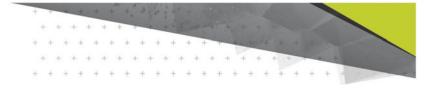


# **Table of Contents**

OVERVIEW OF THE QUARTER	3
INTRODUCTION	5
OUR PRIORITIES FOR 2021/22	6
Organisational performance	6
R&D Tax Incentive and Grant Management	9
GIQ Tactical Estates and Strategic programmes	11
Achieving our performance targets	13
OTHER HIGHLIGHTS FROM THE QUARTER	15
Transformation Programme	1.5
HomeSafe Programme	15
Tech Incubator Programme	16
CleanTech	17
Industry 4.0 and other events	18
APPENDICES	
Appendix 1: Detailed Grants Forecast and Financials	20
Appendix 2: Appropriation Reporting	21
Appendix 3: Detailed Financial Results	22
Appendix 4: Measurement Standards Laboratory - Detailed Reporting	25
Appendix 5: Gracefield Innovation Quarter Programme - Detailed Reporting	28





## **OVERVIEW OF THE QUARTER**

This quarter we have made good progress on implementing our priority projects as set out in the Minister's letter of expectations for 2021/22, despite the disruption of a COVID-19 lockdown and while continuing to provide business as usual support for our customers. We have also continued to make good progress on embedding our transformation programme.

#### Organisational performance

- The re-emergence of COVID-19 has impacted commercial revenues, and has also driven lower than anticipated project costs.
- COVID-19 has impacted our health and safety performance for Q1, with a number of incidents related to working from home. We have subsequently made communications and support from the Occupational Health Nurse available.
- We have continued to actively monitor and manage risks identified last quarter by making incremental progress on security risks, working to define a path forward for the risk associated with use of G-Suite for RDTI, and concluding the sale process for the Flexible Labs at GIQ. This quarter, we have identified that internal and external factors influencing the recruitment market are presenting a people risk for Callaghan Innovation, and are developing plans to mitigate this risk.
- We had a quarter without any significant downtime or service disruptions for our digital infrastructure, and continued to focus on maintaining appropriate security controls.

## **RDTI** and Grant Management

This quarter, the focus for RDTI has increasingly been on the strategic elements of RDTI uptake and performance. We have worked to continuously improve the RDTI journey for customers, explored in-year payment options with Inland Revenue and MBIE, and provided MBIE with a high-level assessment of the viability and feasibility of Callaghan Innovation delivering an in-year payments solution, which will be used to inform MBIE's option development for a briefing to Ministers in October.

We are on track to achieve our performance targets for grant management, with 9 out of 10 measures on track in Q1. The only performance measure not on track was the percentage of Project Grant recipients who perceived that the grant-funded project had improved business productivity, with 81.9% reporting this improvement, below the 85% standard.

## GIQ Tactical Estates and Strategic programmes

We made good progress on the GIQ Tactical Estates Continuity Programme this quarter, completing the construction of the Measurements Standards Laboratory Time and Radio Frequency Lab, getting construction of two modular laboratories underway, and replacing 14 HVAC units. Design progress was made on the hazardous goods facility, flexible office accommodation, and site-wide infrastructure replacement. Demolition of two remaining end-of-life assets was put on hold until the move into the new Flexible Labs and Time and Radio Frequency Lab, and successful commissioning of the new electrical lab.





Progress has also been made on the GIQ Strategic Programme. 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.

#### Achieving our performance targets

In Q1 we achieved 10 out of 12 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') (926 vs 1000 standard)
- Net Promoter Score for Callaghan Innovation Innovation Skills (59 vs 60 standard).

All other performance measures met or exceeded the target, including having worked with 3081 organisations this quarter, well ahead of the target of 2600.

#### Other highlights

- The HomeSafe programme progressed through three projects:
  - The Critical Risks Project (Hazardous Substances) was approved to go ahead as a 12 month programme.
  - We completed gathering data on our carbon emissions for both the FY 19/20 and FY20/21 years as part of the Carbon Neutral project, and set an interim target to reduce our emissions by 33% by 2030.
  - Several aspects of the Emergency Management project progressed, including providing CIMS introductory training in Auckland, Wellington and Christchurch.
- The Tech Incubator Programme hit a major milestone and passed more than \$57m in committed funding (to 14 deep tech start-ups, since October 2020). This was a funding target set for 2.5 years, so an impressive milestone to meet in less than 12 months.
- We publicly launched an independent report into New Zealand's cleantech ecosystem and established a cross-agency CleanTech Mission Partnership, both of which have been well received across the board.
- The Industry 4.0 Demonstration Network was unable to deliver planned face-to-face activities due to the COVID-19 lockdown, but pivoted to deliver Smart Factory Tours virtually.





## INTRODUCTION

This report summarises the progress Callaghan Innovation made in the first 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
  - Other highlights from the quarter this section will focus on different aspects of Callaghan
- 2. 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 Q1 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 30 September 2021<sup>1</sup>

	Actual	Budget	Variance
	\$m	\$m	\$m
Group surplus/(deficit) after non-operating items	(1.051)	(1,311)	260
Revenue	31.499	34.501	(3.001)
Expenses	32.574	35.895	3.321
Interest income and non-operating items	0.023	0.083	0.060
Cash and deposits	46.858	45.140	1.718

#### Revenue

A strong start to the year for IBT (+\$0.2m) has been more than offset by continuing challenges in the delivery and completion of KiwiStar work (-\$0.8m) and to a lesser extent Glycosyn (-\$0.4m). The re-emergence of COVID-19 has also impacted commercial revenues across other groups by approximately 30% (YTD). In addition to this the National Science Challenge is \$1.5m behind budget YTD.

## **Expenses**

Most expenditure categories are tracking close to budget, with the main exceptions being lower than anticipated project costs (driven by lower commercial revenue) and reduced depreciation.

## Cash and deposits

Cash and deposits are tracking close to budget. The National Science Challenge has contributed to the \$1.7m favourable variance here.

## Health and Safety

During Q1, the health and safety team prioritised its journey towards Safety II. Callaghan Innovation has historically adopted a Safety I approach and is on a journey to be Safety II. This work is being led

<sup>&</sup>lt;sup>1</sup> 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 hosted by Callaghan Innovation.



by the Health Safety and Environment team, the HomeSafe Programme and the work of the Business Improvement and Innovation Lead.

In Q1 we continued to develop our internal processes and procedures for our internal reporting system so that we do not only focus on failure (incidents and near misses) but on the lead signals that can continue to help us improve in all areas, especially critical risk controls. The reporting produced for governance continues to evolve towards Safety II.

The health and safety team received a handover from the HomeSafe Programme on contractor management. Developments to the contractor management system have continued alongside the significant work of ensuring pre-qualification of all our contractors and the development of an exemption process.

Engagement with our health and safety representatives and how we communicate, collaborate and cooperate with our people has progressed, and documents on roles and responsibilities have been produced for all levels of the organisation.

COVID-19 has impacted our health and safety performance in Q1. Our 12 month rolling average for TRIFR is 8.3, which is within WorkSafe New Zealand and ACC guidance. We processed 27 risk assessments and have received 36 event (hazard, near miss and incident) reports. We now include all of the GIQ programme events in the reporting. A number of incidents are related to the set up working from home - communications and support from the Occupational Health Nurse have subsequently been made available. The critical risk of hazardous substances continues to have the majority of events reported against it, followed by stored energy.

#### Focus for Q2:

- Improvements to contractor management system
- Environmental monitoring and assessment benchmarking
- Continued improvement to the health and safety reporting system
- Developments in a worker engagement structure aligned to our future state

## 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 three key risks. Updates on these risks are set out below.

Risk description	Status as at 30 September 2021
Security Risks	Incremental improvements have been made to our ability to manage security risks, including adopting an information classification and handling standard, improved ELT reporting, and increased communication and engagement.



Research and Development Tax Incentive	We are continuing to work with Inland Revenue regarding their concerns about our use of G-Suite as a document storage and management solution for Sensitive Revenue Information relating to applications for the RDTI, to understand the impacts on RDTI operations and the go-live for the Grants Management System (Hiwa-i-te-rangi) project, and to define a path forward.
GIQ Programme Supplier Risk	The sale process of the preferred supplier for the Flexible Labs project has been concluded and works commenced on the construction of the facilities. The supplier has achieved key milestones to date, albeit the next milestone is likely to be delayed due to the recent Level 4 lockdown in August.

### New risks identified this quarter

This quarter we have identified one key risk, which is detailed below.

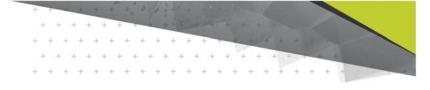
Risk description	Mitigations
People risk  The internal and external factors influencing the recruitment market are presenting a people risk for Callaghan Innovation focused on engaging and retaining talent in a competitive market.	<ul> <li>Develop an identified plan to address what is important to our people and translate this into Callaghan Innovation's employee value proposition which provides us a point of difference within a tight labour market.</li> <li>Identify new ways to engage and build a talent pipeline that reflects the needs of the business.</li> <li>Senior leaders to identify flight risks and have conversations with these individuals with the view to accommodating their drivers and retaining talent.</li> </ul>

## State of systems / IT

Callaghan Innovation's digital infrastructure platforms and client products and services remained available during the period in line with stated business requirements, with no significant observed downtime or service disruptions.

Digital continues to mature its operational delivery practices to ensure that system stability, reliability and availability are maintained appropriately, with a continued focus on improving responsiveness where required. A continued focus on maintaining appropriate security controls, and driving up enhancement opportunities for all Digital platforms, products and services was evidenced during the period.





Digital will be working closely with the wider enterprise in the coming period to confirm what Digital platforms, products and services are considered critical, with a commitment to performing health checks on the top 10 services to ensure compliance with stated baseline performance (including security controls) measures are in place and being appropriately monitored over the medium term.

## 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 by two per cent 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:

- The RDTI scheme remains one of Callaghan Innovation's top priorities and has strong attention
  at all levels of the organisation. Over the last quarter, the focus has increasingly been on the
  strategic elements of RDTI uptake and performance, as many operational aspects of RDTI at
  Callaghan Innovation have been significantly enhanced.
- We continue to implement a wide range of continuous improvement measures, to ensure customers have easily accessible information and support throughout the RDTI journey.
- The RDTI transition support payment for former Growth Grant recipients (announced by Hon Dr Megan Woods, Minister of Research, Science and Innovation, in April 2021) went live for customers on 30 August 2021. The purpose of the transition support payment is to help former Growth Grant customers maintain their investment in R&D while they move to the RDTI. Our customer relationship managers are in contact with these businesses and assisting them with their applications.
- Together with Inland Revenue and MBIE, we have been exploring how in-year payments of the RDTI could be delivered to assist with cash flow challenges some businesses may face while they wait for the tax refunds to come through. Three options are being explored in parallel through the tax system, government loans or private sector.
- We provided MBIE with a high-level assessment of the viability and feasibility of Callaghan Innovation delivering an in-year payments solution through a government loan. This will be used to inform MBIE's option development for a briefing to Ministers in October.
- We note an increase in the number of RDTI applications in our backlog awaiting processing (approximately 700 as at 22nd October, 2021) resulting from volume spikes in May and August 2021 caused by COVID related due-date extensions for General Approvals (resulting in 635 new applications for the 2 months), as well as lower than usual quality applications that result in longer processing times.



# **New Zealand's Innovation Agency**

#### Focus for Q2:

- We will continue to work closely with former Growth Grant customers to transition them to the RDTI, and will also widen the focus to include other Callaghan Innovation grants customers.
- Once a preferred in-year payments option is approved by Ministers, further scoping and consultation will be undertaken, along with additional policy development and implementation planning.

#### Backlog Reduction:

- We are acutely aware of the issues the backlog and associated long processing times are causing for customers.
- We are working with MBIE and Inland Revenue on a proposal to significantly reduce the backlog over the coming months, improving processing times, customer experience, and reducing the backlog to sustainable levels of demand before the summer break.

### **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.

#### 9 out of 10 measures are on track this quarter

			2021/22	
Performance Measure	ce Measure Actual 2020/21		Q1	Outlook for year end
Targeted Business Research and Developm	ent Funding A	ppropriation		
Number of businesses with active Project Grants this year	655	570	672	On track
Net Promoter Score from Project Grant recipients	82	+70	82	On track
Percentage of Project Grant recipients who perceived that the grant-funded project:  • Had an overall positive impact on their business	97.2%	95%	97.5%	On track
Increase knowledge acquisition	93.8%	85%	96.2%	On track



Improved business productivity	82.5%	85%	81.9%	Off track	
Net promoter score from Student Grant recipients	+89	+70	89	On track	
Category 2 - Research and Development S	ervices and Fo	cilities for Busine	ss and Indus	try	
Number of customers with a Research Development Solutions project this financial year	288	250	308	On track	
Net Promoter Score from Research Development Solutions	+58 +40		+58	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	1234	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%	93.3%	On track	

#### Focus for Q2:

 We will continue to focus on managing the strong demand against the remaining appropriation.

## GIQ Tactical Estates and Strategic programmes

The redevelopment of the 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).

#### 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	Construction of two modular laboratories is underway in the supplier's factory. For both labs the steel chassis are complete, the floors are down, the wall and roof framings are complete, electrical roughing is complete and the mechanical install has begun. Work has also started to prepare the infrastructure and ground for the placement of the labs at GIQ.
Construction of the Measurements Standards Laboratory Time and Radio Frequency Lab completed	Construction works have been completed. The scientists are now carrying out environmental condition tests to ensure approach standards to house New Zealand's atomic clocks.
Deferred maintenance projects completed including roof and exterior replacements, HVAC replacement and laboratory safety improvements	Fourteen HVAC units have been replaced to improve the environmental conditions in the lab and workspaces. The DSP2 roof replacement has commenced.
Construction of a hazardous goods facility commenced	Carrying out the design stage, a twelve month activity. Engaging with an independent QS and the market to finalise design costs and solutions.
Construction of flexible office accommodation commenced	Callaghan Innovation Board approved the design solution for the refurbishment and core structure upgrade of the Library Building and proceeding to the delivery stage (construction). Market engagement with potential contractors is underway and will be completed in October.
Construction of site-wide infrastructure replacement commenced	Detailed design stage is progressing to plan. As part of this stage we have gone out to market to engage a contractor to undertake works to improve 1.9 kilometres of linear length underground infrastructure at GIQ.

#### Focus for Q2:

- Appointment of a main contractor to lead the refurbishment and core structure upgrade of the Library Building, the Flexible Offices Project.
- Completion of the offsite Flexible Labs construction before being transported to GIQ to start the process to connect and operationalise the labs.
- Finalising the design solution and appointment of the main contractor to carry out the:
  - o Hazardous Goods and Chemical store project
  - o Site Wide Infrastructure project, and
  - o 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 an 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 Future Pathways and Regional Property Strategy reviews being led by MBIE.

#### Highlights from this quarter:

- Commencing a feasibility study to test the viability of the Biotech Hub initiative and if the value proposition is proven to be beneficial to New Zealand and Callaghan Innovation. 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 June 2021, the Callaghan Innovation Board adopted Option C in the GIQ White Paper, agreeing to a GIQ Strategic Assessment. The Strategic Assessment includes defining the 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. Approval for the Strategic Assessment will be sought from the Board in November 2021.

#### Focus for Q2:

- Complete the Biotechnology Hub initiative's feasibility study to determine if investment in a Biotech Hub 'stacks up' and delivers sufficient benefit to the RSI ecosystem and New Zealand socially and economically.
- Complete the Strategic Assessment on 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 10 out of 12 of our performance targets. The two areas that did not meet the performance standard were very close, with COVID-19 contributing to reduced customer interaction in events and international missions, which currently cannot go ahead.



		2021/22			
Performance Measure	Actual 2020/21	Dawfaumannaa		Outlook for year end	
Callaghan Innovation Operations Multi-ca	itegory Appro	oriation			
Percentage of set milestones achieved for our transformation programme - GIQ, Digital Transformation, Tātai Whetū, HomeSafe	New measure	At least 80%	88%	On track	
Total number of organisations working with Callaghan Innovation on services this Financial Year	3,114	2,600	3093	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	663	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	925	At risk	
Net Promoter Score for Callaghan Innovation Services: Events	+40	+30	39	On track	
Net Promoter Score for Callaghan Innovation Services: International Missions	N/A +60		N/A	N/A	
Net Promoter Score for Callaghan Innovation Innovation Skills (formerly 'Programmes')	+60	+60	59	At risk	
Category 2 - Research and Development Business and Industry	Services and F	acilities for			
Number of customers with a Research Development Solutions project this financial year	288	250	308	On track	
Net Promoter Score from Research Development Solutions	+58	+40	58	On track	
Callaghan Innovation Capital Investment					
Any major capital project proposals are developed in accordance with published Treasury business case guidelines	Achieved	Achieved	N/A	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 HomeSafe Programme
- The Tech Incubator Programme
- CleanTech
- Industry 4.0 and other events.

#### **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 HomeSafe Programme.

#### HomeSafe Programme

The HomeSafe programme is focused on ensuring the health, safety and environmental risks we face are effectively managed when we do our work. The following projects have progressed in this quarter:

- The Critical Risks Project (Hazardous Substances): The programme board approved a 12 month programme to improve or create the following hazardous substances processes and guidance for:
  - Improved processes for work area chemical induction, staff off-boarding, handover of chemicals before exit, and stocktake and disposal
  - New processes for procurement, chemical delivery for Christchurch and Auckland (and certified handler training for those responsible for receipt of chemicals)
  - Clear guidance around safe chemical handling
  - Safety Data Sheet review.

In addition, planning for the disposal and stocktake of hazardous substances is well underway. The programme board also approved, in principle, the purchase of additional EX-rated devices to support improved chemical tracking.

- Carbon Neutral project: We completed gathering data on our carbon emissions for both the FY 19/20 and FY20/21 years. This includes organisations we own that are part of the food innovation network. Callaghan Innovation reduced carbon emissions by 17% over those 2 years, due to COVID-19 restrictions. We have set an interim target to reduce our emissions by 33% by 2030. Working with our GIQ and Facilities colleagues, we have identified opportunities to reduce our carbon emissions relating to our buildings and infrastructure. We are also considering how we reduce carbon emissions relating to our flights.
- **Emergency Management project**: CIMS introductory training was provided in Auckland, Wellington and Christchurch. Initial discussions were held regarding an Emergency



Management Leadership Group. We identified opportunities for low cost emergency management training and met with other organisations to discuss how they do emergency management. An introductory paper to the programme board outlined a framework for the Emergency Management project in three of the four 'Rs' (Readiness, Response and Recovery) and four focus areas (leadership, capability & capacity, communication & engagement, and resources & tools).

#### Focus for Q2:

- Rollout of the Hazardous Substances initiatives.
- Commissioning of a Fleet Transition plan to outline how we move away from fossil fuel vehicles.
- Development of our decarbonisation roadmap/strategy.
- Scoping out the work-related health and wider wellbeing work for the organisation.
- Pause the Emergency Management project.

#### **Tech Incubator Programme**

#### >\$50M committed through the Technology Incubator Programme

This quarter, we hit a major milestone and passed more than \$57m in committed funding (to 14 deep tech start-ups, since October 2020). This was a funding target set for 2.5 years, so an impressive milestone to meet in less than 12 months. The breakdown of this investment is \$10.5M in public money from Callaghan Innovation in repayable grants (\$750k each) and \$46.5M in co-investment from the private sector through the four Tech Incubators. The ratio matches approximately the 1:5 ratio seen in tech incubators in standout countries like Israel.

The portfolio is diverse and companies are tackling some of the world's greatest problems including cancer treatments, manufacturing drugs in New Zealand for terminal medical conditions, remediation of contaminated land, space technology, carbon emissions management, disaster emergency response, and oral disease in humans and animals.

This success is a direct result of taking learnings from the pilot technology incubator scheme, to design and procure a more ambitious programme, with internationally connected providers who each had at least \$20m available to invest in deep tech ventures. The four Technology Incubators for the current programme are Brandon Capital, Bridgewest Ventures, Sprout Agritech, and WNT Ventures.

With the increasing availability of venture capital in New Zealand driven by NZGCP's \$300m Elevate Fund of Funds, plus a trend of increasing international Venture Capital interest in New Zealand, these four providers are contributing to a unique market niche, with our funding de-risking opportunities to enable investment into true deep-tech at incredibly early stages.

#### NB: Table Confidential and not for public release







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#### CleanTech

Earlier this year Callaghan Innovation commissioned an <u>independent report into New Zealand's CleanTech ecosystem</u> that benchmarked Aotearoa New Zealand's challenges and opportunities against other small advanced economies. While the report sees great opportunities for New Zealand, in the context of growing global investments in CleanTech, it highlighted some specific challenges. Unsurprisingly these challenges include our isolation from international markets, a lack of private investment to support commercialisation, and a need for increased collaboration.

As a response to the highlighted challenges Callaghan Innovation led the establishment of the cross-agency <u>CleanTech Mission Partnership</u>, bringing together a group of organisations that will





support CleanTech innovators along their commercialisation journeys from initial idea to impact. The partnership is made up of Callaghan Innovation, New Zealand Growth Capital Partners, Auckland Unlimited, Science for Technological Innovation and UniServices, and is receiving strong support from NZTE. The partnership is unified around a shared vision documented in the <u>partnership</u> statement.

The public launch of both the CleanTech report and the partnership have been well received across the board, resulting in outreach from other Government agencies, lwi and the business community. We expect the partnership to grow over the coming months. We also received excellent media coverage including <a href="Stuff">Stuff</a> and <a href="Dominion Post">Dominion Post</a>, Newstalk ZB, <a href="NZ Herald">NZ Herald</a>, <a href="CIO">CIO</a> and a range of niche outlets like <a href="NZ Farmers Weekly">NZ Farmers Weekly</a> and <a href="NZ Manufacturer">NZ Manufacturer</a>, and an in depth video interview with the <a href="National Business Review">National Business Review</a> discussing the sector and needs.

Since the launch, the partnership has been working collaboratively to identify CleanTech innovators, and their specific challenges, and exploring how the partnership group can best support them individually and collectively, this work will inform the further development of the partnership roadmap and priority initiatives that will help lift New Zealand's global CleanTech standing.

In addition to the CleanTech Mission Partnership, Callaghan Innovation is working directly and through the Regional Business Partner network with over 220 CleanTech innovators, and is supporting other CleanTech focussed activities such as the Climate Response Accelerator and the X-Labs circular economy lab, and is an active contributor to the MBIE led Cross Government Clean Energy steering group, Ara Ake's Energy Innovation Forum, and the Scion bio-pilot project.

The <u>Climate Response Accelerator</u>, in partnership with Creative HQ, took in 8 teams from over 70 applications to mentor them through the commercialisation of their climate tech ideas/products. The teams pitched in September at the end of the programme and continue working through their journey. The diverse range of innovations across energy, packaging alternatives, apps and transport technology reflects the growing number and variety of CleanTech innovators.

#### Industry 4.0 and other events

The Industry 4.0 Demonstration Network continued to deliver where it could under COVID-19 restrictions. One face-to-face factory visit with Bonson Industries took place in July ahead of the lockdown, as well as 19 Mobile Showcase events held across Palmerston North, Hastings, Hawkes Bay and Wellington. The programme website content, <a href="https://www.industry4.govt.nz">www.industry4.govt.nz</a>, has been updated and received 1,555 new unique visitors over this quarter.

Network of Site Visits attendees had the opportunity to engage with people, and view machinery and technology across the shop floor, which demonstrated many Industries 4.0 technologies. Those who attended also gained an in-depth understanding of how the SIRI assessments were conducted. Those attending face-to-face site visits were from Auckland, the Bay of Plenty, Waikato and Wellington, and represented the following sectors: machinery and equipment, food and beverage, plastics, and other manufacturing.

The national COVID-19 lockdown this quarter impacted the ability to deliver the planned face-to-face activities which included a Ministerial visit. It is expected that most of these events will take place in quarters 2 and 3 instead, pending alert levels reducing in Auckland.

Impact on the factory assessments to prepare them for physical factory visits has been minimal due to the ability to continue remotely and because the majority of these factories are outside Auckland. Engagement with the programme continues to be strong with an additional 13 manufacturers registered to be considered for the Network of Site Visits assessment.

Due to impacts of COVID-19 restrictions, the programme has pivoted the delivery of its Smart Factory Tours to be done virtually to provide a highly immersive smart factory tour experience where participants will be able to see first-hand what modern manufacturing in New Zealand looks like.





The construction of the Aronui Industry 4.0 Navigator Centre in Auckland was also impacted by the COVID-19 lockdown and is now scheduled to be completed in November 2021. Next quarter we will launch the centre and deliver expert-facilitated workshops to businesses to help them understand how an Industry 4.0 can make them more globally competitive, and feel confident to start their own Industry 4.0 journeys.

A survey of Industry 4.0 sentiments and feedback on the Demonstration Network was conducted this quarter. Results and findings will be published next quarter to inform future events.





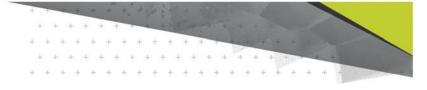
## **Appendix 1: Detailed Grants Forecast and Financials**

	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	_	10,564	4,847	15,411
Remaining appropriation at 30 September 2021	38,251	67,782	15,899	

<sup>\*</sup> Totals are provided where appropriate

<sup>\*\*</sup> 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.



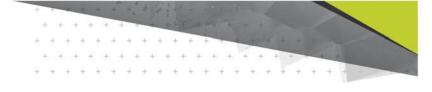


## **Appendix 2: Appropriation Reporting**

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	19,754	60,069
canagnan minovación - operacións ivica	75,023	15,754	00,003
National Measurement Standards	8,567	2,142	6,425
Industry 4.0	2,131	465	1,666
muusty 4.0	2,131	403	1,000
Capital expenditure			
Callaghan Innovation - Capital			
Expenditure	47,935	-	47,935
C			
Grants			
Repayable Grants	20,746	4,847	15,899
Research and Development Growth			
Grants (FY21/22 only)	-	-	-
Targeted Business Research and			
Development Funding (FY21/22 only)	67,490	10,564	56,926



## **Appendix 3: Detailed Financial Results**

#### Statement of revenue and expense

**Callaghan Innovation Group** 

For the period ended 30 September 2021

				Full Year
	Actual	Budget	Variance	Budget
	\$k	\$k	\$k	\$k
Revenue				
Crown operating				
Crown Funding - Other	740	958	(218)	4,151
Callaghan Innovation Funding	10,419	10,487	(68)	41,950
Strategic Investment	4,631	4,631	(0)	18,523
Business R&D Grants administration	1,937	2,004	(66)	8,014
National Measurement Standards	2,142	2,142	0	8,567
Programme Funding	845	845	-	3,378
Food Innovation Network	1,129	1,129	0	4,515
Total Crown operating	21,842	22,195	(353)	89,098
Crown contestable contracts and other	3,406	4,925	(1,520)	19,702
Commercial revenue				
Domestic Commercial	1,923	2,235	(312)	8,489
Overseas Commercial	2,622	3,729	(1,107)	12,013
Total Commercial revenue	4,545	5,964	(1,419)	20,502
Other Income	1,706	1,416	289	5,696
Total revenue	31,499	34,501	(3,001)	134,999
Expenses				
Personnel	17,626	18,276	650	69,164
Services and Contracts	4,604	6,379	1,774	25,549
Other costs	8,063	8,542	478	34,839
Depreciation	2,280	2,698	419	12,276
Total expenses	32,574	35,895	3,321	141,828
Operating surplus / (deficit)	(1,074)	(1,394)	320	(6,829)
Interest Income	102	77	25	307
Tax (expense)/credit	-	-	-	-
Non Operating Income	(79)	6	(85)	26
Surplus / (Loss)	(1,051)	(1,311)	260	(6,497)

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

\$k

Grants funding from MBIE 15,411
Grants expenditure (15,411)
Net Impact 0

#### Statement of financial position

As at 30 September 2021

				Full Year
	Actual	Budget	Variance	Budget
	\$k	\$k	\$k	\$k
Assets				
Current assets*	87,840	80,610	7,229	97,498
Non-current assets				
Fixed Assets	85,013	93,289	(8,276)	116,585
Investment in associates	4,224	4,491	(267)	4,511
Total assets	177,077	178,390	(1,314)	218,593
Liabilities				
Current liabilities*	(64,420)	(63,836)	(584)	(60,819)
Non-current liabilities				
Non-current employee entitlements	(118)	(218)	100	(218)
Deferred tax	(564)	(690)	127	(690)
Total liabilities	(65,103)	(64,745)	(358)	(61,728)
Net assets	111,974	113,645	(1,671)	156,865

#### Statement of equity

As at 30 September 2021

				Full Year
	Actual	Budget	Variance	Budget
	\$k	\$k	\$k	\$k
Equity				
Contributed capital	101,493	101,493	-	149,428
Accumulated surplus	10,481	12,152	(1,671)	7,437
Total equity	111,974	113,645	(1,671)	156,865

includes the following estimated grants liability at 30 September 2021:

\$k

Current assets

MBIE grants receivable 32,875

Current liabilities

Provision for grants payable (32,875)

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).

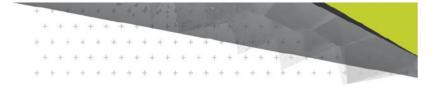


#### Statement of cashflow

For the period ended 30 September 2021

				Full Year
	Actual	Budget	Variance	_Budget
	\$k	\$k	\$k	\$k
Net cash flows from:				
Operating activities	547	6,813	(6,266)	9,569
Investing activities	(7,638)	(11,874)	4,236	(44,936)
Financing activities	-	-	-	47,935
Net increase / (decrease)	(7,091)	(5,061)	(2,030)	12,568
Add cash at start of period	53,949	50,201	3,748	50,201
Balance at end of period	46,858	45,140	1,718	62,769





# Appendix 4: Measurement Standards Laboratory - Detailed Reporting

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 177\* internationally recognised measurement standards it provides enable New Zealand exports to be accepted in more than 100 markets.

#### Our highlights this quarter

#### MSL's outputs this quarter

- 67 commercial jobs delivered to customers (calibration & consultancy).
- 9 IANZ assessments of external laboratories carried out by MSL staff.
- 76 enquiries to <u>info@measurement.govt.nz</u>.
- Mayor Barry and Joe Shadwell (Council Comms & Engagement Advisor) visited MSL on 12 August. They were given a tour of the new MSL Building and the Temperature Labs, Light Standards and the Kibble Balance Lab.
- 33 attendees received measurement training. One company (NZ Steel) received onsite measurement training.
- 1724 downloads of resources (e.g. technical guides, software) from measurement.govt.nz.

#### **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*	tbc	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*	tbc	On track				

<sup>\*175</sup> submitted in error, public copy amended to 177.





\* There were 102 technical procedures in validation on 1 October 2021, IANZ has not audited MSL during this three-month period. There are no outstanding corrective action requests from previous audits.

#### **Outreach and Recognition**

- Lower Hutt Mayor Campbell Barry and Joe Shadwell (Council Comms & Engagement Advisor)
  visited MSL. They were given a tour of the new MSL Building and the Temperature Labs, Light
  Standards and the Kibble Balance Lab.
- MSL scientist contributed to the organising committee for NZ Institute of Physics and arranged a tour to GIQ to visit MSL and other Callaghan Innovation staff and laboratories.
- MSL has launched an <u>online learning module</u> "An introduction to MSL". This module has been designed to demonstrate to a broad audience who MSL are, why MSL exists and what 'Sl' stands for. This module is available to all via the measurement.govt.nz website.
- MSL Director attended Quarterly Standards, Accreditation & Metrology Group Meeting with leaders of IANZ, Trading Standards, Standards NZ, MBIE & JAS-ANZ.
- MSL Scientists and Technicians contributed extensively to a Stuff.co.nz article <u>'The most important three pieces of metal in New Zealand, explained</u>' This article delves into measurement science, explaining the SI and the role MSL plays in maintaining NZ's measurement system.

#### Strategic Planning

During Q1 MSL has reviewed and updated its strategic plan to develop a draft version which will guide MSL through the next 5 years. Key strategic themes developed in this update plan include:

- 1. Enhance MSL's Role as a World Class National Metrology Institute
- 2. Build MSL's Leadership & Influence in the National Quality Infrastructure & Science Ecosystem
- 3. Contribute to the Evolution of Metrology

This strategic plan informs and validates the CAPEX spending plan for the current financial year. Implementation of the CAPEX plan will take place in Q2 - Q4.



### Focus for the next quarter

- Implement CAPEX spending plan.
- Finalise reforecast move plan and commence electrical and time laboratory moves.
- Transition to new Callaghan Innovation enterprise organisational structure and ways of working.

## Financial performance

	Actual YTD \$000	Budget YTD \$000	Variance \$000	Full Year Budget \$000
National Measurement Standards	2,142	2,142	0	8,567
Strategic Investment	33	33	0	133
Total Crown Revenue	2,175	2,175	0	8,700
Domestic Commercial	132	143	(11)	570
Overseas Commercial	9	10	(1)	40
Total Commercial Revenue	140	153	12	610
Other Income	6	0	6	15
Total Revenue		2,328	(7)	9,325
Expenses				
Personnel	1,085	1,165	80	4,370
Services and Contracts	88	72	(16)	341
Other Costs	161	115	(47)	471
Depreciation	238	273	35	1,298
Total Expenses	1,572	1,624	52	6,480
Contribution Margin	749	704	45	2,845

#### Use of MSL capital appropriation

At quarter one MSL has spent 2.2% of its capital appropriation (\$47K of \$2,135K). Strategic planning and validation of FY22 capex spend plan will see significantly increased appropriation use during Q2-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 and Investment Analyst. Recruitment for a Stakeholder Engagement Advisor and Change Specialist is still underway.

#### Our highlights for this quarter

#### **Tactical Workstream**

- The Flexible Labs project began construction of two modular laboratories at the supplier's factory. The labs are built at the suppliers site before being transported and finalised on site. Work has also started to prepare the infrastructure and ground for the placement of the labs at GIQ.
- The Flexible Offices project's design solution for the refurbishment and core structure upgrade of the Library Building and proceeding to the delivery stage (construction) was approved by the Callaghan Innovation Board.
- The construction of the new laboratory for MSL's Time and Radio Frequency teams was completed. Environmental lab conditions testing is underway and will continue through to Q4 before New Zealand's atomic clocks can be 'safely' moved to the new lab.
- Continuing design and remediation works, as part of the Roofs and Exterior project, for the DSP2
  roof and the G Block roof and exterior cladding.
- 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 14 HVAC units replaced 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, and Site Wide Infrastructure project.
- Completed the fit out of 'Office 2' and construction of 'Office 4', the new laboratories and meeting spaces at the Textile Centre in Auckland.
- 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

• The Flexible Offices project appointment of a main contractor to lead the refurbishment and core structure upgrade of the Library Building.





- The Flexible Labs offsite construction completed and transported to GIQ for 'connecting' and getting the labs up and running in Q4 2022.
- Finalising the design solution and appointment of the main contractor to carry out the:
  - Hazardous Goods and Chemical store project
  - Site Wide Infrastructure 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**

- The GIQ Masterplan 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.
- We are engaging with a group of key external stakeholders who are potential strategic partners for the site.

#### Future-focused Workstream focus for next quarter

- Complete the Biotechnology Hub initiative's feasibility study to determine if investment in a Biotech Hub 'stacks up' and delivers benefit to the RSI ecosystem and its partners.
- Complete the Strategic Assessment on the key strategic choices that would shape a 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 Q1 was \$4.8m.
   Although productivity was adversely impacted by the August 2021 COVID-19 outbreak, particularly those projects underway with construction, expenditure during Q1 was at the highest level since the inception of the programme.
- The programme's life-to-date capital expenditure at 30 September 2021 was \$30.2m.



#### The following table outlines capital expenditure to 30 September 2021:

GIQ <u>Capital</u> expenditure  Tactical Estates Continuity Programme (GIQ Programme Business Case)	Actual (life-to-date) 30 Sep 2021 (\$000)	Forecast (total cost)* (\$000)	Budget Approved** (\$000)	Variance to Budget (▼ = under) (\$000)	Funding (per PBC)*** (\$000)
Tactical Estates Continuity Programme Tranches:					
T1 - Emergency Response Works	15,302	15,557	16,638	▼1,081	12,157
T2 - Deferred Maintenance	3,562	6,571	7,160	▼589	11,300
T3 - Hazardous Goods & Site Infrastructure	1,682	5,097	5,099	▼02	34,942
T4 - Flexible Workspaces	3,563	28,110	28,110	-	19,768
T5 - Business Growth Workspaces	6,109	6,877	7,331	<b>▼</b> 454	23,580
Total Tactical Estates Continuity Programme	30,218	62,212	64,338	▼2,126	101,747

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

- Tranche 1 Emergency Response Works expenditure was \$0.5m during Q1; this was driven by construction of the new Time Laboratory in the Robertson Building and final commissioning works in the new MSL Building.
- Tranche 2 Deferred Maintenance expenditure during Q1 was \$0.8m, which was driven by the replacement of HVAC systems across the site.
- Tranche 3 Hazardous Goods & Site Infrastructure projects' Q1 expenditure of \$0.8m in Q1 reflects external design teams working on detailed designs, which are nearing completion.
- Tranche 4 Flexible Workspaces expenditure of \$2.4m in Q1 was driven by material purchases and construction activity for the Flexible Laboratories project, in addition to external consultant costs to support the design stage of the Flexible Office Spaces project.
- Tranche 5 Business Growth Workspaces expenditure was \$0.3m during Q1, 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) 30 Sep 2021 (\$000)	Forecast (Full Yr) 2020/21 (\$000)	Budget Approved 2020/21 (\$000)	Variance to Budget (▼ = under) (\$000)	•
GIQ Programme Office Costs	1,081	5,280	5,305	▼ 25	3,000
Demolition & Asbestos Removal*	-	1,413	1,413	-	-
Depreciation on GIQ Assets	264	1,593	1,862	▼269	4,167
Operating Expenditure	1,345	8,286	8,580	▼ 294	7,167

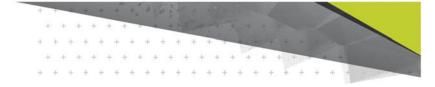
<sup>\*</sup> The budget incorporates funding of \$1.413 million carried forward from 2019/20 for Hector and McKay demolition/asbestos removal.

- GIQ Programme Office costs include programme management, Gateway Reviews, personnel and overhead expenses associated with delivering the Tactical and Future Focussed workstreams.
- Demolition and Asbestos Removal expenditure during 2021/22 will be incurred in relation 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 planned to take place in Q3 and Q4, asbestos removal and demolition work (and associated costs) will fall very close to the end of the financial year. The COVID-19 outbreak in August 2021 caused some

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

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





- delays to the enabling projects' timelines, which in-turn has increased the risk of the demolition activity extending 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.