

Business- Government Partnership for Innovation and Growth: The Case of New Zealand

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NZ Grass Processor (Mark I)



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Fonterra's Whareroa Plant, Taranaki



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Setting the Scene: The "New Zealand Fast Forward" Programme

- Announced 11 March, 2008
- NZ \$700 million (US \$560 million) government investment in pastoral and food industries research, development and innovation
- Sector = approximately 60% of NZ export revenues
- Based on:
 - Shared business-government vision for sector (follows joint business-government report in 2006)
 - Matched business investment in research (total joint investment will be around NZ \$2 billion (US \$1.6 billion))
 - Joint business-government governance of research investment
- Largest ever single investment in research by NZ

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Telling the recent story of New Zealand in brief

- Cohesive, modern, democratic, stable society
- Lacking shared, grounded vision for future
- Geographically remote, at the end of supply chains and trade routes
- Small, relatively urbanised, highly-educated, globally-orientated population (4.2 million)
- 1.3 million workforce

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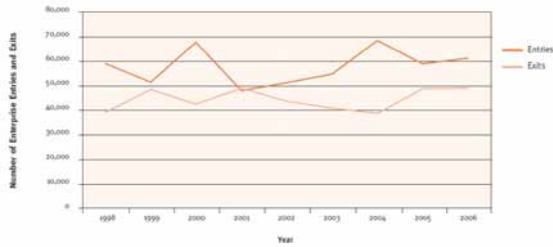
An entrepreneurial economy

- About 350,000 enterprises
- 96% of enterprises employed 19 or fewer people.
- 87% of enterprises employed 5 or fewer people.
- 64% of enterprises had no employees.
- Simple to start a company – many do:-

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Entries and Exits (Business Demography Dataset)

Figure 16. Enterprise Entries and Exits, February 1998-2006



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In some ways, an economy performing well: Growth

	NZ	Aus	US	OECD
84-94	1.5	3.3	3.2	2.9
94-04	3.4	3.9	3.3	2.6
99-04	3.8	3.3	2.8	2.3

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In some ways, an economy performing well: Unemployment

Year	90	95	00	05	07
%	7.1	7.5	6.6	3.8	3.6

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Attractive and open to FDI

• Foreign Investment Inflows (millions)

	02	03	04	05	06
FDI	-2707	3517	4302	4462	2421
Portfolio	4083	6659	7414	3839	2855

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In other ways, not performing well: Productivity and wages

1991-1995 0.9
1996-2000 1.4
2001-2005 0.8

Average 1.1

(average annual per cent change)

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Labour costs for production workers in manufacturing by country	US \$ per hour, 2004
Germany	32.53
Netherlands	30.76
United States	24.71
United Kingdom	23.17
Australia	23.09
Japan	21.90
Canada	21.42
New Zealand	12.89
Korea	11.52
Taiwan	5.97
Hong Kong (special administrative region of China)	5.51
Mexico	2.50

Source: US Dept of Labor, Bureau of Labor Statistics, Nov 2005

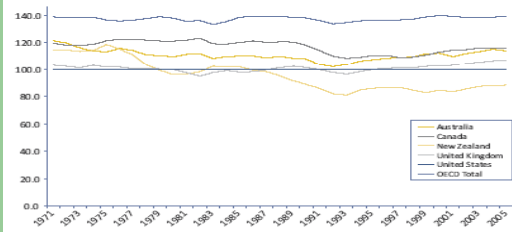
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And particularly not well: R&D spend

- 1.2% of GDP, compared with OECD average of 2.2%
- Over 50% of R&D spend is by Government; private sector below 50%

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And poorly in terms of Per Capita GDP relative to OECD competitors



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Responses: The Crisis and the Solutions up to 1999

- Up to 1984:
 - The 'closed economy'
 - Emerging challenges
 - Missed signals

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Responses: The Crisis and the Solutions up to 1999 contd.

- 1984-1999
 - The radical reform model
 - Expectations and frustrations
 - 1999: a sea-change
- Business-Government relations pre 1999
 - In pre-1984 'closed' economy
 - 1984-1999: the neo-liberal phase

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1999: Modern social democracy

- Dealing with:
 - The legacy of 80s and 90s
 - Path dependency
 - Growth and the danger of complacency
- The key tenets:
 - Economic transformation
 - Families, young and old (social inclusion)
 - National identity

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Modern Social democracy contd.

- Government's emphases:
 - Fiscal stability
 - Improved savings and investment
 - Improved productivity
 - Corporate governance
 - State sector performance

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Economic Transformation: national vision for growth and innovation

Tenets:

- A better-performing, knowledge-based economy
- A 'bold, forward-looking, aspirational' strategy (shifting gear)
- Innovation and competitiveness the key challenges
- Improved business performance fundamental
- Business-government-stakeholder partnership vital

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ET: five themes

- Growing globally competitive firms
- A world class infrastructure
- Innovative and productive workplaces
- Environmental sustainability
- Auckland: an internationally-competitive city
- within ET, focus on:
 - Growth and Innovation
 - Improved international connections

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Growth and Innovation

- Growth and Innovation Framework (GIF), (thereafter Economic Transformation)
- Industry support: e.g. Bio-technology, ICT, Creative, Food, Wood
- Improved R&D expenditure and performance;
- Entrepreneurship and the commercialisation of innovation

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Growth and Innovation contd.

- Support for SMEs
 - The potential for equity partnerships to contribute to growth
 - Developed tripartite co-operation (government, business, trades unions) in support of productivity and growth.
- AND

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Improved international connections

Key measures:

- Support for Doha and APEC, and RTAs
- Closer ties with Australia (a single economic market);
- Increased funding for NZTE's promotion of export success;
- Better integration of external and domestic economic strategies;
- A better understanding of the challenges facing small, open economies in global economy;
- A fair environment for the New Zealand manufacturing sector (especially re 'hollowing out').

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Case Study: the Growth and Innovation Framework: An emerging national vision

- Govt. response led by PM: 'Growing an Innovative New Zealand' (GINZ)
- Blueprint for change
- Top-half-of-the-OECD target
- Vision
- Now subsumed under ET agenda

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Origins of GIF

- Government party analysis, drawing on international networks (e.g. UK)
- Domestic stakeholders (business – e.g. Knowledge Wave; unions – e.g. high wage high skill economy; some key commentators)
- Top-down politically-driven model (importance of PM and ministers; DPMC)
- Various reports and meetings

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Private sector participation in GIF

- Initial scepticism, but emerging realpolitik (especially after 2002 election)
- Government charm offensive (listening)
- Change of personnel (e.g. Business New Zealand)
- Jointness of language and aspiration

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Private sector contd.

- CTU role
- Informal networks
- Consensus at top of business community, but buy-in below more difficult (e.g. GIAB)
- Volume of engagement an issue
- Questions about rate of progress and complexity of policy-making

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Operationalisation of GIF

- DPMC
- MED
- Growth and Innovation Framework Officials Working Group
- Growth and Innovation Advisory Board (GIAB) (private sector involvement)

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Growth and Innovation Advisory Board (GIAB)

- **Membership**
- **Structure**
- **Workstreams:**
 - Growth culture
 - Agribusiness
 - Infrastructure
 - People and skills
 - Global connectedness
 - Research and innovation

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GIF foci

- Foci:
- Strengthening the fundamentals
 - More effective innovation
 - Improving skills and talents
 - Global connectedness
 - Industry focus, involving selection and prioritisation (bio-tech, creative, ICT etc)

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GIF action areas

- Strengthening the innovation system: e.g.
 - CRI Capability Fund
 - Partnerships for Quality (between business and universities)
- Developing skills and talent e.g.:
 - Reform of tertiary sector (planning and differentiation)
 - Extension of skill training
 - Adult literacy and Foundation Skills
 - Links into developed productivity/skilling agendas

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GIF action areas contd.

- Increasing international connection: e.g.
 - Beachheads programme (NZTE)
 - Enterprise Networks Grants
 - Investment New Zealand
- Engaging with sectors: e.g.
 - Large budget Screen production Grant
 - Sectoral taskforces (ICT, Bio-technology, Food and Beverage etc)

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GIF action areas contd.

- Working with regions: e.g.
 - Regional Strategy Fund
 - Enterprising Partnerships Fund
- Assisting business development: e.g.
 - Growth Services Fund (NZTE)
 - SME Directorate (MED)
- Strengthening infrastructure: e.g.
 - Digital Strategy
 - Auckland Regional Economic Development Strategy and GUEDO

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GIF's performance

- Measured across multiple criteria, including:
 - Innovation
 - Product innovation good, R&D continues poor; patenting requires improvement; networking good as is commodity sector take-up of new technology; ICT adoption still to make ground.
 - Enterprise
 - Continuing evidence of high levels of firm creation and OECD-comparable rates of firm survival

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GIF's performance contd.

- Investment:
 - Strong investment flows; improvements in traditionally low savings rates; both stock exchange and venture capital markets have room for improvement
- International connections:
 - External trade performance can improve; domestic value-adding improving as is sophistication of exports; FDI performing well as is international labour market engagement

Broadly, reasonable performance with plenty of room for improvement

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Assessing GIF's progress

- Vision has wide currency/consensus at political level
- In principle, also true for officials and (senior) stakeholders
- Serious question about:
 - consolidating vision on sustainable across all constituencies
 - Practical, ongoing engagement

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Assessing GIF's progress contd.

- Challenges:
 - Coherence
 - Complexity
 - Effective prioritisation
 - Whole-of-government issues
 - Buy-in by government officials
 - Demonstrating impact (causalities)
 - Sustained grounding of approach

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B Research, Science and Technology

Government's priorities:

- support basic and strategic research
- support researcher-led innovation in new areas or applications
- increase the rate of commercialisation and the ability of firms to commercialise
- support promising researchers, and environmental, social and health research
- About \$1 billion invested by Government (about two-thirds by Ministry of Research, Science and Technology (MORST))

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MORST key investments (06/07)

• Industry Research	\$191m
• Environmental Research	\$90m
• New Economy Research Fund	\$62m
• Health Sciences	\$59m
• Technology New Zealand	\$48m
• CRI Capability Fund	\$47m
• Marsden Fund	\$34 m
• Supporting Promising Individuals	\$18m

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Stakeholder involvement in RST

- Widespread
- Directly (e.g. Capitalising on Research Action Group following 2006 'Capitalising on Research' summit)
- Indirectly
 - Board-level interventions in FRST, CRIs, HRC etc.
 - Membership of university councils
 - Task forces and working groups

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RST delivery

The context:

- In 2006:
 - Government funded \$785 million worth of R&D, up 8.0 percent from 2004.
 - Businesses funded \$753 million, up 18.6 percent from 2004.
 - Ninety-five percent of all R&D was domestically funded.
- Need for business to do better widely accepted.

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RST delivery contd.

Key institutions:

- Crown Research Institutes
- Universities

Major funding bodies:

- FRST (\$450m annually)
- HRC (\$60 million)
- RSNZ (\$34 million)
- Technology New Zealand (\$48 million)
- Research Consortia (from \$250k to \$3 million plus)

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Evaluating RST

- Priorities command broad support
- Business and export needs pervasive in RST thinking
- Underfunding (both private and public)
- Tensions (e.g. between CRIs and universities)
- Maintaining talent vital
- Improved integration of:
 - government-funded agencies
 - Agencies and private sector (esp SMEs)

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Evaluating RST contd.

- Growing emphasis on commercialisation of research (e.g.):
 - AgResearch: e.g. **Grasslanz Technology** (*100% interest held*); promotes and licenses proprietary forage cultivars, grass endophytes and applied biotechnologies, delivered to farmers through seed company licensees
 - HortResearch: e.g. **sensor technology** for pear ripeness - one of Time Magazine's 'coolest inventions' for 2004
 - Uniservices (University of Auckland): 130 licensing deals 2006; market capital of companies based on Uniservices technology \$656 million 2006)
- A good start: recognised that more can be done.

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C Supporting international connections (trade): NZTE

- New Zealand Trade and Enterprise (NZTE)
- To improve New Zealand's business environment for enterprise and growth
 - To increase the international connections of New Zealand businesses
 - To build New Zealand business capability
 - Created to form single agency 2003
 - Industry New Zealand and Trade New Zealand
 - \$150m plus annually
 - On-shore (420 staff) and off-shore delivery (240)
 - Business-based governance

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NZTE focus

- **sectors**: a focus on sectors with long-term competitive advantage
- **regions**: a focus on the development of successful regional economic development strategic involving active stakeholder participation
- **enterprises**: provision of a comprehensive range of support measures from start-up to exporting maturity
- **international linkages and engagement**: support for exporting companies, including in-country trade commissioners, network creation, promotional activities, information flows etc.
- **investment promotion**: active promotion of inbound investment into NZ

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NZTE activity areas

- **Business development** (e.g. Enterprise Development Grants: in two forms (for market development, on a 50% basis up to \$500k on a \$100k per annum basis; for capability building, on a 50% basis up to \$20k.))
- **Export services** (e.g. Beachheads Programme: accelerated access for high-growth firms to international markets)

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NZTE activity areas contd

- **Sector development** (10 sectors identified)
- **Regional development** (e.g. Regional Strategy Fund)
- **NZ success** (e.g. Enterprise Culture and Skills Activities Fund to promote entrepreneurship and business success)

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NZTE-Private sector engagement

- Business presence pervasive
 - Senior business leaders
 - Key exporters (ICT, commodity sector)
- NZTE board
- Advisory boards (e.g. Beachheads Advisory Boards; CEO Summit for 'Better by Design')
- Engagement serious, ongoing, with mutual expectations

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Practices and Institutions

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Key practices

- Senior political leadership
- Thinking about international experience
- Stakeholder engagement
- Tripartism
- Whole-of-government
- Institutional reform and creation
- Public-Private Partnerships still controversial, but in place

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The Key Implementation Agencies

- Strong political oversight (Office of PM; DPMC; ministers and advisers)
- Pervasive role of Treasury (funding and evaluation)
- Of ministries, MED is paramount (ex Ministry of Commerce)
- Internal structure/traditions of MED important
- MORST: small, vocal, a support role
- Other ministries/departments play supporting roles

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The Key Implementation Agencies contd.

- NZTE: crown agency at arms length from Government; insulation provided by strong business board
- NZTE: also seen as pro-business and focused; different from government
- Funding environment: tough – careful scrutiny by Treasury, and ministers, in context of competing demands

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The Implementation Agencies contd.

- Strong emphasis on evaluation
- Technical competence of staff (generally) high
- Workloads, experience, ideological orientations raise questions
- Whole-of-government issues

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Principles of Support: Making a Difference

- Emphasis on
 - **targeting**
 - **high-end, high value-add, high-tech.**
 - **International potential**
 - **SMEs**
 - **Preferred sectors**
 - **Capability building**
 - **Applied, relevant outcomes (e.g. in RST)**

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Principles of Support

- Part user-pays (e.g. 50% model)
- accountability
- Competitive tendering (e.g. for research funds)
- Wide range of support limits from \$5k to multi-million
- Partnerships/collaborations encouraged
- Evaluation of outcomes increasingly important
- Use of delivery agents

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First Principles

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First Principles - People

- Vision and consensus (e.g. GINZ)
- Leadership (e.g. DoL Management Capability Building)
- Top-level stakeholder participation (e.g. GIAB, FRST, NZTE)
- Quality of thinking (e.g. 'Capitalising on Research' seminar and Action Group)
- Tolerance of perspectives (e.g. GIAB)
- Building new capability (e.g. Technology for Industry Fellowships)
- The importance of 'champions'

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First principles - Process

- Sustaining support for transformation (e.g.)
 - maintaining macroeconomic fundamentals
 - Sustained government support
 - Constant engagement with social partners
- NZ solutions (e.g. NZ Tourism Strategy)
- Momentum (e.g. recent reform of regional grant structure)
- Openness (e.g. Knowledge Wave conference)

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First principles – Process contd.

- Networks (e.g. Partnerships for Excellence)
- Whole-of-government (e.g. GUEDO)
- Moving beyond 'market failure' (e.g. focus on social inclusion)

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First principles - Institutions

- Institutions are/should be professional, transparent and accountable
- Institution building in New Zealand is path-dependent on the neo-liberal reform project post 1984
- Institutions are not a panacea: the creation of specialist institutions subject to careful scrutiny in New Zealand, but also, often, viewed with scepticism.
- Care taken about transfer of international institutional options

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First Principles – Institutions contd.

- Project-based models preferred (e.g. task forces)
- Institutions should involve the social partners at a strategic level
- 'Buy-in' by social partners and constituencies into institutions important
- Existing institutional arrangements/rivalries (e.g. the government department structure) may hinder policy innovation – responses needed
- Institutional capacity issues exist and must be addressed (e.g. staffing)

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