



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

ENDEAVOUR FUND: TRANSFORMING NEW ZEALAND'S FUTURE



INVESTMENT PLAN 2022–2024



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

Ministry of Business, Innovation and Employment (MBIE)

Hīkina Whakatutuki – Lifting to make successful

MBIE develops and delivers policy, services, advice and regulation to support economic growth and the prosperity and wellbeing of New Zealanders. MBIE combines the former Ministries of Economic Development, Science + Innovation, and the Departments of Labour, and Building and Housing.

More information

Information, examples and answers to your questions about the topics covered here can be found on our website, www.mbie.govt.nz, or by calling us free on 0800 20 90 20.

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KUPU TAKAMUA A TE MINITA MINISTER'S FOREWORD

Tēnā koutou katoa.

It is a pleasure to release the refreshed Endeavour Fund Investment Plan 2022-24. This fund plays a unique and important role in the science system providing an open, competitive process for selecting excellent research proposals with the potential to have significant positive and transformational impact for New Zealand.

We know that research, science and innovation (RSI) plays a vital role in our day-to-day lives. This was demonstrated last year when the COVID-19 pandemic put a spotlight on what the RSI system can achieve.

As we move forward to meet the challenges and opportunities in this new COVID-19 world my aspiration is for a more connected, adaptable and resilient research, science and innovation system.

This Government has ambitious goals to tackle long-standing social issues, transition to a low emissions and climate-resilient economy, and build a more knowledge-intensive economy. We need the knowledge and support our RSI community and our Māori RSI community provides us to progress these goals.

We also need to be ambitious with our ideas and our science. The Endeavour Fund provides the opportunity to create new knowledge that will transform New Zealand's future.

Nō reira tēnā koutou, tēnā koutou, tēnā koutou katoa.



Hon. Dr. Megan Woods

Minister for Research, Science and Innovation

WHAKATAKI INTRODUCTION

This Investment Plan covers the next three annual Endeavour Fund Investment rounds which will award funding in 2022, 2023, and 2024.

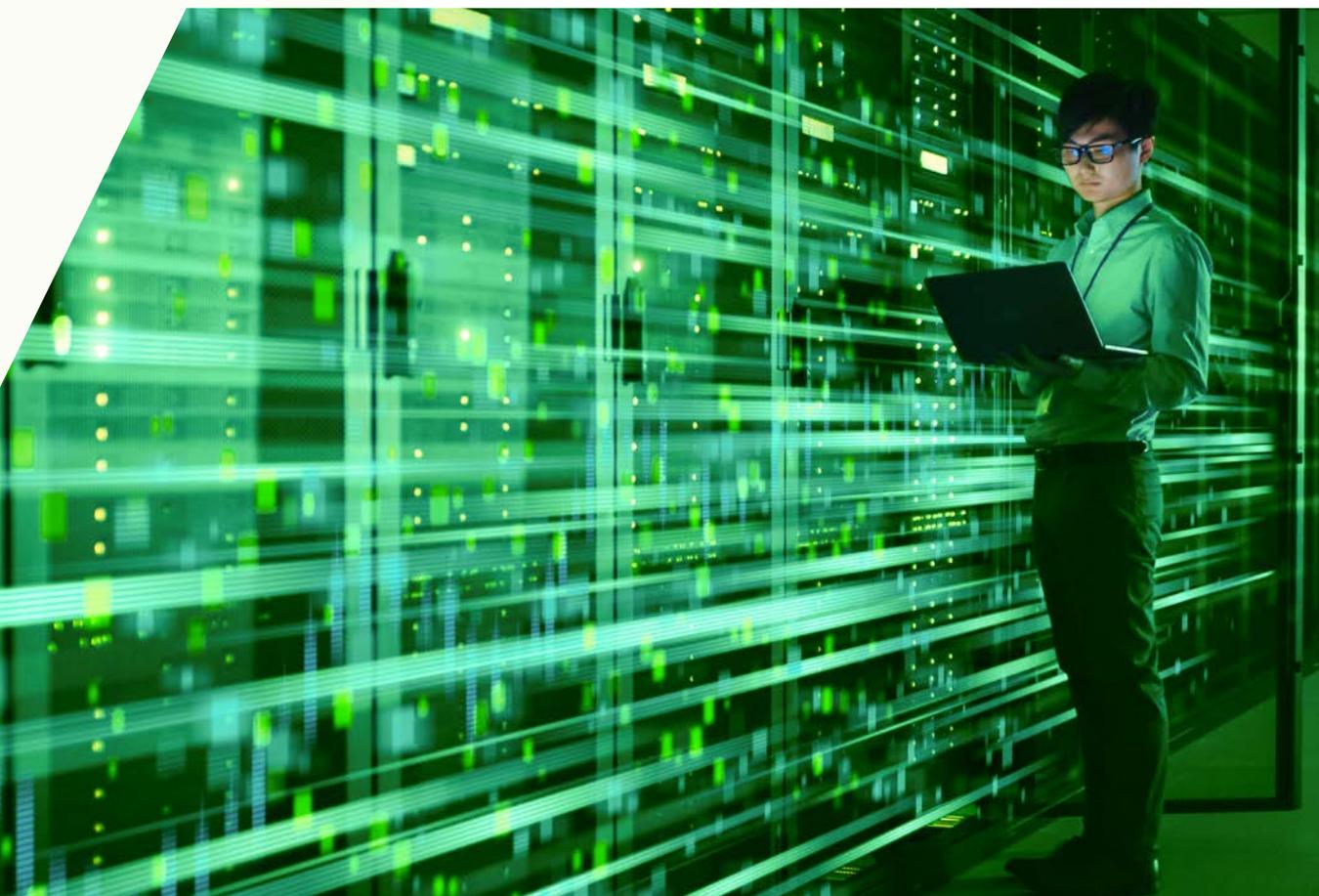
The Endeavour Fund (the Fund) supports excellent research with the potential to positively transform New Zealand's economy, environment and society. The Fund uses an open, contestable mechanism to select excellent research proposals that will provide the highest potential impacts across a range of economic, environmental and societal objectives and transform our future.

The Science Board will allocate funds as set out in the Gazette Notice for each Endeavour round in accordance with the investment signals and mix of portfolio targets set out in this Investment Plan.

This Investment Plan should be read in conjunction with the:

- › Gazette Notice for the relevant Endeavour Fund round, which sets out the assessment criteria and the amount of funding available.
- › Annual Call for Proposals which includes funding application and submission guidelines for Smart Ideas and Research Programmes.

See the [Fund's webpages](#) for links to these documents.



TE TUKANGA TUKU PŪTEA O ENDEAVOUR THE ENDEAVOUR FUNDING PROCESS

Proposals submitted to the Fund will be assessed independently for their excellence and potential impact, and then for their alignment with the Investment Signals in this Investment Plan.

The Gazette Notice details the criteria used to make these assessments, and the Science Board's approach to decision-making.

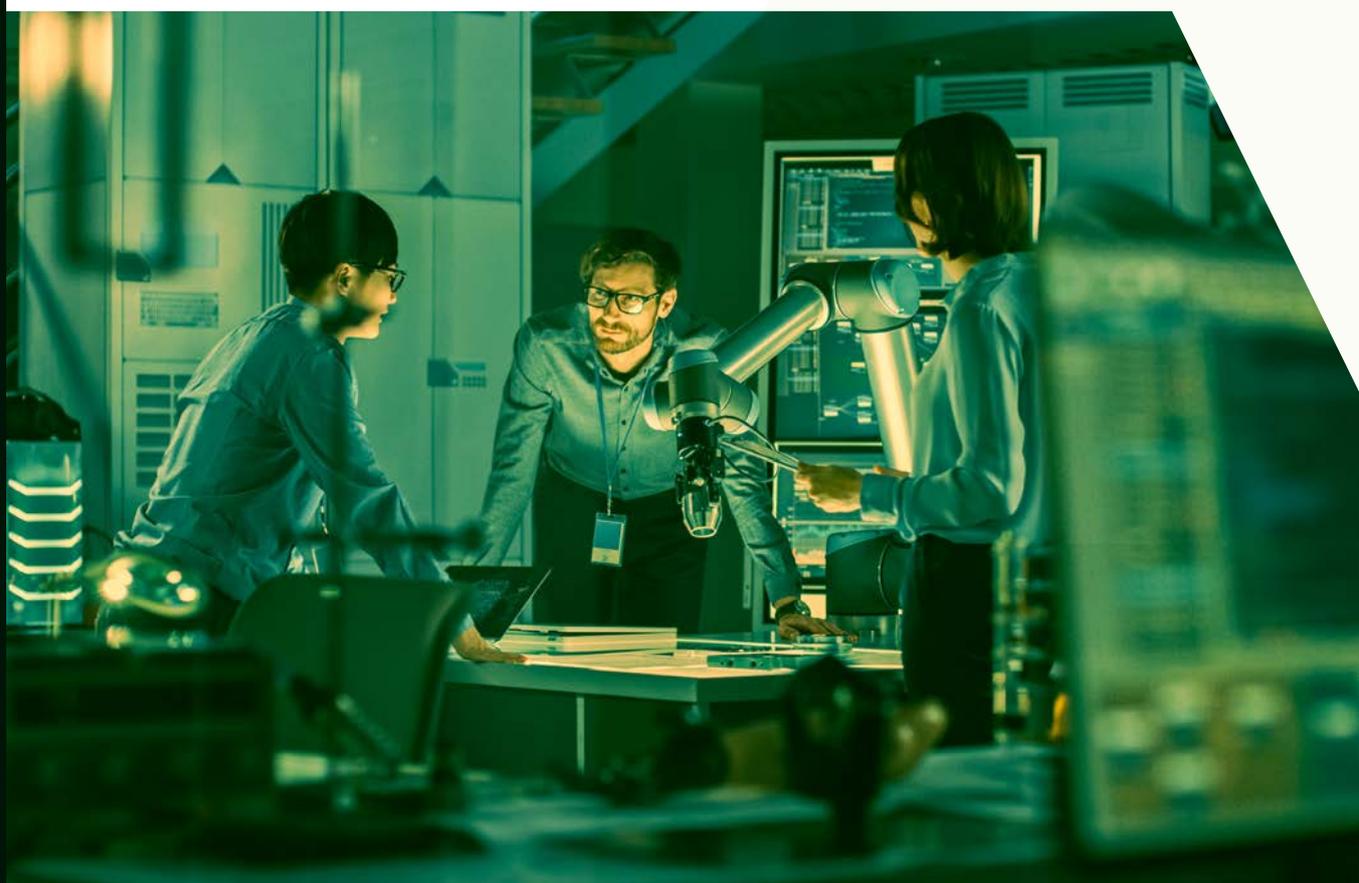
Ngā Āhuatanga Pūtea e Wātea Ana The Funding Mechanisms Available

Research Organisations can apply for funding from the two different investment mechanisms; Smart Ideas and Research Programmes.

Smart Ideas provide for smaller investments intended to:

- › Catalyse and rapidly test promising, innovative research ideas with high potential for benefit to New Zealand.
- › Refresh and provide diversity in the science portfolio.

Research Programmes provide for larger investments intended to support ambitious, excellent and well-defined research ideas. These will have credible and high potential to positively transform New Zealand's future in areas of future value, growth or critical need as set out in the Investment Signals.





The Funding Available

The Gazette Notice shows the value and duration of funding available under Smart Ideas and Research Programmes. Funding of individual Smart Ideas proposals is capped and although there is no maximum value for Research Programmes investment, there is a new requirement for the Science Board to aim to fund a minimum number of Smart Ideas and Research Programmes. The largest Research Programmes proposals will be subject to additional scrutiny for value by the Science Board because of their size.

Research Programmes Impact Categories

Research impact is difficult to predict, especially where the objective is transformational change. Transformational change is not the same as large impact. Transformation involves higher risk, and therefore makes it particularly challenging to quantify potential benefits or provide plausible pathways to impact. As such, it is not appropriate to assess high-risk transformational proposals alongside proposals with lower risk and more certain outcomes.

To allow funding for research with transformational impact, applications to Research Programmes can be made under two Impact categories, as defined in the Gazette Notice:

1. Research Programmes: Protect and Add Value
2. Research Programmes: Transform

The table on the following page presents examples of the types of outcomes and impact expected under the Fund across the different Research Programmes Impact categories and the Fund's objectives.

THE FUND'S OBJECTIVES

		Economic	Environmental	Societal
PROTECT AND ADD VALUE	Outcomes	<p>Improved products and services, or</p> <p>New products or services which fit in existing categories, or</p> <p>Improved or more sustainable production and other business processes.</p>	<p>Better environmental management, regulation, conservation or restoration activity.</p>	<p>Improved techniques for delivery of public services, or</p> <p>Better evidence for public policy design, or</p> <p>Better understanding of and resilience to risk.</p>
	Impact	<p><i>Leading to...</i></p> <p>Growth of existing sectors, or</p> <p>Greater value derived from natural resources, or</p> <p>Less pollution.</p>	<p><i>Leading to...</i></p> <p>Better environmental quality or reduced risks to the environment, or healthier environment.</p>	<p><i>Leading to...</i></p> <p>More effective or efficient public service delivery, or</p> <p>Better life outcomes for individuals.</p>



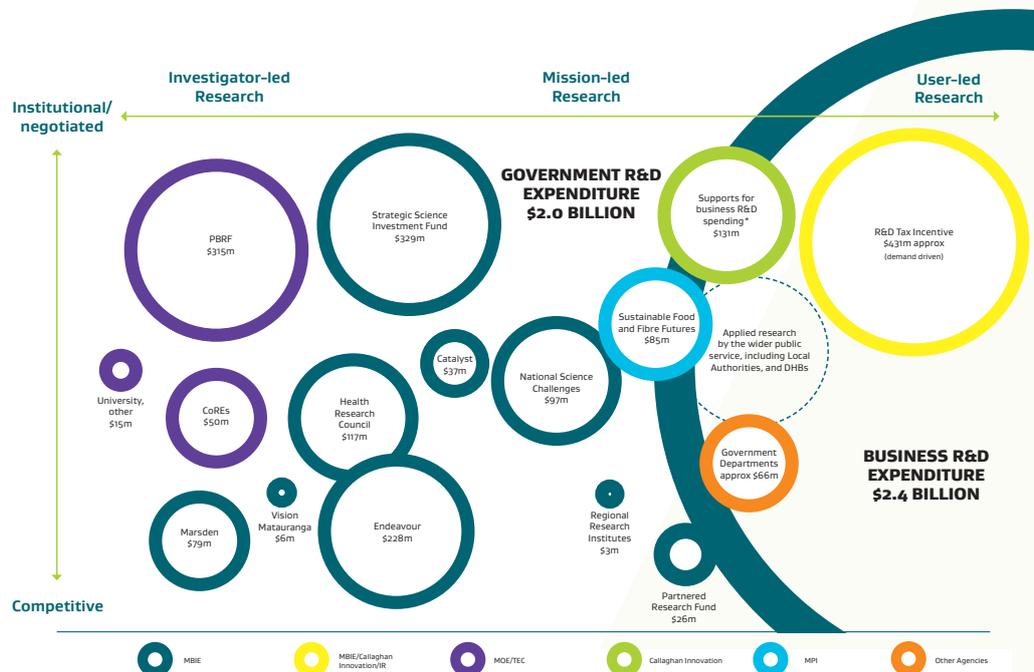
THE FUND'S OBJECTIVES

		Economic	Environmental	Societal
TRANSFORM	Outcomes	<p>Entirely new category of good, product or service, or</p> <p>Technology or practice with order of magnitude improvement in performance or entirely new capability(ies).</p>	<p>New technique for environmental management, conservation or restoration.</p>	<p>New ways of living or organising communities and society, or</p> <p>New mode of delivering public services or new category of policy intervention.</p>
	Impact	<p><i>Leading to...</i></p> <p>Creation of, or growth in, an economic activity which is new for New Zealand, or</p> <p>Changing an existing economic sector into a high knowledge-intensity industry/sector, or</p> <p>Entering or creating new export market, or</p> <p>New types of high-skilled work, or</p> <p>New sustainable use or eliminated use of a natural resource.</p>	<p><i>Leading to...</i></p> <p>Elimination (virtual or complete) of a pest or the damage it causes, or</p> <p>Dramatic improvement in state of the environment, or</p> <p>Elimination of a pollution stream.</p>	<p><i>Leading to...</i></p> <p>Total change in the character and magnitude of risks or opportunities people face, or</p> <p>Order of magnitude improvement in policy efficiency or effectiveness.</p>

TE RAPU TŪRANGA MŌ TE PŪTEA O ENDEAVOUR I TE PŪNAHA PŪTEA PŪTAIAO POSITIONING THE ENDEAVOUR FUND IN THE SCIENCE FUNDING SYSTEM

The Endeavour Fund is the largest contestable, mission-led research fund in New Zealand. It is also distinct from other funds in the breadth, duration and/or type of research supported.

The diagram below shows how the Fund is situated in relation to other government-funded science and innovation investments, by allocation method, type of investment, and size.



Dollar amounts represent appropriations used in the GBOARD calculation
 GBOARD = Government Budget outlays and appropriations on R+D. Business R+D Expenditure from Business R+D survey.
 * delivered by Callaghan Innovations, including R&D grants, services and repayable loans

Other Contestable Funds

The Health Research Council of New Zealand funds research with the primary objective of health outcomes, and complements the Endeavour Fund. The Marsden Fund and Centres of Research Excellence provide investigator-led research funding.

Other Mission-led Funds

The Government uses the Strategic Science Investment Fund and the National Science Challenges to make significant, stable, longer-term investments targeting particular missions.

HE WAWATA MĀTAURANGA

VISION MĀTAURANGA

The Vision Mātauranga policy aims to enable the distinctive contribution of Māori communities, knowledge and resources to the future of New Zealand through research, science and innovation. Vision Mātauranga encourages partnership, and is designed to inspire researchers to find innovative responses to opportunities and solutions to issues and needs facing New Zealand. The policy applies across, and is integrated within, all MBIE science investment mechanisms.

Proposals can give effect to the Vision Mātauranga policy by considering the various ways in which Māori communities, knowledge and resources may be enabled, mobilised and empowered in research, science and innovation. The manner and extent to which proposals give effect to Vision Mātauranga may differ depending on the research.

Very strong applications, giving effect to Vision Mātauranga, may be Māori-led or co-led. Strong applications may have Māori researchers or traditional knowledge holders as part of the team; or may work meaningfully with Māori communities, interest groups, businesses, or key individuals. Strong applications enabling Māori knowledge may use kaupapa Māori approaches or draw richly on mātauranga Māori. Others may incorporate Māori principles or perspectives into the research.

Enabling Māori people will be an important part of giving effect to Vision Mātauranga, as the appropriate understanding, development, and protection of Māori knowledge and resources will have Māori input.

Research positioned to give effect to Vision Mātauranga will create distinctive and meaningful impact for Māori and for New Zealand in any or all of the following ways:

- › Enhancing productivity and performance of Māori and non-Māori enterprise through new products, processes, and services.
- › Achieving environmental sustainability by utilising distinctive Māori relationships with the environment.
- › Improving health¹ and social well-being for Māori.
- › Generating new knowledge at the interface between indigenous knowledge (including mātauranga Māori) and research, science and innovation.
- › Generating new indigenous knowledge (including mātauranga Māori) and research, science and innovation.

¹ The Endeavour Fund does not fund research with primarily health outcomes but will support this as a secondary outcome.

NGĀ TOHU HAUMI MŌ TE 2022 KI TE 2024 INVESTMENT SIGNALS FOR 2022 TO 2024

The Endeavour Fund is an important source of science and research value for New Zealand through working at the leading edge of what we know and can do to positively transform our future. This can be through transforming the economy, protecting, managing and restoring our environment, and lifting societal well-being.

The Fund is an open, contestable fund that supports proposals in a wide range of impact areas. When making investment decisions, the Science Board will aim to avoid duplication or excessive concentration of research in any given area, within the Fund or broader science system.

Proposals must:

- › Demonstrate excellent, highly connected research, with high potential impact in areas of future value, growth or critical need for New Zealand.
- › Be well positioned in the wider domestic and international research context, and leverage additional value from the wider research, science and innovation community.
- › Consider the potential of Māori people, knowledge and resources and reflect genuine, fit-for-purpose approaches for enabling that potential. Some research topics may enable this in a more expansive way than others.

Proposals should reflect Government policy, strategy and roadmaps where relevant. Alignment with such documents is one way to help demonstrate future value, growth or critical need.

The Science Board will look for opportunities to fund proposals:

- › Whose primary objective is to create new knowledge pathways to support the transition to a low emissions and climate resilient economy.
- › Support new or existing industries to be knowledge intensive (i.e., are characterised by workforces that are predominantly highly skilled, and which have the technology, tools and resources necessary to create higher value products and services).

NGĀ WHĀINGA PŪTEA MŌ TE KŌPAKI PŪTEA O ENDEAVOUR PORTFOLIO TARGETS FOR THE ENDEAVOUR FUND

Portfolio targets are a mechanism to help the Fund achieve its objectives. They apply to all active contracts receiving Endeavour investment funding in a given year. This will include both new investment made in the most recent funding round and existing contracts.

As the Fund's funding contracts are several years long, around one quarter of the total funding is available for new investment each year. This means it can take many years to achieve a portfolio target. Portfolio targets help set the long-term direction of the Fund. Each annual funding decision will aim to balance the portfolio to meet the targets in the table below.

The annual Gazette Notice provides the total amount of new investment available under the annual Call for Proposals. The targets are:

- › Flexible, so that the Science Board has ability to change the proportion invested in each category in any given round, depending on the number and quality of proposals received.
- › Expressed in terms of the annual (not total) contract value and will be considered independently.

PORTFOLIO TARGETS: RESEARCH PROGRAMMES

Impact Category	Proportion of Portfolio
Protect and Add Value	50%
Transform	50%

PORTFOLIO TARGETS: RESEARCH OUTCOMES

Research Outcomes	Proportion of Portfolio (annual contract value)
Economic	70%
Environmental	25%
Societal	5%

The economic, environmental and societal outcomes are not individual funds. Any given proposal may address more than one outcome.

PORTFOLIO TARGETS: INVESTMENT MECHANISM

Investment Mechanism	Proportion of Portfolio
Smart Ideas	20%
Research Programmes	80%



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