Briefing for the incoming Minister of Science, Innovation and Technology

November 2023

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
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Te Kāwanatanga o Aotearoa
New Zealand Government

Contents

1. Welcome to the Science, Innovation and Technology portfolio

1. As the incoming Minister for Science, Innovation and Technology, you have a number of priorities focused on boosting New Zealand's tech sector. We understand your focus will be on partnering with the tech sector to create the right policy and regulatory environment to support more innovation and faster growth.

2. This portfolio was previously focused on research, science and innovation, which collectively represent Government investment of around $1.5 billion per year. The addition of technology will mean changes in the focus and organisation of our work. We would value an early opportunity to engage with you on your vision for this new portfolio. We have set out our understanding of your priorities below:

    - Introducing an **International Graduates Visa**, a **Global Growth Tech Visa**, and a **Digital Nomad Visa**.
    - **Supporting startups** by investigating changes to the tax treatment of options issued by startups to their staff.

3. For the purposes of this briefing we have assumed that you will be working alongside your colleagues in the Immigration and Revenue portfolios on the new visas and tax policy. We are prepared to advise you on all your priorities and would value a conversation on how we can assist you to work with your colleagues on these initiatives.

4. In addition, the Science Innovation and Technology (SI&T) portfolio has a small number of funds that might fall within the scope of the coalition agreements' intentions to prioritise public services on the basis of need, not race. We would like to discuss the Government's intentions about this part of the Coalition agreement with you.

5. The purpose of the remainder of this briefing is to:

    - provide background information about the SI&T portfolio (sections 2, 4 and 5 of this briefing).
    - provide initial advice on the strategic issues facing the New Zealand SI&T system (section 3 of this briefing).

6. Further briefings will be provided to you as needed, focussing on specific topics in greater depth.

2. Portfolio overview

Science, Innovation and Technology in New Zealand

7. Science, Innovation and Technology in New Zealand consists of businesses, people, institutions such as research organisations, and infrastructure. Many people are engaged day-to-day in developing and using technology, innovating, researching, and connecting with each other in a wide range of activities that contribute to SI&T. Government is only partially responsible for this activity.

8. Using the NZTech definition, the New Zealand technology sector consists of around 23,000 businesses, employing nearly 120,000 people. In 2022 the tech sector made up around $20 billion (eight per cent) of New Zealand's GDP. According to NZTech, the sector is the second largest contributor to New Zealand's exports, making up 10.9 per cent of all exports worth $9.8 billion.

9. The Research and Development (R&D) intensive parts of the New Zealand economy consist of 42,000[1] researchers not including students, around 4,000 R&D performing businesses (with many more reporting innovation), eight Universities, seven Crown Research Institutes, and many independent research organisations, business accelerators and incubators, and other support functions.

10. Overall investment in R&D was approximately $5.2 billion in 2023. Businesses perform well over half of the R&D that happens in New Zealand, which the Government supports and encourages through a variety of mechanisms. The remainder takes place in public and private research organisations.

11. The technology sector and the R&D intensive parts of our economy overlap and interact in many ways. Improving the depth and productivity of this connection is one of the biggest opportunities in your portfolio.

Your Responsibilities

12. As Minister of Science, Innovation and Technology you are responsible, on behalf of the Government, for overall stewardship of the SI&T portfolio. Most of the existing responsibilities in the portfolio relate to research, science and innovation. You have indicated that a key role for the SI&T Minister will be to act as a champion at the heart of government for the NZ tech sector. We would value the opportunity to discuss what additional responsibilities you would like to include in this portfolio to enable you to fulfil that role.

13. The government provides a stewardship role for SI&T by setting the overall strategy and direction, investing, providing ownership of some institutions, and creating enabling regulatory frameworks and fulfils the following roles.

    - Sets direction. Government's involvement in the SI&T system has significant influence over the direction of SI&T activities.
    - A regulator. The government is closely involved in regulating technology activities. The Government's coalition agreements highlight its intention to liberalise genetic engineering laws, one of the areas where government regulation plays a key role in technology development. Other

[1] By headcount

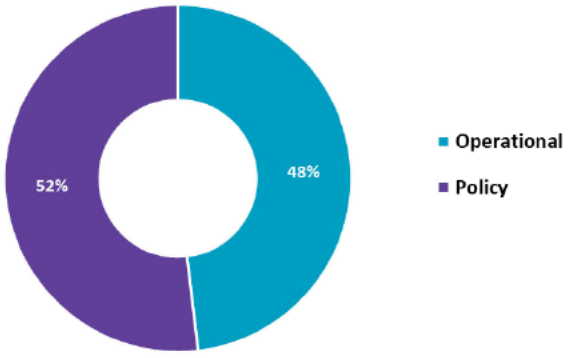
notable areas include aerospace, and medical technology. Often these regulations are the responsibility of other portfolios.

- An owner of organisations, most notably Crown Research Institutes and Callaghan Innovation.
- A funder of SI&T activities and infrastructure.
- A provider of information. The government collects and shares information to support good decision-making.
- A coordinator and connector. The government is active in coordinating activity including connecting tech sector and R&D intensive firms with research institutions and other firms both domestically and internationally.
- A user of SI&T. Many government departments rely heavily on the technological or scientific outputs of firms and research organisations.

14. Most of the day-to-day activity in the portfolio is likely to draw your attention towards your champion, ownership and funding roles. However, there is also a small number of specific legislated or technical decisions which you must take from time to time. We will advise you when these are necessary. More information is provided later in this briefing.

Department

15. The Science, Innovation and Technology portfolio is supported by the Ministry of Business, Innovation and Employment (MBIE), with 139 staff members. The diagram and table below show that 48 per cent of the SI&T portfolio is operational while 52 per cent is policy.



Portfolio FTE by Function

Function	Portfolio FTE	Portfolio %
Operational	62.9	48
Policy	67.7	52
Total staff	**130.6**	**100**

Notes:
The portfolio view does not include enablement functions such as finance, legal, communications, ICT, Ministerial Services.
All numbers are represented as FTE.
Data are as at 30 September 2023.

16. Operational staff are responsible for making and managing Vote Business, Science and Innovation (BSI) research investments. This work includes designing and running investment rounds for SI&T funds, negotiating funding agreements for devolved funds, monitoring the performance of projects and contracts, managing payments, providing Ministerial advice in relation to science investments and maintaining oversight on behalf of the Crown for just under $1bn of investment on a day-to-day basis.

Vote Business, Science, and Innovation and appropriations

17. You have overall responsibility for SI&T expenditure in 2023/24 of $1,942.5 million in Vote Business, Science and Innovation and a further $466.3 million in Vote Revenue (for the R&D Tax Incentive). You set the priorities for investment via mechanisms such as investment plans and terms of reference for funding bodies, and settings for grant programmes to businesses.

18. The annual Budget round is particularly important in the SI&T portfolio because expenditure is one of the main tools you have for shaping the New Zealand research and innovation system. A large amount of SI&T funding is committed to existing funding contracts, meaning funding with that commitment is harder to reprioritise quickly. We would like to have an early conversation with you about how we best use SI&T funding to support your objectives for the portfolio.

19. A range of different types of appropriations (technical funding categories) are used to deliver SI&T funding, but it is more practical to think of the breakdown in terms of what it purchases. This is set out in the table below. A full table of SI&T expenditure by appropriation is included at Annex 2.

Item	2023/24[1] $million	Share of total %
Departmental expenditure (policy and contract management)	$41.2	1.7
Funding for Research	$954.7	39.6
Other non-departmental programmes	$73.8	3.1
Callaghan operational funding	$85.9	3.6
Support for Business R&D and Innovation	$285.6	11.9
Game Development Sector Rebate scheme	$39.9	1.7
Total (operating expenditure)	**$1,481.1**	**61.5**
Capital expenditure	$461.2	19.1
Total (Vote BSI)	**$1,942.5**	**80.6**
Research and Development Tax Incentive (in Vote Revenue)	$466.3	19.4
Total	**$2,408.6**	**100.0**

Notes:

1. Expenditure estimates include changes to accounts that will be implemented at the October Baseline Update.
2. R&D Tax Incentive expenditure is based on forecast for 2023/24 reported for the Pre-Election Economic Fiscal Update (PREFU).

Confidential advice to Government

20. Cabinet has previously approved several capital projects in the research system. In most cases these are approved as contingencies that can be drawn down subject to approval of a further business

case. The most significant of these is $451 million of capital and operating contingency (of which $4.75 million has been drawn down) to deliver the Wellington Science City capital investment programme. These are not counted towards expenditure until they are approved by Cabinet.

Funding bodies in the Science, Innovation and Technology portfolio

21. Several entities are responsible for independent funding decisions from the SI&T portfolio. You have oversight of, and set the direction for, these funding decisions.

The Science Board

22. The Science Board is responsible for making independent funding decisions for the Endeavour Fund and National Science Challenges. The total value of these funds is $308 million in 2023/24. You appoint the Board members and set the direction of investment under the Research, Science, and Technology Act 2010. MBIE provides administrative support to the Science Board.

The Marsden Fund Council

23. The Marsden Fund Council is responsible for making annual funding decisions for the Marsden Fund. It made decisions on $78.5 million of funding in 2022/23. The duties and responsibilities of the Marsden Fund Council are set out in a Terms of Reference set by you as Minister. You appoint the Marsden Fund Council and the Royal Society Te Apārangi provides administrative support.

The Health Research Council

24. The Health Research Council is responsible for funding decisions in health research. Total funding for 2023/24 is $125 million across four different appropriations from Vote Business, Science and Innovation, and a small amount of funding from the Ministry of Health.

25. While the Minister of Health is responsible for legislation, ownership and appointments governing the Health Research Council, you are responsible for administering its funding. However, a memorandum of understanding sets out an agreement whereby past Ministers have agreed to be jointly responsible for some Health Research Council functions, including setting expectations and making appointments to the Council.

Callaghan Innovation

26. Callaghan Innovation delivers several funding programmes to incentivise businesses to invest in R&D and support them to grow the size of their R&D programmes. It provides R&D incentives, innovation support services, and access to facilities and networking services. The Callaghan Innovation operating appropriation of $86 million in 2023/24 funds a range of Building Business Innovation initiatives ($35 million), its Research and Development Solutions arm ($33 million), and the management of various business R&D and innovation support programmes ($18 million). The programmes (described in more detail below) are funded separately.

IRD and Callaghan Innovation – R&D Tax Incentive

27. The Research and Development Tax Incentive (RDTI) is funded from Vote Revenue, but the RDTI appropriation is the responsibility of the Minister of Science, Innovation and Technology. IRD is responsible for receiving applications for the RDTI from businesses and for assessing whether their

R&D expenditure is eligible for the incentive (as part of a businesses' income tax return), and for distributing the incentive in the form of tax refunds or credits. Callaghan Innovation provides advice to the IRD on applications and the IRD makes decisions considering this advice. This includes responsibilities for assessing whether a business' R&D activities are eligible for the RDTI and advising IRD of their findings.

Crown Research Institutes, Universities, and Businesses

28. While research-performing organisations are not funding bodies, Crown Research Institutes (CRIs) and Universities enjoy a high degree of autonomy over their research programmes and investments, giving them a lot of practical influence over the distribution of resources in the SI&T system. CRIs and Universities often contract and sub-contract research work between each other, creating further funding relationships.

29. R&D support for businesses, most notably the RDTI, enable businesses to be the primary decision-maker over their research programmes, meaning businesses are significant R&D decision-makers in their own right.

Major links with other portfolios

30. The relationships between the SI&T portfolio and other Ministerial portfolios extend beyond the normal expectation of agencies working together on shared Government outcomes. The relationship with the Immigration and Revenue portfolios in delivering your manifesto commitments is noted above.

31. Liberalisation of genetic engineering legislation also has important implications for the SI&T portfolio and will require work across your portfolio, the Environment portfolio which holds the existing policy and regulatory function, and key contributing portfolios such as Primary Industries and Health. Other regulations which affect the tech sector are owned across a much larger range of portfolios. You may wish to engage with the new Minister of Regulation to explore how his work programme can support innovation.

32. Several other portfolios rely directly on activity which is funded and owned in this portfolio, some of which is mission critical for their operational functions. Equally, the tech sector relies on interventions which are part of some other portfolios. The key relationships :

- **Economic Development**. The Economic Development portfolio holds responsibility for capital markets and New Zealand Growth Capital Partners, policy responsibility for the Startup Advisory Council, and responsibility for many associated grants, all of which play a key role in Government support for the tech sector. More generally, advanced economies consider investment in SI&T critical to economic growth. Over half of New Zealand's research is conducted in businesses. There is a lot of value in maintaining strong alignment between business-facing policies that sit across the Economic Development and SI&T portfolios.
- **Natural resources and hazards portfolios**, including Primary Industries, Environment, Conservation, Emergency Management, and other related areas. A large proportion of the funding in the SI&T portfolio is spent on research on the environment (including climate change) and primary industries. All seven CRIs, for which you have ownership responsibility alongside the Minister of Finance, do work in these areas, either predominantly or exclusively. Much of this work is critical to the successful functioning of those portfolios and agencies. Ministers in these

portfolios, and their agencies, have typically taken a keen interest in research programmes and services.

- **Tertiary Education**. As noted in your manifesto, skills are an area of key concern to the tech sector, so the relationship with the education system will be particularly important in this regard. Universities conduct over half of the research that takes place in public institutions, more than CRIs, and are therefore key delivery agents for this portfolio. Universities conduct most of our publicly funded health, advanced technology, engineering, veterinary, and social research, as well as training the bulk of our future tech and research workforce. Universities as organisations are the responsibility of, and receive most of their funding from, the Tertiary Education portfolio, but policies governing them have a direct impact on the outcomes achieved by the SI&T portfolio.
- **Health**. The Health Research Council, which funds the bulk of the health research in New Zealand, is the technical responsibility of the health portfolio.

3. Strategic choices in the Science, Innovation and Technology portfolio

Overview

33. This Government has set out its ambition to restore New Zealand's former reputation as being a world economic and social leader. It aims that New Zealand will again becoming an export powerhouse, by focusing on an economy that enables wealth creation, maximises added value before exporting, invests in IT to promote economic growth and employment, and ensures high educational achievement which will lead to high value employment opportunities.

34. This section of this briefing outlines MBIE's advice on the key challenges and opportunities in achieving this goal, and ways in which the SI&T portfolio can contribute.

The economic context

35. As outlined in MBIE's separate briefing on the economic context, New Zealand's economy faces several long-term challenges. These include weak productivity, increasing stresses on our economic resilience, negative impacts on the natural environment, and significant disparities between different population groups. Compounding these, are global 'megatrends', such as changes in climate, technology, and demography, and rising geopolitical tensions. In the short-term, our economy also faces immediate headwinds. These challenges and trends present both risks and opportunities to the economy.

36. MBIE can help you to work collaboratively across portfolios and with stakeholders, such as business and local communities, to achieve your immediate portfolio priorities and address these challenges.

Science, innovation and technology are critically important to New Zealand's future

37. Science, innovation and technology underpin New Zealanders' standard of living and wellbeing. They underwrite the productivity of key industries and contribute skills and knowledge to the creation of new ones.

38. In the context of increasing environmental pressures, particularly due to climate change, ageing populations, rapidly evolving technology, and increased geopolitical competition, science, innovation and technology have been identified by almost all developed countries as critical factors in national success. Such countries invest far more heavily in these sectors than New Zealand.

39. MBIE's view is that the New Zealand economy needs to transform over the next 25 years to deliver sustainable prosperity for current and future generations. To meet the multiple challenges it faces, New Zealand needs to export a more diverse set of products and services to a wider range of countries, producing them with lower emissions and higher rates of productivity. This cannot be achieved without much more science, leading to increased innovation and advanced technology, than we are currently undertaking.

Public and Private investment in R&D work together

The private sector is incentivised to invest in R&D but less than is optimal for the economy

40. The private sector is incentivised to invest in R&D as lower costs, higher quality, or new types of goods and services give them a competitive edge. However, because new knowledge is transferrable it can be hard for private sector firms to stop competitors from benefiting from their investment in R&D. In economics this is referred to as market spillover. Keeping trade secrets and securing intellectual property rights are two main ways firms look to overcome loss of proprietary knowledge, but measures cannot secure all the private benefits of knowledge.

41. Investment in R&D can also be risky, especially the further you move away from incremental improvements. Once firms invest beyond incremental improvements, they can face clusters of research that all need to be done, and be done successfully, to deliver returns on the investment. More radical innovation can also strand existing assets and previous investments, and the cost of scaling up and commercialising can be large. On the other hand, failing to innovate or adapt can render firms uncompetitive.

42. Government's interest is not in the survival or competitiveness of any one firm, but rather in at least some firms being competitive, increasing their offshore revenue, and employing more New Zealanders in well-paying jobs. A simple way of expressing this is to observe that R&D tends to privatise risk but socialise benefit. The benefits of R&D are all eventually experienced publicly, meaning government will always have a role in its provision.

Private investment in R&D, helped by predictable government support, is core to a thriving tech sector

43. The development of new, unique technologies via R&D is the lifeblood of a thriving technology sector. Performing R&D makes it more likely that a product or service will have novel technology that is harder to replicate, meaning they can command higher prices and make New Zealand firms more internationally competitive.

44. As noted, for good reasons, individual firms will tend to invest less in R&D than is good for the country as a whole. Government has a key role as a co-investor in business R&D, which it currently performs mainly through the RDTI, and also through some smaller grants and supports delivered via public research organisations. Government R&D supports have been shown globally to be successful at increasing the amount of R&D undertaken by businesses, and the current suite of supports is having similar effects in New Zealand.

45. One of the most important factors for the success of Government supports for business R&D is predictability. R&D projects often take several years to complete, and more time to result in successful products and services. Consistency of support over that time is key to firm's confidence in making decisions and has been highlighted as an important factor by the tech sector.

Public research is also necessary to support a thriving technology sector

46. By investing in public research that can be taken up and embedded across firms and industries, governments can help meet the gap in knowledge creation and generate larger benefits for the economy.

47. Due to their size and longer-term view, governments are better placed to manage the risk of investing in a wider range of research over time thereby increasing the flow of new knowledge into their economies. Governments have choices about the level and mix of R&D investment they make over time. For example, governments need to make judgements about the right mix between basic research that provides the fundamental building blocks for ground-breaking new technologies, and more applied research that has a clear path to application but provides a narrower impact.

48. There is a growing body of international evidence that R&D expenditure yields high rates of return, both to the organisation or sector performing the R&D and to the wider society and economy. A recent state-of-the-art study[2] estimated an annual economy-wide rate of return of at least 20 per cent, even under relatively conservative assumptions. A meta-analysis[3] of the literature found average rates of return to private R&D of at least 14 per cent and for public R&D of around 20 per cent.

49. New Zealand specific studies have found similar results for the benefits of R&D conducted in New Zealand. The estimated annual rate of return for New Zealand agricultural R&D is 17 per cent[4]. An analysis of New Zealand's total R&D expenditure over the period 1989-2021[5] found a minimum estimated economy-wide annual rate of return of 11 per cent (comparing favourably for estimates for Australia and the US of 10 per cent and 9 per cent respectively).

50. A government might also invest in R&D areas to support government priorities and core science services that span across economic, environmental, health, and societal domains, or it might have specific industry policy that drives how and where it focuses its R&D policy.

[2] Jones, B F & Summers L H (2020), "A calculation of the social returns to innovation"

[3] Frontier Economics (2023), "Rate of return to Investment in R&D"

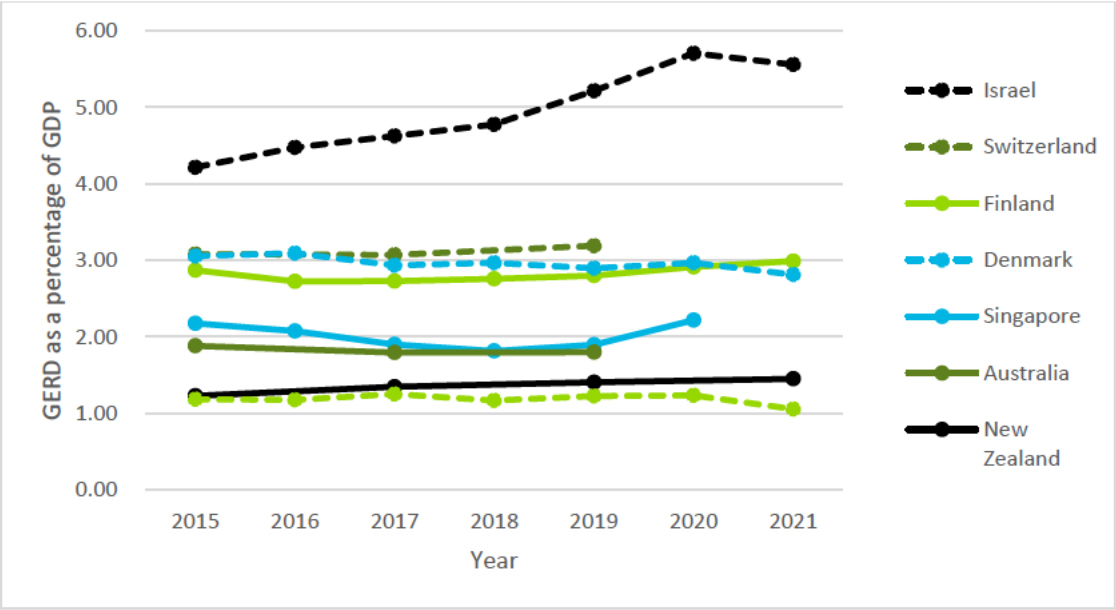
[4] New Zealand Treasury (2006), "The role of R&D in productivity growth: The case of agriculture in New Zealand: 1927 to 2001

[5] CSIRO Australia (2021), "Quantifying Australia's returns to Innovation"

Expenditure on R&D is growing but from a low base.

Expenditure on R&D

Figure 1: Total expenditure on R&D as a proportion of GDP (Source: OECD Main Science & Technology Indicators)

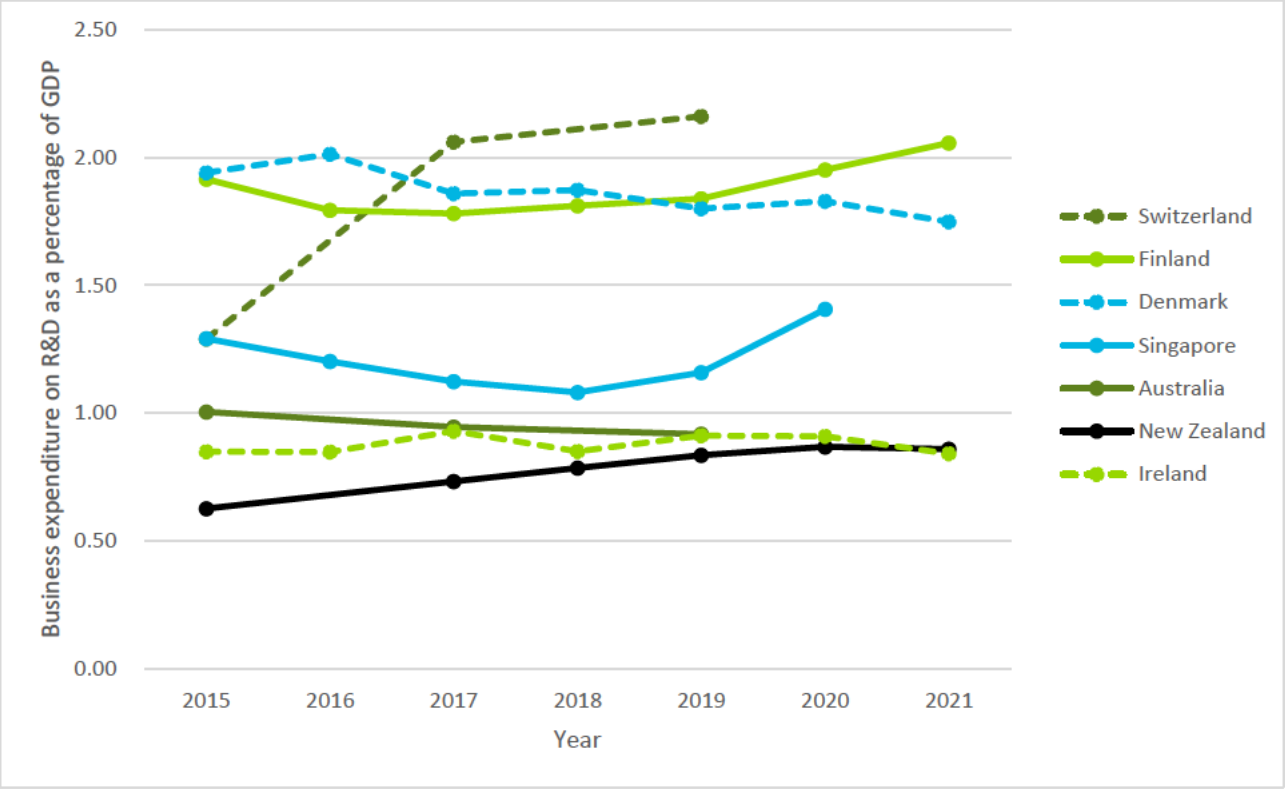


51. Expenditure on R&D provides the best available measure of how much R&D is performed in a country, sector or industry. New Zealand's expenditure on R&D is growing, but from a low base compared to other small, advanced economies. In 2021, New Zealand spent 1.45 per cent of GDP on R&D, compared to the OECD average of 2.71 per cent. Most advanced economies are above, or have serious plans to get above, three per cent of GDP. The comparator countries in the chart above are all wealthier than New Zealand by some measure, meaning that even those with similar or lower levels of proportional investment (Ireland, Singapore, Australia) are spending significantly more in real terms.

52. The gap between our R&D expenditure and that of our peers in other countries is particularly striking given that successive governments have expressed their ambition to diversify or transform the New Zealand economy to overcome a persistent productivity gap to the OECD average – a problem that comparator countries typically do not share. The Productivity Commission[6] has identified our level of investment in R&D as making up around 40 per cent of our productivity gap with other countries. Raising our R&D expenditure to international norms is one of the most important measures a Government could adopt to improve New Zealand's long-term productivity.

[6] Productivity Commission (2013), "Investigating New Zealand-Australia productivity differences: New comparisons at industry level"

Figure 2: Business R&D expenditure as a proportion of GDP (Source: OECD Main Science & Technology Indicators)



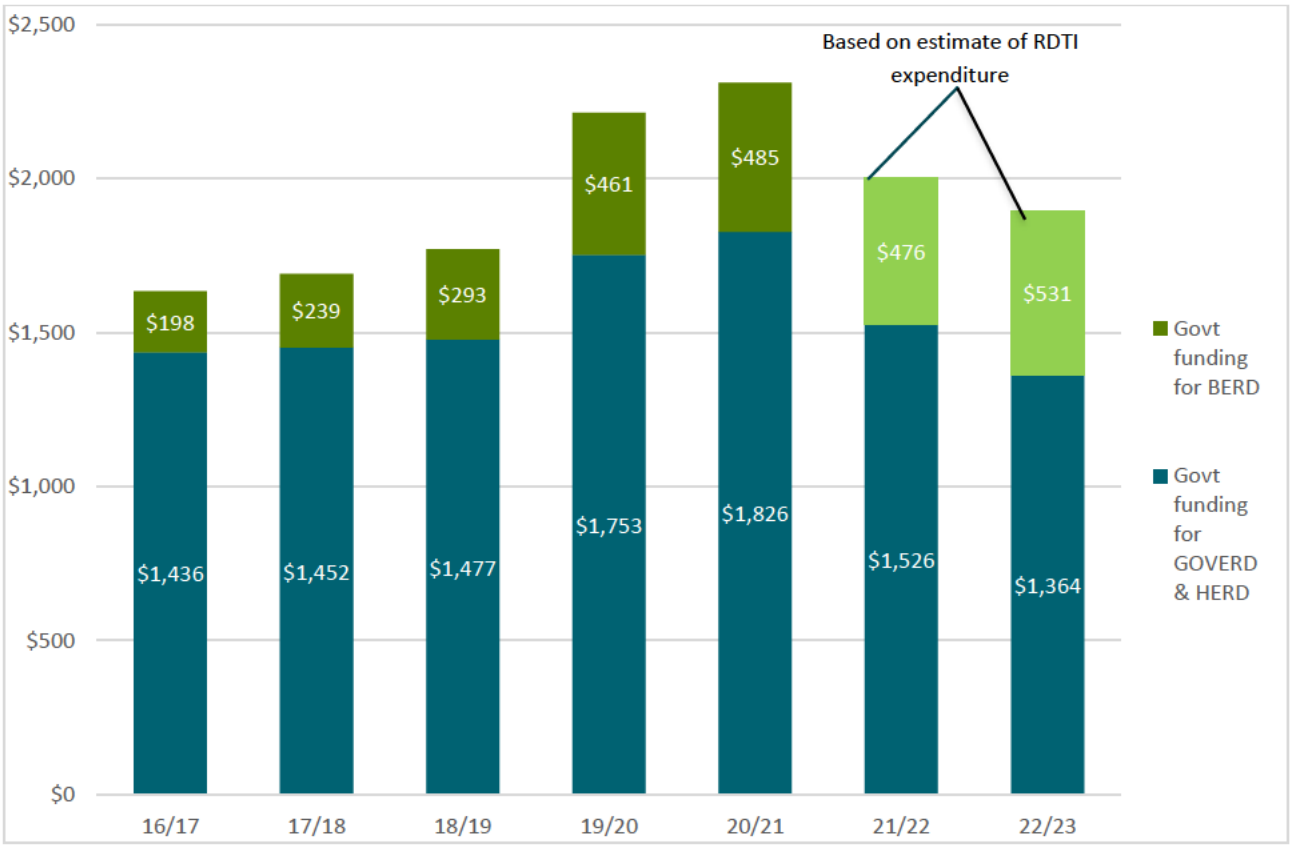
53. Business R&D has grown steadily over the last ten years and has been responsible for the majority of growth in R&D expenditure. The COVID-19 pandemic has had a clear effect on growth in Business R&D, and we are yet to see whether the rate of growth will recover to its pre-COVID trajectory. Growth prior to COVID is consistent with international trends for Business R&D growth, which suggests that this trend is likely to continue, but also that we need to at least maintain our current rate of growth in order to avoid falling further behind.

54. Real government funding for R&D has declined over the past two years, and funding for research in public research institutions (e.g., Universities and CRIs) is now lower than it was in the 2016/17 financial year. This is placing significant pressure on the financial viability of research organisations, and some CRIs, in particular. It will be increasingly difficult for us to retain critical research capability in both Universities and CRIs.

55. Over recent budgets government has prioritised the financial stability of the research institutions it owns (the CRIs). This has come at the expense of providing strategic support to areas of emerging research strength that have the potential to support the development of new industries.

56. The chart below disaggregates government support into funding for business (BERD) and funding for public research organisations (GOVERD and HERD).

Figure 3: Real government funding for R&D (2023 dollars, $m)



Source: MBIE analysis based on appropriations data

Our system lacks funding for advanced technology research that can support New Zealand's future technology sector

57. New Zealand spends one of the highest proportions of government R&D investment in the OECD on environmental and agricultural research. However, in real terms, these levels of investment would likely look comparable if our overall R&D investment was commensurate with other advanced economies. The 'gap' is mainly one of research into advanced technologies, which could form the bedrock of a growing, productive future technology sector for New Zealand.

58. New Zealand has areas of emerging and existing research excellence in fields such as space and aerospace technology, quantum technologies, advanced materials, medical technologies and biotechnology. Increasingly we are seeing these research areas spin out and support new firms with the potential to have global impact.

59. These technology areas, along with cross-cutting technologies such as artificial intelligence, reflect the emerging global economy and are examples of the types of capabilities New Zealand will need to invest in if it wants to remain an advanced economy over the longer term. In the near term these are all research areas serving rapidly growing global markets, and already underpin areas of significant industry potential in New Zealand.

60. Currently our research funding system provides limited funding to support these research areas, in contrast to the funding which we apply to our traditional economic strengths. New Zealand is highly unusual among OECD economies in this respect. Over recent years we have used fixed term funding to maintain and support these emerging technology areas, but these mechanisms are due to cease in

the near future or are not suitable for use on an ongoing basis. If we are unable to allocate research funding to these technology areas, we are likely to start losing the capability that we have, particularly where this is in high demand globally.

An increased supply of skilled people is needed to feed a growing technology sector

61. Your manifesto highlights the importance of skilled people to the technology sector, and commits to developing a smarter immigration system to keep us attractive in the global competition for talent. The tech sector, and other research-intensive firms, regularly highlight access to skills as being the single most important constraint on growth.

62. You have also committed to policies to grow domestic talent and improve the skills of young people coming out of the education system. Only a small proportion of school students achieve credits in digital technologies or STEM subjects. At university, the number of domestic students completing IT degrees (Bachelor's and above) is slowing. Businesses also often report that graduates are not work-ready. Like other sectors in New Zealand, most firms in the technology sector are small and can be hesitant to hire and invest in developing talent. This means fewer career opportunities.

63. There is a large opportunity to improve prospects for many groups in the domestic population if they can be trained with technology-specific skills at a variety of levels (from applied PhDs to less technical but still in demand roles like UX designers, support technicians, and software developers). Working with the Education sector to increase focus will be important to ensure that more New Zealanders can benefit from the growth of the technology sector.

Enabling regulation can be at the core of a more focussed approach to science, technology and innovation

Our recent innovation policy work has focussed on generic supports

64. While successive governments have stressed the importance of science, technology and innovation to the economy, in practice this has tended to be overshadowed by the need to manage the ongoing health and functioning of the publicly funded research system. This has resulted in the deferral of policy actions that are necessary to close New Zealand's productivity gap with the OECD average and diversify our industrial base.

65. Most of our innovation policy in recent years has been focused on the design or redesign of direct incentives (for example, grants and the RDTI). There is scope to streamline our other innovation interventions to ensure they are working well together.

There is significant potential in a more focussed approach, with enabling regulation at its core

66. We consider there is significant potential in an innovation approach that is aligned around technology sectors and clusters where New Zealand has the potential to have a competitive advantage, in line with the recommendations of the Productivity Commission's Frontier Firms inquiry. Work with the space and aerospace sector since 2015 demonstrates the potential of this approach.

67. Although businesses generally do not like regulation that constrains innovation or imposes excessive costs, and certainly not over-regulation, we believe that technology firms have a strong interest to see enabling regulation take shape as it provides the necessary permission and certainty to their future operations. Space, aerospace and genetic modification are three examples of high technology industries that need good foundational regulation to operate, and nimble regulators.

68. The Government's coalition agreements commit to liberalising genetic engineering legislation. This is one area in which enabling regulation, when combined with focussed policies around industry development, research investment, and skills development, could lead to a step change in the development of a high growth high productivity technology sector for New Zealand.

69. Other sectors where we see the potential for similar enabling regulatory regimes and focussed innovation policies include continuing work with the aerospace sector and the medical technology sector. Artificial intelligence is another area in which many other advanced economies are moving to develop governance and regulatory regimes, to provide assurance to consumers and the public that the technology is being used responsibly, and to provide visible permission space and general guidance to companies to expand and develop new technologies and applications.

Our public research system faces structural challenges and lacks important supports for advanced technology development

We lack the structures and organisations in our research system that are dedicated to transferring domestic and global research into innovative technology businesses

70. Growth-generating innovation systems typically have large scale research institutions and centres of expertise focused on technology research. Successful comparator Small Advanced Economies (for example, Singapore and Finland) have taken a deliberate, joined-up, and selective approach to developing these innovation systems.

71. New Zealand's technology and innovation system has big gaps compared to those overseas. There are opportunities to develop policies to encourage our public research organisations to focus further on innovative advanced technology. Funding settings could incentivise the development of important areas of technological research capability, and place collaboration with industry at the heart of that research. Easy to use pilot and scale-up facilities can encourage the growth of innovative technology firms. Aligning a critical mass of resources, deep research capability, private sector activity, and international engagement can provide a platform for accelerated, high value growth in the technology sector.

Our public research system faces enduring, structural challenges that are getting in the way of it delivering value to New Zealand

72. Declining real expenditure is not the only challenge facing the public research sector. Consultation on the Te Ara Paerangi programme revealed enduring, systemic problems, and widespread dissatisfaction. Of the 885 submissions received from the public, businesses, industry groups, researchers and research organisations, there was not a single submission claiming the system was working well. In addition to issues of funding, it identified that:

    - The system lacks focus, and delivers smaller results across many areas, rather than doing fewer things well.

- The system is fragmented, with poor visibility of the effectiveness of current investments, and lacks direction and strategy-setting.
- The impact of research is reduced because there are weak connections between those who conduct research and those who use it.
- Poor integration between research organisations, and wasteful or unnecessary competition for research funding, further reduce system effectiveness and impact.
- Investment in research by, with, or for Māori is disproportionately low.
- Our research workforce is under pressure, lacks diversity, and career paths are unstable.

73. A high proportion of consultees said that Government had given insufficient attention to the Treaty of Waitangi in policy governing the research system, and that research investments gave insufficient expression to the Treaty.

74. The subsequent reform programme was largely predicated on increasing expenditure. In an increasingly constrained fiscal environment this may be more difficult, but some of the issues identified will still need to be addressed for the research sector to function effectively.

Science, innovation and technology have an important international dimension

75. Research has always been a global enterprise, and mechanisms for international scientific collaboration are well-established. Because of our small population, and correspondingly smaller research community, New Zealand is more reliant on global research to fill important knowledge gaps than larger countries. Our innovators also need to operate in global markets. The pace of change in global technologies means that proving an innovation in New Zealand before taking it to the world is not a useful strategy for innovative businesses. Access to offshore capital and market connections have become key ingredients for the success of New Zealand technology companies. Yet despite these imperatives, New Zealand is not as well-connected globally as other small, advanced economies.

76. At the same time, the global environment for research and innovation collaboration has become more complex. Technology is now at the centre of geopolitical competition, and large economies are actively seeking to structure technology markets in their favour. In this more contested environment, national security considerations have become an increasing part of technology policy globally, and New Zealand is no exception. New Zealand's existing political, security and trading relationships provide opportunities for us to do well in the emerging global technology environment, but as states seek to intervene in their own markets, these will require an increasing amount of effort to maintain and exploit.

77. Some New Zealand research institutions have a significant leadership role in their fields. Government has a role in promoting and funding our world-leading research capability to act as a lighthouse to attract more research talent and to create pathways to markets for the innovations arising from that research.

4. Portfolio responsibilities

Legislation

78. You have certain functions, duties and powers under several Acts of Parliament as Minister of Science, Innovation and Technology. These do not usually require your daily attention, so we will brief you on them as needed. We have summarised Acts you are responsible for below and have listed your more significant functions, duties and powers.

Research, Science, and Technology Act 2010

79. This Act establishes the purposes the government's research, science and technology for which funding can be allocated and the processes for allocation.

80. Under this Act you are responsible for:

- Establishing and appointing members of the Science Board. The Science Board is responsible for making independent funding decisions on SI&T.
- Setting criteria for the assessment of funding applications. The Science Board must make funding decisions according to these criteria.

Depending on the fund, some funding decisions are made by the Science Board, and others are made by you, MBIE, or other entities.

Crown Research Institutes Act 1992

81. This Act establishes your role as one of the shareholding Ministers responsible for the CRIs. You are responsible for the following CRIs (see Annex 1 for more detail):

- AgResearch Limited
- The Institute of Environmental Science and Research Limited (ESR)
- The Institute of Geological and Nuclear Sciences Limited (GNS Science)
- Manaaki Whenua Landcare Research New Zealand Ltd (Manaaki Whenua)
- The National Institute of Water and Atmospheric Research (NIWA)
- The New Zealand Institute for Plant and Food Research Limited (Plant and Food Research)
- The New Zealand Forest Research Institute Limited (Scion).

Callaghan Innovation Act 2012

82. This Act established Callaghan Innovation as a Crown entity with the aim of supporting science and technology-based innovation and its commercialisation by New Zealand businesses to improve their growth and competitiveness.

Income Tax Act 2007 and Tax Administration Act 1994

83. The Minister of Science, Innovation and Technology and the Minister of Revenue are jointly responsible for the policy settings of the RDTI. The RDTI was introduced from the 2019/20 tax year for businesses conducting eligible R&D and enacted by the Taxation (Research and Development Tax

Credits) Act 2019. MBIE and Inland Revenue provide advice about the scheme. Callaghan Innovation also plays a critical role in the delivery of the RDTI through assessing the eligibility of R&D activities.

Measurement Standards Act 1992

84. This Act provides for the use of uniform units of measurement for physical quantities throughout New Zealand, and for the establishment and maintenance of standards of measurement of physical quantities. The Measurement Standards Laboratory of New Zealand operates as a business unit of Callaghan Innovation and is funded by a separate appropriation. Under the Act, the Minister shall provide for the use throughout New Zealand of uniform units of measurement of physical quantities, and for the establishment and maintenance of standards of measurement of physical quantities.

Building Research Levy Act 1969

85. This Act allows for a levy to be drawn from building and construction work and then paid to an industry organisation to fund building and construction research. You are the Minister responsible for the levy and may prescribe the rate of levy after consulting the New Zealand Master Builders' Federation Incorporated and the Building Research Association of New Zealand Incorporated (BRANZ). The latter entity receives the levies prescribed under this Act.

Heavy Engineering Research Levy Act 1978

86. This Act allows for a levy to be drawn from producers and importers of steel goods and then paid to an industry organisation to fund heavy engineering research. You may prescribe the rate of levy after recommendation from The New Zealand Heavy Engineering Research Association (Incorporated) and consultation with the New Zealand Manufacturers and Exporters Association Incorporated. The latter entity trades as “The Manufacturers Network”. The Heavy Engineering Research Association receives these levies. Please refer to the Science, Innovation and Technology work programme (Section 57) for the action required to amend this Act.

Wheat Industry Levies Act 1989

87. This Act allows for a levy to be drawn from wheat growers, flour millers, and purchasers of flour to be supplied to various industry organisations to fund research. United Wheat Growers (NZ) Limited determines the levy and reports to you annually about how it is spent.

Royal Society of New Zealand Act 1997

88. This Act continues The Royal Society Te Apārangi as an organisation with the objective of advancing and promoting science, technology, and the humanities in New Zealand.

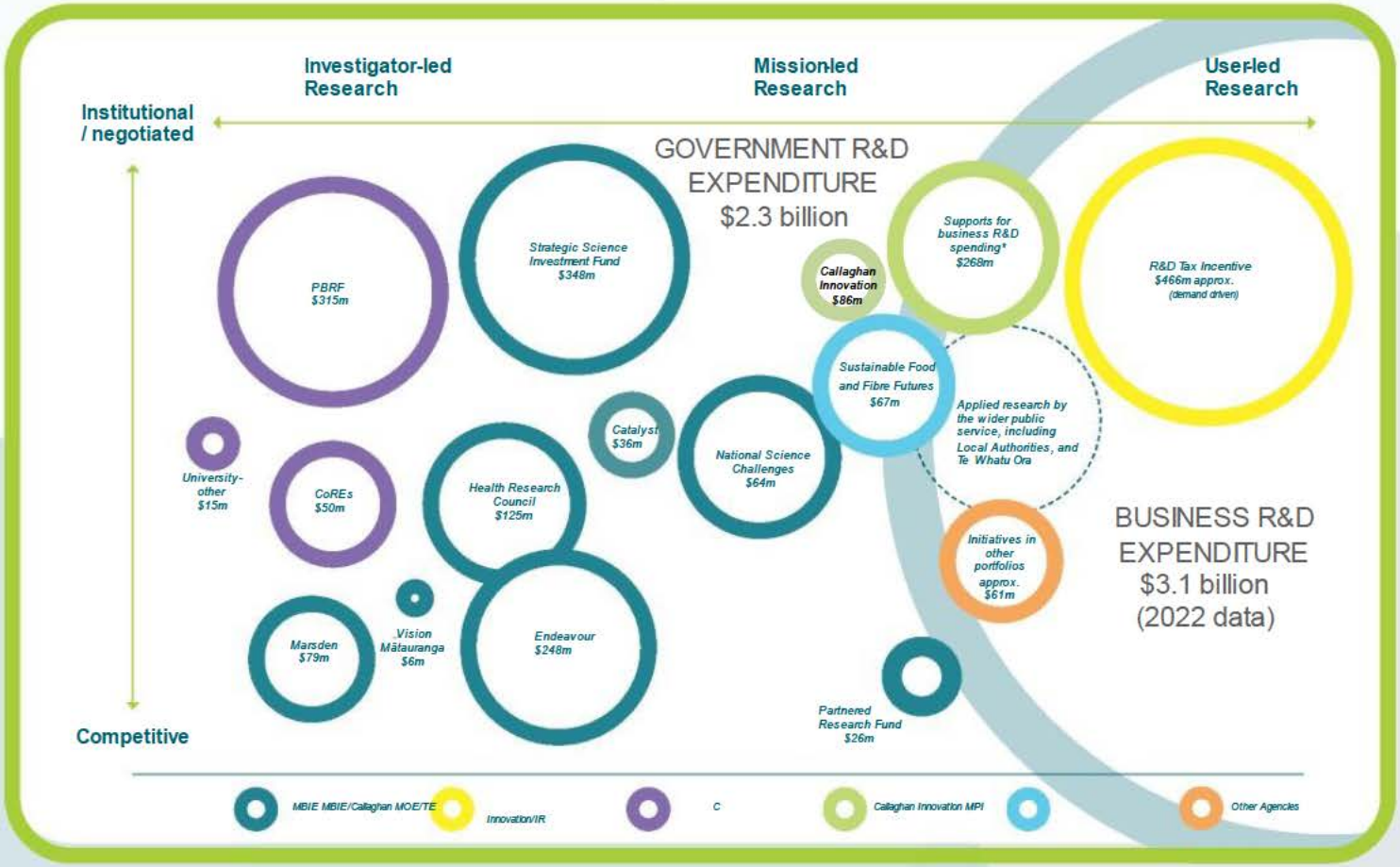
Unsolicited Electronic Messages Act 2007

89. Regulates the sending of unsolicited commercial electronic messages, requires information about who authorised a message and how to unsubscribe, and prohibits address-harvesting.

Contract and Commercial Law Act 2017 (Part 4)

90. Establishes a framework for contracts, sale of goods, e-transactions etc. Part 4 facilitates the use of electronic technology to meet legal requirements.

Science Investment based on 2023/24 Financial Year



Dollar amounts represent appropriations used in the GBOARD calculation
GBOARD = Government Budget outlays and appropriations on R+D. Business R+D Expenditure from Business R+D survey.
** delivered by Callaghan Innovations, including R&D grants, services and repayable loans*

Funding and Ownership

Research and Development Tax Incentive

91. The RDTI (estimated to cost $466 million in 2023/24) is government's main initiative to incentivise increased business investment in R&D and encourage more New Zealand businesses to undertake R&D.

92. Delivering the incentive through the tax system has the benefit of being broad-based (all businesses undertaking eligible R&D can access it) and rules-based (providing businesses with certainty).

93. You are responsible for the relevant appropriations and policy settings, while the tax incentive is delivered through the tax system. MBIE, Inland Revenue and Callaghan Innovation are collectively responsible for the RDTI:

    - MBIE has overall policy responsibility, with you as lead Minister.
    - Inland Revenue is responsible for tax policy and for the delivery of the scheme through the tax system.
    - Callaghan Innovation is an advisor to IRD, with a role to assess whether businesses' activities meet the definition of R&D under the legislation.

94. After some early implementation challenges the RDTI is now operating well, seeing an increase in business R&D, and is highly valued by R&D performing businesses. There is a statutory requirement to conduct an independent evaluation of the impact of the programme after five years (April 2024).

95. The In-Year Payments programme provides eligible RDTI recipients with access to their tax credit closer to the time that they incur R&D expenses. This helps these businesses improve cash flow and removes one of the barriers to engaging in R&D.

96. In-Year Payments are due to be implemented by IRD as an integral part of the RDTI by April 2025. In the meantime, from March 2023, MBIE has implemented a temporary scheme to provide In-Year Payments in the form of a loan which is repayable upon receiving the tax credit. Providing this support in the form of a loan has entailed a high level of complexity and implementation challenges. We will provide you with further advice about the status of this programme and the transition to provision of In-Year Payments through the tax system shortly.

Strategic Science Investment Fund

97. The Strategic Science Investment Fund (SSIF) ($348 million) supports longer-term underpinning infrastructure and programmes for mission-led science. An SSIF Investment Plan sets out what the Government is seeking from SSIF investments. Just under $200m of SSIF programmes are tied to specific CRIs and their respective missions. Others fund specific research areas across organisations; for example, Antarctic research, and genomics research. The infrastructure category of the appropriation funds large scale research infrastructure, such as the research vessel Tangaroa.

National Science Challenges

98. The National Science Challenges (NSCs) ($64 million) were established in 2014 and are a set of eleven mission-led research programmes which aim to address issues of national significance to New Zealand over ten years. The NSCs are due to conclude at the end of their contracts in mid-2024.

Endeavour Fund

99. The Endeavour Fund ($248 million) is the Government's main competitive, mission-led science investment, designed to allocate funding to support research, science or technology that has the potential to positively transform New Zealand's economic performance and the sustainability and integrity of our environment, help strengthen our society, and to give effect to the Vision Mātauranga policy.

Marsden Fund

100. The Marsden Fund ($79 million) is the Government's major investigator-led research contestable fund. Decisions on grants are made by the Marsden Council, which you appoint. The Marsden Fund is administered by the Royal Society Te Aparangi on behalf of MBIE.

Catalyst Fund

101. The Government directly invests in international science partnerships through the Catalyst Fund ($36 million). The Fund supports activities that initiate, develop and foster collaborations leveraging international science and innovation for New Zealand's benefit. MBIE is the decision-maker for the Catalyst Fund.

102. The Government develops and implements opportunities to strengthen New Zealand's international connections across its science and innovation systems through bi-lateral and multi-lateral science and technology partnerships. In 2021 MBIE signed a new research and innovation cooperation agreement with its British counterpart and recently secured a (to be announced) joint commitment in quantum technology development. MBIE is in discussion with United States counterparts to develop strategic cooperation regarding Antarctica, artificial intelligence and quantum technologies. These discussions are linked with the United States-New Zealand Strategic Technology Dialogue centred on national security and defence R&D. There are also longstanding investments with both China and Singapore and MBIE has recently committed with Japan to a science and technology joint collaboration that brings in new partners across south-east Asia.

103. In 2022 the Government secured New Zealand's Association to Horizon Europe, the world's largest research funding programme with a budget of $160 billion over seven years. Association allows New Zealand research organisations and private firms to take part in Horizon Europe Pillar 2, "Global Challenges and Industrial Competitiveness", whose explicit aim is to boost technological solutions to major global challenges through incentivising large-scale R&D programmes between public researchers, multinational industry, and major public service end-users such as in medical technology, aerospace, cyber, biosecurity, hazard resilience and local government. New Zealand participation delivers not only frontier science and technology exposure but also integration with the European Intellectual Property and regulatory environment.

104. Catalyst also funds international Space R&D, primarily in advanced materials and remote sensing capabilities with Germany and the United States (NASA). This is described in further detail in your separate briefing for the Space portfolio.

Digital Technology Sector programmes

105. Two groups of exporters are supported by these programmes – the Game Development, and Software as a Service (SaaS) sectors. The new Game Development Sector Rebate ($40 million per

annum) supports the development and growth of the local sector, it targets mid-to-large scale game development studios with a 20% rebate on eligible expenditures. Run by NZ On Air, the scheme is being tested now in a pilot phase which will see first claims paid out in December 2023. Beyond the pilot, year one applications and claims are scheduled to be processed before June 2024. A complementary programme is offered by CODE (the Centre of Digital Excellence) which supports early-stage game development studios with contestable grants and mentoring ($2.25m per annum).

106. SaaS firms are directly supported by the kwiSaaS initiative at New Zealand Trade and Enterprise. KiwiSaaS includes a community (connecting 500+ companies, founders, and leaders through events, peer-support, and information), a SaaS Academy involving upskilling and reskilling, and a SaaS benchmarking tool. Funding for kiwiSaaS ends in June 2025. Both Game Development and SaaS firms are supported indirectly through several skills pipeline initiatives including an awareness raising campaign (TechStep) targeting New Zealand's potential future tech workforce and an international marketing campaign (See Tomorrow First) with funding expiring in June 2024. All of these initiatives are connected with the Digital Technologies Industry Transformation Plan and we recommend an early discussion with you about the future of these programmes.

Tāwhaki Joint Venture

107. You are the responsible Minister for the Tāwhaki Joint Venture in Canterbury. Tāwhaki was established in 2021 as a joint venture between Kaitorete Limited (Te Taumutu Rūnanga and Wairewa Rūnanga – the two hapū either side of Kaitorete Spit) and the Crown. That same year, the Crown paid $16 million to purchase the land (the site) at Kaitorete for Tāwhaki. The land is held by Tāwhaki's agent Kaitorete Land Holding Limited of which you as the Shareholding Minster hold 50 per cent of the shares of the company. The project has dual objectives to heal and rejuvenate the whenua on Kaitorete Spit in Canterbury and advance New Zealand's aerospace industry through the development of aerospace activities and R&D facilities on the site.

108. Tāwhaki is responsible for the delivery of a business case to shareholders, including Cabinet, in the middle of 2024. This business case will set out options for the future use of the site, including space launch facilities and other associated infrastructure.

Talent and Science Promotion

109. Talent and Science Promotion funds engagement between scientists and the public by contributing to the development of talented, skilled individuals and their organisations. Initiatives include New Zealand's research fellowships schemes.

Te Pūnaha Hihiko – Vision Mātauranga Capability Fund

110. Te Pūnaha Hihiko – Vision Mātauranga Capability Fund is aimed at enabling the implementation of Vision Mātauranga policy across the Government's investments in SI&T. It invests about $4 million each year into projects that strengthen capability, capacity, skills and networks between Māori and the science and innovation system. Projects increase the understanding of how research can contribute to the aspirations of Māori organisations and deliver benefit for New Zealand.

Expanding the Impact of Vision Mātauranga

111. This initiative focusses on creating a sustainable Māori research and science workforce and making research fit-for-purpose for Māori people, Mātauranga Māori and Rangahau Māori.

Health Research

112. The Health Research Council is responsible to the Minister of Health, but most of its funding is through Vote Business, Research and Innovation ($125 million), with the Minister of Science, Innovation and Technology responsible for that funding. Funding is administered to the Health Research Council through a Crown Funding Agreement with MBIE. A Memorandum of Understanding is in place between the two responsible Ministers.

113. The Council funds both investigator-led and mission-led research. Most funding is awarded through its annual contestable Project (short term) and Programme (longer term) grants and through investment streams aligned with key Government priorities.

Other Support for Business Innovation

114. Callaghan Innovation administers several programmes that complement the broad-based RDTI by providing direct and targeted financial support to businesses to encourage innovation:

- The New to R&D Grant ($22.5 million) subsidises the cost of building R&D capability within businesses that have not performed R&D before. It provides a higher rate of support (up to 40 per cent before tax versus 15 per cent after tax) but is only available to businesses that have not performed R&D and only for up to two years or $400,000 (whichever comes first). It is designed to increase the number of businesses engaged in R&D across the economy by helping them build the capabilities necessary to conduct R&D over the longer term.
- The R&D Student Grant ($15 million) subsidises the cost of employing a current or recently graduated student on a R&D project. It has three schemes: Experience Grants (summer interns), Fellowship Grants (PhD or Masters students), and Career Grants (recent graduates). The objective is to build the base of people with R&D skills.
- The Arohia / Innovation Trailblazer Grant ($25 million in 2023/24, rising to $50 million in 2025/26) subsidises the cost of non-R&D activities for businesses likely to generate significant spill over to the rest of the innovation system and the economy more broadly, either by pushing out the global innovation frontier themselves (creating a trail for other businesses to follow) or by enabling other businesses to push out the global frontier. For example, it might support businesses that are seeking to establish the viability of a new market or business model, thereby generating knowledge useful to others seeking to do something similar. It has two schemes:
  - Full Grant: up to $4 million to cover 30 per cent of the cost of non-R&D activities for businesses with opportunities that have proven potential.
  - Seed Grant: up to $25,000 to cover 50 per cent of the cost of building the evidence necessary to apply for the Full Grant.

Commercialising Public Research

115. The Commercialisation Partner Network ($6 million) was established in 2010 to share commercialisation expertise among public research organisations. There are currently two commercial partners:

- Return on Science (run by the University of Auckland)
- KiwiNet (a collaboration of the other New Zealand universities, all the CRIs, Cawthron Institute, Malaghan Institute, and the Health Innovation Hub).

116. The PreSeed Accelerator Fund, commonly referred to as PSAF or PreSeed ($9 million) was established in 2003 and co-funds early-stage commercialisation activities from publicly funded research by CRI and universities. PreSeed helps researchers to develop opportunities to attract private investment that prompts further growth.

Other Government agencies' investment in research

117. The Tertiary Education Commission administers the Performance-Based Research Fund ($315 million) and Centres of Research Excellence ($50 million), which are both directed at Tertiary Education Organisations.

118. Centres of Research Excellence (CoREs) are inter-organisational research networks working on commonly agreed researcher-led, curiosity-driven programmes. They are funded through a contestable process that considers research excellence, benefits to New Zealand, outcomes for tertiary education and the governance/management strength.

119. The Performance-Based Research Fund (PBRF) is a performance-based funding system to encourage and reward excellent research in New Zealand's degree-granting organisations.

120. The Ministry of Primary Industries co-invests in industry-led research and innovation in New Zealand's food and fibre sectors through the Sustainable Food & Fibre Futures Fund ($67 million).

121. Several departments fund mission-led research to support their own activities, including the Department of Conservation ($22 million), the Ministry for the Environment ($1.5 million), and the Ministry for Primary Industries ($44 million).

122. The Ministry of Foreign Affairs and Trade has a significant interest in New Zealand's relationships with the major science powers, especially as regards Antarctica, New Zealand's Association to Horizon Europe, and MBIE's research and policy work around sensitive technologies and shaping international norms and standards in science.

Advisory Bodies

123. There are several sources of advice in the SI&T system.

The Royal Society Te Apārangi

124. The Royal Society Te Apārangi is an independent, non-government organisation with a key role as New Zealand's academy of sciences. Its core purpose is the advancement and promotion of science, technology and the humanities in New Zealand. The Royal Society's broader functions include providing expert advice on important public issues for the Government and the community. The Royal Society also administers several funds on your behalf, including the Marsden Fund and the Fellowships for Excellence.

The Health Research Council

125. The Minister of Health is the Minister responsible for the HRC, whose statutory functions include advising the Minister of Health on national health research policy and advising on health research priorities for New Zealand.

MBIE Chief Science Advisor and Departmental Science Advisors

126. MBIE's Chief Science Advisor Dr Gill Jolly, leads the Science Leadership team which includes fellow Departmental Science Advisors. The team:

- provides scientific leadership within MBIE in areas requiring scientific depth
- is part of the Prime Minister's Chief Science Advisor forum, providing connectivity between a variety of Government agencies and ministries around science-related issues.

5. Immediate Decisions

127. The table below sets out immediate, urgent decisions we would like to discuss with you.

Topic	Description	Driver	Timing
ESR Kneperu redevelopment	ESR's Implementation Business Case was approved in-principle in early October 2023. The decision was made in principle as ESR had not yet agreed the final terms of its contract with its preferred supplier. Final agreement from Ministers is required for ESR to enter into contracts Commercial Information	Current facilities are functionally obsolete and have operational risks. The building needs to be replaced to meet health and safety standards.	Mid- December 2023
Crown Research Institute (CRI) Annual Meetings	All CRIs are required to hold an annual meeting. Shareholding Ministers, or their proxy, need to attend the meeting to vote on the resolutions or by written resolution in lieu of holding an in-person meeting (preferred approach). A briefing will be provided to agree the written resolutions for the CRI AGMs.	To comply with the Crown Research Institute Act 1992.	By 31 December 2023
Summaries of CRI performance and tabling of Annual Reports	To provide shareholding Ministers with 2022/23 performance summaries for each CRI. Minister of Science, Innovation and Technology is asked to table the CRI Annual Reports in the House of Representatives.	To comply with the Crown Research Institute Act 1992.	As soon as practicable after the House resumes
Funding for GeoNet and the National Seismic Hazard Model	GeoNet and the National Seismic Hazard Model have a significant funding gap from 1 July 2024, with negative implications for the financial viability of GNS Science if not addressed. You will need to engage with other interested Ministers to agree a sustainable model to steward these services	As one of the shareholding Ministers for GNS Science.	Before budget process
Artificial Intelligence work programme and UK AI Safety Summit	MBIE is working on a cross-agency AI work programme, alongside supporting priority international engagements with MFAT. In relation to the UK's recent AI Safety Summit, NZ participation was requested on their Expert Advisory Panel on AI science. We will brief you on the wider context, and our recommended representative for the UK's panel.	While the UK have appreciated the delays associated with the NZ election, a Ministerially endorsed panellist is overdue	December
Health Research funding	MBIE and Ministry of Health officials will be preparing advice to you and the Minister of Health on appropriate support for non-contestable capability funding.	The HRC Act constrains HRCs ability to make non-contestable funding decisions.	Late November
Non Departmental Appropriation Report – Science, Innovation and Technology portfolio	The *Non-Departmental Appropriations Report Science, Innovation and Technology portfolio for the year ended 30 June 2023* covers spending for SI&T related non-Departmental appropriations with reportable performance information within the Business, Science and Innovation Vote. You are required to present the report to the House of Representatives as soon as possible after the commencement of the next session of Parliament.	Public Finance Act 1989 - section 19B(2) and 19B(3)	As soon as possible after the commencement of the next session of Parliament

6. Science, Innovation and Technology work programmes

128. The following table sets out the major work programmes already in place, on which we will seek to engage you at your convenience.

Programme	Description	Action/next step
Te Ara Paerangi	The previous government established Te Ara Paerangi, a major programme of reform to the SI&T system. The programme consists of a number of distinct pieces of work, some of which are noted below.	We would welcome an early conversation with you on the future of this initiative.
Endeavour Fund	Preparing for 2024 investment round. Develop advice on revisions to Smart Ideas.	Publication of 2025 investment plan and Gazette Notice.
Strategic Science Investment Fund Programmes – Contracts	Extending CRI and Independent Research Organisation Strategic Science Investment Fund contracts.	Approval of contract extension by Deputy Secretary Labour, Science, and Enterprise. Publication of 2024 Investment Plan.
Antarctica Platform Reinvestment	Developing and assessing the platform plan to enable re-investment in the Antarctica Platform.	Publication of 2024 Investment Plan.
Partnerships	Review of Leather and Shoe Research Association, Kiwifruit and Plant Photobiology partnership contracts.	Sunset fund, final three contract reviews completed by June 2024.
Genomics Aotearoa	Implement recommendations of Genomics Aotearoa platform review.	Current contract concludes in December 2024, work will begin in 2024 on the next contract with Genomics Aotearoa.
eResearch	Work on future contracting requirements for New Zealand eScience Infrastructure and Research Education Advanced Network of New Zealand in light of a business case to develop a Digital and Data Research Institute business case. Contracting arrangements with NeSI and REANNZ end June 2024,	Determine what the next contracting arrangements looks like.
New Zealand Research Information System	Develop an information system to allow significantly improved access to data on research system performance.	Address current technical issues.
National Science Challenges	Contracts end 30 June 2024.	Support wind-down of contracts.
National Research Priorities	An independent panel has been established to recommend a set of research priorities for New Zealand. The panel has met and is preparing advice for government.	Consider advice on the policy and potential next steps. Consider the panel's advice on potential research priorities.

Programme	Description	Action/next step
Refresh of innovation funding mechanisms complementing the R&D Tax Incentive	Ongoing work to increase the availability of the RDTI by establishing the in-year payment scheme. Design and implementation of new R&D and innovation grant schemes to support firms and activities not covered by the R&D Tax Incentive.	Consider advice on changes to in-year payment loan maturity.
Horizon Europe	*Association to Pillar Two (Global Challenges and European Industrial Competitiveness) of Horizon Europe, the EU's research framework programme.* Treaty legislation was presented to the House from Select Committee in August 2023.	Implementing the top-up funding mechanism, engage with Eu**ropean Union's** Programme Committees and policy fora.
Support bilateral research, science and innovation agreements with Japan, China, Korea, Singapore, the UK, USA, Australia, EU and Germany.	Negotiation of cooperation/joint funding arrangements with China, Japan, and the United States' National Science Foundation. Develop joint collaboration Programmes with Australia, Singapore, the United Kingdom and Germany.	Various ongoing milestones to agree work programmes and support ongoing and future investments.
International representation	You will have invitations to join Ministerial summits in February 2024 (the European Commission on research security) and April 2024 (the OECD Global Technology Forum).	Consider Minister's travel options for early 2024, with preferences ideally known before Christmas.
RNA Research Platform	Establish the Strategic Science Investment Fund Ribonucleic Acid Development Platform.	Finalise contract and work with the hosts on steering group appointments.
Giving effect to Te Tiriti o Waitangi	Work Initiatives to give effect to Te Tiriti in the SI&T system, including implementation of the Te Tiriti policy statement.	Conclude investment processes in the 'Expanding the Impact of Vision Mātauranga' funds.
Workforce initiatives	Initiatives to attract and develop a skilled and talented workforce. Expanded research fellowships will open for applications in 2024. A new applied doctorates scheme will seek expressions of interest from potential hosts in late 2023.	Finalise contracting arrangements for the provider of the new fellowship scheme by November 2023. Policy decisions on contracting for applied doctorates.
Support for Pacific researchers	Initiatives to improve the opportunities for the participation of Pacific peoples in the SI&T system.	Ongoing.
Wellington Science City	Construction of three adaptable, resilient, multi-institution Science, Innovation and Technology hubs that will improve collaboration between researchers, CRIs, universities and industry, and their use of equipment and facilities..	Mīmiro Collaboration and Engagement hub and Rōpū Māori groups being set up to enhance connectivity across the Wellington Science City hubs.
Aerospace Strategy	MBIE has committed up to $11.5 million to establish a distinct New Zealand approach to aerospace and implement the goals of the Strategy for the sector by 2030.	Up to $3.5 million fund design to support R&D, up to $3 million for workforce development, and up to $5 million to build CAA advanced aviation capability.

Programme	Description	Action/next step
Monitoring and steering science, innovation and technology funders (Health Research Council, Royal Society New Zealand)	Ensure our science, innovation and technology funders are delivering the services and having the impact as sought under their funding agreements.	Negotiate Health Research Council five-year Crown funding agreement. Commercial Information
Monitoring SI&T Crown Entities	Provide ownership support including the monitoring of performance of SI&T related Crown Entities.	Upcoming milestones for Crown Entity monitoring are detailed in Annex 1.
Geohazards	Support the National Emergency Management Agency to secure sustainable funding and accountability arrangements for GeoNet and the National Seismic Hazards model.	Consider advice to the Minister of Emergency Management on future accountability arrangements, in your role as shareholding Minister of GNS.
Weather forecasting system review.	Review settings for the provision of forecasting science, research, data, and advice.	Consider advice on the interim review report in December. You may wish to accelerate this review.
Next steps on research system design	Various structural problems remain in the research system, including lack of transparency, diffuse decision-making, unclear accountabilities, and confused accountability arrangements.	Consider advice on next steps for possible changes to some policy settings in the research system.
Artificial Intelligence cross-government work programme	Work with other agencies to strengthen New Zealand's ability to benefit from AI technologies and identify significant gaps that warrant further consideration. Partnering with DIA who are focused on public sector use of AI.	Cross-agency survey being analysed now. AI briefing to you in December.
Game Development Sector Rebate	Funded in Budget 2023, the rebate for game development firms is live now with funding flowing in the next weeks to larger studios involved in a pilot phase. The rebate seeks to catalyse growth and job creation in mid-to-large-sized game development studios.	Pilot phase finishing in December. All other applicants registering now. Digital tech sector briefing to you shortly to support an early conversation with you.
The International Tech Story – "See Tomorrow First"	Funded in Budget 2022, and jointly led by NZTE, NZStory and NZTech, this is the international activation of a unified, national brand for New Zealand's tech sector to attract foreign investment and talent. The brand is currently being deployed through digital media campaigns and trade events in the United Kingdom, Singapore, Australia and North America.	Digital tech sector briefing to you shortly to support an early conversation with you. Funding for this initiative expires in Jun 24.
TechStep	Funded in Budget 2022, the Auckland Business Chamber is leading a national digital and event-based campaign to attract more New Zealanders into careers in the tech sector.	Digital tech sector briefing to you shortly to support an early conversation with you.
kiwiSaaS	A community of New Zealand Software-as-a-Service (SaaS) leaders, founders and employees to help them build peer-to-peer connections and upskill in order to lift the SaaS sector's growth rate. The project is also working on opportunities to reskill individuals from other sectors into the SaaS sector. The community is made up of around 1,400 members.	Digital tech sector briefing to you shortly to support an early conversation with you.

Programme	Description	Action/next step
Centre of Digital Excellence (CODE)	Ongoing funding for CODE's nationwide provision of support for expansion of early-stage game development studios.	Digital tech sector briefing to you shortly to support an early conversation with you.
Digital skills programme	Ongoing funding for CODE's nationwide provision of support for expansion of early-stage game development studios.	Digital tech sector briefing to you shortly to support an early conversation with you.
Start-Up Council recs and report-back	The UpStart report set out recommendations to become a global Start-Up leader.	We would welcome an early conversation with you and the Minister of Economic Development on this.

7. How MBIE assists you

129. MBIE assists you in fulfilling your portfolio responsibilities through its roles in:

- **Science, Innovation and Technology policy** as well as advice on the leadership and development of the Science, Innovation and Technology system.
- **management of Science, Innovation and Technology appropriations** within Vote Business, Science and Innovation, including planning and prioritising funding.
- **Crown entity ownership and monitoring** including commenting on draft statutory planning documents, developing and communicating Government's ownership priorities and objectives for CRIs, and monitoring CRI performance.
- **international science and innovation partnerships** including advice on investments, developing international partnerships, and providing support for your missions and international meetings.
- **innovative partnerships** including advice on promoting research and development intensive businesses activity in New Zealand (from both domestic and international firms) and co-invests with international partners into New Zealand-based R&D.

Key MBIE officials

130. The table below sets out the key MBIE officials who will support you in this portfolio.

Key MBIE officials in Science, Innovation and Technology

Contact	Role	Priority Area	Contact details
Carolyn Tremain 	Secretary, Ministry of Business, Innovation and Employment	All	Privacy of natural persons
Nic Blakeley 	Deputy Secretary, Labour, Science and Enterprise *	All	Privacy of natural persons

Danette Olsen 	General Manager Science System Investment and Performance	Science Investments	Privacy of natural persons
Iain Cossar 	General Manager, Science Innovation and International	Science, innovation and international, policy	Privacy of natural persons
Willy-John Martin 	Director Māori Research Science and Innovation	Māori Research Science and Innovation	Privacy of natural persons
Prue Williams 	General Manager, Future Research System	Science policy	Privacy of natural persons
Michael Bird 	General Manager, Entity Performance and Investment, Labour, Science and Enterprise	SI&T entity performance and monitoring, including board appointments and statutory functions	Privacy of natural persons
Gill Jolly 	Chief Science Advisor, Labour, Science and Enterprise	Science advice and science sector relationships	Privacy of natural persons

Annex 1: Crown Research Institutes

You have responsibility for overseeing and managing the Crown's interest in, and relationship with Crown Entities in the ST&I portfolio and to carry out any statutory responsibilities including:

- Making sure an effective board is in place to govern each entity through the appointment, reappointment and removal of board members.
- Participating in setting the strategic direction and annual expectations of the entities.
- Reviewing performance and results.
- Managing risks on behalf of the Crown.
- Agreeing to the levels of funding for reportable outputs for Crown Agents (not CRIs).
- Answering to Parliament for entity performance.

Crown Research Institutes

CRIs are Crown-owned companies that undertake scientific research for the benefit of New Zealand. Each of the seven CRIs is aligned with a productive sector of the economy or a grouping of natural resources. CRIs are also partner investors in science and innovation alongside MBIE and are some of New Zealand's most significant producers of science and technology.

Crown Research Institutes Act 1992

Under this Act the Minister of Finance and the Minister of Science, Innovation and Technology are shareholding Ministers responsible for the CRIs. The Minister of Science, Innovation and Technology generally takes the lead shareholder role, particularly as the formal point of contact with the CRI Boards. Your responsibilities as a shareholding Minister include:

- Appointing and dismissing directors.
- Overseeing the Government's ownership priorities and objectives.
- Approving any major transactions.
- Monitoring Board performance.

Annual cycle

- Send the Letter of Expectation (January/February).
- Table the half-year report (early March)
- Accept and table the Statement of Corporate Intent (June).
- Table annual reports (October).
- Attend the CRI Annual Meetings (October – December) or send a proxy.

Other

- Meet with CRIs (usually Chair and Chief Executive), new Directors and visit CRI campuses.
- Accept and endorse CRI business cases (with the other shareholding Minister).

Upcoming priorities and deliverables for CRIs (first 100 days)

Topic	Description	Driver	Timing	Area
Wellington Science City	$451 million investment (with further co-investment from participating institutions) in the construction of Wellington Science City, contingent on Cabinet approval of a programme business. Participating CRIs are GNS Science, ESR and NIWA.	To enhance research productivity, innovation, and commercialisation outcomes. Multiple research institutions are facing urgent investment to replace aging research infrastructure in Wellington. This has provided a reconfiguration opportunity to improve proximity and connectedness across both research institutions and the private sector.	Programme Business Case to be developed by 1 July 2024.	Collaboration between MBIE, crown infrastructure company Rau Paenga and participating institutions will continue throughout 2023 to develop and finalise the programme business case.
ESR Keneperu redevelopment	Redevelopment of ESR's Keneperu Science Centre. Designed with an open, highly flexible layout to support modern collaborative ways of working.	Currently facilities are functionally obsolete and have operational risks. The building needs to be replaced to meet health and safety standards.	ESR's implementation Business Case was approved in principle, contingent on shareholding Ministers agreement to the final terms/risk allocation of the contract and Te Waihanga's agreement. Final agreement is likely to be sought in late December 2023/ early January 2024.	MBIE sought approval of the Implementation Business Case from Ministers in late September 2023, [redacted] Commercial Information [redacted] Further advice or updates will be provided, in consultation with the Treasury.
CRIs Annual Report for the year ended 30 June 2023.	CRIs are due to provide Annual Report by 30 September 2023 (within three months after the end of each financial year). The Annual Report will need to be tabled as soon as practicable after parliament recommences.	To comply with the Crown Research Institute Act 1992.	Reports to be provided by 30 September 2023. Reports must be tabled within five house sitting days of parliament recommencing, or as soon as practicable once Parliament re-commences.	MBIE will provide advice to address what is in the reports and recommend tabling in the house.

CRIs Half-yearly reports to 31 December 2023	CRIs are due do provide their half-yearly reports by 29 February 2023. The half-yearly reports should be tabled within five working days of receipt.	To comply with the Crown Research Institute Act 1992. The half-year results will help inform the strategy in the Statement of Corporate Intent for the upcoming year.	29 February 2024	We will provide a briefing covering all CRIs, in consultation with the Treasury.
Letter of Expectations from shareholding Ministers to CRIs for the 2024/25 financial year.	Shareholding Ministers of Crown companies typically send an annual Letter of Expectations to the Board of the company.	This is part of the usual cycle of accountability for CRIs.	January / February 2024	MBIE will organise the briefing and draft Letter of Expectations, in consultation withthe Treasury and other interested institutions.

CRIs and their Boards

AgResearch Limited – AgResearch's purpose is to enhance the value, productivity, and profitability of New Zealand's pastoral, agri-food, and agri-technology sectors.

Chief Executive: Dr Sue Bidrose

Board Members	Role	Term start date	Term expiry date
Kim Louise Wallace	Deputy Chair	1/07/2017	31/05/2026
Louise Cullen	Director	16/03/2020	29/09/2025
Jessie Chan	Director	1/06/2023	31/05/2026
Mary-Anne Macleod	Director	1/02/2022	31/01/2025
Paul Reynolds	Chair	1/07/2015	30/06/2024
Ruku Schaafhausen	Director	1/07/2018	30/06/2024
Vacancy			

The Institute of Environmental Science and Research Limited (ESR) – ESR's purpose is to deliver scientific and research services to the public health, food safety, security and justice systems, and the environment sector.

Board Members	Role	Term start date	Term expiry date
Kate Thomson	Director	1/07/2018	30/06/2024
Sarah Young	Chair	1/06/2023	31/05/2026
Ashley Bloomfield	Director	1/06/2023	31/05/2026
Bruce Campbell	Director	1/06/2023	31/05/2026
Catherine Abel-Pattinson	Director	1/06/2023	31/05/2026
Justine Gilliland	Director	1/02/2022	31/01/2025
Melissa McLeod	Director	1/02/2022	31/01/2025

Chief Executive: Peter Lennox	Matthew Glenn	Director	1/02/2022	31/01/2025

The Institute of Geological and Nuclear Sciences Limited (GNS Science) – GNS Science's purpose is to deliver research that drives growth in New Zealand's geologically based energy and minerals industries, and to improve understanding of geological processes and hazards.

Chief Executive: Chelydra Percy

Board Members	Role	Term start date	Term expiry date
Felicity Evans	Director	1/07/2018	30/06/2024
David Smol	Chair	1/05/2023	30/04/2026
Wendy Venter	Director	1/02/2022	31/01/2025
Livia Esterhazy	Director	1/06/2023	31/05/2026
Andrew Cordner	Director	1/02/2022	31/01/2025
Brian Young	Director	1/06/2023	31/05/2026
Paul White	Director	14/08/2017	31/08/2024
Vacancy			

Manaaki Whenua Landcare Research New Zealand Ltd (Landcare Research) – Landcare Research's purpose is to drive innovation New Zealand's management of terrestrial biodiversity and land resources, in order to both protect and enhance the terrestrial environment.

Chief Executive: James Stevenson-Wallace

Board Members	Role	Term start date	Term expiry date
Paul Reynolds	Deputy Chair	1/07/2015	30/06/2024
Colin Dawson	Chair	1/02/2022	31/01/2025
Justine Gilliland	Director	16/03/2020	29/09/2025
Andre Byrom	Director	1/06/2023	31/05/2026
John Rodwell	Director	1/07/2017	31/05/2026
Warren Williams	Director	1/02/2022	31/01/2025
Marjory Russ	Director	1/02/2022	31/01/2025
Vacancy			

Board Members	Role	Term start date	Term expiry date
Barry Harris	Chair	1/07/2018	30/06/2024

The National Institute of Water and Atmospheric Research (NIWA) – NIWA's purpose is to enhance the value and management of New Zealand's aquatic resources and environments, and to improve understanding and prediction of climate and weather hazards.

Chief Executive: John Morgan

Mary-Anne Macleod	Director	1/07/2018	30/06/2024
Tracey Batten	Director	1/07/2018	30/06/2024
Livia Esterhazy	Deputy Chair	1/06/2023	31/05/2026
Dean Moana	Director	1/02/2022	31/01/2025
Margaret Hyland	Director	1/02/2022	31/01/2025
Janice Fredric	Director	1/02/2022	31/01/2025

The New Zealand Institute for Plant and Food Research Limited (Plant and Food Research) – Plant and Food Research's purpose is to enhance the value, productivity and sustainability of New Zealand's horticultural, arable, seafood, and food and beverage industries.

Chief Executive: Mark Piper

Board Members	Role	Term start date	Term expiry date
Colin Dawson	Deputy Chair	1/07/2015	30/06/2024
Wendy Venter	Director	1/07/2018	30/06/2024
Nicola Shadbolt	Chair	1/09/2019	29/09/2025
Dean Moana	Director	16/03/2020	29/09/2025
Nadine Tunley	Director	16/03/2020	29/09/2025
Justine Daw	Director	1/02/2022	31/01/2025
Vacancy			

The New Zealand Forest Research Institute Limited (Scion) – Scion's purpose is to drive growth from New Zealand's forestry, wood products, wood-derived materials, and other biomaterials.

Board Members	Role	Term start date	Term expiry date
David (Jon) Ryder	Deputy Chair	1/01/2016	30/06/2024
Stana Pezic	Director	14/08/2017	31/05/2025
Nicole Anderson	Director	10/07/2023	9/07/2026
Philip Taylor	Director	10/07/2023	9/07/2026
Kiriwaitingi Rei	Director	10/07/2023	9/07/2026

Chief Executive: Julian Elder	Brendon Green	Director	1/02/2022	31/01/2025
	Steve Wilson	Director	1/07/2016	29/09/2023
	Helen Anderson	Chair	6/08/2018	30/06/2024
	Gregory (Greg) Mann	Director	14/08/2017	30/06/2024

Crown Agents

Callaghan Innovation

Callaghan Innovation works across the science and innovation system to help translate scientific knowledge into economic value. It provides services to businesses such as:

- Providing research and technical services to support near-to-market innovation by businesses and acting as an intermediary to help link firms to the commercialisation of services and funding.
- Supporting the administration and approval of R&D funding and tax credits.
- Managing the business incubator and business accelerator programmes.
- Helping firms acquire the skills and expertise needed to take ideas to market successfully.

Crown Entities Act 2004

Callaghan Innovation is a Crown agent under the Crown Entities Act 2004. As a Crown agent, Callaghan Innovation can be directed to give effect to Government policy that relates to the entity's functions and objectives. The Crown Entities Act 2004 provides a framework for Crown agent governance and accountability, including responsibilities of board members, disclosure of interests, and the roles of Ministers.

Callaghan Innovation Act 2012

This Act established Callaghan Innovation as a Crown entity with the aim of supporting science and technology-based innovation and its commercialisation by New Zealand businesses, to improve their growth and competitiveness.

Measurement Standards Act 1992

Through this Act, you provide for the use throughout New Zealand of uniform units of measurement of physical quantities, and for the establishment and maintenance of standards of measurement of physical quantities. The Measurement Standards Laboratory of New Zealand operates as a business unit of Callaghan Innovation and is funded by a separate appropriation.

Annual cycle

- Send the Letter of Expectation (January/February).
- Accept and table the Statement of Performance Expectations (June).
- Every three years, or on your request, accept and table the Statement of Intent (June).
- Table annual reports (October).

Other

- Callaghan Innovation provide a fortnightly status report to the Minister.
- Minister meets with Callaghan Executive and MBIE quarterly.
- Accept and endorse business cases (with the other shareholding Minister).

Upcoming priorities and deliverables for Callaghan Innovation

Topic	Description	Driver	Timing	Area
Wellington Science City	$451 million investment (with further co-investment from participating institutions) in the construction of Wellington Science City, contingent on Cabinet approval of a programme business.	To enhance research productivity, innovation, and commercialisation outcomes. Multiple research institutions are facing urgent investment to replace aging research infrastructure in Wellington. This has provided a reconfiguration opportunity to improve proximity and connectedness across both research institutions and the private sector.	Programme Business Case to be developed by 1 July 2024.	Collaboration between MBIE, crown infrastructure company Rau Paenga and participating institutions will continue throughout 2023 to develop and finalise the programme business case.
Callaghan Innovation Annual Meeting	Callaghan Innovation is required to hold an annual meeting of shareholders or to pass a resolution signed by the shareholders in lieu of holding an annual meeting, provided all actions can be resolved without a meeting.	To comply with the Crown Entities Act 2004.	By 31 December 2023	MBIE will organise the briefing and resolution. Callaghan Innovation generally requests shareholders to pass a resolution in lieu of the annual meeting, which will be included in the briefing.

Topic	Description	Driver	Timing	Area
Callaghan Innovation Annual Report for the year ended 30 June 2023.	Callaghan Innovation is due to provide its Annual Report by 21 November 2023 (15 working days after the deadline for signing the Audit report on 31 October 2023). MBIE will provide advice so the Annual Report can be presented to the House of Representatives within five working days if it has resumed sitting, or when the new Parliament commences.	To comply with the Crown Entities Act 2004.	December 2023, but this timing is dependent on timely submission of the Annual Report.	MBIE will organise the briefing (likely early January), in consultation with Treasury.
Callaghan Innovation Quarterly Report to 31 December 2023.	Callaghan Innovation will provide the Quarterly Report by 1 January 2024, or shortly thereafter. MBIE will provide a weekly report item on this by 29 February 2024.	This is part of shareholding Ministers', MBIE's and Treasury's usual monitoring arrangements for Crown entities.	February 2024	Quarterly Report is provided by Callaghan Innovation. Advice is provided by MBIE..
Letter of Expectations from shareholding Ministers to REANNZ for the 2024/25 financial year.	It is usual for shareholding Ministers of Crown companies to send an annual Letter of Expectations to the Board of the company.	This is part of the usual cycle of accountability for CRIs.	January / February 2024	MBIE will organise the briefing and draft Letter of Expectations, in consultation with The Treasury.

Callaghan Innovation's Board

Board Members	Role	Term start date	Term expiry date
Jennifer Kerr	Deputy Chair	1/10/2018	27/03/2025
Elena Trout	Member	19/06/2019	4/07/2025

Callaghan Innovation is a Crown agent, established on 1 February 2013. As a business-facing

organisation, its purpose is to accelerate the commercialisation of innovation by New Zealand businesses. **Chief Executive:** Stefan Korn	Matanuku Mahuika	Member	19/06/2019	4/07/2025
	Shaun Hendy	Member	1/10/2018	27/03/2025
	Nicole Buisson	Member	19/06/2023	18/06/2026
	Sally McKechnie	Member	19/06/2023	18/06/2026
	Pete Hodgson (Chair)	Chair	1/04/2018	30/06/2024
	Vacancy			

Other Crown Entities

The Research Education Advanced Network New Zealand p

The Research Education Advanced Network New Zealand (REANNZ) is New Zealand's official National Research and Education Network and provides a critical component of New Zealand's eResearch infrastructure through a dedicated network to meet the unique requirements of New Zealand's science and research community.

Schedule 4A of the Public Finance Act 1989

REANNZ is a crown-owned company under Schedule 4A of the Public Finance Act 1989. Crown entity companies are subject to the accountability regime set out in the Crown Entities Act 2004. The shareholding Ministers of REANNZ are the Minister of Finance and Minister of Science, Innovation and Technology. The Minister of Science, Innovation and Technology generally takes the lead shareholder role for REANNZ. As the lead shareholding Minister your responsibilities include:

- Appointing its Board and monitoring Board performance.
- Approving the annual Statement of Intent and Letter of Expectations, which sets the Government's priorities and objectives for REANNZ.
- Approving any major transactions.

Annual cycle

- Send the Letter of Expectation (January/February).
- Accept and table the Statement of Performance Expectations (June).
- Every three years, or on your request, accept and table the Statement of Intent (June).
- Table annual reports (October).

Other

- Accept and endorse business cases (with the other shareholding Minister).

Upcoming priorities and deliverables for REANNZ

Topic	Description	Driver	Timing	Area
Confidential advice to Government				
REANNZ Annual Meeting	All companies are required to hold an annual meeting of shareholders or to pass a resolution signed by the shareholders in lieu of holding an annual meeting.	To comply with the Crown Entities Act 2004.	By 31 December 2023	MBIE will organise the briefing and resolution, in consultation with Treasury. REANNZ generally requests shareholders to pass a resolution in lieu of the annual meeting, which will be included in the briefing.
REANNZ Annual Report for the year ended 30 June 2023.	REANNZ is due to provide its Annual Report by December 2023 (15 working days after the deadline for signing the Audit report on 31 October 2023). MBIE will provide advice on this so that the Annual Report can be presented to the House of Representatives within 5 working days if it has resumed sitting, or when the new Parliament commences.	To comply with the Crown Entities Act 2004.	November 2023, but this timing is dependent on timely submission of the Annual Report.	MBIE will organise, in consultation with The Treasury.

Topic	Description	Driver	Timing	Area
Letter of Expectations from shareholding Ministers to REANNZ for the 2024/25 financial year.	It is usual for shareholding Ministers of Crown companies to send an annual Letter of Expectations to the Board of the company.	This is part of the usual cycle of accountability for CRIs.	January / February 2024	MBIE will organise the briefing and draft Letter of Expectations, in consultation with Treasury.

REANNZ Board

REANNZ

Research and Education Advanced Network New Zealand Ltd (REANNZ) provides a high-performance computing network to promote research, education and innovation for the benefit of New Zealand. It was formed in September 2005 under the Companies Act 1993 and is listed under schedule 4 of the Public Finance Act 1989.

Chief Executive: Amber McEwan

Board Members	Role	Term start date	Term expiry date
Eric Ross (Ross) Peat	Deputy Chair	1/07/2015	31/12/2023
Janine Smith	Chair	12/11/2018	30/06/2024
Liz Gosling	Director	1/09/2019	30/06/2024
Warren Williams	Director	15/11/2021	14/11/2024
Sara Brownlie	Director	1/10/2018	28/06/2026
Jim Metson	Director	1/09/2019	30/06/2025
Johnathan Eele	Director	7/11/2022	6/11/2025

Other Advisory Boards in the SI&T portfolio

Marsden Fund Council

Name	Role	Term start date	Term expiry date
Professor Jan Lindsay	Member	1/12/2023	30/11/2026
Professor Gillian Dobbie	Chair	1/12/2022	30/11/2025
Professor Richard Newcomb	Member	1/03/2018	30/11/2026
Distinguished Professor Geoff Chase	Member	1/03/2018	30/11/2026
Professor Colin Brown	Member	1/12/2019	30/11/2026
Professor Cynthia White	Member	1/03/2018	28/02/2025
Professor Michelle Spiller	Member	5/07/2022	4/07/2025
Professor Jaqueline Beggs	Member	5/07/2022	4/07/2025
Professor Stephen MacDonell	Member	1/06/2023	30/11/2025

Professor Penelope Brothers	Member	1/06/2017	30/11/2024
Professor Paul Spoonley	Member	1/06/2017	30/11/2024

The Science Board

Name	Role	Term start date	Term expiry date
Professor Aidan Byrne	Chair	1/03/2017	23/10/2025
Dr Jessica Hutchings	Member	1/07/2019	23/10/2025
Dr Elizabeth Wedderburn	Member	30/04/2018	3/04/2025
Ms Kirikowhai Mikaere	Member	4/04/2022	3/04/2025
Professor Charles Eason	Member	4/04/2022	3/04/2025
Professor Nicholas Long	Member	4/04/2022	3/04/2025
Dr Laura Domigan	Member	4/04/2022	3/04/2025
Dr Sereana Naepi	Member	4/04/2022	3/04/2025

Annex 2: Science, Innovation & Technology components of Vote Business, Science and Innovation as at Budget 2023

From Research, Science and Innovation portfolio:

	2023/24	*2024/25*	*2025/26*	*2026/27*	*2027/28*
Departmental Output Expenses					
Research, Science and Innovation: Departmental administration of in-year payments loans 2022-2026	1,000	1,000	800	800	800
Research, Science and Innovation: Innovative Partnerships	4,392	3,020	3,020	3,020	3,020
Research, Science and Innovation: National Research Information System	1,994	1,996	1,747	1,747	1,747
Total Departmental Output Expenses	7,386	6,016	5,567	5,567	5,567
Non-Departmental Output Expenses					
Research, Science and Innovation: Embedding International Talent in the New Zealand Innovation Ecosystem	-	-	-	-	-
Research, Science and Innovation: Endeavour Fund	248,162	244,712	242,712	242,712	242,712
Research, Science and Innovation: Founder and Startup Support	2,717	2,717	2,717	2,717	2,717
Research, Science and Innovation: Health Research Fund	124,989	124,989	117,489	117,489	117,489
Research, Science and Innovation: Innovation Trailblazer Grant 2023-2028 (MYA Expense)	11,889	15,000	17,950	32,600	32,600
Research, Science and Innovation: Marsden Fund	78,545	78,545	78,545	78,545	78,545
Research, Science and Innovation: National Measurement Standards	8,986	8,986	8,986	8,986	8,986
Research, Science and Innovation: National Science Challenges (MYA Expense)	64,335	-	-	-	-
Research, Science and Innovation: National Science Challenges (Annual Appropriation)	-	79,153	79,153	79,153	79,153
Research, Science and Innovation: New to R&D Grant 2023-2028 (MYA Expense)	19,106	26,875	22,500	22,500	22,500
Research, Science and Innovation: Non-departmental administration of in-year payments loans 2022-2026	1,200	1,200	2,200	2,200	2,200
Research, Science and Innovation: Partnered Research Fund	32,506	17,953	18,011	15,611	15,611
Research, Science and Innovation: Wellington Science City MCA - Depreciation, Maintenance and Site Support	3,500	-	-	-	-
Research, Science and Innovation: Wellington Science City MCA - Research & Innovation Support	1,000	-	-	-	-
Research, Science and Innovation: R&D Project Grant 2023-2028 (MYA Expense)	9,500	-	-	-	-
Research, Science and Innovation: Technology Incubator Programme 2023-2027 (MYA Expense)	19,565	19,054	19,054	19,054	18,911
Research, Science and Innovation: Transitional Support to Research and Development Performing Businesses	82,000	-	-	-	-
Total Non-Departmental Output Expenses	708,000	619,184	609,317	621,567	621,424

Non-Departmental Other Expenses					
Research, Science and Innovation: Catalyst Fund	41,751	42,961	41,441	35,491	35,363
Research, Science and Innovation: Innovation Development Grant	-	-	-	-	-
Research, Science and Innovation: Innovative Partnerships Strategic Facilitation Fund	5,953	5,000	-	-	-
Research, Science and Innovation: In-year payments fair value write-down and impairment (MYA Expense)	123,346	37,632	26,258	-	-
Research, Science and Innovation: North Island Weather Events - Plant and Food Research Limited Response and Recovery	-	-	-	-	-
Research, Science and Innovation: Public Sector Pay Adjustment – Business, Science and Innovation Remuneration Cost Pressure	1,000	2,000	2,000	2,000	2,000
Research, Science and Innovation: Regional Research Institutes	-	-	-	-	-
Total Non-Departmental Other Expenses	172,050	87,593	69,699	37,491	37,363
Multi-Category Expenses					
Policy Advice and Related Services to Ministers MCA	**12,093**	**8,654**	**8,655**	**8,655**	**8,655**
Departmental Output Expenses					
- Policy Advice and Related Services to Ministers - Research, Science and Innovation	12,093	8,654	8,655	8,655	8,655
Research, Science and Innovation: Talent and Science Promotion MCA	**38,366**	**36,619**	**42,518**	**48,692**	**48,692**
Non-Departmental Output Expenses					
- Applied training for Research Talent	-	1,770	3,352	5,089	5,089
- Fellowships for Excellence	17,748	20,685	23,623	28,060	28,060
- Science in Society	10,468	4,168	5,668	5,668	5,668
- Vision Mātauranga Capability Fund	5,982	5,982	5,982	5,982	5,982
Non-Departmental Other Expenses					
- Expanding the Impact of Vision Mātauranga – Talent and Navigation	1,275	1,121	1,000	1,000	1,000
- Royal Society of New Zealand	2,893	2,893	2,893	2,893	2,893
Research, Science and Innovation: Strategic Science Investment Fund MCA	**347,212**	**347,913**	**328,533**	**328,533**	**328,033**
Non-Departmental Output Expenses					
- Strategic Science Investment Fund - Infrastructure	68,388	67,935	62,559	62,559	62,559
- Strategic Science Investment Fund - Programmes	278,824	279,978	265,974	265,974	265,474
Research, Science and Innovation: Callaghan Innovation - Operations MCA	**85,868**	**84,044**	**83,629**	**78,629**	**79,129**
Non-Departmental Output Expenses					
- Building Business Innovation	35,117	33,293	32,878	37,931	38,431
- Business Research and Development Contract Management	17,946	17,946	17,946	7,893	7,893
- Research and Development Services and Facilities for Business and Industry	32,805	32,805	32,805	32,805	32,805

Research, Science and Innovation: Contract Management MCA	**29,631**	**29,654**	**29,656**	**29,656**	**30,284**
Departmental Output Expenses					
- Science and Innovation Contract Management	19,710	19,733	19,735	19,735	20,235
Non-Departmental Output Expenses					
- Research Contract Management	9,921	9,921	9,921	9,921	10,049
Research, Science and Innovation: Targeted Business Research and Development Funding MCA	**17,500**	**15,000**	**15,000**	**15,000**	**15,000**
Non-Departmental Output Expenses					
- New to R&D Grant	-	-	-	-	-
- R&D Project Grant	-	-	-	-	-
- Student Grant	17,500	15,000	15,000	15,000	15,000
Total Multi-Category Expenses	530,670	521,884	507,991	509,165	509,793
Total Annual and MYA Expenses (excluding capital expenditure)	**1,418,106**	**1,234,677**	**1,192,574**	**1,173,790**	**1,174,147**
Capital Expenditure					
Research, Science and Innovation: Callaghan Innovation	22,900	-	-	-	-
Research, Science and Innovation: North Island Weather Events - Plant and Food Research Limited Response and Recovery	17,000	-	-	-	-
Research, Science and Innovation: In-year payments loans (MYA Expense)	414,691	166,500	-	-	-
Research, Science and Innovation: Strategic Science Investment Fund MCA - Capital for Infrastructure	6,100	-	-	-	-
Total Capital Expenditure	460,691	166,500	-	-	-
Total Annual and MYA Expenses (including capital expenditure)	**1,878,797**	**1,401,177**	**1,192,574**	**1,173,790**	**1,174,147**

From Digital Economy & Communications portfolio:

	2023/24	2024/25	2024/25	2025/26	2027/28
Multi-Category Expenses					
Policy Advice and Related Services to Ministers MCA	**1,451**	**1,451**	**1,301**	**1,301**	**1,301**
Departmental Output Expenses					
- Policy Advice and Related Services to Ministers - Digital Economy and Communications	1,451	1,451	1,301	1,301	1,301
Digital Technologies Industry Transformation Plan MCA	**61,513**	**52,166**	**46,456**	**43,786**	**44,651**
Departmental Output Expenses					
- Delivery and Management of Digital Technologies Industry Transformation Plan	546	569	474	544	1,409
Non-Departmental Output Expenses					
- Game Development Sector Rebate administration	1,155	1,742	1,742	1,742	1,742
- Game Development Sector Rebate Scheme	38,737	38,150	38,150	38,150	38,150
Non-Departmental Other Expenses					
- Centre of Digital Excellence (CODE) Regional Hubs	2,250	2,250	2,250	2,250	2,250
- Delivery and Management of Digital Technologies Industry Transformation Plan by Partners	18,825	9,455	3,840	1,100	1,100
Total Multi-Category Expenses	62,964	53,617	47,757	45,087	45,952
Total Annual and MYA Expenses (excluding capital expenditure)	**62,964**	**53,617**	**47,757**	**45,087**	**45,952**
Capital Expenditure					
- Game Development Sector Rebate Capital	500				
Total Capital Expenditure	500	-	-	-	-
Total Annual and MYA Expenses (including capital expenditure)	**63,464**	**53,617**	**47,757**	**45,087**	**45,952**