RISKS TO NEW ZEALAND IN FIFTY YEARS





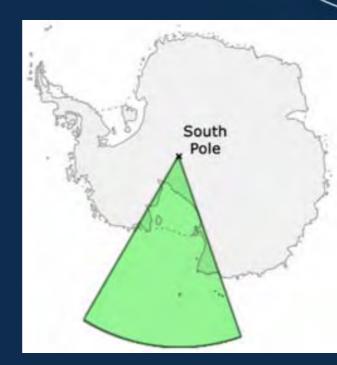
OUTLINE

- 1. What is New Zealand?
- 2. Project 2058 Methodology
- 3. Risk Assessment Theory
- 4. Risks to New Zealand
- 5. Concluding Remarks

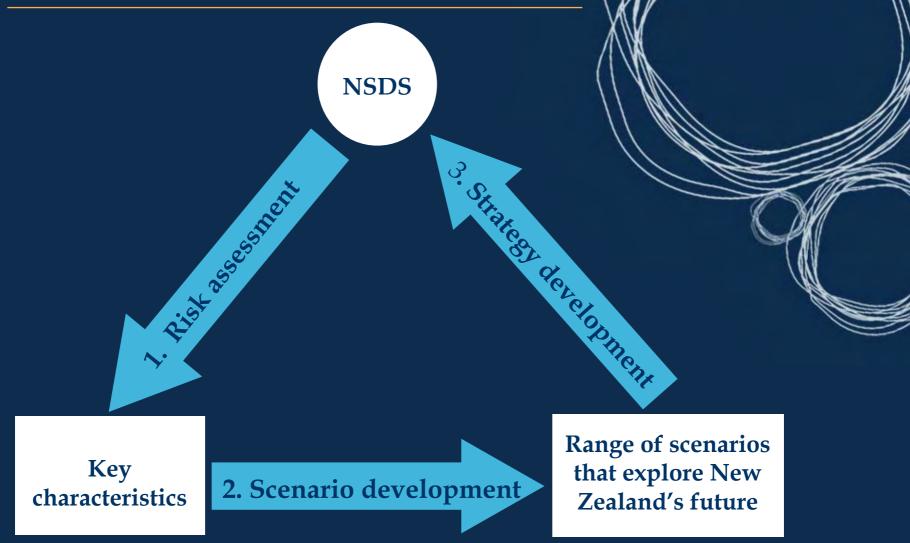


1. WHAT IS NEW ZEALAND?

- North, South and Stewart Islands
- Chatham Islands
- Kermadec Islands
- Sub Antarctic islands
- Tokelau
- Cook Islands
- Niue
- Ross Dependency



2. PROJECT 2058 METHODOLOGY

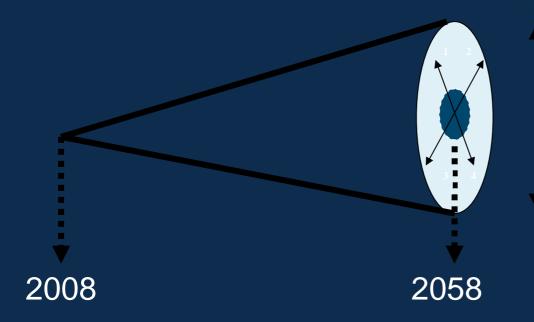


2. PROJECT 2058 METHODOLOGY PART 1: RISK ASSESSMENT



Identify key characteristics of change

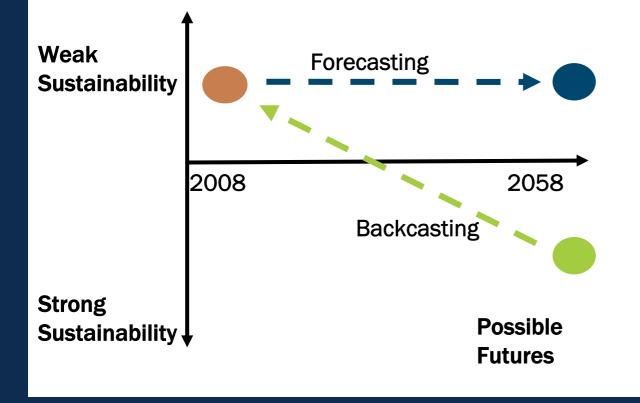
2. PROJECT 2058 METHODOLOGY PART 2: SCENARIO DEVELOPMENT





2. PROJECT 2058 METHODOLOGY PART 3: BACKCASTING

A National Sustainable Development Strategy (NSDS)



3. RISK ASSESSMENT THEORY

Identify key characteristics of change

'Walk into the future backwards' 1858 1908 1958 2008 2058?



3. RISK ASSESSEMENT THEORY KEY CHARACTERISTICS

Discrete Event Wild Cards

Technological Leaps Semi-Known (innovation/capacity/acceptance)

Trends Over Time Known

Underlying Tensions Known and are likely to always exist (bubbling away)

3. RISK ASSESSEMENT THEORY WHAT MAKES A RISK – A RISK?

Assumptions:

- Multiplier effect
- All risks have opportunities
- A risk is anything that significantly breaks down societies thin veneer.
- A 'thin veneer' exists



"Courtesy is only a thin veneer on the general selfishness." (Honore De Balzac 1799-1850)

HOW TO INCREASE THE DEPTH OF THE VENEER?

- 1. Transparent Institutions
- 2. Reporting and Informing Institutions
- 3. Independent Institutions
- 4. Adaptive Institutions
- 5. Mature Institutions
- 6. Future thinking Institutions
- 7. Interlinking Institutions
- 8. Educated and Informed Public
- 9. Democratic Electoral System
- 10. Timely Infrastructure
- 11. Effective Foreign Policy (Neutrality / Alliances)



HOW TO **REDUCE** THE DEPTH OF THE VENEER?

Do not:

- 1. Invest in quality institutions, processes and infrastructure
- 2. Complete a risk assessment of the future
- 3. Have a vision for the long-term
- 4. Have an overarching strategy to deliver on the vision (and align institutions)
- 5. Develop an action plan that is easy to both assess, hold implementers accountable, monitor and understand

3. RISK ASSESSMENT THEORY OPTIONS

A Thin Veneer X A Significant **Risk** (or two) **New Zealand** in Crisis

A Thick Veneer X A Significant Risk (or two) =

New Zealand as Survivor



3. RISK ASSESSEMENT THEORY INSTITUTIONAL MEMORY

I tend to think my childhood as having been fairly normal. But there were a few telltale signs....

All the years I was growing up, we had gold hidden in the basement of our house. *"Dad,"* I would plead, *"there are these things called* **banks** …". *"You never know."* he would reply, thoughtfully holding up a gold bar, *"One of these might buy a loaf of bread, or a sack of potatoes, some day."* And so the gold remained, a hedge against eventualities I could never quite wrap my head around.



SON OF A HOLOCAUST SURVIVOR

4. RISKS THREE STEPS

- 1. Where we have been in the past (our wisdom/baggage)?
- 2. Where and what are we now? What do we have to manage?
- 3. What is the future looking and feeling like?



A: The World B: New Zealand

4. RISKS FROM THE WORLD

- 1. Wild Cards (pandemic, financial collapse)
- 2. Technological Leaps (nuclear, medical, communication, carbon storage, robots, Antibiotic Resistance (leap backwards))
- 3. Trends Over Time
 - Population Growth (growing population)
 - Environmental disaster (climate change)
 - Economic Power Changes (BRIC Countries)
 - Scarce Resources and Security of Supply (oil, water, food, infrastructure, transport)
- 4. Underlying Tensions
 - Religious (Islam/Christianity), Terrorism (individual rights/security)

IMPLICATIONS:

terrorism, war, poverty, disease, migration, invasion/takeover, an increase in multi-country agreements/protocols (and foreign policy)



All the water in the world (1.4087 billion cubic kilometres of it) including sea water, ice, lakes, rivers, ground water, clouds, etc. Shown on the same scale as the Earth.

All the air in the atmosphere (5140 trillion tonnes of it) gathered into a ball at sealevel density. Shown on the same scale as the Earth.

We choose recycled, renewable and sustainable resources and make alternative energy the right choice.

LANEI ATION

Our mission is to create economic partnerships with the poor in developing world communities who supply our stores.

STATISTICS TO ME



Certification Partnership Program Guarantees. Fair Price

Labour Welfare

Sustainable Environment

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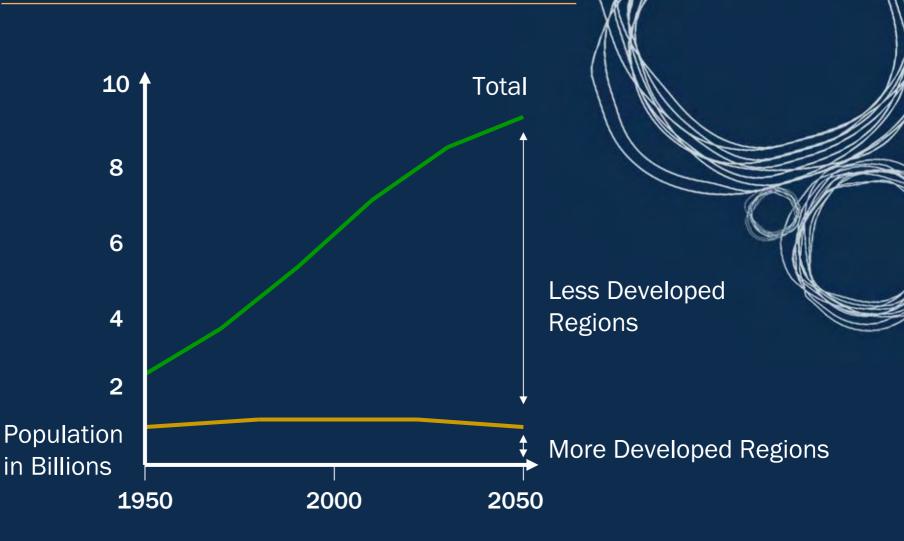
· Quality

32.57



We seek to raise industry standards and improve the quality of life for farm animals around the world.

WORLD POPULATION GROWTH



RELIGIOUS TENSIONS ARAB/ISRAEL CONFLICT

'In essence, the conflict that exists today is no more than an old-style struggle for power, once again presented to mankind in semi-religious trappings. The difference is that, this time, the development of atomic power has imbued the struggle with a ghostly character; for both parties know and admit that, should the guarrel deteriorate into actual war, mankind is doomed.' Einstein: A Final Message 1960

4. RISKS SPECIFIC TO NEW ZEALAND

- 1. Wild Cards (environmental, pandemic)
- 2. Technological Leaps (agricultural)
- 3. Trends Over Time
 - Population Growth (ageing population)
 - Environmental disaster (climate change)
 - Economic Power Changes (Asia)
 - Scarce Resources and Security of Supply (oil, water, food, infrastructure, transport)
 - Wealth distribution expanding (crime, health)
 - Media (concentration, fragmentation, competition, democratisation)
- 4. Underlying Tensions (cultural tensions, local/central government, individual rights/security, land use, land access, public/private ownership)

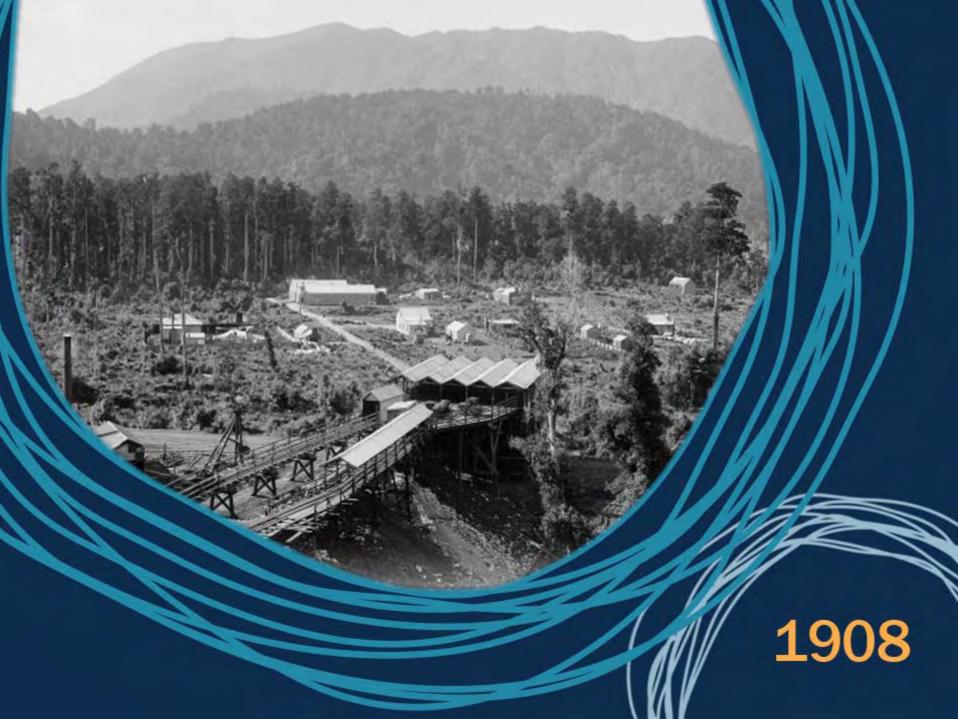
IMPLICATIONS:

poverty, immigration, invasion/takeover, health, poor governance, weak infrastructure, pollution, economic downturn, damage to clean-green brand











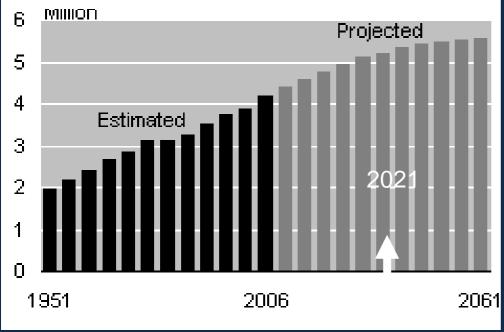






NEW ZEALAND STATISTICS POPULATION CHANGES

New Zealand Population 1951-2061





In 2021 - More New Zealanders over 65 years of age than under 15 year olds

NEW ZEALAND STATISTICS RURAL DRIFT

1858	1908	1958	2008
60%	52%	26%	14%



NEW ZEALAND STATISTICS FIVE LARGEST EXPORTS

By Type

1958	2008 NB: Not Comparable
Wool	Dairy
Lamb	Meat
Butter	Wood
Beef	Machinery
Cheese	Aluminium

By Country

	6.1
1958	2008
UK 56%	Aust 21%
US 15%	US 14%
France 6%	Japan 11%
Aust 4%	China 5%
Germany 3%	UK 5%

NEW ZEALAND STATISTICS FIVE LARGEST IMPORTS

By Type

1958	2008
Machinery	Vehicles and Parts
Base	Mechanical
Metals	Machinery
Textile /	Mineral
Clothing	Fuels
Food	Electrical
Beverages	Machinery
Chemicals / Fertiliser	Plastics

By Country

1958	2008
United Kingdom	Australia
Australia	Japan
USA	China
Germany	USA
India	Germany

NEW ZEALAND A VISION

...To be the first nation to be truly sustainable — across the four pillars of the economy, society, the environment, and nationhood." (Clark, 2007)





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