

# 1 Quarter.

**Callaghan Innovation**

Quarterly Report to the Minister of Research, Science, and Innovation

For the first quarter ending 30 September 2020

## Unlocking a once-in-a-lifetime challenge

### **Supporting customers in a COVID affected world**

Putting in place support to stabilise and thrive

### **Continued investment in R&D**

Swathe of activity from RDTI to Student Grants to Tech Incubators

### **Strengthening the eco-system**

C-prize accelerates environmental technology innovation

### **Building the critical foundations**

Major progress in all transformation programmes this quarter

## The only real option is to innovate

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## Overview of the Quarter

Pre COVID-19, the world was already on track for heavy disruption due to the combination of rapid technological change intersecting with major demographic and societal changes. COVID-19 has amplified this disruption with early impacts in the acceleration in adoption of all things digital. Automation will be a major investment focus for businesses coming out of this pandemic.

Therefore the first quarter of FY 2020/21 has been focused heavily on how we provide support to stabilise R&D performers keeping their important work going for New Zealand's recovery as many of these businesses are charting the path for our future economy. This included by the end of Q1 getting over \$74m of R&D loan money into R&D performers hands, continued delivery of vouchers, additional financial support for tech incubators to ensure they can continue and standing up R&D technical support through vouchers for RTS services.

Economic modelling shows that COVID-19 has also impacted our target of 2% R&D, pushing that back by around five years. That increases the importance of the delivery of the R&D tax incentive policy which has been a big focus for us in Q1 around application assessments, improving operational processes, engagement with businesses and scaling the team. This quarter we opened up Student Experience Grants, got all the Tech Incubator programme contracts signed and stood up the Repayable Grant Investment Committee to ensure operational alignment between tech incubators and the Government's policy.

Strengthening the innovation ecosystem will also be important for opportunities presented from disruption and it's been a busy quarter with the completion of our environmentally focused C-Prize programme. What is delightful is two companies from this programme have already received \$1m each in capital (confidential) showing not only the calibre of ideas in this year's C-Prize, the support for investment in the sustainability space and the importance of continuing to develop this part of the innovation ecosystem. Additionally we fully launched the HealthTech Activator, perfect timing given the growth in focus on health technologies along with increased investment in these startups globally.

Internal transformation which supports Callaghan Innovation itself becoming an exemplar of a government innovation agency has been a big part of our Q1 delivery. With all our transformation programmes now established they are starting to deliver with strong progress addressing Gracefield infrastructure issues. We also moved all of our organisation to G-Suite which increased our productivity significantly. We could not have delivered the COVID-19 service suite as effectively without these tools. Our Tātai Whetū programme delivered a new organisational vision (adopting Sir Paul Callaghan's 'a place where talent wants to live') as well as signing our high level future operating model for the organisation. Additionally we

progressed the RTS strategy in terms of confirming our target market customers and developing a new commercial pricing model to pilot.

We are pleased with the delivery of our non-financial performance measures with the vast majority of these measures on track. Financial performance is currently strong due to timing-related underspends in some of our cost lines around personnel and some of our investments.

Overall it's been an incredibly busy first quarter of the year and our people are tired given the normal workload of operationalising policies (R&D tax incentive, evolved Tech incubator policy), our transformation activities, our core activities across Grants, Sectors and RTS and of course additional COVID-19 workload. As an organisation we are passionate about supporting innovation in Aotearoa and have been calling on our people's discretionary effort to deliver these activities. Our executives are heavily focused on our people's wellbeing - we launched our Hauora strategy earlier this year which is helping deliver initiatives to support wellbeing. Additionally our change framework, he rangi hou kei tua, is working well to help land some of our internal transformation changes smoothly.

# Strategic Initiative Progress

It's been a strong start to the new financial year with good progress in our customer facing initiatives as well as our transformation programmes. Our strategy for the year is outlined in Figure 1 and this section focuses on progress made against these priorities.

Figure 1: Callaghan Innovation FY 2020/21 Strategic Plan

## Our strategy on a page. FY2020-21

**CallaghanInnovation**  
New Zealand's Innovation Agency



## COVID-19 customer response continues

When COVID-19 hit New Zealand, Callaghan Innovation's Emergency Response Team (ERT) focused on the wellbeing and safety of our people, supporting our customers, particularly those in essential industries, and working on various elements of the COVID-19 response. This work included setting our people up to work effectively from home, ensuring we had stable and effective communications and great wellbeing support for our staff. We also responded with changes to a number of existing products and services to support customers grappling with the impact of the pandemic on their business (which in some cases was severe).

By April 2020, we knew that COVID-19 was here to stay and we further formalised our approach beyond the work of the ERT and shifted from a reactive focus - 'let's just get through this', to a responsive focus - let's stabilise and thrive.

As we progressed and built this project out in Q1 of 2020/2021, the heart of the project recognised our need to improve our ability to serve the ecosystem and care for the wellbeing of our staff. Drawing on Agile principles we've used multidisciplinary teams to design and deliver the products and services our people and our customers told us they needed.

### R&D Loan implementation

In Q4 FY 2019/20 we worked across government to develop the proposed R&D Loan as a support response for COVID-19 impacted R&D businesses progressing it through approvals and high level design. The R&D Loan allows R&D impacted businesses to maintain their R&D programmes due to negative cash impacts from the pandemic putting these at risk.

The first quarter of this financial year saw us deliver this service to market, open the scheme to market in the end of July, design the measurement framework and design the assurance programme to ensure integrity of the loan process and approvals. By the end of Q1, \$74.6m had been paid out to businesses with another \$24.9m approved ready to contract, with \$50.4m in the pipeline under assessment or applications in progress.

Callaghan Innovation has established an audit, review and compliance programme for the R&D Loan, comprising five components. Two of these address the proportionately higher levels of risk associated with the early phases of loan operations and enable Callaghan Innovation to make any adjustments required to reduce risks as quickly as possible. The third element relates to a review programme designed to ensure that loan recipients are spending all loan monies on R&D eligible activities as defined by the Ministerial Direction. The fourth element is associated with the financial reporting and accounting treatments of the loan and our annual external financial audit will be extended to include this activity. The final component is an audit of the loan scheme's performance.

All audit, review and compliance activity is reported through Callaghan Innovation's Internal Risk and Audit function and reported to the R&D Loan Governance Committee, Executive Leadership Team, Board and/or Board subcommittees as required.

Activity in Q1 is summarised below.

<b>Component</b>	<b>Purpose</b>	<b>Activities in Q1</b>
Outcomes Reviews	The right applicants are either receiving or being declined the R&D Loan	Reviews completed at \$30m and \$90m and reported to R&D Loan Governance Committee and ARC.

Process Review	Assessors are compliant with all loan processes	Review programme undertaken after the first 100 loan applications have been assessed.
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**Focus for Q2:**

- Complete the application and approval phase of the R&D loan and pay out the remainder of the funding until the \$149 million appropriation is exhausted.
- Continue the assurance programme work to ensure integrity of the loan process.
- Start the transition of the R&D Loan to BAU, including putting in place the processes and people to manage the loan book for the 10-year life of the programme.
- Continue to collect data on any unmet demand for R&D support to feed into policy development about further COVID-19 R&D support measures.

### Update on other COVID-19 responses

In addition to the R&D loan we made significant progress in other COVID-19 related initiatives to support the continuation of R&D critical to economic recovery.

<p><b>Booster Voucher Scheme:</b></p> <p>This has been a successful exercise, with 262 vouchers being actively worked on. Uptake by Māori businesses is 12%; above the stretch target of 10%.</p>	<p><b>Startup system enablers:</b></p> <p>This initiative has focused on the incubators and investors supporting development and growth of early stage ventures in NZ. Funds have successfully bridged the gap in sponsorship shortfall and enabled these organisations to continue their great work.</p>	<p><b>RTS co-funded service</b></p> <p>This has been extended to June 2021. Our Customer Engagement team is working with customers to help them scope their R&amp;D projects, match the RTS capabilities and complete the contracting process.</p>
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### Callaghan Innovation Internal Response Update

COVID-19 has enabled us to drive our organisation and our people towards a much more flexible way of working. We've revised our old and co-created a new Flexible Working Policy and Framework, which acknowledges that working flexibly is now at the heart of how we work. We refocused our wellbeing strategy and associated work streams to continue to provide support to staff feeling the excitement of new ways working and challenged by the on-going impact of the pandemic on their wellbeing and that of those they love. This was particularly important for our Auckland based teams during the Auckland lockdown.

We've also used the COVID-19 experience to establish an ideation pipeline to stimulate, test and assess ideas, and a delivery mechanism that better enabled responsive, cross functional teams and great outcomes for customers. We've used a COVID-19 Discovery and Ideation Sprint to develop a range of proactive initiatives to support New Zealand's R&D performing firms weather the storm of the second and future waves of the pandemic. This resulted in 35 ideas being tested and the creation of seven concrete ideas that are ready to go when the timing is right.

## ***Implementation of the R&D Tax Incentive***

The key focus for the first quarter was application assessments, increasing the number of people in the RDTI assessment team and building business engagement with the RDTI hub. We also progressed work on the Tripartite MOU between Callaghan Innovation, MBIE and IR, which sets out the roles and responsibilities of each agency in relation to the RDTI, and an MOU between Callaghan Innovation and IR, which operationalises the information sharing provisions in Schedule 7, s38(2) of the Tax Administration Act 1994. Both of these MOUs will be signed in Q2.

Business engagement with the RDTI Hub content continues to build. In total 15,869 Hub user sessions were recorded for the quarter, along with 1,734 How-To guide downloads and 221 new Hub subscribers. Online advertising featured COVID-19 support messaging to highlight RDTI refundability, generating 11,665 ad clicks. A Techweek Online 2020 TV session on the RDTI in late July also attracted high viewer numbers.

Stakeholder engagement in the quarter included separate "Software and the RDTI" discussions with each of the Big 4 accountancy firms and with BDO, and an RDTI discussion with industry representative body NZ Tech.

We have been building on the customer feedback and learnings from the pilot, working closely with IR to improve the RDTI guidance, and release a How-To-Guide for R&D activity eligibility assessment.

Internally, we are developing a tool to support RDTI operations and administration of the assessment, allowing for scalability of current manual process, and eLearning modules for use by Callaghan Innovation staff and customers. We have added two people to the team and a pilot for addressing capability and capacity gaps by utilising expertise from our Research and Technical Services Group is progressing.

In quarter one we supported the PWC review, commissioned by MBIE to assess operationalisation of the R&D tax incentive policy.

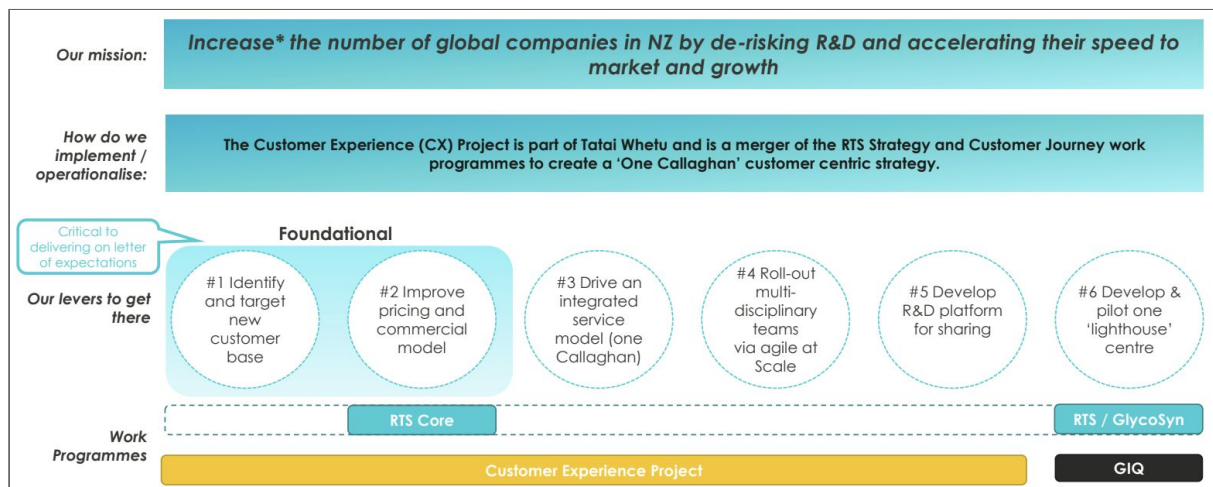


### Focus for Q2:

- Sign the tripartite MOU with MBIE and IR, setting clear expectations regarding the governance structure for the RDTI.
- Improve internal processes to decrease assessment processing time.
- Execute the transition engagement plan for remaining Growth Grants customers.
- Support the requirement analysis and development of the RDTI tool, automating the assessment process to the extent possible and reducing the manual workarounds and current delays. An MVP tool is expected to be delivered by February 2021, in time to support us for the expected peak in March – September.
- Support the release of phase 1 eLearning module.
- Establish a core team engagement function to proactively support RDTI applicants. This team will provide RDTI applicants with active guidance and set expectations regarding the eligibility criteria for RDTI at an initial stage.
- Continue to develop new RDTI Hub content to supplement the existing How-To guides and detailed IR guidance.
- Host an RDTI workshop as part of the 16 November Southern SaaS Online programme. Further RDTI webinars will be offered to key tech sector groups before the end of the quarter.

## Implementation of the RTS Strategy

Figure 2: RTS Strategy



In June our board signed off the work done to identify and target a new customer base for our RTS group. 2,100 high impact innovators were identified via research, of which we serve around 25% today.

Four key areas of focus have driven our RTS strategy activities in Q2:

1. Developing a pilot to test a new pricing and commercial model that optimises RTS to free up time for High Impact Innovators.
2. Reviewing our internal Strategic Investment Funding to understand opportunities for alignment with High Impact Innovators.

3. Develop a business case to invest in understanding future capabilities required for RTS to support industry development in regards to skills and physical assets. This business case was approved.
4. We have determined the lighthouse project (workstream 6) for this strategy is the development of the BioTech Hub. Work commenced on scoping this project.

**Focus for Q2:**

- Execute the sprint to understand future capabilities required for RTS to support industry development.
- Continue pilot to test new pricing and commercial model.
- Complete SIF review to align investment.
- Stakeholder engagement for BioTech hub development and initial workshops to assess opportunity.
- Stand up sprint on driving an integrated service model (workstream 3) in the Advanced Manufacturing space.

## ***Other activity in the R&D funding space***

### **Project and Student Grants**

Applications for the 2020/21 Student Experience Grant round were open during Q1. A total of 644 organisations applied for 1350 student places, which is slightly above last year's level of demand.

Callaghan Innovation had just over 300 active Project Grants through Q1, and demand for Project Grants remains strong. We have seen a small increase in days to decision with project grants requiring rework due to the number of new to Callaghan Innovation applicants who are not familiar with the information requirements. The last two investment committees have seen a large number of approvals made (19) which is a significant increase on usual numbers.

### **Tech Incubator Programme**

The first quarter saw the following milestones met for the Tech Incubator programme:

- Completed contract negotiations between Callaghan Innovation and each incubator with all incubators signing these contracts.
- Completed the operational improvement work required to open applications for pre-incubation and repayable grants.
- Seeking legal advice on Section 12 of the Callaghan Innovation Act and anti-money laundering legislation to repayable grants mechanism.
- Establishing the Repayable Grants Investment Committee and confirming committee membership.

**Focus for Q2:**

- Hold the first few Repayable Grants Investment Committees to approve repayable grant application ensuring alignment to policy. Additionally review the investment strategy for all four tech incubators.

## *Connecting and inspiring the ecosystem and its development*

### **C-Prize: Innovating for a cleaner world**

This year's C-Prize finalists demonstrated that there is huge potential and talent within the cleantech sector in New Zealand. That is combined with a passion to build products, services and technologies that will enable a more sustainable future – one that can be taken well beyond our shores to solve global challenges.

This year's finalists faced a unique journey through the C-Prize mentoring and judging because of the impact of COVID-19, but emerged as stronger businesses as a result. The talent in the competition this year prompted the judges to name three businesses as highly commended, as well as the overall winner.

C-Prize completed in the first quarter of this financial year, with 2019/20 C-Prize winner, **Zincovery** which aims to create a waste-free galvanised steel industry. The industry currently produces waste acid which also contains large quantities of zinc and iron that is disposed of into landfill and waste water. Zincovery is creating a new technology to fully recycle the waste acid and extract the valuable materials. The recycled zinc, iron oxide, and fresh acid can then be reused in industry. The company has raised more than \$1 million in capital (this has not yet been announced publicly) since the C-Prize announcement, and will start building the first commercial plant in New Zealand in 2021.

Highly commended business, **Loop HQ**, is on a mission to build a residential electricity model fit for the future world. The company aims to accelerate residential carbon reduction by designing a smart, hardware-enabled system at a price-point that will ensure accelerated residential uptake. The company has raised more than \$1 million since the C-Prize wrapped up for 2020.

Also highly commended, Waikato company **OneBin**'s product will reduce the contamination in recycling streams, thus reducing the total amount of recyclable material going to landfill. OneBin uses artificial intelligence to identify and separate recyclables from waste at the point of disposal. The technology will also enable OneBin to intuitively perform waste audits, report the fill level of the bin and maintenance issues, and generate real-time reports – making recycling more convenient and reducing the opportunity for human error.

**Ngā Kaitiaki** is developing an ecological mobile game and data collection platform designed to transform a generation of gamers into a global community of citizen scientists. Ahi Ka Rangers is an innovative and fun game that educates players to have a positive impact on their environment – both in-game and IRL (in real life). The island-building simulation game weaves te Ao Māori (Māori worldview) throughout game play, providing a new way of understanding biomes and environmental systems, and teaching players how to

care for and protect them. It is also designed to become the world's largest environmental data collection platform, collecting ground-truth and observational data from anywhere in the world.

### The HealthTech Activator – clearing the path for Kiwi healthtechs

Following its first phase launch earlier in 2020, the HealthTech Activator second phase is now live with a great depth of practical advice, content and events available for New Zealand healthtech companies [via its website](#).

Key areas of expertise available include advising on defining product/market fit, assessing market readiness and creating an individualised support journey, capital education and planning, assisting with regulatory preparedness and reimbursement strategy, as well as clinical trials and validation. The site also provides access to global data sets and support on where to find funding.

The Activator has also scheduled its first two capability training workshops for Q2. One will focus on capital planning and the specific challenges for healthtech companies; the second focuses on the importance of market validation and how to get it right.

The core focus of the Activator is to continue to work closely with our partners, MedTech CoRE and CMDT, to ensure all New Zealand healthtechs are plugged into the Activator to connect with the skills, knowledge and tools they need to navigate the sector's unique roadblocks.

### Scale-Up NZ continuing to grow profiles and connections

In quarter one Scale-Up NZ had:

- 2,074 total visible profiles on the platform (415 new profiles added in Q1)
- 4,417 total registered users/ people that have signed up (594 new users joined in Q1)
- 22,000 site visits and 113,000 page views
- 351 total introduction requests received overall (56 requests received in Q1).

#### **Focus for Q2:**

The focus for the next quarter is on data visualisation and bringing Scale-Up NZ data to life. We will be creating a new front page for Scale-Up NZ that visualises the data in new ways (still a work in progress).

We are also engaging with MBIE and the startups leadership group to work through how Scale-Up NZ data can best contribute to the startup measurement/tracking work that they are looking to deliver.

## ***Significant progress on building our foundations***

Three of our transformation programmes come together to build our foundations to deliver on our internal vision of creating an innovation agency that can be an exemplar for government. In the first quarter we also initiated a fourth programme, HomeSafe, to address key health and safety issues.

### **Digital Transformation**

This quarter we:

- Rolled out G-Suite to the entire organisation.
- Selected a vendor for Hiwa-i-te-rangi (Grants platform replacement).
- Completed the business case for replacement of our SharePoint-based document management system.
- Released an RFP for a new data integration and architecture platform.
- Completed the business case for Iho Matihiko (a project to improve customer experience through better digital content and channels).

#### **Focus for Q2:**

- On-board the vendor for Hiwa-i-te-rangi.
- Release an RFP for replacement of our SharePoint-based document management system.
- Complete the detailed business case for new data integration and architecture platform.
- Complete Stage 1 of the network optimisation project.
- Complete technical discovery and detailed business case for Iho Matihiko.

### **GIQ Programme**

This quarter we:

- Completed a fourth Treasury Gateway Review for the programme.
- Commenced construction of a new laboratory for MSL's Time and Radio Frequency Teams, a partial roof replacement in the Processing Building for GlycoSyn, and a new facility for MBIE Trading Standards.
- Continued construction on a new Microfabrication Cleanroom.
- Approved indicative business cases for Tranche 4 (Flexible Laboratory Accommodation), and project initiation documents (PIDs) for Tranche 2 (Roof and Exterior, and Laboratory Upgrades), Tranche 3 (Hazardous Goods and Chemical Storage), and Tranche 4 (Flexible Laboratories and Flexible Offices).
- Developed Callaghan Innovation's Asset Management Strategy which defines and aligns our asset management approach with best practice.
- Held Biotechnology Hub Vision and Investment Logic Mapping workshops with key stakeholders.
- Appointed design consultants to support development of a GIQ masterplan.

**Focus for Q2:**

- Commence demolition of B Block bunkers and continue planning for remaining demolition in 2021.
- Continue construction of GlycoSyn roof replacement, new Microfabrication Cleanroom, and Time Laboratory.
- Prepare a number of detailed and indicative business cases as projects move towards delivery stage.
- Complete construction of 'Office 2' and progress construction of 'Office 4', the new meeting and lab spaces at our Auckland Textile Centre site.
- Progress deferred maintenance works (Tranche 2), including commencing work to replace HVAC units sitewide.
- Complete construction of a new facility for tenant Trinity Bioactives (Tranche One).
- Explore opportunities to collaborate with key strategic partner Victoria University of Wellington's Robinson Research Institute, to support their increased business growth.
- Undertake internal and external stakeholder engagement on the draft Masterplan for the Gracefield site.
- Implement our Asset Management System (Framework) and determine levels of service and a one facility classification system for setting KPI's and measuring asset management performance.
- Establish a 'Working Group' for biotech hub initiative to enable wider stakeholder engagement and collaborate on development of the Strategic Case for the Indicative Business Case.
- Progress the Strategic Services Programme.

## Tātai Whetū Programme

This quarter we:

- Approved the MVP Future Operating model blueprint.
- Launched the organisational vision.
- Embedded He rangi hou kei tua (the Callaghan Innovation change framework) in the organisation.
- Completed the initial assessment of Callaghan Innovation's risk culture.

**Focus for Q2:**

- Approval of the Business Case to commence work on Operating Model Phase 2.
- Continuing the Service and Process work streams of the Customer Experience Phase 2 project.
- Kick off a project to formulate a new set of organisational behaviours.
- Continuing work to embed our risk framework into the organisation.

## Health and Safety

This quarter we:

- Undertook a Coordinated Incident Management System (CIMS) review, identifying roles and responsibilities and additional staff to fill CIMS roles, and assessing training needs.
- Developed and tested procedures to manage Callaghan Innovation's responsibilities as a manufacturer, importer, designer, and supplier (MIDS). This has identified improvements that will be incorporated before rolling out training and delivery to selected users.
- Identified a list of 10 critical risks. Analysis has been undertaken to assess Callaghan Innovation's controls against each risk with a view to identifying missing controls or controls that require strengthening.
- Commenced a SafePlus review to provide a high-level review of business processes including health and safety governance and leadership, strategy setting, enterprise risk management, health and safety risk management, procurement and worker engagement.
- Commenced an audit of all our laboratories focusing on hazardous substances and heavy manufacturing equipment.
- Evolved the Health and Safety Project into the HomeSafe Programme.

Please see further commentary on health and safety under the Enterprise Risks section.

### Focus for Q2:

- Assess results of SafePlus review and prioritise actions to address any recommendations.
- Incorporate feedback on PCBU MIDS framework and work with the organisation to develop and implement fit for purpose processes.
- Review the list of 10 critical risks and confirm acceptance of these.
- Develop and prioritise actions to address any missing controls for critical risks.
- Implement deliverables from CIMS review.
- Pilot workstream to implement and validate controls for one of the 10 critical risks (Hazardous Substances).
- Sign off the programme mandate and business case for HomeSafe Programme.

## *In other news*

### **Supporting the development and implementation of Industry Transformation Plans**

This quarter we have continued to support the development and delivery of the Industry Transformation Plans. Callaghan Innovation leads the commercialisation workstream of the

Agritech ITP and has lead responsibility for two high impact projects (Horticulture Robotics Institute and Hosting the Farm2050 Nutrient Initiative). We are working with partner agencies to develop the Digital and Food and Beverage ITPs to ensure these work programmes can unlock the potential of our customers in these sectors, and provided expert input to MBIE to support the development of the Advanced Manufacturing ITP.

In Q2 we will focus on developing the business case for the Horticultural Robotics Catalyst, which will be a centre for collaboration, help New Zealand businesses to overcome issues of scale, have a global focus and ensure that New Zealand researchers and entrepreneurs can lead the world in this space.

We will also establish the Farm2050 Nutrient Initiative project which involves connecting with Farm2050 (a global agritech initiative) to facilitate the development of scientifically valid/statistically significant trials that allow for analysis, optimisation and automation of farming activity, coupled with exploring new biological methods of improving soil nutrition.

In the agritech commercialisation workstream, in Q2 we will progress work across the three focus areas: Accelerating commercialisation and spin-outs of research institute intellectual property; Prototyping technology in partnership with farmers; and International research collaboration.

We are also working with MBIE and NZTE to develop a business and technology road map to support the SaaS sector as part of the Growing Export Success Stream.

### **Progressing Industry Partnerships**

This quarter:

- We signed all contracts for the delivery of the Industry 4.0 Demonstration Network, alongside an overarching MOU with MBIE. Concept design for the Mobile Showcase has been approved, alongside approval in principle of the proposed Smart Factory. Detailed design phases are underway and tracking well.
- The NZPA have had 104 new engagements and 43 new projects initiated since the transfer to Callaghan Innovation and feedback is very positive.
- We launched phase two of the HealthTech Activator, providing dedicated support services for early-stage founders and companies in the healthtech sector.

#### **Focus for Q2:**

- Launch the [industry4.govt.nz](http://industry4.govt.nz) overarching website, which will act as a central point to direct clients and questions.
- Deliver the first assessment and webinar as part of the Industry 4.0 Network of Site Visits.



- Formulate the NZBPA action plan based on the recommendations of the Operational Review.
- Re-launched the NZPA website under Callaghan Innovation's umbrella, and develop a new range of collateral in order to run more effective engagements.

### **Larry Keely workshop driving ten types of innovation**

We had fantastic attendance at our August [Larry Keely seminar](#) paid event on the 10 types of innovation with peak attendance of 426 (surpassed our expectations). The full event is [here](#). We ran a poll at the start and end of the webinar asking this question both times: Is now the right time to undertake bold innovation? We wanted to see if there was a positive shift as a result of the webinar, we achieved an 11% increase (from 77% to 88% agreeing with an 8-10 score that now is the time to undertake bold innovation), a pretty good result for a 90 minute seminar.

### **Launch of Hemp and Cannabis roadmaps**

Q1 saw the completion and launch of our [Hemp / Cannabis roadmaps](#) for industry. The roadmaps help businesses to access the right capabilities in these emerging and rapidly changing areas.

### **Appointment of CISO**

Callaghan Innovation lacks maturity in its operational security practices, and this is a common source of constraint in all parts of the organisation - observed primarily in our technology platforms, along with our physical environment, and personnel practices.

Organisational leadership to address maturity gaps around technology security, physical security, and personal security is required. An external CISO will provide capability via thought leadership and organisational direction to ensure that Callaghan Innovation is able to deliver effectively against its obligations to provide a safe and secure environment across all components of its business.

In the first quarter we shortlisted three organisations from all-of-government providers to provide CISO services for Callaghan Innovation. Axenic was appointed to provide our CISO services. The goal is integrating all security matters and applying a single organisational "lens" to address strategic security challenges in our complex organisation.

## **Enterprise Risks**

### **Health and Safety**

Callaghan Innovation is working through significant critical risk events around Hazards Substances currently, which has increased our Health & Safety enterprise risk. This has been identified as we have moved through issues around tracking and security of substances,

chemical storage and labelling, emergency management and signage, gaps in training and competency (certified handlers), and a lack of understanding of the Health and Safety at Work (Hazardous Substances) Regulations 2017. Our Chief Executive Vic Crone has engaged with WorkSafe New Zealand on the issues identified and will progress that engagement to advise on the remediation activities being undertaken and to ensure Callaghan Innovation's obligations and responsibilities are being met.

In September 2020, in order to address the ongoing Health and Safety issues, it was agreed to create a single Health and Safety Programme (the HomeSafe Programme) to encompass all existing Health and Safety Project work as well as newly identified workstreams.

Through this work, we have been working to achieve mitigations around Health & Safety, and have completed a SafePlus Assessment of the GIQ site, which covers a high level review of business processes including health and safety governance and leadership, strategy setting, enterprise risk management, health and safety risk management, procurement and worker engagement. This will inform the Programme priorities. Currently we have a Laboratory Compliance Audit underway, which involves assessing compliance with the Health and Safety at Work Act and applicable regulations, determining chemical storage information, and the provision of guidance in relation to the suitability of storage areas. The audit also seeks to identify any physical improvements required to laboratory spaces to ensure they are compliant with the legislation.

We are also working on raising the capability, competency and capacity of Callaghan Innovation's core function of health and safety practitioners, and the maturity of the existing health, safety and risk culture, are also critical areas of focus.

### **Other enterprise Risks**

Callaghan Innovation (CI) requested and was funded \$9.9m from MBIE (April 2020) to support potential business interruption impacts from COVID-19. This money was to be used according to the COVID-19 criteria as set out in Budget guidelines (May 2020) issued by the Ministry of Finance together with the budget bid from CI.

In June 2020 CI requested \$3.6 million be paid into the CI bank account as an initial drawdown to provide support through COVID-19 impacts. This transaction was completed.

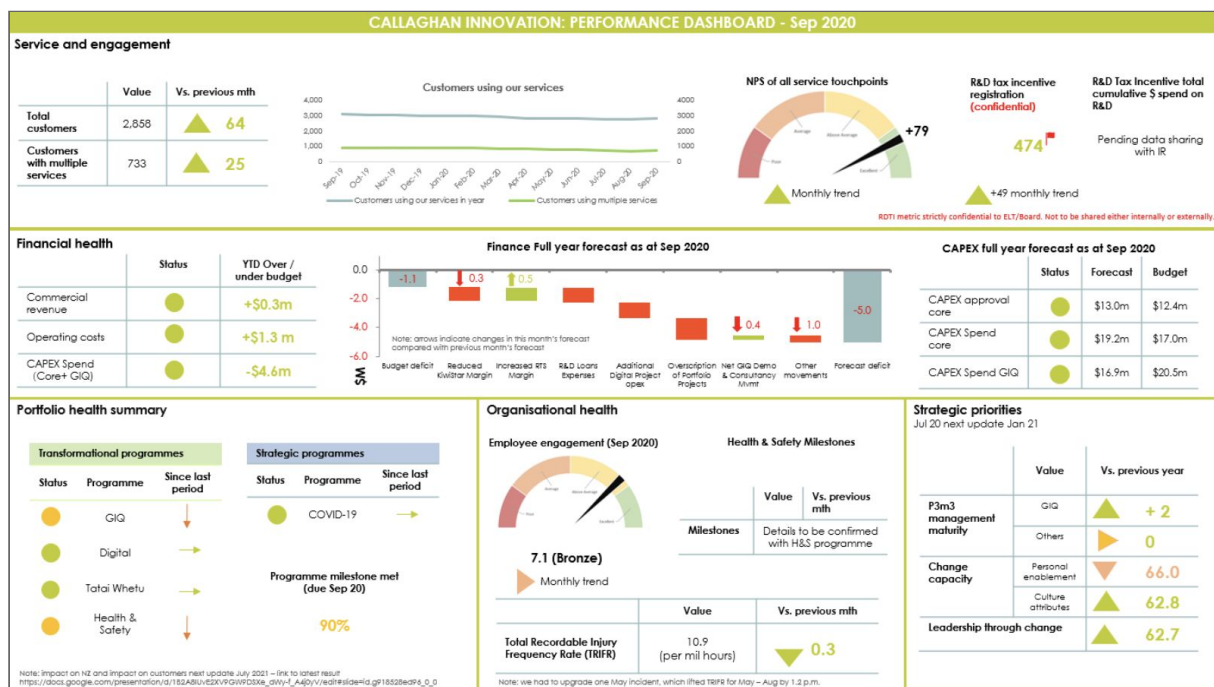
At that time the funding agreement for the 2021 year was being finalised and as part of this the balance of the approved funding (\$6.4m) should have been included as part of the CI funding for the 2021 year. This step did not occur, hence the balance of \$6.4m is not readily available for CI to drawdown on.

From MBE's perspective and based on the current cash holdings of CI (\$61m at 30 June 2020) MBE is reluctant to give CI any further cash without providing evidence that CI requires the additional funds. If MBE accepts the evidence, a variation to the funding agreement of CI will be signed and the drawdown process can happen.

The risk for CI is that this money has been included in the FY21 budget as revenue (CC605 CEO) and accounted for in the budget deficit of \$1.1m for the FY21 year. If CI does not receive this money the deficit could potentially increase to \$7.5m which will severely impact the cost pressures CI are already facing and investments in the coming years which our cash reserves are allocated too.

## Performance and our Impact

### September 2020 Performance Dashboard



## Non Financial Performance Measures by Category

### Callaghan Innovation Operations: Multi-Category Appropriation

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Total number of organisations working with Callaghan Innovation on services this Financial Year	2,866	2,600	2,991	

Net Promoter Score of all surveyed customers	+74	+60	+79	
Total number of organisations working with Callaghan Innovation and NZTE as a F700 <sup>1</sup> customer	386	300	465	
<b>Digital Transformation Programme</b>				
Deliver new grants platform	N/A	Achieved	On track	
Implement new data integration and architecture platform	N/A	Achieved	On track	
Complete network optimisation	N/A	Achieved	On track	
<b>Gracefield Innovation Quarter (GIQ) redevelopment</b>				
GIQ Strategic Services Programme Business Case complete	N/A	Achieved	On track	
Sitewide Masterplan complete	N/A	Achieved	On track	
Biotech Hub Indicative Business Case complete	N/A	Achieved	On track	
Demolition of four structures onsite	N/A	Achieved	Delayed	
Construction of a hazardous goods facility commenced	N/A	Achieved	On track	
Construction of flexible office accommodation commenced	N/A	Achieved	On track	
<b>Tātai Whetū Programme (Culture, operating model &amp; customer experience)</b>				
Embed new Operating Model and associated processes	N/A	Achieved	On track	
Deliver Shared Vision, Values, and Identity	N/A	Achieved	On track	
Embed new Risk Culture in Callaghan Innovation	N/A	Achieved	On track	
<b>Māori Economy</b>				
Number of Iwi & Trusts served*	N/A	5	1	
Defining our role as Treaty partner	N/A	Achieved	On track	
<b>Health, Safety and Wellbeing</b>				
Full implementation of PCBU framework	N/A	Achieved	On track	
HSE Critical Risk Framework Operationalised	N/A	Achieved	Delayed	
Wellbeing strategy operationalised - engagement score for Wellness above 6.9 and Happiness above 7.4	N/A	Achieved	On track	
<b>Bioresource Processing Alliance (BPA)</b>				

<sup>1</sup> NZTE have renamed the F700 segment "Focus" and have increased the target from 700 customers to 1000-1400 customers by June 2021. Callaghan Innovation's performance will be re-baselined accordingly next quarter.

Number of industry partners involved in research projects	N/A	Baseline to be established	4	
Number of new products or processes developed for industry partners	N/A	Baseline to be established	15	
<b>NZ Product Accelerator (NZPA)</b>				
Number of industry partners involved in research projects	N/A	Baseline to be established	8	
Number of new products or processes developed for industry partners	N/A	Baseline to be established	18	
<b>NZ Food Innovation Network</b>				
Continued operation of the New Zealand Food Innovation Network and support MBIE with the programme review	N/A	Achieved	On track	

### Category 1: Building Business Innovation

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Number of customers who worked with Callaghan Innovation in the following services: Events; International Missions; Innovation Skills (formerly 'Programmes')	1,101	1000	646 <sup>2</sup>	
Net Promoter Scores for the following Callaghan Innovation Services: - Events - International Missions - Programmes	+48 +69 +74	+30 +60 +60	+56 +72 +70	
Total unique opens of Callaghan Innovation's monthly Accelerate e-newsletter	N/A	3500	2,257	
<b>Scale-Up NZ</b>				
Organisations profiled on Scale-Up NZ	N/A	2000	2074	
Introduction requests	N/A	450	351	
<b>HealthTech Activator</b>				
Define programmes and services required to smooth the commercialisation journey of Healthtech companies	N/A	Development and delivery of 75% of	Achieved	

<sup>2</sup> Cancellation of in-person events and international missions from March 2020 onwards due to Covid-19 restrictions had led to large decrease in customers in events and international missions categories.

		programmes and services		
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### Category 2: Research and Development Services and Facilities for Business and Industry

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Number of customers with a Research and Technical Service project this financial year	256	216-264	245	
Net Promoter Score from Research and Technical Services	+47	+40	+57	
RTS Strategy delivery: Deliver and implement a new commercial operating model that supports high-impact 'frontier firms' and established R&D players, while sustaining revenues	N/A	Achieved	Delayed	

### Category 3: Business Research and Development Contract Management

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Number of new Project and Student grant applications received during the financial year	968	700	1265	
Percentage of Project and Student grant applications who have received a decision within 30 working days of receipt of the completed application	89%	90%	94%	

### Business Research and Development Grants

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Percentage of businesses receiving a Growth Grant that maintain or increase eligible R&D expenditure over the grant period	89%	70%	87%	

### Targeted Business Research and Development Funding

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Number of active Project Grants this financial year	576	570	452	

Net Promoter Score from Project Grants recipients	+74	+70	+80	
Percentage of Project Grant recipients who perceived that the grant- funded project: - Had an overall positive impact on their business - Increased knowledge acquisition - Improved business productivity	93% 91% 89%	95% 85% 85%	94% 89% 84%	
Net Promoter Score from Experience Grants recipients	+93	+70	+91	

### Repayable Grants for Startups

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Number of customers that received a service from either an incubator or accelerator	204	170	196	
Net Promoter Score from Startup customers	+71	+60	+69	
First ventures for funding from the Tech Incubator Programme	N/A	Achieved	On track	

### Short-term Research and Development Loan Scheme

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Percentage of applicants that have been provided with a decision within 4 weeks of their application being received	N/A	80%	To be measured in Q2	N/A

### Future-proofing New Zealand's Manufacturing Sector by Driving Industry 4.0 Uptake and Skills Development

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Number of customers who received a service during the financial year	N/A	Baseline to be established	N/A	
Net Promoter Score from customers who receive a service during the financial year	N/A	Baseline to be established	N/A	
Deliver a programme that includes at least 10 Industry 4.0 factory site visits per year and a dedicated mobile	N/A	Achieved	On track	

showcase to demonstrate Industry 4.0 technology				
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### National Measurement Standards

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Provision of national measurements and standards and related services in accordance with statutory obligations under section 4 of the Measurement Standards Act 1992, reported annually to the Minister and accepted	Achieved	Achieved	On track	
All technical procedures related to the maintenance of national measurement standards (in accordance with the resolutions and recommendations of the Metre Convention) independently reviewed and validated, with all external review actions completed by the end of the financial year	Achieved	Achieved	On track*	

\* There were 109 technical procedures in validation on 1 Nov 2020, 12 of which were validated or revalidated during the three months from 1 July 2020 to 31 Oct 2020. IANZ has not audited MSL during this three-month period. There are no outstanding corrective action requests from previous audits.

### Capital Expenditure

Performance Measures	2019/20 Result	2020/21 Performance Standard	Q1 2020/21 Result	Status
Any physical and virtual infrastructure investment is aligned with the overall strategy	Achieved	Achieved	On track	
Any major capital project proposal is developed in accordance with published Treasury business case guidance	Achieved	Achieved	On track	

## Financial Performance

### Key Financial Indicators to 30 September 2020

	Actual \$m	Budget \$m	Variance \$m
Group surplus/(deficit) after non-operating items	0.7	(1.1)	1.8
Revenue	30.8	31.8	(1.0)
Expenses	30.3	33.0	2.7



Interest income and non-operating items	0.3	0.2	0.1
Cash and deposits	55.4	55.7	(0.3)

The Callaghan Innovation Group includes the parent (Callaghan Innovation), two operating subsidiaries (New Zealand Food Innovation (South Island) Limited and New Zealand Food Innovation Auckland Limited), as well as one equity accounted associate (New Zealand Food Innovation (Waikato) Limited). These reported values also include the National Science Challenge operations.

## Commentary

The Group surplus for the first quarter of \$0.7m is \$1.8m up on budget driven by YTD savings across several cost categories (some of which are expected to unwind through Q2).

Overall Crown revenue is down on budget, with the National Science Challenge (NSC) experiencing further delays in implementing several key projects post COVID-19 (\$1.4m behind plan YTD). This trend is driving both a reduction in costs as well as lower recognised revenue. A pickup is expected towards year end, however this activity is likely to push into later years of the programme. Conversely, FY21 spend on the Industry 4.0 programme has been front loaded to support the set-up phase, resulting in earlier revenue recognition (up \$0.3m).

It's been a mix in commercial revenue performance with some areas performing well and others such as Kiwistar really suffering impacting demand and sales opportunities.

In addition to the savings related to NSC outlined above, cost savings have come across several categories, including:

- Travel (\$0.2m), driven by the lock down in Q1, changing behavioural patterns in travel and work and an increasing uptake of our new Google video conferencing platform.
- Slower than planned ramp up in strategic initiative spend (\$0.3m) and headcount (\$0.2m), as we took time in Q1 to ensure our areas of focus were appropriately aligned to our revised FY21 strategy.
- Lower than expected demolition costs (\$0.2m), as the planned activity pushed into second half of the year.
- Depreciation (\$0.2m), with completion of some key projects now pushing into late FY21.

Cash and term deposits are below budget, with the budgeted Q1 settlement of a \$3.3m insurance claim now expected in Q2.

## Detailed financial results

Statement of Revenue and Expense, Callaghan Innovation Group, for the period ended 30 September 2020

	Actual	Budget	Variance	Full Year Budget
	\$k	\$k	\$k	\$k
<b>Revenue</b>				
<b>Crown operating</b>				
Crown Funding – Other	-	-	-	1,413
Callaghan Innovation Funding	11,145	10,867	277	49,769
Strategic Investment	4,631	4,631	0	18,523
Business R&D Grants administration	1,937	1,947	(10)	7,789
National Measurement Standards	2,030	2,030	-	8,118
Programme Funding	845	845	0	3,378
Food Innovation Network	1,219	1,218	1	4,870
<b>Total Crown operating</b>	21,806	21,537	269	93,860
<b>Crown contestable contracts and other</b>	3,042	4,452	(1,410)	17,809
<b>Commercial revenue</b>				
Domestic Commercial	2,338	1,818	520	7,561
Overseas Commercial	2,671	2,922	(251)	10,835
<b>Total Commercial revenue</b>	5,009	4,740	269	18,396
<b>Other Income</b>	972	1,043	(71)	3,404
<b>Total revenue</b>	30,828	31,771	(943)	133,469
<b>Expenses</b>				
Personnel	15,864	15,482	(382)	60,141
Services and Contracts	4,486	6,007	1,520	33,088
Other costs	7,748	9,082	1,334	30,994

Depreciation	2,246	2,478	232	11,035
<b>Total expenses</b>	30,344	33,048	2,704	135,259
<b>Operating surplus / (deficit)</b>	484	(1,277)	1,761	(1,790)
Interest Income	310	131	179	510
Tax (expense)/credit	-	-	-	-
Non Operating Income	(48)	35	(83)	141
<b>Surplus / (Loss)</b>	747	(1,111)	1,858	(1,139)

The following grants funding and expenditure occurred in the quarter ended 30 Sept 2020:

	<b>\$k</b>
Grants funding from MBIE	55,381
Grants expenditure	(55,381)
Net Impact	0

When the FY20/21 SPE budget was prepared, revenue and expenses for the Bioresource Processing Alliance and NZ Product Accelerator programmes were included on a gross basis (~\$4.4m in total). Following conclusion of the accounting treatment for these programmes as part of the FY19/20 annual report process, these are now netted off in actual results. To ensure financial information is presented on a comparable basis, these amounts have been netted off in the budget data above (although there is no impact on the budgeted surplus).

### Statement of Financial Position, as at 30 September 2020

	<b>Actual</b>	<b>Budget</b>	<b>Variance</b>	<b>Full Year Budget</b>
	<b>\$k</b>	<b>\$k</b>	<b>\$k</b>	<b>\$k</b>
<b>Assets</b>				
Current assets*	192,698	212,698	(20,000)	84,077
Non-current assets				

Fixed Assets	69,322	72,138	(2,817)	93,980
Investment in associates	4,429	4,637	(208)	4,793
<b>Total assets</b>	<b>266,448</b>	<b>289,473</b>	<b>(23,025)</b>	<b>182,850</b>
<b>Liabilities</b>				
Current liabilities*	(150,184)	(172,444)	22,260	(53,902)
Non-current liabilities				
Non-current employee entitlements	(218)	(328)	109	(318)
Deferred tax	(682)	(762)	80	(762)
<b>Total liabilities</b>	<b>(151,085)</b>	<b>(173,534)</b>	<b>22,449</b>	<b>(54,981)</b>
<b>Net assets</b>	<b>115,363</b>	<b>115,940</b>	<b>(576)</b>	<b>127,869</b>

\* Includes the following estimated grants liability at 30 September 2020:

<b>Current assets</b>	
MBIE grants receivable	126,205
<b>Current liabilities</b>	
Provision for grants payable	(126,205)

### Statement of equity, as at 30 September 2020

	Actual	Budget	Variance	Full Budget	Year
	\$k	\$k	\$k	\$k	
<b>Equity</b>					
Contributed capital	97,535	97,535	-	109,493	
Accumulated surplus	17,828	18,404	(576)	18,376	
<b>Total equity</b>	<b>115,363</b>	<b>115,939</b>	<b>(576)</b>	<b>127,869</b>	

The statements above, along with the cashflow statement on the following page, have been prepared exclusive of the \$149m impact of the R&D Loan Scheme reflected in the Statement of Performance Expectations for FY21 (these loan balances are reflected in MBIE's financial statements).

## Statement of cashflow, for the period ended 30 September 2020

	Actual	Budget	Variance	Full Year Budget
	\$k	\$k	\$k	\$k
<b>Net cash flows from:</b>				
Operating activities	(176)	5,966	(6,142)	12,090
Investing activities	(5,409)	(8,201)	2,792	(34,254)
Financing activities	-	-	-	11,958
<b>Net increase / (decrease)</b>	<b>(5,585)</b>	<b>(2,235)</b>	<b>(3,350)</b>	<b>(10,206)</b>
Add cash at start of period	60,966	57,915	3,051	57,915
<b>Balance at end of period</b>	<b>55,381</b>	<b>55,680</b>	<b>(299)</b>	<b>47,709</b>

## Grants Forecast

### Growth Grants Forecast

The Growth Grants scheme is now closed to new applicants, and we are forecasting a surplus of \$55.8m in this appropriation at the end of the MYA period. The forecast has sensitivity both up and down dependent on customer demand. We will continue to monitor and reforecast this appropriation monthly.

Actuals	Cash Basis \$000	Accrual Basis \$000
Available Appropriation		
Establishment Appropriation	\$802,860	\$802,860
Adj FY17/18 - project grants transfer	\$20,000	\$20,000
Adj FY17/18 - appropriation c/fwd	\$5,789	\$5,789
Adj Y18/19	-\$4,850	-\$4,850
	\$823,799	\$823,799

Adj for 2019/20 - OBU '19	-\$34,490	-\$34,490
Adj 2019/20 - OBU '19 RDTI	-\$5,170	-\$5,170
Adj for 2019/20 - OBU '19 RDTI	-\$830	-\$830
Adj for 2020/21 - MBU '20 RDTI	-\$5,200	-\$5,200
Gross Available Appropriation	\$778,109	\$778,109
<b>Carry Forward Accrual Cash</b>		
2013-2017 appropriation	\$58,958	\$0
Actual cash payments		
Claims paid in cash FY17/18	-\$141,584	-\$141,584
Claims paid in cash FY18/19	-\$192,778	-\$192,778
Claims paid in cash FY19/20	-\$216,332	-\$216,332
Claims paid in cash FY20/21 YTD	-\$31,066	-\$31,066
Total Paid	-\$581,759	-\$581,759
Accrual Movements		
Reverse opening accrual		\$58,958
Closing accrual (base case)		-\$106,650
Net Accrual movement		-\$47,692
Available Appropriation	\$255,308	\$148,658

<b>Forecast</b>			<b>Based on Customer Forecast</b>
<b>Scenario - Base Case</b>	<b>Cash Basis \$000</b>	<b>Accrual Basis \$000</b>	<b>Cash Basis \$000</b>
Appropriation remaining	\$255,308	\$148,658	\$255,308
Less - FY22 transfer to RDTI	-\$5,200	-\$5,200	-\$5,200
Less forecast commitments	-\$194,287	-\$87,638	-\$266,301

<b>Surplus/(Shortfall)</b>	<b>\$55,821</b>	<b>\$55,821</b>	<b>-\$16,193</b>
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<b>Scenario - Worst Case</b>	<b>Cash Basis \$000</b>	<b>Cash Basis \$000</b>
Appropriation remaining	\$255,308	\$255,308
Less - FY22 transfer to RDTI	-\$5,200	-\$5,200
Less forecast commitments	-\$198,252	-\$276,385
<b>Surplus/(Shortfall)</b>	<b>\$51,856</b>	<b>-\$26,277</b>

<b>Scenario - Best Case</b>	<b>Cash Basis \$000</b>	<b>Cash Basis \$000</b>
Appropriation remaining	\$255,308	\$255,308
Less - FY22 transfer to RDTI	-\$5,200	-\$5,200
Less forecast commitments	-\$189,462	-\$256,217
<b>Surplus/(Shortfall)</b>	<b>\$60,646</b>	<b>-\$6,109</b>

## Project and Student Grants Forecast

We continue to forecast excess demand and an appropriation shortfall in the Targeted Business Research and Development Funding MYA, which covers Project and Student Grants.

<b>As at 30 Sept 2020</b>	<b>Cash Basis</b>	<b>Accrual Basis</b>
	<b>\$000's</b>	<b>\$000's</b>
Available appropriation		
Rolled over from 2013-2017 appropriation	\$23,835	\$23,835
Original 2018-2022 appropriation	\$187,500	\$187,500
Transfers to growth grants	-\$20,000	-\$20,000

Net Appropriation (1 Jul 2017 - 30 Jun 2022)	\$191,335	\$191,335
Carried forward accrual cash (2013-2017 appropriation)	\$8,835	\$0
2017/18 cash payments	-\$22,322	-\$22,322
2018/19 cash payments	-\$28,797	-\$28,797
2019/20 cash payments	-\$43,588	-\$43,588
2020/21 cash payments (YTD)	-\$7,166	-\$7,166
Total cash payments	-\$101,873	-\$101,873
Reverse opening accrual		\$8,835
Add closing accrual		-\$17,892
Net accrual movement		-\$9,057
<b>Available appropriation at Forecast date</b>	<b>\$98,297</b>	<b>\$80,405</b>
Commitments at forecast date	-\$64,366	-\$46,474
<b>Remaining MYA available to 30 June 2022</b>	<b>\$33,931</b>	<b>\$33,931</b>
		<b>Shortfall at June 2022</b>
<b>Forecast Demand Profiles</b>		<b>(\$m)</b>
Best case (low demand) - per June modelling		-\$56.0
Base case		-\$62.2
Worst case (High demand) - per June modelling		-\$67.7

## Repayable Grants

	<b>Actual \$000</b>
Total FY20/21 appropriation available (excl. admin costs)	20,521



YTD payments:	
Incubators	(2,224)
Accelerators	(225)
Repayable Loans	(70)
	(2,519)
Remaining FY20/21 appropriation available	18,002

The slow ramp up through FY19/20 has continued into Q1 however with the new Tech Incubators now in place, take up is expected to increase from Q2 onwards. We also expect \$4.2m to be transferred through to the appropriation from FY20 through the October baseline update.

## **Measurement Standards Laboratory has a new building**

### **Overview**

The first move of standards equipment out of McKay into the new MSL building has begun. Temperature Standards has accepted the environmental conditions and commissioning of equipment within the new laboratory is underway. Challenges remain to achieve the environmental conditions required for Electrical Standards to operate in the new building. Solutions are being actively pursued.

To complete the move out of McKay construction of a new Time and Radiofrequency laboratory in the Robertson building is required. External contractors Hawkins have been confirmed as leading this work and significant progress in quarter two is expected.

The move out of the McKay building to the new MSL building requires custom built moving equipment to protect the incredibly precise and very delicate equipment.



### **Use of MSL capital appropriation**

At quarter one MSL has spent 3% of its capital appropriation (\$62k of \$2 165k) with approvals ramping up, as forecast, into quarter two.

### **MSL's outputs this quarter**

- 42 calibration jobs delivered to customers
- 8 IANZ assessments of external laboratories carried out by MSL staff
- 1 Technical Guide delivered
- 46 Enquiries to [info@measurement.govt.nz](mailto:info@measurement.govt.nz)
- 1485 downloads of resources (e.g. technical guides, software) from [measurement.govt.nz](http://measurement.govt.nz)

### **International acceptance of New Zealand's measurement system**

In August, MSL participated in the virtual programme for the International Conference on Precision Electromagnetic Measurements (CPEM). An MSL scientist was invited to give a talk on the Kibble Balance – a huge honour – and another scientist gave a presentation on NZ hosting CPEM in 2022 in Wellington.

MSL scientists continue to participate virtually in international meetings and technical committees. Of note is an MSL scientist was invited (by the German NMI and a USA organisation - NCSLI) as an expert to deliver two international presentations on global efforts to digitise metrology. The same scientist has been invited to be part of the NZ Data and Digital Standards Community of Practice.

The Annual Management Review of the Quality System was completed this quarter. This is a key requirement for MSL's accreditation under ISO 17025.

## Actions to address MSL resilience and relevance

MSL has hosted several external stakeholders (doing tours of the new building facilities) in quarter one to build its reputation and relevance and potential collaboration opportunities in the NZ ecosystem. Groups hosted included MBIE's contestable science funding team, BRANZ, the NZ Space Agency and NIWA. The NZ Space Agency visit has led to MSL contributing to an international workshop with the German Aerospace Agency in October to discuss research collaboration opportunities in space communications.

At industry's request, MSL has published our resources for setting up an apprenticeship-style scheme for training metrology testing and calibrations technicians (<https://measurement.govt.nz/training/growing-metrologists/>).

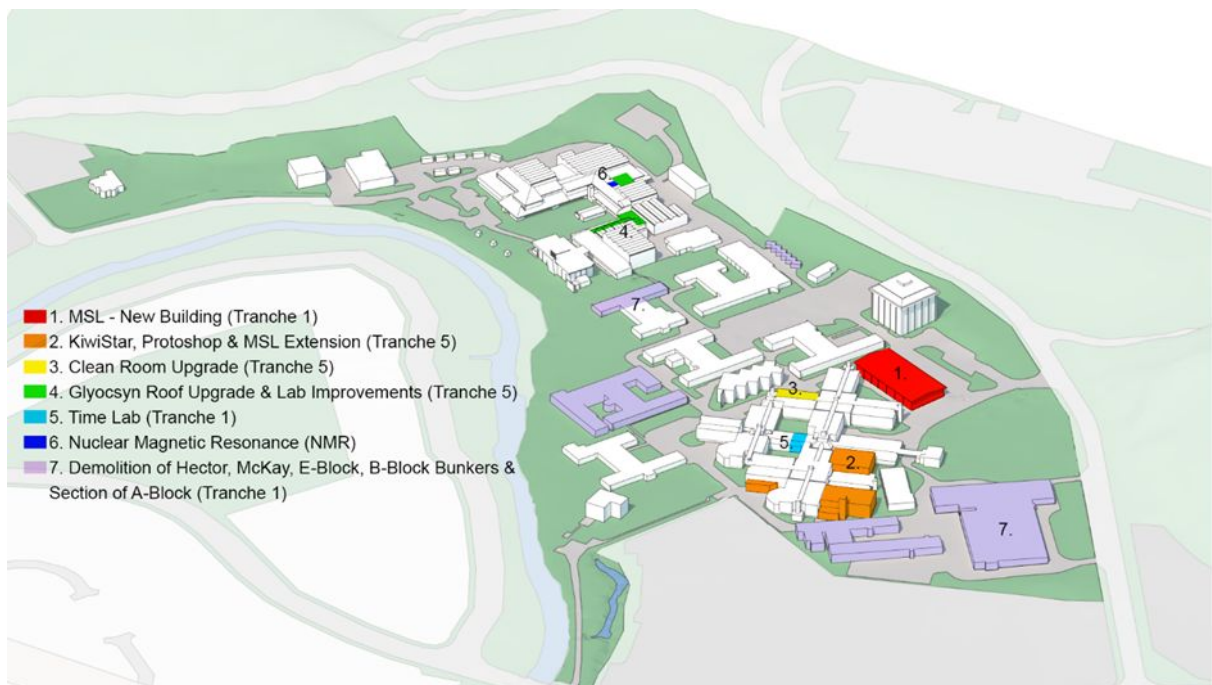
## Financial performance

	Actual	Budget	Variance	Full Budget	Year
<b>Revenue</b>	<b>\$k</b>	<b>\$k</b>	<b>\$k</b>	<b>\$k</b>	
National Measurement Standards	2,030	2,030	-	8,118	
Strategic Investment	33	33	-	133	
<b>Total Crown Revenue</b>	<b>2,063</b>	<b>2,063</b>	<b>-</b>	<b>8,251</b>	
Domestic Commercial	138	111	27	436	
Overseas Commercial	19	11	7	67	
<b>Total Commercial Revenue</b>	<b>156</b>	<b>122</b>	<b>34</b>	<b>503</b>	
Other Income	8	-	8	15	
<b>Total Revenue</b>	<b>2,227</b>	<b>2,185</b>	<b>42</b>	<b>8,770</b>	
Expenses					
Personnel	1,179	1,189	(10)	4,691	
Services and Contracts	18	72	(54)	275	
Other Costs	138	147	(9)	604	
Depreciation	196	219	(23)	1,089	
<b>Total Expenses</b>	<b>1,531</b>	<b>1,626</b>	<b>(96)</b>	<b>6,658</b>	
Contribution Margin	696	559	137	2,112	
Indirect Expenses	783	754	30	2,811	

EBIT	(87)	(195)	108	(699)
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Overall MSL commercial work is tracking ahead of budget. Year to date there are underspends in expenses. This shows as a greater than budgeted contribution margin. MSL expects that by year end it will track very close to budget as recruitment and contracts are progressed.

## Gracefield Innovation Quarter Programme progressing well



### Our highlights this quarter

#### Programme Organisation

A Gateway Review was completed in late September 2020. The GIQ Programme was subject to two reviews: Gateway Review 0 (strategic assessment) for the Strategic Services Programme and Gateway Review 4 (readiness for service) for the Tactical Estates Continuity Programme. The report and recommendations are with the SRO for consideration.

Three new roles were established in the National Facilities team and the structure was reorganised to focus on four key functions: delivering the maintenance and operational requirements of the Gracefield site; identifying a future facilities operating model; ensuring

our assets meet legislative and compliance requirements; and managing the logistics of all chemicals and deliveries on site.

New roles were appointed, including a Quality and Compliance Manager and Transition Manager (National Facilities team), and a Project Manager (Delivery team).

Callaghan Innovation's Asset Management Strategy was approved. This will ensure important business decisions, such as the prioritisation and approval of asset investments, and preventative maintenance scheduling, are based on sound, robust and transparent principles.

A review of GIQ Benefit Management approach and documentation was completed. This resulted in the GIQ Programme Benefit Strategy, The GIQ Benefit Map and Tactical Estates Benefit Plan all being approved.

### **Tactical Estates Continuity Programme**

In Q1 we commenced regular engagement with all staff and tenants on the increasing construction activity at Gracefield. Focus is on safely managing the logistics of traffic, people and materials around the Gracefield site to ensure the health and safety of everyone and to enable the business to plan ahead for any potential impacts.

A Detailed Benefit Realisation Schedule for each active project is underway and is aligned to the GIQ Benefit Strategy, Benefit Map and Benefit Plan. The Benefit schedules are being developed using Callaghan Innovation's Change Framework tools, to engage with the business. Business benefit owners own the schedule and the relevant actions required over time to deliver the identified benefits.

The Detailed Business Case was approved, a contractor appointed, and construction commenced on the GlycoSyn re-roofing work. We appointed a contractor and commenced construction mobilisation of a new laboratory for MSL's Time and Radio Frequency Teams.

The Indicative Business Case for Tranche 4 (Flexible Laboratory Accommodation) was approved, and Project Initiation Documents (PIDs) were approved for Tranche 2 (Roof and Exterior, and Laboratory Upgrades) Tranche 3 (Hazardous Goods and Chemical Storage), and Tranche 4 (Flexible Laboratories and Flexible Offices). All projects are now in the 'Define' stage.

### **Strategic Services Programme**

We have evolved the Stakeholder Engagement Strategy, and in Q1 undertook extensive stakeholder engagement with the Biotechnology Hub initiative foundation stakeholders - GlycoSyn, our Biotechnologies group, and Ferrier Institute (Victoria University of Wellington). Activity included Vision Workshops and Investment Logic Mapping Workshops with a wider group of stakeholders.

A preferred supplier to undertake the development of the Gracefield site wide masterplan was appointed. Design work has commenced ahead of stakeholder engagement in Q2 and Q3.

The Strategic Services Programme Strategic Assessment was drafted, and we initiated strategic partnership conversations with Victoria University of Wellington, who confirmed their long term commitment to the site.

## **Our focus next quarter**

### **Programme Organisation**

In Q2 we will implement the Gateway Review recommendations and internal P3M3 assessment, and undertake recruitment of key roles, including Maintenance Manager (National Facilities team) and Project Manager (Delivery team).

We will implement the Asset Management System across the organisation to develop, direct, coordinate and control Asset Management activities, and develop Asset Management Plans and appropriate levels of service for our most critical assets.

### **Tactical Estates Continuity Programme**

Following approval from Immigration New Zealand, critical workers from Australia will come to New Zealand to complete the installation of screened rooms in the new MSL Building. Once finished this will mark the completion of the fit-out of the building and enable it to be operational for MSL.

We will commence asbestos removal and demolition work, starting with B Block Bunkers and planning for the remaining buildings (E Block, Hector Building, McKay Building) to be completed by 2022.

We will be approaching completion of construction of 'Office 2' and progress construction of 'Office 4', the new laboratories and meeting spaces at the Textile Centre in Auckland.

The Detailed Business Case for the HVAC maintenance and replacement project will be submitted, and a contractor appointed. Work is expected to commence in December 2020.

Indicative Business Cases for projects within Tranche 2 (lab upgrades), Tranche 3 (site-wide infrastructure and hazardous goods) and Tranche 4 (flexible offices) will be completed.

Design work on a project to deliver flexible laboratory accommodation at GIQ will be undertaken, towards the development of a Detailed Business Case to confirm the preferred option.

Construction of the refurbishment of the microfabrication cleanroom facility and GlycoSyn roof replacement will continue, and are expected to be completed in February and April 2021 respectively. Construction of the new laboratory for MSL's Time and Radio Frequency teams is also expected to be completed in April 2021, and in Q2 we will complete

construction of a new facility for tenant Trinity Bioactives (Tranche One) and the GlycoSyn cooling system and Sampling Suite safety upgrade.

We will explore opportunities to collaborate with key strategic partner Victoria University of Wellington's Robinson Research Institute, to support their increased business growth.

## Strategic Services Programme

With the appointed design consultants, we will undertake extensive internal and external stakeholder engagement on the draft Masterplan. We will be seeking feedback from a broad range of stakeholders including staff, tenants, government, potential partners, local community and Iwi. The engagement will include an exhibition and drop-in meetings for those on site, as well as a website for online feedback.

We will form a Working Group for the Biotechnology Hub initiative and progress work to draft an Indicative Business Case by April 2021.

The Strategic Assessment for the Strategic Services Programme will be progressed and socialised within Callaghan Innovation and Victoria University of Wellington. A summary "pitch deck" supporting external socialisation will be developed.

We will progress strategic partnership conversations with Victoria University of Wellington with a view to developing a Memorandum of Understanding, and develop a Strategic Services Programme Resourcing Plan.

## Financial Performance

The Tactical Estates Continuity Programme's capital expenditure during Q1 was \$1.9million; a significant lift from the previous quarter (\$0.9 million). The programme's life-to-date expenditure at 30 September 2020 was \$17.5 million.

Expenditure for the full 2020/21 financial year is forecast to be approximately \$18 million, which represents a significant acceleration in programme expenditure from the previous financial year (\$7.9m).

The following table outlines capital expenditure to 30 September 2020:

GIQ Capital expenditure	Actual (life-to-date) 30 Sep 2020 (\$000)	Forecast (total cost)* (\$000)	Budget Approved** (\$000)	Variance to Budget (▼ = under) (\$000)	Funding (per PBC)*** (\$000)
<b>Tactical Estates Continuity Programme (GIQ Programme Business Case)</b>					
<b>Tactical Estates Continuity Programme Tranches:</b>					
T1 - Emergency Response Works	12,707	14,884	15,582	▼ 698	12,157
T2 - Deferred Maintenance	1,021	1,354	1,491	▼ 137	11,300
T3 - Hazardous Goods & Site Infrastructure	113	415	420	▼ 05	34,942
T4 - Flexible Workspaces	47	200	200	-	19,768
T5 - Business Growth Workspaces	3,635	5,598	6,020	▼ 422	23,580
<b>Total Tactical Estates Continuity Programme</b>	<b>17,523</b>	<b>22,451</b>	<b>23,713</b>	<b>▼ 1,262</b>	<b>101,747</b>

\* Forecasts are included for projects that have budget approved - the forecast reflects the estimated spend against the approved budget.

\*\* Budget Approved refers to the internal budget that has been approved for projects within the tranches.

\*\*\* Funding per PBC is the funding requirement as outlined in the GIQ Programme Business Case.

Tranche 1 Emergency Response Works expenditure was \$0.2 million during Q1, with the MSL Building having reached practical completion in the previous quarter. Expenditure will pick up again in Q2, with Hawkins Ltd recently appointed to undertake construction of the new Time Lab - this being the final major capital investment within this tranche.

Tranche 2 Deferred Maintenance expenditure during Q1 was \$0.3m. Procurement of a supplier to undertake the replacement of a significant number of HVAC systems across the site will take place during Q2, and this will result in a significant lift in expenditure during Q3. Tranches 3 & 4 progressed through the define stages during Q1, with expenditure of \$0.1 million. Tranche 5 Business Growth Workspaces expenditure was \$1.3 million during Q1, which was driven by construction work on the new Microfabrication Cleanroom.

The programme is also supported by funding for operating expenditure, which is outlined in the table below:

Operating expenditure	Actual (Yr-to-date) 30 Sep 2020 (\$000)	Forecast (Full Yr) 2020/21 (\$000)	Budget Approved 2020/21 (\$000)	Variance to Budget (▼ = under) (\$000)	Funding 2020/21 (PBC) (\$000)
GIQ Programme Office Costs	857	4,673	4,322	▲ 351	3,000
Demolition & Asbestos Removal*	14	729	2,743	▼ 2,014	797
Depreciation on GIQ Assets	211	1,202	1,437	▼ 235	3,470
<b>Operating Expenditure</b>	<b>1,082</b>	<b>6,604</b>	<b>8,502</b>	<b>▼ 1,898</b>	<b>7,267</b>

\* The budget incorporates funding of \$1.413 million carried forward from 2019/20 for Hector and McKay demolition/asbestos removal.

GIQ Programme Office costs include programme management, Gateway Reviews, personnel and overhead expenses associated with delivering the Tactical Estates Continuity Programme, and work on the GIQ Strategic Services Programme (SSP). Costs are forecast to be higher than budget, as the forecast anticipates some early stage define and design costs relating to the KiwiStar, Protoshop & MSL project will be reclassified as operating expenditure; although this is not yet certain.

Demolition and Asbestos Removal costs include the demolition of McKay & Hector Buildings, E Block, and B Block Bunkers, and the prior removal of asbestos from these buildings. Expenditure is forecast to be lower than budget, as the tendered cost of the work came in less than expected. In addition, due to the Time Lab completion being later than anticipated, the cost of the McKay Building demolition is now likely to shift out into 2021/22. As part of the re-baseline of the GIQ programme, are working with MBIE to transfer funding from 2020/21 into 2021/22, to enable the McKay demolition to proceed.

The budget for depreciation covers the costs arising from the investment in GIQ assets.