

Technology for Prosperity

Total investment
\$278m
per year by 2029/30
(from forecast \$183m
in 26/27)

Expected contributions:

- Capability for smarter decision-making and system performance
- Measurable productivity, competitiveness and stewardship gains
- Knowledge that supports higher positioning in global value chains
- Improved value propositions for international talent, capital and partnerships

TFP = Technology for Prosperity
PI&B = Primary Industries and Bioeconomy
ES&R = Environmental Sustainability and Resilience
H&S = Healthy People and a Thriving Society

TFP 1	Medium	Artificial Intelligence and Advanced Computing
Research into applied AI systems for physical, edge and remote operating environments, building globally relevant capability from distinctive local conditions.		
Invest in science that: • Develops edge AI, sensing, autonomous systems, and human-machine learning. • Integrates data, models and hardware for real-world deployment. • Expands access to AI capability across firms and sectors. Focuses on physical AI, not general-purpose AI. Leverages NZ operating conditions to develop and validate globally relevant capability. Applications across PI&B , ES&R and H&S .		

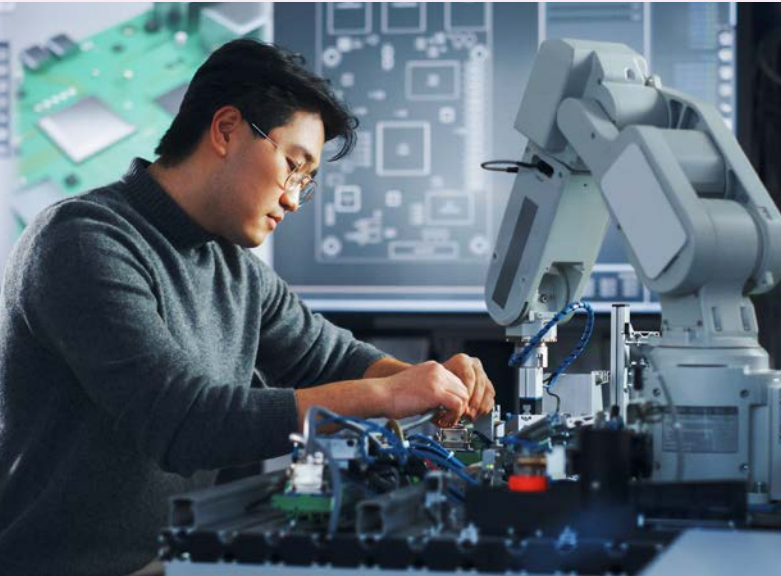
TFP 3	Medium	Biomedical Technologies
Strengthens biomedical and animal health innovation pathways from discovery to trials, diagnostics, commercial development and domestic manufacturing capability.		
Invest in science that: • Develops advanced therapeutics and diagnostics through translational research capability. • Supports translation, trials, manufacturing and scale-up capability. • Grows firms through co-investment and global partnerships. Focus on existing research strengths and unmet needs. Health applications supported through H&S and animal health applications through PI&B .		

TFP 6	Medium	Innovation Sandbox
NZ becomes a globally preferred environment for developing, validating and deploying advanced tech in real-world settings through connected innovation sandboxes, testbeds and proving grounds.		
Invest in science that: • Builds innovation pathways, entrepreneurial capability, and commercialisation pathways. • Attracts international co-development, investment and validation activity w/ InvestNZ. • Focus on priority technology opportunities with strong cross-pillar application.		

TFP 2	Medium	Synthetic & Engineering Biology
Mission-led science translates NZ’s biological resources and genomics capability into scalable industrial applications, biomanufacturing, and high-value products.		
Invest in science that: • Builds capability in biological design, translation, scale-up and deployment. • Supports bioeconomy, industrial biotech and waste valorisation. • Creates commercially viable products and companies through industry-led R&D. Connects to bio-based value creation, primary integration (PI&B), circular economy (ES&R).		

TFP 4	Large	Advanced Manufacturing
Nationally connected advanced technology clusters strengthen discovery science to export-ready high-value goods pathways.		
Invest in industry-led science that: • Builds shared technology roadmaps that align capability, partnership, investment and commercial impact, including through industry-research challenge programmes. • Prioritises investments using economic impact, milestones and stop-go points. Specific investments will be identified through an industry co-led roadmap process. Connects to primary sector high-value products w/ PI&B .		

TFP 7	Small	Powering New Zealand’s future
Research supports abundant, renewable and economically competitive domestic energy pathways through integrated energy system design.		
Invest, alongside NZ’s major energy companies, in science that: • Targets major energy opportunities and constraints. • Improves generation, storage, transmission and demand management. • Identifies practical transition pathways and export opportunities. Focus on system design, adoption, and transition pathways, not just technology, aligned w/ ES&R .		



TFP 5	Medium	Space & Advanced Aviation
Grow export value from space and aerospace systems by focusing research, industry and government effort on scalable, internationally relevant capabilities.		
Invest in science that: • Connects NZ firms and researchers to global missions. • Builds demonstration missions and flight heritage. • Develops high-value, defensible capability areas. Builds on NZ’s geographic and technical advantages. Includes shared-use tech developed with investment from defence R&D.		

TFP 8	Small	Advanced Energy Technologies
Develop globally relevant advanced energy technologies, services, and products by translating science capability and renewables advantage into commercial opportunities.		
Invest in science that: • Connects research with developers, investors, partners, and emerging energy companies. • Develops advanced energy, storage, smart energy and cleantech solutions. • Strengthens secure and resilient energy systems. Focus on emerging opportunities and NZ advantage, potential alignment to ES&R (geothermal) and PI&B (biofuels, critical minerals).		