

Sustainability summit

21 November 2019



© 2019 Willis Towers Watson. All rights reserved. Proprietary and Confidential. For Willis Towers Watson and Thinking Ahead Institute members' use only.

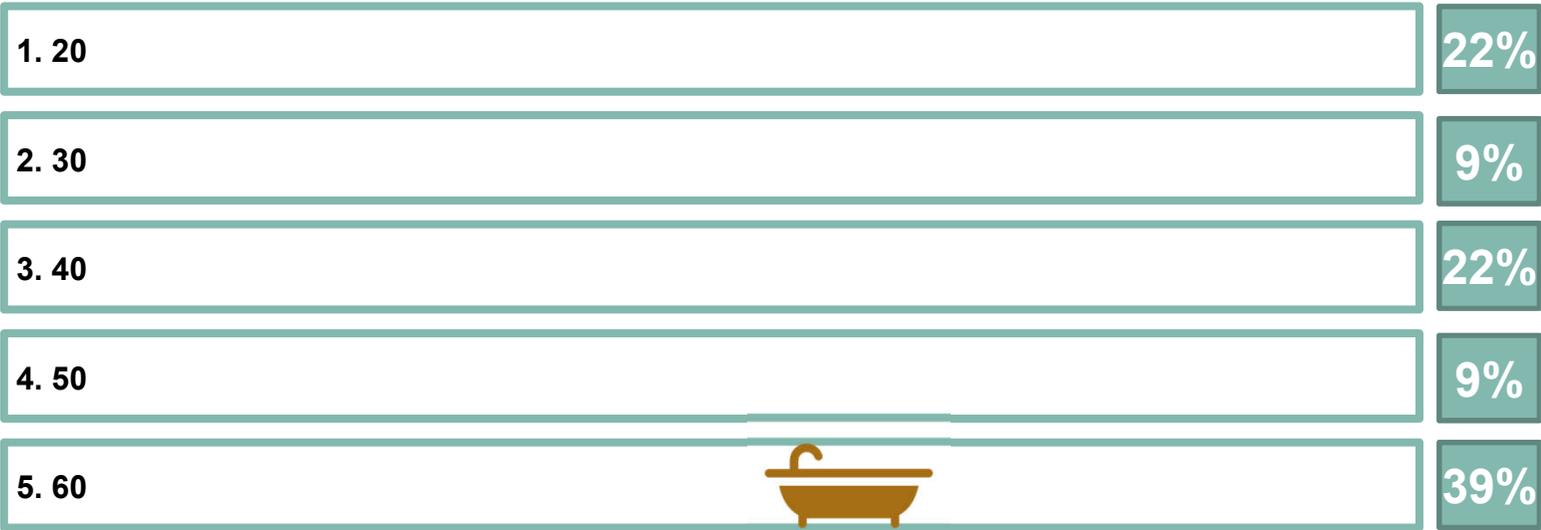
Thinking Ahead Institute
WillisTowersWatson 

Sustainability summit

Objectives

- Learn from academic experts
- Explore what we can do in practice
- Develop a list of practical, actionable takeaways

You save more water by not eating 450 grams of hamburger meat than you would by not showering for ____ days



The most important thing to happen right now (audience suggestions)

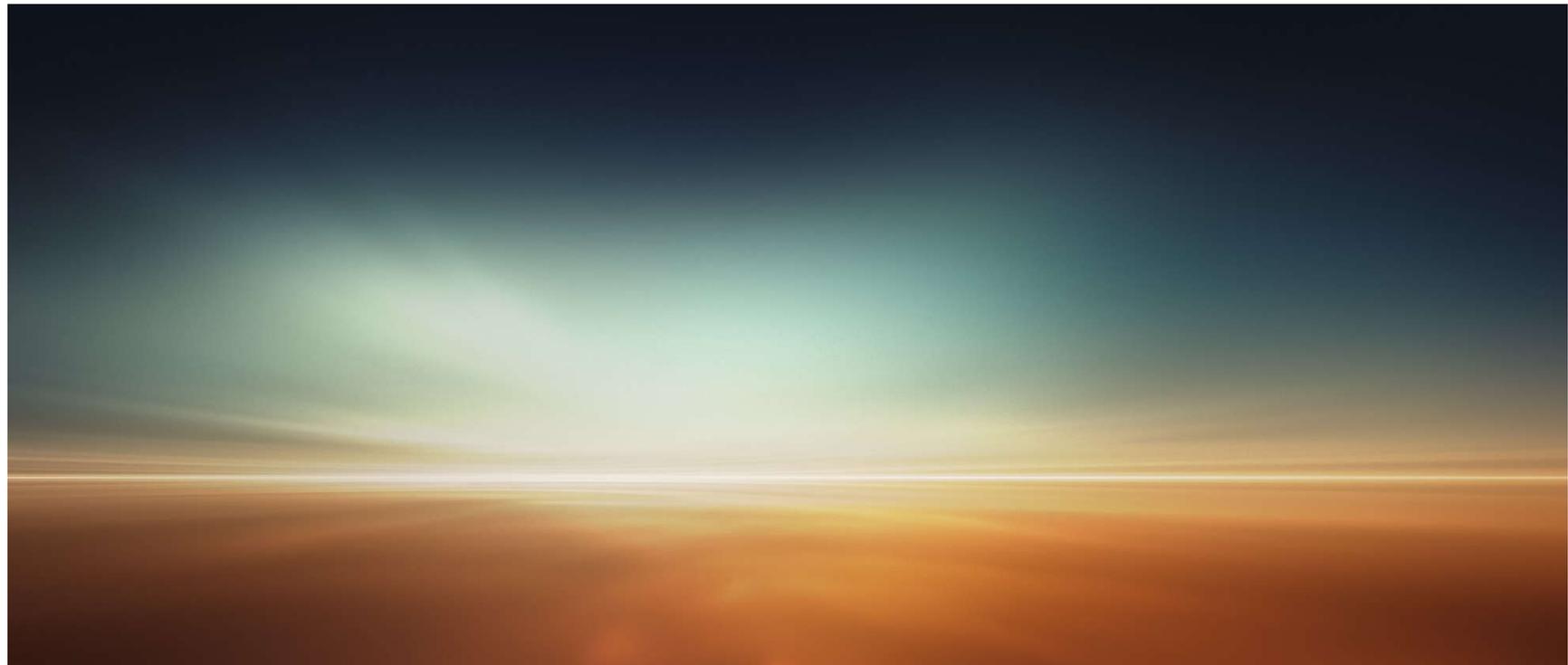
- “Rework fiduciary duty
- Australia to lead on climate
- Industry people to clearly understand climate change
- Independent challenge to greenwashing
- Investment industry takes ownership and lobbies
- Address inequality
- Sustainability on every agenda, all the time
- Politicians to think long term
- Carbon pricing
- Listen to, and hear, experts
- Close the policy-action gap on climate
- Raise awareness of climate and integration with other issues
- Think long term
- Whole market accurately prices carbon
- Investment industry to drive corporates’ behaviour
- Change what growth means
- \$100/tonne carbon price NOW (and increasing through time)
- Develop standard measurement
- Strong political and corporate leadership
- All governments globally to get woke to climate
- Governments to regulate and elevate SDGs
- Pollution tax to change behaviours
- Global standards for disclosure and reporting”

Agenda

| Time | Session | Presenter |
|-------|--|--|
| 9:00 | Welcome and introductions | Tim Hodgson |
| 9:30 | Sustainability beliefs | Roger Urwin |
| 10:30 | <i>Break</i> | |
| 11:00 | Spotlight topic 1 – climate change | David Karoly |
| 12:30 | <i>Lunch</i> | |
| 13:30 | Spotlight topic 2 – corporate stewardship in pursuit of the SDGs | Tim Hodgson |
| 15:00 | Practitioner panel | Roger Urwin Mary Delahunty, Allison Hill, Liza McDonald |
| 16:00 | Closing thoughts | |
| 16:30 | <i>Finish</i> | |

Sustainability beliefs

Roger Urwin



Sustainability in investing: the concept

- Understanding of the material factors that affect long-term value creation
- Aims to generate long-term value in an efficient and balanced approach that is fair to successive generations
- Sees success as achieving a balance of objectives: the maximisation of risk-adjusted financial return and creating positive impact in extra-financial outcomes
- Emphasises governance and stewardship as coping mechanisms

The need for investment beliefs

- Asset owners have to mix a number of distinct strands to build the sustainable strategy that meets their mission
- These multi-strand elements are difficult to integrate into a coherent sustainable strategy
- The conflation of these elements, with their mixed motives and timescales in particular, can often result in cognitive dissonance producing misalignment of mission and strategy
- Dealing with this requires strong governance processes to achieve mission clarity in which beliefs will be a fundamental element.

Effective belief systems

Beliefs are high level principles and subjective thinking that guide the organisation to certain types of decisions and content

Effective beliefs are aligned (collective), actionable (get embedded in portfolios) and edgy (have depth and carry competitive advantage)

Perfect consensus (one identical shared view) is not possible; a settlement (agreement to work to a shared view) is possible

Beliefs include the unique context parameters of the enterprise as much as the investment content

What beliefs cannot do is dictate the decisions and the investment priorities, in these areas critical judgement skills must come in

1. My investment organisation has attained appropriate levels of mission and purpose clarity



Total votes: 21

2. Investment organisations in general have attained appropriate levels of mission and purpose clarity

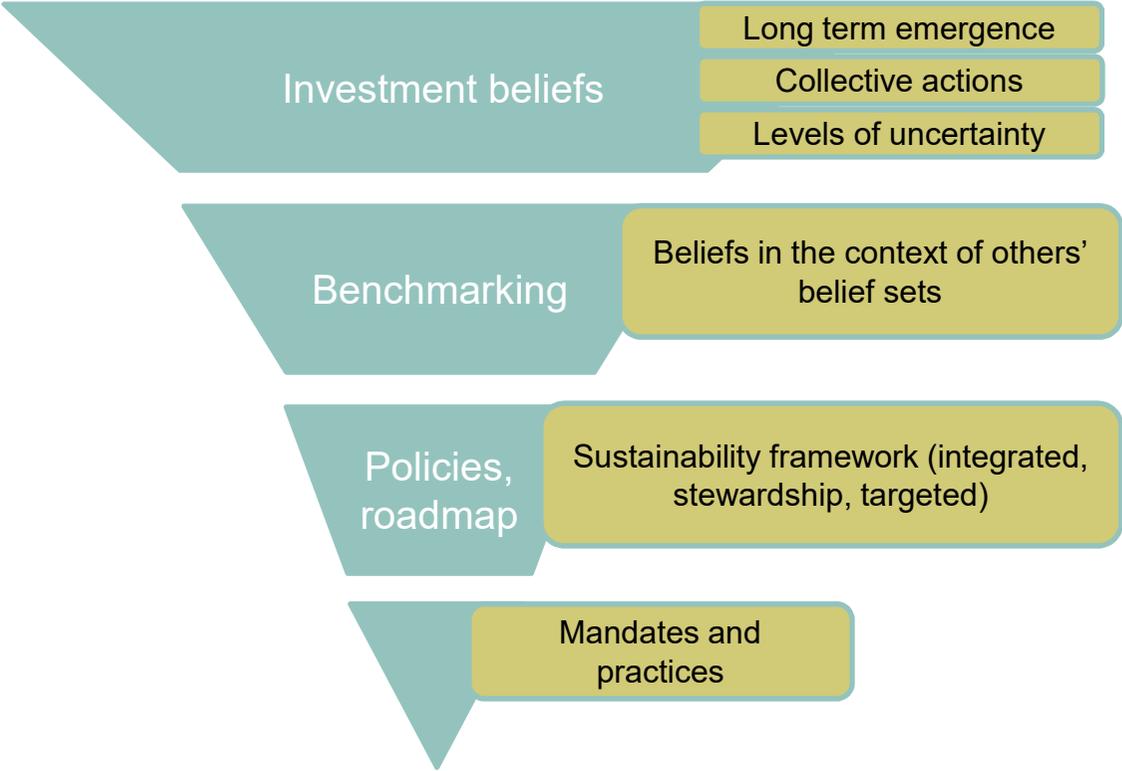


Total votes: 22

Beliefs project methodology and output



Approaches to sustainability



Project summary

Survey group

- 550 responses
- From 45 organisations
- Asset managers and asset owners

About the survey:

- 36 questions, of which:
 - 32 are based on Likert scale
 - 4 offer range-based responses

Six vectors used to frame the results



Beliefs project results and takeaways



3. Investors are over-sensitive to short-term factors and not sensitive enough to long-term factors. As a result, long-term factors are less efficiently priced



Total votes: 22

4. The market does not accurately price in ESG externalities



Total votes: 22

Agreement – highest

| Statements with which respondents agreed most on average | % agree |
|---|---------|
| 14. Sustainability in investing is broader than considering ESG factors, and includes sustainability of the economic and financial system | 86% |
| 17. Systematically considering ESG issues will lead to more complete analyses and better-informed investment decisions | 85% |
| 19. The execution of ownership rights, including voting and engagement, can positively influence the performance and lower the risk of investments over time | 85% |
| 1. Investors are over-sensitive to short-term factors and not sensitive enough to long-term factors. As a result, long-term factors are less efficiently priced | 82% |
| 23. Asset owners as part of their overall responsibilities should consider direct and indirect negative impact with respect to the ESG footprint of their investments | 81% |
| 5. I am willing to accept a lower return in the shorter term to deliver higher long-term returns | 80% |

Agreement – lowest

| Statements with which respondents agreed least on average | % agree |
|--|---------|
| 22. Asset owners should steer clear of non-financial considerations on the basis that financial factors should represent the only consideration | 9% |
| 2. The long term is the same as the aggregation of short terms. As a result investors can be most effective maximising the performance of a series of short-term periods | 11% |
| 16. The excess demand of investors for assets with well-managed ESG factors has made these investments higher priced and ultimately lower performing than mainstream | 18% |
| 20. The benefits of incorporating ESG principles into the investment process are unlikely to outweigh the cost of doing so | 28% |

Beliefs on climate change

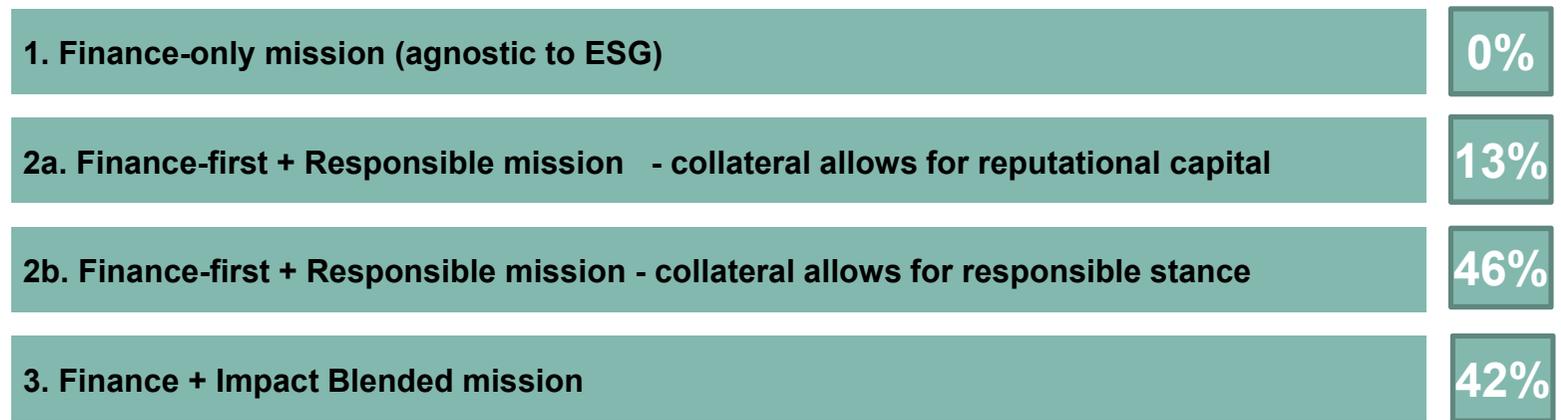
| Statements from respondents on climate change | |
|---|---------------|
| 3. The market does not accurately price in ESG externalities | 69% agreement |
| 4. ESG externalities can effectively be priced into valuations | 49% agreement |
| 30. Over what time frame will climate change create material impacts for society | 10 years |
| 31. The financial impact of climate change over the next 20 years will be | Moderate |
| 33. Companies can gain significant competitive advantage through their strategic response to climate change and resource scarcity/degradation | 77% agreement |
| 34. There is a case to ignore stranded assets in anticipation of adaptive organisational and market responses | 25% agreement |

The mission buckets

- The values for Materiality, Mispricing and Motivations map to these 'buckets'
- This also allows more accurate specification of the middle areas where funds and managers are clustered with different motivations but similar substance

| | | | |
|---|--|---|---|
| <p>1. Finance-only mission (agnostic to ESG)</p> | <p>2a. Finance-first + Responsible mission - collateral allows for reputational capital</p> | <p>2b. Finance-first + Responsible mission - collateral allows for responsible stance</p> | <p>3. Finance + Impact Blended mission</p> |
| <p>Mission is solely focused on financial goals</p> | <p>Mission is 'responsible' - includes ensuring license to operate and managing reputational capital</p> <p>Conviction that likely to produce no significant financial detriment</p> | <p>Mission is 'responsible' - includes having a positive ESG footprint and doing what underlying investors would wish</p> <p>Conviction that likely to produce no significant financial detriment</p> | <p>Mission is more explicitly concerned with non-financial impacts</p> <p>Conviction that the financial detriment from including non-financial impacts is limited</p> |

5. The mission that seems best placed to deliver an 'ideal' pension fund system is:



Total votes: 24

6. How do you view the following ‘belief’: my organisation, by pursuing more societally beneficial and sustainable actions, will produce better outcomes for itself



Total votes: 23

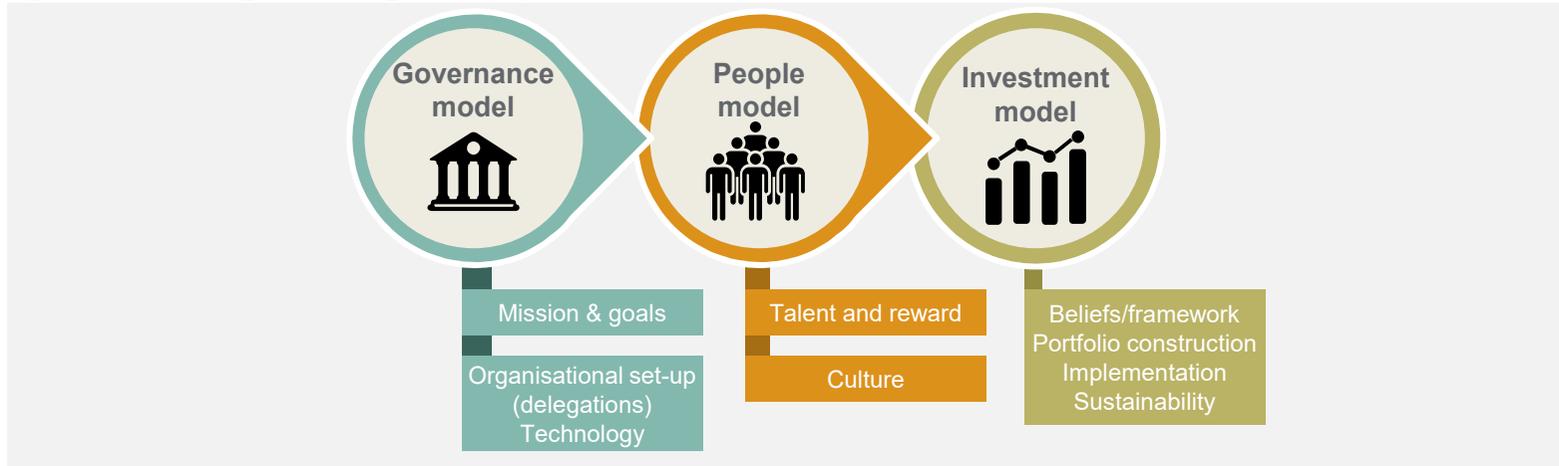
Where are asset owner funds positioned on sustainability?

- Asset owners now count for close to \$100trn on a definition of pensions, SWFs and insurance
- But with limitations in long horizon investing and sustainability and particular problems lie in fiduciary duty, sustainability data and achieving impact

| | | | | |
|---|--|--|-------------------------------------|----------------------------------|
| Beliefs on level of <u>materiality</u> and/or <u>mispericing</u> ascribed to sustainability | Targeted sustainability beliefs reflecting mispricing | | C T | |
| | Integrated sustainability beliefs reflecting materiality | A I | B S | |
| | Traditional beliefs reflecting agnosticism | | | |
| T Tilted/Targeted - includes Integration and Stewardship | | Finance-only mission | Finance-first + Responsible mission | Finance + Impact Blended mission |
| S Stewardship/Engagement - includes Integration | | Beliefs on level of non-financial <u>motivation</u> ascribed to sustainability | | |
| I Integrated ESG | | | | |

Beliefs on sustainability extend into governance

- Sustainable success reflects mission clarity, good information, trusted board governance, and a delegated investment team powered by
 - effective culture (inclusive, open, innovative) and
 - effective leadership (purposeful, empowering, focused on comparative advantages)
- Sustainability in investing requires some governance changes
 - tapping wider network of disciplines and specialists
 - stronger capabilities internally and through strategic partners
 - governed through more agile work practices



7. For investment mandates to adopt sustainability principles, the monitoring should be aligned with these principles (pick up to 3):



Total votes: 23

8. I expect the global average temperature to be ___ °C above pre-industrial levels in 2050



Approx ave +2.4C

Total votes: 24

Spotlight topic 1 – climate change

David Karoly





National Environmental Science Programme



Preparing for changing climate risks

Professor David Karoly, Earth Systems and Climate Change Hub
National Environmental Science Programme, CSIRO

Some views from leaders

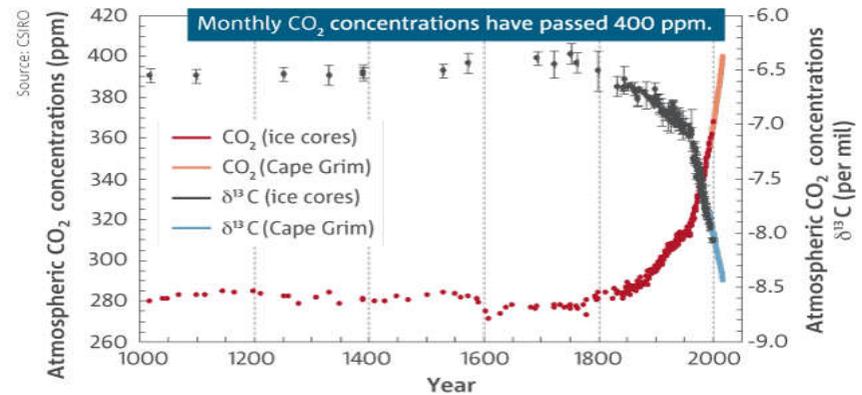
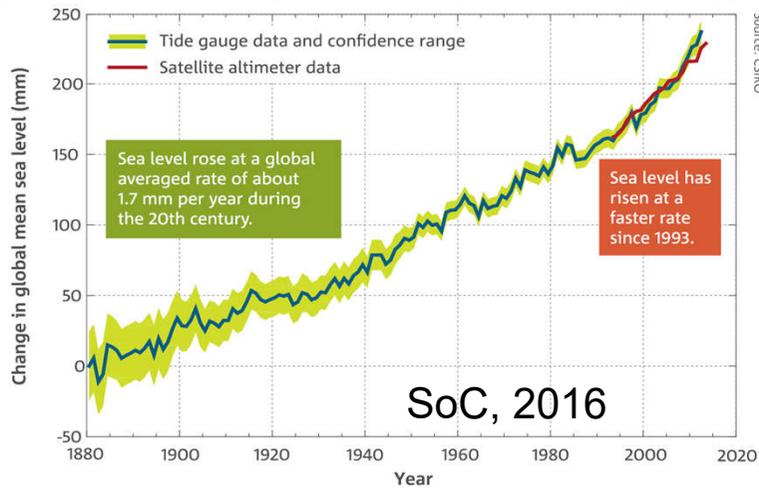
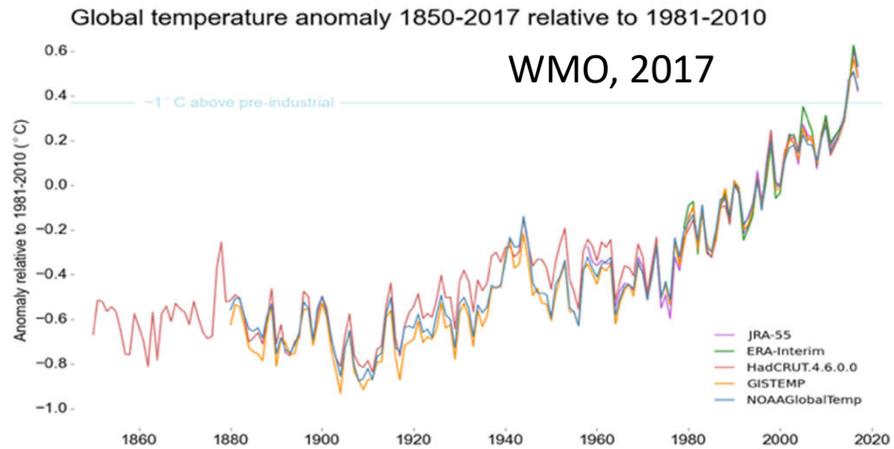
- Ban Ki Moon *“Climate change is the greatest threat facing humanity. It threatens to undo 50 years of our development work and it will impact the poor in the greatest sense.”*
- Barack Obama *“We will respond to the threat of climate change, knowing that the failure to do so would betray our children and future generations.”*
- Andrew Mackenzie, BHP, 2019 *“The evidence is abundant: Global warming is indisputable. The planet will survive. Many species may not.”*

TCFD: Need to manage risks associated with

- physical risks due to climate change, and
- transition to a zero carbon economy

- IPCC Special Report: Climate Change and Land (SRCCL), Aug 2019
- IPCC Special Report: The ocean and cryosphere in a changing climate (SROCC), Sept 2019
- United in Science, report to UN climate action summit, Sept 2019
- Global emissions and Australian emission projections

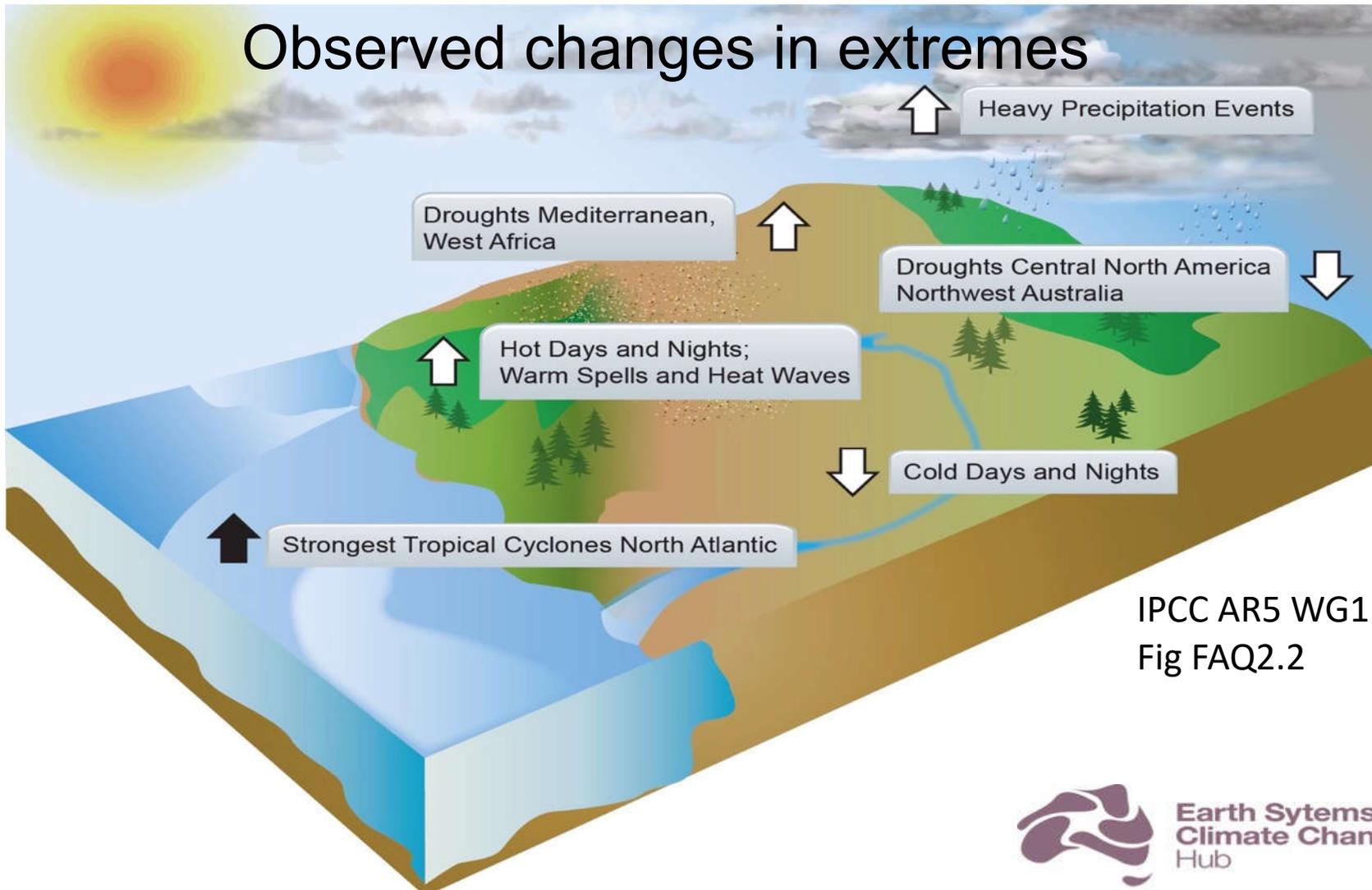
Observed global climate change



The decrease in the ratio of the carbon-13 isotope ($\delta^{13}\text{C}$) that accompanies increasing CO₂ trends show that the sources are fossil fuel and land-use change.

SoC, 2016

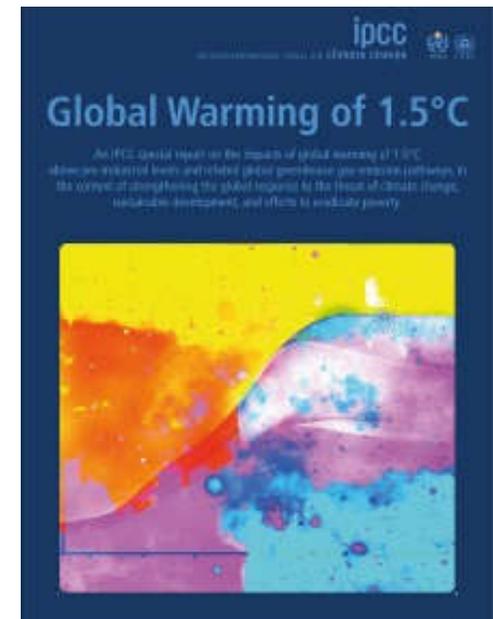
Observed changes in extremes



IPCC AR5 WG1
Fig FAQ2.2

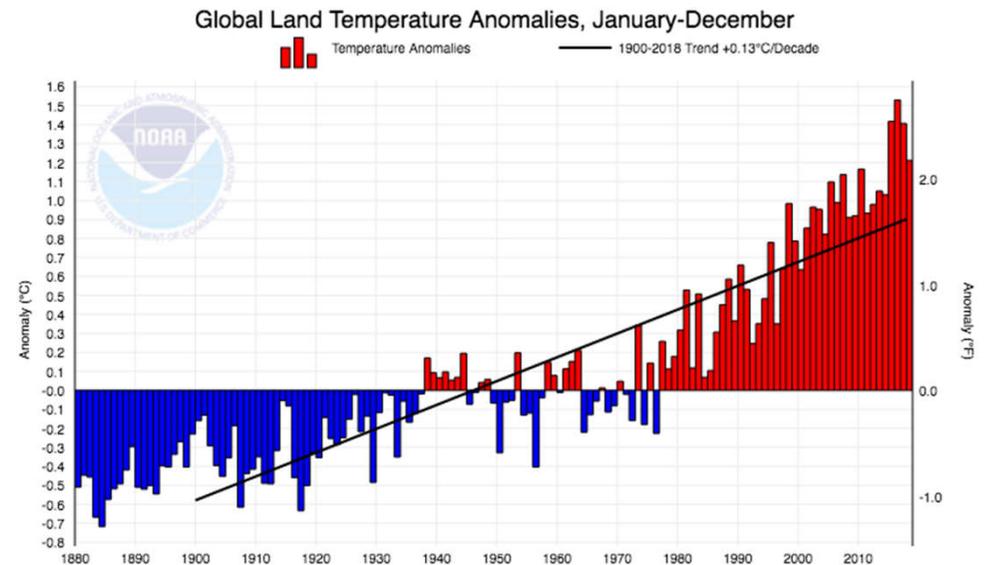
IPCC Special report *Global warming of 1.5°C* , 2018

- Global warming is likely to reach 1.5°C between 2030 and 2052 if warming continues at the current rate
- Climate change-related impacts on natural and human systems are greater for 1.5°C of global warming than at present, even higher for 2.0°C and higher again for the projected warming even if all current commitments under the 2015 Paris Agreement are all met
- “countries in the Southern Hemisphere subtropics” (like Australia) “are projected to experience the largest impacts on economic growth due to climate change should global warming increase”



IPCC Special report on Climate change and Land, 2019

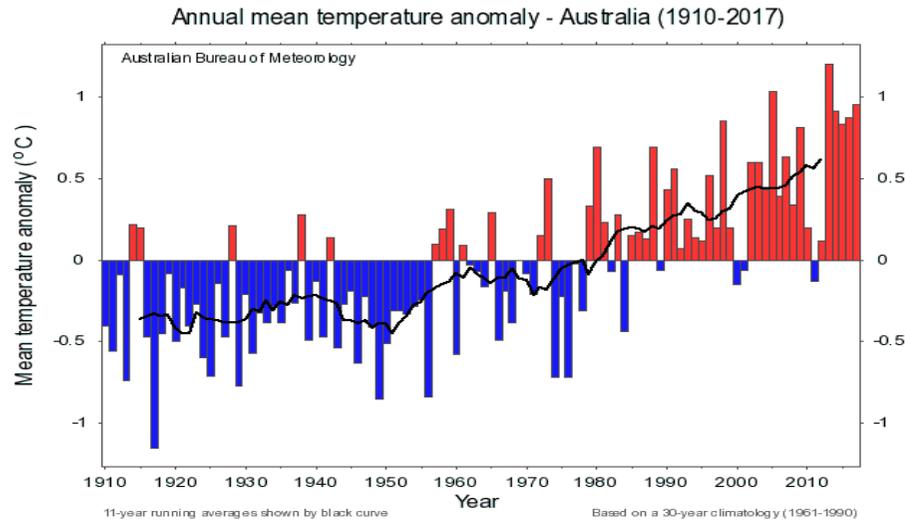
- Since the pre-industrial period, the land surface air temperature has risen nearly twice (~1.7 times) as much as the global average temperature
- Climate change, including increases in frequency and intensity of extremes, has adversely impacted food security and terrestrial ecosystems as well as contributed to desertification and land degradation in many regions



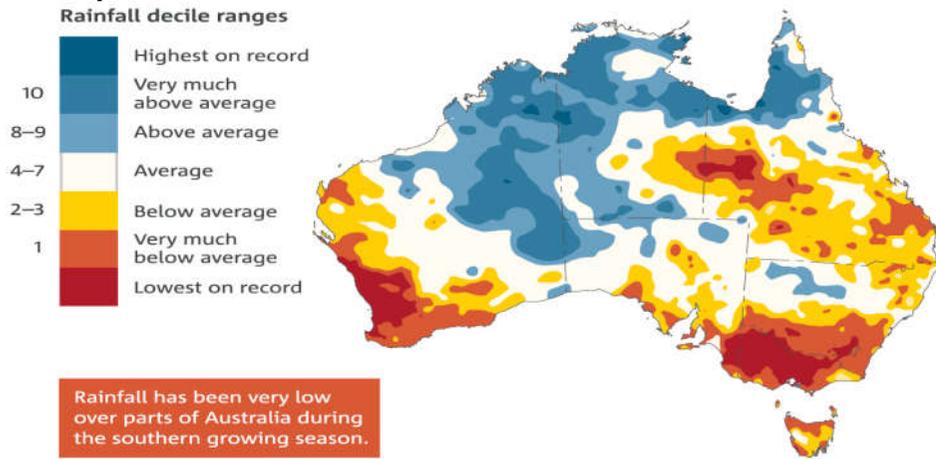
IPCC Special report on the Ocean and Cryosphere in a Changing Climate, 2019

- It is *virtually certain* that the global ocean has warmed unabated since 1970 and has taken up more than 90% of the excess heat in the climate system.
- Marine heatwaves have very likely doubled in frequency since 1982 and are increasing in intensity.
- Global mean sea level is rising, with acceleration in recent decades due to increasing rates of ice loss from the Greenland and Antarctic ice sheets, as well as continued glacier mass loss and ocean thermal expansion.

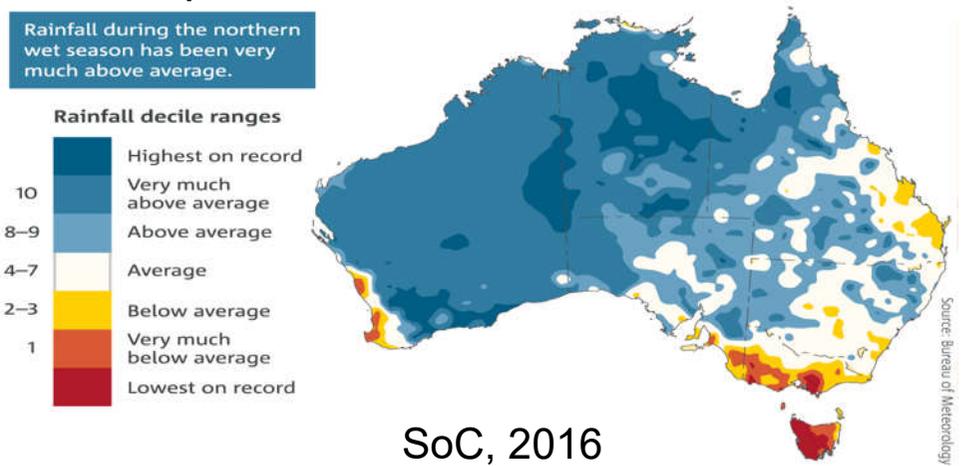
Observed Australian climate change



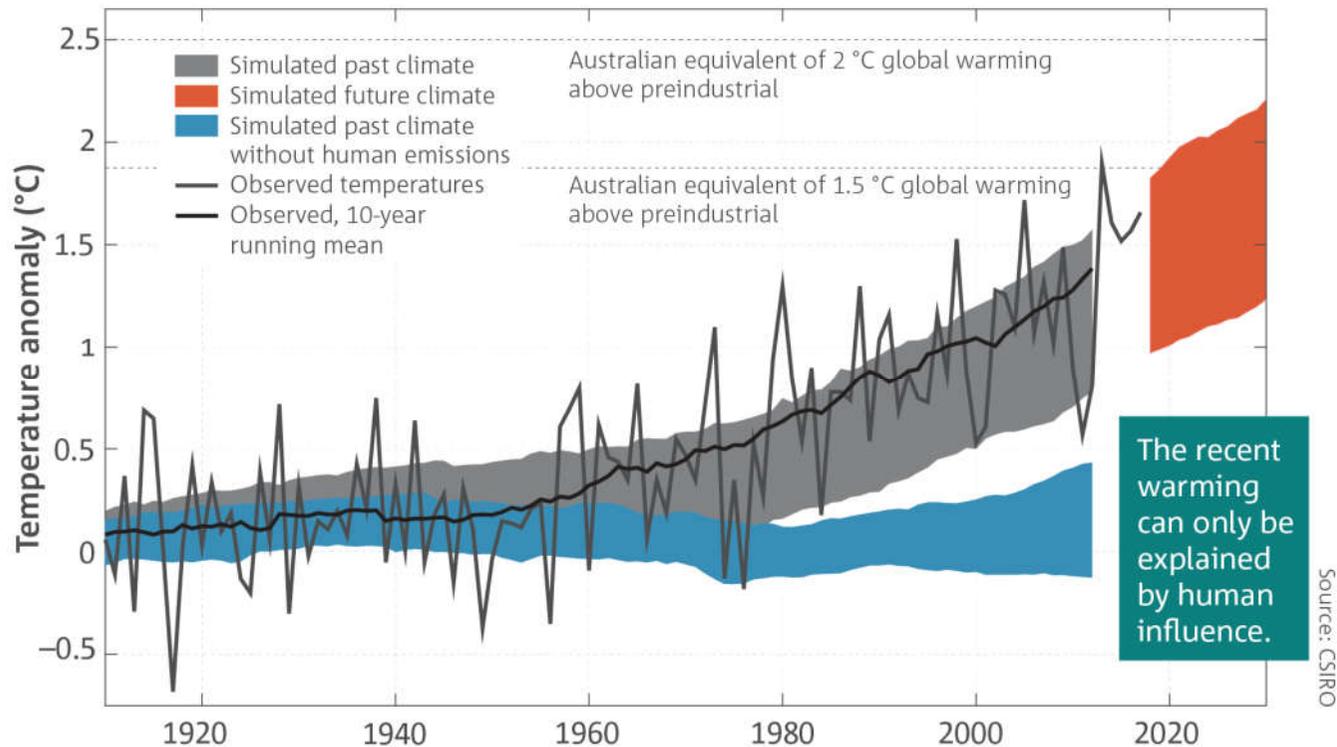
April-Oct rain deciles 1996-2015



Oct-April rain deciles 1996-2015



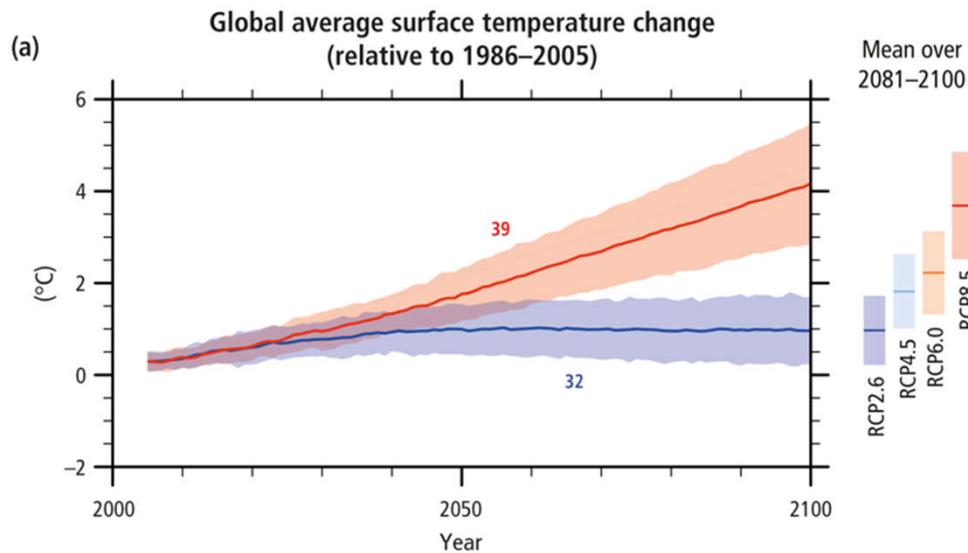
Simulated temperature changes in Australia



SoC, 2018

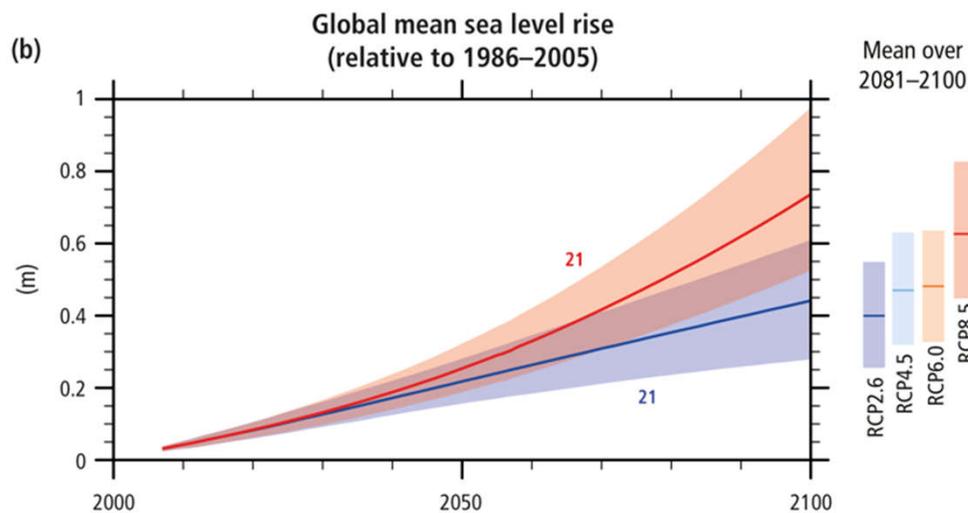
The recent warming can only be explained by human influence.

Source: CSIRO



Projected climate change

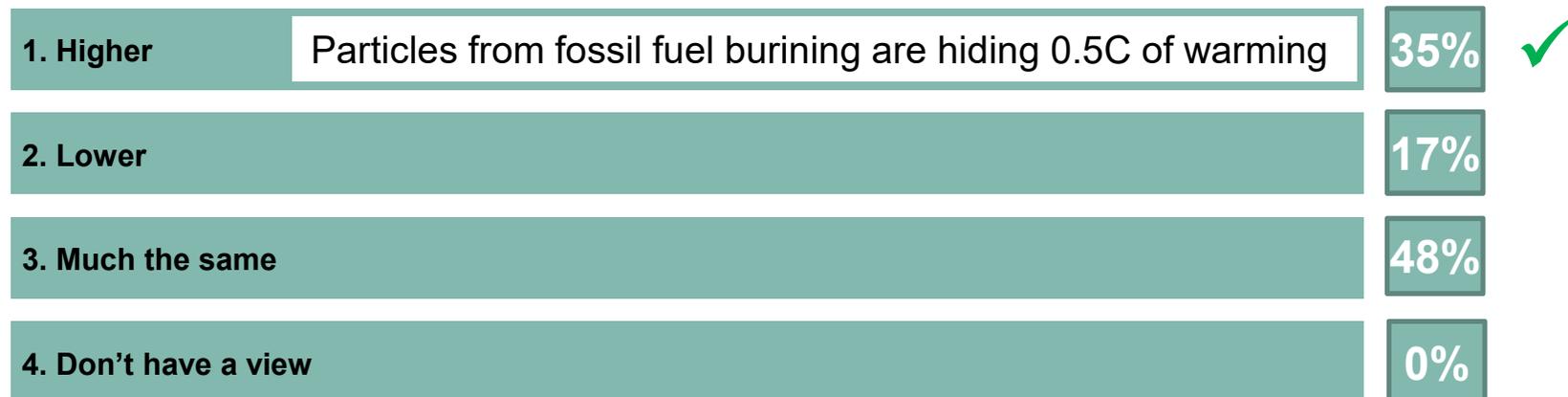
Two paths for global warming, depending on emissions. Very low emissions gives >50% chance of warming less than 2°C



Sea level rise in 2050: ~15-35cm
Continues to rise for centuries after surface temperature stabilises

Fig SPM.6, IPCC AR5 Synthesis Report

If the world rapidly reduces greenhouse emissions from 2020 onwards, the global temperature in 2030 (relative to BAU emissions) would be:



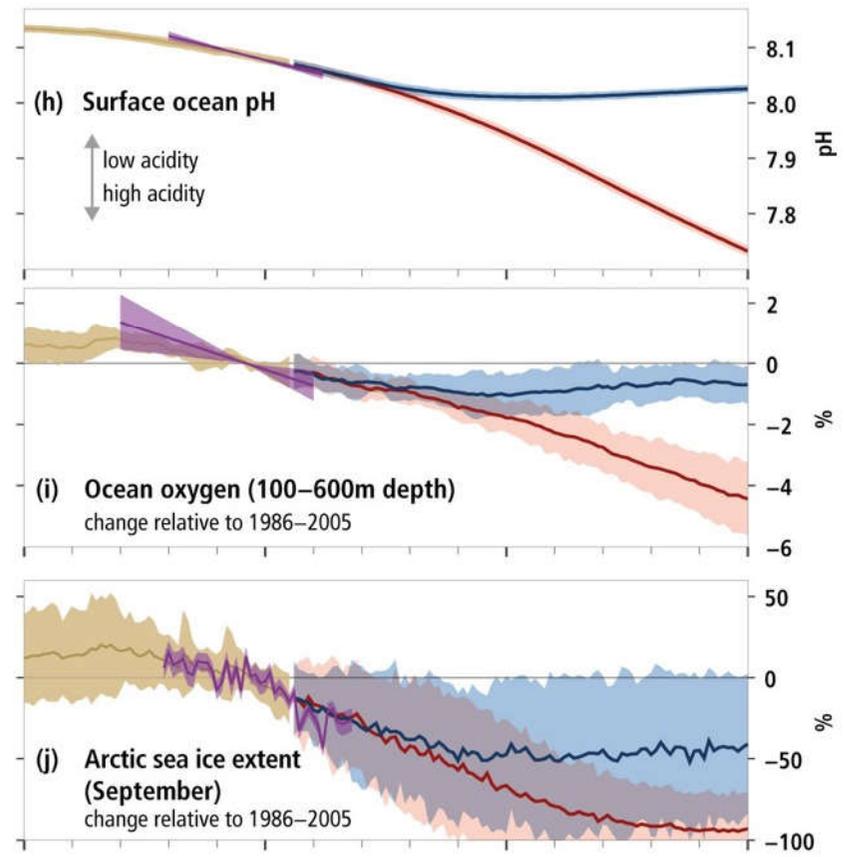
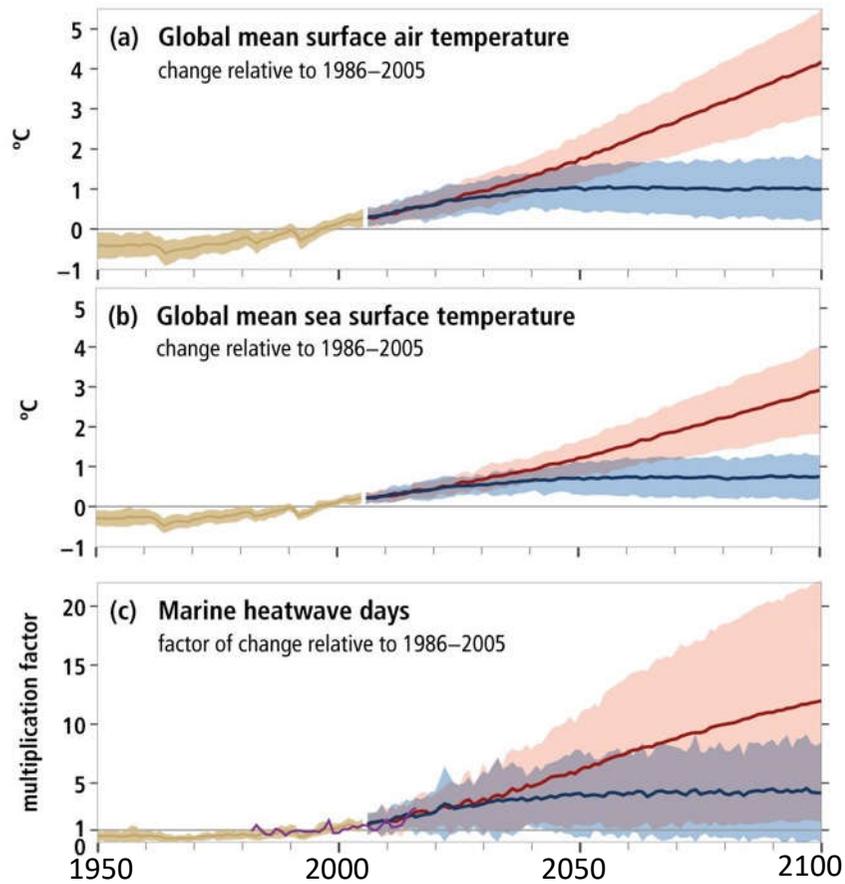
Total votes: 23

Past and future changes in the ocean and cryosphere

From IPCC SROCC 2019, Fig SPM.1

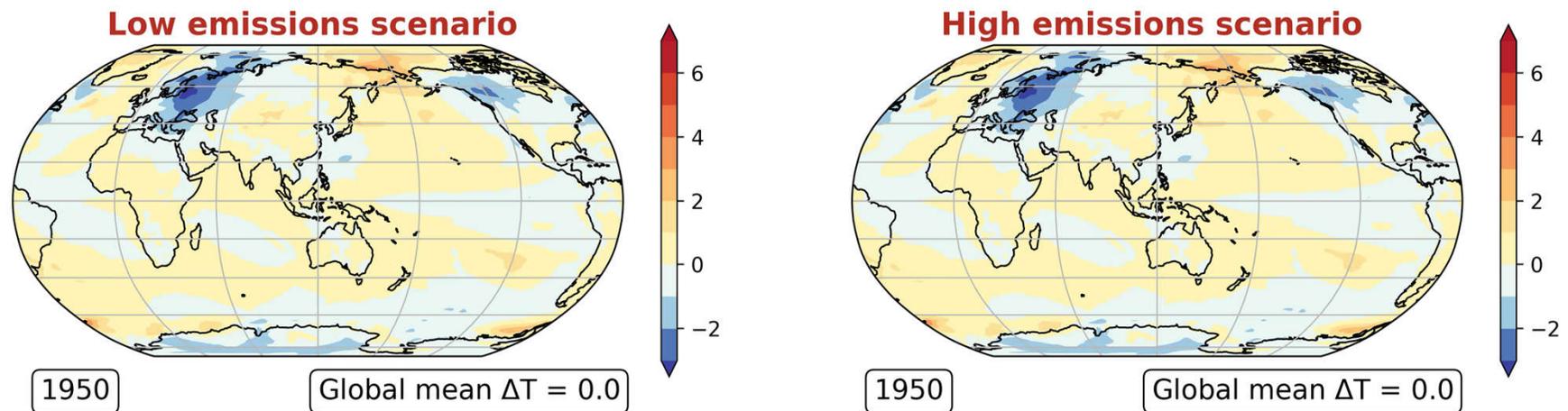
Historical changes (observed and modelled) and projections under RCP2.6 and RCP8.5 for key indicators

Historical (observed) Historical (modelled) Projected (RCP2.6) Projected (RCP8.5)



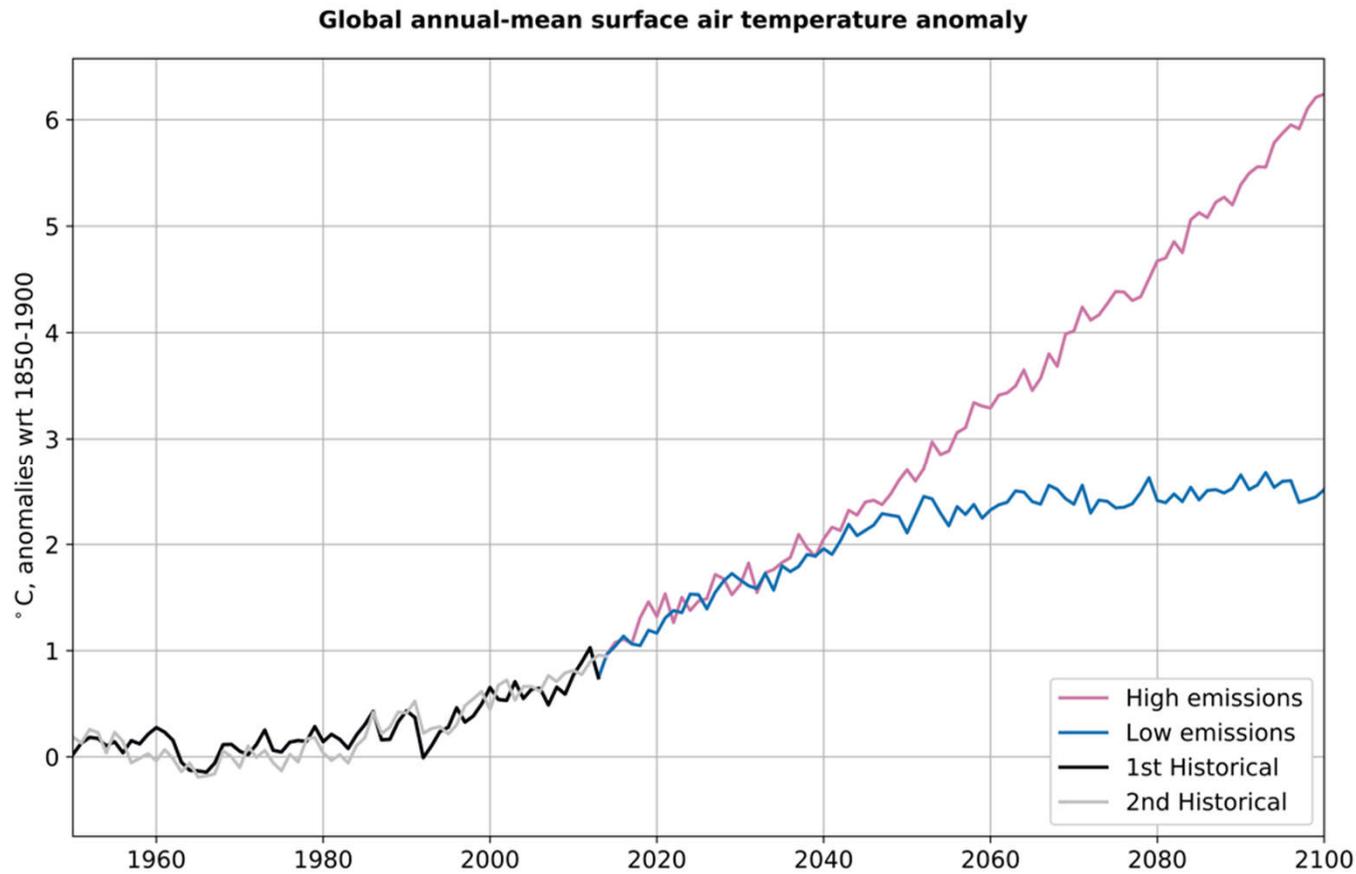
New Australian global climate model simulations ACCESS

Temperature change relative to 1850-1900



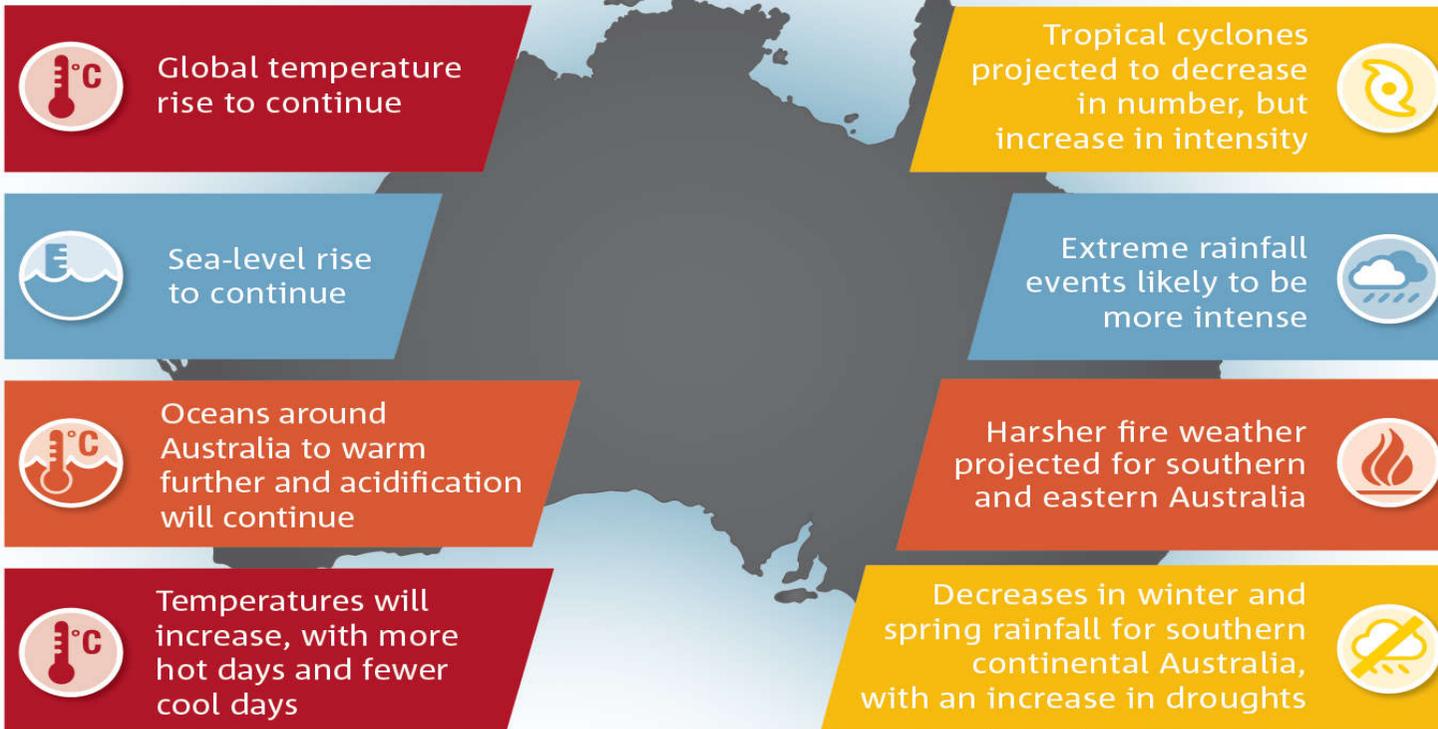
For more information, see webinar at <http://nspclimate.com.au/ensuring-australian-climate-model-simulations-inform-global-assessments/>

New Australian global climate model simulations ACCESS



Projected changes in Australian climate

Source: Bureau of Meteorology and CSIRO



SoC, 2016

Australian climate projections

Annual days above 35°C at capital cities

| City | 1981-2010 average | Current average 2006-15 | CCIA 2015 (projection to 2030) | CCIA 2015 (high emissions 2090) |
|-----------|-------------------|-------------------------|--------------------------------|---------------------------------|
| Adelaide | 20.7 | 25.6 | 26 (24 to 29) | 47 (38 to 57) |
| Brisbane | 13.7 | 12.5 | 18 (15 to 22) | 55 (37 to 80) |
| Darwin | 11 | 15.4 | 43 (25 to 74) | 265 (180 to 322) |
| Hobart | 1.6 | 1.8 | 2.0 (1.9 to 2.1) | 4.2 (3.2 to 6.3) |
| Melbourne | 11 | 13 | 13 (12 to 15) | 24 (19 to 32) |
| Perth | 28.8 | 35.4 | 36 (33 to 39) | 63 (50 to 72) |
| Sydney | 3.1 | 3.0 | 4.3 (4.0 to 5.0) | 11 (8.2 to 15) |

CCIA: Projections for selected Australian cities (2015)

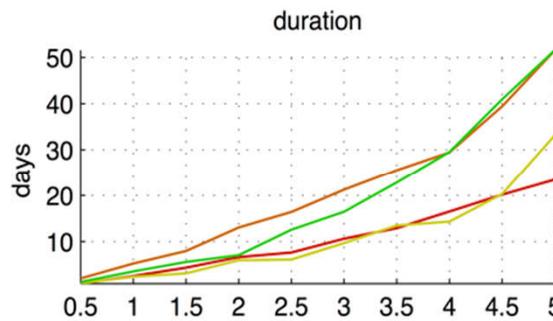
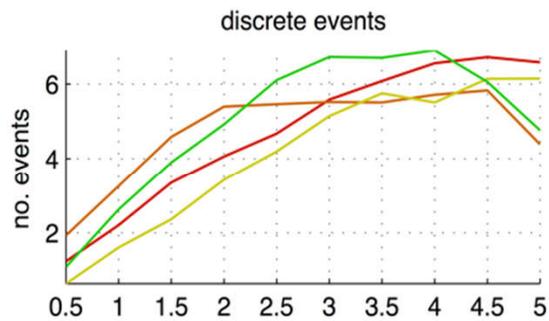
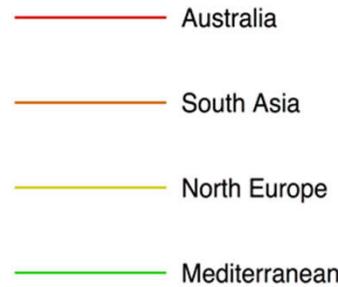
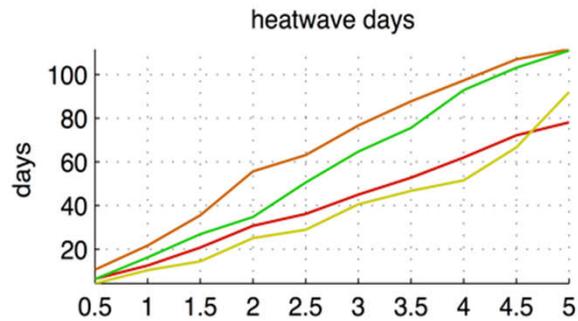
Australian climate projections

Winter rainfall change (%) at capital cities

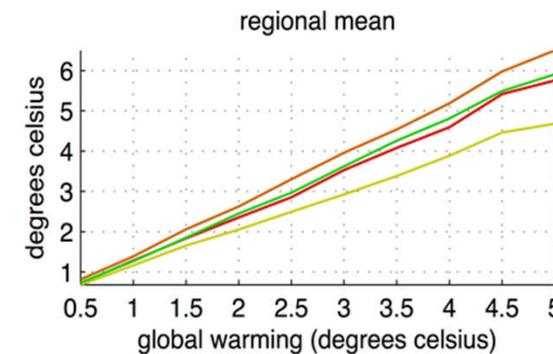
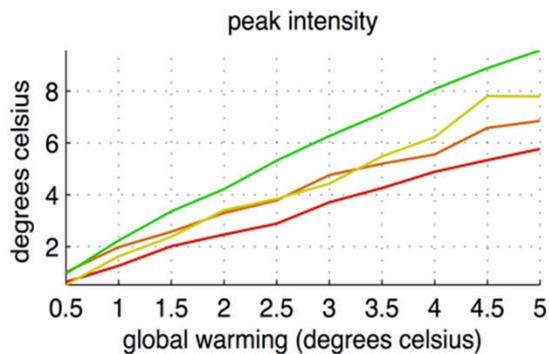
| City | Current (2006-15) relative to 1986-2005 (%) | CCIA 2015 (projection to 2030) (%) | CCIA 2015 (projection to 2090, high emiss.) (%) |
|-----------|---|---------------------------------------|---|
| Adelaide | -18 (-26 to -10) | -6 (-16 to 6) | -19 (-43 to -3) |
| Brisbane | 8 (-26 to 42) | -5 (-27 to 8) | -17 (-49 to +18) |
| Darwin | 7 (-126 to 140) | -5 (-35 to 19) | -4 (-45 to +44) |
| Hobart | -2 (-10 to 6) | +1 (-6 to 10) | +6 (-11 to +19) |
| Melbourne | -10 (-24 to 4) | -3 (-10 to 7) | -10 (-25 to +6) |
| Perth | -21 (-35 to -8) | -7 (-18 to 4) | -29 (-44 to -15) |
| Sydney | 23 (0 to 45) | -1 (-19 to 12) | -17 (-31 to +1) |

CCIA: Projections for selected Australian cities (2015)

Changes in heatwaves for different levels of future global warming



Marked increases in number of heatwave days and peak intensity, ~50% more than mean warming

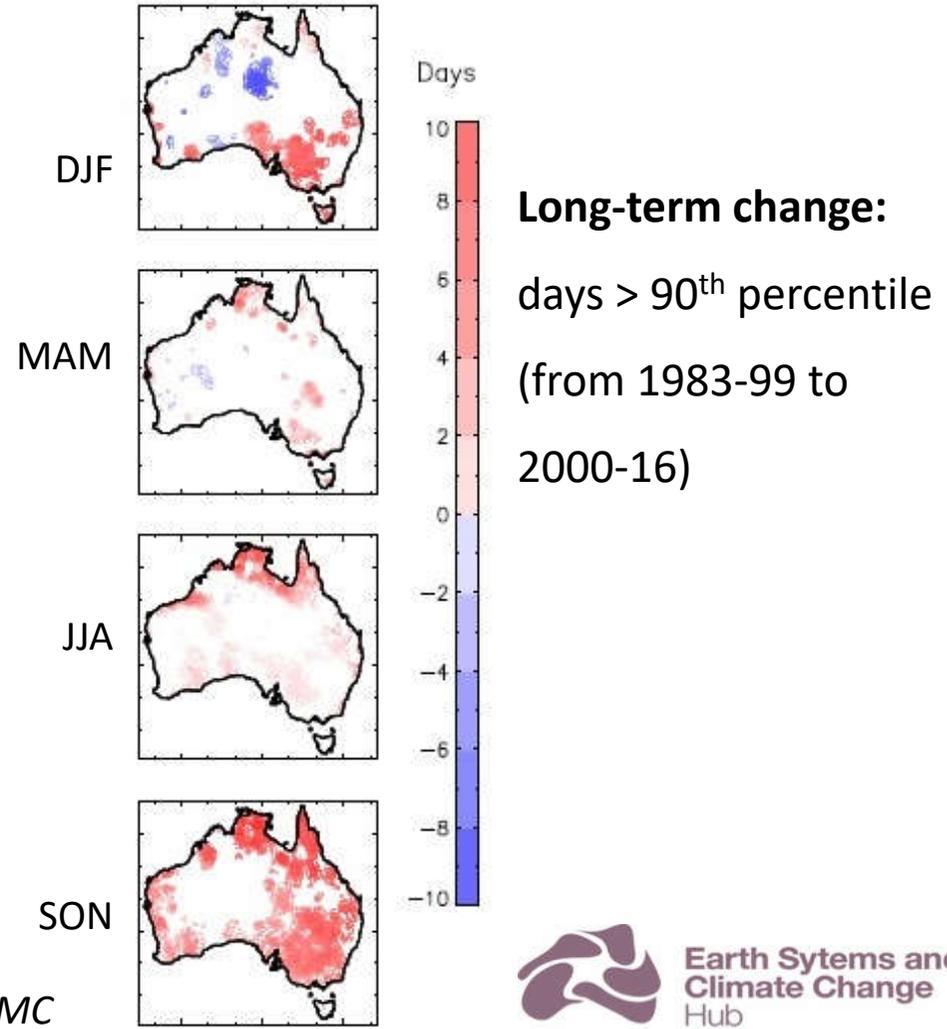


From Perkins-Kirkpatrick, 2017

Fire weather

Significant trends towards more dangerous conditions in SE Australia

- Earlier start to the fire season in many parts of Australia



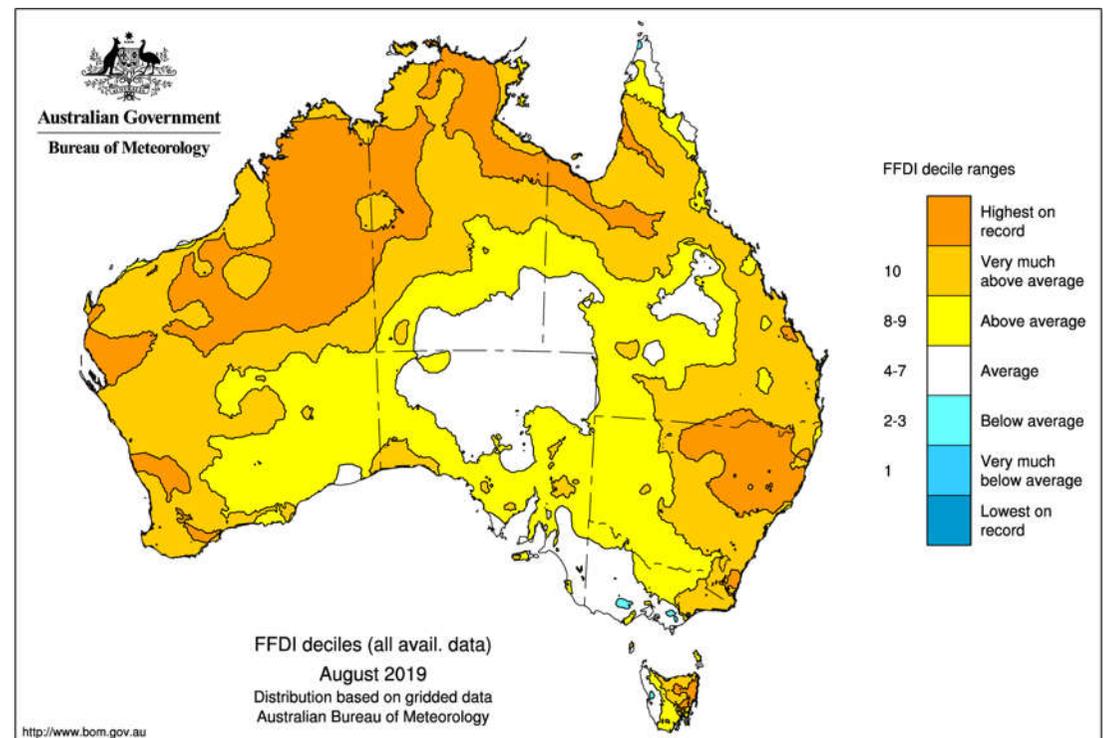
From Dowdy (2017), *JAMC*

Fire weather

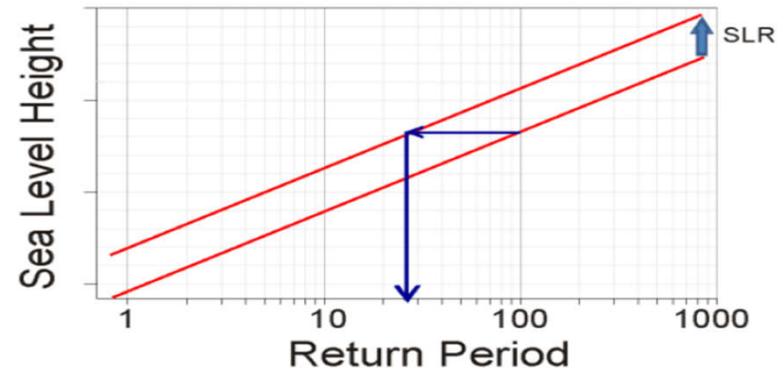
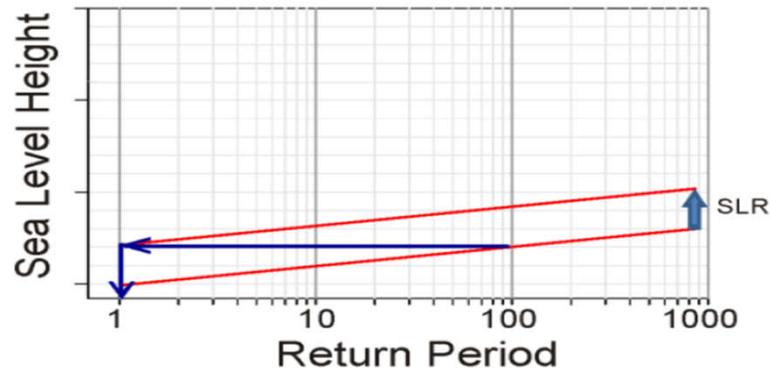
FFDI deciles for Aug 2019

Significant trends towards more dangerous conditions in NSW

- Many recent events are worse than conditions experienced previously.



Frequency of inundation will increase with sea-level rise



- Change in frequency depends on the characteristics of extreme events at a given location
- For Williamstown, a 0.5 m sea-level rise is expected to increase the frequency of exceedances by a factor of ~ 130 times
- i.e. a 1-in-100 year event will occur more than once per year under a 0.5 m sea-level rise

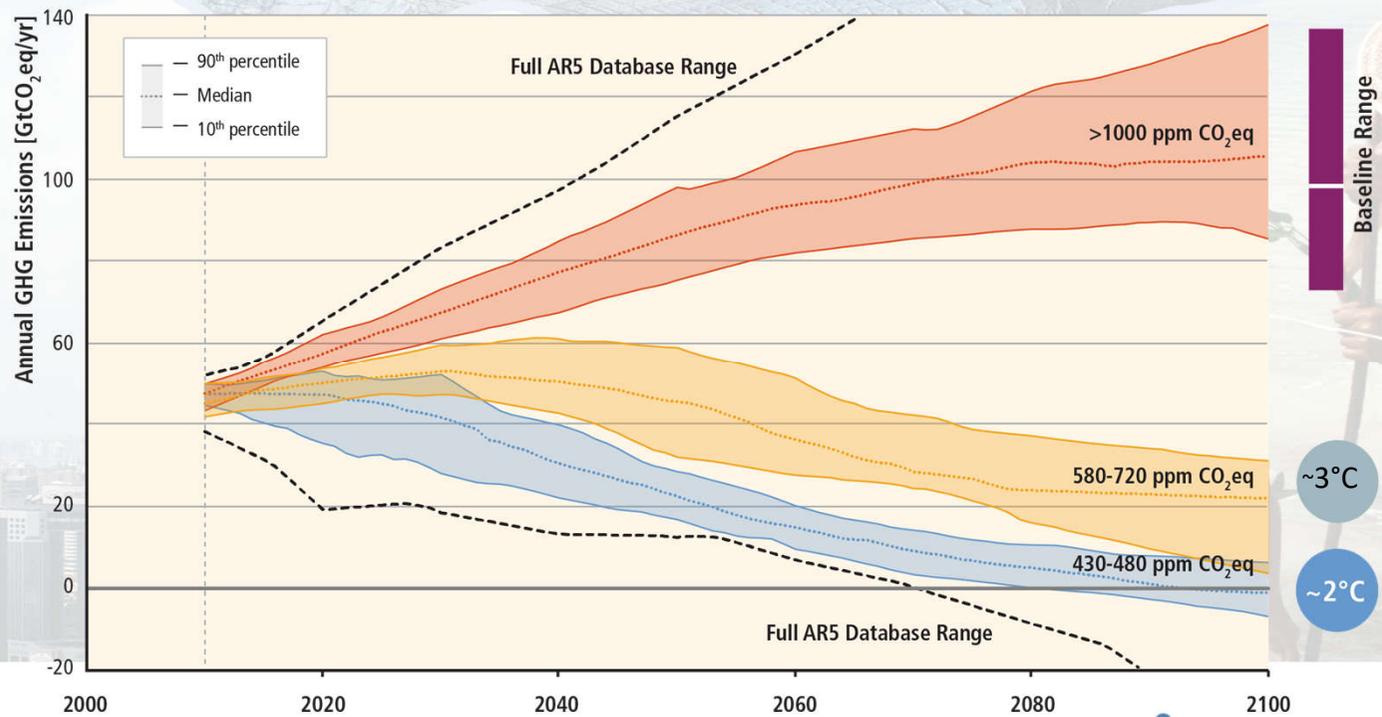
Data source: IPCC AR5, Chapter 13, Figure 13.25; IPCC SROCC

Assessing physical climate risks

- Vulnerability assessment: how have past extreme weather and climate events affected your business or your investments over the past 30 years?
- Past impacts on buildings, infrastructure, production, employee health and safety, supply chain, delivery chain, etc
- Determine the types of extremes that have affected different aspects of your business or investments



Stabilization of atmospheric concentrations requires moving away from the baseline – regardless of the mitigation goal.



Based on Figure 6.7

Global sources of emissions

Energy production remains the primary driver of GHG emissions



2010 GHG emissions

AR5 WGIII SPM

UNFCCC Paris Agreement, Dec 2015

Aims to strengthen the global response to climate change by:

- (a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C,
- (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development;
- (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development.



Mitigation Measures



More efficient use of energy



Greater use of low-carbon and no-carbon energy

- Many of these technologies exist today



Improved carbon sinks

- Reduced deforestation and improved forest management and planting of new forests
- Bio-energy with carbon capture and storage

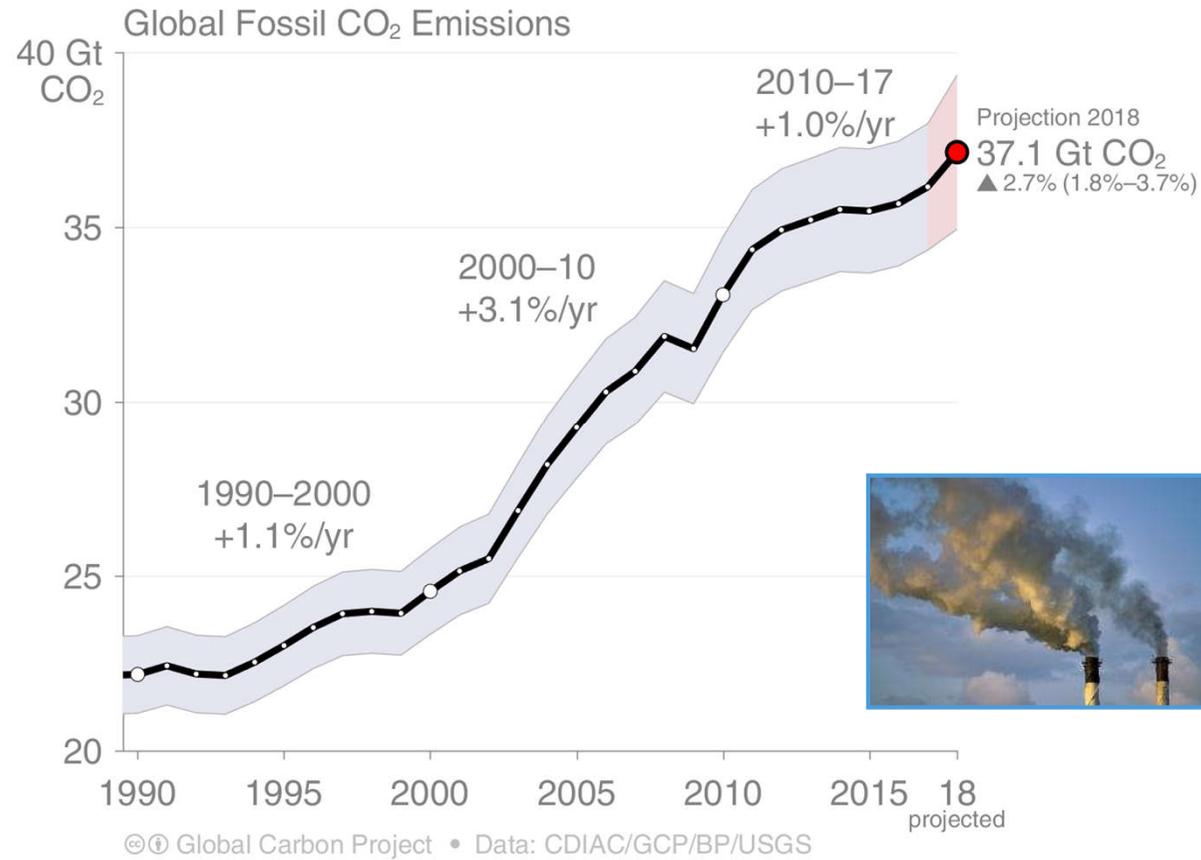


Lifestyle and behavioural changes

AR5 WGIII SPM

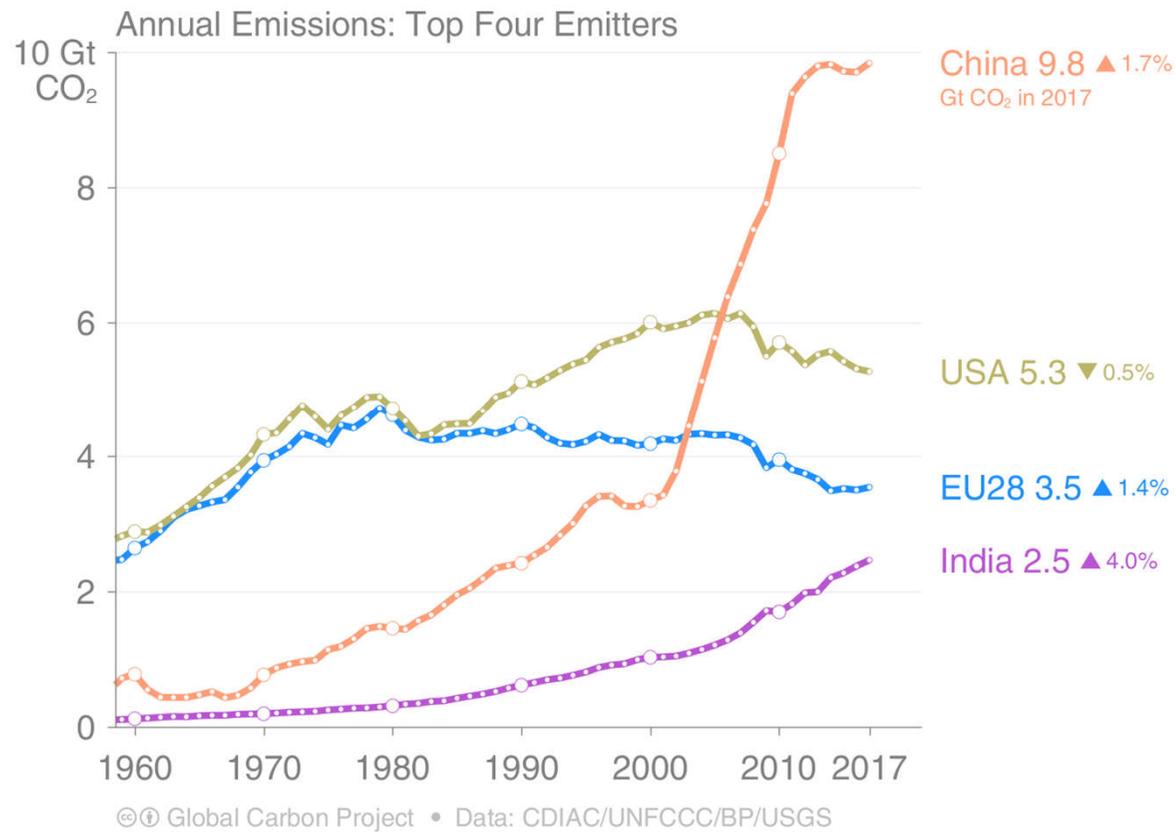
Emissions from fossil fuel use and industry

Global emissions from fossil fuel and industry: 36.2 ± 2 GtCO₂ in 2016, 62% over 1990



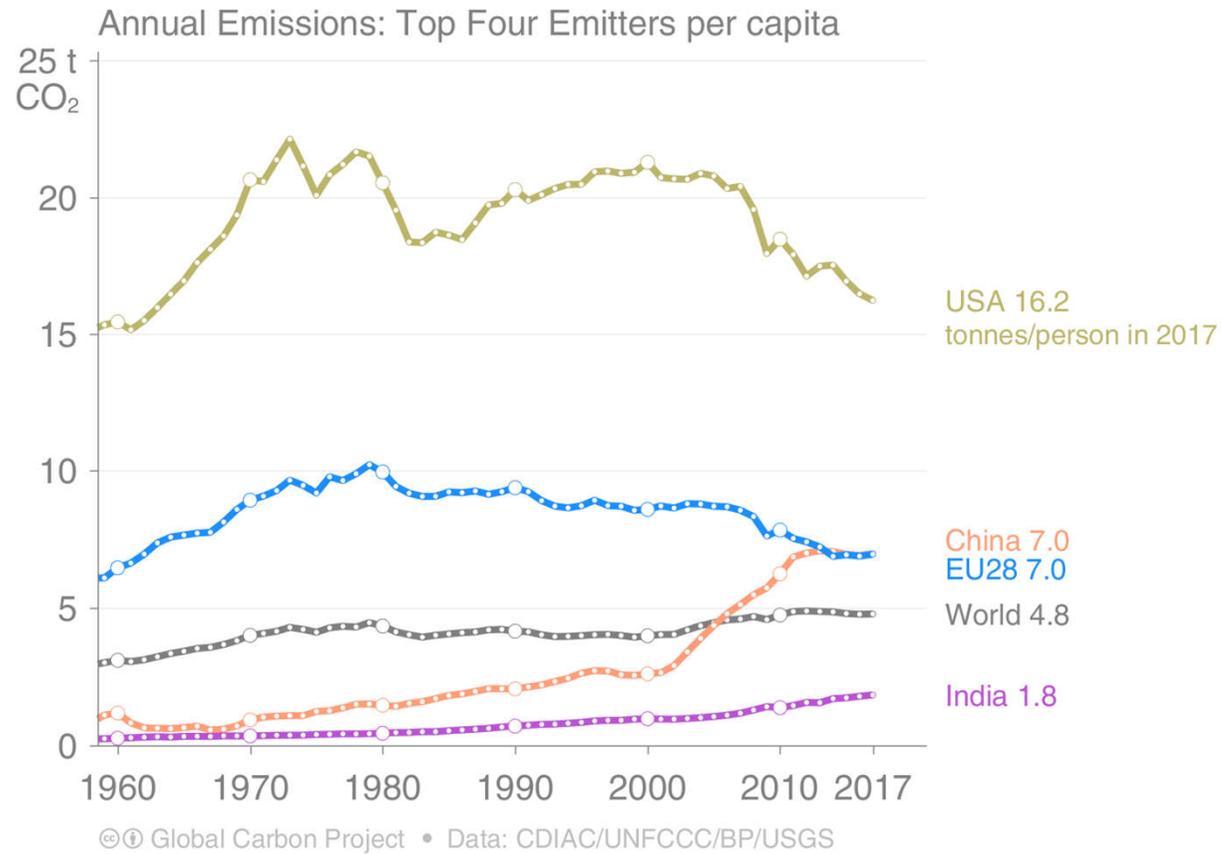
Top emitters: fossil fuels and industry

The top four emitters in 2016 covered 59% of global emissions
 China (28%), United States (15%), EU28 (10%), India (7%)



Top emitters: fossil fuels and industry (per capita)

Countries have a range of per capita emissions reflecting their circumstances

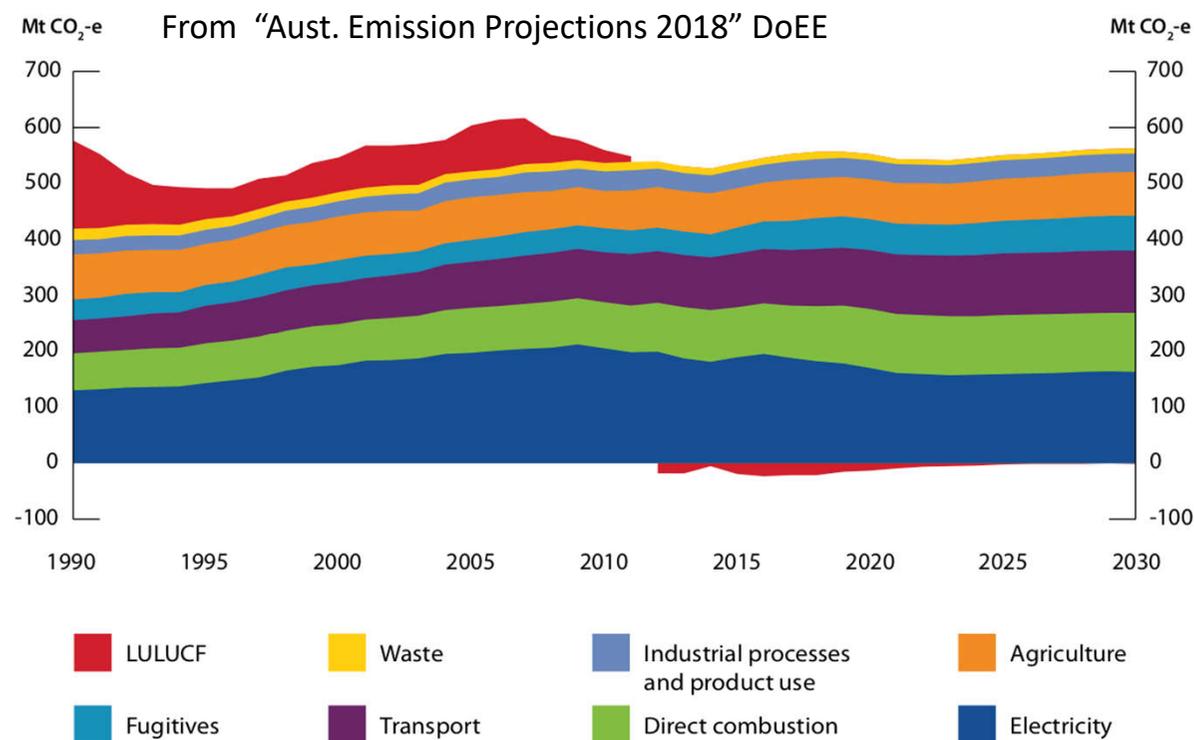


Growth in Australian emissions by sector 1990-2030

2020 relative to 2000: -1%, despite commitment of -5%

Australia's INDC 2030: 26% to 28% below 2005, latest -7%

Figure 3 Australia's emissions, 1990 to 2030



United in Science
report informing UN
Climate Action Summit,
Sept 2019

from WMO, UNEP,
IPCC, GCP, Future
Earth, GFCS



Systems and
Change

Summary

- Climate change has already led to significant changes in climate risks and will continue to do so for the next 30-100 years or more
- Most confident projected changes are for increases in heat waves, severe fire weather and coastal flooding, less certainty in many other extremes
- Recent Special Reports from IPCC have confirmed faster rate of observed climate change and increasing impacts
- Much stronger global emission reductions are needed to limit global warming to well below 2 degrees above pre-industrial levels

Key Messages

- **Human influence on the climate system is clear**
- **The more we disrupt our climate, the more we risk severe, pervasive and irreversible impacts**
- **We have the means to limit climate change and build a more prosperous, sustainable future**

AR5 WGI SPM, AR5 WGII SPM, AR5 WGIII SPM

References

- IPCC Special Report *Global Warming of 1.5°* <https://www.ipcc.ch/sr15/>
- Aust Academy of Science *The science of climate change: Questions and answers 2015* <https://www.science.org.au/climatechange>
- IPCC Special Report *The Ocean and Cryosphere in a Changing Climate*, 2019 <https://www.ipcc.ch/srocc/home/>
- IPCC Special Report *Climate Change and Land*, 2019 <https://www.ipcc.ch/report/srccl/>
- Global Carbon Project Carbon Budget 2019 www.globalcarbonproject.org/
- UN *United in Science*, 'Synthesis report latest climate science' UN Climate Action Summit, 2019 <https://www.un.org/en/climatechange/un-climate-summit-2019.shtml>
- CSIRO & Bur of Met State of the Climate 2018 <https://www.csiro.au/en/Showcase/state-of-the-climate>



National Environmental Science Programme



FOR MORE INFORMATION
Prof David Karoly
David.Karoly@csiro.au

www.nespclimate.com.au

The Earth Systems and Climate Change Hub is funded by the Australian Government's National Environmental Science Program, with co-investment from the following partner agencies



Spotlight topic 2 – corporate stewardship in pursuit of the SDGs

Tim Hodgson





nature
International journal of science

Letter | Published: 01 July 2019

Committed emissions from existing energy infrastructure jeopardize 1.5 °C climate target

Dan Tong, Qiang Zhang , Yixuan Zheng, Ken Caldeira, Christine Shearer, Chaopeng Hong, Yue Qin & Steven J. Davis 

Nature **572**, 373–377 (2019) | [Download Citation](#) 

14k Accesses | **3** Citations | **4410** Altmetric | [Metrics](#) 

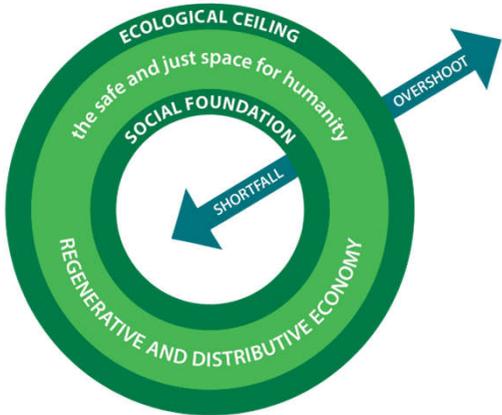
Here's the gig



'We' have built an economic machine that runs 24x7

The economic machine is making the rich richer, and is dumping its waste into environmental sinks

Our past returns were overinflated – because we didn't pay the true cost of production

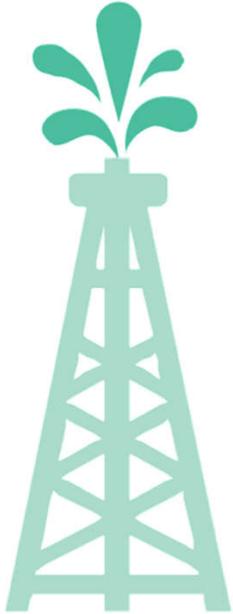


EITHER | we maintain the machine and risk a future collapse in profits / returns

- Spectate
- Participate

OR | we risk current profits / returns and re-plumb the machine

There are two things that matter



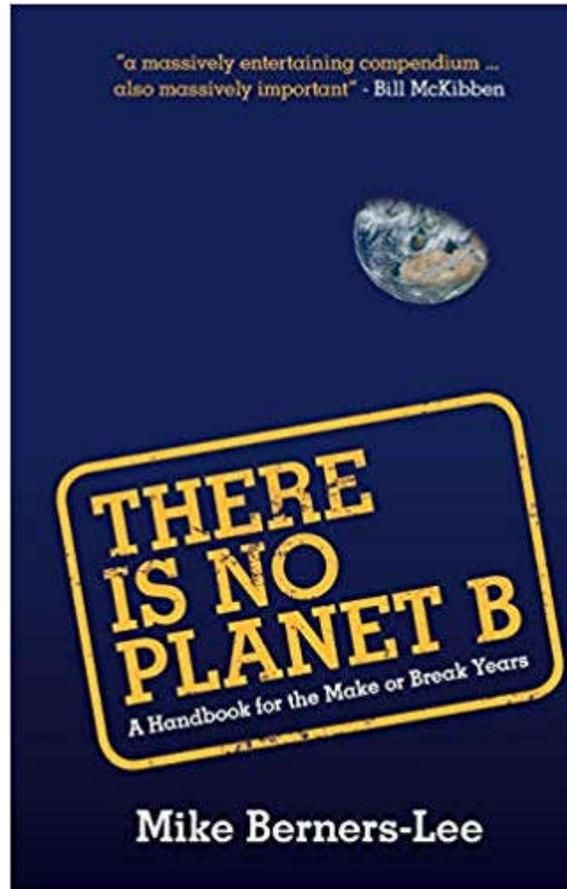
Climate change



Inequality

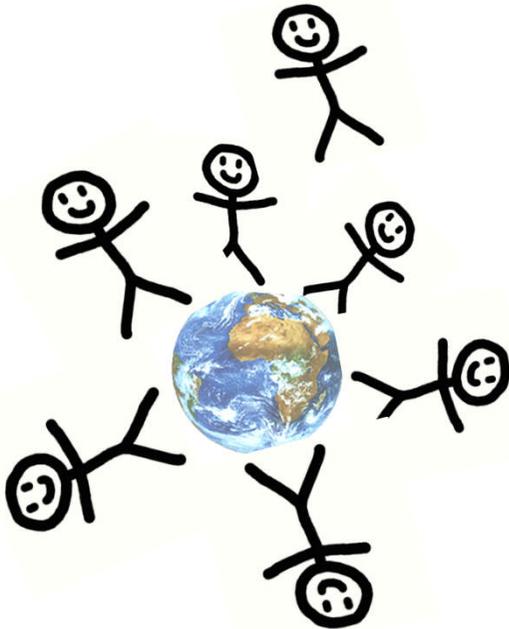
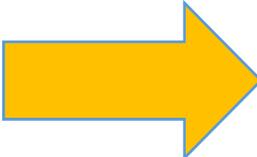
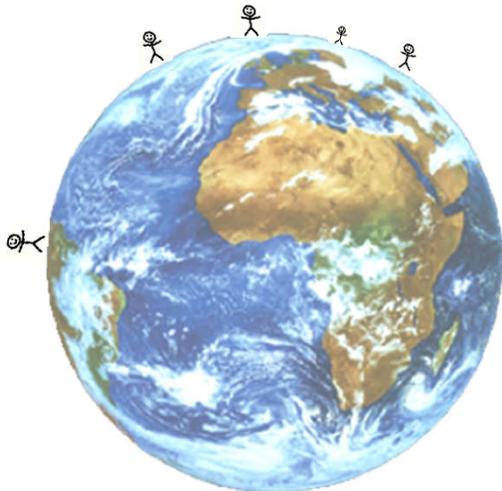
The law of the bathtub





Living in the anthropocene

- *For better and worse*
- *Like it or not*
- *Ready or not*



Source: Mike Berners-Lee

In my personal context, I feel some level of responsibility for the impact my consumption and investment decisions have on other people and the planet



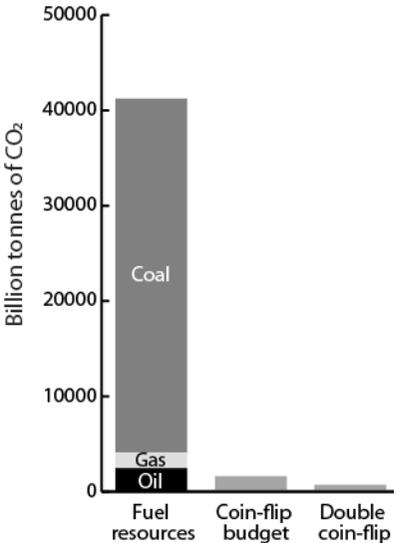
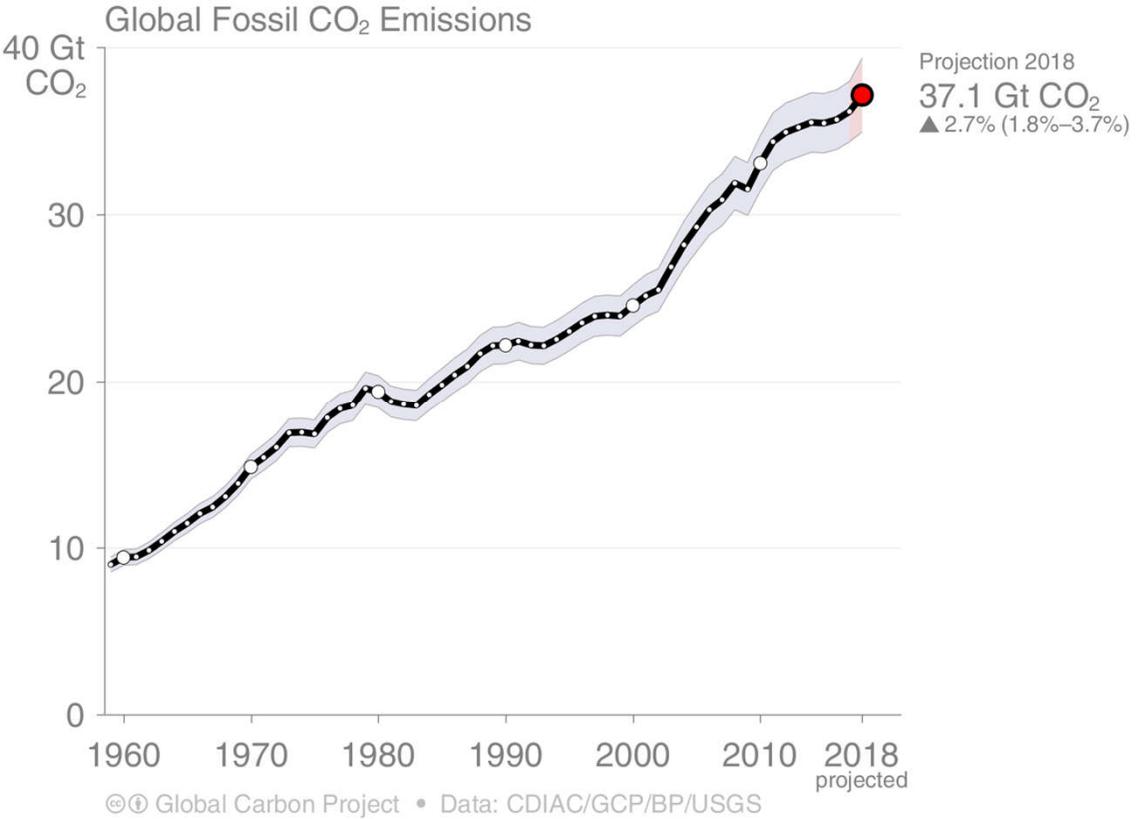
Total votes: 20

In my work context, we feel some level of responsibility for the impact our consumption and investment decisions have on other people and the planet



Total votes: 20

Our awareness to-date has had zero effect



Source: *The Burning Question*, Mike Berners-Lee & Duncan Clark

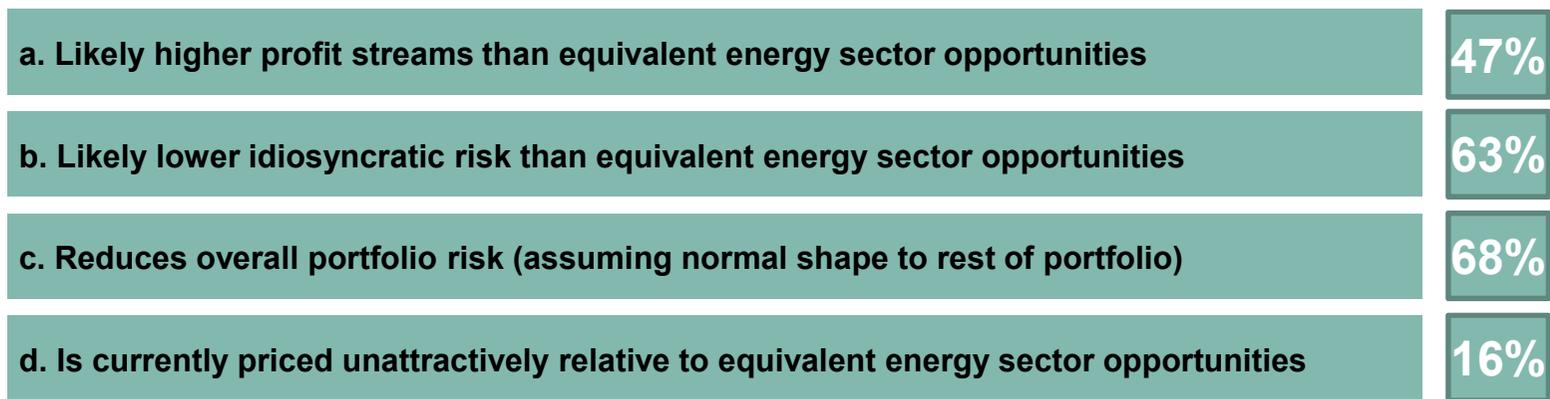
The battle of the tipping points

Can we organise ourselves faster than the climate runs away?



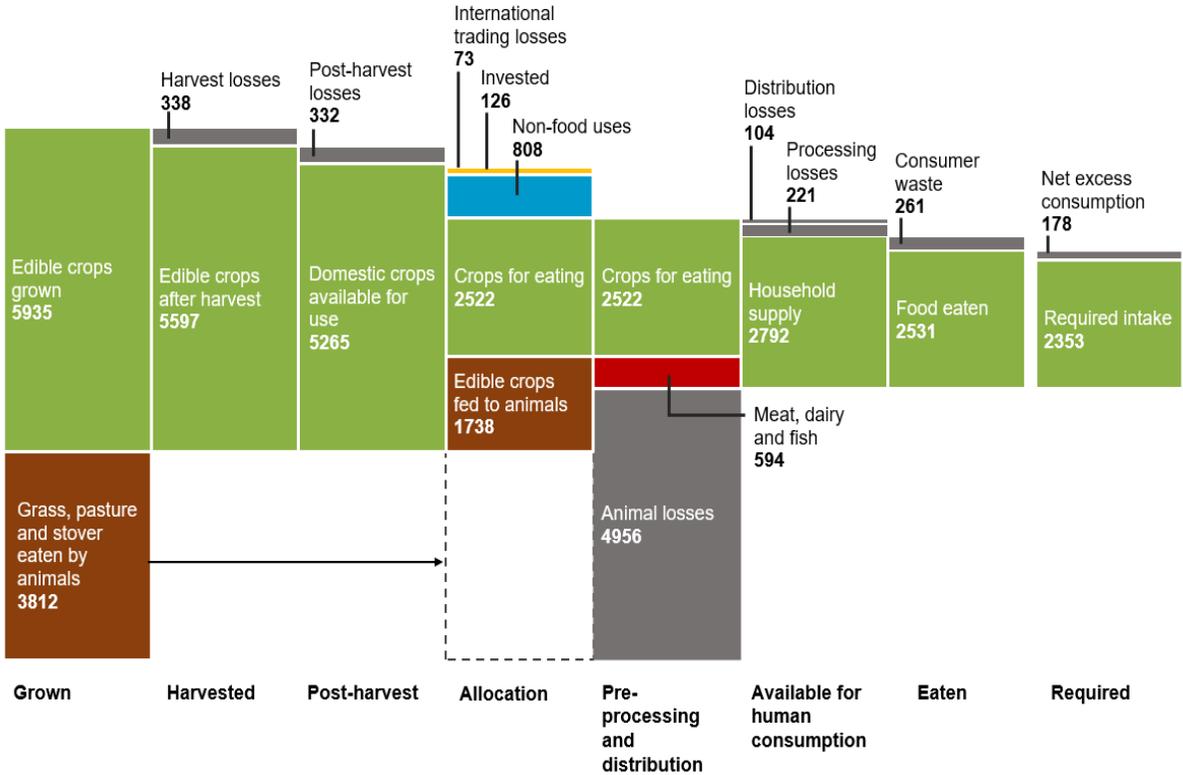
Craters from methane explosions in Russian permafrost

Reasonable beliefs about investment into renewable energy opportunities (pick any number of the following)



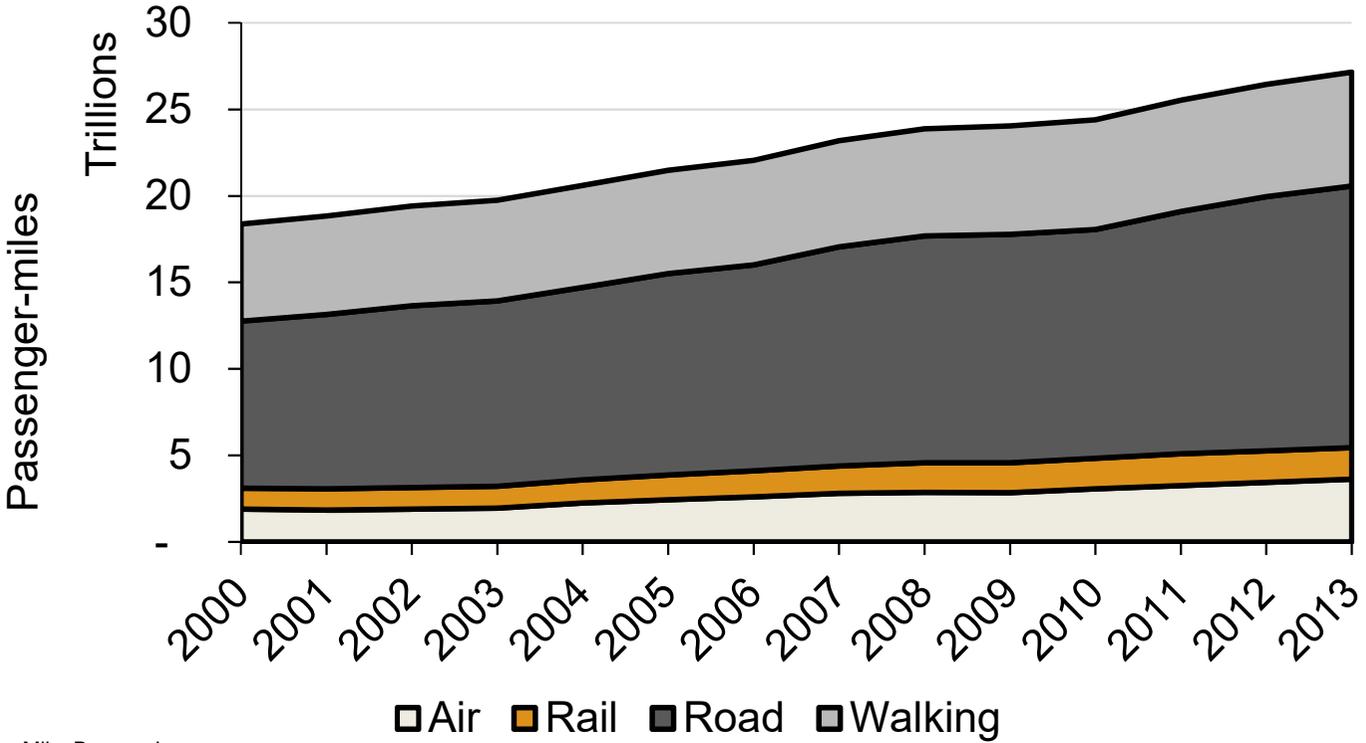
Total votes: 19

Where do the world's calories go?



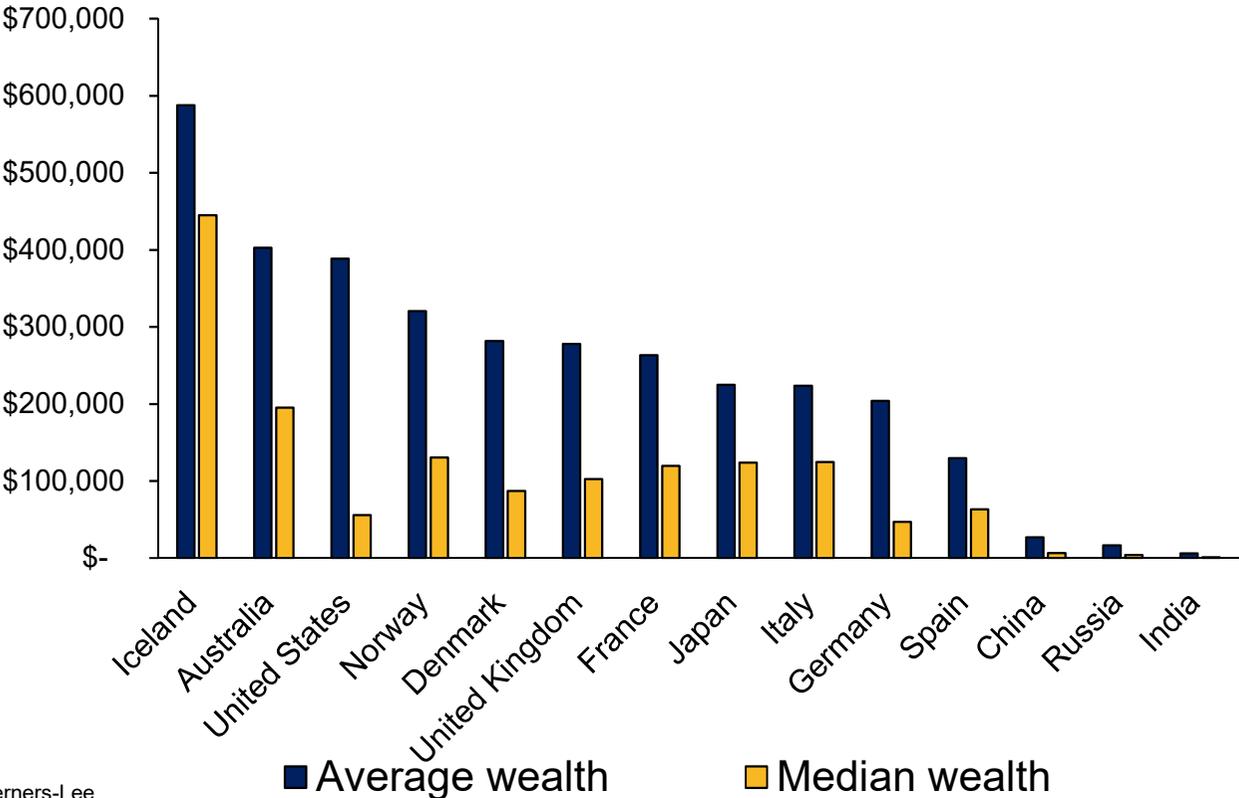
Source: Mike Berners-Lee

Total travel, by mode of transport



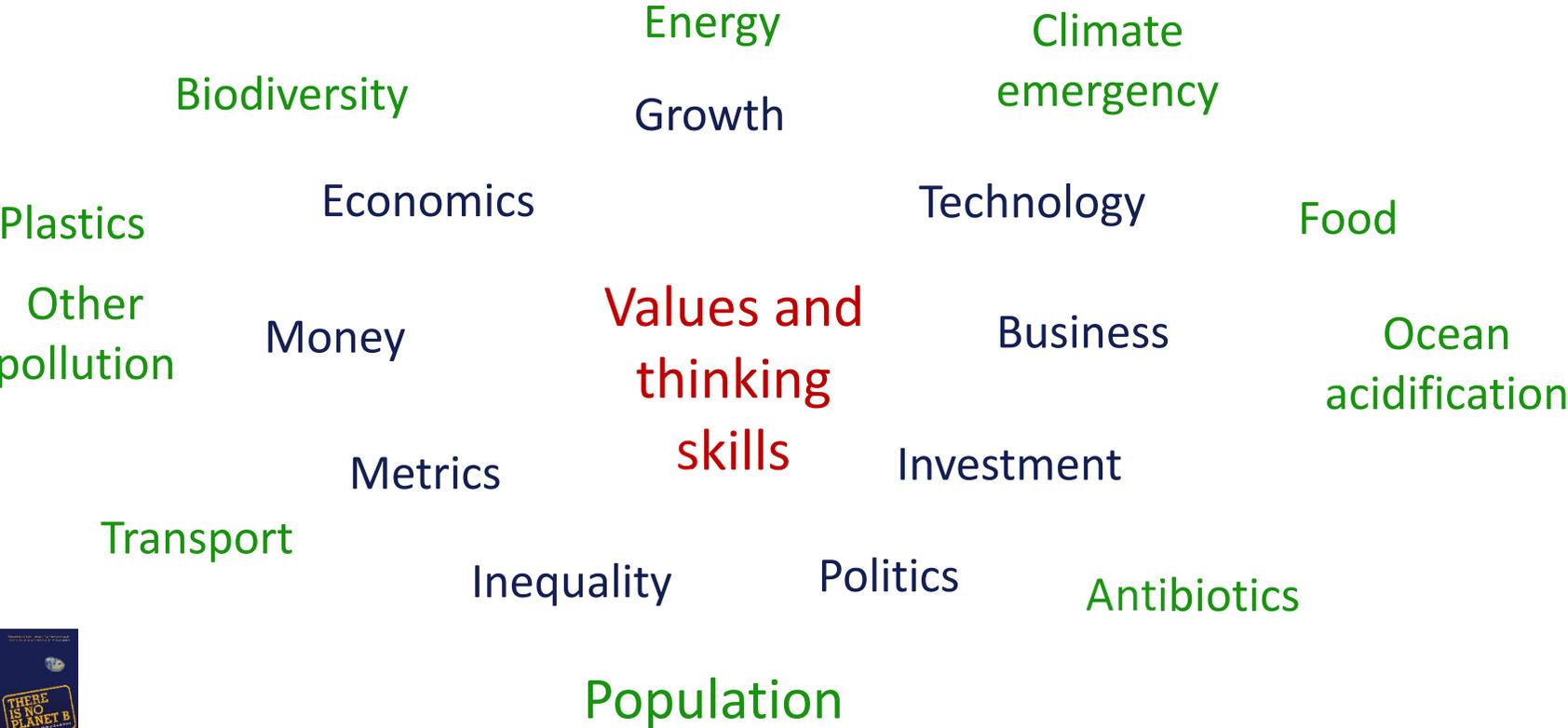
Source: Mike Berners-Lee

Inequality | Why are most Americans so much poorer than most Italians?



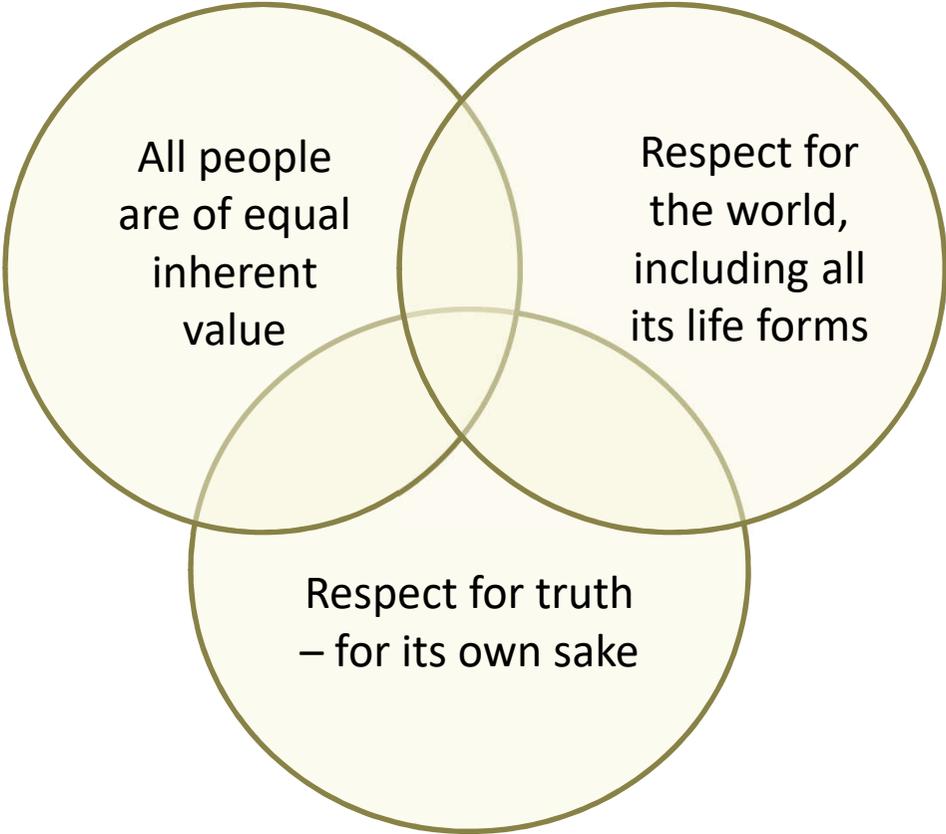
Source: Mike Berners-Lee

There Is No Planet B: A Handbook for the Make or Break Years



Source: Mike Berners-Lee

Three values we can no longer live without



Source: Mike Berners-Lee

**Do we need the following as a core value?
All people are of equal inherent value**



Total votes: 18

Do we need the following as a core value?
Respect for the world, including all its life forms



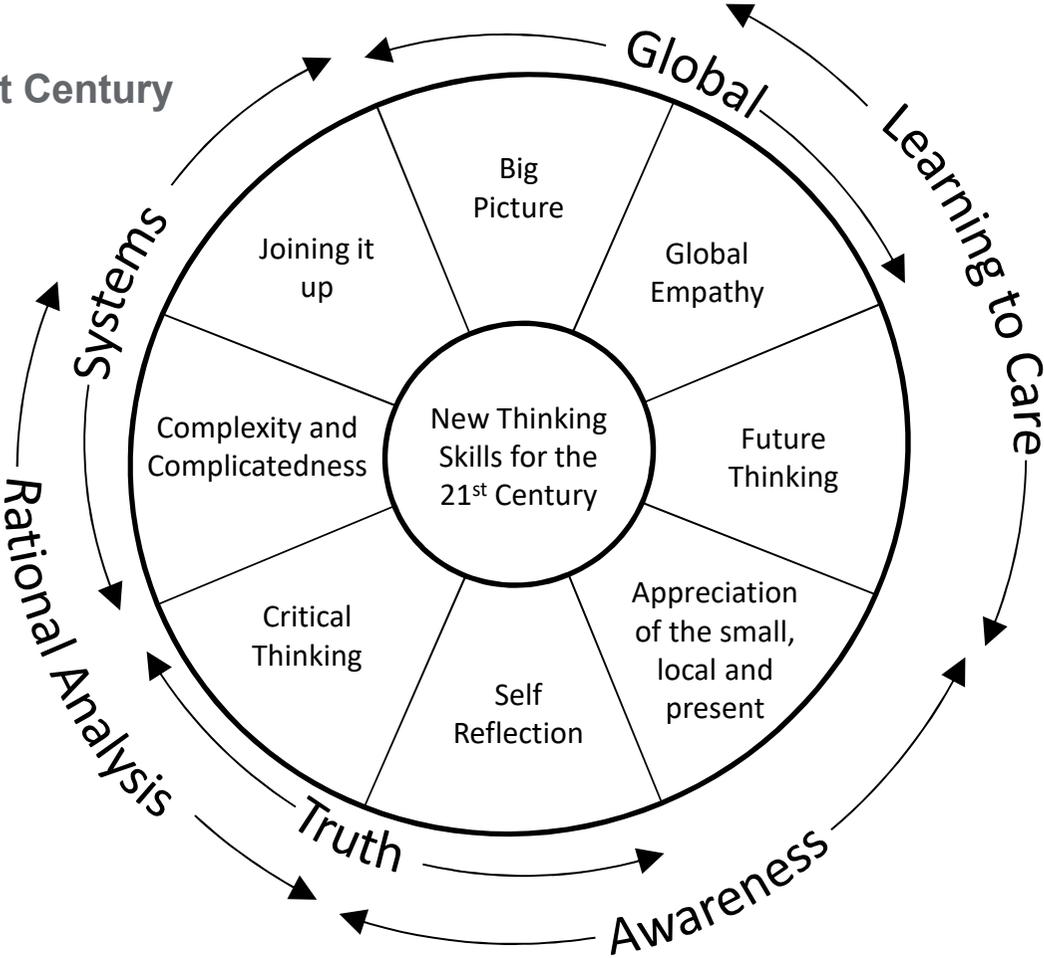
Total votes: 18

**Do we need the following as a core value?
Respect for truth – for its own sake**



Total votes: 18

Eight new thinking skills for the 21st Century



Source: Mike Berners-Lee

Stewardship in pursuit of the SDGs

- How do we evolve our investment analysis?
- How do we find and scale the right technologies?
- What transparency should we offer superfund members?
- How constraining is fiduciary duty?
- How constraining / enabling is our culture?
- What do we do with 'problem' companies?

Divest or stay engaged?

What is responsible stewardship?

- Do you have written criteria for divestment decisions?

- Example criteria for 'managed decline of fossil fuel businesses'*
 1. No lobbying for policies that reduce the probability of the 1.5°C goal.
 2. No exploration spending.
 3. No approval or acquisition of new fossil fuel infrastructure or projects.
 4. A clear plan for wind down of fossil fuel extraction.
 5. Remuneration policies that support managed decline of fossil fuel extraction

* Source: www.divestinvest.org

Anthropocene-fit investment

- Every time we spend or invest we steer the future
- Every divestment creates an investment opportunity
- Investments now need to be as transparent as product supply chains need to be
- 'Fiduciary duties' must include more than financial returns
 - Non-financial criteria must have quantified weighting
 - In general this will financial require preparedness to compromise financial returns.
 - Asset managers need to feel ESGs are part of core responsibility
- Value boundaries must include all people and species
- Trust and trustworthiness will be critical



Source: Mike Berners-Lee

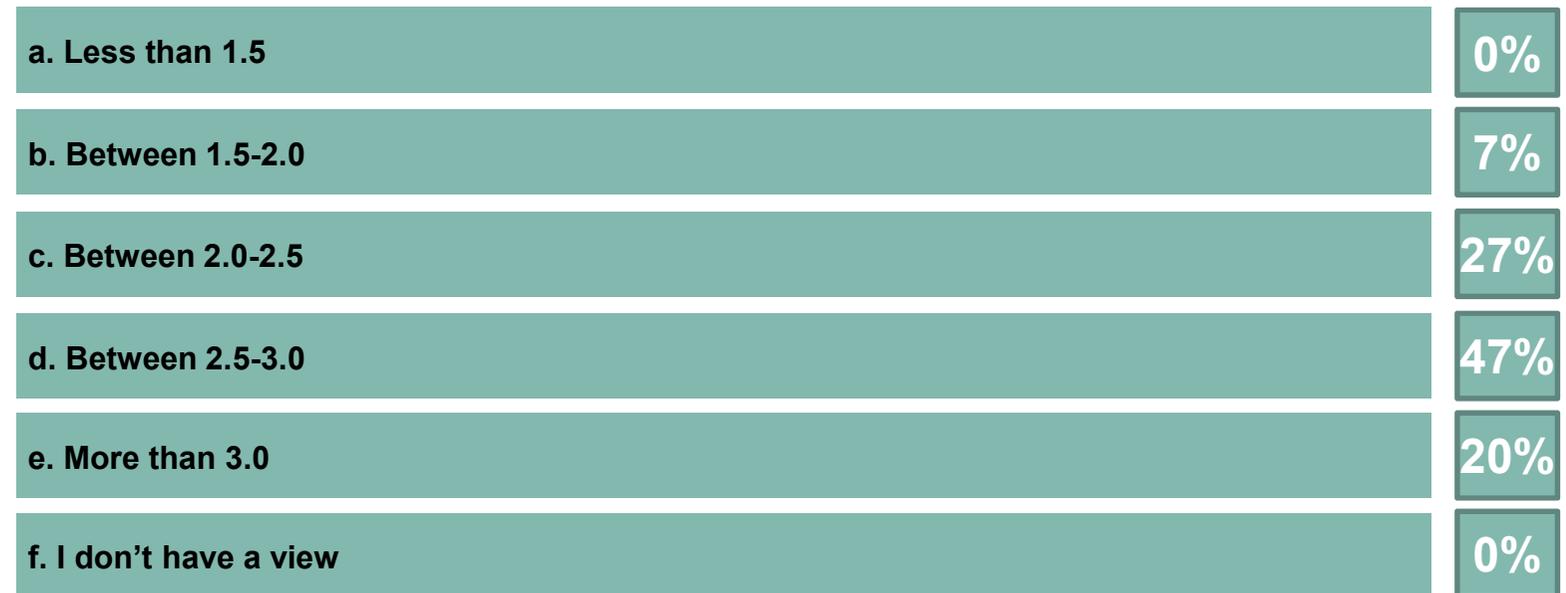
Practitioner panel



Panellists

| | | |
|---|--|---|
|  |  | <p>Mary Delahunty Head of Impact, HESTA</p> |
|  | <p>Allison Hill Director of Investments, QIC</p> |  |
|  |  | <p>Liza McDonald Head of Responsible Investments, First State Super</p> |

I expect the global average temperature to be ___ °C above pre-industrial levels in 2050



Approx ave +2.7C (0.3 higher than start-of -day vote)

Total votes: 16

Concluding remarks

Tim Hodgson





The world **NEEDS** a **+1.5C** economy

...what would that look like?

- What should stewardship / engagement look like?
- What role should exclusions play?
- Do we need to deliberately strand some of our assets?
- What 'inevitable policy response' (PRI) should we anticipate?
- How do we invest in / build a circular economy?
- How do we select which technologies to fund and scale?
- When is too late?
- How do we redefine fiduciary duty?
- How should we structure manager mandates?
- How should we change monitoring and reporting?

Future
research
agenda

+

Call to action

=

Who's in?

The most important action for the investment industry to take right now (audience suggestions)

- “Fiduciary duty must include impact
- Bridge short term and long term (pressures to deliver financials in the short term is increasing)
- Shape regulation
- Organise a capital (buyer’s) strike
- Engage banks over their lending
- Education
- Asset owners to concentrate public equity holdings and then act as owner
- Measure everything”

The background of the slide is a close-up photograph of a tree trunk's cross-section, showing concentric growth rings in shades of light brown and tan. A dark green rectangular box is overlaid on the left side of the image, containing white text.

2020 Thinking Ahead Institute events

10 March 2020 – Melbourne breakfast seminar

12 March 2020 – TPA summit, Sydney

13 March 2020 – Sydney breakfast seminar

Limitations of reliance

Limitations of reliance – Thinking Ahead Group 2.0

This document has been written by members of the Thinking Ahead Group 2.0. Their role is to identify and develop new investment thinking and opportunities not naturally covered under mainstream research. They seek to encourage new ways of seeing the investment environment in ways that add value to our clients.

The contents of individual documents are therefore more likely to be the opinions of the respective authors rather than representing the formal view of the firm.

Limitations of reliance – Willis Towers Watson

Willis Towers Watson has prepared this material for general information purposes only and it should not be considered a substitute for specific professional advice. In particular, its contents are not intended by Willis Towers Watson to be construed as the provision of investment, legal, accounting, tax or other professional advice or recommendations of any kind, or to form the basis of any decision to do or to refrain from doing anything. As such, this material should not be relied upon for investment or other financial decisions and no such decisions should be taken on the basis of its contents without seeking specific advice.

This material is based on information available to Willis Towers Watson at the date of this material and takes no account of subsequent developments after that date. In preparing this material we have relied upon data supplied to us by third parties. Whilst reasonable care has been taken to gauge the reliability of this data, we provide no guarantee as to the accuracy or completeness of this data and Willis Towers Watson and its affiliates and their respective directors, officers and employees accept no responsibility and will not be liable for any errors or misrepresentations in the data made by any third party.

This material may not be reproduced or distributed to any other party, whether in whole or in part, without Willis Towers Watson's prior written permission, except as may be required by law. In the absence of our express written agreement to the contrary, Willis Towers Watson and its affiliates and their respective directors, officers and employees accept no responsibility and will not be liable for any consequences howsoever arising from any use of or reliance on this material or the opinions we have expressed.