



**Four Possible Futures  
for  
New Zealand**

[sustainablefuture.info](http://sustainablefuture.info)

# Sustainable Future

## Sustainable Future Institute

Is an independent think tank specializing in research and policy analysis.

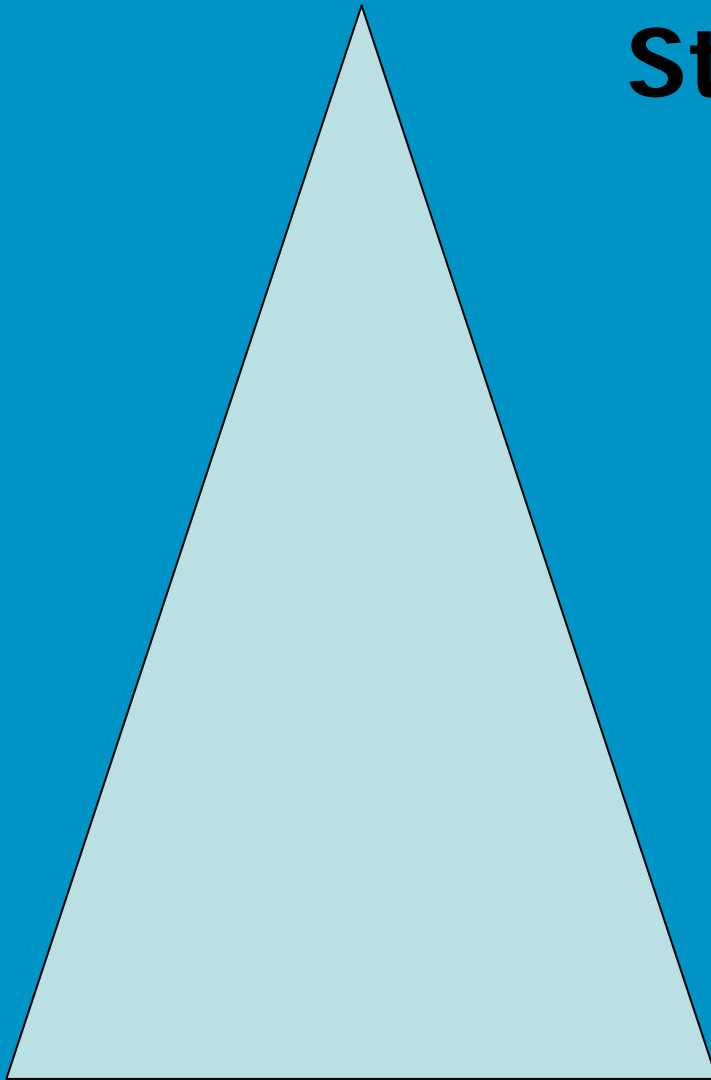


## *Project 2058*

The strategic aim is to promote integrated long-term thinking, leadership and capacity-building so that New Zealand can effectively explore and manage risks and opportunities over the next 50 years. The method to achieve this aim is to produce a National Sustainable Development Strategy.

## Presentation

- Part A: Being a New Zealander
- Part B: The Big Picture
- Part C: 21 Drivers of Change
- Part D: Scenarios



**Strategic Knowledge**

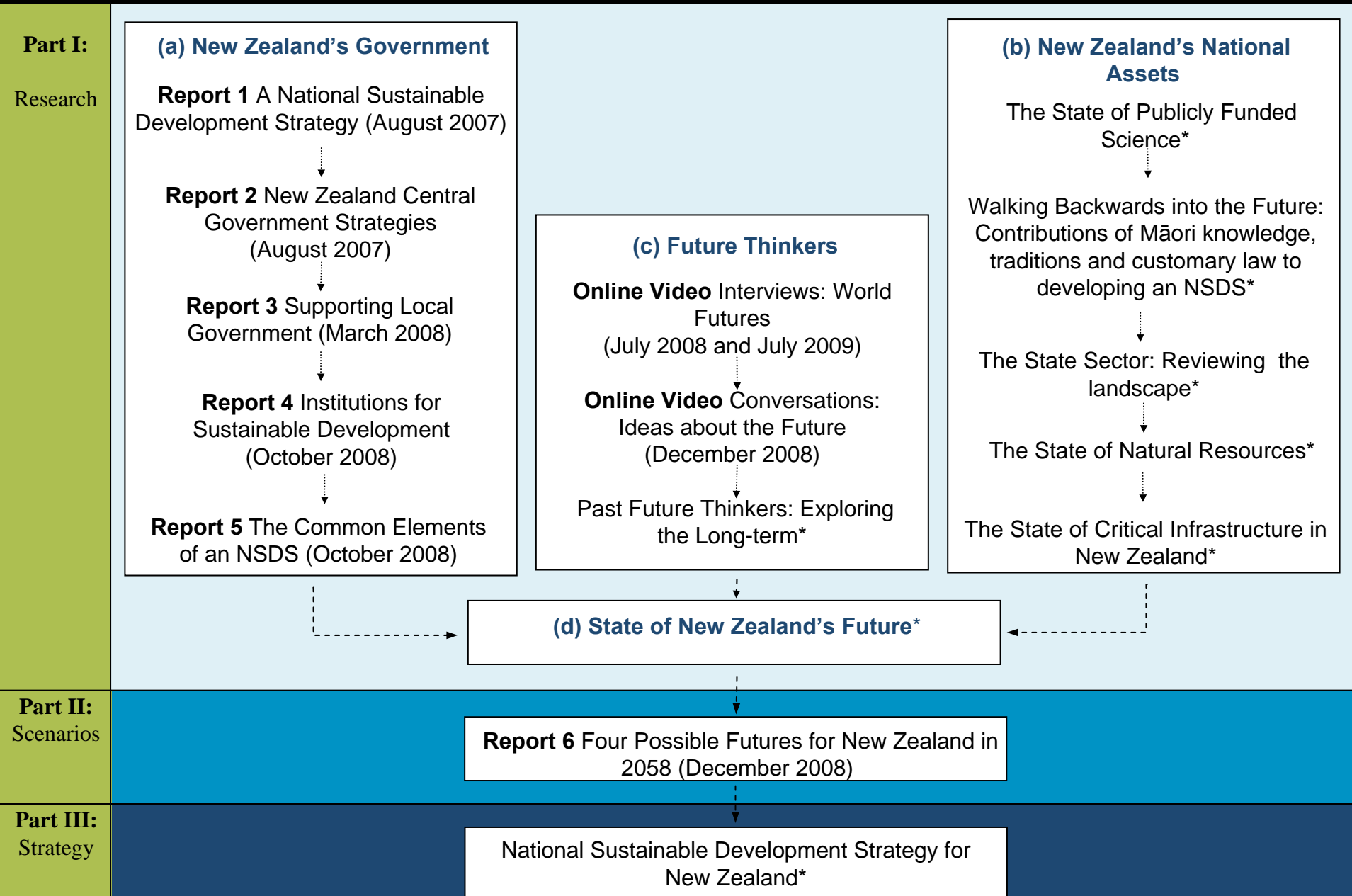


**Information**

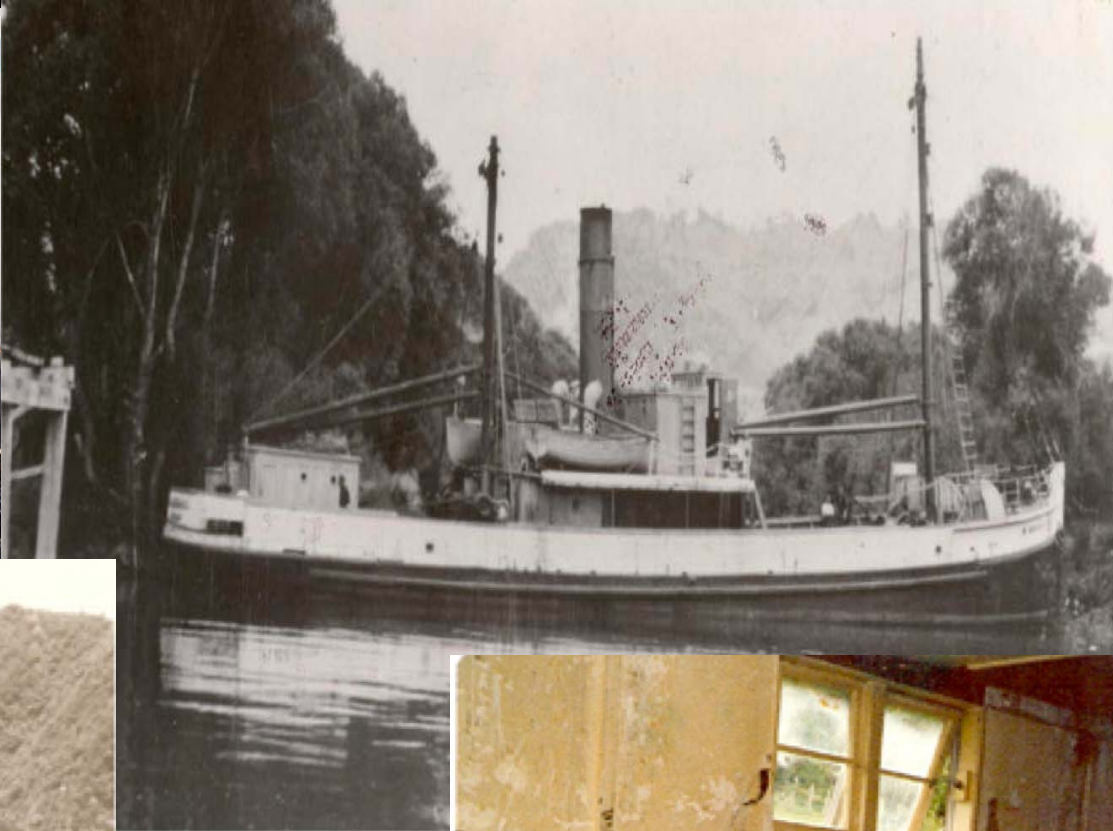


**Data**

# Project 2058 – The Method



# A: Being a New Zealander

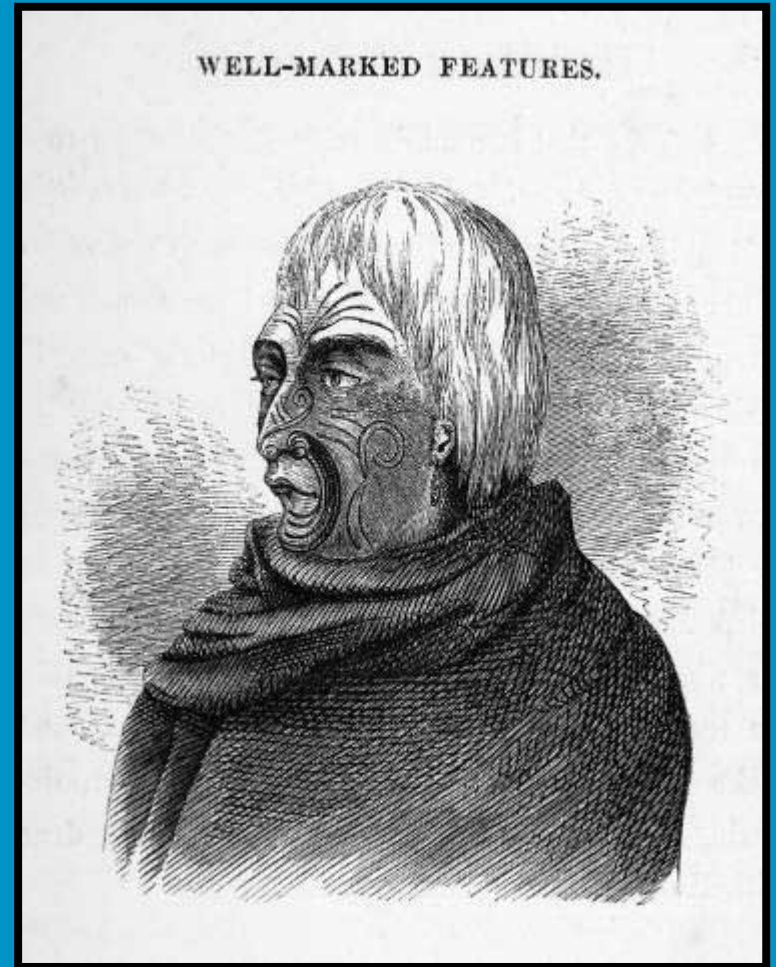


# Chief 1800

For fifty years he was the most feared fighting chief and at one stage controlled about  $\frac{1}{4}$  of NZ.

He was also considered to be the creator of the famous haka:

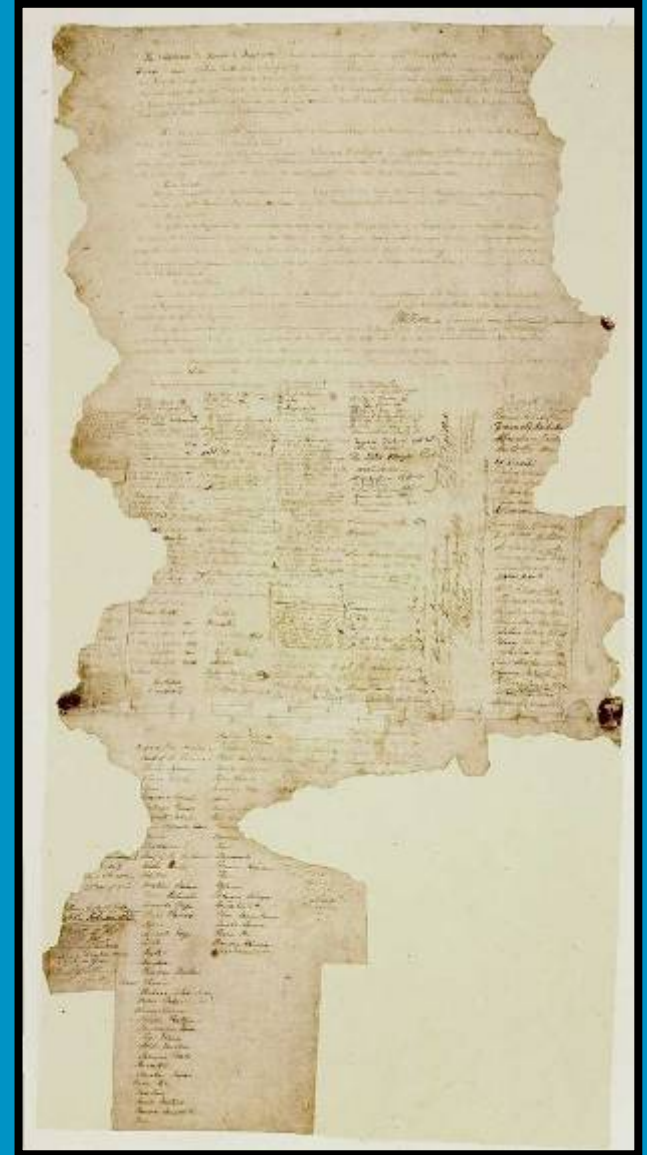
Ka mate! Ka mate!



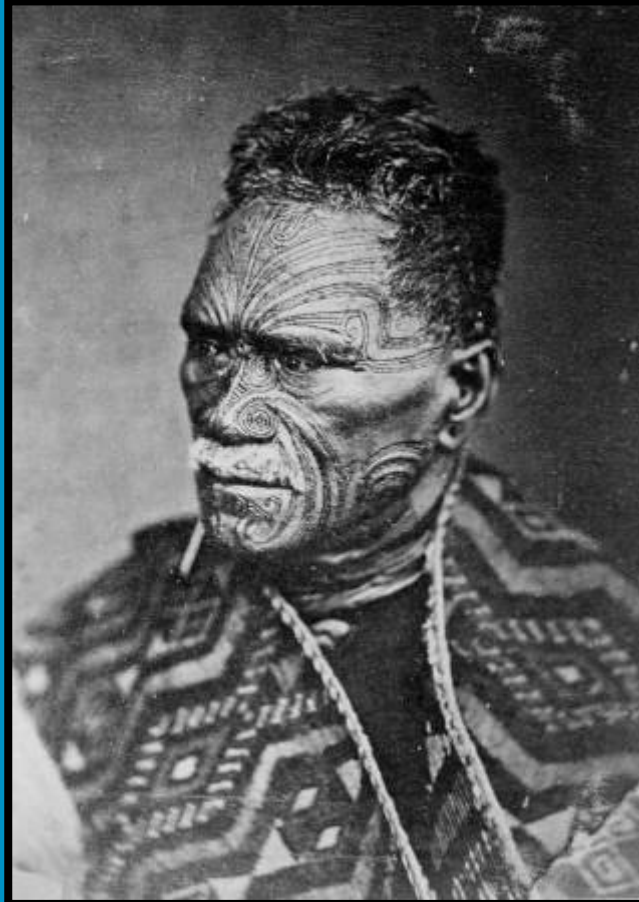
**Te Rauparaha (1760s-1849)**

# Treaty of Waitangi 1840

On 6 February 1840, the Treaty was signed between representatives of Queen Victoria and approx 500 Māori, (13 were women).



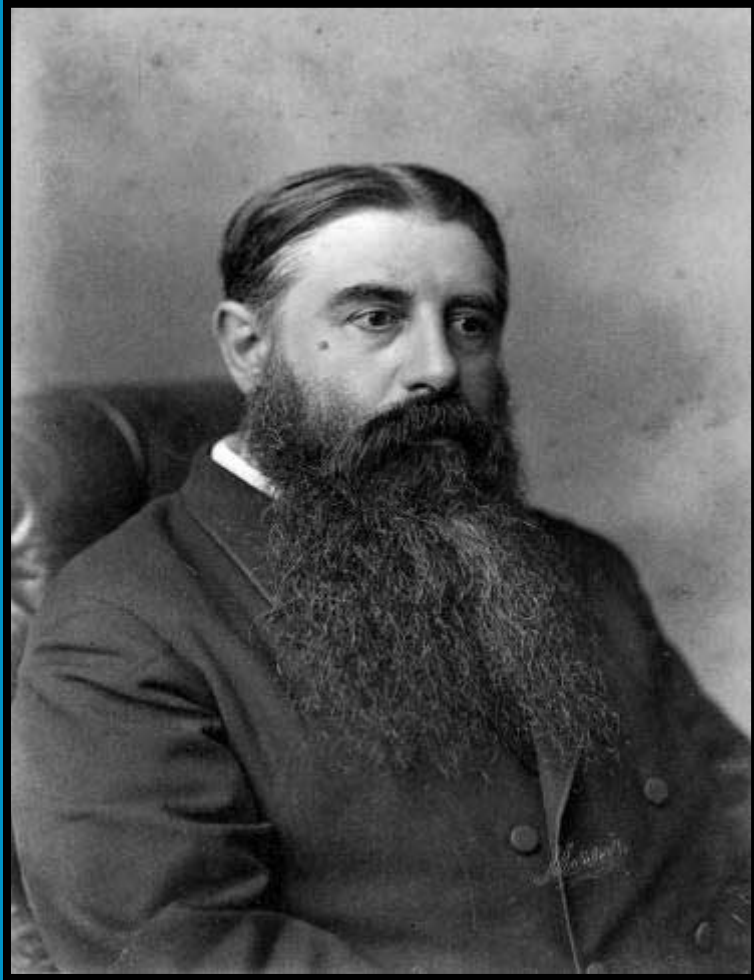
# Maori King 1858



King Tawhiao (1822 – 1894)



# Prime Minister 1873



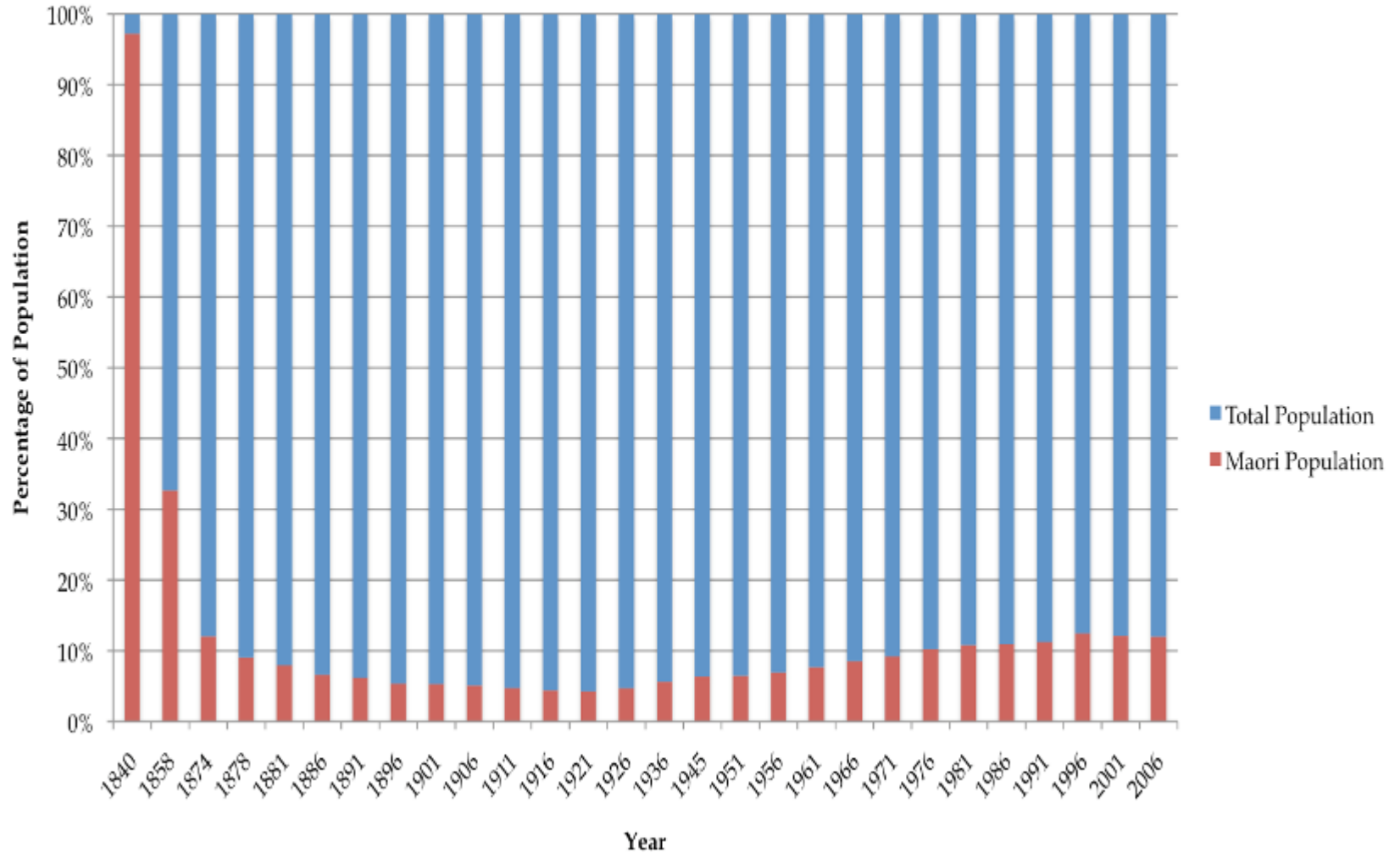
**Julius Vogel (1835-1899)**

Vogel implemented an immigration and works scheme designed to revive the economy and provide the pre-conditions of economic growth. In ten years he was able to bring about results that would otherwise have taken decades to achieve ...and do more to put an end to hostilities than an army of ten thousand men.

*"We considered it very desirable, in a young country, that wealth should not be in the hands of a few capitalists [who]...would leave the country, and enjoy elsewhere the wealth so accumulated."*

# Population

## Total Population and Maori Population 1840 - 2006



# B: The Big Picture

Of the 97 billion who have lived  
90 billion have died

Of the 7 billion alive

3 billion currently live on \$2 or less a day

Of the 4 billion living on more than \$2

2 billion are financially and physically dependent

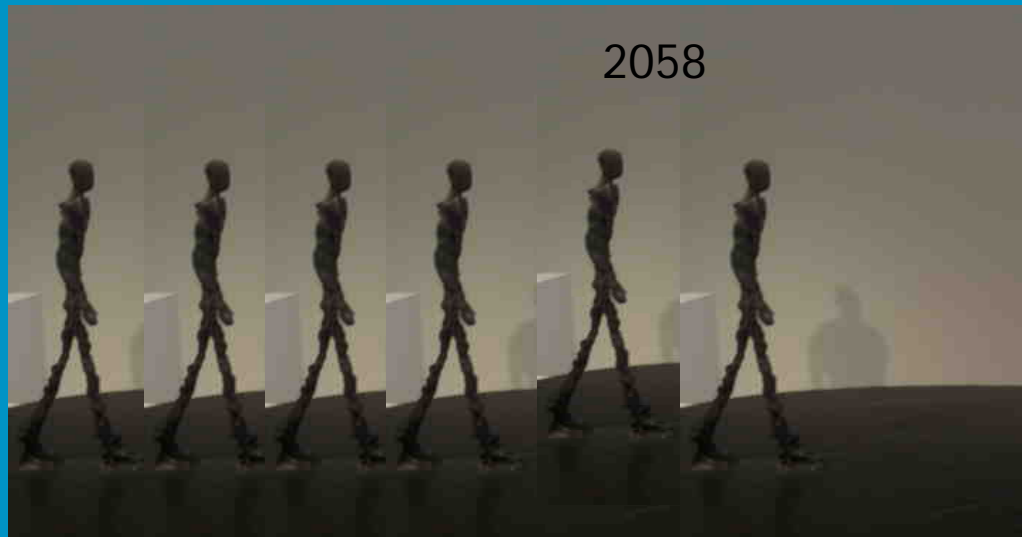
So we represent the 2 billion earning, alive and  
able to make a difference

(2 billion divided into 97 – we are the 2%)

# From 40:60 to 60:40

In 2008, 3 billion made \$2 or less per day.

Fifty years later, the developed countries & China grow old – while Africa & India remains young.



# Wild Cards

What, When, Where, Why, How?

## Wild Card 1

### Technology

- Info
- Nano
- Bio

Asteroids

Volcanoes

## Wild Card 2

- Terrorism
- Crime
- War
- Nuclear War

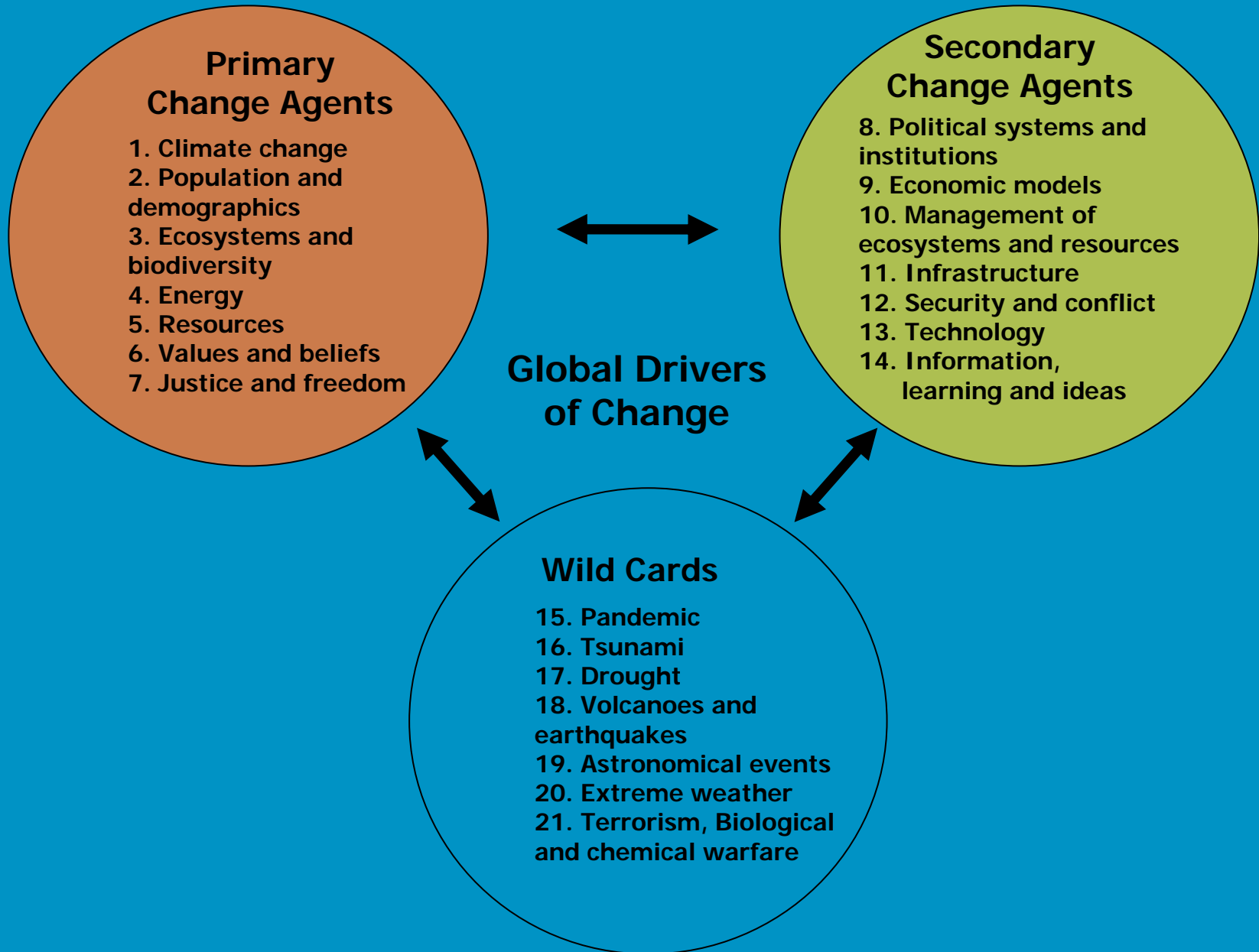
## Wild Card 3



### Health & Safety

- Antibiotic R.
- Pandemic
- Food
- Water

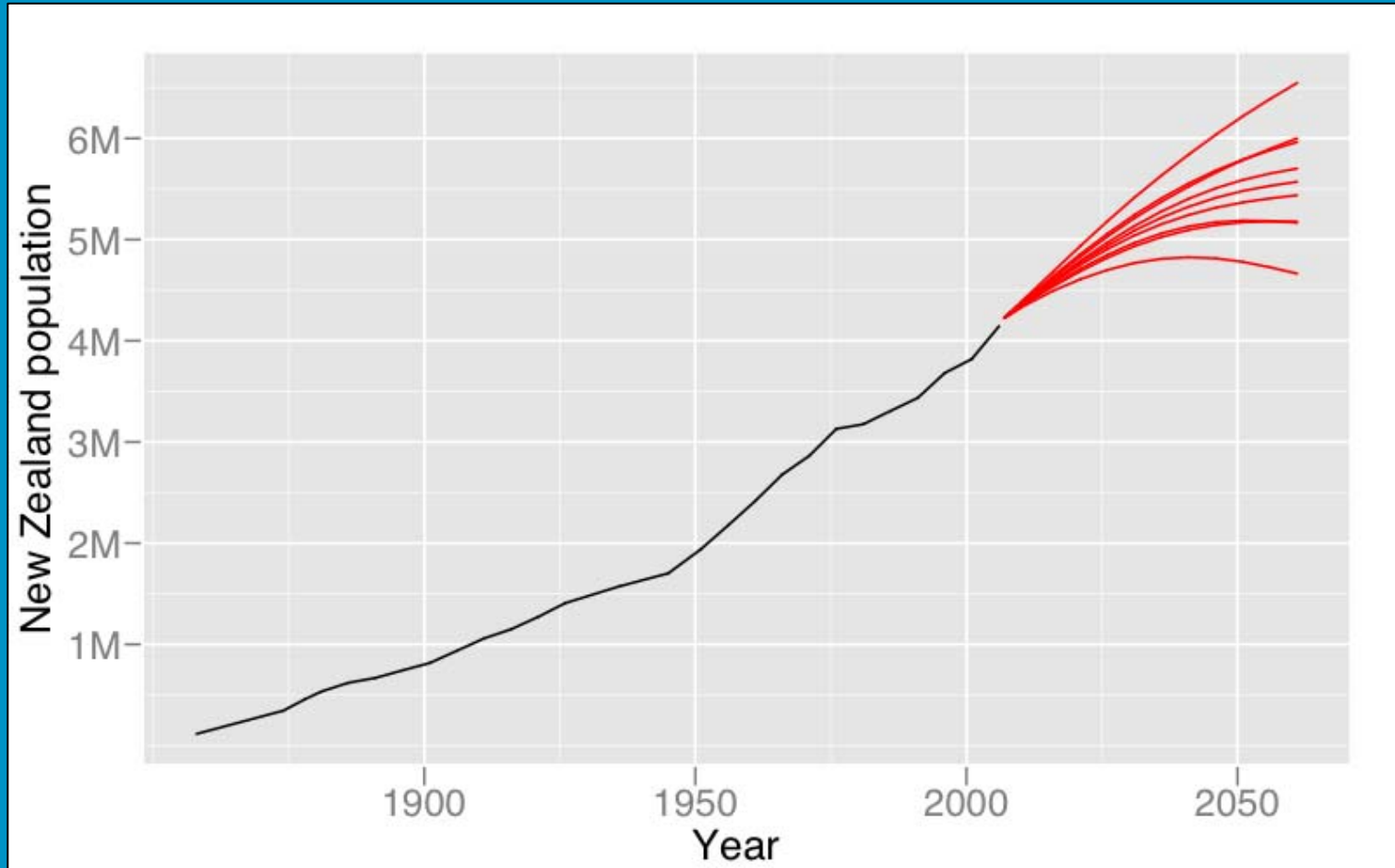
# C: 21 Global Drivers of Change



# Climate Change



# Population



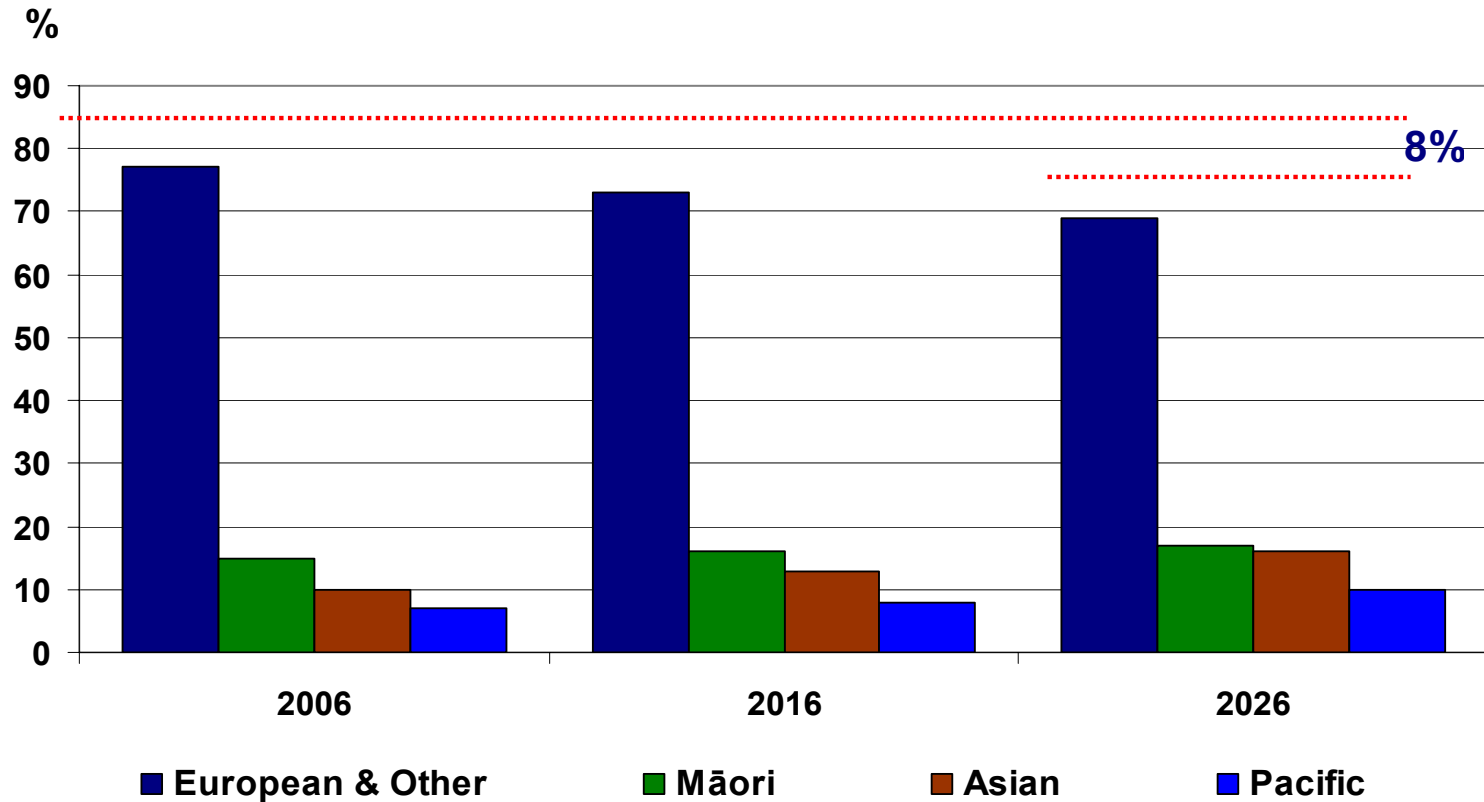
New Zealand has one of the highest rates of combined immigration and emigration (population turnover) in the world.



# Race Relations

## Ethnic Share Of New Zealand Population (percent)

Adapted from Statistics New Zealand, projections from series 6



# Values and Beliefs



## Our Indigenous People

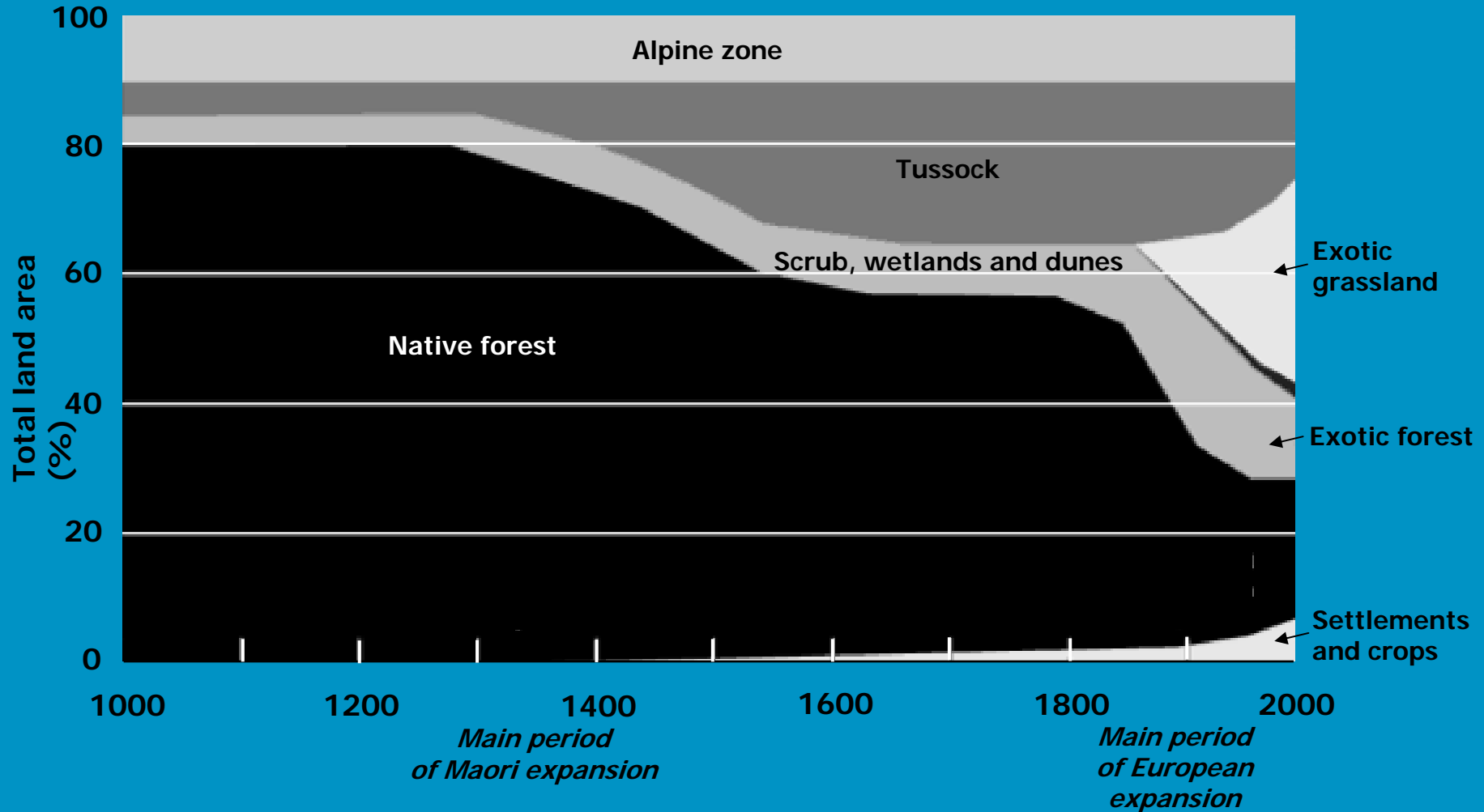
1. Whakapapa

2. Kaupapa

3. Kaitiakitanga

1. Me titiro whakamuri  
tatou. Kia mohio ai.  
Me pehea haere ki mua  
(Walking Backwards  
into the Future)

# Management of Resources

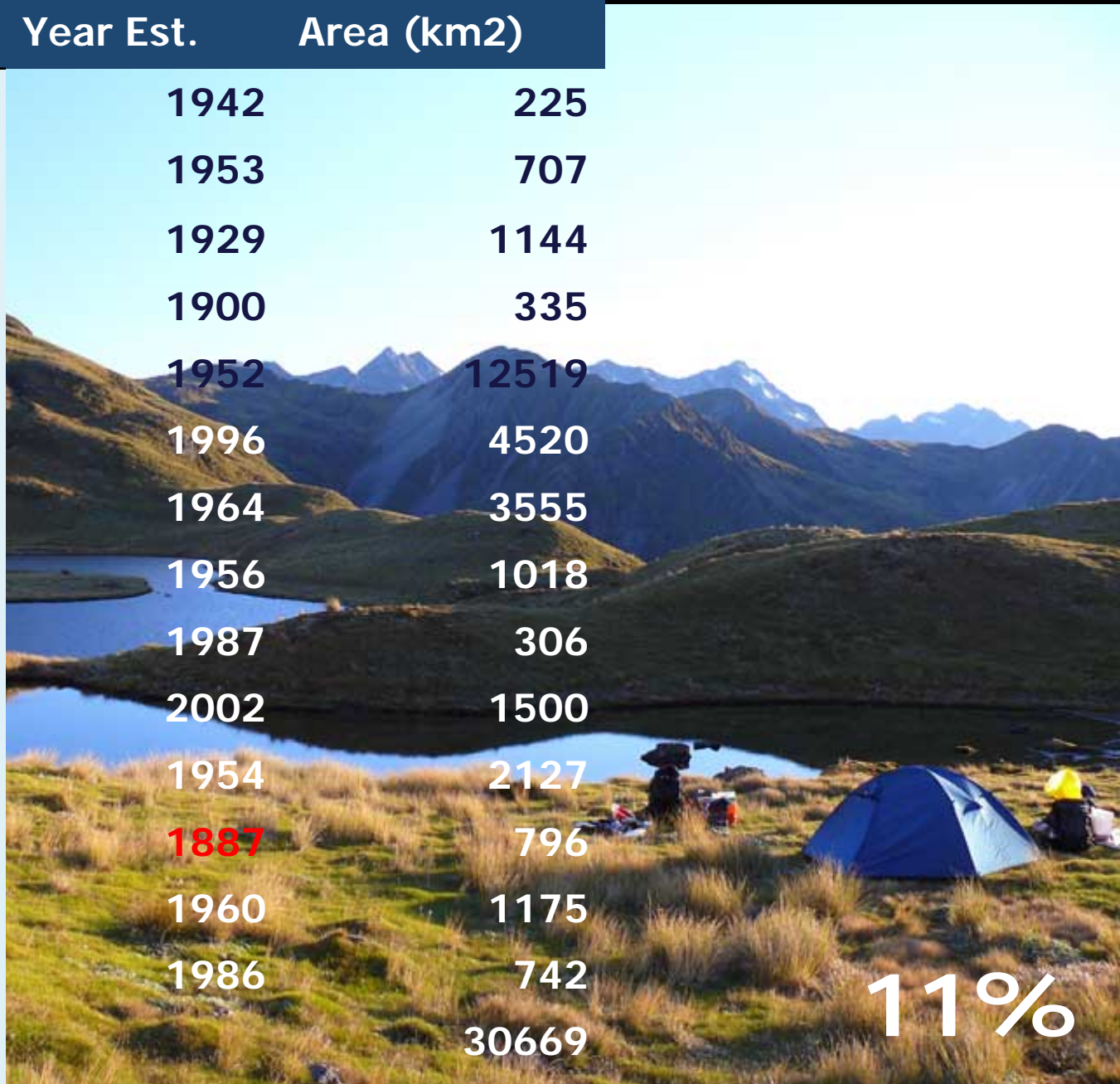


# Ecosystems and Biodiversity

National Park	Year Est.	Area (km2)
---------------	-----------	------------

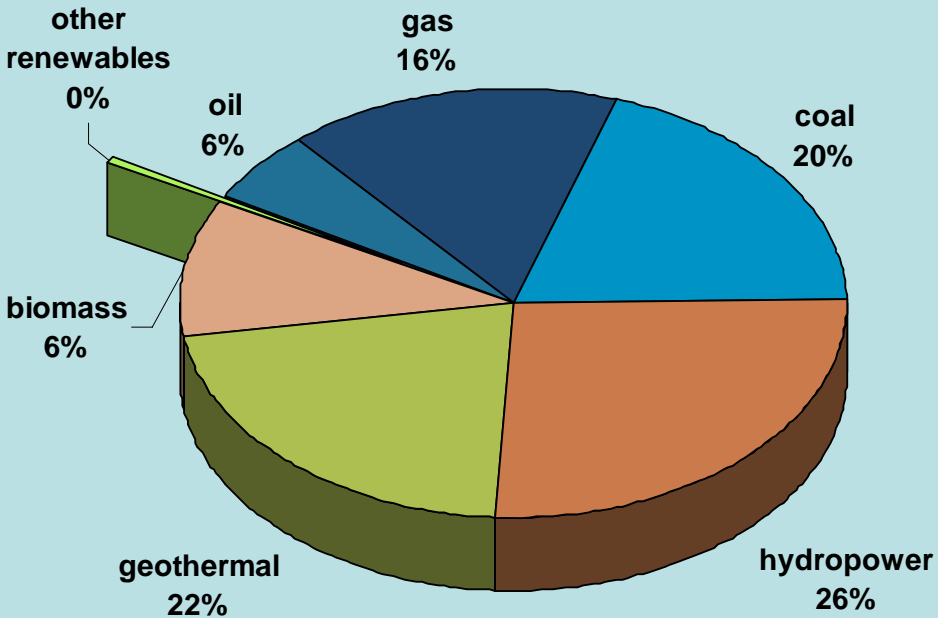
Abel Tasman	1942	225
Mount Cook	1953	707
Arthur's Pass	1929	1144
Egmont	1900	335
Fiordland	1952	12519
Kahurangi	1996	4520
Mount Aspiring	1964	3555
Nelson Lakes	1956	1018
Paparoa	1987	306
Raikiura	2002	1500
Te Urewera	1954	2127
Tongariro	1887	796
Westland Tai Poutini	1960	1175
Whanganui	1986	742
Total Area in Parks		30669

11%

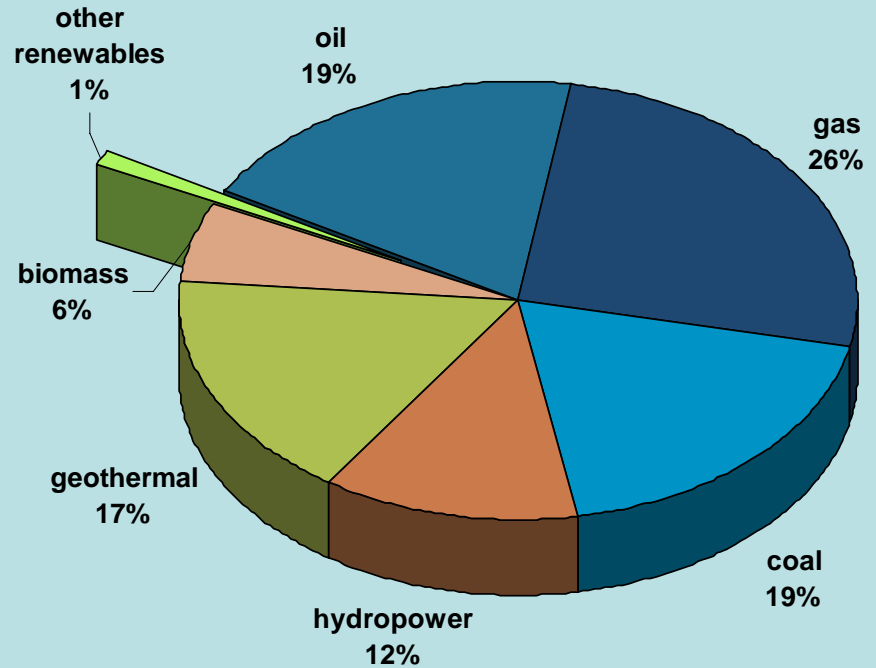


# Energy Generation

Share of Total Energy Generation in 1980

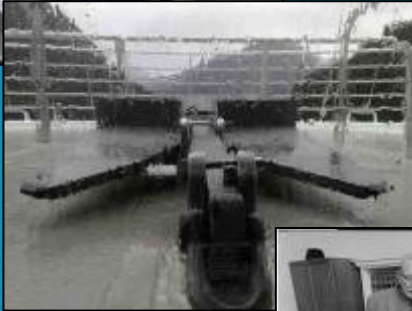


Share of Total Primary Energy Generation in 2008



# Damn the Dam

Tiwai Point Aluminium Smelter uses 15% of New Zealand's electricity



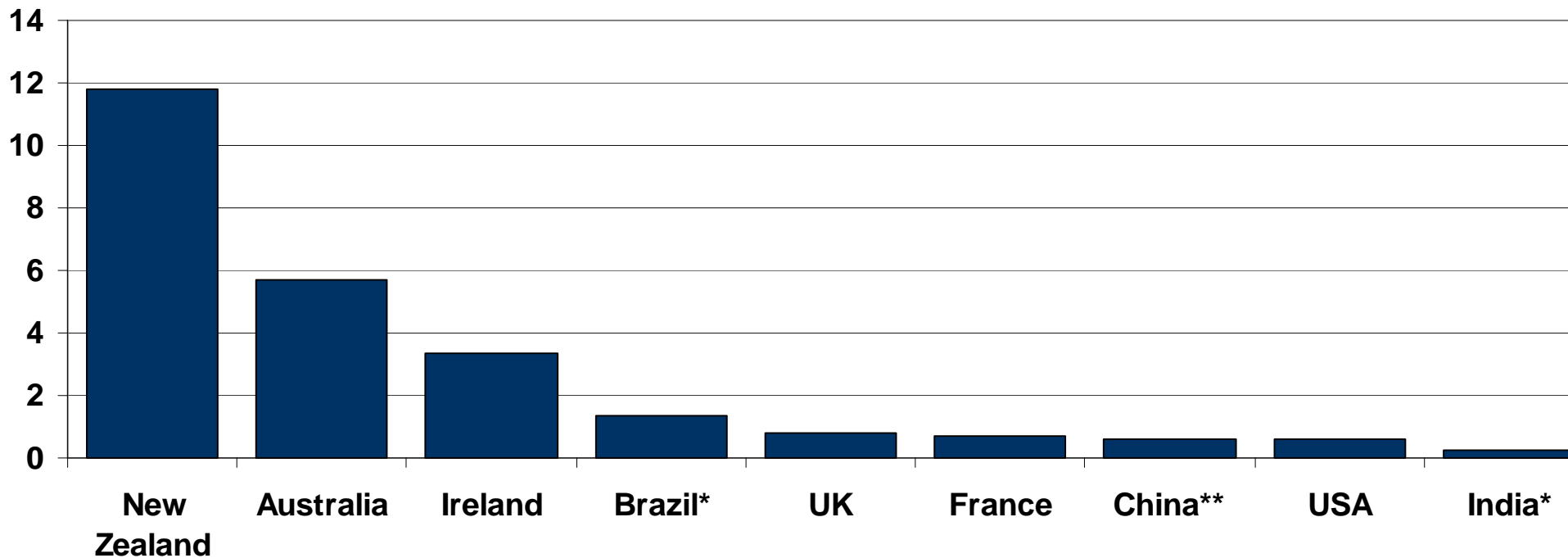
# Resources



## Total number of livestock per country per person as at 30 June 2007

(Includes all cattle, sheep, and pigs)

Total number per  
person



# Exports & Imports



## 2008 Exports

Dairy 22%

Meat 11.7%

Mineral Fuels 6.6%

Wood 5.0%

Machinery 4.8%

Aluminium 3.6%

Fruit 3.4%

## 2008 Imports

Fuels and oils 16%

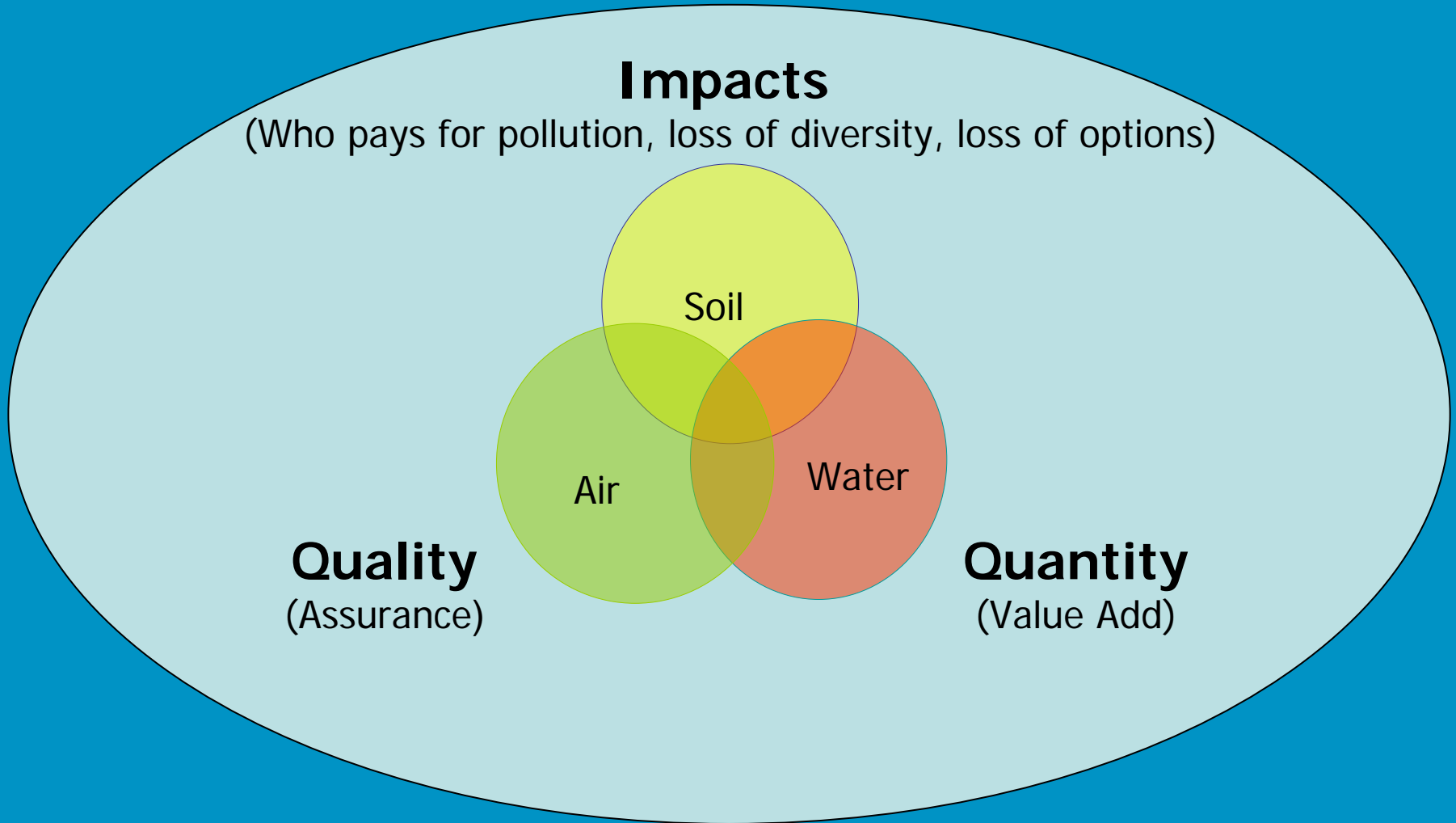
Machinery 13%

Motor vehicles 12%

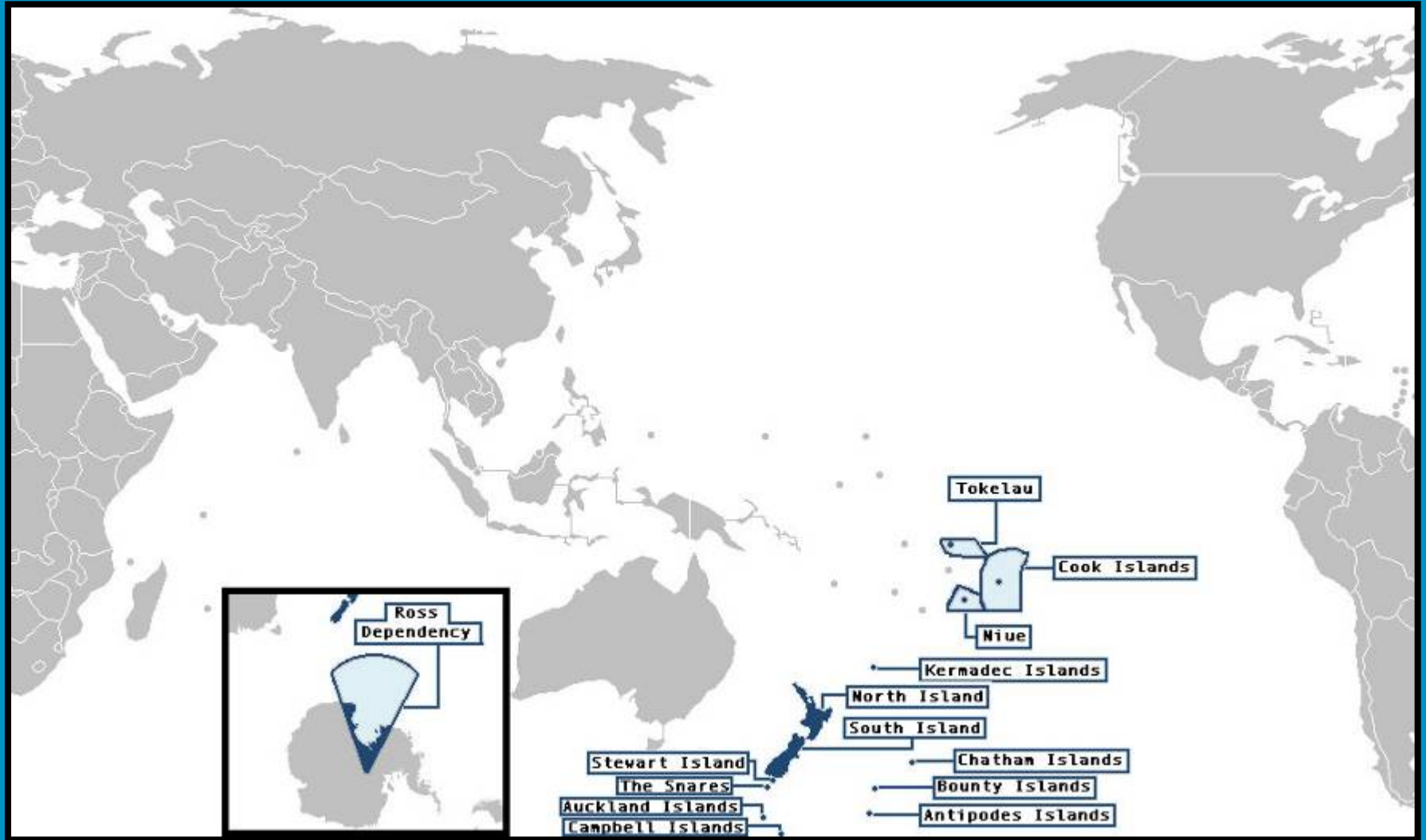
Electrical machinery 8.5%



# Agriculture

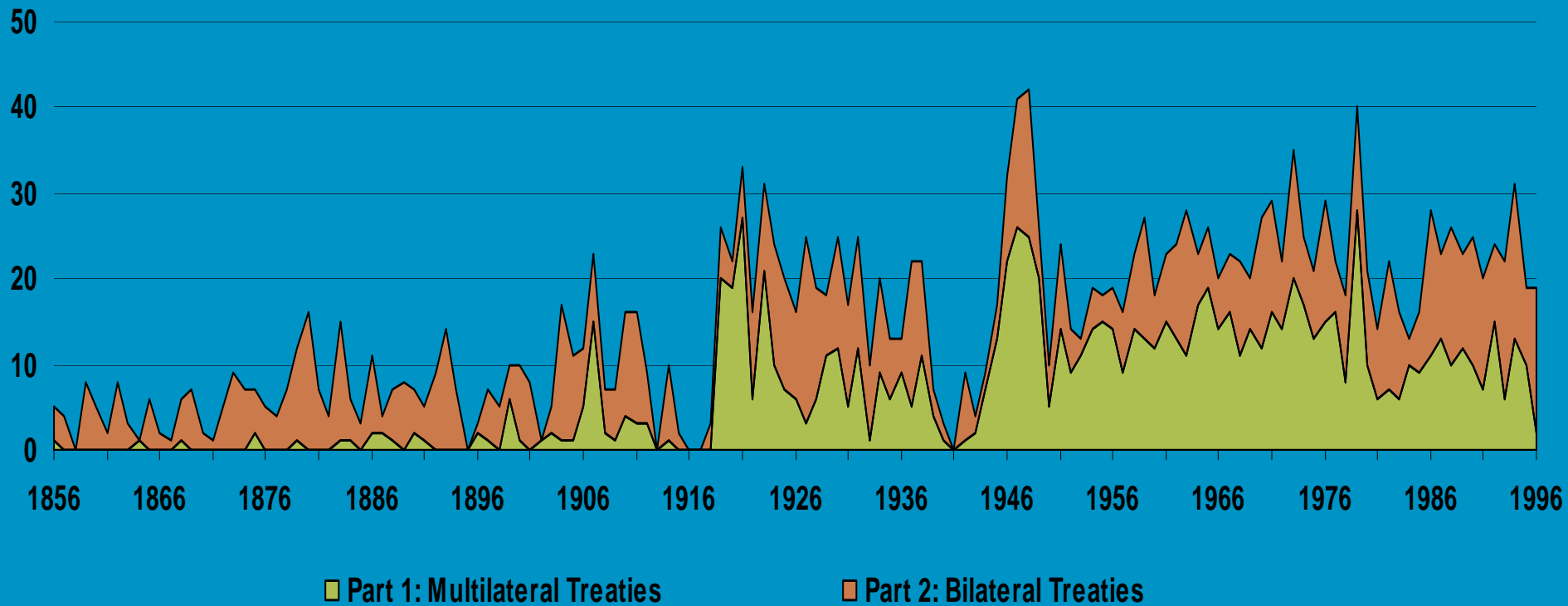


# Not Just Three Islands

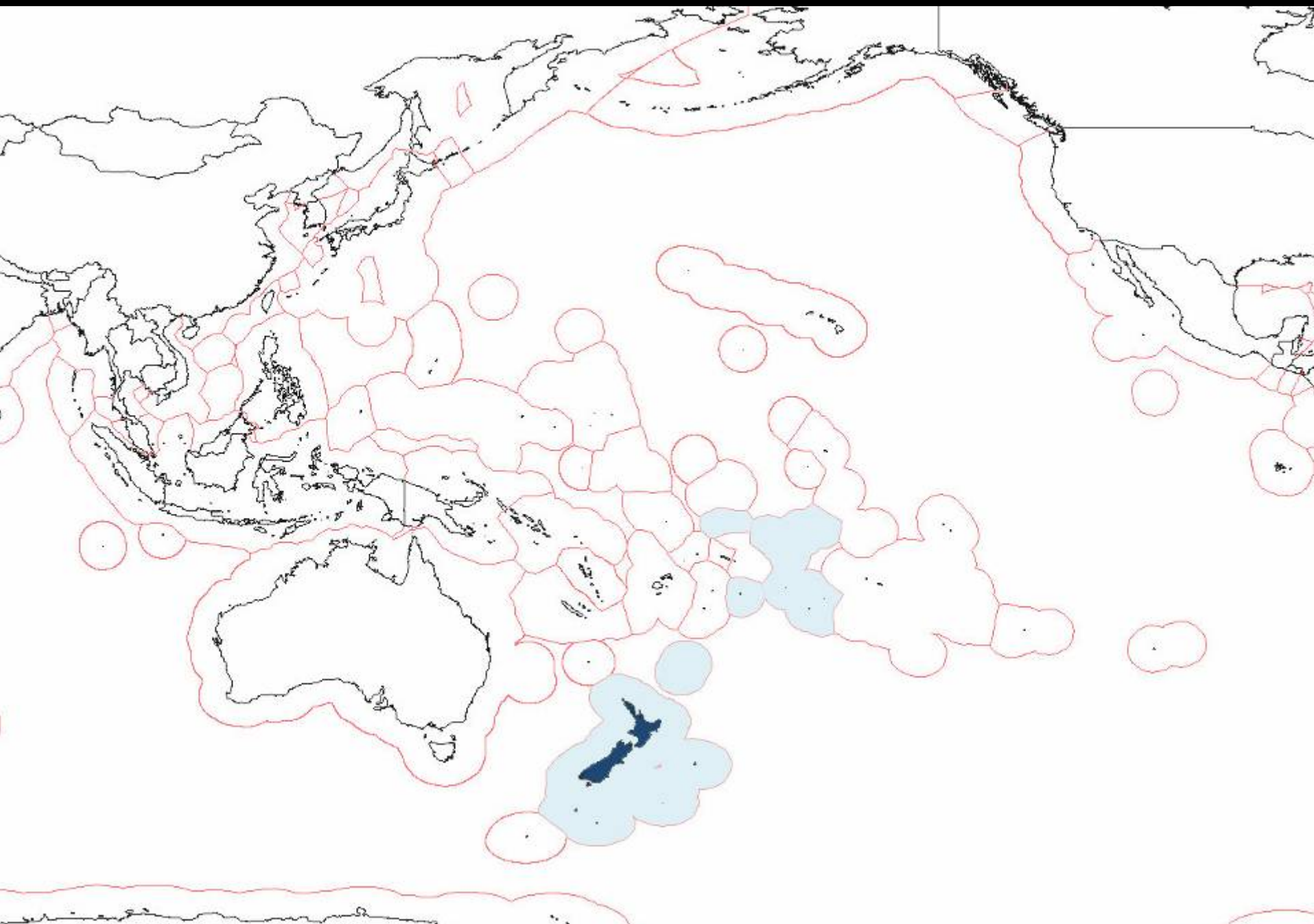


# International Treaties

Number of treaties over time in New Zealand



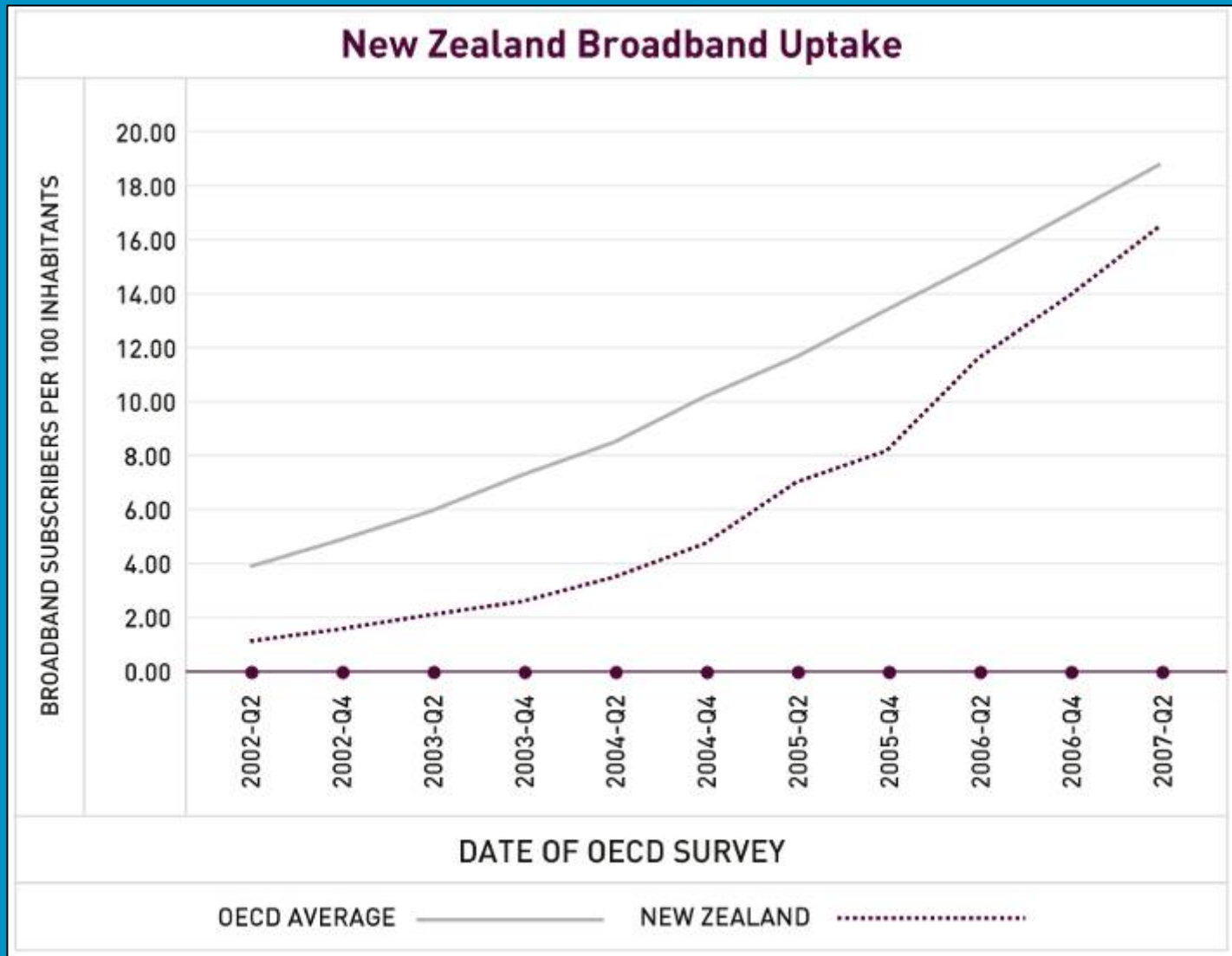
# Exclusive Economic Zone



# Security and Conflict



# Technology



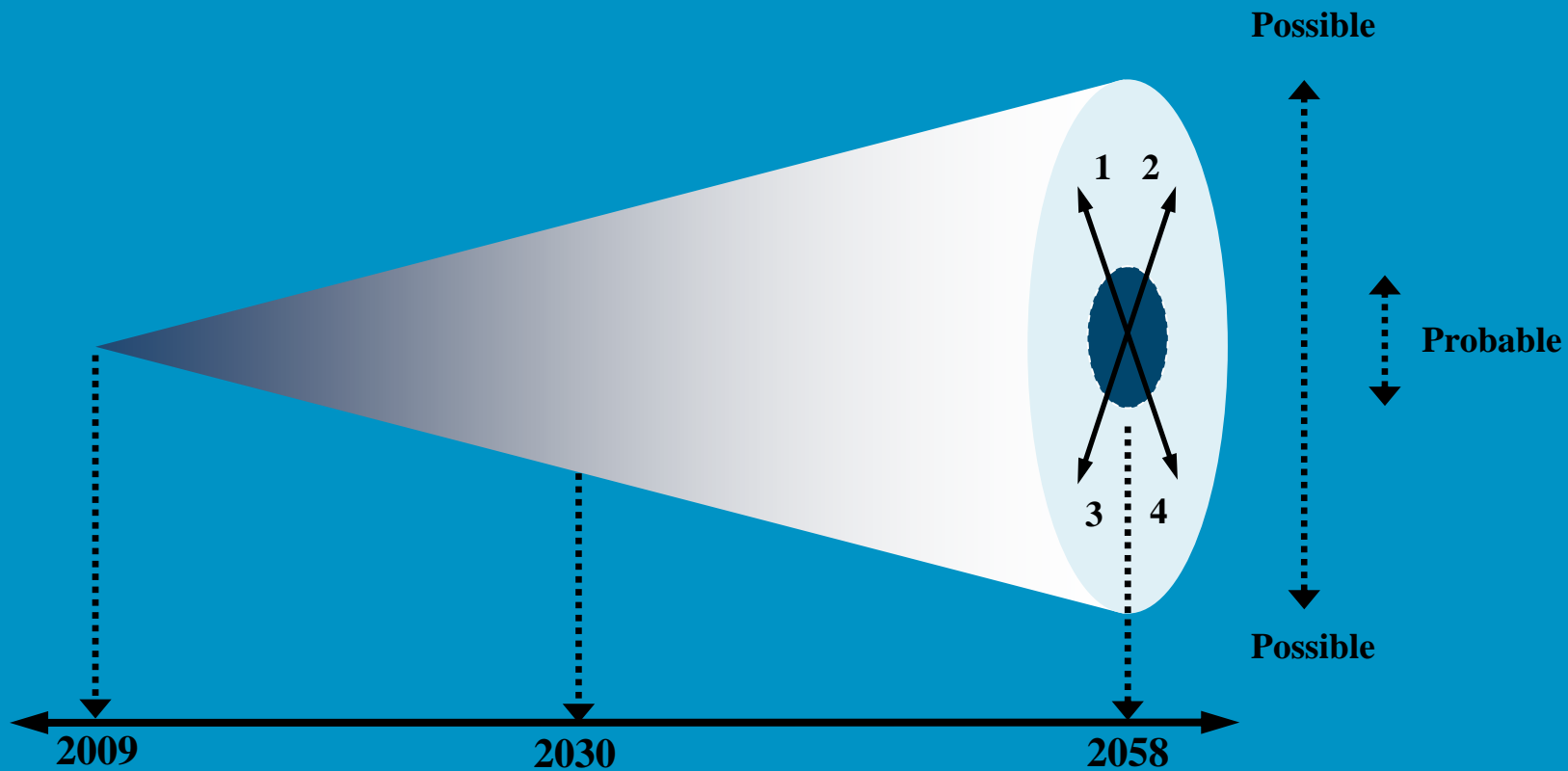
# Benchmarking

UNDP, Human Development Report 2007/2008 and 2008 Update

Total Human Development Index	Includes Education Index	Includes Disparity of income (ratio of richest 10% to poorest 10%)	Includes RST expenditure (% GDP)	Includes GDP (per capita)
1. Iceland (0.968)	1= Australia (0.993)	1. Japan (4.5)	1. Israel (4.46)	1. Luxembourg (60 228)
3. Australia (0.962)	1= New Zealand (0.993)	42. Ireland (9.4)	20. Australia (1.70)	16. Australia (31 794)
19. Italy (0.945)	6. Norway (0.991)	64. Macedonia (1.25)	25. Russia (1.17)	27. UAE (25 514)
20. New Zealand (0.944)	12. Ireland (0.978)	65. New Zealand (12.5)	26. New Zealand (1.16)	28. New Zealand (24 996)
21. UK (0.942)	18. UK (0.970)	66. Australia (12.5)	27. Ukraine (1.16)	29. Greece (23 381)
177. Sierra Leone (0.336)	177. Burkina Faso (0.255)	126. Bolivia (168.1)	91. Peru (0.10)	174. Malawi (667)

# D: Scenarios

## Scenarios







Well



NZ



Well World

Poor



Poor

# Indicators

## Responses of *Powerful* counties

- Self-sufficient, heavily armed and a fortress mentality
- Serious engagement with all the problems of the planet

## Responses of *Small* counties

- Disrupt
- Ignore
- Adapt / Innovate
  - Monitor closely what is happening
  - Support global leadership (UN, WB, etc)
  - Build alliances (e.g. State of Australia, Pacific Union)
- Leadership - lead by example

Small countries like New Zealand might have a limited ability to influence world events...

...but we can still shape the future.



New Zealand will never be the puppeteer...

...but we can be part of the audience, and that means we can decide to give a standing ovation or boo the performance.



We can show  
global players  
how changes  
should be made –  
not because they  
have to listen to  
us...

...but because  
small countries  
have put in place  
something that  
powerful  
countries want.



**New Zealand  
needs a  
'National Strategy'  
to optimise our future,  
to align our industry,  
to reinforce our national brand and  
to be an example of what is possible**

**- not because we have to, but because we  
want what it can deliver**



**THANK YOU**

