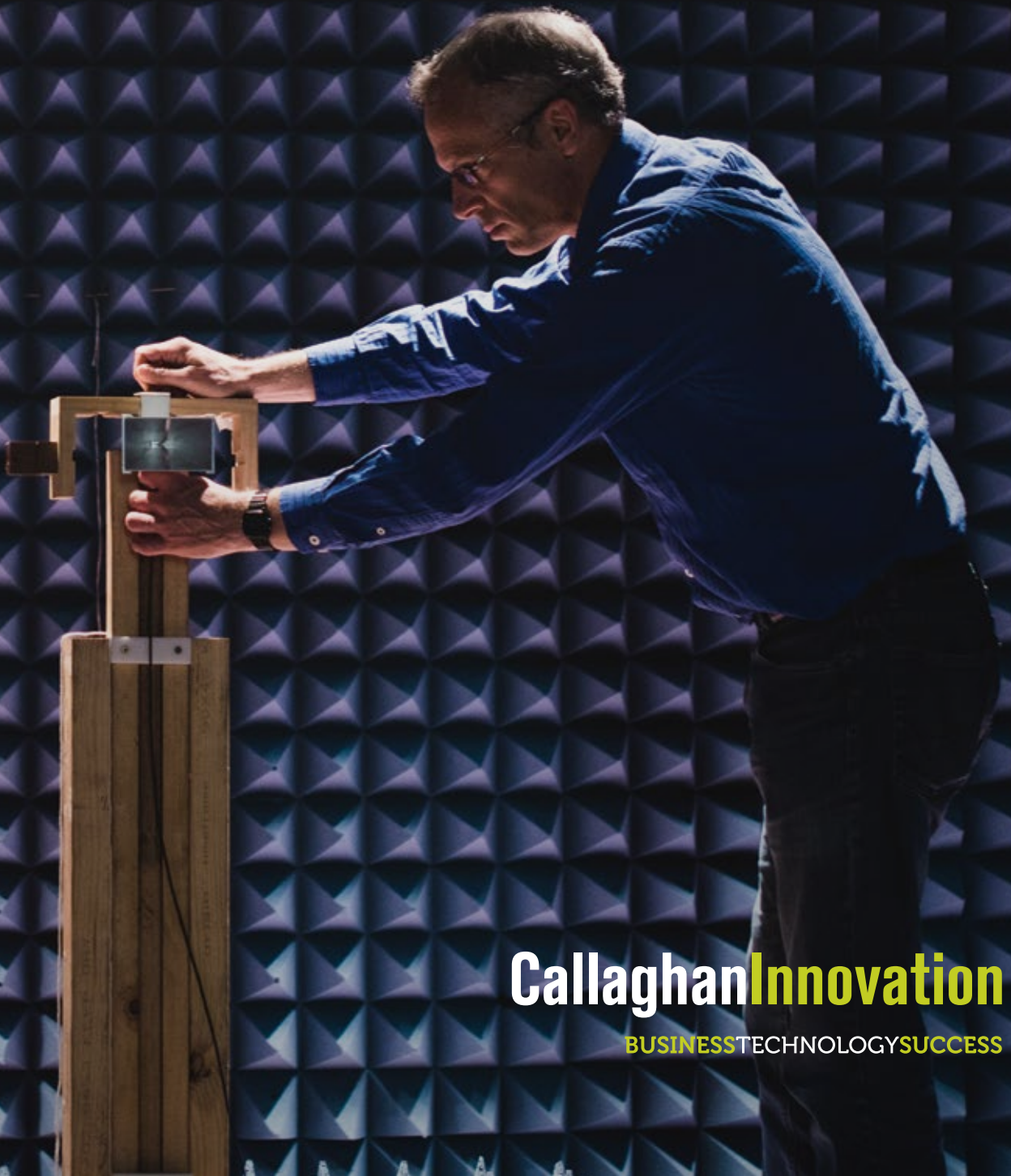


Statement of intent

1 JULY 2015 – 30 JUNE 2019



CallaghanInnovation

BUSINESSTECHNOLOGYSUCCESS

Foreword

Innovation is the fast track route to economic growth. Businesses must innovate to create and transform knowledge into new products and services that meet market needs.

Businesses that stay ahead of global competition through innovating and successfully commercialising their ideas are more likely to improve their productivity, grow their export revenue and employ more people in higher-wage work. While growing, New Zealand business innovation remains low by the standards of developed economies.

Business investment in research and development (R&D) is a strong indicator of growth and is the genesis of technology-driven innovation. Less than 5% of New Zealand businesses with more than six employees do R&D. Businesses spent an estimated \$1,246 million on R&D in 2014. New Zealand needs these numbers to increase.

Encouraging the growth of more innovative businesses is the reason for Callaghan Innovation's existence. Our activities contribute to achieving the Government's target of increasing business expenditure on R&D (BERD) to 1% of GDP by 2018. To achieve this target New Zealand businesses have some major spending to do. While the challenge is ambitious, it is not impossible.

To create world-leading, knowledge-intensive products and services, New Zealand needs business leaders and entrepreneurs who are ambitious to grow their companies and are willing to invest in new technologies and R&D.

At Callaghan Innovation we help inspire businesses to innovate, stimulate their investment in R&D, and then support their innovation programmes with specialist research, engineering and commercial expertise.

Along with delivering services to businesses, we help build New Zealand's overall innovation capability. We do this by creating networks of technical expertise across the innovation system, including key players such as the nine universities and seven Crown research institutes, so as to improve businesses' access to science and technology across the country.

The way we approach our mission is set out in our whakatauākī: Rukuhia te wāhi ngaro, hei maunga tātai whetū – explore the unknown, pursue excellence¹.

By supporting New Zealand businesses to turn bright ideas into next-generation, market-ready products, processes and services, we seek to grow the size of New Zealand's economy and increase its resilience – achieving a more diverse and balanced spread of contributions from multiple technology-intensive sectors.



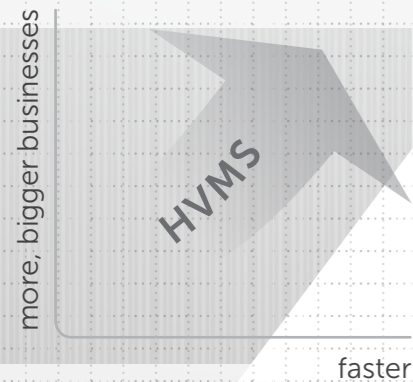
Sue Suckling
Chair



Dr Mary Quin
Chief Executive



Strategy overview



Our mission is to accelerate the commercialisation of innovation by New Zealand businesses.

We grow New Zealand's innovation economy – the 'high-value' manufacturing and services (HVMS) sector – by helping businesses to succeed through technology.

We contribute to increasing the diversity and value of exports from New Zealand.



Delivering innovation services to businesses

- Technology and product development
- Access to experts
- Innovation skills
- Business collaborations
- R&D Grants

Building New Zealand's innovation capability

- Inspiring current and future innovators
- Technology networks
- International partnerships
- Pilot plants, incubators and innovation precincts
- National Science Challenge: Science for Technological Innovation

Investing in our capability and ensuring that Callaghan Innovation is:
About business | Bold | Connected | Delivering results

2025
Increase exports to 40% of GDP

GROW
Our customers grow bigger, faster and smarter through investment in R&D

2018
Increase business expenditure on R&D (BERD) to 1% of GDP

MORE
More businesses using Callaghan Innovation's services





Our purpose

Callaghan Innovation's mission is to accelerate the commercialisation of innovation by New Zealand businesses. We grow New Zealand's innovation economy by helping businesses to succeed through technology.

To achieve our purpose we have refined our strategy so that all our attention and energy is focused on:

Delivering innovation services to businesses

Building New Zealand's innovation capability

We work in close partnership with other organisations that also contribute to increasing business R&D. Together we ensure a comprehensive and integrated response to the opportunities and challenges that our customers face.





Callaghan Innovation

Our customers

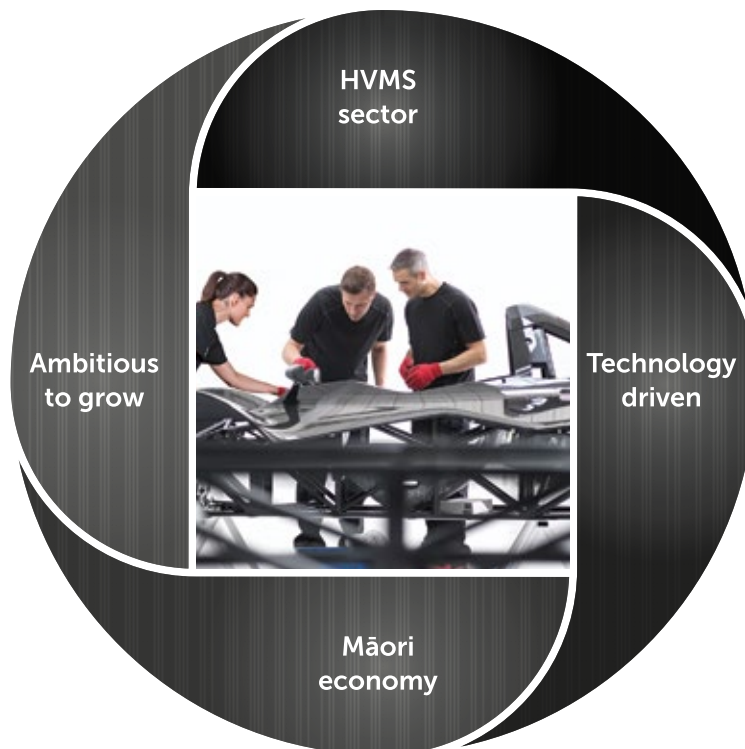
Callaghan Innovation applies a number of principles that help to sharpen our focus on those businesses where we can add the most value.

'High-value' manufacturing and services (HVMS) sector

Our primary focus is on businesses within the HVMS sector – these businesses are export and R&D intensive and are more likely to innovate than other sectors.

Ambitious to grow

We support businesses that have ambitions to significantly increase their share of existing markets (domestically and internationally) or create new markets through innovation. Innovation does involve risk. Our services help to increase the odds of success for those businesses that have the passion to take on the risks and reap the rewards of innovation.



Technology driven

We recognise that businesses can grow through a variety of means (for example, by expanding into new overseas markets), but our strategy is to focus on those businesses that want to grow through technology. We are particularly interested in those businesses that want to disrupt markets through their technology, rather than merely keep up with their competitors.

Māori economy

A key part of Callaghan Innovation's role is supporting Māori businesses to embrace innovation as a catalyst for unlocking the potential of the Māori economic asset base.



What we do

Callaghan Innovation's strategy is focused on:

Delivering innovation services to businesses

Building New Zealand's innovation capability

Delivering innovation services to businesses

We provide services that meet a diverse range of needs depending on where our customers are in their innovation journey – from supporting start-ups to assisting the most experienced R&D performers. We set businesses on the fastest and most effective pathways to achieve growth and success through technology.

Our service mix ranges from self-help and on-demand solutions to deep, customised engagement for those businesses that have unique technical and commercial requirements.

As businesses' needs evolve, so too does our service mix.

Our services currently include:

Technology and product development

There are many different paths to take an idea from concept to commercial reality. We have experienced advisors who help businesses navigate each step and specialist scientists and engineers to deliver tailored R&D solutions.

Whether it is lowering the cost of production or managing changing technologies – we help businesses improve their products or develop new ones.

Callaghan Innovation provides end-to-end support by helping businesses:

Identify the steps needed to commercialise their ideas

Develop components, products, processes and technology from proof of concept through to production

Apply and adapt existing technology or develop their own ground-breaking research

Perform testing and measurement for specialised analysis of their products, materials, processes and calibration systems

Access our world-class equipment, facilities, workshops, pilot plants, labs and people for R&D.

Access to experts

We open doors for New Zealand businesses seeking innovation advice, skills, support and technical expertise – from both New Zealand and worldwide sources.

We offer businesses fast and easy access to experts, and expert teams, that provide tailored solutions to meet their needs. We leverage our network connections and act as an ‘innovation broker’ to ensure that businesses have access to the right advisors, partners, mentors and technology providers. We are also introducing on-line self-help tools that businesses can use to access expertise and equipment.

Through our national and international network connections we:

Offer ‘Global Expert’ – our database of national and international innovation and R&D expertise, with sources that include business networks, universities and scientific institutes

Offer the services of our technology networks – our own team, who apply their deep knowledge of national and international scientific and research expertise

Refer businesses to our partner organisations, including New Zealand Trade and Enterprise (NZTE), regional economic development agencies and the venture capital community, so they have access to the full range of support available.

Innovation skills

We help businesses build the in-house skills and capability needed so that they are innovation-ready.

We provide a range of programmes, training courses and workshops to improve business performance, eliminate inefficient processes and activities, and increase customer satisfaction. We are constantly improving our programme suite, responding to feedback and ensuring that we cater to our customers’ needs. In future, businesses will have direct access to these programmes through an online portal.

The programmes we currently offer include:

IMProve

This helps businesses to benchmark their innovation management capabilities against those of international cohorts of similar businesses

Innovation IP

This helps businesses to develop a pragmatic and commercial approach to intellectual property and how to protect it

Agile Innovation

This helps businesses to improve their innovation planning, risk management, speed and measurement of product development

Better by Lean

This helps businesses to review their processes and management systems in order to improve productivity and reduce waste

HPWI (High Performance Working Initiative)

This helps businesses to achieve higher productivity through effective employee engagement and workplace practices

Innovation Experts Series

This provides businesses with access to the world’s leading innovation practitioners through targeted workshops.



Business collaborations

We provide businesses with opportunities to work with partners around shared technology-based engagements and to form mutually beneficial collaborations. These collaborative projects are aimed at reducing the costs of R&D and promoting the sharing of knowledge among the partnering businesses.

We encourage and promote groups of businesses through:

Collaborative innovation projects where we invite businesses to tackle targeted technology projects jointly with other businesses, industry associations and research organisations

Planning and facilitating technology-seeking missions to international events and visits to world-class innovation facilities

Developing partnerships to help solve common innovation and technology problems

Establishing clusters of Māori businesses with a desire to innovate or create shared opportunities

Providing customised innovation services to address the unique needs of a specific industry.

R&D grants

We offer a range of R&D grants to add scale to businesses' R&D investment for greater impact.

Our R&D grants are structured to meet a range of business needs, whether those businesses are young start-ups or established R&D performers.

Our grants include:

Getting Started Grants

These grants help businesses overcome roadblocks and commence R&D activities

Project Grants

These grants help businesses develop a specific product, process or service with the aim of growing their commitment to R&D

Growth Grants

These grants support evolving, multi-year R&D programmes in businesses that are experienced R&D performers

Student Grants

These provide businesses with access to both undergraduate and postgraduate students who can assist in R&D projects and thereby gain commercial experience.



Building New Zealand's innovation capability

Business success depends on a strong innovation system and Callaghan Innovation plays a critical role in building and strengthening New Zealand's innovation capability.

We use our knowledge and understanding of business innovation needs to:

Drive better integration across the component parts of the system

Improve coordination and networking amongst the many players, in both the public and private sectors

Identify and understand the gaps and opportunities where key players, including ourselves, can add the most value.

Our activities in this area currently include:

Inspiring current and future innovators

New Zealanders have the ingenuity to be confident global innovators and entrepreneurs. Worldwide experience shows that the most innovative companies grow bigger and faster than other companies. We help to inspire businesses and individuals to be excited by the possibilities that innovation holds and be ambitious about growth.

Our goal is to increase the number of ambitious businesses and grow the pipeline of future innovators and entrepreneurs. We are doing this by connecting people with New Zealand's most exciting business leaders and overseas experts, by supporting events that celebrate New Zealand success, and sponsoring events and prizes that stimulate innovation.

Technology networks

To connect businesses to the technology and expertise they need to turn great ideas into reality, we need to stay up to date with the latest technology trends and know where to find credible research partners and business advice – within New Zealand and in other parts of the world.

We have identified seven broad areas of technology that underpin innovation in multiple industries:

Advanced materials technologies

Biotechnologies

Food processing technologies

Information and communication technologies (ICT)

Sensing and automation technologies

Design and manufacturing technologies

Measurement and calibration technologies.

Callaghan Innovation's technology networks give businesses a single front door to the innovation system. We provide a line of sight between research, technology and industry. This involves:

Identifying innovation within Crown research institutes, universities and institutes of technology that has the potential to be commercialised

Identifying and helping to fill gaps in areas of technology needed by businesses

Looking for opportunities to align the most appropriate research, design and engineering teams with industry needs

Ensuring that New Zealand businesses are current by staying up to date with global mega-trends as well as smaller, unique technology advances

Connecting like-minded businesses to find solutions to complex technical problems.

International partnerships

We build and maintain strategic international partnerships to assist us, and the wider New Zealand innovation system, to be at the forefront of innovation best practice and to take advantage of technological trends and opportunities. For example, Callaghan Innovation co-leads New Zealand's membership of the Enterprise Europe Network which is the world's largest business and innovation support network, operating in 54 countries. This membership allows New Zealand businesses to be more connected to global value chains involving European technology and European business.

Callaghan Innovation also contributes to wider Government initiatives to attract offshore sources of funding for R&D, skills, talent and research infrastructure to New Zealand.

Pilot plants, incubators and innovation precincts

We recognise that businesses often need to outsource their R&D requirements to other research providers in New Zealand that have the relevant expertise and technical facilities. Callaghan Innovation is part of a networked system of shared innovation facilities and pilot plant services for businesses.

For example, Callaghan Innovation supports open-access food innovation facilities (as part of the New Zealand Food Innovation Network) which provide specialist equipment and people to help food and beverage manufacturing businesses to innovate.

Callaghan Innovation's Gracefield Innovation Quarter in Lower Hutt, Wellington offers businesses access to specialist facilities and expertise in order to scale up, deploy and test technology, collaborate and fast track their product development. This site is ideal for businesses whose R&D includes chemistry, biotechnologies, advanced materials and rapid prototyping. Businesses can also co-locate on site if this suits their needs.

Callaghan Innovation supports two types of incubators that work with start-up businesses to speed up their path to market:

Founder incubators work with entrepreneurs by giving them access to support, networks and investments that can help them to test business ideas, validate them in the market and, when there is potential, build businesses

Technology incubators are privately owned businesses that concentrate on commercialising complex intellectual property sourced primarily from publicly funded research organisations such as universities and Crown research institutes.

National Science Challenge: Science for Technological Innovation

Callaghan Innovation hosts the National Science Challenge: Science for Technological Innovation which is a ten-year research programme involving all the New Zealand universities, Scion, AgResearch, the Institute of Geological and Nuclear Sciences Limited (GNS) and Lincoln Agritech. The Challenge aims to enhance New Zealand's ability to use physical and engineering science for economic growth.





Our people

Investing in our capability

Callaghan Innovation's mission has attracted and retained a skilled and experienced workforce. During the next four years a key area of focus will be to ensure that Callaghan Innovation has a highly engaged and energised workforce that is:

About business

Helping businesses to succeed through technology is our top priority and reason to exist

Bold

We are forward thinkers, ahead of the game, trying new ideas and taking risks

Connected

We are professionals working together within our organisation and with partners

Delivering results

We are resourceful and committed to achieving tangible outcomes.

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 people are valued and treated equitably and with respect.

We have a range of policies covering:

Health and safety

Equal employment opportunities

A professional code of ethics and expectations of performance

Flexible working

Career stages and reviews

The prevention of bullying and harassment.

We undertake regular staff engagement surveys to monitor engagement and identify any trends. We also support a wide range of activities to promote staff wellbeing. These include access to an employee assistance programme, workstation assessments, seasonal wellbeing initiatives and access to annual flu vaccinations.

Our partners

NZ Inc Partner organisations and stakeholder engagement

Callaghan Innovation cannot achieve its mission alone. Many organisations and individuals, in both the public and private sectors, contribute to building New Zealand's innovation economy. For Callaghan Innovation to be successful we need to ensure that our customers and other stakeholders are aware of what we are doing, how they can help us, and how we in turn can help them.

We value our close working relationships with NZTE, regional economic development agencies and other government agencies including the Ministry of Business, Innovation and Employment, the Treasury, the Ministry for Primary Industries, the New Zealand Venture Investment Fund and the Ministry of Foreign Affairs and Trade. We work in close collaboration with these agencies to ensure that businesses receive an integrated response.

We also partner with Crown research institutes, tertiary education organisations, as well as private R&D providers to ensure that our customers are connected to the best expertise no matter where it sits in the system.

To help shape what we do, and gauge how well we are doing it, we need to be well informed about our customers' and stakeholders' needs and their views on our performance. This is why we place a high priority on stakeholder engagement.

Our communications and stakeholder engagement activities include:

Introducing a new corporate website and marketing material

Supplying regular articles on innovation and the successes of our customers for the media

Undertaking an annual survey of key stakeholders and partners

Publishing our quarterly e-zine and other publications to build awareness and understanding of our work

Producing customised reports on collaborative activities with our R&D partner organisations

Arranging frequent speaking engagements for Callaghan Innovation staff at technology and business conferences and events.



What success looks like

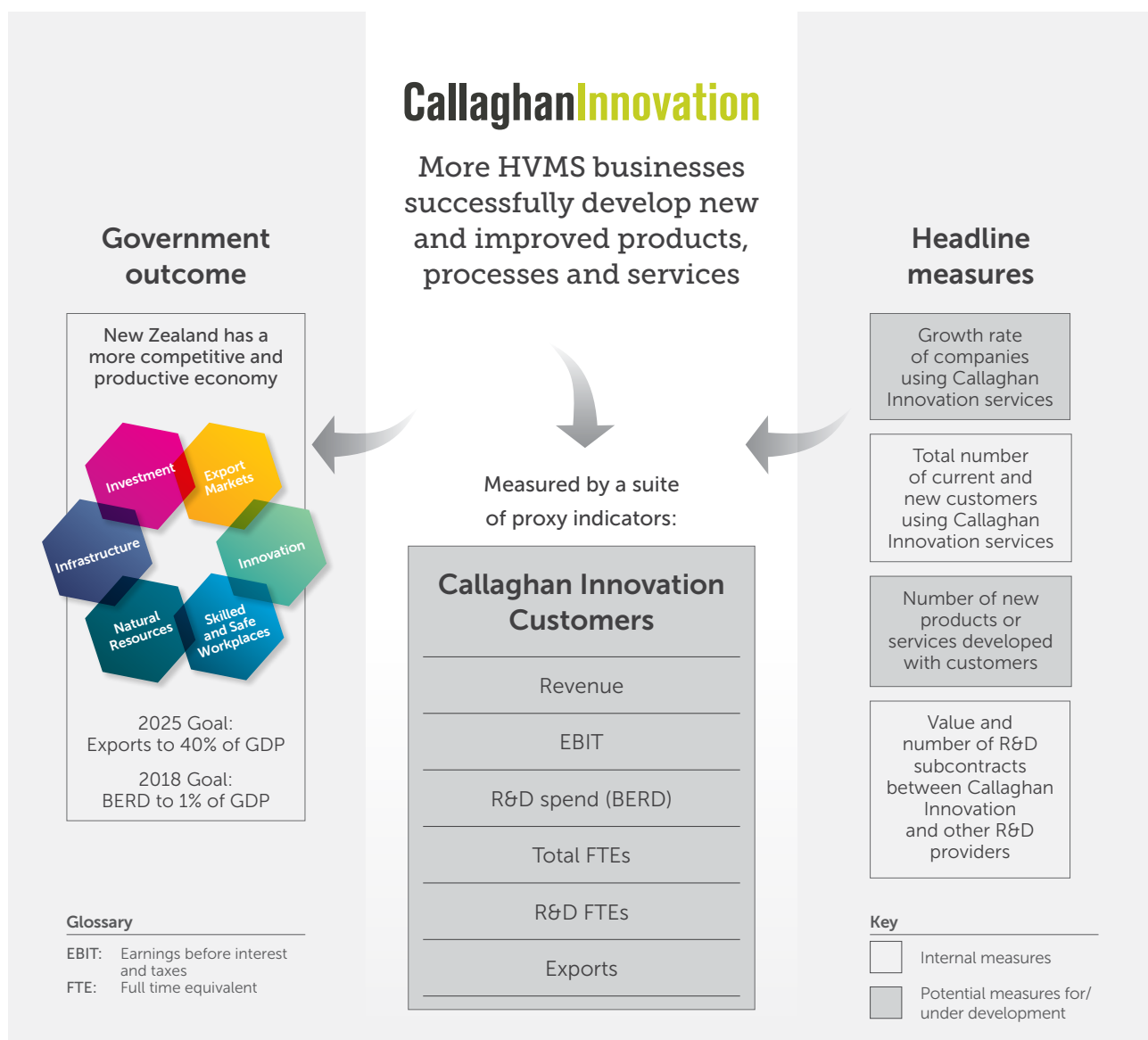
Callaghan Innovation’s strategy is closely aligned with the Government’s Business Growth Agenda and in particular the target of increasing business expenditure on R&D (BERD) to 1% of GDP by 2018. We use performance measures to understand how we contribute to this goal, as well as our ultimate goal of more and bigger HVMS businesses in the New Zealand economy.

As a priority, we have been strengthening our performance measurement framework and indicators

to monitor our progress. This includes collecting baseline data on HVMS businesses so that we can monitor the impacts of our services down to an individual business level.

Below is an overview of our key performance measures and a summary of what success will look like from external and internal perspectives in four years’ time. Our performance measurement framework is provided in our Statement of Performance Expectations.

An overview of Callaghan Innovation’s key performance measures



In four years' time we will know that we are being successful when ...

Externally

More businesses are successfully developing new and improved products, processes and services through technology-driven innovation.

Our customers have access to the most relevant expertise and facilities to conduct their R&D, either with us or at other R&D organisations, nationally and internationally.

There is more coherence and coordination occurring across the innovation system so that customers can enter the system at any point and easily navigate their way through.

Callaghan Innovation is regarded by its customers, key stakeholders and the New Zealand public as a proactive, value-adding entity demonstrated by an increase in the number of new high-tech products and services launched into global markets.

Callaghan Innovation is regarded as supportive and responsive to the needs of Māori businesses.

Internally

Callaghan Innovation is a fit-for-purpose organisation with a highly engaged and energised workforce, working towards a shared purpose, aligned with a core set of values and supported by effective and efficient infrastructure and systems.

Commercial revenue targets are consistently met and plans are in place to ensure future sustainability.

Callaghan Innovation has an improved understanding of its customers through the better collection and use of high-quality information and data and has used this knowledge to tailor its offerings.

Callaghan Innovation is strongly connected and aligned with partner organisations, including NZTE and regional business partners, so that customers' experiences are seamless.

Continuous improvement

Fostering a culture of continuous improvement is also paramount for our success. Our performance improvement framework external review is scheduled for the 2015/16 year and we will use the findings of this review to further focus our performance improvement activities. Our system of internal reviews will ensure that Callaghan Innovation continues to focus its resources on where it can add the most value for New Zealand.

Annex 1 – Managing in a dynamic environment

Risk management framework

Callaghan Innovation demonstrates its agility in a fast and dynamic environment by stating intentions, defining a clear path to achieve our goals, taking calculated risks and effectively managing these as we go.

Risk management processes have been used to identify and assess the key risks that may affect Callaghan Innovation. All risks are recorded in the corporate risk register and are categorised in relation to the likelihood and consequences of the risk events occurring.

High impact risks are updated by general managers and reported to the Audit and Risk Committee of the Board on a quarterly basis. Updates include mitigation actions and progress against these actions.

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 information technology (IT) infrastructure. An upgrade programme for both physical and non-physical assets is underway. It includes:

Upgrading and optimising IS and IT systems

Catching up on deferred maintenance of systems and property

Developing the Gracefield Innovation Quarter

Optimising Callaghan Innovation’s facilities across all real estate locations

Partnering where possible with other entities in shared facilities and services

Supporting strategic initiatives and investments in the innovation system.

Health, safety and environment

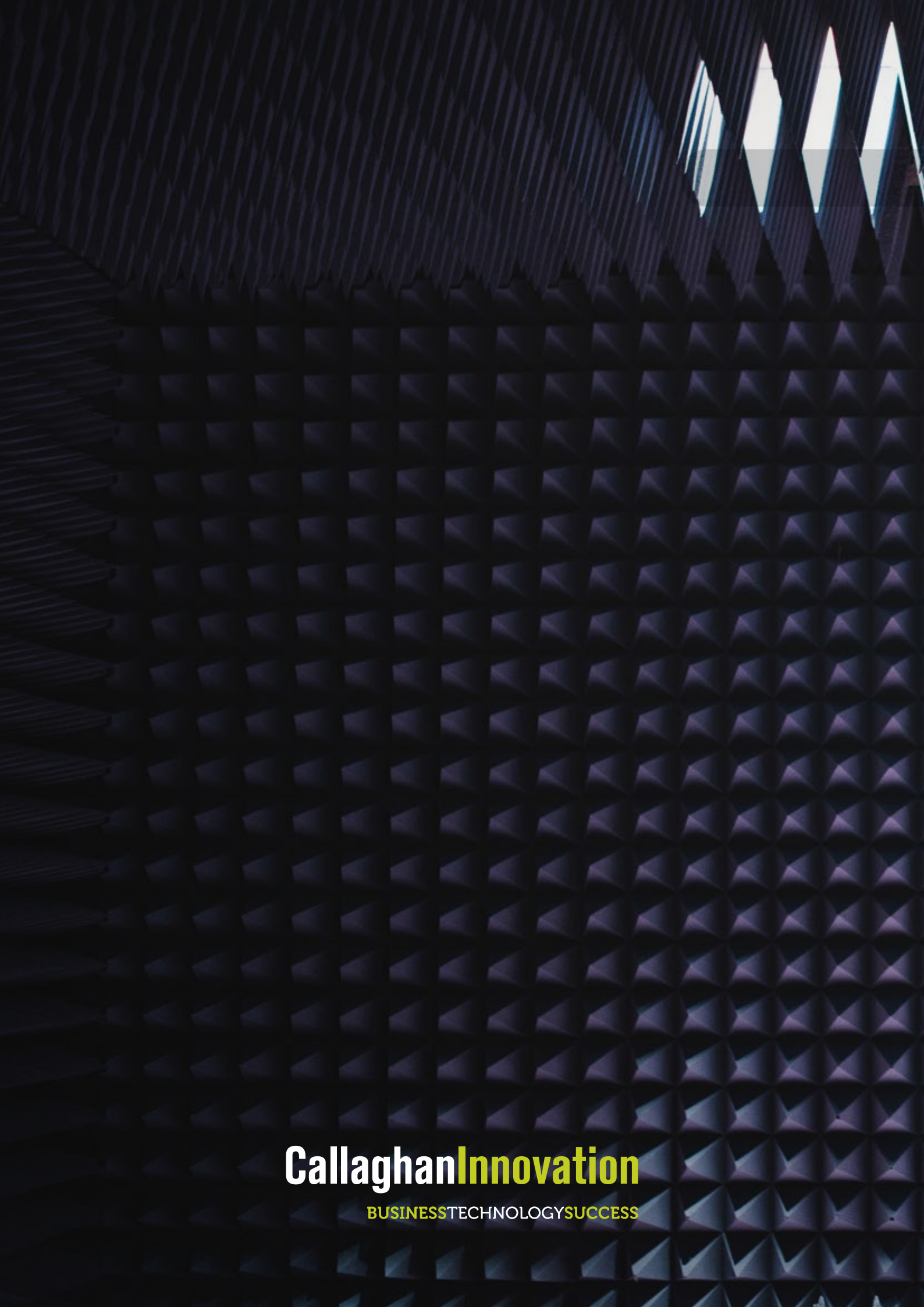
Callaghan Innovation values the wellbeing of employees, contractors, customers and the communities in which we operate. We are committed to practices that support the promotion of health and safety and minimise any adverse health, safety and environmental impacts.

We consult and equip our staff with relevant information, instruction, training and supervision at all levels to empower them to supervise or undertake their work activities competently in a safe and healthy way. We are committed to ongoing improvements in our health and safety frameworks, management, systems and practices. We conduct regular reviews, ensure legislative compliance and keep up to date with best practice.



Callaghan**Innovation**

Cover image: Dr Mark Poletti conducts an experiment in the anechoic chamber at Callaghan Innovation's Gracefield site



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