CallaghanInnovation

STATEMENT OF INTENT

1 JULY 2014 - 30 JUNE 2018

Callaghan Innovation accelerates commercialisation of innovation by firms in New Zealand

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Foreword

With its myriad of dynamic and inventive firms producing hightech goods and services for export, a promising new side to the New Zealand economy is emerging as a powerful force.

Known collectively as the High-Value Manufacturing and Services (HVMS) sector, established firms and an increasing number of ambitious start-ups are using the latest technologies and ideas to create a global market advantage, generating high premiums and well-paid jobs for New Zealanders.

Global trends in new technologies are creating new and uncharted opportunities for those high-tech companies who dare to innovate; global trade is rising and business optimism in New Zealand is at its highest level since 1994.

Callaghan Innovation is charged with spearheading the growth of more and larger innovative businesses. It does this through helping HVMS firms realise the benefits of ideas, including commercial returns, faster.

Callaghan Innovation directly supports building a more effective and productive economy for New Zealand through its contribution to the Government's Business Growth Agenda.

The Board sees this as an exciting time for Callaghan Innovation as it moves beyond its start-up phase towards full operational delivery. Callaghan Innovation is funded by the Government through five output classes – reflecting the scale and diversity of its activities – and also receives commercial revenue from the private sector. By excluding itself from contestable funding, Callaghan Innovation is able to partner with all R&D providers and connect firms to New Zealand's full range of R&D resources.

We work closely with others, including New Zealand Trade and Enterprise (NZTE) and the New Zealand Venture Investment Fund (NZVIF), as well as with regional development agencies and the many providers of innovation services throughout New Zealand. We will work closely with Māori, recognising the scale and potential of the Māori economy. Over the next four years, the Board will focus on five key initiatives:

- Build innovation skills and programmes for HVMS companies that want to grow, enabling these firms to transform their own rate of commercialisation
- Support clusters of firms with customised action plans to break through their shared barriers to innovation
- Build the product development skills of HVMS firms by creating technology networks that provide advice, facilities and outsourced R&D services for firms
- Unleash the innovation potential of the Māori economy by making sure our services are 'fit for Māori'
- Inspire current and future generations of New Zealanders to become ambitious and confident global innovators.

Callaghan Innovation will continue to be a learning organisation; trying a range of approaches, evaluating impact and making changes as necessary. The Board will continue to be vigilant in identifying cost savings and focusing on those areas where the organisation can deliver most value.

The Callaghan Innovation Board is pleased to present this Statement of Intent for Callaghan Innovation for the four years to 30 June 2018. This document has been prepared in accordance with the requirements of sections 141 and 142 of the Crown Entities Act 2004.

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Sue Suckling Chair

Richard James.

Richard Janes Board member

1. Introduction

New Zealand has the capacity to grow more and bigger HVMS firms. But in order to do so, firms need to invest more than they currently do in research and development and in the commercialisation of their ideas.

Created in 2013, Callaghan Innovation helps firms overcome barriers to innovation by providing HVMS businesses with access to technical know-how, scientific laboratories, funding, training and networks that enable firms to realise the value of their ideas faster. Callaghan Innovation's programmes are designed to help firms appreciate the benefits of R&D, which can be both expensive and risky; protect their intellectual property (IP) from competitors; gain affordable access to costly R&D expertise and equipment through sharing resources and outsourcing; and navigate a sometimes complex and fragmented public R&D system.

As a vital contributor to the Business Growth Agenda, the aim of Callaghan Innovation is simple: we want the HVMS sector to grow faster by having more – and bigger – smarter firms. And we will do this by working with new and existing firms to encourage and enable a faster pace of innovation.

Current State

0.58% Business expenditure on R&D as % of GDP Source: Statistics NZ biennial R&D survey

1000 firms launching new products and services in past two years *Source: Statistics NZ biennial Business Operation Survey*

75 companies in TIN200 with turnover > \$20m Source: annual TIN100 report

\$6.72b exports from High Value Manufacturing and Service companies

Source: Statistics NZ annual export statistics

18th in Global Innovation Ranking Source: World Economic Forum annual global competitiveness report

Future State (2025)

1% Business expenditure on R&D as % of GDP

5000 firms launching new products and services in past two years

150 companies in TIN200 with turnover > \$20m

\$10b exports from High Value Manufacturing and Service companies

10th in Global Innovation Ranking

Callaghan Innovation is unashamedly ambitious. We recognise that there is no single "right way" to support innovation by businesses, as highlighted by the wide range of instruments and agencies in innovation systems worldwide. So we will experiment and learn as we implement our plans and identify more clearly where the greatest demand and opportunities lie.

2. Our value proposition: how we work

The New Zealand Government has four priorities for this term of office:

- Building a more competitive and productive economy
- Responsibly managing the Government's finances
- Delivering better public services to New Zealanders, within tight financial constraints
- Supporting the rebuilding of Christchurch.

Callaghan Innovation has a role in contributing to these priorities and directly supports building a more effective and productive economy for New Zealand through the Government's Business Growth Agenda.

Callaghan Innovation provides a suite of services to stimulate innovation, including:

- Research and technical services to support near-to-market innovation by businesses
- Support and coordination of technology networks of national and international scientific expertise
- Assistance to individual firms to develop skills and expertise to successfully take ideas to market
- Connecting businesses to sources of capital, skills and international expertise
- Awarding grants for research and providing internships
- Nurturing and providing grants to new firms in incubators
- Fostering a culture of innovation and aspiration.

But it's not just what we do, it's how we do it that will create value for New Zealand businesses.

Callaghan Innovation is a small part of the New Zealand innovation system, and there are many other organisations – public and private – that provide essential and complementary services. We work together with them to provide firms with ready access to R&D services.

The Government currently invests \$1.36 billion in science and technology, primarily through research and teaching institutes, but also directly in businesses. The private sector also invests a further \$1.2 billion in research and development – money that is spent in-house, through independent research organisations, or on contract to public research organisations.

So what's different about Callaghan Innovation?

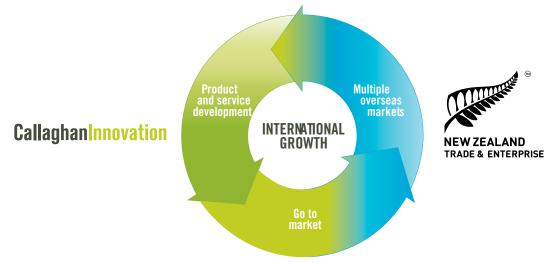
We exist to serve business. If business succeeds, Callaghan Innovation succeeds. Our services are configured to meet business needs and to help fuel their growth. Callaghan Innovation will adapt its suite of services to reflect the demand and feedback from its clients and, along with our partners, will continue to contribute to providing better public services.

We target High-Value Manufacturing and Services sector firms who want to – and can – innovate and grow, including those in the Māori economy.

We complement other players in the Research, Science and Technology system.

Callaghan Innovation does not compete with other research organisations. We build formal partnerships with universities, institutes of technology and polytechnics, and Crown Research Institutes (CRIs) so that clients can, through Callaghan Innovation, gain access to the entire New Zealand research and innovation infrastructure.

We work with our partners to deliver collective impact. Partnerships are key to our success. Callaghan Innovation's mission cannot be achieved without active engagement by many institutions and individuals, both in the public and private sectors. We share many of our clients with NZTE, and provide complementary services to support firms' growth. We also work closely with the NZVIF, as well as with regional development agencies (such as Economic Development Agencies) and the many providers of innovation services throughout New Zealand.



We value the trust of businesses and work hard to earn it. We do this, first and foremost, by striving to add real value to business. We learn by listening to what our customers have to say; we monitor the impact we have on their growth and success, and improve continuously on what we do. We act with integrity at all times: by offering impartial and informed advice to our clients; by acting as a conduit, through which businesses can reach out and connect to the whole innovation ecosystem, and by being open and transparent in the conduct of our business.

We make international connections to help businesses grow. We assist firms directly to be better connected internationally, so they can access expertise, technologies, investment and capital. Callaghan Innovation needs international partnerships to ensure we are at the forefront of innovation practice and that our services are cutting edge. This involves investing in close links with exemplar organisations in other countries and working in collaboration with those organisations. We need also to ensure that the key parts of the innovation system used by firms (such as incubators) are well-connected with counterparts and networks overseas to inform best practice.

We use the following principles for implementing our preferred services mix:

Principles for implementing our preferred services mix

- Apply a systematic learning-by-doing approach to evolving the mix of services from the existing mix on establishment, supported by capability to evaluate service impact; stop or make changes to initiatives and resource allocation; and report results
- Design and systematically review services based on evidence, expected impact, evaluation measures and practical considerations, including consistency with government policy, internationally-benchmarked innovation statistics, and experience from OECD and other countries' innovation systems
- Partner with others to provide services to increase the effectiveness of the service and/or reduce costs
- Ensure critical science, engineering and technology capabilities at establishment are preserved and enhanced in the system for New Zealand's benefit as the mix of services evolves
- Make use of technology and social media to enhance services and customer access to these services
- Manage ownership of intellectual property to maximise benefits to New Zealand
- Ensure services can be delivered within the Callaghan Innovation budget.

3. Our strategy for 2014–2018

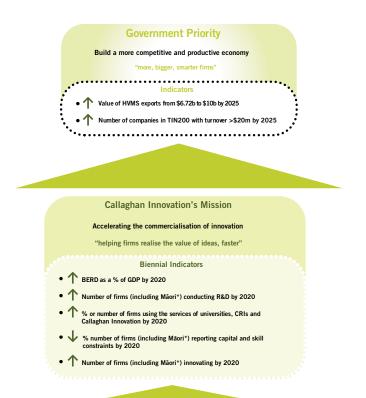
Callaghan Innovation cannot be all things to all businesses. The HVMS sector is characterised by its diversity and we need to be smart about the way we concentrate effort to create the greatest value for companies.

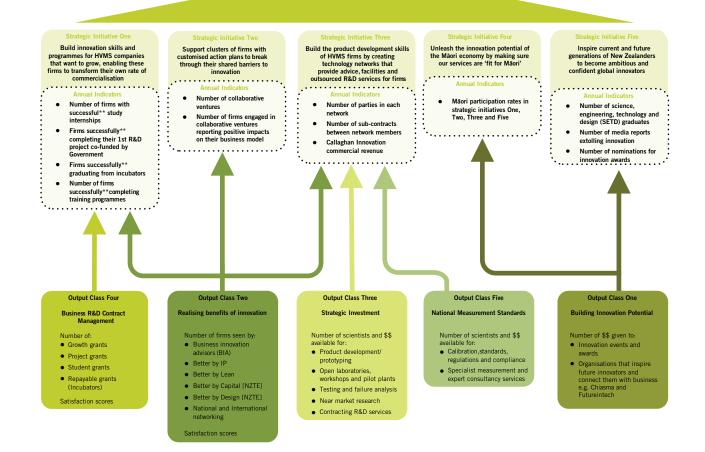
Callaghan Innovation's strategy comprises five major initiatives that will transform the speed with which New Zealand firms commercialise their ideas and inventions:

- **Strategic Initiative One:** Build innovation skills and programmes for HVMS companies that want to grow, enabling these firms to transform their own rate of commercialisation.
- **Strategic Initiative Two:** Support clusters of firms with customised action plans to break through their shared barriers to innovation.
- Strategic Initiative Three: Build the product development skills of HVMS firms by creating technology networks that provide advice, facilities and outsourced R&D services for firms.
- Strategic Initiative Four: Unleash the innovation potential of the Māori economy by making sure our services are 'fit for Māori'.
- Strategic Initiative Five: Inspire current and future generations of New Zealanders to become ambitious and confident global innovators.

The following sections describe each strategic initiative in more detail. An intervention logic that outlines the relationship between the five strategic initiatives, our mission and the five output appropriations is described in Figure 1 on page 8.

Figure 1: Intervention Logic diagram





*There is currently no means of tracking impacts on Māori firms. We will discuss with TPK, MBIE and Statistics NZ options for tracking this indicator in the BOS or the R&D survey **Success as defined by the policy for the programme

Strategic Initiative One: Build innovation skills and programmes for HVMS companies that want to grow

Innovation involves risk and requires talent. We build the skills and confidence of business owners to innovate, and share with them some of the financial risk that this entails, in ways that encourage businesses to initiate, maintain and grow their own innovation programmes.

Callaghan Innovation will assess the opportunities for a company to innovate, and any gaps it may have in terms of skills and resources, and help the firm put in place a plan to accelerate its commercialisation projects. A cadre of credible business innovation advisors (BIA) will be recruited over the next year. The BIAs will be business-savvy technical experts who are able to build an enduring relationship of mutual trust with the high-tech firms.

Training

Callaghan Innovation provides companies with access to training programmes, such as NZTE's 'Better by Design' and 'Better by Capital' programmes, and Callaghan Innovation's 'Better by Lean' programme, which help firms build skills and smarter business processes. Callaghan Innovation also provides innovation-specific training in the form of 'Better by IP', which helps firms understand how best to acquire, manage and protect intellectual property.

Grants

A key activity for Callaghan Innovation is the provision of grants to support firms to undertake additional research and development activities. We administer five types of grant programmes, as follows:

Type of Grant	Criteria
Growth	Significant grants available to all firms who invest over 1.5% of turnover in R&D. To cover 20% of R&D costs (with a maximum of \$5m p.a.).
Project	Up to 50% of R&D project costs, awarded primarily to firms undertaking research for the first time.
Student	Support undergraduate and graduate students to work for business on R&D projects.
Incubator Support	Support provided to founder-focused incubators nurturing start- up ventures with high-growth, export potential.
Repayable	Repayable grants to be administered by technology-focused incubators support new companies based on promising areas of technology. The grants are to be repaid once the new businesses start generating revenues.

The grants allow government to share with business some of the risks associated with more ambitious research initiatives, and encourage firms to do things that they might not otherwise do. Grants, such as those for internships, also build new relationships between businesses and research and training providers, which endure beyond the first grant.

Access to skills and capital

Firms face multiple barriers to growth. As we develop working relationships with firms, other problems limiting growth will emerge. Lack of skilled employees, or shortfall of capital for start-up firms looking for post-angel investment, are two examples frequently raised by our clients as major factors constraining growth. Callaghan Innovation neither provides capital for growth, nor trains students, but we work with other relevant organisations that do. We work closely with NZTE, NZVIF, Ministry of Business, Innovation and Employment (MBIE), Ministry of Foreign Affairs and Trade (MFAT), Tertiary Education Commission (TEC) and other agencies, as appropriate, to ensure a comprehensive and concerted response to the barriers to growth faced by our clients.

Incubators

In the very risky and complex world of high-tech innovation, one of the biggest barriers to success is access to funding and the necessary skills to successfully commercialise high-tech intellectual property. The incubator funding programme that Callaghan Innovation administers is a direct response to solving this challenge, and accelerating the growth and success of New Zealand start-up businesses. The new technology-focused incubators will be able to access repayable grants on behalf of the start-up companies they incubate. Assistance to all incubators may include technology and market validation, business planning and development, capability development, investment preparation, governance and advisory board advice, and shared working space.

Available to all HVMS companies

Grants and training programmes are available to any company that has the ambition to grow through innovation. The grants underwrite some of the risks associated with more ambitious research and development projects.

Strategic Initiative Two: Support clusters of firms to break through their shared barriers to innovation

The relatively small size of New Zealand firms means that investment in capital-intensive R&D facilities is relatively rare. Although HVMS firms strive to be different from each

other, many share a common need for technology and know-how. These firms may belong to the same industry, or be serving different markets, but share a common technology challenge.

Callaghan Innovation can create efficiencies by putting in place programmes, action plans, resources and/or services to meet common product development needs faced by a given cluster of firms. This will reduce R&D costs to individual members, create synergies and promote sharing of knowledge between non-rival firms. For example, there are a number of telematics firms in New Zealand, each servicing a different market. Telematics combines GPS technology, telecommunications, sensors, and computer science to monitor moving assets and provide smart services for utilising those assets, such as fleet management systems for trucks. Callaghan Innovation is working with these firms to explore options for building a shared R&D project that will build common hardware for the firms.

Callaghan Innovation also identifies, builds and supports strategic consortia of New Zealand firms to pursue opportunity-driven collaborative innovation projects. The Square Kilometre Array and the deployment of sensing technologies in the regeneration of Christchurch are creating new technology-based opportunities for firms. Callaghan Innovation is exploring the potential for these initiatives to create new innovation opportunities for business.

Strategic Initiative Three: Build the product development skills of HVMS firms by creating technology networks

Firms have told us they need better access to capital-intensive facilities and equipment, outsourced research and development expertise, and project management skills.

New Zealand has excellent research capability, but it is spread across relatively small teams in multiple organisations and locations. This fragmentation makes it hard to determine New Zealand's full capabilities and to identify possible gaps in core technologies that are critical to long-term economic growth. It also makes it difficult for businesses to identify sources of help for their commercialisation problems.

Callaghan Innovation is building networks of R&D facilities, and scientists, for firms to use to support near-market innovation. The technology networks bring in-house expertise and the expertise and facilities in other research organisations under one umbrella, providing firms with a single, direct right-of-way into an integrated national (and international¹) network of expertise.

¹ To be effective, these networks need connections and partnerships with offshore networks and organisations and we are seeking these out.

Technology networks, when fully developed, will more effectively create linkages and visibility across public and private research capabilities in a way that will allow R&D providers to be fully aware of their colleagues' R&D activities, and will allow firms to get ready access to the experts and facilities they need to advance their own innovation programmes.

Seven major technology areas have been identified so far as critically important to one or more significant industries or groups of companies in New Zealand. These seven technology areas underpin major innovation trends for the future and will be the basis for Callaghan Innovation's technology networks:

- 1. Information and communication technologies
- 2. Sensing and automation technologies
- 3. Advanced materials technologies
- 4. Biotechnologies
- 5. Food technologies
- 6. Measurement and compliance technologies (including the Measurement Standards Laboratory)
- 7. Design and manufacturing

What will each technology network entail?

The technology networks will provide a coordinated, easily accessible line of sight to the R&D facilities and scientists that firms can use to support near-market innovation.

Through the networks, firms can access the following services from New Zealand's overall R&D infrastructure:

- Research and expertise in product development processes and procedures, which can be used by firms to plan and execute the series of steps required for successful product development. Project management expertise is part of this capability.
- Customised research and product development assistance to solve specific process
 or project-related problems for firms. The network will provide firms with access to the
 world's best experts who can help solve their toughest problems.
- A source of expertise about regulations and compliance issues required, in order to export specific types of products to foreign markets. This service will avoid firms making costly mistakes in product design, documentation or packaging.
- Machine shop and workshop facilities for firms to create prototype products or evaluate and select the most appropriate manufacturing equipment.
- Testing and failure analysis services, through which firms can quickly understand the cause of product or component performance problems. The networks make available testing equipment and expertise that individual firms could not afford or would only occasionally use.
- Pilot plant research capability and facilities to assist a firm in scaling up its manufacturing from prototype to production quantities.
- Open lab services providing shared use of complex or expensive equipment that individual firms cannot afford alone. Open labs provide fit-for-purpose short-term accommodation for businesses wanting direct access to technical specialists, equipment, advice and services that are world-class, professional and business-friendly.
- Access to international extensions of the national networks and offshore expertise and facilities.

Each network is managed by a network manager appointed by Callaghan Innovation. The network manager develops a sound understanding of the technology needs of businesses, and of the research skills and projects that are already underway in public and independent research organisations in New Zealand, including CRIs, universities and independent research organisations. The manager builds relationships with the relevant research institutions to ensure this information remains current, and puts in place protocols that will allow business to access this expertise in a timely manner. In time, the networks may evolve into national specialist institutes. National Science Challenge: Science for Technological Innovation (SfTI) aims to increase the contribution of the high-value manufacturing sector to New Zealand's GDP through the creation of new technical innovations. Callaghan Innovation's leading role in SfTI will facilitate our understanding of leading-edge research and ensures that SfTI is linked to the needs of firms in New Zealand and accelerates technology transfers.

Ensuring technology networks are relevant

The networks are not expected to recover all their costs, but they are expected to service the needs of New Zealand business. Firms will be expected to pay a contribution to the services they use. This will ensure each network is managed in a way that is relevant to the demands and needs of firms in New Zealand and will create strong links between business and science, thereby providing a mechanism for aligning publicly funded research more closely to the needs of industry.

Measures of success

The networks will, necessarily, evolve over time. Sustainability of any given network will ultimately rely on measureable firm involvement. The number of companies using the networks, and the level of private sector contributions, are two short-term measures we will use to track the value and relevance of the networks.

We will also conduct our own formal review process to ensure networks provide highquality services and add value to business.

The role of Callaghan Innovation's Research and Technical Services

Callaghan Innovation has identified the need for its Research and Technical Services business unit to have a new role in the innovation ecosystem. For many firms, Research and Technical Services will be their outsourced R&D department. But since much of the innovation capability needed by firms in New Zealand is external to Callaghan Innovation, we propose to embed our Research and Technical Services teams into the appropriate national networks. By being part of the networks, our Research and Technical Services teams will develop effective partnerships with external providers and with our business innovation advisors, so we can offer firms a complete solution to their outsourced R&D needs.

Our Research and Technical Services will also provide bespoke R&D project management services. A Callaghan Innovation research project manager can, on behalf of a firm, build and manage a portfolio of R&D projects, using the R&D expertise and resources of the networks. The Callaghan Innovation project manager would operate inside the firm to promote the transfer of R&D project management skills.

In order to implement this new strategy, Callaghan Innovation will be more closely aligning its research and technical services capabilities with the seven technology areas defined above. This process will involve consultation with all key stakeholders including staff, firms and MBIE.

Once this process has been completed, we will then implement an appropriate system of rolling reviews for Research and Technical Services. These reviews will ensure that Callaghan Innovation focuses resources where it can deliver the greatest value for New Zealand.

National infrastructure

Callaghan Innovation is the custodian of significant national scientific infrastructure, including the Measurement Standards Laboratory. We will use the following principles to determine our national infrastructure and geographical footprint:

Principles for the preferred national infrastructure

- Maximise the use of existing infrastructure including, where practicable, making surplus facilities and equipment available to other researchers on commercial terms
- Divest assets and equipment that are surplus to ongoing business requirements
- Invest in new infrastructure and equipment based on:
 - 1) the mix of services to be provided
 - 2) the engagement model adopted for interacting with entrepreneurs and businesses
 - 3) the opportunities that new technologies provide to deliver services more cost effectively e.g. the use of ICT and mobile re-locatable resources as alternatives to investment in fixed physical infrastructure
- Coordinate investment in new infrastructure with other organisations, in order to maximise opportunities for collaborations and value creation
- Presence at all high-value manufacturing and services-related innovation precincts
- A presence in the regions through relationships with regional Economic Development Agencies
- Customer-facing staff distributed in proportion to the concentration of high-value manufacturing and services firms
- A headquarters in the Wellington CBD providing access to government.

As Callaghan Innovation looks to align its physical and virtual infrastructure with its overall strategy, mix of services and its business engagement model, any infrastructure investment will be guided by Cabinet's expectations for the approval of major capital projects, including developing proposals in accordance with published Treasury business case guidance, where applicable.

Strategic Initiative Four: Unleash the innovation potential of the Māori economy

Māori businesses – be they owned or managed by Māori – are an essential and fastgrowing part of the New Zealand economy. Callaghan Innovation will ensure that it is actively supporting and addressing the needs of Māori businesses to grow and be competitive in the global economy.

The pou, or pillars, of Callaghan Innovation's strategy for the Māori economy are leadership, strategic partnerships and continuous engagement. These will be well-established and embedded into 'business as usual' activities across all of Callaghan

Innovation's operations. We aim for all our staff to be capable of engaging with Māori businesses with confidence.

As more Māori businesses see the value of investing in research and new technologies to grow their companies, we want engagement with Callaghan Innovation to become the norm, and for these businesses to be well-informed about the services we can provide.

For example, Callaghan Innovation is working with a number of Māori food and beverage producers to expose their chief executives and technical or product development managers to the latest developments in international food technology and food industry trends. Callaghan Innovation's general manager of Māori economy will lead a group on a trip to the US, to participate in two food technology conferences and connect with potential partners. The objective is to encourage these firms and others to adopt new technologies, develop international partnerships and ultimately grow their business.

We will work closely with Māori entities to ensure that our services are 'fit for Māori', and we will measure the extent to which Māori businesses are engaged with, and succeeding through, Callaghan Innovation.

We are succeeding when Māori businesses confirm that their engagement with Callaghan Innovation and Māori strategic leaders in NZTE, MBIE and Te Puni Kōkiri was seamless, relevant and consistent – irrespective of the organisation responsible for delivering the services.

He kai kei aku ringa report – a blueprint for Māori economic development through to 2040 will reflect and confirm the 'one plan' approach being consistently applied across all Māori Strategic Leaders.

We will monitor our success in working with Māori, and adapt and refine our approach to ensure Māori-led businesses are achieving their potential.

Strategic Initiative Five: Inspire current and future generations of New Zealand innovators

Commercialising innovation takes drive, passion and guts. Building big, successful companies also takes ambition – the desire to build a business on a global scale, not just support a comfortable lifestyle. Some national cultures are more encouraging and supportive of innovation – its risks and inevitable failures – than others. Those countries that admire and celebrate innovators – the way New Zealand admires and celebrates its great sports achievers – are likely to reap long-term and growing economic advantage over countries that do not.

New Zealanders have exceptional levels of inventiveness and the ability to solve problems in innovative ways with limited resources. At Callaghan Innovation we will undertake and support activity that inspires and motivates both today's and tomorrow's innovators, recognising that attitudes and aspirations can be encouraged. In doing so, we align our efforts with the range of education, skills-building and business support programmes that others already provide.

> New Zealand faces a major challenge of skill shortages in the science, engineering and technology industries. Callaghan Innovation is actively supporting Futureintech to address this issue. Futureintech works to increase the proportion of science, engineering and technology enrolments in tertiary study, offer students realistic learning experiences and raise the profile of careers in the science, engineering and technology industries.

4. Managing organisational health and capability

Callaghan Innovation is a national employer with around 400 employees spread across multiple sites in Auckland, Wellington and Christchurch. Callaghan Innovation is a new organisation, created from parts or all of other organisations and we are currently building new functions.

In 2014, a key area of focus is ensuring a highly engaged and energised workforce, working towards a shared vision and direction, and aligned within a core set of values.

To ensure we achieve this we will:

- Measure and understand current levels of engagement, and the subsequent development of two or three key initiatives to improve engagement
- Ensure that all employees understand our vision and direction, their contribution to this, and the creation of a core set of values, against which the organisation can assess commitment and performance
- Develop quality leadership skills in all areas of the organisation
- Adopt a flexible structure to support our vision and direction
- Identify and understand the pool of commercialisation and innovation talent
- Implement best practice in people and capability initiatives (such as sourcing, recruitment, onboarding, remuneration strategy and structure, and performance measurement, metrics and reporting, employee wellbeing and development of the social fabric of Callaghan Innovation) to support the business and drive key outcomes associated with our strategic direction.

Communications and stakeholder engagement

Callaghan Innovation is a relatively small organisation, yet we work across the whole innovation system. This means that we need to have strong links across the system if we are to fulfil our mission, as well as effective links to offshore innovation initiatives and organisations. Those links are important in keeping us informed and able to respond to the dynamic environment we work in and the changing needs of our customers. Equally, we need to ensure that our clients and other stakeholders are aware of the activities and actions we are developing and delivering. Successfully building these links will be based on a range of activities including:

- A programme of proactive and reactive meetings and speaking engagements by our staff
- Upgrading our corporate website
- A programme of media and social media activity to highlight the range of our activities
- Continuing to publish Accelerate Callaghan Innovation's e-zine and other publications to build awareness and understanding of our work
- Developing a range of material that profiles our role and the activities we are delivering.

Good employer

Callaghan Innovation is required to be a good employer under the Crown Entities Act 2004 and seeks an inclusive high-performance business-facing culture, built on mutual trust and respect. All appointments are on merit. Managers and employees are responsible for promoting a work culture in which all personnel, whatever their gender, ethnic or social background, sexual orientation or role, are valued and treated equitably and with respect.

Callaghan Innovation has a range of policies covering:

- Equal employment opportunities
- Professional code of ethics
- Flexible working
- Career stages and review
- Protected disclosures
- Health and safety.

These and other policies are currently being progressively updated.

Callaghan Innovation also provides access to the Employee Assistance Support programme, workstation assessments and access to annual flu vaccinations.

Health, safety and environment

Callaghan Innovation values the wellbeing of our employees, contractors, customers and the communities in which we operate. We are committed to ensuring that we have health and safety practices that support the promotion of health and safety and minimise any adverse health, safety or environmental impacts. We are committed to ongoing improvements in our health and safety management, systems, and practices.

We regularly review our health and safety framework and introduce and communicate enhancements. We consult with, and equip our staff with, relevant information, instruction, training and supervision at all levels to empower them to competently supervise or undertake their work activities in a safe and healthy way. They are informed of all the related hazards and the measures to be taken to protect themselves.

Callaghan Innovation strives to continually improve its health and safety framework, and to this end we engage in ongoing external reviews, ensure compliance to the relevant health and safety legislation and keep up to date with best practice such as the Good Governance Practices Guideline for Managing Health and Safety Risks May 2013 from MBIE and the Institute of Directors.

Both the Gracefield and the Auckland sites employ occupational health nurses.

Commitment to continuous improvement

Callaghan Innovation will constantly look for ways to improve how it does business and delivers value. Callaghan Innovation will use the Performance Improvement Framework (PIF) self-review methodology to drive performance improvement.

Real estate, capital investment and asset management

The focus of Callaghan Innovation's asset management is on specialised science equipment, and property such as land and buildings, supported by IT infrastructure. Both of these assets were in a significant state of deferred maintenance. We are now planning for a fit-for-purpose Callaghan Innovation, and as a result are conducting a review of both physical and non-physical assets. This will include:

- Upgrade of IT systems
- Dealing to deferred maintenance of systems and property
- Evaluation of the Gracefield Innovation Precinct
- Optimising Callaghan Innovation's real estate presence in all locations
- Partnering, where possible, with other entities in shared facilities and services
- Supporting strategic initiatives and investments in the innovation system (e.g. The FoodBowl an open-access plant for food innovators).

The Gracefield Innovation Precinct business case will be prepared for Board and Minister consideration. It is envisaged that the Gracefield site will become an innovation precinct including Callaghan Innovation's Research and Technical Services (RTS) specialists, high-value manufacturing firms, and Victoria University research teams. The innovation precinct will enable firms to collaborate and build scale with each other and RTS providers, both nationally and internationally, to improve knowledge and skills, deploy technology and develop a cohort of growth-oriented firms.

Interest in other entities

Any interest in other entities, as per section 100 of the Crown Entities Act, will be subject to Board and Ministerial consideration.

5. Consultation and reporting to the Minister

The relationship between a Crown agent and its responsible Minister is an important one, to ensure the alignment of activities with Government expectations and manage risks for Ministers and their agencies.

The Minister of Science and Innovation is the responsible Minister for Callaghan Innovation and we operate a 'no-surprises' policy on matters of significance and relevance. The following table outlines the agreed levels of reporting and consultation:

What	Who	When
Regular meetings:Matters of materiality requiring discussion with the Minister	Chair of Callaghan Innovation Board Callaghan Innovation Chief Executive and senior management	Monthly or as required by Minister Weekly or as required by Minister
Written reports:Matters of interestPriority projectsPolicy briefings	Callaghan Innovation Chief Executive	Fortnightly or as required
 Quarterly report: Progress against Statement of Performance Expectations and performance measures Risks and issues, including organisational capability and relationships Financial management Other matters as agreed with Minister 	Callaghan Innovation Board and Chief Executive	Within 30 days following the end of the September and March quarters, and within 45 days of the end of the December quarter
Annual reporting to Minister and Parliament	Callaghan Innovation Board	In line with statutory requirements
 Ministerial support and services: Responses to information requests from the Minister Responses to Ministerial enquiries Responses to requests under the Official Information Act Responses to written Parliamentary Questions 	Callaghan Innovation Board Chair or Chief Executive	As required by Minister or Callaghan Innovation. 95% of responses are provided within required timeframes

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Matters requiring consultation with the Minister:Any material change in the capabilities and functionality of Callaghan Innovation	Callaghan Innovation Board Chair or Chief Executive	As soon as practicable
- Any activities that are potentially outside the scope of appropriations made by Parliament or relevant legislation applying to Callaghan Innovation		
- Any significant organisational decisions that will give rise to Parliamentary interest or public debate		

CallaghanInnovation

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