

# A point of vanishing stability

Exploring a climate strategy for New Zealand

Whakaritenga mo ngā wāheke  
Navigating with foresight

#ClimateStrategyNZ

WiFi: wellington



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# ClimateStrategyNZ

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# The Aim

To contribute to a national conversation on a climate strategy for New Zealand.

This will help ensure that New Zealand:

- **Is antifragile** (able to withstand physical risks of climate change)
- **Meets its international commitments** (able to manage reputation risks)
- **Succeeds in transitioning to a low-carbon economy** (able to manage transitional risks)
- **Is a creative, fair and just society** (able to manage liability risks)

# Speakers



Wendy McGuinness



Conal Smith



Dr Anita Wreford



Roger Dennis



Adrian Orr



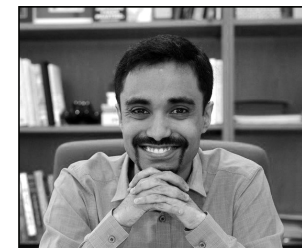
Chlöe Swarbrick MP



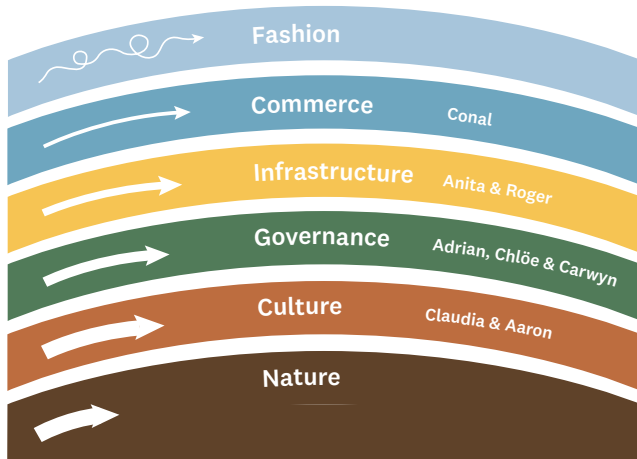
Dr Carwyn Jones



Dame Dr Claudia Orange



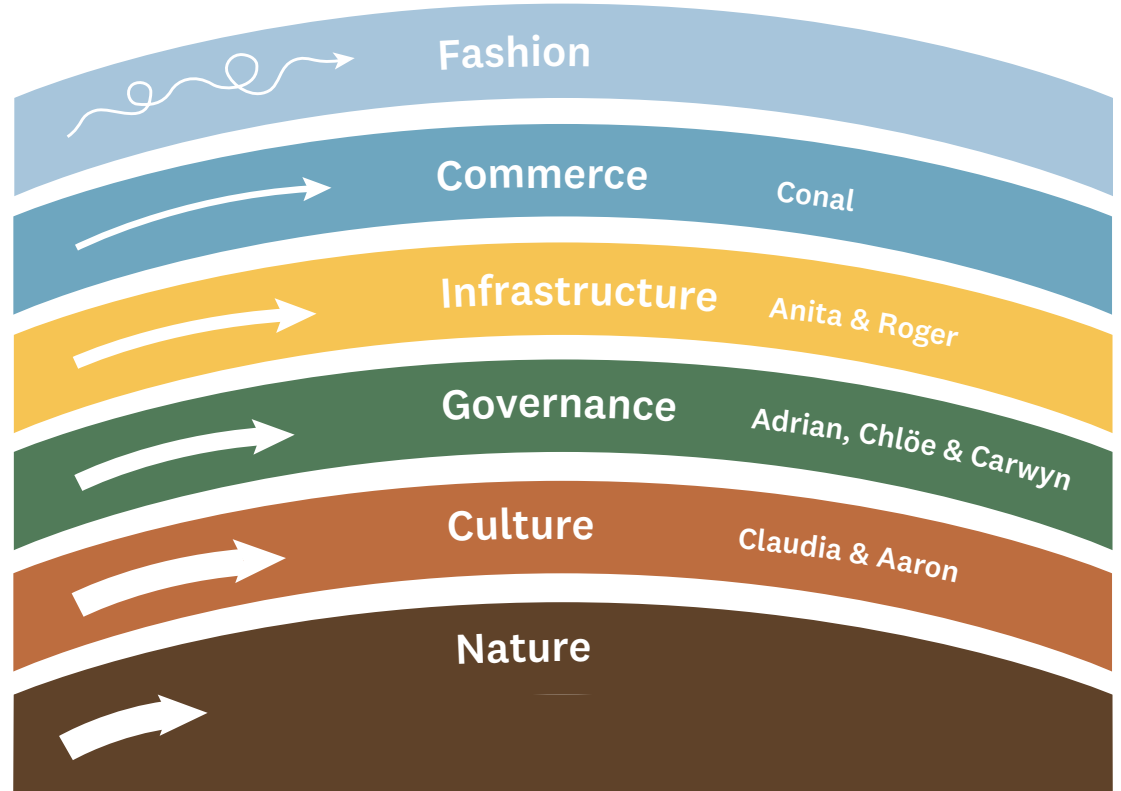
Aaron Maniam



# The Process

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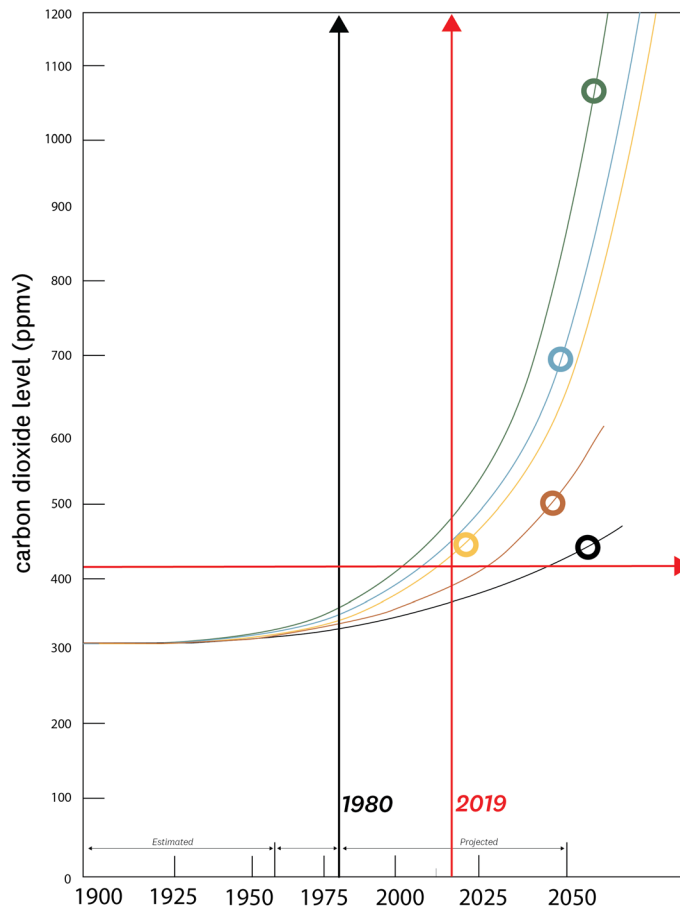
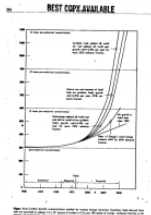
## Pace Layer Thinking



# Revisiting 1980:

## 40 years ago

“Probably the most serious anthropogenic threats to the stability of climate are CO<sub>2</sub> emissions and releases of chemicals that deplete stratospheric ozone. In both cases it is impossible for an individual nation to protect itself against the consequences of other nations’ actions. These problems are truly global in scope, and there is no human institution now established that can adequately address them.”



- Synthetic fuels replace all world oil; coal replaces all world gas.
- Historic mix and amounts of fossil fuels (no synthetic fuels).
- Dept. of Energy's world energy scenerio, (NEP 2).
- Natural gas replaces all world coal and half of world oil (no synthetic fuels).
- No growth in fossil fuels after 1985.

# Revisiting 2017: 2 years ago

“New Zealand’s gross emissions have increased 23.1 per cent since 1990.”

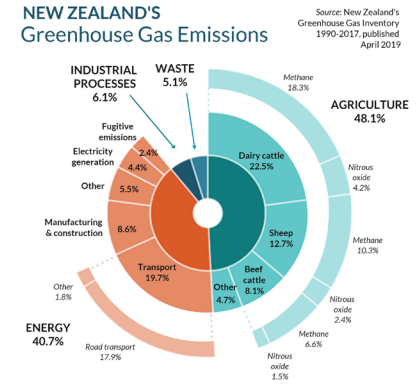
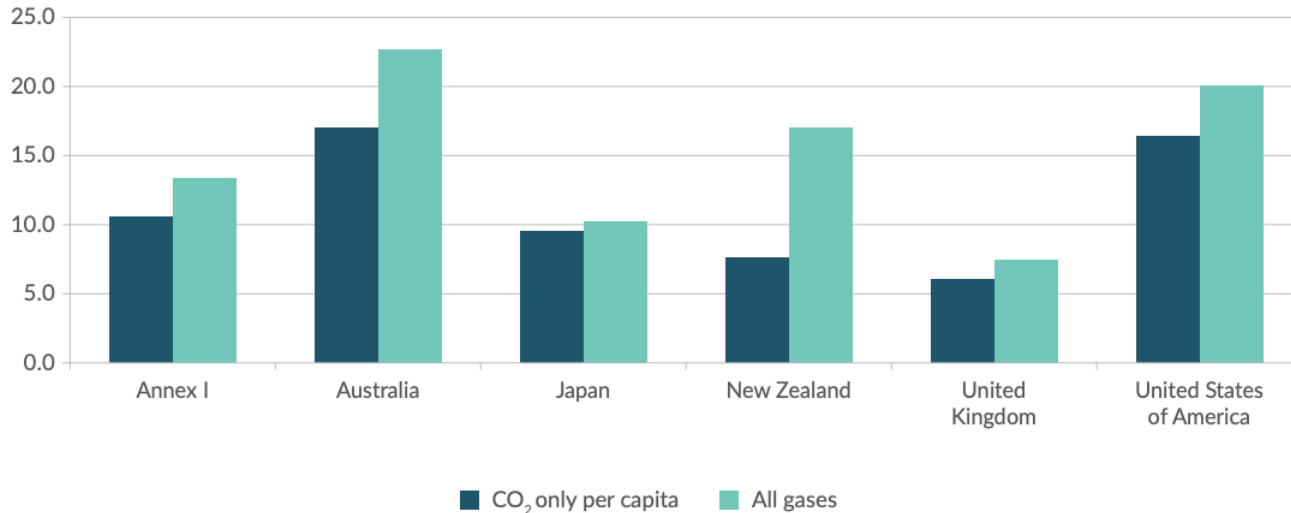
Figure 2: New Zealand’s gross and net emissions from 1990 to 2017



# Revisiting 2017: 2 years ago

“New Zealand’s gross emissions ranked 24th [...] but our emissions per person were the 7th highest.”

Figure 5: International comparisons for per capita emissions in 2016<sup>6</sup>

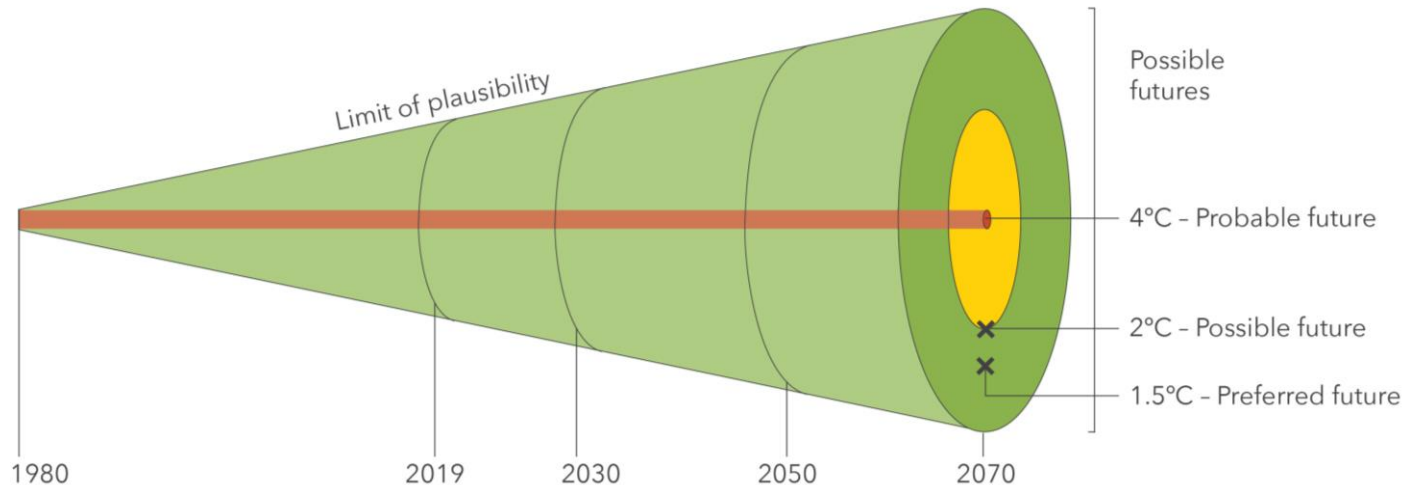




# Looking forward: Cone of Plausibility

Limiting warming to 1.5°C means we need to reach net zero at 2050. This requires 'rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems'.

Limiting warming to 2°C means we need to reach net zero at 2070 (October 2018)



# A Climate Strategy

Who, What, When, Where, Why & How  
Who pays/Timing issues/Trade-offs

## Transition Strategy

Goal: Lower emissions  
Business interest: Profits  
Public interest: Jobs & Justice  
Timeframe: 8 years  
Example: Productivity Commission Report

## Physical Strategy

Goal: Retain capital  
Business interest: Asset values  
Public interest: Health & Safety  
Timeframe: Long-term  
Examples: LGNZ, ICNZ, Infrastructure



'Your view of human nature will change profoundly as you read this brilliant book.'

DANIEL KAHNEMAN

Author of *Thinking, Fast and Slow*

# THE MARSHMALLOW TEST

Understanding self-control and  
how to master it

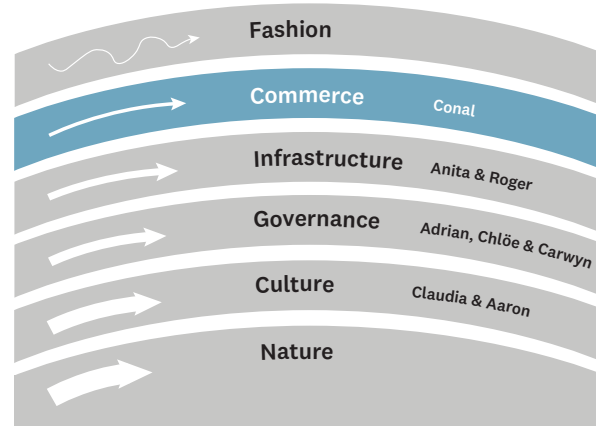


WALTER MISCHEL

# Conal Smith



Conal led development of the first international guidelines on the measurement of subjective wellbeing and the OECD's first wellbeing themed country report. He taught the first course in wellbeing economics at Sciences Po in Paris in 2014 and is a member of Kōtātā Insight, a specialist team of economists and social psychologists.



# A point of vanishing stability: Exploring a climate strategy for New Zealand

Conal Smith

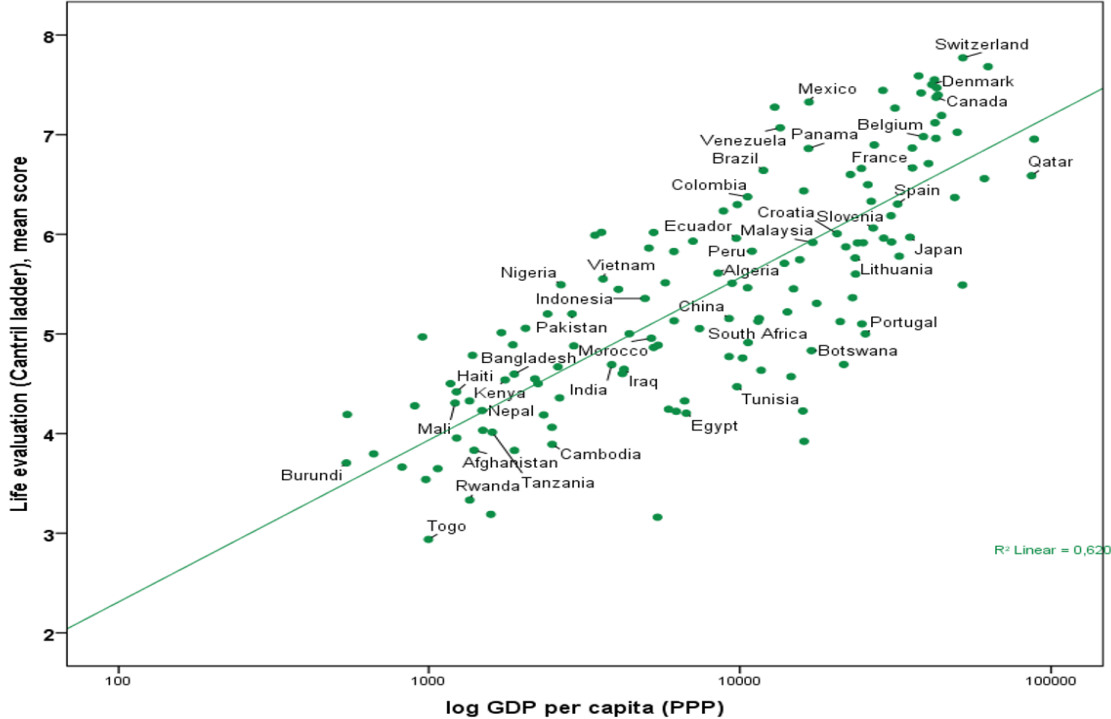
30 May 2019



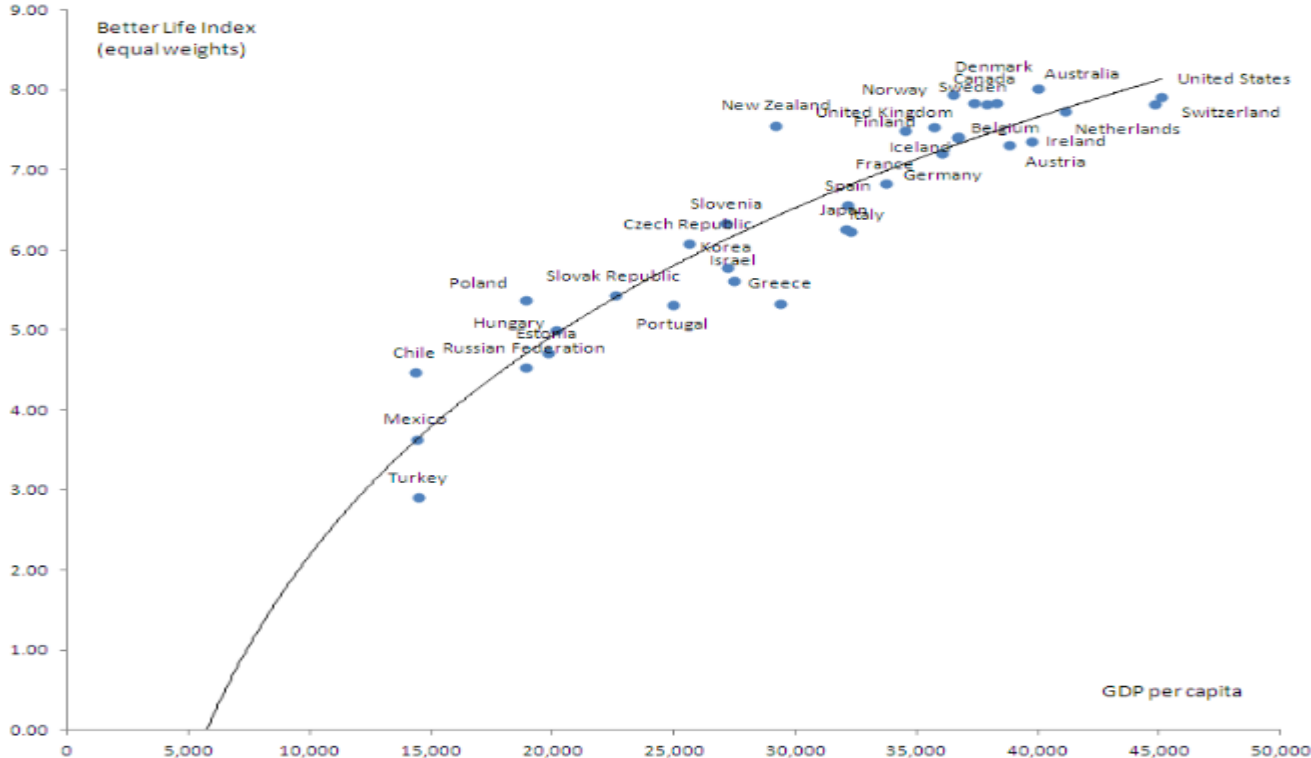
# The economy and wellbeing

Notes:  
**Cantril ladder**  
(= **life evaluation**)  
Source: Gallup World Poll  
140+ countries  
2012 (or latest available)

**GDP per capita**  
(= **logarithmic scale**)  
Source: World Bank

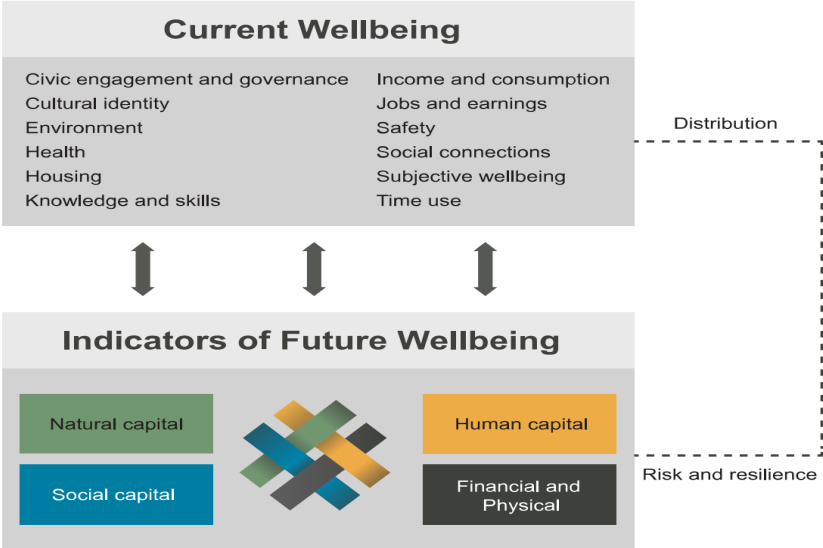
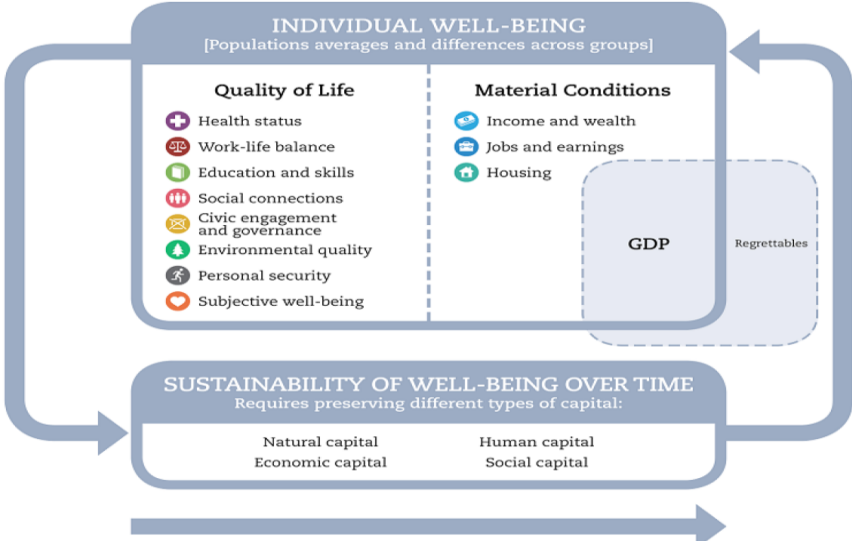


# The economy and wellbeing

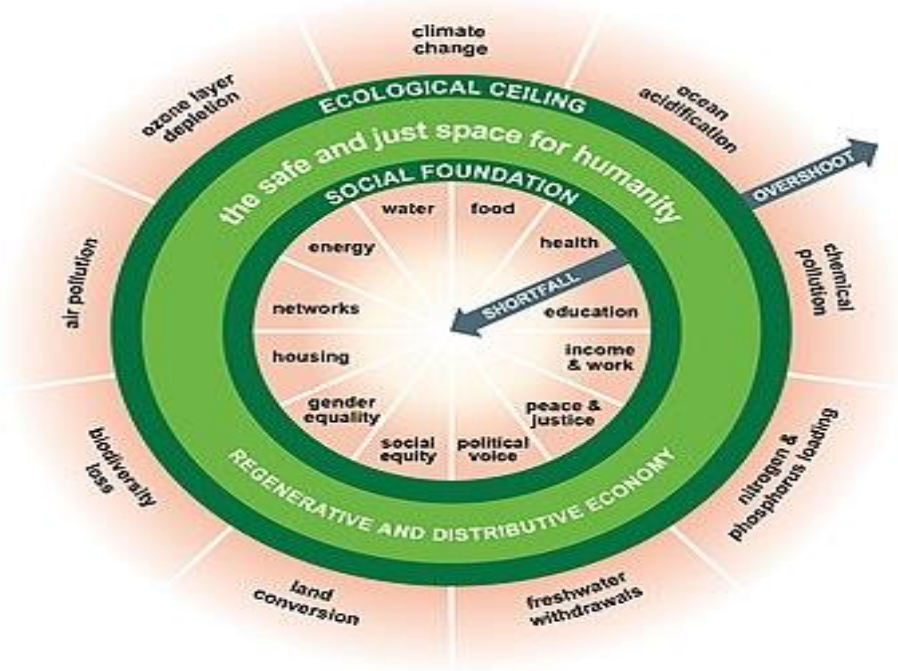




# The capital stocks model

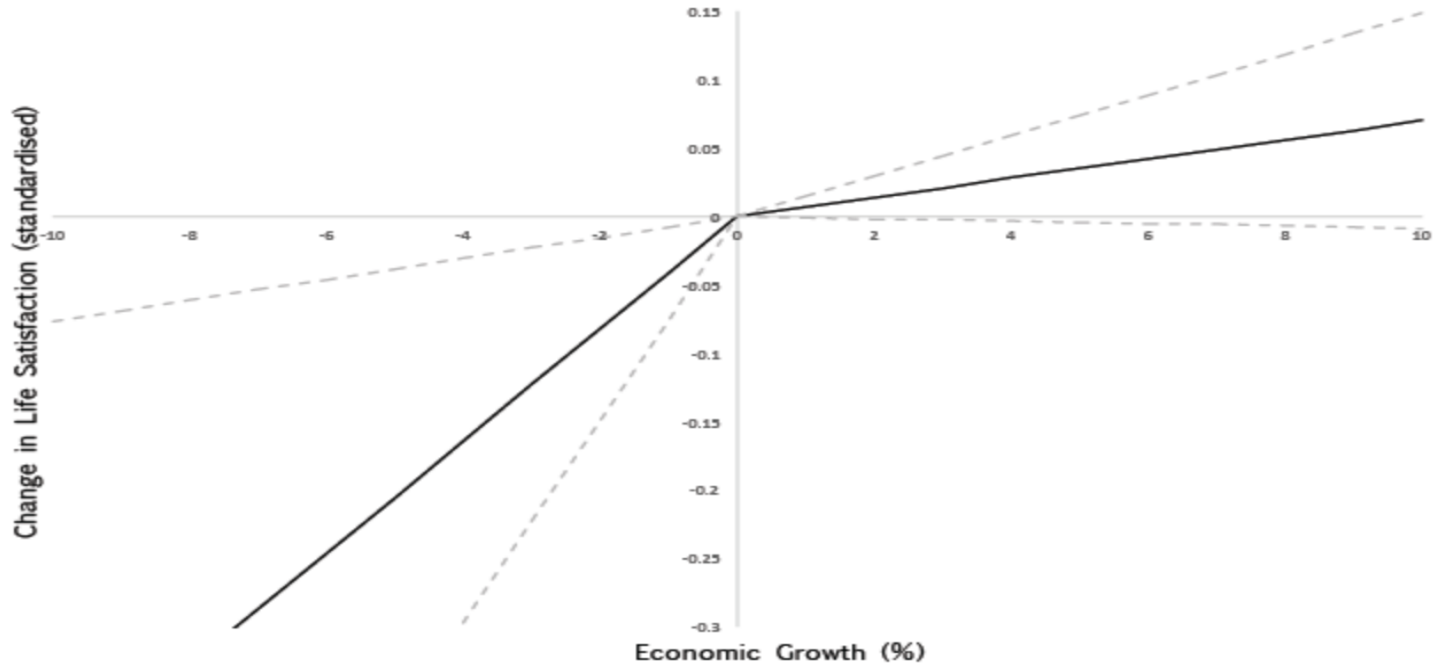


# The capital stocks model: alternatives

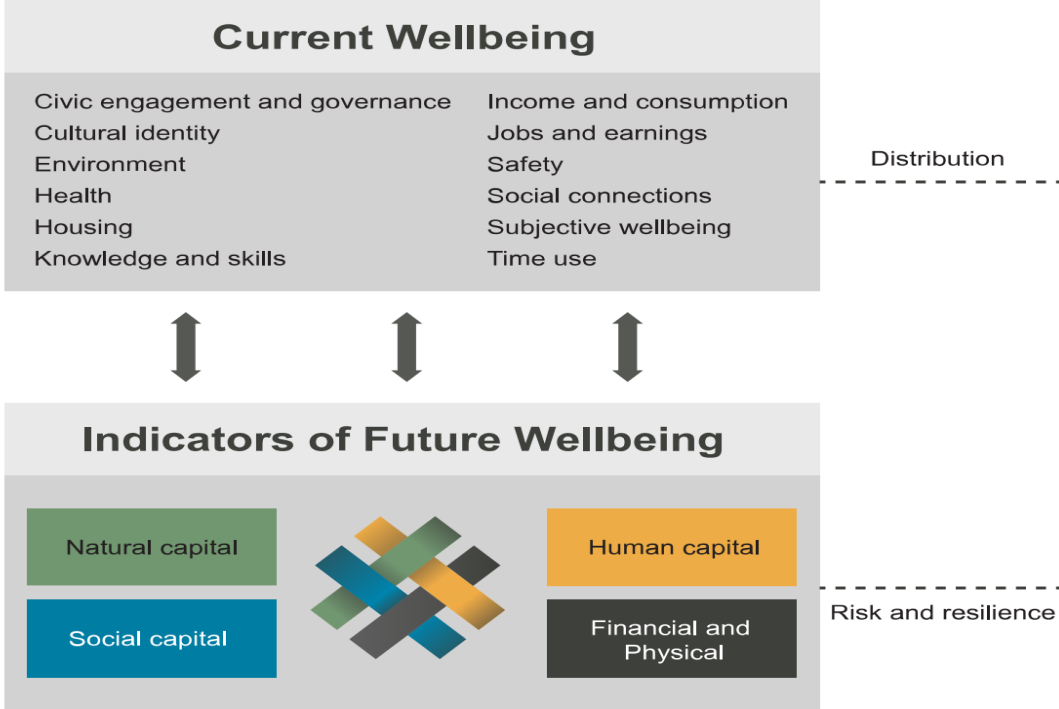


# Loss aversion

Figure 1. Economic growth and change in life satisfaction



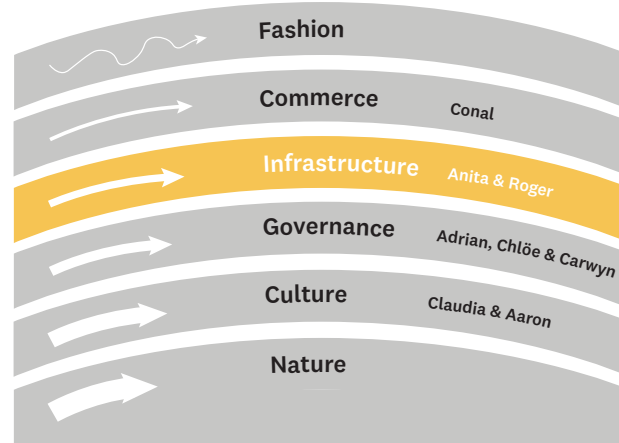
# The capital stocks model



# Dr Anita Wreford



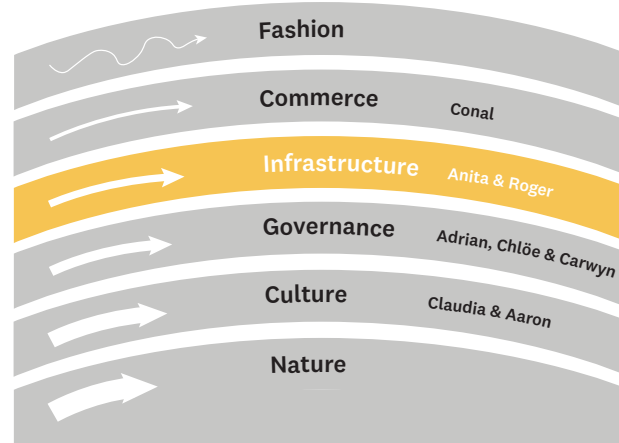
Anita has been lead author on previous IPCC reports and is lead author on an upcoming IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. She is also an author of the upcoming Australasia chapter of the *Sixth Assessment Report*.



# Roger Dennis



Roger is a consultant of foresight, innovation and large-scale change. He supports government bodies and companies focusing on futures thinking and strategy in order to create advantageous change. At the 4th Nobel Laureates Symposium in 2015 he spoke on the link between cities, data and climate change.





P  
300m  
ON  
LEFT





**“At a public meeting, recalls West Coast Regional Council chief executive Mike Meehan, a question from the floor asked when residents should stop investing in the seawall and look at moving on. It did not go down well. A motion was put forward never to raise the issue again. It was approved 39 to one.”**

*Listener Magazine - 22 November, 2018*

Factor	Time	Uncertainty	Impact on option	Comments
Coastal retreat for residential properties	30 – 50 years	Reasonably foreseeable	High	It is uncertain who would take responsibility for a response to retreat of residential properties from accelerated coastal erosion and increased inundation events as a result of climate change effects, and how this would be funded.

*Future Proofing Punakaiki – Programme Business Case and Master Plan  
Prepared for Buller District Council Dec 2018*

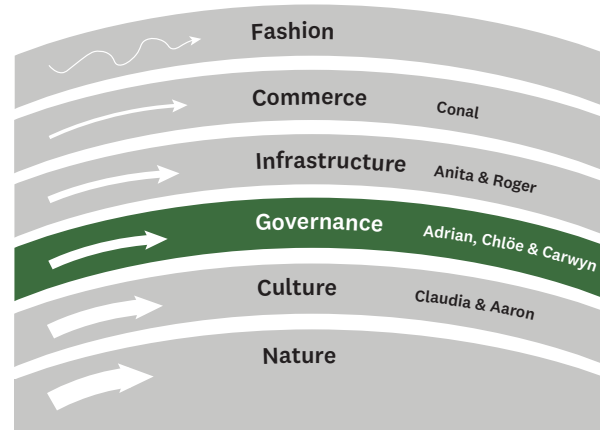
How do you  
change the  
paradigm that  
climate change  
won't impact  
'me'?



# Adrian Orr



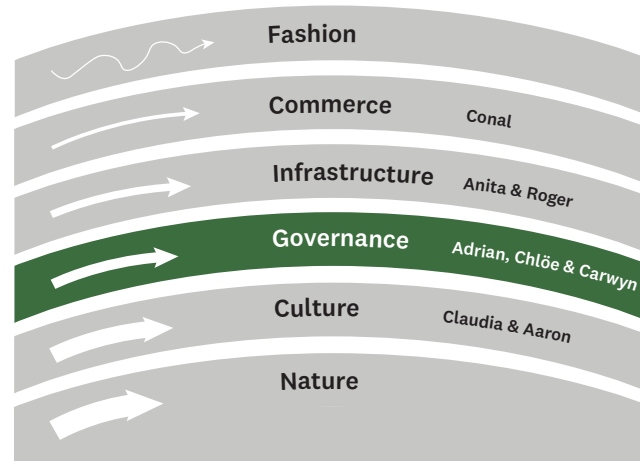
Adrian was appointed Governor of the RBNZ in March 2018. He has previously held roles as CEO of the New Zealand Superannuation Fund, and as Deputy Governor and Head of Financial Stability for the RBNZ. Prior to that Adrian has worked as Chief Economist at Westpac Banking Corporation and at The National Bank of New Zealand.



# Chlöe Swarbrick



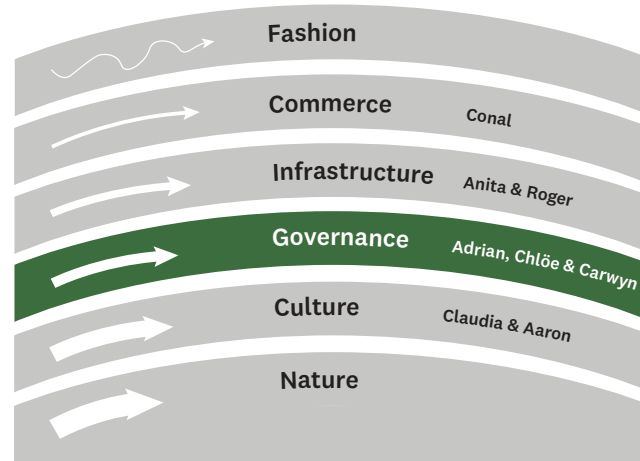
Chlöe cut her political teeth as a 22-year-old, running for election as the Mayor of Auckland in 2016. She is now a Green Party MP, and Aotearoa's youngest MP in 40 years. She brings to Parliament her experience as a law student, journalist, business owner and community project leader.



# Dr Carwyn Jones



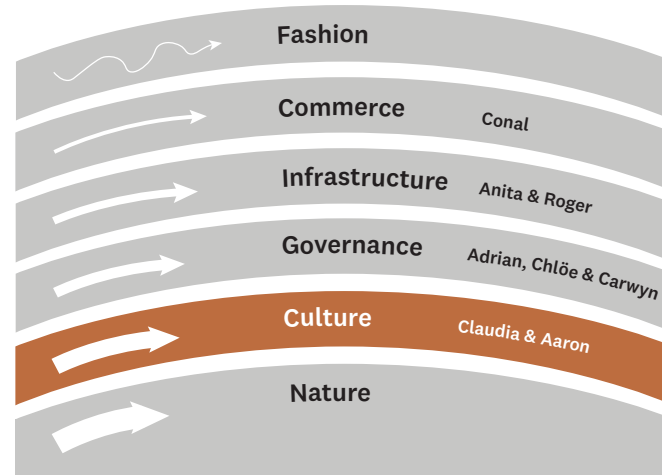
Carwyn is a Senior Lecturer in the Faculty of Law at VUW. His research focuses on the Treaty of Waitangi and indigenous legal traditions. He is the author of *New Treaty, New Tradition- Reconciling New Zealand and Māori Law* (2016).



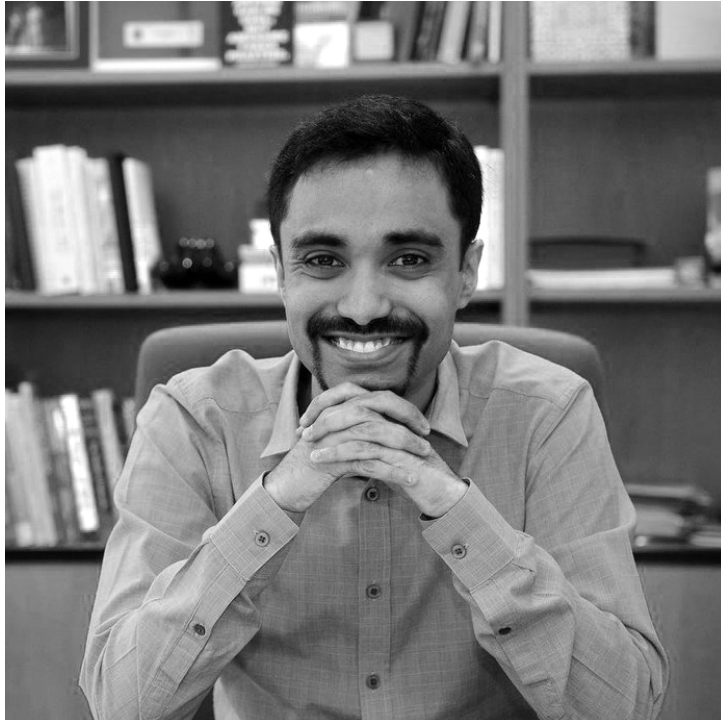
# Dame Dr Claudia Orange



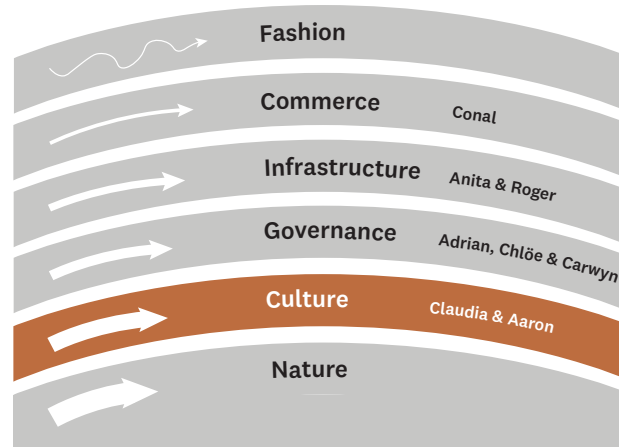
Claudia is an Honorary Research Fellow at the Museum of New Zealand Te Papa Tongarewa. She has also published widely on New Zealand history and race, including the books *The Treaty of Waitangi* (1987) and *An Illustrated History of the Treaty* (2004).



# Aaron Maniam



Aaron was the first Head of Singapore's Centre for Strategic Futures (CSF) and organised Singapore's initial 'Foresight Conference' in 2011. More recently, he served as Senior Director at Singapore's Ministry of Trade and Industry, coordinating policy on manufacturing, services, tourism and economic transformation.



# Voices on Climate

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## **Commission for the Future – 1981 (New Zealand)**

“Even within individual nations, decisions in these regards can be expected to strain existing institutions, and require long periods for debate. On a global scale, there are no adequate institutions and no precedent for such decisions of the co-operation they would require. Will the atmosphere conduct the experiment for us?”



## **Mark Carney – 2015**

“The task is large, the window of opportunity is short, and the stakes are existential.”



## **Greta Thunberg – 2019**

“Adults keep saying we owe it to the young people, to give them hope... but I don’t want your hope. I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. I want you to act. I want you to act as you would in a crisis. I want you to act as if the house is on fire, because it is.”

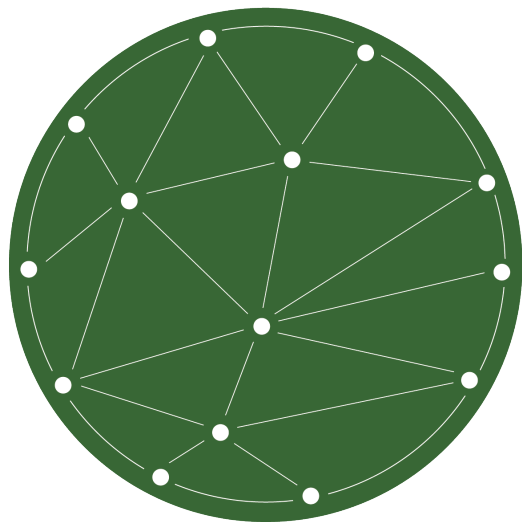


## **Sir David Attenborough – 2019**

“My generation is no great example for understanding - we have done terrible things [...] if we are not making progress with young people, we are done.”



# Thank you for attending. Upcoming events...



## Climate Reporting Discussion Paper launch

12.15–1.30 pm, 25 June 2019

McGuinness Institute



## KiMuaNZ: Exploring climate futures finale presentation

5.30–8 pm, 3 July 2019

Government House



## Lessons for 2058: Revisiting the Commission for the Future and the New Zealand Planning Council

5.30–7.30 pm, 10 September 2019

National Library of New Zealand