

2009 science and innovation budget scorecard: Stabilising but lacks vision

There was general agreement among the major political parties in pre-election RS&T policy statements that science and technology are critical components of sustainable economic and social development (*NZ Science Review* 65: 29–44, 2008). The importance of science was recognised by the Australian government in its May budget through a 25% increase in science funding. This budget included a raft of visionary research, science and technology-related initiatives including a major increase in science funding, university reforms and overhaul of private sector R&D tax. The expectation is that these investments and reforms will not only buffer unemployment, but also position the country to take advantage of the return of confidence during economic recovery. Similar insight has been shown in the US, with large increases in science investment. Here in New Zealand, the 2009 Budget provided an opportunity for the new Government to re-evaluate priorities and ensure that we are also well positioned for the projected economic upturn. Sadly, the 2009 RS&T Budget scorecard does not bode well for a timely, science and innovation-fuelled economic recovery.

When compared with last year's budget, the baseline increase in science investment in New Zealand this year is a modest \$18M or 2.5%. In effect this is a reduction of 0.5% when allowance is made for inflation using a 3.0% movement in the CPI. This nominal increase does not compare favourably with the 25% increase in science and innovation funding in Australia. When economies and reprioritisation are taken into account, new RS&T investment for 2009/10 is \$28M. New initiatives over 4 years include an additional \$10M per annum for CRI capability funding, \$9M to the Marsden Fund for untargeted excellent research, and \$8M to the Health Research Council (HRC) for strategic health initiatives based on excellent science. In addition, the Kiwi Advanced Research and Education Network (KAREN) project will receive a one-off allocation of \$16M in 2010/11.

Although Vote RS&T is a major contributor to our innovation system, other Votes, including Education, Agriculture and Forestry, Trade and Enterprise, and the Environment, are also significant players, and their contributions should not be ignored. In particular, the pastoral and food sector will receive an extra \$30M in the coming year, increasing to \$70M in year 2012/13. This Primary Growth Partnership scheme of \$190M over 4 years will replace Labour's \$700M Fast Forward Fund. Additionally, commitment to the University Performance-Based Research Fund (PBRF) has been retained, growing to \$250M in 2010/11.

Excellent basic research

One of the most positive announcements in the 2009 Budget is the support for excellent basic research in universities and

research institutions, with the Marsden Fund increasing by 25%. Strategic health research through the HRC, which is also based on research excellence, increased by 13%. While these investments were long overdue, they are welcome and will help maintain key research capability over the next 4 years and benefit the country, albeit in the long term.

Research in the CRIs

Although capability funding to the CRIs has been increased by 20% this year, the FRST investment fund has declined by a small amount, and now stands at \$529M. The net result is a small increase in CRI funding. Increased capability funding can be applied to assist buffering the volatility of competitive and negotiated funding in the CRIs and allow new programmes to be scoped.

Tertiary education

Vote Education is an integral component of overall Government investment in R&D, amounting to \$189M, or 24% of total investment in 2006/07 (based on OECD returns). In this context, the Government signalled its commitment to grow the PBRF to \$250M by 2010/11 and maintain it at this level. Other changes in the Budget allocation that impinge on science include disestablishing training grants, Top Achiever doctoral awards, the Capital Investment and Tripartite Adjustment Funds, and halving the Innovation Fund. These changes, together with low CPI adjustments, will put considerable pressure on university budgets and will be detrimental to our innovation system, much of which is nurtured in academic environments.

Prime Ministerial Science Adviser and Science Prizes

The appointment of Professor Peter Gluckman, one of New Zealand's most distinguished scientists, as Chief Science Adviser to the Prime Minister, was announced just before the Budget. Although the overall Budget impact is neutral, with most of the cost of this part-time (1–2 days per week) position and its support being met by Auckland University reimbursement, the inclusion of a scientific perspective at the highest level of Government, and independent of MoRST and the Royal Society, stands to raise the profile of science in this country. In addition to this position being reactive to the Prime Minister's requests for information, it is hoped that it will also be strategically proactive in terms of promoting science as an integral part of our economy. It is hoped that the advice provided will be impartial, evidence-based and empowered with strategic wisdom. Adding to the science prizes sponsored by the Royal Society, the New Zealand Association of Scientists and sector groups, the Prime Minister's Science Prizes of \$1M per annum over 4 years were also announced in the Budget. It is hoped that this will add to

the growing recognition that science is an integral and essential part of our innovation system.

To put the \$18M increase in science expenditure in some sort of budgetary perspective, it is interesting to compare investment in science with other planned new initiatives, some of which will have little long-term effect on social development and the economy. New infrastructure spending on roads, rail, cycleway networks, broadband and home insulation dwarf science by orders of magnitude. Add to this increased policing and the building of new prisons, rather than addressing the root societal problem through research, and spending \$9M on a confusing and likely politically mute citizen's referendum on whether 'a smack as part of good parental care' should be a criminal offence, one

begins to question the wisdom of some of the prioritisations made. This is particularly relevant when related to the axing of tax credits for R&D (see above for comment on Australia's approach) and the Fast Forward scheme.

Recently, a current Minister of the Crown indicated that the RS&T portfolio was seen as a 'fun portfolio', grouping it along with sport and recreation, and the arts. God save our nation if science and innovation are not taken more seriously than pastime entertainment and recreation, notwithstanding the contributions of Peter Jackson and Graham Henry to our economy.

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