



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

2020 Endeavour Fund Roadshow



Introduction and Agenda

- Housekeeping
- Introductions
- Science system and the draft RSI Strategy
- 2019 Endeavour wrap-up
- 2020 Endeavour Fund
- Assessment and Decision Making Processes
- ‘A Better Brew...’
- Impact of Research
- Other MBIE funding opportunities
- Questions and Close

Government's ambition



To bring about a productive, sustainable, and inclusive future that works for all New Zealanders.

Ambitious agenda, including tackling big challenges such as the transition to a zero-carbon economy by 2050, supporting our regions to grow, preserving and protecting our environment, creating fulfilling and high-value jobs, and increasing our wellbeing.



Government's draft RSI strategy

- The purpose of the Research, Science and Innovation (RSI) Strategy is to:
 - > communicate the government's objectives for RSI in New Zealand
 - > to highlight priorities for government action within the RSI portfolio
 - > signal intentions and directions
- This will update and replace the 2015 National Statement of Science Investment
- Principles of: Excellence, Impact and Connections

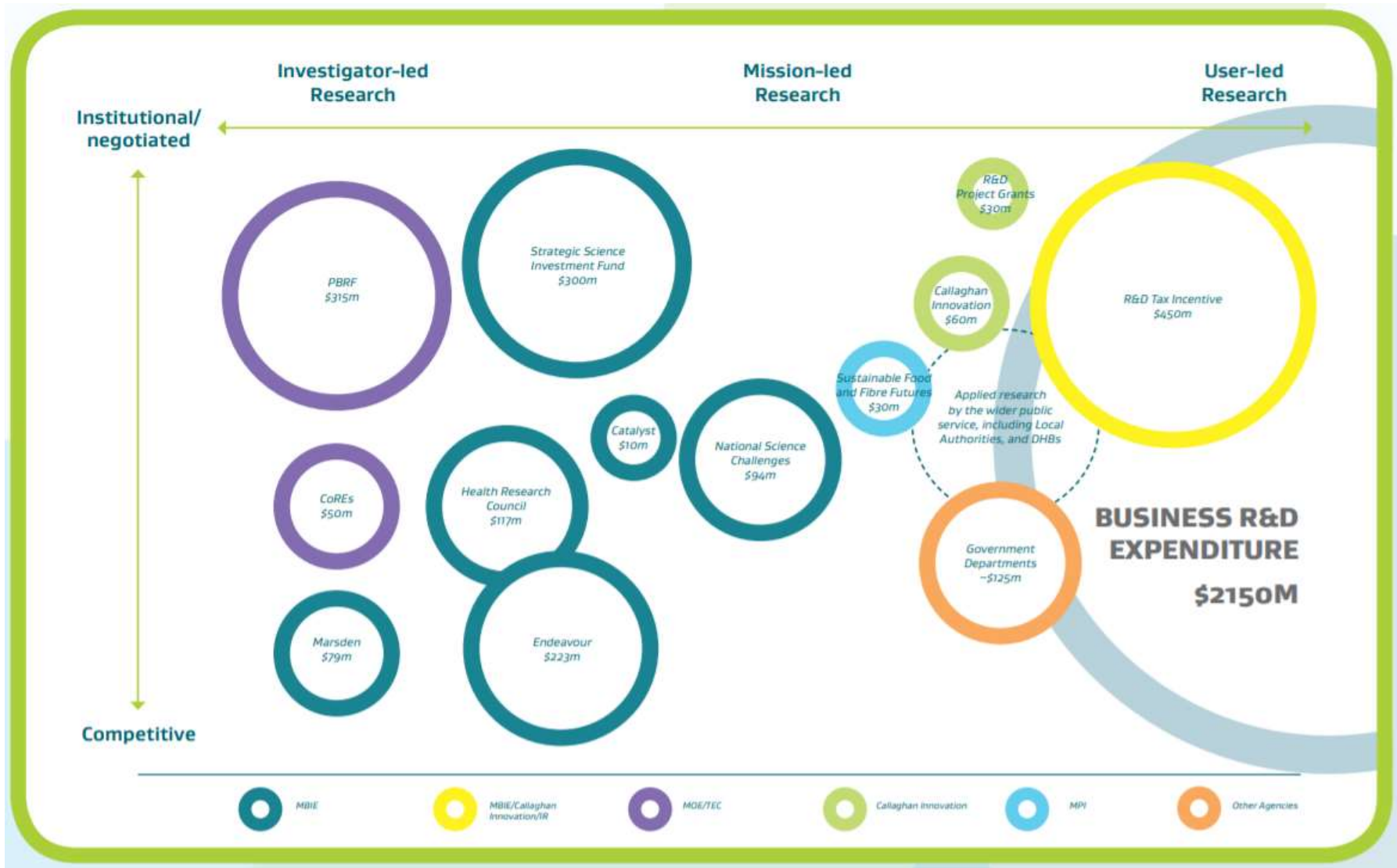


RSI Strategy consultation

- Consultation is currently open, closing 10 November 2019
- Submissions can be made through the RSI Strategy website:
<https://www.mbie.govt.nz/have-your-say/draft-research-science-and-innovation-strategy/>
- Consultation sessions are scheduled around the country. Please see the RSI Strategy website for details and RSVP
- Any questions can be directed to the RSI Strategy Secretariat at:
RSI-Strategy@mbie.govt.nz



Government funding



2019 Endeavour Wrap-up



What was new in the 2019?

- New Gazette Notice
- New Investment Plan

Together, they resulted in:

- New impact categories
(Transform & Protect and add value)
- New investment signals
- Portfolio approach



Success Rates

Smart Ideas

	Number submitted	Number funded	Annual value
2017	250	41 (16.4%)	\$15.4 million
2018	254	46 (18.1%)	\$16.1 million
2019	283	49 (17.3%)	\$17.1 million

Research Programmes

	Number submitted	Number funded	Annual value
2017	158	27 (17.1%)	\$42.6 million
2018	145	23 (15.8%)	\$41.3 million
2019	131	22 (16.8%)	\$39.2 million

A few quick observations

- Quality of applications continues to improve
- Science Board used the Portfolio Approach
- 9% of the Research Programmes investment went to Society proposals
- Size of proposals continues to grow
- 44% of Transform and 42% of PAV proposals assessed for Impact received investment

Impact categories

- Proposals the ‘Transform’ category
 - a. **Immediate impact.** Is the new, or changed, technology, process, practice, business model or policy, that is enabled by the research, a radical change and/or a leap in performance versus the status quo?
AND
 - b. **Ultimate impact.** Could the research ultimately lead to a transformational change within the New Zealand economy, society or environment by, for example, creating or disrupting economic activities, creating a new sustainable resource use or eliminating environmental damage, or changing the character of risks and opportunities faced by individuals and society?
- Proposals that do not meet both criteria should be made under the ‘Protect and add value’ category

Some of the successful Transform proposals

- Re-imagining aquaculture: Inventing low-impact, offshore mobile technology that transforms finfish production
- 3-D printing porous media for process engineering
- Geothermal: The next generation



Socio-economic objectives

- Economic 70% (61.7%)
- Environment 25% (34.0%)
- Society 5% (4.3%)



Vision Mātauranga

Relevance of VM:

- Research Programmes assessed for Impact
 - > Relevant 86%
 - > Not Relevant 14%

Numbers of Research Programmes Science Leaders with Māori affiliation:

- 12/188 or 6.4%

2020 Endeavour Fund



Minor changes to Endeavour 2020

- The **Investment Plan** (covered 2019, and the next two rounds, 2020 and 2021)
- Should be read with the annual
 - **2020 Gazette Notice** (assessment criteria and funding available)
 - **2020 Call for Proposals** (sets out how to apply)



Available investment

New Annual Investment - \$56.8 million

~\$18 million for Smart Ideas

~\$38.8 million for Research Programmes

- Target 60% Protect and add value
- Target 40% Transform



Investment mechanisms

Smart Ideas provide for smaller investments intended to catalyse and rapidly test promising, innovative research ideas

- Two or three years
- \$400k - \$1 million

Research Programmes provide for larger investments intended to support ambitious, excellent and well-defined research ideas

- Three, four or five years
- Minimum \$500k or more per year

Smart Ideas

- **Concepts:** Assessment of Excellence only
- **Full Proposals:** Assessment of Excellence and Impact concurrently
- **Assessment Criteria**
 - Excellence**
 - Science (50%)
 - Team (15%)
 - Impact**
 - Benefit to New Zealand (25%)
 - Implementation Pathway(s) (10%)



Smart Ideas

6 Nov 2019 (12 noon)	Closing date for registration (mandatory)
27 Nov 2019 (12 noon)	Closing date for Concepts
April 2020	Applicants notified of Science Board decisions
27 May 2020 (12 noon)	Closing date for Full Proposals
mid-Aug 2020	Science Board makes funding decisions
mid-Sept 2020	Applicants notified of Science Board decisions
1 Oct 2020	Contracts begin

Research Programmes

- One proposal submitted, two-stage assessment process

Excellence

- Science (25%)
- Team (25%)

Impact

- Benefit to New Zealand (25%)
 - Implementation Pathway(s) (25%)
- After proposals that have been assessed for both the Excellence and Impact, a Portfolio approach is used by the Science Board when making their investment decisions

Research Programmes

11 Dec 2019 (12 noon)	Closing date for registration (mandatory)
4 Mar 2020 (12 noon)	Closing date for proposals
May 2020	Applicants notified of Science Board decisions on Excellence
mid-Aug 2020	Science Board makes funding decisions
mid-Sept 2020	Applicants notified of Science Board decisions
1 Oct 2020	Contracts begin

Vision Mātauranga

Vision Mātauranga research may contribute to any or all of the following impacts for New Zealand:

- enhancing productivity and performance of Māori and non-Māori enterprise through new products, processes and services
- achieving environmental sustainability by exploring distinctive Māori relationships with the environment
- improving health¹ and social wellbeing for Māori, and
- generating new knowledge at the interface between indigenous knowledge and science and technology

¹ The Endeavour Fund does not fund research with the primary objective of health outcomes, but will support this as a secondary objective.

Assessment and Decision Making Processes



Assessment of proposals

Smart Ideas

- Submit a Concept
- Assessed for Excellence
 - Four independent assessors who provide scores and comments
 - Lead Assessors provide a summary
 - Rank-order list developed based on median weighted scores
- Applicants of the best invited to submit Full Proposals
- Assessed for Excellence and Impact
 - Process the same as Concepts, but eight independent assessors (four for Excellence and four for Impact)
 - MBIE provides the Science Board with summaries and a rank-order list, based on total weighted scores (based on medians), to make their investment decisions

Assessment of proposals

Research Programmes

- Submit at Full Proposal
- Assessed for Excellence
 - Four independent assessors who provide scores and comments
 - Lead Assessors provide a summary
 - Rank-order list developed based on median weighted scores
- Proposals of sufficient Excellence assessed for Impact
 - Four independent assessors assess Impact who provide scores and comments
 - Lead Assessors provide a summary and revised scores if warranted
 - MBIE provides the Science Board with proposal summaries, total weighted scores (based on medians and revised scores), and alignments to the Investment Signals, to make their investment decisions

Science Board decisions (based on 2019 process)

- Smart Ideas
 - Invest in the best proposals based on a rank-order list
- Research Programmes:
 - Take a portfolio approach
 - Consider the portfolio targets
 - Consider Impact categories (Transform and PAV)

Portfolio approach

- Each proposal has sufficient merit against the Impact and Excellence criteria
- Consider how the overall mix of investments meet the investment signals in the Investment Plan
- Consider value offered by the largest proposals
- Avoid duplication and excessive concentration in Endeavour and in the broader public science system
- General policy objectives including, where appropriate, the Vision Mātauranga policy

Investment Signals

General Signals

- G1. Excellent research, with high potential impact in areas of future value, growth or critical need for New Zealand
- G2. Leverage wider investment and knowledge, in New Zealand and overseas
- G3. Give effect to Vision Mātauranga
- G4. Take account of broader Government policy and strategy documents

Specific Signals

- S1. Creating and growing knowledge-intensive industries
- S2. Supporting the transition to a low-emissions economy

Value of large proposals

Not an assessment of 'value for money'

Rather:

- An assessment of the value of funding, for example, two 'small' proposals rather than one 'large' proposal

Consequently:

- Large proposals need to be of the highest quality to receive investment



Concentration and Duplication

- Concentration
 - Sectors of the existing portfolio with high investment
- Duplication
 - Several proposals seeking funding for the same research



Transform



- 2019 round
 - > Targeted investment: 30%
 - > Proposals received: 35%
 - > Received investment: 43%
- 2020 round
 - > Targeted investment: 40%
- 2021 round
 - > Targeted investment: 50%

A Better Brew...



Things to consider when applying

- Design your proposal with the end in mind
- Show stretch in the science and the thinking
- Manage risk with suitable plans
- Build the best team (researchers and end-users)
- Up to 50% of funding can be used to fund offshore collaborators
- Co-funding not mandatory, but potentially useful the nearer you are to market
- Think about Benefit to NZ broadly (consider spill-over benefits)
- Consider capability development
- Co-design with end-users (do it early)
- Alignment to broader Government strategies and policies

Vision Mātauranga

- Give careful consideration to the relevance of the proposal to VM under each criteria
- Engaging with Māori at the beginning not the end
- Include a statement about relevance (or not) at the beginning of the proposal
- Consider Māori involvement in wider project team and include the costs of their involvement

And some of the little things...

- Use informative and ‘non-tabloid’ titles
- Executive Summary
 - Key ‘go-to’ place in proposals
 - Split into four ‘assessment criteria’ sections
 - Limited words, use wisely
- Public Statements
 - Use language that the general public and journalists understand
 - Concise and precise. Avoid jargon.
 - Make the outcomes and benefits clear
 - Do not present IP you want to protect
- Select ANZSRC codes with care

Impact of Research



*New position paper out now:
www.mbie.govt.nz/researchimpact*



What's changed in NZ?

Stronger expectations from funders

2015 National Statement of Science Investment:

*“All of our science should have a **strong line of sight to the eventual benefits** for individuals, businesses or society”*

2018 PBRF round:

‘Uptake and impact’ included as a type of research contribution for the first time

A rising tide of research investment

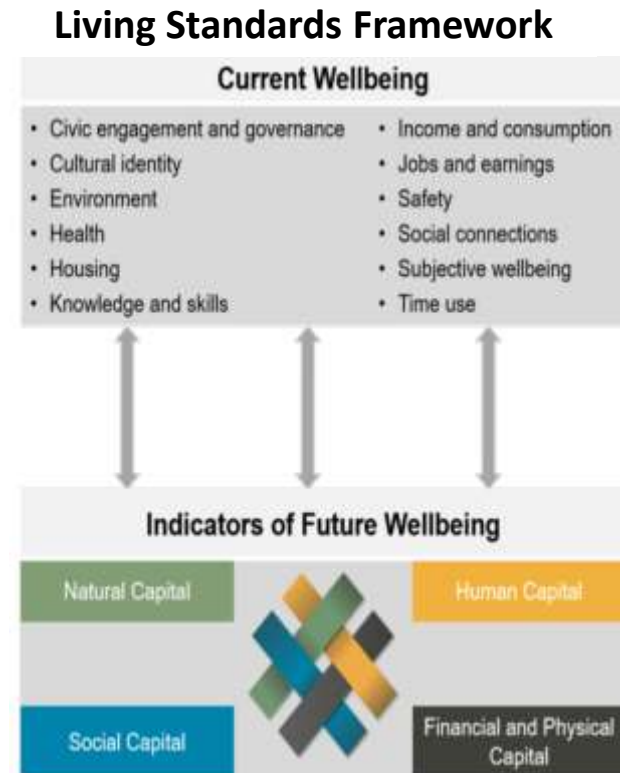
Government target to raise economy-wide R&D to 2% GDP by 2027

Comprehensive, linked, research funding data

MBIE received \$10m to build a National Research Information System

We need to tell a more credible impact story

- How does public research investment help achieve government wellbeing goals?



MBIE definition of research impact

‘A change to the economy, society, or environment, beyond contribution to knowledge and skills in research organisations’

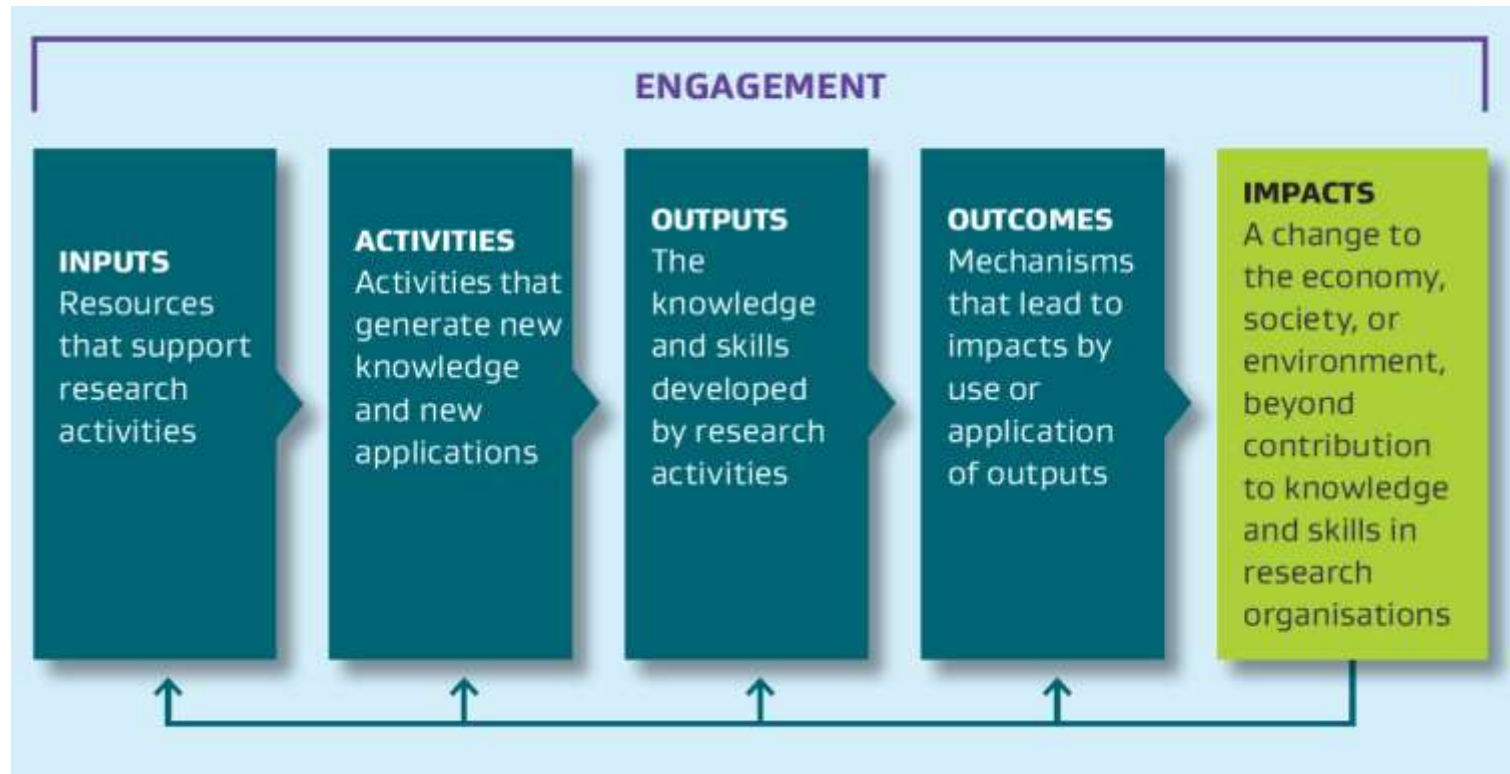
Principles for measuring impact

1. Acknowledge the **multiple factors** that contribute to impact
2. Corroborate the value of research by **talking to end-users** and collecting **evidence**
3. Use a **unit of analysis** that is large enough to allow for failures, risk-taking and distributed impact pathways (eg research institution, large research programme, portfolio, or fund)
4. Acknowledge lags, data gaps and data **biases** towards large or easily-measured impacts
5. Recognise the **diverse contributions** to impact across disciplines, horizons and wellbeing



The results-chain framework

To align language and concepts of research impact across the system



MBIE's expectations

- **Everyone:** start using the results-chain language
- **Institutions:**
 - Articulate your institution's contribution to research impact
 - Support researchers to plan for and increase impact from their work
 - **Work with MBIE to capture and share linkable impact data.**
- **Researchers:**
 - Use the results-chain framework to plan for and increase impact of your research
 - Talk to your research office about impact planning and end user engagement
- **MBIE:**
 - Understand the **sectoral resourcing needs to support research impacts**
 - Develop shared data infrastructure, capability and good practice
 - Monitor impact at the system level

Other MBIE opportunities



MBIE supported Infrastructure

- **New Zealand eScience Infrastructure**

www.nesi.org.nz or contact support@nesi.org.nz



- **Research Education Advanced Network NZ**

www.reanz.co.nz or contact help@reanz.co.nz



- **Australian Synchrotron**

www.synchrotron.royalsociety.org.nz



- **RV Tangaroa**

www.niwa.co.nz or contact rob.christie@niwa.co.nz



Other funding opportunities

- **Vision Mātauranga Capability Fund**
 - > portal closes 14 November
- **PreSeed Accelerator Fund**
 - > funding available for research commercialisation via your research organisation
- **Catalyst Fund: Strategic**
 - > investment in collaborative research projects between New Zealand and China in Food Science and Environmental Science; registration closes 29 October, portal closes 2 December
- **SSIF Advanced Energy Technology Platform**
 - > will open in late 2019

Visit the MBIE website for more information and subscribe to the MBIE Alert e-newsletter for updates

Want to know more about Endeavour?

We can

- explain the process
- help with use of the Portal and resolve Portal problems

We cannot

- interpret the Call for Proposals
- provide specific advice about your proposal

Contact us

Questions on the process, CfP or content

Email	endeavour@mbie.govt.nz
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Questions on the portal or proposal submission

Email	IMSsupport@mbie.govt.nz
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Call	0800 693 778 (8.30am – 4.30pm)
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Web	See MBIE's Endeavour Fund webpage
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Questions?

