptions.

The leading bodies found that climate is often covered in annual reports, but not where it matters. Only 8 per cent of ASX 100 companies made their disclosures within the financial statements. That is relevant because the content of ancillary reports, such as sustainability reporting, is not audited.

"If it's in the financial statements, it's going to be audited; if it's outside, the auditor has a look at it to see if it's consistent. But it's not actually audited, so it doesn't have the same credibility," Ms Peach explained.

The Australian bodies are the first to link the mandatory definition of materiality, which is based on international standards, and the interpretation of materiality as outlined in practice statement 2.

Practice statement 2 instructs on how to arrive at materiality judgments, and states that they need to be assessed on whether the information could reasonably be expected to influence the decisions of primary users such as investors.

Kris Peach says companies must think about climate risk. PHOTO: JESSICA SHAPIRO

Key points

Climate guidance is timed with the forthcoming annual financial statements in mind.

The guidance, which originated in Australia, is believed to be world-leading.

REST fights claim it failed to consider climate change

Planning, approvals and commercial laws

- Litigation and administrative claims (merits and judicial review)
  - Planning & development – mapping and approvals?
  - Boundary adjustments and public resumption of land?
  - Negligence & nuisance:
    - failure to adapt contributes to private property damage?
    - economic losses following critical infrastructure outages?
    - reliance on incomplete or incorrect information?
  - Contract: force majeure?
  - Misleading disclosure?
  - Sub-national governments: discharge of statutory obligations
- *The political power of 'ostensibly unsuccessful' litigation*

Justice Preston ruffles some feathers

Land and Environment Court
New South Wales

Medium Neutral Citation:	**Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7**
Hearing dates:	13-17, 20-24, 27-28 August 2018 and 16, 30 November and 7, 14 December 2018 (
Date of orders:	08 February 2019
Decision date:	08 February 2019
Jurisdiction:	Class 1
Before:	Preston CJ
Decision:	The Court orders: (1) The appeal is dismissed. (2) State significant development application No SSD5156 for the amended Rocky of consent to the application.
Catchwords:	APPEAL – open cut coal mine – impacts on existing, approved and likely preferred impact – negative social impacts – impacts of the mine on climate change – econon other land uses – impacts and costs of mine outweigh benefits of mine – developme
Legislation Cited:	Environment Protection and Biodiversity Conservation Act 1999 (Cth) Environmental Planning and Assessment Act 1979 Environmental Planning and Assessment Regulation 2000 Environmental Protection Act 1994 (Qld) Gloucester Development Control Plan 2010 Gloucester Local Environmental Plan 2010 Mineral Resources Act 1989 (Qld) Paris Agreement 2015 Protection of the Environment Administration Act 1991 Protection of the Environment Operations Act 1997 State Environmental Planning Policy (Mining, Petroleum Production and Extractive State Environmental Planning Policy (Petroleum Production and Extractive Industrie 2018 State Environmental Planning Policy (State and Regional Development) 2011 United Nations Framework Convention on Climate Change 1992
Cases Cited:	Abley v Yankalilla District Council (1979) 22 SASR 147; (1979) 58 LGRA 234 Aldous v Greater Taree City Council (2009) 167 LGERA 13; [2009] NSWLEC 17

News Print article

Landmark decision blocks Gloucester Resources coal mine in NSW

By Ben Potter

In an appeal decision being hailed as a landmark that could further tighten the screws on the coal industry, the NSW Land and Environment Court has blocked Gloucester Resources' proposed Rocky Hill coking coal mine on the ground that it would hasten climate change.

The decision by Chief Judge Brian Preston, SC, who is an expert on climate litigation, will reverberate around the coalmining districts of the nation.

FINANCIAL REVIEW

'A decision that's come out of a parallel universe': Ruling to reject coal mine slammed

11/02/2019

CHRIS SMITH ROCKY HILL COALMINE

2GB 873AM

The Sydney Morning Herald

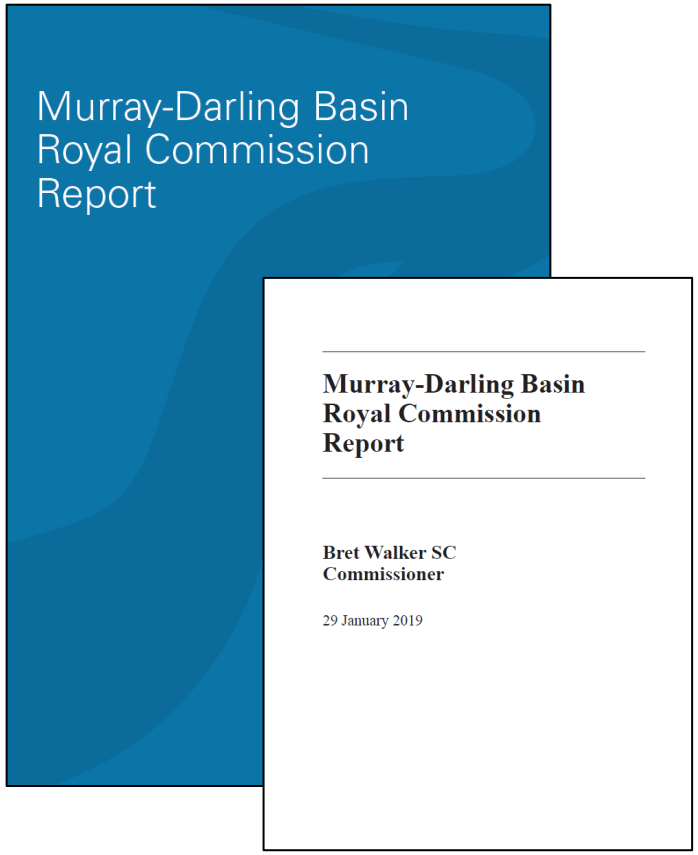
ENVIRONMENT CLIMATE CHANGE COURTS

'We won': Landmark climate ruling as NSW court rejects coal mine

Planning, approvals and commercial laws

- Litigation and administrative claims (merits and judicial review)
  - Planning & development – mapping and approvals?
  - Boundary adjustments and public resumption of land?
  - Negligence & nuisance:
    - failure to adapt contributes to private property damage?
    - economic losses following critical infrastructure outages?
    - reliance on incomplete or incorrect information?
  - Contract: force majeure?
  - Misleading disclosure?
  - Sub-national governments: discharge of statutory obligations
- *The political power of 'ostensibly unsuccessful' litigation*

The OTHER Royal Commission



- '…climate change…appears to be regarded by the MDBA as a factor to be dealt with by the same mundane operational flexibility as the system always has displayed in order to cope with 'normal' variability.'
- …Science, as that term should be understood, was not used. The MDBA has failed to disclose key matters, such as its modelling. Science is open, available, and can be critiqued and checked. It can be validated or invalidated.
- [The MDBA's failure to conduct] any review of climate change risks to the Basin…demonstrates ongoing negligence by the MDBA. It is a dereliction of its duties. It is not just indefensible, but incomprehensible…'

A few more choice words

- ‘Politics rather than science ultimately drove the setting of the Basin-wide SDL and the recovery figure of 2750 GL. The recovery amount had to start with a ‘2’. This was not a scientific determination, but one made by senior management and the Board of the MDBA. It is an unlawful approach. It is maladministration.

- In 2011, management of the MDBA improperly pressured the CSIRO to alter parts of the CSIRO’s ‘Multiple Benefits’ report. This rendered parts of that report misleading, as they no longer reflected the views of, at the very least, Dr Matthew Colloff, who was one of the authors. The CSIRO should not have agreed to the changes that were made. This conduct too represents maladministration.

- Regrettably…the MDBA has shown itself to be unwilling or incapable of acting lawfully. …there are serious doubts whether the current senior management and Board are capable of fulfilling their statutory obligations and functions.

- The assertion by the MDBA that climate change projections could not be incorporated into the modelling because they were too uncertain is rejected.

- [The MDBA’s failure to conduct] any review of climate change risks to the Basin… demonstrates ongoing negligence. It is a dereliction of its duties. It is not just indefensible, but incomprehensible.

- Any assertion by the MDBA that climate change can be incorporated into the Basin Plan modelling at its 10-yearly review, or at some later date, is misplaced. Climate change is happening now, and can occur quickly. Deferral to a later date…is nonsensical in a policy sense as well as unlawful.

Key message: *this is a different kind of green - the weight of money*

- Climate change has evolved from a purely ‘ethical, environmental, non-financial’ issue, to one that presents material risks and opportunities within mainstream investment horizons (and political cycles)
- When capital markets and regulators are on board, political ‘beliefs’ become irrelevant
- Financial and legal imperatives underpin proactivity in both climate change mitigation (emissions reduction) and adaptation (impact risk management and strategy)

What next?

- Consider material climate risk drivers & opportunities (mitigation and adaptation, physical and economic transition risks) for *your* operations
- Build the business case: quantify impact on long-term cash flows, yield/productivity, flood risk reduction etc - *how will this maximise future revenues, costs and property values, and thus your Probability of Default (PD) and Loan-to-Value (LTV) ratios?*
- Talk to your bank. Talk to other banks.
- Talk to your neighbours and your representatives (collective / community-based projects?)
- Competitive advantage: talk to your customers.

MinterEllison