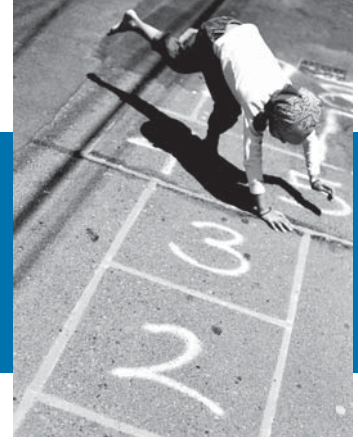




# 100% Pure Conjecture: Future Scenarios

October 2008



## KEY MESSAGES

- A Future Scenarios game has creatively engaged New Zealanders in thinking about the future. People can step 20 and 50 years forward in time and then relate this experience to what is happening today.
- The game is based on four scenarios that were developed to explore the future of New Zealand society.
- Over 2000 people have participated in the game at conferences and workshops. They include local government organisations, tourism operators, conservationists, policy makers and community groups. It has been adapted for many interest groups and situations.
- Use of the scenarios and game in developing strategy around sustainability issues is an area of future research.

## playing with the future

Hundreds of New Zealanders have taken part in a scenarios game that places them 20 years, and then 50 years, into the future. This game prompts people to think differently about the future. It enables them to step beyond everyday pressures and short-term concerns. Participants can take on roles, such as a grown-up grandchild in an occupation different to their own. By engaging with future possibilities, they can consider their experience of changes that may not happen for many years. For some, the game could generate a transformative moment, such as a grasp of what an abstract concept like 'sustainability' may mean.

## four future scenarios

The game is based on detailed scenarios that Landcare Research developed with a team of participants from central government agencies.<sup>1</sup> These scenarios were initially developed in 2005, with a second edition in 2007 and an urban variation in 2008.<sup>2</sup>

The scenarios, shown in the diagram below, differ from each other according to the:

- extent of social cohesion (from competitive individualism to social collaboration)
- state of ecosystems and availability of natural resources (from conserved to depleted)

Each scenario diverges from today, so that in fifty years hence they resemble:

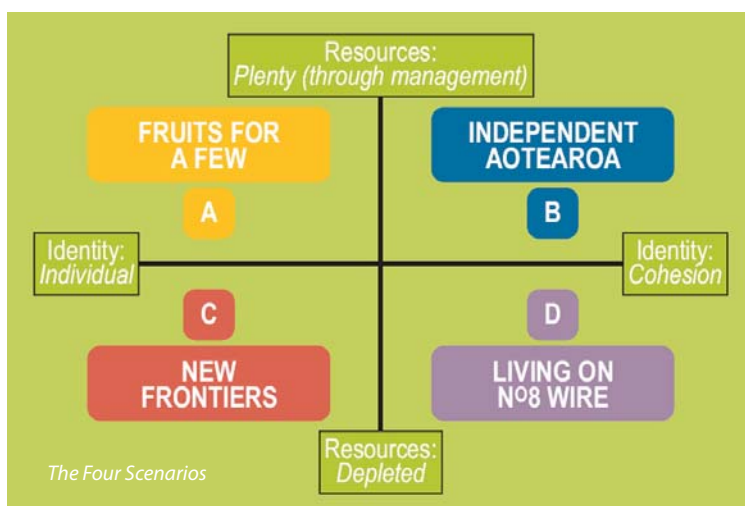
- A. An open economy with protected ecosystems but unevenly-distributed benefits: 80% of resources in the hands of business-political elite and 20% with the rest.
- B. A more closed economy and equitable society, with national efforts to improve a GPI (Genuine Progress Index or Indicator<sup>3</sup>) taking the place of GDP (Gross Domestic Product).



Members of 'Sustainable Christchurch' think about the future

C. A globalised open economy where winners prosper, until New Zealand hits a wall of resource shortage and ecosystem pollution. This results in a severe economic crash and social conflict.

D. After initial resource depletion trends (along the lines of C), strong social networks help to avoid the resource crash, creating a localised, inward-looking subsistence lifestyle.



## how do the scenarios diverge?

All four scenarios follow broadly similar demographic changes over 50 years. These include an ageing population and relatively faster growth among Maori and Pacific families than Pakeha families. They differ a little in their inward and outward migration flows. Some global influences are common to all, such as more expensive fossil fuels and the effects of climate change, but the human response to these stressors varies between the scenarios.

The scenarios differ economically in the extent of global trade and tourism connections, uses of new technologies and reliance upon commodity exports. However, these are not statistical forecasts that project historic trends. The scenarios are a stimulus to creatively explore possibilities around existing 'signals' in society. They are not science fiction. They are plausible extensions or outcomes of discernable and competing social-economic trends that are detectable in New Zealand today.

A review of the scenarios in *Future Times* describes them as: "Robust stories that reflect the community we are now and might be in the future. None are what might be considered the worst or best possible outcome, but each includes positives and negatives that are realistic possibilities, given our present knowledge."

## the value of scenarios

Scenario concepts, including the game, may be used in various ways:

- A narrative starting point or conceptual framework for **modelling future societies**. They can provide explicit assumptions for developing quantitative population, resource and economic models. A first version of this modelling has been developed by the New Zealand Centre for Ecological Economics, and published in Section 4 of the *Four Future Scenarios* book (2007).<sup>4</sup>
- A starting point or group-forming activity, identifying **desirable and un-desirable vision(s)** of the mid-term future for an organisation, company, town or local government region. From this starting point, a back-casting process can take the work further, identifying steps required in the intervening years, towards the desired future. In New Zealand local government, for example, it could connect with the process of public review of Long Term Council Community Plans.
- An aid to **risk analysis, or future-preparedness** in business and government. For example, they can be used when facing uncertainty in designing long-term, resource-intensive investments such as electricity generation, energy grids, road tunnels, airports and other communications infrastructure. Decision makers can consider which 'futures' this infrastructure will be most effective in, and in what circumstances they could become unviable or irrelevant.
- A stimulus for personal reflection and, in groups, for **educational use**. The relative appeal of these scenarios to readers differs between cultural groups and political perspectives. Playing the game prompts discussion about today's society and its competing values, by focusing attention on some aspects that can be expanded into a future setting. A well-prepared teacher or facilitator has a key role to play here.



A small selection from the *Scenarios Game*: role cards, recent trends, future possibility cards and 'wild cards'.

### what does the scenarios game involve?

The game is designed for gatherings of 16 or more people. It includes:

- a warm-up activity that looks back 20 years, using photos to show how much has changed recently in everyday life and inviting discussion of trends
- future possibility cards, to open discussion on new drivers of change
- a diagram showing key driver variables that distinguish the four scenarios (discussed above) and descriptions of the scenarios
- role cards, for what a future grandchild might be doing in 50 years as an adult
- wildcards (e.g. earthquakes and technology shocks), to test the resilience of the scenarios.

A small selection from the Scenarios Game: role cards, recent trends, future possibility cards and 'wild cards'.

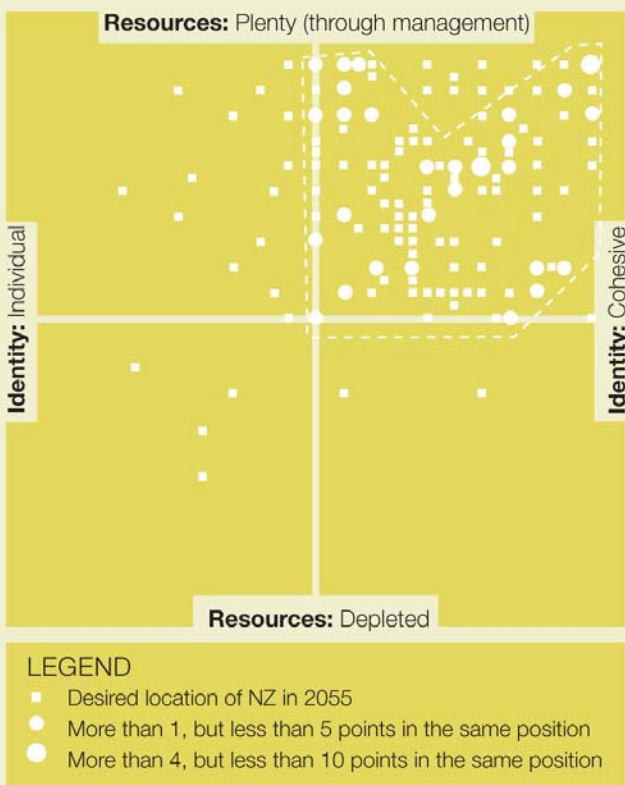
The full game kit is available on Landcare Research's website and includes notes for facilitators.



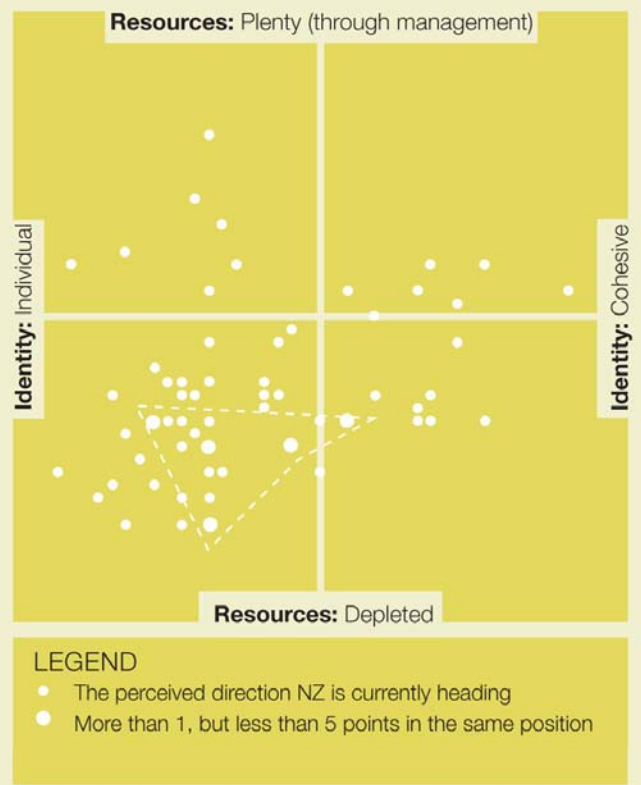
### taking the future back to the present

Researchers have used the game to examine New Zealanders views on the current direction of their society and their preferences for the future. Participants in the game were asked to identify the direction that they think New Zealand is currently taking and how this compares with the four scenarios. The charts below shows their responses.

**FIGURE 5** Game Participants' Desired Location for NZ in 2055



**FIGURE 6** Current Trend Direction from 2006 (starting near the centre)



Most game participants suggested that the current direction of New Zealand's society and economy is moving towards greater individualism and unsustainable exploitation of natural resources. Those same people reported a personal preference for travel in an opposite direction. They favoured

more social collaboration rather than competition, and the conservation of New Zealand's ecosystems and resource base. The game thus provided a good discussion starter on sustainability themes and preferred futures, by presenting four contrasting futures for consideration.

#### WANT TO FIND OUT MORE?

**Email:** [scenarios@landcareresearch.co.nz](mailto:scenarios@landcareresearch.co.nz)

**Useful links:**

The game resources, available for free download:

<http://www.landcareresearch.co.nz/services/sustainablesoc/futures/>

The Four Future Scenarios book, available for purchase:

<http://www.mwpress.co.nz/store/viewItem.asp?idProduct=541>

## NOTES

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1 Taylor, R, Frame, B, Delaney, K and Brignall-Theyer, M (eds.) (2007), *Four Future Scenarios for New Zealand: Work in Progress* (2nd edition). Lincoln: Manaaki Whenua Press. Development of the scenarios and game was funded by the Foundation for Research, Science and Technology (FRST), 'Building Capacity for Sustainable Development: the enabling research', contract.

2 The urban version was funded by FRST's Learning Sustainability Programme

3 Recent work on GPI includes: Forgie, V, Andrew, R, Hooker, L, Patterson, M, Moleta, G (2008), *A Genuine Progress Indicator for New Zealand: Environmental Valuation*. New Zealand Centre for Ecological Economics, Palmerston North. See also <http://www.ingentaconnect.com/ind/ijesd/2004/00000003/F0020003/art00012>

4 This model was developed by O Montes de Oca Munguia, R Andrew, and J Lennox. The trial model published in the 2007 book includes population, labour force, social accounting and environmental elements. See also [http://www.nzcee.org.nz/pages/research\\_projects/futuring/](http://www.nzcee.org.nz/pages/research_projects/futuring/)