

Quarter.

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

For the second quarter ending 31 December 2021

Working with Inland Revenue to further improve the **RDTI for customers**

**Completing and approving a Te Tiriti /
Treaty partnership Roadmap**

**Reaching milestones in the GIQ
Tactical Estates and Strategic Programmes**

**Our scientists recognised at awards and
elected to international governance roles**

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OVERVIEW OF THE QUARTER

This quarter we have continued to progress our priority project as set out in the Minister's Letter of Expectations for 2021/22. In addition to delivering business as usual support to our customers a key focus for the year remains the successful transition from Growth Grants to the R&D Tax Incentive.

Organisational Performance

- COVID-19 continues to reduce domestic commercial revenues.
- Health and Safety performance has been underpinned by our journey into a safety II approach where workers are identifying solutions. There are also improvements in systems and processes which will be rolled out in following quarters.
- Risks have been identified including Change Fatigue and Supply Chain and we are actively managing these through clear communications and active management of projects.
- Availability for critical digital technologies was maintained during this quarter. We have worked with MBIE and the CRI community to uplift capabilities for managing sensitive research across the science community.

RDTI and Grant Management

This quarter we have continued to work closely with Inland Revenue and MBIE to embed the RDTI. In collaboration with Inland Revenue we have worked with customers to understand their experiences of the RDTI to identify potential improvements. Our assessment team has almost doubled the number of recommendations to Inland Revenue demonstrating our focus on continuous improvement.

The RDTI is on track registering former Growth Grant customers, with 225 registered out of 440. 76 of those former Growth Grant customers have applied for RDTI to seek approval for their R&D activities. The financial year end date varies between customers therefore we expect these numbers to grow over the next 6 months as the majority are likely to submit their RDTI applications for the year ending March 2022.

Our performance targets for Grant Management are on track with 10 of 12 achieved, with a highlight being the NPS for Project Grant recipients of +83% for Q2 (performance standard of +70%). Of the two measures not on track, the percentage of Project Grants recipients who perceived improved business productivity is 84.5% (standard 85%) was up from Q1 (81.9%).



GIQ Tactical Estates and Strategic Programmes

Q2 actual spend for the GIQ Tactical Estates programmes was \$6.9m against a budget of \$5.6m. The GIQ Tactical Estates sees tangible milestones achieved this quarter including both modular flexible laboratories delivered to site, two of the atomic clocks relocated and various other projects tracking well.

Achieving our Performance targets

In Q2 we achieved 8 of 10 of our performance targets(excluding RDTI and Grant Management which are reported elsewhere). The two areas that did not reach the performance targets were:

- Number of customers who worked with Callaghan Innovation in the following services: Events; International Missions: Innovation Skills (formerly 'Programmes') 902 vs 1,000 standard
- Net Promoter Score for callaghan innovation Innovation Skills (formerly 'Programmes') +59 vs +60

All other performance measures met or exceeded the target, including the new measure of Percentage of set milestones achieved for our transformation programme (GIQ, Digital Transformation, Tatai Whetū, HomeSafe) +87% vs +80% standard.

Other Highlights

- The Tatai Whetū transformation programme completed:
 - The first phase of our Te Unuhanga project is complete including creating and approving a Te Tiriti / Treaty partnership Roadmap.
 - Introducing and scaling new Ways of Working (agile) across Callaghan Innovation and understanding the agile growth mindset.
- The Health Tech Activator is ramping up with companies accessing more resources to support Health tech commercialisation, with around 3,000 new users and 18 events.
- MSL completed 44 calibration jobs for customers this quarter. In addition to successfully having the MSL Time and Frequency Laboratory handed over, two MSL staff were elected to two senior international governance roles.
- RDS saw the biotechnologies area have strong growth for our services over this period.
- Success at the Science New Zealand awards included:
 - Early Career Researcher - Dr Rebecca Hawke - Measurement Standards Laboratory for work on the Kibble Balance project.

- Individual/Lifetime Achievement Awards - Dr Mark Poletti - Communications team (Data and Internet of Things) for demonstrating both scientific excellence and commercial relevance in the field of audio engineering and acoustics
- Team Award - Communications team (Data and Internet of Things) receiving the team award for creating technology that makes a difference in people's lives.



INTRODUCTION

This report summarises the progress Callaghan Innovation made in the second quarter against:

- The priorities the Minister for Research, Science and Innovation set out in her Letter of Expectations for 2021/22; and
- Our Statement of Performance Expectations (SPE) for 2021/22.

Our report is organised into three sections:

- 1. Our priorities for 2021/22** - this section provides a progress update on Callaghan Innovation's priorities for the year:
 - The organisation's core performance basics.
 - RDTI and grant management.
 - GIQ Tactical Estates and Strategic programmes.
 - Achieving our performance targets.
- 2. Other highlights from the quarter** - this section will focus on different aspects of Callaghan Innovation's operations and will change quarter on quarter.
- 3. Appendices** have more information about the GIQ Programme, Measurement Standards Laboratory, tracking against our appropriations and detailed financial statements.



OUR PRIORITIES FOR 2021/22

This section provides an update for Q2 for our priority areas for 2021/22: our organisational performance, the work to improve the operational aspects of the RDTI and grants management, and the tactical estates and GIQ programmes of work.

Organisational performance

This section provides a summary of Callaghan Innovation's operational performance, including how it is tracking against budget and internal measures of operational efficiency.

Key Financial Indicators to 31 December 2021

	Actual \$m	Budget \$m	Variance \$m
Group surplus/(deficit) after non-operating items	(2.938)	(3.244)	0.306
Revenue	60.870	68.740	(7.870)
Expenses	63.886	72.150	8.264
Interest income and non-operating items	0.078	0.166	(0.088)
Cash and deposits	38.329	37.581	0.748

Revenue

The re-emergence of COVID-19 (delta variant) has impacted domestic commercial revenues across all groups by a reduction of approximately 20% (YTD). Overseas commercial revenues are also reduced with both KiwiStar (-\$1.3m) and Glycosyn (-2.2m) significantly down on budget. KiwiStar has been severely impacted by supply chain issues. Glycosyn is expecting to close the gap on budget with a strong book of signed contracts in place for H2; this would be impacted if there is lost lab time due to COVID-19 (which Omicron has the potential to do). In addition to this the National Science Challenge is \$3.0m behind budget YTD.

The caveat on us achieving our commercial revenue forecast of \$10.6m for H2 is that our business is not materially impacted by staff absences (due to the Omicron variant). At 30% staff absentee across the February to June period our commercial revenue would be impacted by up to \$2.5m.

Expenses

Most expenditure categories are tracking close to budget, with the main exceptions being lower than anticipated project costs (National Science Challenge and lower commercial revenues), lower personnel (FTE driven), travel (Covid restrictions) and reduced depreciation.

Cash and deposits

Cash and deposits are tracking close to budget.



Health and Safety

The focus in Q2 continues to implement our safety II approach, empowering our people to identify solutions and improved working methods based on what is going right (which happens the majority of the time).

In Q2, the health and safety internal reporting system underwent improvements in functionality and improved user experience. These improvements have led to the monthly reporting of health and safety incident data and other enhancements resulting in a new report for the Callaghan Innovation Board and Leadership team.

In Q2, the contractor management system was reviewed and improved. Training was developed for workers and managers on the new contractor management standard and planned to roll out in Q3. Due to Covid-19, environmental monitoring and assessment benchmarking could not occur, so this will now be undertaken in Q3.

Due to Covid-19, we trialled new ways of working; this included rethinking how leadership could have insights and interactions. Proactive engagement is encouraged by the WorkSafe CEO¹. Virtual engagement sessions were trialled for the Leadership team around our critical risks; this involved videos being taken and provided by the business and then the opportunity for senior leaders and managers to ask questions and have conversations about safety. In Q3 the virtual engagement sessions will be extended to the Board.

COVID-19 has impacted our health and safety performance. Our 12 month rolling average for TRIFR is 7.6, which is within WorkSafe and ACC guidance. We processed 68 risk assessments and have received 47 event (hazard, near miss and incident) reports. The critical risk of working at heights and vehicles has most events reported against them; previously this was hazardous substances.

Focus for Q3:

- Training on contractor management system provided to our people
- Environmental monitoring and assessment benchmarking
- Continued improvement to the health and safety reporting system
- Developments in reframing our needs for health assessment and monitoring

Risk Management

This section provides an update on key risks that could significantly impact Callaghan Innovation's ability to deliver on the Government's innovation work programme.

Update on risks identified last quarter

Last quarter we identified one key risk - an update is provided below.

¹ <https://www.iod.org.nz/news/boardroom/boardroom-autumn-2021/focus-closely/#>



Risk description	Status as at 31 December 2021
<p><i>People risk</i></p> <p>The internal and external factors influencing the recruitment market are presenting a people risk for Callaghan Innovation focused on engaging and retaining talent in a competitive market.</p>	<p>We have been monitoring this risk closely & believe its escalating, it's been raised to the People & Culture committee due to the current employment market is one of pay scales where Callaghan are increasingly seeing far smaller numbers of applicants for open roles, and being unable to retain leavers due to the pay differentials being offered in a tight talent market.</p>

New risks identified this quarter

This quarter we have identified two key risks, which are detailed below.

Risk description	Mitigations
<p><i>Change Fatigue</i></p> <p>As the organisation is nearing the end of the redesign, the risk exists that people are feeling overwhelmed, stressed and uncertain of the future of the working environment and the stability of their roles.</p>	<p>Callaghan has moved to a quarterly planning and prioritisation model to ensure that what is planned is achievable with current resources and capacity constraints.</p> <p>Regular internal communications through numerous channels to ensure people understand the new environment and apply a 'no surprises' approach, including support mechanisms.</p> <p>Continuous engagement is assisting with ensuring our people can feel open to provide feedback and have open communication about the future working environment of the organisation.</p>
<p><i>Supply Chain</i></p> <p>There is a high likelihood that impacts from COVID-19 will have an effect on the delivery of projects due to the supply of materials and restrictions from the new traffic light system.</p>	<p>RFP documentation includes mitigation strategies as part of the contractor evaluation process.</p> <p>Regular forward planning meetings with assigned contractors.</p> <p>Following government guidelines on the new traffic light system and considering the implications in regular discussions with project managers and at programme level governance.</p> <p>Determining if requirements can be met prior to the commencement of work.</p> <p>Main contractors make allowances for local materials, supplies and equipment to be sourced wherever possible.</p> <p>Contingency included to address COVID related issues should they materialise.</p>

State of systems / IT

Callaghan Innovation's critical digital services were available during the period in line with stated business requirements, with no observed significant disruptions to note. Some minor service disruptions were observed and appropriate recovery actions were undertaken to restore services with no material business interruptions in the period.

Digital has recently undertaken a review of its operating model and organisation design as part of a wider review across Callaghan Innovation, with some noted changes to roles / responsibilities for some leadership roles and introduced a streamlined delivery practice, following the conclusion of several Digital Transformation Programme projects.

Two remaining funded projects in Digital Transformation are scheduled for closure in early 2022.

Continued progress to mature cyber security operational work practises has been observed in this period, along with an increased focus on cyber security awareness for end users following two high profile security breaches to other NZ organisations noted in the media. These events, none of which have had material impacts to Callaghan Innovation, have offered timely reminders of the dynamic nature of cyber security and continued risk of a cyber event impacting organisations like ours.

Digital has supported recent work with MBIE and the CRI community to uplift capabilities for managing sensitive research and commercial information with appropriate technology choices, and continues to support building collective solutions to shared challenges of this nature across the science community.

Digital has continued to undertake health checks on critical technology in use at Callaghan Innovation as a means of identifying operational risk and future investment opportunities, as well as confirming organisational roadmaps for Digital Infrastructure, internal technologies, Digital and physical security, and Data.

R&D Tax Incentive and Grant Management

Callaghan Innovation administers a number of incentive programmes aimed at encouraging businesses and entrepreneurs to invest in R&D. Lowering barriers and reducing some of the risks associated with R&D is important for enabling New Zealand to develop high-value, globally relevant companies. This is important to help drive New Zealand's economic recovery.

R&D Tax Incentive

The R&D tax incentive (RDTI) is the Government's flagship policy to achieve the goal of increasing New Zealand's R&D investment to two per cent of GDP by 2027. We continue to work with Inland Revenue and MBIE to embed the RDTI as a viable and effective funding mechanism for businesses. A successful transition from Growth Grants to the RDTI is a key focus this year.

Highlights from this quarter:

- In collaboration with Inland Revenue (IR), we worked with customers to understand their experience of the RDTI and identify potential improvements to the awareness, education and

application processes, and supporting communications. This will form the basis of a significant “customer journey” redesign project that will commence in Q3, in continued collaboration with Inland Revenue and MBIE. Our aim is to make the RDTI as easy as possible to understand and engage with, based on learnings from the first two years of the scheme's operation.

- We continued our engagement with former Growth Grant recipients, and have now contacted all 353 of these customers who are eligible for the transition support payment. Through initiatives including webinars and direct calling campaigns, our aim has been to inform these customers and encourage as many as possible to apply for the RDTI, as well as transition support payments. There are 87 former Growth Grant recipients customers who are not eligible for the transition support payment, which are yet to be contacted.
- In this quarter the assessment team made 556 recommendations to Inland Revenue, up from 290 recommendations made in the previous quarter. This significant improvement is due to an ongoing focus on continuous operational improvement, to reduce the processing time for applications and the prevailing backlog of outstanding applications. Initiatives towards these ends included intensive ‘Sprint’ assessment sessions and the introduction of triage tools that ensure the assessment team is prioritising its resources on the right applications. We also hired additional specialist assessors. As at 31st December 2021, the claims backlog was 474, a significant reduction from the 675 claims outstanding at the end of Q1.
- Our Customer Engagement Specialists continued to hold one-on-one meetings with potential customers who have expressed an interest in the RDTI. As well as informing businesses about the RDTI, an aim of these meetings is to help improve the quality of applications, which will have a flow-on benefit of reducing application processing times. A total of 272 customer engagements were held over the quarter and they have been very well received by businesses. About 50 are returning customers keen to use the RDTI engagement service. This is a significant increase from Q1, 182 engagements, largely due to the calling campaign sprints, focused on former Growth Grant recipients.
- We worked with MBIE to highlight customer feedback about transition support payments, and to advocate for amendments to aspects including the level of penalty applied if businesses overclaim their entitlement.

Focus for Q3:

- Our customer journey redesign work will be an important focus in Q3. Facilitated by Creative HQ and involving staff from Callaghan Innovation, Inland Revenue and MBIE, this work will be conducted via a series of agile design sprints, leveraging our new ways of working, and commencing in February 2022. These sprints will iteratively design, test and deliver changes to the ways in which customers obtain information about the RDTI, go about making an application, and are communicated with throughout the process
- We will launch a campaign to proactively contact businesses that have enrolled for the RDTI via the myIR portal, but have not yet made an application. Based on current patterns, around 50% of enrolled businesses convert to applications. Our aim will be to provide whatever assistance we can to support more businesses to apply for the RDTI.
- We will continue our focus on initiatives aimed at improving the processing time of applications, and reducing the backlog of outstanding applications.

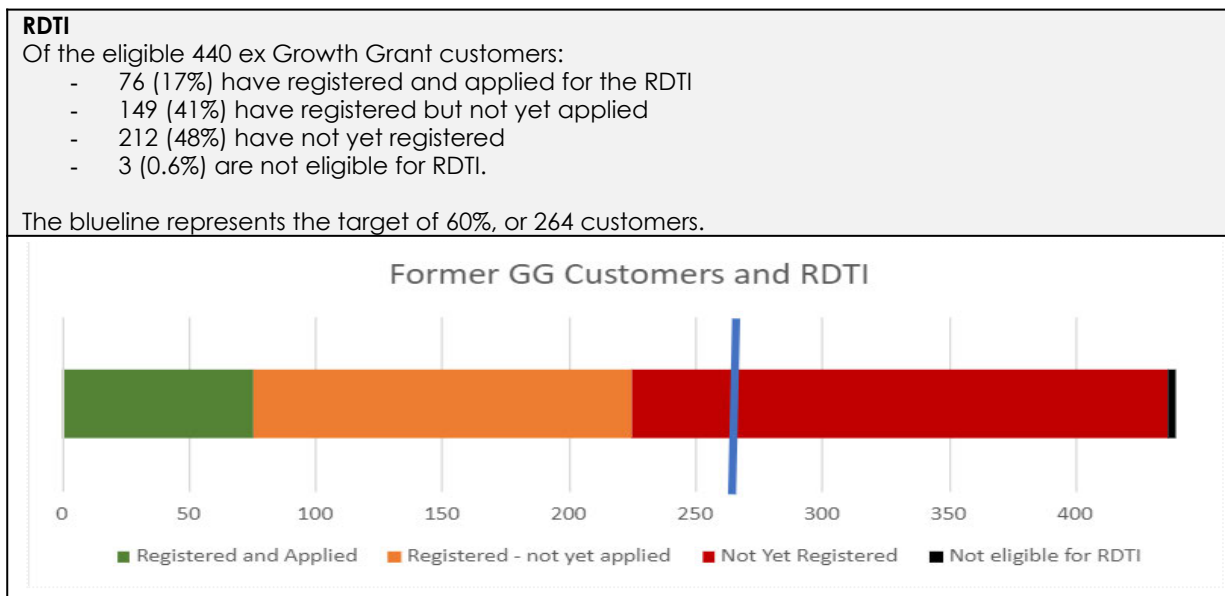
R&D Grant Management

Grant funding is a key lever to incentivise businesses to invest in R&D and grow the size of their existing R&D programmes. Our grant funding also provides innovators with the footing they need to develop their ideas. The demand for grant funding remains high as our economy continues to rebuild and we continue to manage demand to ensure that we are operating within appropriation constraints.

10 out of 12 measures are on track this quarter

Performance Measure	Actual 2020/21	2021/22		
		Performance standard	Q2	Outlook for year end
Targeted Business Research and Development Funding Appropriation				
Number of businesses with active Project Grants this year	655	570	+674	On track
Net Promoter Score from Project Grant recipients	82	+70	+83	On track
Percentage of Project Grant recipients who perceived that the grant-funded project:				
<ul style="list-style-type: none"> Had an overall positive impact on their business 	97.2%	95%	97.5%	On track
<ul style="list-style-type: none"> Increase knowledge acquisition 	93.8%	85%	96.3%	On track
<ul style="list-style-type: none"> Improved business productivity 	82.5%	85%	84.5%	Off track
Net promoter score from Student Grant recipients	+89	+70	+90	On track
Number of customers that received a service from either an incubator or accelerator	296	170	+193	On track
Net Promoter Score from incubator or accelerator customers surveyed	+62	+50	+62	On track
Category 2 - Research and Development Services and Facilities for Business and Industry				
Number of customers with a Research Development Solutions project this financial year	288	250	302	On track
Net Promoter Score from Research Development Solutions	+58	+40	59	On track

Callaghan Innovation Operations Multi-Category Appropriation Category 3 - Business Research and Development Contract Management				
Number of new Project and Student grant applications received during the financial year	1357	700	1121	On track
Percentage of Project and Student grant applications who have received a decision within 30 working days of receipt of the completed application	92.2%	90%	88.5%	Off track



- Focus for Q3:**
- We continue to focus on improved turnaround for Project and Student grant applications.
 - See previous section 'Focus for Q3' for RDTI

GIQ Tactical Estates and Strategic programmes

The redevelopment of GIQ in Lower Hutt, Callaghan Innovation's largest site, has been the part of our transformation work that's most visible to our customers and others outside our organisation. It's a crucial part of supporting Callaghan Innovation's transformation into the innovation agency that Aotearoa needs for a thriving, modern economy.

Delivering the GIQ Tactical Estates programme

The first stage of the GIQ Programme is to stabilise the GIQ site, addressing duty of care requirements, building critical foundations and remediating buildings to provide healthy, safe and fit-for-purpose workspaces for our staff, tenants and customers. This first stage is called Tactical Estates Continuity Programme (TECP). Q2 actual spend for the GIQ Tactical Estates programmes was \$6.9m against a budget of \$5.6m.

Update on TECP key milestones for the year

Programme Milestone	Update on progress
Demolition of four end-of-life assets completed	Demolition of the two remaining structures is on hold until the current occupants can move into the new Flexible Labs and Time and Radio Frequency Lab and successful commissioning of the new temperature lab (update on these below).
Construction of flexible laboratory accommodation completed	Both modular laboratories have been delivered to site with the internal refurbishment and services connections underway. We remain on track to receive possession of the buildings this financial year (notwithstanding any delays associated with the introduction of the Omicron variant).
Construction of the Measurements Standards Laboratory Time and Radio Frequency Lab completed	We have relocated two atomic clocks, with the balance to be relocated into the new facility this financial year.
Deferred maintenance projects completed including roof and exterior replacements, HVAC replacement and laboratory safety improvements	Both the HVAC replacement project and the DSP2 roof replacement remain on track to be completed this financial year - both projects are 80% complete.
Construction of a hazardous goods facility commenced	A preferred contractor has been identified, and we are continuing to work through final design to incorporate value engineering measures. On receipt of the final cost submission, a business case will be developed seeking approval to engage the preferred supplier and commence work will be completed.
Construction of flexible office accommodation commenced	We have completed the procurement process and entered final contract negotiations. Site possession will occur within the coming month and a schedule of materials for the



	procurement of long lead items has been developed.
Construction of site-wide infrastructure replacement commenced	We have completed the procurement process and entered final contract negotiations. A pre-commencement workshop has seen the finalisation of the design, and the schedule of materials for the procurement of long lead items is being developed. We anticipate sites to commence in April.

Focus for Q3:

- Support the site mobilisation of the main contractors for the Library Building and Site Wide Infrastructure Projects.
- Completion and handover of the Flexible Labs.
- Relocation of the last two atomic clocks into the new Time & Radio Frequency Lab.
- Finalising the design solution and appointment of the main contractor to carry out the:
 - Hazardous Goods and Chemical store project and,
 - Early Childhood Centre relocation and new build project.
- Continuing the deferred maintenance projects (lab improvements, roof improvements, HVAC replacement and remediation).

GIQ Strategic Programme

The Strategic Programme, stage two of the GIQ Programme, has completed a strategic assessment, initial GIQ Blueprint and Masterplan design to provide foundations for an aspirational pathway for significant site transition over a 20-year period. They provide a 'stake in the ground' to shape and direct possible GIQ future development and provide inputs to the Te Ara Paerangi - Future Pathways and Regional Property Strategy reviews being led by MBIE.

Highlights from this quarter:

- Completed a feasibility study to test the viability of the Biotech Hub initiative. Biotech is recognised as an incredibly important science in addressing our pressing environmental, climate, health and food challenges. The commercial potential in this sector is immense.
- A Biotech Sector Stakeholder session was held with over 40 participants. The stakeholders supported a Biotech Hub being located at GIQ with national connection through a hub and spoke model. The hub presents an opportunity to co-create a future operating model and facilities that drive deeper sector connection, collaboration and the capacity to expand and share capabilities onsite and with connected partners.
- In September 2021, the Callaghan Innovation Board approved phase 1 of a strategic assessment. The Strategic Assessment included the definition of Success Definition against

which options for the future of GIQ can be measured, articulating the important strategic choices for Callaghan Innovation and framing a series of options.

Focus for Q3:

- Complete phase 2 of the Strategic Assessment providing an initial assessment of the key strategic choices that would shape GIQ in the future, including the types and blend of capabilities that benefit from co-location at GIQ.

Achieving our performance targets

Callaghan Innovation is responsible for brokering and providing innovation services to businesses and delivering programmes that enhance Aotearoa's innovation system.

This quarter we are on-track to achieve 8 out of 10 of our performance targets.

Performance Measure	Actual 2020/21	2021/22		
		Performance standard	Q2	Outlook for year end
Callaghan Innovation Operations Multi-category Appropriation				
Percentage of set milestones achieved for our transformation programme - GIQ, Digital Transformation, Tātai Whetū, HomeSafe	New measure	At least 80%	87%	On track
Total number of organisations working with Callaghan Innovation on services this Financial Year	3,114	2,600	2890	On track
Net Promoter Score of all surveyed customers	+70	+60	+71	On track
Number of NZTE Focus customers who use Callaghan Innovation services*	672	600	636	On track
Building business innovation category				
Number of customers who worked with Callaghan Innovation in the following services: Events; International Missions; Innovation Skills (formerly 'Programmes')	1,006	1,000	902	Off track
Net Promoter Score for Callaghan Innovation Services: Events	+40	+30	+45	On track
Net Promoter Score for Callaghan Innovation Services: International Missions	N/A	+60	NA	

Net Promoter Score for Callaghan Innovation Skills (formerly 'Programmes')	+60	+60	+59	Off track
Category 2 - Research and Development Services and Facilities for Business and Industry				
Number of customers with a Research Development Solutions project this financial year	288	250	+302	On track
Net Promoter Score from Research Development Solutions	+58	+40	+59	On track
Callaghan Innovation Capital Investment				
Any major capital project proposals are developed in accordance with published Treasury business case guidelines	Achieved	Achieved		

Note RDTI and grant management performance measures are reported in the R&D Tax Incentive and Grant Management section of this report, and National Measurement Standards are reported in Appendix 4

OTHER HIGHLIGHTS FROM THE QUARTER

This section will change quarter on quarter to highlight different parts of Callaghan Innovation's services. This quarter focuses on:

- The Tātai Whetū Programme
- The Health Tech Activator
- Accelerator programmes
- MSL
- RDS

Transformation Programme

Callaghan Innovation has embarked on a transformation journey to maximise our impact. This work programme modernises the way we operate and increases the capability of our technology, systems, processes, and buildings and facilities so that we can more effectively support our customers and the broader innovation ecosystem.

There are several priority work programmes underway that are helping to build our critical foundations. This quarter we will be focused on the Tātai Whetū Transformation Programme.

Tātai Whetū

The Tātai Whetū transformation programme is focused on carefully and deliberately redefining and evolving our vision and ways of working, so we can deliver on our purpose, promise and influence on the future of New Zealand. The benefits of Tātai Whetū will be:

- Enhanced crown partnerships with Māori honouring Te Tiriti o Waitangi
- Improved service, and greater responsiveness, to our customers and stakeholders

- Improved experience for employees

The last quarter saw Tātai Whetū complete the first phase of our Te Unuhanga project. This work saw us completing and approving a Te Tiriti / Treaty partnership Roadmap. It also included provision of a Te Tiriti training programme to our leadership cohort across Callaghan Innovation (Executive Leadership team and Strategic Leadership group).

Building on from previously communicating out internally our Risk Management Strategy and associated online risk training modules, as well as completing our Risk Maturity Assessment, Tātai Whetū is now in the final stages of our risk focussed project. This will see us rolling out training workshops across all Callaghan Innovation business groups. These risk workshops will set up the organisation to use a common and consistent approach to recording and managing risks using JIRA software as our risk management tool.

In continuing the work to support embedding our new operating model, Tātai Whetū has been steadily progressing through the implementation stage of introducing and scaling new Ways of Working (agile) across Callaghan Innovation and growing the understanding of the agile growth mindset. Through a series of Agile 101, Agile Facilitator and Agile Product Owner workshops we are systematically embedding and growing on our existing agile capabilities and contributing to the Callaghan Innovation culture and environment of passionate talented and empowered people delivering for our customers and Aotearoa.

Focus for Q3:

- Confirm the approach to how we scale ongoing Te Tiriti training across Callaghan Innovation
- Complete the risk project within Tātai Whetū by rolling out Jira risk management tool to all relevant groups in Callaghan Innovation
- Support embedding our new operating model by continuing to progress implementing and scaling new Ways of Working (agile) across Callaghan Innovation.

Big Room Planning

As part of our transition to agile Ways of Working, in December 2021 a cross-Hapū team comprising representatives from ePMO, Ways of Working, Strategy, Enterprise Architecture and Exec Enablement - supported by our transformation partner, Radically - held Callaghan Innovation's first Big Room Planning session with around fifty participants. Designed to enable iterative, dynamic and responsive quarterly planning at scale, Big Room Planning (BRP) brings together members of our Whare and Hapū to align on our strategy, objectives, and key results for the upcoming quarter (Q3), and breaks down silos by immediately surfacing interdependencies between Hapū, information vacuums and potential risks for delivery.

Working as an organisation wide team from a shared source of information, we addressed dependencies together and made trade off decisions to respect the capacity and capability we have to deliver. This resulted in a realistic and achievable committed plan for delivery across Q3. It should be noted that BRP is designed to adjust to environmental changes, with each Hapū empowered to iterate approach and adjust deadlines and deliverables across the quarter without having to wait for the next Big Room Planning session. This data is collected and used to help inform our next planning session, and results in continual learning for the org and our people as we navigate and adapt to succeed.

The practice of Big Room Planning is being embedded as part of our regular quarterly cadence, maximising efficiency, transparency, and engagement while minimising unnecessary stress and churn.

Focus for Q3:

- Apply learnings from BRP#1 to the development of BRP #2
- Further prioritisation of Q3 deliverables to mitigate impact of Omicron
- Streamline data gathering process and more efficient digital tooling pre-BRP #2.
- Design and development of a user-friendly output tool for all Hapū to access BRP decisions and priorities

The Health Tech Activator

HTA's online engagement throughout the quarter has continued to ramp up, with companies seeking more learning modules, downloads and preparatory materials in a COVID restricted business environment.

The site has been further refined for easier navigation, and the content build has continued with there now being a real depth of material available, from webinars to podcasts to downloadable case studies and guides across a wide range of topics that support HealthTech commercialisation. We're especially grateful to the Australian Federal MedTech & Pharma Programme (MTP Connect), for openly sharing with us a number of informative pieces of content.

A few key web portal highlights as of 12/21 include :

HTA total sessions in calendar year 2021 = 4,904

Document Downloads = 237

Total new users = 3000 (rounded)

Organic impressions = 36,000 (rounded)

We've continued to build out our event delivery, with a mix of online and cohort based activity, which has also allowed us to create additional downloadable content for early/mid stage HealthTech companies to access :

Total # of events = 18

Total # of attending organisations = 49

Of particular focus across the past quarter has been our further development of work around market validation for HealthTech businesses. HTA now offers a number of resources to assist companies with desk based market research and two programmes to support Market Validation. The first, "An introduction to knowing your customer and your market" is delivered by Apagie and is a two half-day workshop that can be delivered either online or in person depending on current COVID settings. The second, delivered in partnership with Creative HQ, is a multi-month in-depth cohort based programme for HealthTech companies preparing to scale and includes engagement with NZTE. In addition to these, we've continued to deliver regular workshops focused on Capital Planning and have tested pilot modules for both Regulatory Preparedness and Reimbursement.

Focus for Q3:

Align HTA planning and delivery with the establishment of the new HealthTech Whare. This will allow for greater alignment and engagement with Physical Technologies and Biotechnologies to further support the growing numbers of HealthTech companies engaging with Callaghan Innovation.

Delivery of 4-month cohort based in-depth Market Validation programme for HealthTech (in association with NZTE) beginning 1st week of Feb '22.

Further cement our engagement in CMDT and the new MedTech Translator (Te Titoki Mataora) with Andrew Clews assuming Advisory/Governance Group role from Feb '22.

Continue development of phase 1 educational modules for Regulatory and Reimbursement.

Further develop relationships with Aust Medtech ecosystem via BioBridge partnership and via the ANZLF Health Group.

Support Clinical trials Pathway work led by MBIE and MOH.

Support regional Health innovation quarter concepts led by University of Auckland (MedTech IQ) and ChristchurchNZ (Te Papa Hauora Health Precinct).

Accelerator programmes

Callaghan Innovation continues to work closely with the New Zealand Product Accelerator (NZPA) and Bioresource Processing Alliance (BPA) programme teams, with regular meetings to track progress and to leverage opportunities for collaboration and connections.

Improvements have been made to the contracting process for the BPA programme to create efficiency and reduce turnaround times.

Highlights this Quarter

New Zealand Product Accelerator (NZPA):

- Established 12 new projects , including new projects with **s 9(2)(b)(ii), s 9(2)(ba)(i)** and **s 9(2)(b)(ii), s 9(2)(ba)(i)** alongside repeat business with other significant companies.
- Focused on improving communication strategies due to restricted access to laboratories. Work has included:
 - updating the NZPA National Testing Register
 - preparing case studies for a website refresh
 - scheduling presentations for the MaDE 2022 conference
 - recruiting new talent for the Advisory Board

Bioresource Processing Alliance (BPA):

- Responded to interest from MBIE's Circular Bioeconomy team and reference to the BPA's model (and suggested expansion) in the Ministry for the Environment's Emissions Reductions Plan.
- Under the current programme BPA2, the Board approved 4 new research projects in Q2, all projects have investment from Industry Partners.

Lead Partner	Project	BPA2 Funding	Industry Cash Co Funding
Ag Research	s 9(2)(b)(ii), s 9(2)(ba)(i)		
Ag Research			
Ag Research			
Callaghan Innovation			

- Board revisited projects from the BPA1 programme to consider opportunities to progress earlier research. New proposals are being considered to build on work in 3 earlier projects. AgResearch project **s 9(2)(b)(ii), s 9(2)(ba)(i)** has been awarded **s 9(2)(b)(ii), s 9(2)(ba)(i)** additional funding due to advances in technology.
- 7 student internships currently underway in various areas of research, related to the BPA Partners programmes, and these provide excellent opportunities for students to develop their skills and experience working on real world research projects.
- Delivered the Māori Innovation forum and a workshop for medicinal cannabis growers and processors. Both events were well supported and have created new opportunities with Māori businesses and the BPA.
- Progress with current BPA projects, with some delay for Auckland based researchers unable to progress work during Covid restrictions.

- Delivered online presentations to Central Otago fruits growers and processors
- Commenced work on the BPA database to improve user experience when applying for funding.

Publicity:

- Article in New Nutrition Business magazine about OVAVO avocado powder, and interview with Kathryn Ryan on RNZ.
- Scion/Agrisea Nanocellulose from Seaweed Team was a finalist in the Kudos Primary Industries awards.
- Anna Yallop interviewed by NBR on the biotech industry (article pending).

Focus for Q3:

- Further develop research-industry opportunities for collaboration and connection; internally within the new structure and externally with our Innovation stakeholder networks.
- Continue providing support and technical services to the Accelerator Programmes.

MSL

The Measurement Standards Laboratory (MSL) is New Zealand's national metrology institute. MSL is responsible for maintaining the national measurement system essential for international and domestic trade and the efficient function of electricity markets, safe aviation, high-value manufacturing and law enforcement. The 175 internationally recognised measurement standards it provides enable New Zealand exports to be accepted in more than 100 markets.

Highlights this Quarter

MSL Outputs

- 44 calibration jobs delivered to customers.
- 5 IANZ assessments of external laboratories carried out by MSL staff.
- 83 enquiries to info@measurement.govt.nz.
- There were 97 technical procedures in validation on 1 January 2022, 3 of which were validated or revalidated during the three months from 1 October 2021 to 31 December 2021.
- IANZ performed Technical Assessments of the Pressure and Humidity sections during this three-month period. Two corrective actions requests were raised during the Pressure Technical Assessment, which are now being addressed by the Laboratory.

MSL Laboratory Move

- The new MSL Time & Frequency laboratory has been completed and handed to MSL. The first stage of the transfer of the cesium atomic clocks which form New Zealand's Time standard was successfully completed in December. The final stage of this transfer to the new laboratory is scheduled for early Q4.

- Final remediation work on the new MSL building Electrical Standards laboratory has been completed. This will allow the electrical standards team to commence moving into the new lab space. The move is expected to be completed throughout Q3 - Q4.

International Acceptance of New Zealand's Measurement System & Recognition

- MSL Director and senior staff attended the 'virtual' Asia Pacific Metrology Programme (APMP) Directors Workshop and General assembly. During this meeting MSL staff were elected to two senior international governance roles (Chair of Technical Committee for Photometry and Radiometry & Chair of Digital Transformation in Metrology Focus Group).
- MSL staff member received an early career researcher award at the [2021 Science New Zealand awards ceremony](#).

Focus for Q3:

- Transition to new Callaghan Innovation enterprise organisational structure and ways of working
- Implement CAPEX spending plan
- Commence move of Time & Frequency and Electrical Standards to new laboratory space
- Continued delivery of world class measurement standards and advice

Research & Development Solutions

Research & Development Solutions are now part of the new Innovation Expertise area of Callaghan Innovation. Over Q2 the focus was on keeping the customer services successfully operating (Data/IoT; Advanced manufacturing, Advanced materials and Biotechnologies, along with GlycoSyn, MSL and KiwiStar) while going through the organisational design process. During this period (financial comment here), we supported a number of companies further their technical R&D and provided science and technical based commercial contract manufacturing services domestically and internationally. In particular the biotechnologies area has seen strong growth for our services over this period.

We had success at the Science New Zealand awards this quarter. Dr Mark Poletti won a lifetime achievement award for his deep internationally recognised expertise in the R&D and commercialisation of audio technologies, and for the Wireless Communications team who received the Science New Zealand team award for creating technology that makes a difference in people's lives.

The Data Vision team were successful in obtaining \$855k contestable funding from a digital innovation fund for New Zealand Public Sector Organisations, run by the Department of Internal Affairs, for a collaborative Iwi data discovery project, this will use unique capability of the data vision team in an AI based multidisciplinary project to support Iwi to effectively use their own data.

During the second half of 2021, Callaghan Innovation and the Ferrier Research Institute (Victoria University of Wellington) have undertaken a joint procurement process to acquire two new 500 MHz Nuclear Magnetic Resonance (NMR) instruments to upgrade the existing facility. NMR is a key tool used by chemists to determine the structure of chemical compounds and is used by approximately 100 researchers on our Gracefield site. The joint procurement has not only helped us to negotiate a significant discount on the price, but it has also enabled us to acquire an optimal suite of equipment that we believe will enable us to establish the best NMR facility in Aotearoa. It is also an excellent example of the collaborative approach between Callaghan Innovation and Victoria University and that we are aiming to achieve with the proposed BioTech Hub.

Focus for Q3:

- Embed new organisational structure
- Continue providing science/technical commercial services to the market



Appendix 1: Detailed Grants Forecast and Financials

	R&D Growth Grants**	Project & Student Grants	Repayable Grants	Total*
Appropriation Period	FY18 - FY22	FY18 - FY22	FY21/22	FY21/22
	\$k	\$k	\$k	\$k
Total appropriation	737,109	226,335	20,746	
Cumulative expenditure (FY17 - FY21)	698,858	147,989	n/a	
Remaining balance available at the start of FY21/22	38,251	78,346	20,746	
FY21/22 Budget Spend	-	67,490	20,746	88,236
FY21/22 YTD Spend	-	25,258	7,048	32,306
Remaining appropriation at 31 December 2021	38,251	53,088	13,698	

* Totals are provided where appropriate

** Note that the R&D Growth Grants Appropriation was \$743.109m as at the 30 June 2021 (as per CI Annual Report). On the 1 July 2021 the R&D Growth Grants Appropriation was reduced by \$6.0m (down to \$737.109m) as this amount was transferred to Inland Revenue for the RDTI programme. This adjustment was made via the March 2021 MBU process and reflected in the 2021/22 year.



Appendix 2: Appropriation Reporting

Callaghan Innovation receives funding from seven separate appropriations. The following table sets out the year to date results against the budgeted amounts and performance expectations as set out in the 2021/22 Estimates of Appropriation for those appropriations.

Detailed performance information is located in *R&D Tax Incentive and Grant Management* and *Achieving our performance targets* sections of this report.

Appropriation Name	Full Year Budget	YTD Actual	Remaining Budget
	\$k	\$k	\$k
Operational funding			
Callaghan Innovation - Operations MCA	79,823	39,520	40,303
National Measurement Standards	8,567	4,284	4,283
Industry 4.0	2,131	511	1,620
Capital expenditure			
Callaghan Innovation - Capital Expenditure	47,935	-	47,935
Grants			
Repayable Grants	20,746	7,048	13,698
Research and Development Growth Grants (FY21/22 only)	-	-	-
Targeted Business Research and Development Funding (FY21/22 only)	67,490	25,258	42,232

Appendix 3: Detailed Financial Results

Statement of revenue and expense					
Callaghan Innovation Group					
For the period ended 31 December 2021					
	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Revenue					
Crown operating					
Crown Funding - Other	2,089	1,914	175		4,151
Callaghan Innovation Funding	20,420	20,975	(555)		41,950
Strategic Investment	9,261	9,262	(0)		18,523
Business R&D Grants administration	3,875	4,007	(132)		8,014
National Measurement Standards	4,284	4,284	0		8,567
Programme Funding	1,689	1,689	-		3,378
Food Innovation Network	2,258	2,257	0		4,515
Total Crown operating	43,876	44,388	(512)		89,098
Crown contestable contracts and other	6,801	9,851	(3,050)		19,702
Commercial revenue					
Domestic Commercial	3,508	4,333	(825)		8,489
Overseas Commercial	3,738	7,290	(3,551)		12,013
Total Commercial revenue	7,246	11,623	(4,376)		20,502
Other Income	2,947	2,878	68		5,696
Total revenue	60,870	68,740	(7,870)		134,999
Expenses					
Personnel	34,142	35,899	1,757		69,164
Services and Contracts	9,170	12,784	3,614		25,549
Other costs	15,754	17,688	1,934		34,840
Depreciation	4,819	5,779	960		12,276
Total expenses	63,886	72,150	8,264		141,829
Operating surplus / (deficit)	(3,017)	(3,410)	394		(6,830)
Interest Income	204	153	50		307
Tax (expense)/credit	-	-	-		-
Non Operating Income	(125)	13	(138)		26
Surplus / (Loss)	(2,938)	(3,244)	306		(6,498)

The following grants funding and expenditure occurred in the quarter ended 30 Sept 2021:

	\$k
Grants funding from MBIE	32,306
Grants expenditure	(32,306)
Net Impact	0

Statement of financial position

As at 31 December 2021

	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Assets					
Current assets*	76,849	72,797	4,052		97,498
Non-current assets					
Fixed Assets	91,525	99,130	(7,606)		116,585
Investment in associates	4,177	4,498	(320)		4,511
Total assets	172,551	176,425	(3,874)		218,593
Liabilities					
Current liabilities*	(61,848)	(63,727)	1,879		(60,819)
Non-current liabilities					
Non-current employee entitlements	(96)	(218)	123		(218)
Deferred tax	(564)	(690)	127		(690)
Total liabilities	(62,507)	(64,636)	2,129		(61,728)
Net assets	110,044	111,789	(1,745)		156,865

Statement of equity

As at 31 December 2021

	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Equity					
Contributed capital	101,493	101,493	-		149,428
Accumulated surplus	8,551	10,296	(1,745)		7,437
Total equity	110,044	111,789	(1,745)		156,865

* includes the following estimated grants liability at 31 December 2021:

\$k

Current assets

MBIE grants receivable 27,879

Current liabilities

Provision for grants payable (27,879)

The statements above, along with the cashflow statement on the following page, have been prepared exclusive of the impact of the R&D Loan Scheme reflected in the Statement of Performance Expectations for FY22 (these loan balances are reflected in MBIE's financial statements).

Statement of cashflow

For the period ended 31 December 2021

	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Net cash flows from:					
Operating activities	1,069	8,184	(7,115)		9,569
Investing activities	(16,689)	(20,804)	4,115		(44,936)
Financing activities	-	-	-		47,935
Net increase / (decrease)	(15,620)	(12,620)	(3,000)		12,568
Add cash at start of period	53,949	50,201	3,748		50,201
Balance at end of period	38,329	37,581	748		62,769

Appendix 4: Measurement Standards Laboratory - Detailed Reporting

Performance Measures

Performance Measures	2020/21 Result	2021/22 Performance Standard	Q1 2021/22 Result	Q2 2020/21 Result	Outlook for Year end
National Measurement Standards appropriation					
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*	On track*	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*	On track*	On Track

* There were 97 technical procedures in validation on 1 January 2022, 3 of which were validated or revalidated during the three months from 1 October 2021 to 31 December 2021. IANZ performed Technical Assessments of the Pressure and Humidity sections during this three-month period. Two corrective actions requests were raised during the Pressure Technical Assessment, which are now being addressed by the Laboratory.

Financial performance

	Actual YTD \$000	Budget YTD \$000	Variance \$000	Full Year Budget \$000
National Measurement Standards	4,284	4,284	0	8,567
Strategic Investment	67	67	0	133
Total Crown Revenue	4,350	4,350	0	8,700
Domestic Commercial	228	285	(57)	570
Overseas Commercial	21	20	0	40

Total Commercial Revenue	249	305	(56)	610
Other Income	6	8	(2)	15
Total Revenue	4,605	4,663	(58)	9,325
Expenses				
Personnel	2,232	2,286	54	4,370
Services and Contracts	116	176	60	341
Other Costs	365	228	(137)	471
Depreciation	494	590	97	1,298
Total Expenses	3,205	3,280	74	6,480
Contribution Margin	1,399	1,383	16	2,845

Use of MSL capital appropriation

At quarter two MSL has spent 15% of its capital appropriation (\$320K of \$2,135K). Strategic planning and validation of FY22 capex spend plan will see significantly increased appropriation use during Q3-Q4.

Appendix 5: Gracefield Innovation Quarter Programme - Detailed Reporting

Programme organisation

- We're continuing to implement the Gateway Review recommendations. This includes the structure and capability required within the programme to support continued delivery.
- We've engaged a Programme Development Manager, Programme Shared Services Manager, Complex Project Delivery Manager and additional Quantity Surveying capability. Recruitment for a Stakeholder Engagement Advisor and Change Specialist is still underway.

Our highlights this quarter

Tactical Workstream

- The Flexible Lab modules have been delivered and installed onsite. Work to complete the refurbishment and services connections is underway.
- The Flexible Offices project has engaged a preferred contractor with site mobilisation due to commence within the coming months.
- The construction of the new laboratory for MSL's Time and Radio Frequency teams was completed. Two of the four atomic clocks have been relocated.
- The DSP2 roof replacement is 80% complete.
- Completed audits of laboratories as part of the Define Stage of the Laboratory Upgrades project.
- Continuing installation of replacement HVAC systems and remediation of existing systems, with 80% of the project completed to date.
- Completed the Microfabrication Cleanroom facility. Environmental lab testing is underway before the lab space is handed over to the scientists for their use.
- Design work is progressing well for the Hazardous Goods and Chemical store.
- Continued implementing Strategic Asset Management work programme, including: completion of our first four Facilities Asset Management Plans, undertake a 'levels of service' survey, complete a confidence and reliability survey of our Asset Register, establish our 10 Year Capital Expenditure Profile for all assets, update our condition grade information for property assets, incorporate corporate priorities into our Asset Management decision making and establish a steering committee to provide a coordinated approach to AM across the organisation.

Tactical Workstream focus for next quarter

- Support the site mobilisation of the main contractors for the Library Building and Site Wide Infrastructure Projects.
- Completion and handover of the Flexible Labs.
- Relocation of the last two atomic clocks into the new Time & Radio Frequency Lab.
- Finalising the design solution and appointment of the main contractor to carry out the:
 - Hazardous Goods and Chemical store project and,
 - Early Childhood Centre relocation and new build project.

- Continuing the deferred maintenance projects (lab improvements, roof improvements, HVAC replacement and remediation).

Future-focused Workstream

- We have completed phase 1 of the Strategic Assessment, which identified potential options/scenarios for future configuration (capability and physical configuration).
- The GIG Master Plan continues to shape the direction for future redevelopment of GIQ, remaining closely aligned with decisions being made by the team delivering current tactical work.
- A Working Group comprising Biotechnology industry key stakeholders and Callaghan Innovation staff is collaborating on an investment proposal to determine the measurable difference a national Biotech hub could make for New Zealand. The proposal is assessing the validity of locating the Biotech Hub at GIQ.

Future-focused Workstream focus for next quarter

- Complete phase 2 of the Strategic Assessment providing an initial assessment of the key strategic choices that would shape GIQ in the future, including the types and blend of capabilities that benefit from co-location at GIQ.

Financial Performance

- The Tactical Estates Continuity Programme's capital expenditure during Q2 was \$6.9m, which was a significant increase from the prior quarter. This took expenditure to \$11.8m in the first half of the financial year - surpassing the \$9.7m spent across the whole of the previous financial year. The main drivers of expenditure during Q2 were the replacement of HVAC units across the site and construction of the new Flexible Laboratories.
- The programme's life-to-date capital expenditure at 31 December 2021 was \$37.2m.

The following table outlines capital expenditure to 31 December 2021:

GIQ Capital expenditure	Actual (life-to-date) 31 Dec 2021 (\$000)	Forecast (total cost)* (\$000)	Budget Approved** (\$000)	Variance to Budget (▼ = under) (\$000)	Funding (per PBC)** (\$000)
Tactical Estates Continuity Programme (GIQ Programme Business Case)					
Tactical Estates Continuity Programme Tranches:					
T1 - Emergency Response Works	15,492	15,557	16,638	▼1,081	12,157
T2 - Deferred Maintenance	5,256	6,819	7,586	▼767	11,300
T3 - Hazardous Goods & Site Infrastructure	2,844	22,373	27,588	▼5,215	34,942
T4 - Flexible Workspaces	7,102	24,835	28,110	▼3,275	19,768
T5 - Business Growth Workspaces	6,472	6,794	7,331	▼537	23,580
Total Tactical Estates Continuity Programme	37,166	76,378	87,253	▼10,875	101,747

* 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 \$0.2m during Q2; this was driven by final works on the new Time Laboratory in the Robertson Building and commissioning works in the new MSL Building.
- Tranche 2 Deferred Maintenance expenditure during Q2 was \$1.7m, which was driven by the replacement of HVAC systems and improvements to laboratory access controls across the site.
- Tranche 3 Hazardous Goods, Site Infrastructure, and Early Childhood Centre Relocation projects' Q2 expenditure of \$1.2m in Q2 reflects external design teams working on detailed designs, which are nearing completion.
- Tranche 4 Flexible Workspaces expenditure of \$3.5m in Q2 was driven by construction of the Flexible Laboratories. The two new modular buildings were delivered to the Gracefield site in mid-November 2021, with fit-out and services connection work commencing there after.
- Tranche 5 Business Growth Workspaces expenditure was \$0.4m during Q2, which was primarily for the upgrade of the air handler system within the GSF Building to provide cooling.

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

Operating expenditure	Actual (Yr-to-date) 31 Dec 2021 (\$000)	Forecast (Full Yr) 2020/21 (\$000)	Budget Approved 2020/21 (\$000)	Variance to Budget (▼ = under) (\$000)	Funding 2021/22 (PBC) (\$000)
GIQ Programme Office Costs	2,395	5,072	5,305	▼ 233	3,000
Demolition & Asbestos Removal*	51	1,413	1,413	-	-
Depreciation on GIQ Assets	549	1,416	1,862	▼ 446	4,167
Operating Expenditure	2,995	7,901	8,580	▼ 679	7,167

* 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 and Future Focussed workstreams. Programme Office costs are forecast to be below budget due to lower personnel expenses.
- Demolition and Asbestos Removal expenditure during 2021/22 relates to E Block and the McKay Building. The demolition of E Block is dependent on the relocation of the Ferrier Research Institute to the new Flexible Laboratories, and the demolition of McKay is dependent upon the relocation of the Electrical Lab, and atomic clocks, to the new Time Laboratory in the Robertson Building. With both these enabling relocations taking place in Q3 and Q4, asbestos removal and demolition work (and associated costs) was scheduled to fall very close to the end of the financial year. However, the COVID-19 outbreak in August 2021 caused some delays to the enabling projects' timelines, which in-turn will likely cause some of the demolition activity to extend into 2022/23.
- The budget for depreciation covers the costs arising from the investment in GIQ assets. Actual depreciation costs are progressively increasing as capital projects are completed. With COVID-19 impacts pushing out project completion dates, depreciation expenses for 2021/22 are forecast to be lower than budget.