MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HIKINA WHAKATUTUKI

National Science Challenges

AN OVERVIEW

Prue Williams, General Manager – Science Investments
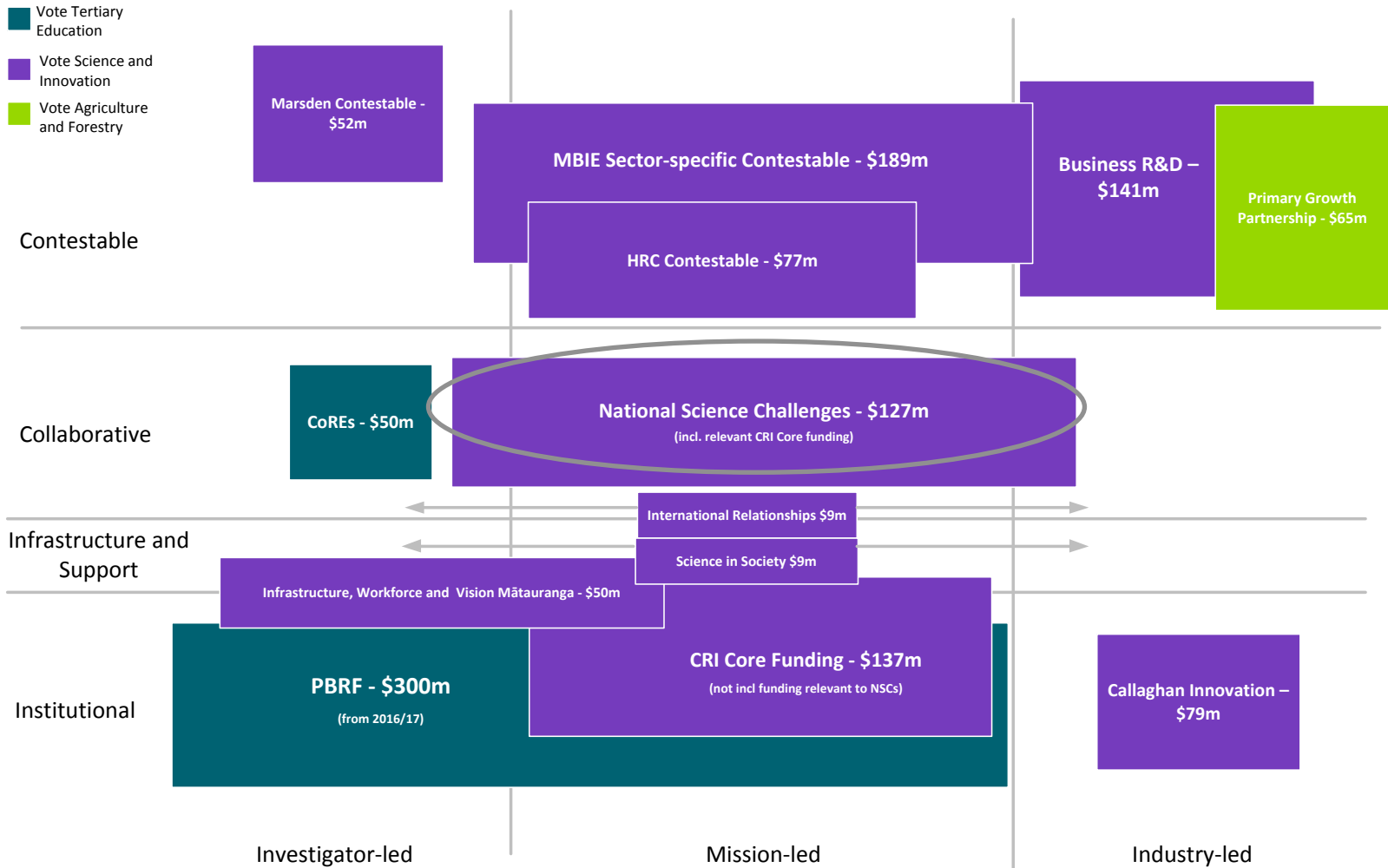
14 August 2015

National SCIENCE Challenges

Tackling New Zealand's big science-based issues

What are they?
How will they work?
Next steps

Current Funding Landscape

Legend:
- Vote Tertiary Education
- Vote Science and Innovation
- Vote Agriculture and Forestry

Contestable
- Marsden Contestable - $52m
- MBIE Sector-specific Contestable - $189m
- HRC Contestable - $77m
- Business R&D – $141m
- Primary Growth Partnership - $65m

Collaborative
- CoREs - $50m
- National Science Challenges - $127m (incl. relevant CRI Core funding)

Infrastructure and Support
- International Relationships $9m
- Science in Society $9m
- Infrastructure, Workforce and Vision Mātauranga - $50m

Institutional
- PBRF - $300m (from 2016/17)
- CRI Core Funding - $137m (not incl funding relevant to NSCs)
- Callaghan Innovation – $79m

Investigator-led　　　Mission-led　　　Industry-led

1. The challenge is directed at achieving a *goal* that benefits New Zealand
2. The challenge addresses a *national-scale* issue or opportunity
3. *Science* is essential to solving or addressing the issue or opportunity
4. The challenge involves *a broad portfolio* of research activity that could be undertaken across a number of research providers
5. There is *wide consensus* that the challenge addresses an issue or opportunity that is important for New Zealand

National Science Challenges

11 Challenges	Objectives
Ageing well	Harnessing science to sustain health and wellbeing into the later years of life
A better start	Improving the potential of young New Zealanders to have a healthy and successful life
Healthier lives	Research to reduce the burden of major New Zealand health problems
High-value nutrition	Developing high value foods with validated health benefits
New Zealand's biological heritage	Protecting and managing our biodiversity, improving our biosecurity, and enhancing our resilience to harmful organisms
Our land and water	Research to enhance primary sector production and productivity while maintaining and improving our land and water quality for future generations
Sustainable seas	Enhance utilisation of our marine resources within environmental and biological constraints.
The deep south	Understanding the role of the Antarctic and the Southern Ocean in determining our climate and our future environment
Resilience to nature's challenges	Research into enhancing our resilience to natural disasters
Science for technological innovation	Enhancing the capacity of New Zealand to use physical and engineering sciences for economic growth
Building Better Homes, Towns and Cities	Research into new technology and long-term solutions for our building environment

Sustain health and wellbeing into the later years of life

Funding

- $35m for 10 years

Science themes in RfP

- Maintaining brain health

- Dealing with physical frailty

- Enhancing the role of older people in society

Recap of Challenge principles

- **Mission-led**

  Each Challenge has a clear objective approved by Cabinet

- **High-quality science focused on the mission**

  Science must be squarely aimed at the Challenge objective – it's not science for science's sake

  Science must be outstanding, world-leading, ground-breaking

- **Not just business as usual**

  A step up in all aspects: research, methods, collaboration, governance, public participation, engagement etc

Recap of Challenge principles

- **Give effect to the Vision Mātauranga policy**

  Vision Mātauranga is to be integrated across all aspects of the Challenge – it is not an optional add-on or after-thought

- **Best team - collaborative, multi-disciplinary, across organisations**

  It's not just about sub-contracting and sharing notes – it's about assembling New Zealand's best team

- **Strong governance and management**

  An excellent research programme will

  fail if it is not well governed and managed

Challenge launched March 2015

In August 2015

- Research and business plans approved by Science Board
- Agreement to release of full funding, subject to contract conditions including a six month review of progress.
- Total of $14.6 million for first funding period.

Next steps:

- Finalise work plan including milestones
- Develop performance indicators with MBIE
- Stakeholder engagement plan

NSC performance framework

Performance Framework finalised May 2015

7 common performance areas:

- Delivery of Challenge objective
- Science quality
- Best research team collaboration
- Stakeholder engagement
- Māori involvement and mātauranga
- Effective governance and management
- Public participation

Annual reporting:

- data on indicators
- narrative annual report
- statistical information

**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**

HIKINA WHAKATUTUKI

Thank you
Any questions?