Te Papa Tipu Innovation Park, Titokorangi Drive, Rotorua Private Bag 3020, Rotorua 3046, New Zealand Telephone +64 7 343 5899 Facsimile +64 7 348 0952 Email enquiries@scionresearch.com www.scionresearch.com



25 February 2022

Hon Dr Megan Woods Minister of Research, Science and Innovation Private Bag 18041 Parliament Buildings WELLINGTON 6160

Dear Minister

# Re: Annual Letter of Expectations for 2022/23

Thank you for the opportunity to present Scion's progress towards your strategic and performance expectations relating to the 2022/23 financial year and beyond.

The Scion Board is confident that if appropriate funding can be sourced Scion's vision, driven by its scientific capability, will deliver the transformative knowledge and innovations needed by the Government to safeguard New Zealand's future health, environment and prosperity.

In response to your specific points raised in the Letter of Expectations for 2022/23, we are pleased to advise as follows:

### Te Ara Paerangi - Future Pathways

Scion supports the opportunity set out in the Te Ara Paerangi - Future Pathways consultation document. We agree that change to the RS&I system is necessary and overdue. To advance impactful change we strongly support working collaboratively to co-design clear, high-level national priorities for Aotearoa New Zealand. This approach aligns very closely with the process Scion has developed to drive impact and achieve our strategic vision for Aotearoa New Zealand to 2030 and beyond. We stress too, that truly transformative national priorities can be delivered only with the backing of significant increase in government and private sector investment. We look forward to working with MBIE to help realise the potential set out in the Te Ara Paerangi green paper.

#### **RSI Property Portfolio**

Scion is aware of the RSI Property portfolio requirements regarding co-located research facilities. We are currently looking at future facilities for our Christchurch team. Scion and the University of Canterbury have established a joint working group to develop a strategic partnership s 9(2)(a)

campus in Rotorua is a strong example of the benefits of co-location. There, with 44 entities on site including mana whenua, we work closely and proactively to deliver both regional and national benefits for New Zealand.

## **Deliver on Government priorities**

You have endorsed our strategy "Right tree, right place, right purpose" that aims to deliver on many Government priorities. We are heavily engaged in the Government and industries strategies you mention: MBIE's Circular Economy Strategy and Business Productivity Goals, the Fit for a Better World Roadmap, and the Conservation and Emissions Reduction Plan, as well as many others such as multiple Industry Transformation Plans, biofuel strategy work, He Waka Eke Noa, waste reduction, recycling and replacement strategies.

Our challenge is that while we have funding mechanisms to undertake science we do not have funding to apply our knowledge and capability to engage with these strategies to the extent that would effectively use the critical capability we hold on behalf of New Zealand.

In recognition of the aims of the Carbon Neutral Government Programme, Scion has recently

completed an EECA-funded assessment of the best options to move our Rotorua campus off its reliance on natural gas, which contributes up to 60% of our GHG emissions. Work is underway on specifics around replacing the boilers and chillers needed for our site, and we have begun an electricity efficiency sub-metering project. In 2021, we replaced three of our petrol vehicles with three battery electric vehicles and intend to replace our utes as technology becomes available. Also, we are internally reviewing our air travel in order to reduce emissions from this source.

#### Well-being and workforce inclusion

We are proud of our response to COVID-19. We have engaged licensed immigration consultants to assist our international staff on immigration issues due to the pandemic and reimbursed staff for unforeseen costs associated with their immigration. For the wider workforce, we have actively checked in on staff members who live alone during lockdown periods, incentivised vaccinations and provided clear communications on requirements at each change in alert levels or traffic light settings. Our wellness team is proactive, holding monthly initiatives like bike week, financial wellness and men's health.

Despite the challenging times for Scion both as a community and an organisation, we were pleased to see our Pulse Engagement score remain steady with last year's results.

The 2021/22 year saw an overall reduction in Gender Pay Gap (GPG) to 11.7, down from 12.4 (2020) and 17.1 (2017). Within pay bands we have an average GPG of 0.9.

Work ahead for 2022 will include providing a more flexible working environment to all staff, including for example participation of parents/primary carers in more senior/higher paid roles in the organisation.

Scion is aware of the lack of Māori researchers, particularly at a senior level. In 2021, we appointed our first Māori Emeritus Researcher. A key part of his role is mentoring the growing number of Māori early career researchers at Scion. We have also been involved with the Te Ara Pūtaiao group in forming a bid for MBIE's Diversity, Equality and Inclusion Fund around hosting Māori graduates and students.

#### Financial resilience

In September 2019, our Board Chair informed the Minister of both short- and long-term funding challenges owing to unsuccessful bids in the MBIE contestable funding rounds. These challenges resulted in financial prudence initiatives that meant planned capital works were stopped and cost containment measures implemented.

While Scion was successful in the recent MBIE contestable round this result does not provide a long-term solution. Our capability remains at risk as well as our ability to deliver on our strategy.

Progressing the MBIE/Scion Long-Term Funding Solution Working Group and other mitigating activities around revenue and revenue delivery are required to determine a financially resilient funding solution for Scion.

## Te Ao Māori

We continue developing capability, skills and networks between Māori and the RS&I system, implementing a co-development approach and strengthening Te Tiriti-based relationships in the science sector to deliver benefits for Aotearoa New Zealand.

We have strengthened our capability by investing in three new Māori Leadership Science and Research roles. We have appointed a Mana Whenua Operations role in partnership with Ngā Hapū e Toru, who have mana whenua at our Rotorua campus. We are in the process of signing a Kawenata with Ngā Hapū e Toru, and a Future Director nominated by the hapū has recently joined the Board. We have growing partnerships with a number of other iwi/hapū through our work, including through a collaboration agreement signed with the Māori Carbon Collective. Our reporting to MBIE includes not only these activities but the benefits realised from them.

# eResearch and use of technologies

eResearch is an essential part of the tools we use to carry out our science, and we are actively collaborating to increase these capabilities. Scion has recently joined Genomics Aotearoa, a cross CRI/university platform focused on bioinformatics-based research.

Scion is a partner in the i4 Accelerator programme that is part of the Digital Technology Industry Transformation Plan. Although forestry is excluded from the Agritech ITP, we are connected through Agritech NZ.

Scion is a member of the ORCID consortium, an active Research Education Advanced Network New Zealand (REANNZ) member and is engaged in the CRI sector discussion on the future eResearch needs across REANNZ and NeSI covering networking, computer and data storage.

Scion has piloted use of cloud infrastructure to reduce costs and maximise reuse of public datasets (e.g. developing and hosting research projects on Amazon Web Services alongside Land Information New Zealand's data archives).

On the use of sensitive technologies, we have and will continue to engage with government on these matters. We are aware of the security concerns related to these.

Our Statement of Core Purpose is very clear that Scion is to drive innovation and growth for economic, environmental and social benefit to New Zealand. Some recent examples are:

- Scion has identified a specific portfolio of research ('New value digital forests and wood sector')
  that will coordinate and connect digital and data-driven innovation in the forestry, wood processing
  and construction sector.
- Scion contributed to the development of the Prometheus Software as a Service (PSaaS) fire
  growth modelling system, which is one of the most used fire growth models in the world.
- Scion has created the Remote Sensing Cluster Group which is a consortium (>70 members) representing all major forest growers in New Zealand.
- Scion co-developed the world's first area-based phenotyping platform for the largest plantation in New Zealand (185,000 ha or 11% of planted forest area). This platform has been used by Timberlands to assess productivity of different genotypes.
- Scion has worked with both industry (Timberlands, PF Olsen) and industry service providers (Interpine, Indufor) to transfer Al-based technologies and build capability across the sector.

# **Specific priorities for Scion**

We continue to work with MBIE, Ministry for Primary Industries and Te Uru Rākau on the implementation of recommendations from the Science Review of Scion. The science review was the final step before proposing a Long-Term Funding Solution as requested by yourself in 2019. The review validated our role and science strategy. It also contained recommendations for retention of critical capability with emphasis on public good facing research and to support New Zealand's transition to a low-carbon economy.

Without a long-term funding solution Scion continues to be highly constrained in how we deliver on our core purpose and on the opportunities described in our strategy for New Zealand, which you (and now many other Ministers) agree are aligned with the Government's priorities.

New Zealand can join other nations' move towards the circular bioeconomy through pursuing options that align with the Government's objectives for a low-carbon future. Scion has critical capabilities in indigenous forestry, bioenergy and new environmentally friendly biomaterials that will help shape those options and provide the opportunity to grow a very bright future for our country.

We do understand the need for fiscal restraint. Therefore, we have been exploring fiscally neutral options that we believe the Long-Term Funding Solution Working Group needs to actively explore, including working with other agencies and we look to your continued support to find this solution.

We reinforce that Scion does look to leverage its funding, and we have made good progress in increasing industry funding over the years and continue to work on this. We have also promoted the R&D tax credit system and will continue to do so. We are challenged in that much of the future opportunity we focus on is in the emergence and building of new industries where there are limited existing partners of scale.

We note your expectation that Scion will engage appropriately with relevant stakeholders including departments to contribute to government priorities and help deliver our strategy, with support from MBIE when appropriate. We do continue to engage and are recognised as being central to many of the Government's priorities with the critical capability and knowledge we hold on behalf of New Zealand. We repeat the challenge we stated earlier in this letter - while we have a level of funding for doing science we do not have funding for stakeholder engagement and knowledge transfer, which has been growing rapidly in recent times given our expertise.

We note the other documents referred to for guidance and confirm that this advice has been taken on board.

Yours sincerely,

Dr Helen Anderson QSO

Scion Chair

Dr Julian Elder Chief Executive