

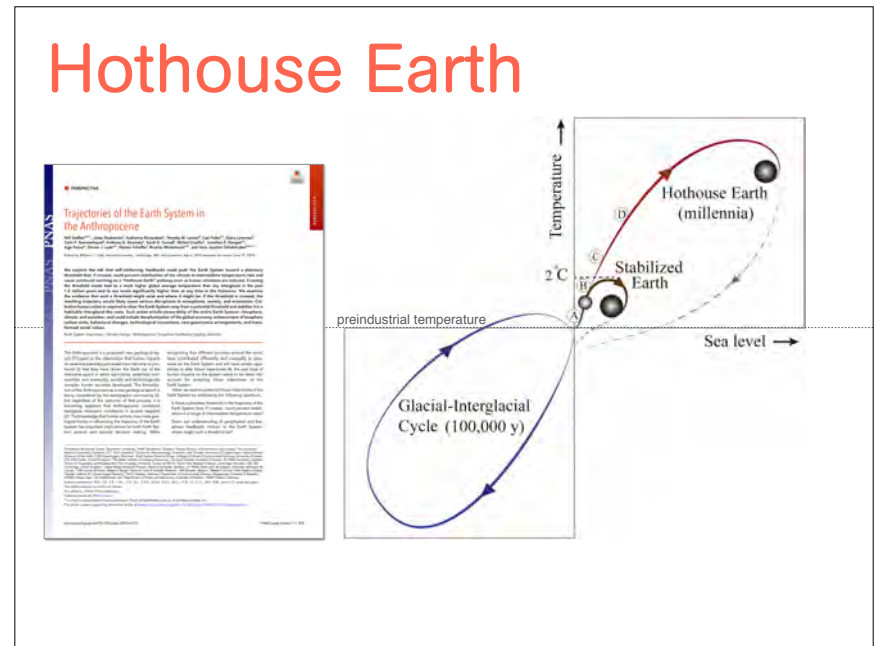
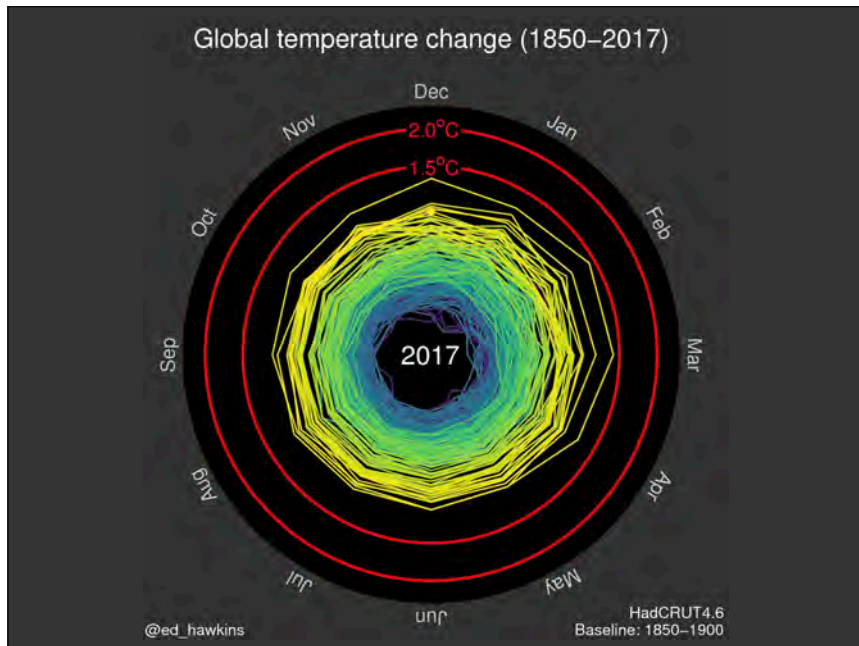
Does government policy adequately address climate risk?

@TimWilsonMP @robgeell @simonahac

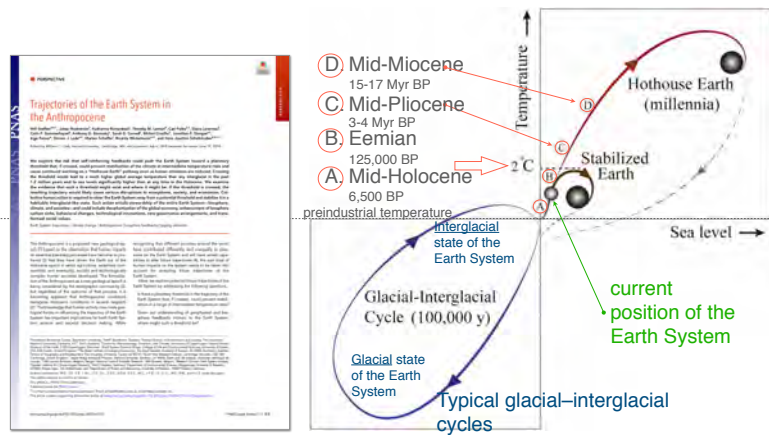
global warming

The science:

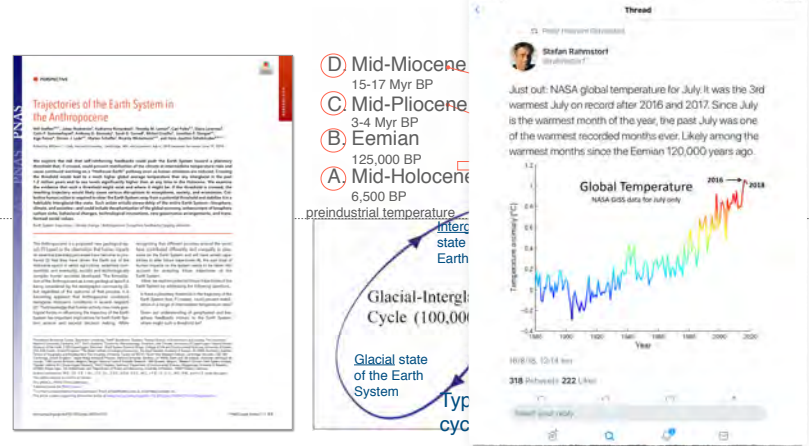
- “The Goldilocks Principle”
 - Venus: CO₂ rich; 460°C
- radiative forcing of gases:
 - Fourier 1824, Tyndall 1861, Arrhenius 1896
- CO₂: 290ppm → 400+ppm (+40%)
- 11,000,000 tonnes of pollution per day
 - heat generation is equivalent to 400,000 Hiroshima explosions/day



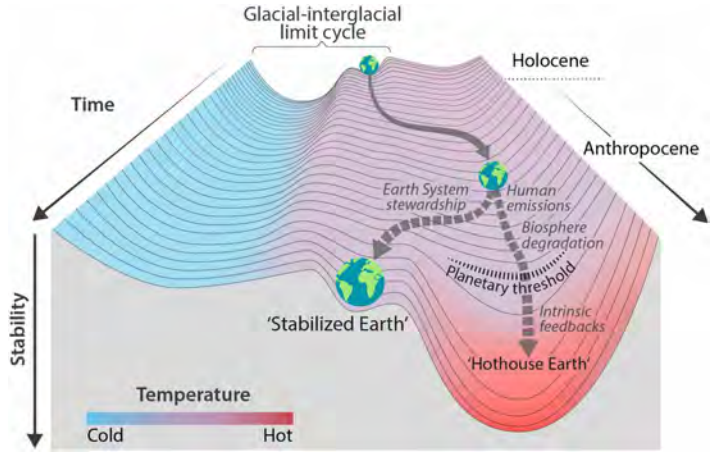
Hothouse Earth



Hothouse Earth

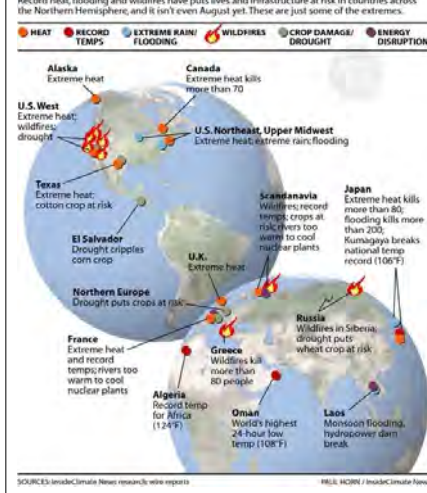


Hothouse Earth



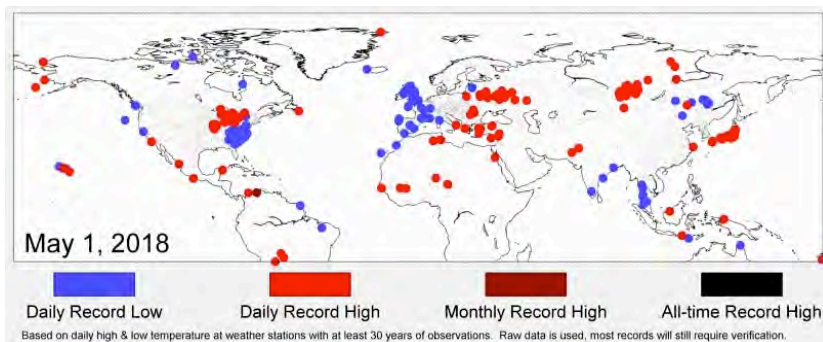
Stability landscape showing the pathway of the Earth System out of the Holocene, out of the glacial-interglacial limit cycle to its present position in the hotter Anthropocene.

Summer of Extremes



SOURCES: smadClimate News research; wire images. PELLACINI / iStock.com

Animated map of record high temperatures set at weather stations around the world between May 1st and July 31st 2018.



 **Robert Rohde: Lead scientist @BerkeleyEarth - climate science and strategic analysis**
@rrohde



Liberal Party climate change policy in 1990

Millennium Milestones
The specific goals and targets of a Liberal Government to the year 2000 include:

- The area of land to be re-forested will be the equivalent of the area of land lost to logging.
- A plan for the use of renewable energy will be developed.
- An achievable level of energy use will be set.
- A reduction in greenhouse gas emissions will be set.
- A goal of reducing energy use by 10% will be set.
- Spending on public transport will be increased.
- Energy of proven and viable ways to deal with climate change will be encouraged.
- The amount of new forest land planted will be at least 10% more than the amount of land lost to logging.
- A complete phase out of CFC and halons by 1995, and others on their way out.
- A ban on the use of ozone depleting substances will be implemented.
- Subsidies to the mining industry will be reduced.
- A set date for a national facility for the disposal of hazardous waste will be set.
- A recycling program will be established.

SENATOR CHRIS EUREKA
Shadow Minister for the Environment and the Arts

"We embrace the philosophy of sustainable development - we reject the false dichotomy of jobs versus the environment. We can have both, at the same time pursuing strategies of ecologically responsible development which improve our standards of living while promoting responsible conservation policies which improve our quality of life."

"We will work with all Australians to achieve these goals and with the States, the Commonwealth, universities, industry, industry, industry and all concerned. We take a co-operative, federalist approach to the solution of environmental problems. But we will never rely on a colleague to act in the general national interest when that is required."

ANDREW PEACOCK

A reduction in 'greenhouse gas' emissions of at least 20% by the year 2000

A target to reduce greenhouse pollution by 20% by 2000

A fair go for the environment

A target to reduce greenhouse pollution by 20% by 2000



PARLIAMENT of AUSTRALIA Australian climate change policy: a chronology

1972	Stockholm declaration	Whitlam
1976	Australian Academy of Science: human activities are likely to contribute to warming	Frazer
1988	Toronto targets (Canada): 20% reduction on 1988 by 2005	Hawke
1989	Cabinet submission: 20% reduction on 1988 by 2005	Hawke/Richardson
1990	Australia adopts 'Toronto targets'	Hawke/Kelly
1992	United Nations Framework Convention on Climate Change (UNFCCC), "Rio Earth"	Keating/Kelly
	The National Greenhouse Response Strategy (NGRS)	Keating/Kelly
1996	NGRS Review: "... greenhouse issues have not been considered".	Howard/Hill
1997	Prime Minister's package: additional 20% electricity from renewables by 2010	Howard/Hill
	Kyoto Protocol adopted with 'Australia Clause'; AGO established	Howard/Hill
1999	Three AGO discussion papers on emissions trading	Howard/Hill
2000	'The heat is on: Australia's Greenhouse Future' Senate Committee report	Howard/Hill
2001	Mandatory Renewable Energy Target scheme (MRET); \$2b; +2% from renewables:	Howard/Hill
	'The heat is on: Australia's Greenhouse Future' rejected	Howard/Hill
2002	"Kyoto not in the nations's interest"; 'Global greenhouse challenge: the way ahead for	Howard/Downer/
2004	'Securing Australia's Energy Future White paper' Chief Scientist, Robin Batterham	Howard
2007	'Shergold Report' recommends Australia develop an emissions trading scheme.	Howard
	Australia ratifies Kyoto Protocol	Rudd



PARLIAMENT of AUSTRALIA Australian climate change policy: a chronology

2008	Garnaut Climate Change Review	Rudd/Wong
	Carbon Pollution Reduction Scheme (CPRS) Green/White paper	Rudd/Wong
	'Australia's Low Pollution Future: The Economics of Climate Change Mitigation'	Rudd/Wong
	Budget: 5% below 2000 levels without any conditions; 15% below 2000 if 'global'	Rudd/Wong
2009	Budget: 25% by 2020 on 2000 levels (450ppm target); 12-month \$10 fixed price in	Rudd/Wong
	CPRS rejected by Senate	Rudd/Wong
	RET has a more ambitious renewable energy target of 20% (45,000 GWh) by 2020	Rudd/Wong
2010	Coalition opposition releases 'Direct Action' and ERF; 5% emissions reduction target.	Abbott/Hunt
2011	'Securing a clean energy future'; Clean Energy Act 2011, Carbon Farming Initiative	Gillard/Combet
2012	CEFC, carbon price, 'Australia's Clean Energy Future'	Gillard/Combet
2013	Repeal of Clean Energy Act 2011 begins, Climate Commission abolished, CCA	Abbott
2014	Direct Action, Carbon Farming Initiative, ERF	Abbott/Hunt
2015	Energy White Paper	Abbott/McFarlane
	Australia's post-2020 emission reduction target: 26-28% below 2005 levels by 2030.	Abbott/Bishop/
	Australia's National Climate Resilience and Adaptation Strategy; net zero emissions	Turnbull/Hunt
2016	Clean Energy Innovation Fund; Paris Agreement; Emissions Intensity Scheme	Turnbull/Bishop/
2017	Alan Finkel Review of the National Electricity Market - not adopted	Turnbull/
2018	National Energy Guarantee (NEG) withdrawn	Turnbull/
?		Morrison/Taylor/

Current and future impacts of climate change on housing, buildings and infrastructure

13 August 2018

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Ultimately, the best defense against rising costs and the physical impacts of climate change is to meet the goals of the Paris Agreement and limit global warming to less than 2°C.

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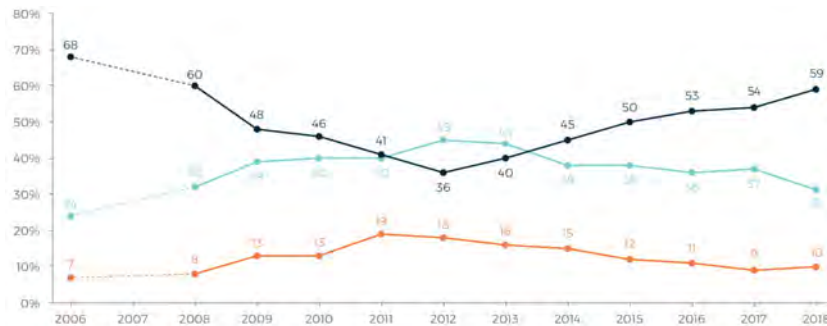
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2018 LOWY INSTITUTE POLL



● Global warming is a serious and pressing problem. We should begin taking steps now even if this involves significant costs
● The problem of global warming should be addressed, but its effects will be gradual, so we can deal with the problem gradually by taking steps that are low in cost
● Until we are sure that global warming is really a problem, we should not take any steps that would have economic costs

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