



Further refinement of priorities

Supporting information for the PMSITAC



At your September meeting you agreed in principle to SI&T areas to prioritise within pillars - and requested additional refinement to further strengthen these priorities

Natural Capital Economy

Strengthening the foundations of prosperity and adaptability

Enabling economic and productivity growth through research and innovation that harnesses New Zealand's natural assets, built environment, enterprising approach, and global reputation for trust, quality, and integrity.

It also supports research and innovation that sustains the foundations of the economy, with a focus on long-term resilience—including the ability to withstand disruptions such as natural hazards.

At the same time, it draws on New Zealand's deep expertise in geohazards, biosecurity, and community-led adaptation to reduce risk, enhance preparedness, and support recovery. Together, these efforts ensure the protection of our people, places, and infrastructure—building a future that is both productive and resilient.

Priorities could include:

- Food science and agritech – innovation in food production and processing
- Geoscience and mineral exploration – supports extractive industries
- Biosecurity science – critical for protecting the primary sector (agriculture, horticulture, aquaculture).

Technology Economy

Catalysing future industries and strategic capabilities.

Accelerating the development and deployment of advanced technologies that strengthen New Zealand's global competitiveness, enhance national resilience, and drive productivity.

This pillar fosters transformative research, cross-sector collaboration nationally and internationally, and scalable innovation to address complex challenges and unlock new economic frontiers.

Priorities could include:

- Artificial Intelligence (AI)
- Advanced manufacturing and robotics
- Space technologies
- Synthetic Biology

Environment

Driving Innovation for Environmental stewardship

Advancing protection and sustainable management of New Zealand's natural environment while leveraging our strengths in environmental science and innovation

This pillar draws on our strengths in ecological science, resource management and our unique biodiversity, to drive research that both protects our natural systems and creates the potential to drive globally relevant commercial solutions.

Priorities could include:

- Ecology and biodiversity science
- Climate science and modelling
- Low-emissions energy systems (e.g. hydrogen, solar, wind)

Health & Society

Enhancing health and social outcomes through research, technology and innovation

Applying evidence-based science and research to empower New Zealanders to live healthier, more productive lives.

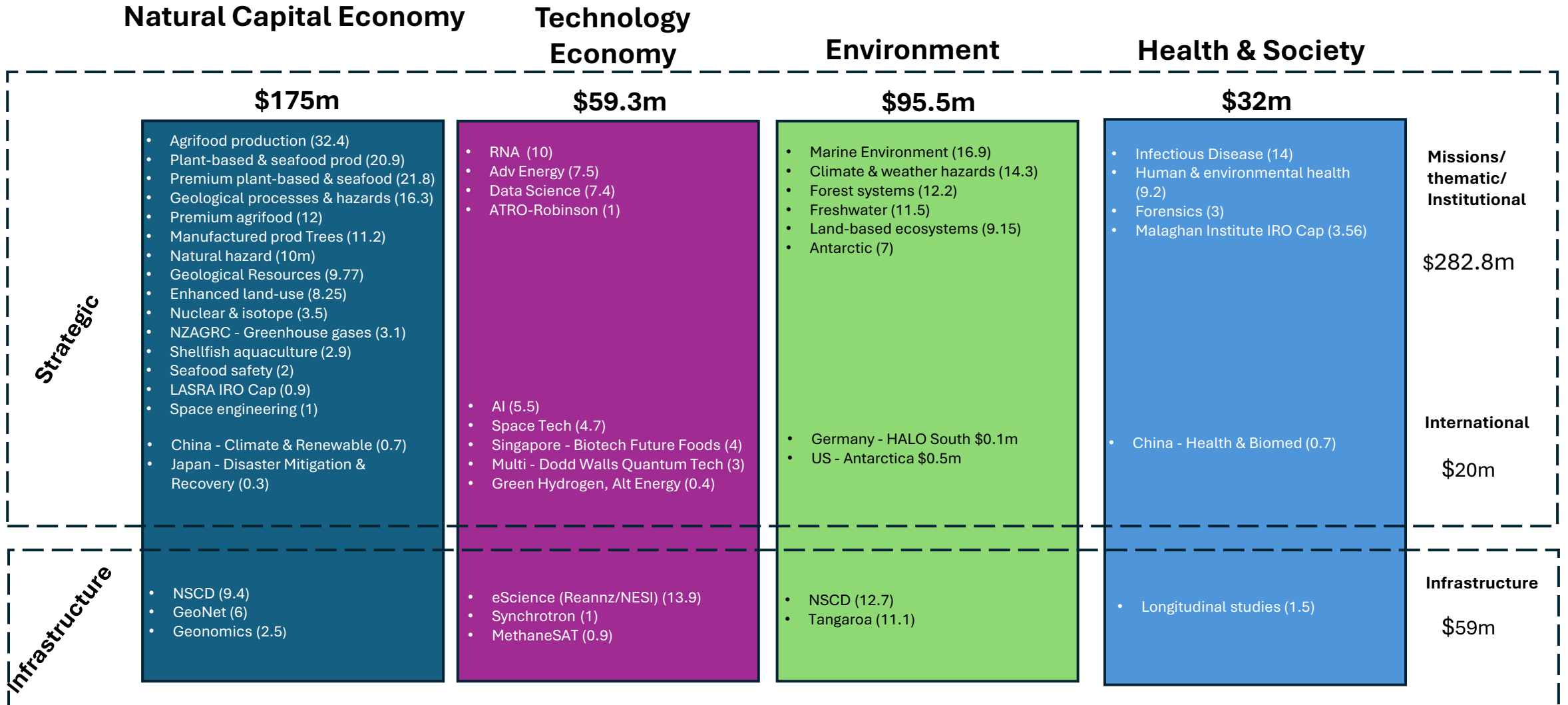
This pillar builds on Aotearoa New Zealand's diverse strengths to ensure our health and social systems are resilient, adaptive, and prepared for future challenges.

Priorities could include:

- Genomics and precision medicine
- Social science and behavioural economics
- Health informatics and digital health
- AI for clinical decision support
- Biotechnology and regenerative medicine

In September we provided information on current mission led funding

Strategic Science Investment Fund - Total Investment: \$361m in 2024/25



We also provided information on current Investigator-led funding...

Endeavour, Marsden, HRC – Total Investment: **\$426.5M in 2024/25***

Natural Capital Economy		Technology Economy		Environment		Health & Society	
\$150.5m		\$74.3m		\$44.3m		\$157.4m	
Primary Production	\$33.0	Basic and Fundamental Research	\$33.5	Other Environment	\$15.5	Health	\$99.5
Natural Hazards	\$23.8	Manufacturing (Advanced)	\$17.1	Freshwater Environments	\$11.4	Basic/Fundamental Research	\$26.9
Manufacturing	\$16.3	Energy & Minerals	\$11.5	Terrestrial Environments	\$8.7	Heritage, Arts & Culture	\$14.4
Climate Change	\$15.5	Machinery & Equipment	\$6.9	Coastal & Marine	\$7.5	Law, Politics & Social Serv.	\$13.5
Construction & Urb. Planning	\$11.8	ICDT	\$5.0	Basic/Fundamental Research	\$1.3	Education, Dev. & Training	\$2.4
Economics & Comm.	\$11.5	Transport	\$0.2	TOTAL	\$44.3	Economics & Commerce	\$0.4
Biosecurity	\$10.5	Economics & Commerce	\$0.1			ICDT	\$0.3
Postharvest Processing	\$7.6	TOTAL	\$74.3			TOTAL	\$157.4
Natural Resource Use	\$6.3						
ICDT	\$4.3						
Basic/Fundamental Research	\$4.1						
Transport	\$3.5						
Energy & Minerals	\$2.2						
TOTAL	\$150.5						

*For a further breakdown please refer to **Annex 10-11**

This slide shows where we currently have “priorities”

Endeavour, Marsden, HRC – Total Investment: **\$426.5M in 2024/25**

Natural Capital Economy

48.17% of \$150.5m is allocated towards the below research areas

Primary Production	\$33.0
• Plant production and Plant Primary Products	\$18.0
• Food production system components and fibre and trees	\$13.6
• Environmental Policy, Climate Change And Natural Hazards	\$1.3
Natural Hazards	\$23.8
• Environmental Policy, Climate Change And Natural Hazards	\$22.9
• Understanding climate change	41.7
Mitigation and adaption to climate change	\$15.7
• Adoption to climate change	\$9.0
• Mitigation of climate change	\$3.9
• Understanding of climate change	\$2.9

Technology Economy

84% of \$74.3m is allocated towards the below research areas

Basic and Fundamental Research	\$33.5
• Biological Sciences	\$15.3
• Physical Sciences	\$5.6
• Chemical Sciences	\$3.3
• Engineering	\$2.2
• Various	\$7.1
Manufacturing	\$17.1
• Instrumentation	\$8.0
• Human pharmaceutical products	\$6.6
• Various	\$2.6
	\$11.5
Energy and Minerals	
• Energy storage, distribution and supply	\$5.6
• Renewable energy	\$2.7
• Various	\$3.2

Environment

81.49% of \$44.3m is allocated towards the below research areas

Other Environment	\$16.0
• Environmental Policy, Climate Change And Natural Hazards	\$10.9
• Environmental management	\$4.9
• Various	\$0.2
Freshwater Environments	\$11.4
• Fresh, ground and surface water systems and management	\$11.4
Terrestrial Environments	\$8.7
• Terrestrial systems and management	\$8.7

Health & Society

89.45% of \$157.4m is allocated towards the below research areas

Health	\$99.5
• Clinical health	\$43.5
• Public health (excl. specific population health)	\$12.0
• Evaluation of health and support services	\$7.8
• Provision of health and support services	\$6.6
• Specific population health (excl. Indigenous health)	\$5.3
• Various	\$24.5
Basic and Fundamental Research – in areas such as:	\$26.9
• the biomedical and clinical sciences	\$7.2
• Psychology	\$3.8
• Health sciences	\$3.8
• Indigenous studies	\$3.5
• Human society	\$3.4
• Language, communication and culture	\$2.2
• Various	\$2.8
Heritage, Arts & Culture	\$14.4
• Māori heritage and culture	\$8.8
• Communication	\$1.5
• Pacific peoples heritage and culture	\$1.0
• Various	\$3.0

Here are the types of science encompassed within each pillar for your prioritisation...

Natural Capital Economy

Focus: Science that directly supports economic sectors and foundational systems.

Sector-Specific Sciences:

- Biosecurity science – critical for protecting the primary sector (agriculture, horticulture, aquaculture)
- Metrology – foundational for standards, trade, and manufacturing
- Food science and agritech – innovation in food production and processing
- Geoscience and mineral exploration – supports extractive industries
- Construction materials science – resilience and innovation in infrastructure

Enabling Technologies & Disciplines:

- Supply chain analytics
- Resilience modelling and systems engineering
- Climate adaptation economics
- Remote sensing for land use and productivity
- Data science for productivity and forecasting

Technology Economy

Focus: Science that drives innovation, digital transformation, and future industries.

Technologies:

- Artificial Intelligence (AI)
- Quantum computing
- Photonics and optoelectronics
- Advanced manufacturing and robotics
- Cybersecurity and cryptography
- Blockchain and distributed systems

Disciplines:

- Computer science and software engineering
- Human-computer interaction
- Mathematics and algorithm design
- Materials science for electronics
- Spectrometry for precision instrumentation

Sector Applications:

- Fintech
- Digital health
- Smart cities
- Space technologies
- Synthetic Biology

Environment

Focus: Science that supports environmental stewardship, sustainability, and climate resilience

Disciplines & Technologies:

- Ecology and biodiversity science
- Climate science and modelling
- Hydrology and oceanography
- Environmental chemistry and toxicology
- Remote sensing and GIS
- Carbon capture and storage
- Circular economy technologies
- Low-emissions energy systems (e.g. hydrogen, solar, wind)

Sector Applications:

- Conservation science
- Environmental monitoring
- Sustainable agriculture and forestry
- Marine science and fisheries

Health & Society

Focus: Science that improves wellbeing, social outcomes, and public health

Disciplines:

- Neuroscience and cognitive science
- Public health and epidemiology
- Genomics and precision medicine
- Social science and behavioural economics
- Health informatics and digital health
- Medical physics and imaging
- Biostatistics and health data science

Technologies:

- Wearable sensors and diagnostics
- Telehealth platforms
- AI for clinical decision support
- Biotechnology and regenerative medicine

Outcome Areas:

- Healthier populations
- Mental health and wellbeing
- Equity and inclusion
- Education and learning sciences

Discussion

- Given the information presented, are you satisfied with that current priorities are appropriate?
- Are there any scientific or research areas you consider should not be prioritised?

We recommend you:

- Agree to the specific priorities under each section.

Next Steps

- Subject to your guidance, the MBIE Secretariate will incorporate any updates on priorities into your report to the Prime Minister.