

# **Building Innovation**

**Labour's policy for  
Science and Innovation**

**2008**



## Introduction

Labour believes that good science lies at the heart of a modern society and a modern economy. Good science and innovative technology contribute to increased economic productivity, better health, a greater understanding of our environment and society and the advancement of scholarship and human knowledge.

Over the past nine years, the profile of research, science and technology in New Zealand has risen significantly. It is debated more, it is valued more and it has delivered more. Labour believes we must ensure New Zealand science is not only world class in terms of the excellence of our researchers, but world class in terms of stability of funding.

Over the next three years the pace of change in research, science and technology will quicken markedly. Recent policy changes and new policies to be implemented post-election will combine to produce a further step-change in this area.

## Science and Innovation Funding

In the last decade Research, Science and Technology funding has increased by 90 percent. Labour has funded strong growth in basic sciences through the Marsden Fund (which has increased by 86 percent), Health Research (which increased by 130 percent) and the New Economy Research Fund.

In addition, Labour established the Pre Seed Accelerator Fund, the Equity Investment Fund, the Seed Capital Investment Fund and the Venture Investment Fund, all designed to accelerate the commercial development of the fruits of research. Business incubators were established for the same reason.

Although improving, New Zealand's investment in research, science and technology is still well below the western world average. Specifically, public sector investment is at about 75 percent of the western world average, and private sector investment is at about 33 percent of the western world average (up from 25 percent nine years ago).

In the private sector, policies we have already announced are likely to raise private sector R&D investment to about 69 percent of the western world average by 2011/12.

In the public sector, funding we have already announced is likely to raise public investment to around 83 percent of the western world average by 2011/12. Labour will seek to improve that figure.

**Labour will in the next 3 budgets increase funding for the Marsden Fund, Health Research, and new Transformational R&D (including new materials)**

as well as renewable energy research, social research and funding to address the needs of researchers early in their careers.

Three factors will drive this increase in R&D over the next three years.

- A growing research and development workforce;
- New Zealand: Fast Forward; and
- The 15 percent R&D tax credit

## **A growing research and development workforce**

In the last decade, and particularly in the past three years, the number of students undertaking doctoral study has almost doubled. The total research and development workforce increased from 9,500 to 16,500 in the 10 years to 2006.

Labour has introduced a range of new fellowships and scholarships, and significantly expanded others including doubling the number of Fulbright Scholarships. In addition, Labour has established the Centres of Research Excellence and the Performance Based Research Fund (\$236 million a year) for University-based research.

## **New Zealand: Fast Forward**

Labour has created the New Zealand: Fast Forward Fund of \$700m, to be matched by private funding from the food and pastoral sectors to create a substantial step forward in research and development, ranging from basic environmental research to pre-commercial development over the next 10-15 years. This is easily the largest single investment in R&D in New Zealand's history.

**Labour will commit to retaining the New Zealand: Fast Forward fund.**

New Zealand: Fast Forward is likely to deliver major change over the 10-15 years during which programmes will run in the following areas:

- Basic Environmental research into the pastoral sector to reduce the environmental effects of climate change gases (50 percent of which come from our pastoral sector) including improvements in water quality and reduced chemical use;
- Advanced food research and development to create new food products, food ingredients, functional foods, nutraceuticals and the like;

- Attention to various workforce and skills gaps that exist or are emerging in our economy throughout the value chain, perhaps with early concentration on food technologists and food engineers;
- Growing globally-competitive firms in New Zealand that enjoy a degree of influence in many markets comparable to the likes of Fonterra, Zespri, PGG Wrightson or Sealords.

## **The 15 percent R&D tax credit**

Private sector investment in R&D is, by international standards, low.

Earlier this year the 15 percent tax credit was introduced. It has a relatively simple design, is applicable to all qualifying R&D expended by the private sector and is available even to loss-making start-up companies which are not yet paying tax. Economic modelling confirms it will result in a large increase in private sector investment in R&D, some of which will be undertaken by public sector institutions.

### **■ Labour will commit to retaining the 15 percent R&D tax credit.**

The Inland Revenue Department (IRD) has calculated the “forgone revenue” from the tax credit at \$330 million per annum in 2011/2012. This means that reported R&D activity in the private sector will double over the next three years (It needs to be acknowledged, however, that some of that reported increase will reflect under-reporting of R&D activity by some firms in past).

A relatively high proportion of privately-funded R&D is carried out in our Crown Research Institutes and in our universities. Their contract research activity will therefore rise significantly.

## **Contestability and Stability - Getting the Balance Right**

Contestability and Stability are both valuable. The former allows a researcher’s proposal to be peer-reviewed so that new researchers succeed and new areas of research gain funding.

The latter allows for long-term research certainty, for science capability to be maintained, for strategically important research to be reliably undertaken and the time needed to prepare funding bids reduced.

New Zealand has historically overvalued contestability and undervalued stability. In the last decade, Labour introduced a more stable funding environment to better balance the benefits of stability and the benefits of contestability, including negotiated funding, capability funding and backbone funding.

**Labour will ensure about one third of Vote: RS&T will be non-contestable three years from now.**

Non-contestable funding will either be negotiated, or, in the case of the backbone funding or capability funding, will be paid as of right. Negotiated funding will be available to all-comers, but is likely to be predominantly secured by the Crown Research Institutes and by universities.

The current split in public sector research, science and technology investment is approximately 40 percent basic research, 40 percent strategic research and 20 percent pre-commercial development. This is likely to shift towards basic research to balance the expected increases in private sector investment at the other end of the spectrum.