National Sustainable Development Strategy

“Why shouldn't New Zealand aim to be the first country which is truly sustainable - not by sacrificing our living standards but by being smart and determined?”

Rt. Hon Helen Clark 28 October 2006

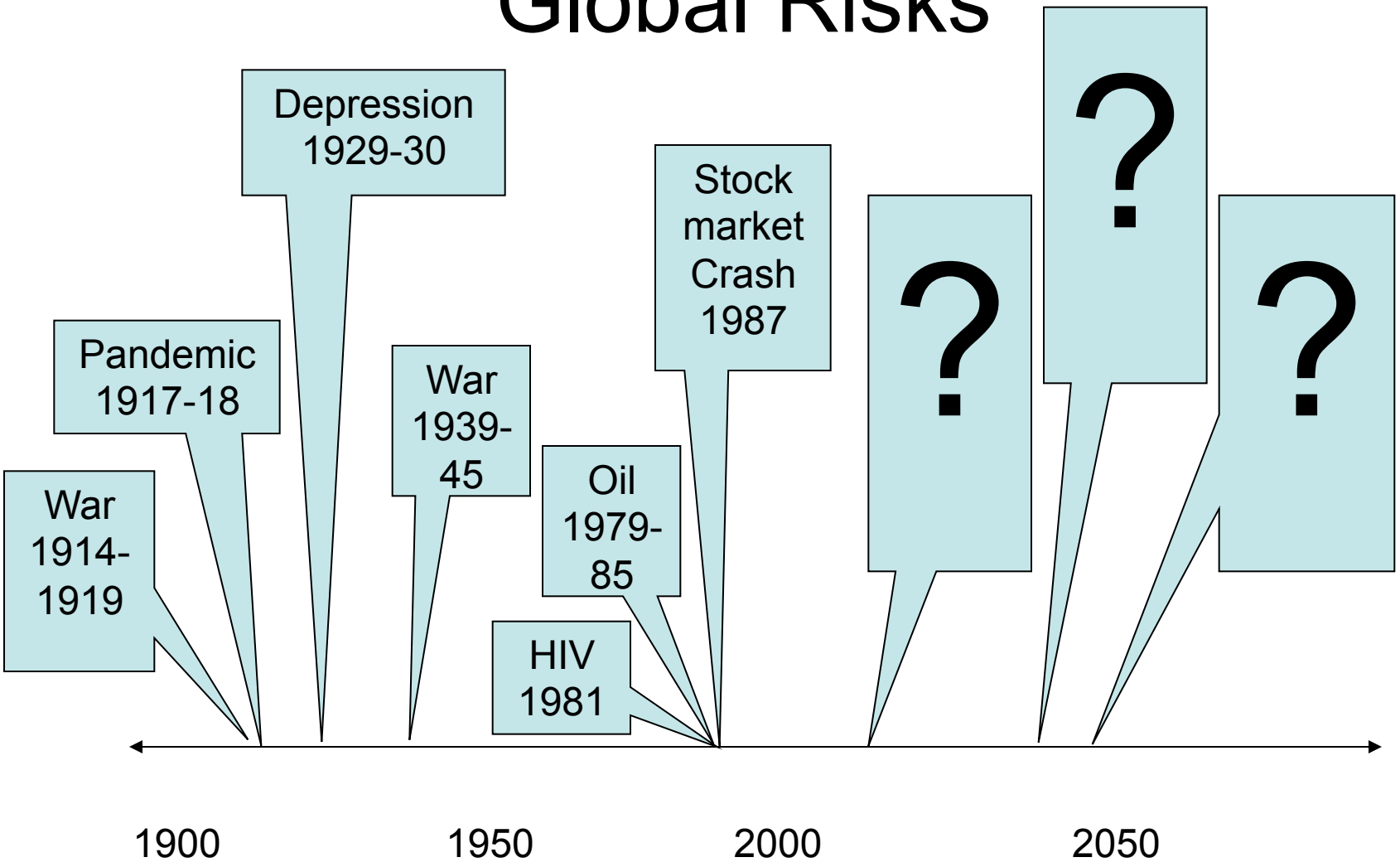
“It could be argued that the LGA signifies a turn from ‘government’ to ‘governance’. Governance is how people come together to address common problems, whereas government is control by state agencies.”

Planning Under Co-operative Mandates (PUCM)

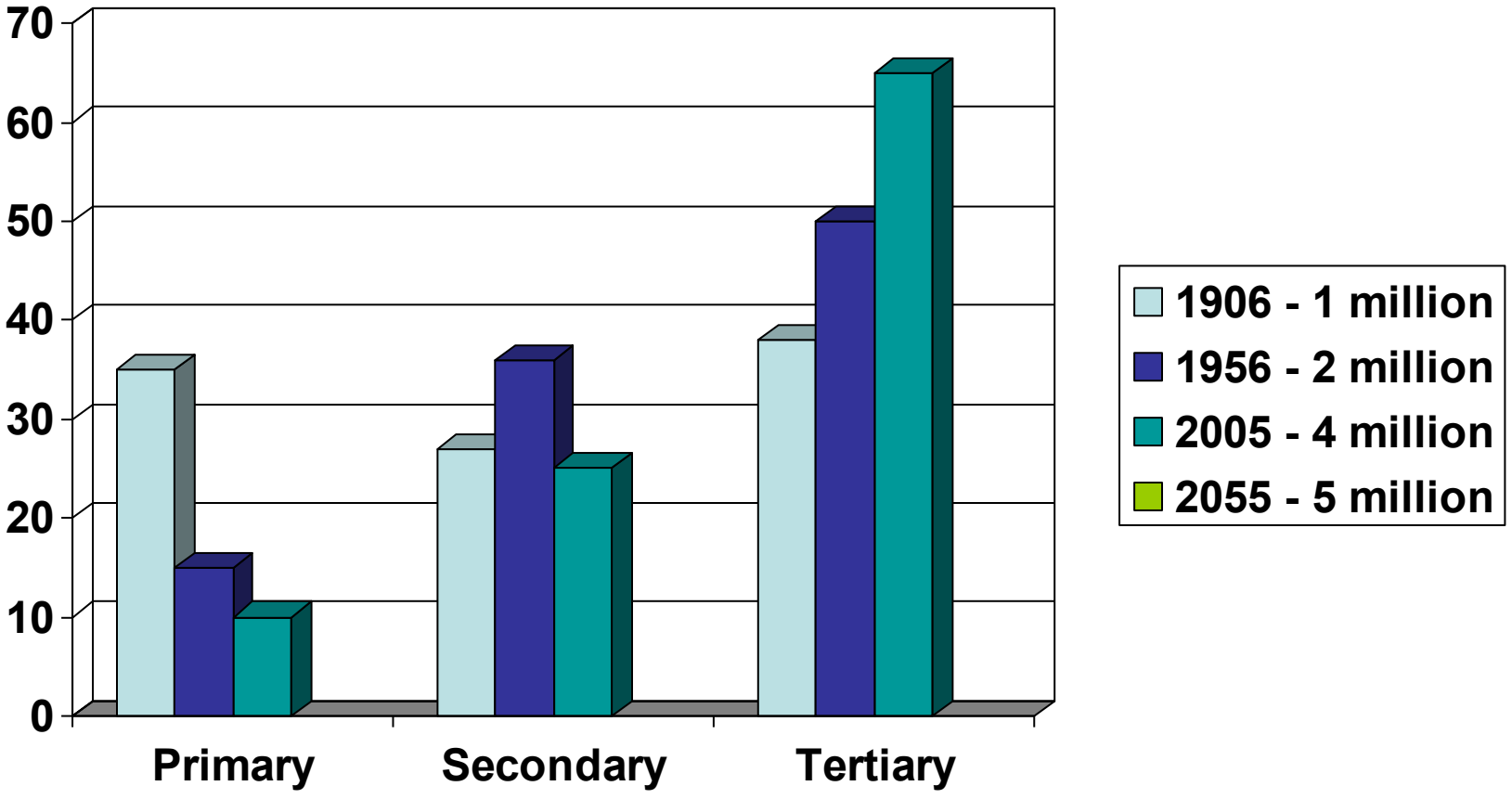
Research Question

What we want New Zealand to look and feel like in 2058?

Global Risks



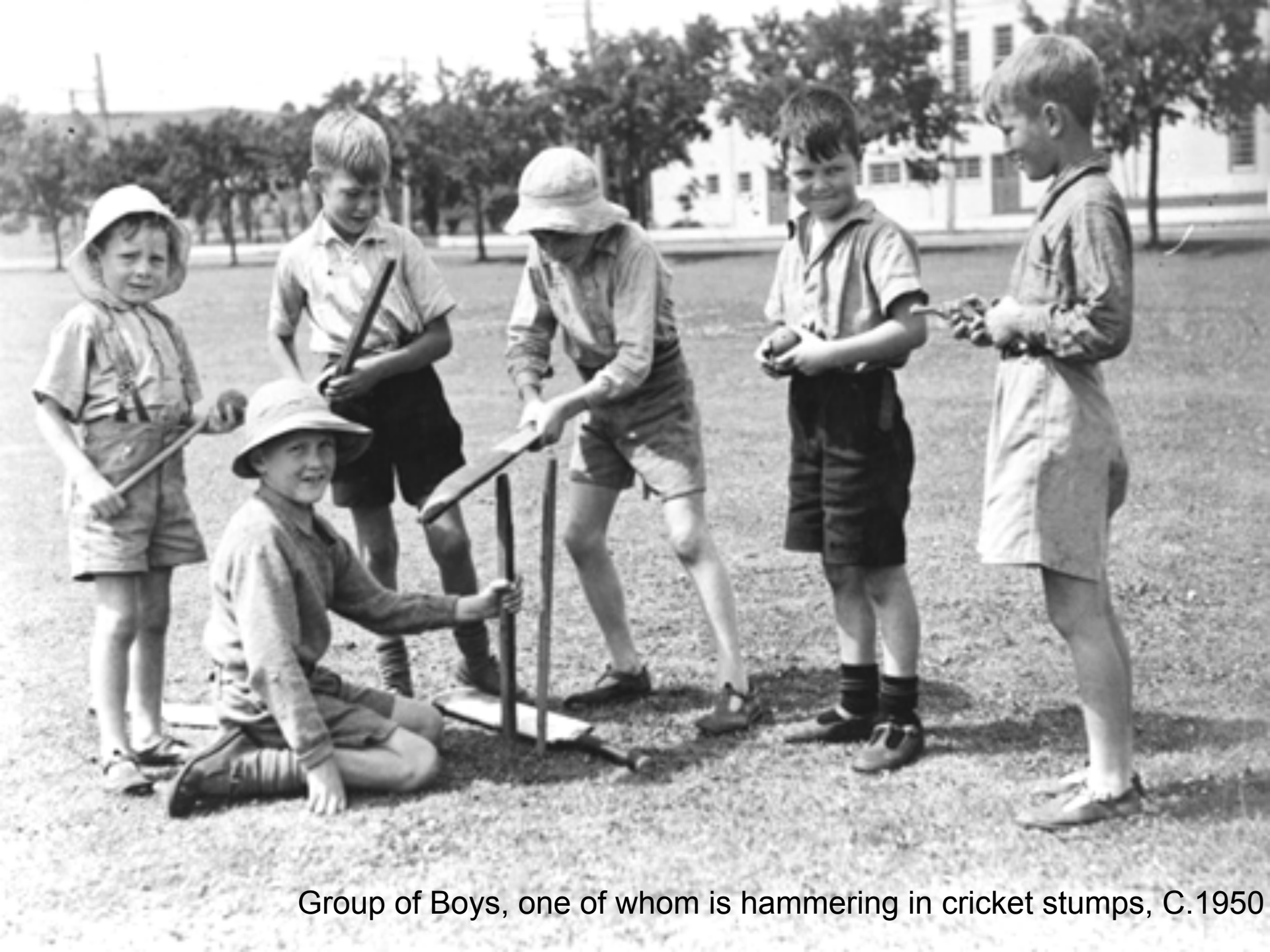
Changes in employment patterns in New Zealand



Looking Back: The last 50 Years

What were the drivers?
What were the limits?
What were the global risks?

Children saying grace before eating, c.1950



Group of Boys, one of whom is hammering in cricket stumps, C.1950

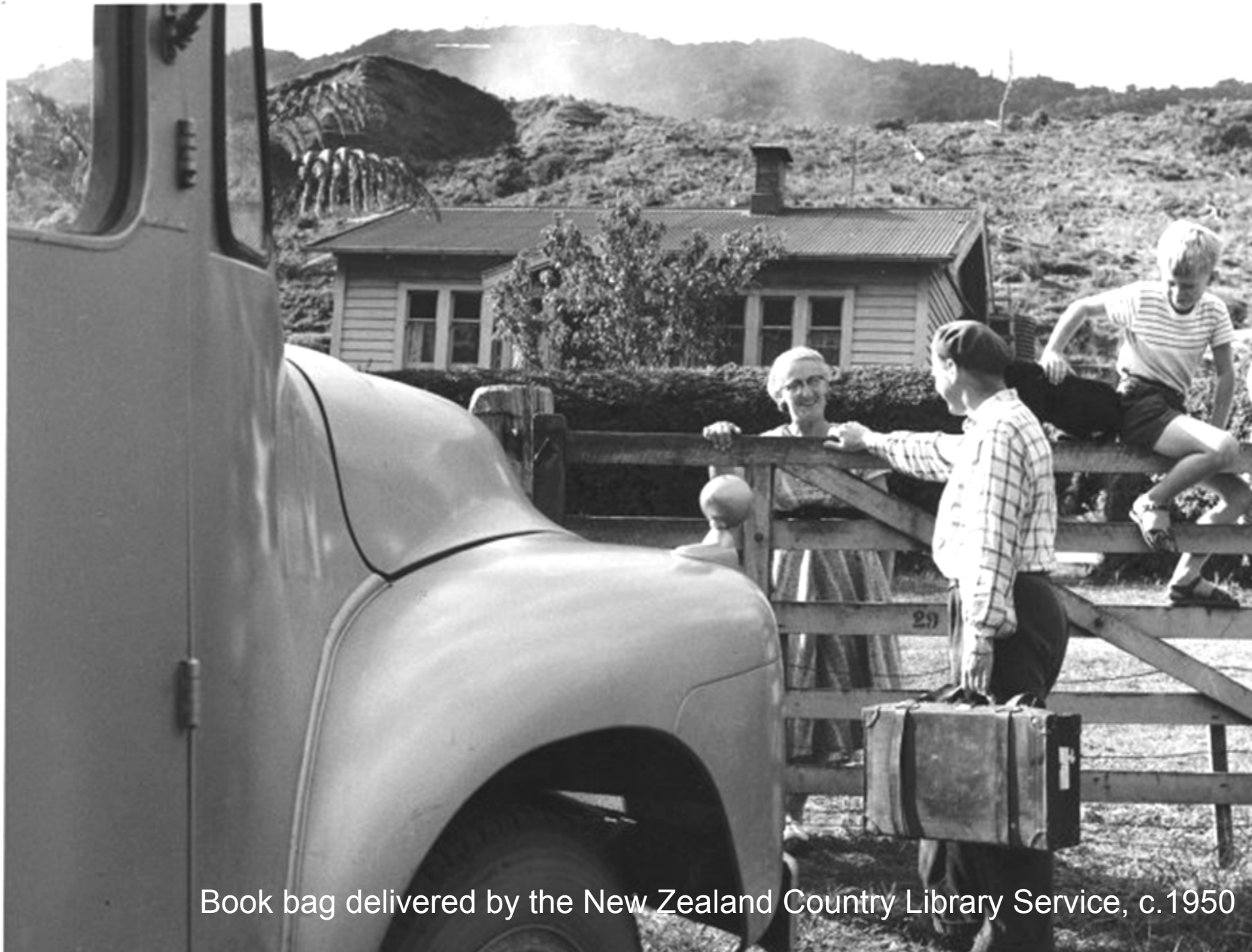
Men running in a chariot race at the Piha Surf Club carnival, c.1950

Oriental Bay, early 1950s

Couples in dancing hall, c.1950

Festival Parade, Lambton Quay, Wellington, 1950s

Whataroa, South Westland, late 1950s



Book bag delivered by the New Zealand Country Library Service, c.1950

Road roller operating on the main highway near Warkworth, 1957

Shearing at Adams' Langley Dale Farm, c.1950

Wellington Fisheries Ltd, c.1950

‘Mallopuffs’ c.1950

Kitchen interior with woman washing a cup, c.1950

Fears appliance store and record lounge, late 1950s

Victoria Avenue Wanganui, looking south towards Drury Hill,1950s

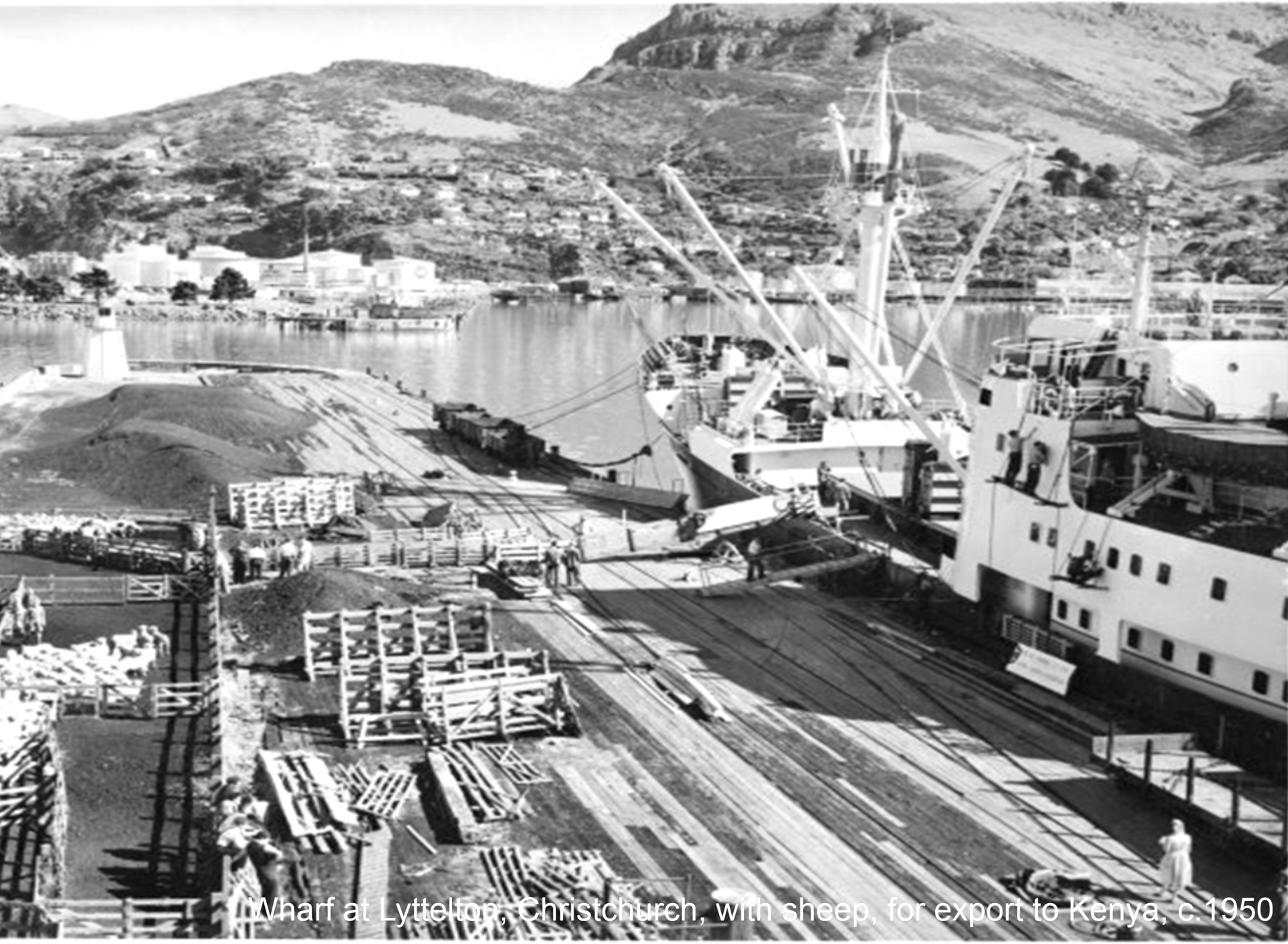
Kelburn Cable Car, Wellington, c.1950

Government Departmental building on Stout Street, Wellington, early 1950s

Lambton Quay, Wellington, c.1950

Auckland Town Hall, c.1959

The Wairua, a Bluff /Stewart Island Ferry, c.1950



Wharf at Lyttelton, Christchurch, with sheep, for export to Kenya, c.1950

Earthworks during the construction of Wellington Airport's runway, late 1950s

Aeroplanes on the runway at Paraparaumu Airport, 1950

Looking Back: Last 50 Years

What were the drivers?

What were the limits?

What were the global risks?

Energy, Economy and Emissions

Statistics NZ January 2006

Highlights

- While GDP increased at a greater rate than energy demand (i.e. decoupling occurred), New Zealand's total CO2 and NOx emissions increased at greater rates than GDP.

- The fishing industry's energy demand and CO2 emissions increased at greater rates than its contribution to New Zealand's economy.

- The transport and storage industry is New Zealand's largest CO2 emitter, however energy and emission intensities decreased by around 10 percent.

- Households accounted for over one-quarter of energy demand in the 2002–03 year, and produce more than 75 percent of New Zealand's total carbon monoxide and 60 percent of non-methane volatile organic compound emissions.

Stern Review:

The Economics of Climate Change – The Options

- **Cost of inaction:**

  the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more.

- **Cost of action:**

  reducing greenhouse gas emissions to avoid the worst impacts of climate change – can be limited to around 1% of global GDP each year.

Stern Review

The Economics of Climate Change – Environment meets Economics

- Mitigation - taking strong action to reduce emissions - must be **viewed as an investment**, a cost incurred now and in the coming few decades to avoid the risks of very severe consequences in the future.

- However, those earlier models were too optimistic about warming: more recent evidence indicates that temperature changes resulting from **BAU** trends in emissions may exceed 2-3°C by the end of this century. This increases the likelihood of a wider range of impacts than previously considered. Many of these impacts, such as abrupt and large-scale climate change, are more difficult to quantify.

Stern Review

The Economics of Climate Change – The Solutions

- Establishing a **carbon price**, through tax, trading or regulation, is an essential foundation for climate-change policy.
- Policies are required to support the development of a range of **low-carbon and high-efficiency technologies** on an urgent timescale.
- Curbing **deforestation** is a highly cost-effective way of reducing greenhouse gas emissions.
- In order to influence behaviors and investment decisions, investors and consumers must believe that the carbon price will be maintained into the future. This is particularly important for **investments in long-lived capital stock**. Investments such as power stations, buildings, industrial plants and aircraft last for many decades. If [not] …then businesses may not factor a carbon price into their decision-making.

Stern Review

The Economics of Climate Change – The Timeframe

- The investments made in the **next 10-20 years** could lock in very high emissions for the next half-century, or present an opportunity to move the world onto a more sustainable path.

- The effects of our actions now on future changes in the climate have long lead times. What we do now can have only a limited effect on the climate over the next 40 or 50 years. On the other hand what we do in the **next 10 or 20 years** can have a profound effect on the climate in the second half of this century and in the next.

Stern Review

The Economics of Climate Change – The Transition

- But establishing credibility takes time. The next 10 to 20 years will be a period of **transition**, from a world where carbon-pricing schemes are in their infancy, to one where carbon pricing is universal and is automatically factored into decision making.

- In this **transitional** period, while the credibility of policy is still being established and the international framework is taking shape, it is critical that governments consider how to avoid the risks of locking into a high-carbon infrastructure, including considering whether any additional measures may be justified to reduce the risks.

Stern Review

The Economics of Climate Change – and Sustainable Development

- **Sustainable development** itself brings the diversification, flexibility and human capital which are crucial components of adaptation. Indeed, much adaptation will simply be an extension of good development practice – for example, promoting overall development, better disaster management and emergency response. Adaptation action should be integrated into development policy and planning at every level.

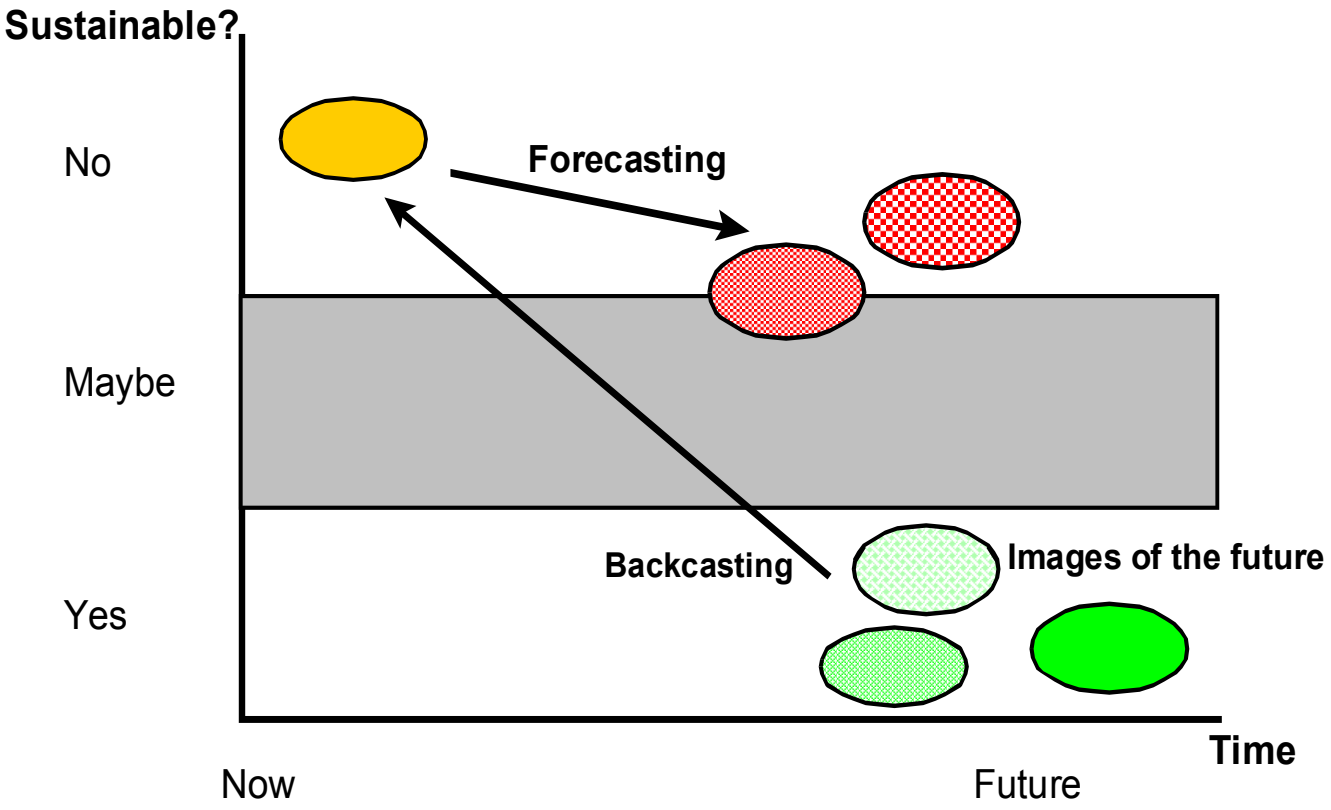
- There are also **significant new opportunities** across a wide range of industries and services. Markets for low-carbon energy products are likely to be worth at least $500bn per year by 2050, and perhaps much more. Individual companies and countries should position themselves to take advantage of these opportunities.

Looking forward

- What are the drivers?
- What are the limits?
- What are the global risks?

Getting There from Here

Hunhammar, 1999 (after Steen & Akerman, 1994)



Part One: 2007

- Review past papers and reports e.g. FfF, Landcare
- Review 2007 papers e.g., PCE, START, PUCM
- Prepare reports to fill the gaps:
  - 2006 LTCCP
  - 'Future thinking' (e.g. Porter's report, MfE etc)
  - Scenario Analysis
  - Measuring well-being – beyond GDP
  - Analysis of NZ statistics – Performance Indicators
  - Survey of New Zealanders needs / desires

Part Two: 2008

Three Options:

Option 1: SANZ prepares the following reports

- Draft *Blueprint 2058* - June/July 2008
- *Blueprint 2058* and a S*ummary of the Feedback* – September 2008

Option 2: Royal Commission

Option 3: Central Government

Proposed Outcomes

1. Stakeholders have increased clarity over
    1. what their desirable image of the future could/should be
    2. what other stakeholders think and
    3. the areas where disagreement between stakeholders remains.

2. A way of benchmarking ‘actual progress’ against an ‘agreed desirable image of New Zealand’.

3. A project that educates, increases awareness, engenders debate, informs and engages New Zealanders to participate and put into practice initiatives that improve overall well-being of current and future generations.

4. The foundations of a NSDS for New Zealand.