

Principles for National Science Challenge development and implementation

Benefit to New Zealand

- **Mission-led** – Each Challenge will focus research on achieving the Challenge objective and outcomes
- **Scope and scale** – Each Challenge will address a national-scale issue identified through a process of wide public engagement and selected by the Government
- **Impact** - Each research plan will provide a credible pathway of research and related activities to achieving the outcome of the Challenge
- **Engagement** - Each Challenge will involve public outreach and will exhibit strong collaboration between researchers and intended end users of the research activity, including, where appropriate, obtaining investment from end users in the Challenge's research

Science stretch

- **Science- led** – Each Challenge will involve the research required to address the Challenge
- **Best science** – Each research plan will involve identifying and selecting the best research to address the Challenge
- **Best team** – Each Challenge collaboration will bring together New Zealand's best team to address the Challenge
- **Multi-disciplinarity** - Each Challenge is likely to involve a broad portfolio of multi-disciplinary research activity
- **Strategic focus** – Each Challenge will involve a ten-year research plan (with a detailed research programme for the first 3-5 years) to address the Challenge that is clearly linked to other relevant research and research strategies in New Zealand and overseas
- **Additionality** – The Challenge approach is used where additional research, progress, and impact can be generated by collaborative research
- **Coherence** – Each research plan will involve inter-related, mutually supporting and co-ordinated research to address the Challenge
- **Portfolio** – Each research plan may include a portfolio of activities including both incremental and high-risk, high-return research

National Science Challenge principles cont.

Approach

- **Collaboration** – Each Challenge will involve purposive collaboration between researchers across a number of research providers to address the Challenge
- **Effective governance** - Each Challenge collaboration will be fit for purpose; builds on existing governance structures where appropriate and will be configured in a way that best supports the achievement of the research objectives and outcomes of the individual Challenge
- **Dynamism** – Each Challenge will include mechanisms to bring in new ideas, researchers, and research providers. The funding system will allow new research to be integrated into the Challenge and the Challenge to be refreshed and renewed.
- **International linkages** - Each Challenge will be clearly linked with international research activity that will support the achievement of the Challenge
- **Vision Mātauranga** – All Challenge research will give effect to the Vision Mātauranga policy.
- **Devolution** – Each Challenge collaboration will have the responsibility, freedom, and flexibility to develop a research and business plan to address the challenge

MBIE's role

- **Performance** – Each Challenge will be monitored to ensure the required results are achieved and will undergo an in-depth review, refresh, and revised funding after 3-5 years
- **Funding** – Each Challenge will be funded through a multi-year appropriation with a combination of new MBIE funding and some existing MBIE funding that will be transferred to National Science Challenges from the contestable funding mechanism as current contracts mature.