





STAKEHOLDER PERCEPTIONS OF THE NATIONAL SCIENCE CHALLENGES 2022

A BETTER START

E Tipu e Rea

AGEING WELL

Kia eke kairangi ki te taikaumātuatanga

Ko ngā wā kāinga hei whakamāhorahora

BUILDING BETTER

HOMES, TOWNS

AND CITIES

HEALTHIER LIVES

HIGH-VALUE NUTRITION

> Ko Ngā Kai Whai Painga

NEW ZEALAND'S **BIOLOGICAL** HERITAGE

> Ngā Koiora Tuku Iho

OUR LAND AND WATER

Toitū te Whenua, Toiora te Wai

RESILIENCE TO NATURE'S **CHALLENGES**

Kia manawaroa Ngā Ākina o Te Ao Tūroa

SCIENCE FOR TECHNOLOGICAL INNOVATION

Kia kotahi mai - Te Ao Pūtaiao me Te Ao Hangarau

SUSTAINABLE SEAS

Ko ngā moana whakauka

THE DEEP SOUTH

Te Kōmata o Te tonga

FINAL REPORT | SEPTEMBER 2022 A QUALITATIVE STUDY



SECTION 1 - EXECUTIVE SUMMARY	3
SECTION 2 - RESEARCH NEED AND APPROACH	8
CECTION 2 OT ALCELIOL DED INTEDACTIONS	11
SECTION 3 - STAKEHOLDER INTERACTIONS	II
SECTION 4 - STAKEHOLDER ENGAGEMENT	14
SECTION 5 - RESEARCH TEAM COLLABORATION	19
SECTION 6 - VISION MĀTAURANGA	24
SECTION 7 - KNOWLEDGE EXCHANGE	27
SECTION 8 - COMPARISONS OVER THE YEARS	33
SECTION 9 - APPENDIX	36





SECTION 1

EXECUTIVE SUMMARY

Summary of purpose and research approach:

METHOD

The **National Science Challenges (Challenges)** have been set up to focus research efforts on a series of goals that, if achieved, will have a major and enduring benefit for Aotearoa.

The **11 Challenges** incorporate a range of goals, including improving the health of all New Zealanders, advancing our economic growth, protecting our unique environment, and encouraging innovation and sustainability.

The Ministry for Business Innovation and Employment (MBIE) monitors the Challenges to assess their progress and performance. Alongside other inputs, Kantar Public (formerly Colmar Brunton) conducts stakeholder engagement research to provide feedback on the Challenges' performance.

MBIE has gathered information about individual Challenges and stakeholder perceptions through qualitative research in 2018, 2020 and 2022.

This document reports on the findings of the 2022 research.

SAMPLE

In total, 104 interviews were completed across the 11 Challenges online or by phone between March and May 2022.

PURPOSE

MBIE wants to understand performance against KPIs:

- Stakeholder interaction and engagement with the Challenges
- 2 Best research team collaboration
- 3 Vision Mātauranga
- 4 Knowledge Exchange.



Key findings

STAKEHOLDER ENGAGEMENT

Working with the Challenges

Most stakeholders have strong partnership relationships with the Challenge teams.

Research priority setting and co-design

Stakeholders hold variable perceptions about the extent to which the Challenges collaborate with them in priority setting and co-design.

Stakeholders' different examples of co-design include:

- Co-designing the research approach with whānau, hapū and iwi
- Co-designing/co-writing project applications with the Challenge team
- Co-designing the objective of the research with the community
- Co-designing with project contractors.

BEST RESEARCH TEAM COLLABORATION

Effectiveness of research teams and Challenge leadership

Stakeholders hold leadership and researchers in very high regard for their skills, knowledge, expertise, collaboration, cultural competence, and engagement. They demonstrate open, transparent, and respectful ways of working. These working relationships and networks are valued, and stakeholders hope they will be sustained.

The co-director model sends a strong signal that te ao Māori and mātauranga Māori is highly valued, and that progress is being made towards integration of mātauranga Māori and Western Science thinking, approaches, and delivery.

There is high confidence in the Aotearoa research evidence/knowledge base that has been built, and this is highly valued to inform decisions and practice.

Collaboration

There is evidence of researcher collaboration within the Challenges, but perhaps not so much across Challenges. Previous 'patch protection' and competition for funding is no longer evident.

Researchers are seen to collaborate and engage well with stakeholders, communities, Māori, and Pasifika peoples.



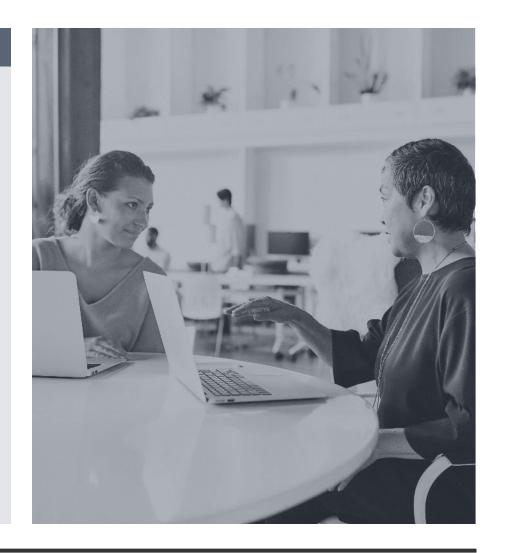
Key findings, continued

KNOWLEDGE EXCHANGE

Although the Challenge is seen to produce a number of important outputs, stakeholders cite effective reporting and dissemination of knowledge as critical to assisting them to create impact. Stakeholders are confident in the robustness of the evidence/knowledge base, however, there is a need for knowledge to be communicated in an accessible way for communities, iwi, hapū, Māori, and individuals. Their view about how accessible the outputs are is variable. They believe there must be pathways to implementation and therefore impact, in both the short term and long term.

Stakeholder confidence in realising impact is also variable, and very much depends on the extent of their involvement right from priority setting. Stakeholders lack awareness about resourcing and funding for implementation and sustainability, which contributes to this perspective.

There are calls for learnings to be synthesised within and across Challenges.





Key findings, continued

MĀORI INVOLVEMENT

Over time, it seems that Māori have become much more central to the research approach. However, within and across the Challenges, Māori partnership is still considered a little variable. Stakeholders describe this variability in Māori partnership as follows:

- No specific Māori component
- Research may be relevant to Māori but is not specifically designed for outputs for Māori
- Research involving Māori as participants and could contribute to addressing critical issues and aspirations
- Māori-centred research with Māori involved, using mātauranga Māori,
 Māori are end-users, and meeting Māori aspirations
- Kaupapa Māori research that is Māori led, focussed on Māori outcomes and aspirations.

There is (still) a need to resource, fund and sustain Māori capability and capacity among Māori researchers, stakeholders, participants and end-users.

MĀTAURANGA MĀORI

Both Māori partners and non-Māori stakeholders cite evidence that the Challenges value mātauranga Māori, and are genuinely working towards equality.

The extent mātauranga Māori is integrated with Western science knowledge is considered variable. There are questions on what this model looks like for outputs, implementation, and sustainable impacts.

Both Māori and non-Māori seek a greater te ao Māori ecosystem, and holistic approach to outcomes and impacts.

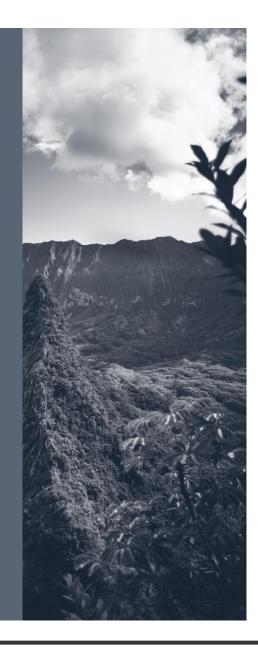




SECTION 2

RESEARCH NEED AND APPROACH

REVIEWING THE NATIONAL SCIENCE CHALLENGES' PERFORMANCE



- The Ministry for Business Innovation and Employment (MBIE) conducts reviews of the Challenges to monitor and assess their progress and performance. Alongside other inputs, Kantar Public (formerly Colmar Brunton) conducts stakeholder engagement research to provide feedback on the Challenges' performance.
- Kantar Public was commissioned to undertake stakeholder surveys in 2016 and 2017. The quantitative approach of the 2016 and 2017 surveys yielded low sample sizes.
- Consequently, MBIE moved to gather richer and more detailed information about individual Challenges and stakeholder perceptions through qualitative research in 2018, 2020, and 2022. In 2018, up to five stakeholders per Challenge were interviewed. For the 2020 and 2022 research, this was expanded to 10* per Challenge.
- This document reports on the findings of the 2022 research.



RESEARCH PURPOSE

Understanding stakeholders' perspectives of the National Science Challenges' performance

SPECIFICALLY, MBIE HAS IDENTIFIED THE FOLLOWING AREAS IT WANTS TO UNDERSTAND:



STAKEHOLDER INTERACTION WITH THE CHALLENGES

How have stakeholders interacted with the Challenges?

2

STAKEHOLDER ENGAGEMENT

- How effectively have stakeholders been involved in the Challenges' priority setting and co-design of research?
- How have the Challenges managed the impact of COVID?
- What is the endurance of working relationships?

3

BEST RESEARCH TEAM COLLABORATION

- How effective is the leadership?
- Do the Challenge research teams have an appropriate skill mix?
- How collaborative are the research teams?

4

VISION MĀTAURANGA

- Do the Challenges embrace and reflect te ao Māori?
- How and to what extent are Māori engaged with the Challenges?
- How do the Challenges value and use mātauranga Māori?

5

KNOWLEDGE EXCHANGE

- How have outputs been used?
- What's the knowledge exchange?
- What is the technology development?
- Is there potential to scale up nationally and internationally?
- How will knowledge be used in the future?
- In what ways will there be impactful outcomes for Aotearoa?







SECTION 3 STAKEHOLDER INTERACTIONS

104 diverse people were interviewed across 11 Challenges

STAKEHOLDERS ARE A VERY DIVERSE GROUP OF PEOPLE, WORKING IN DIVERSE ROLES AND FOR DIVERSE ORGANISATIONS:

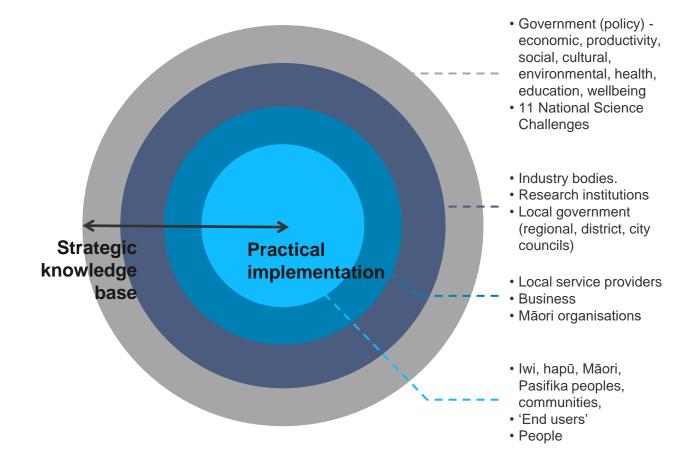
- Just over one third (39) are Māori.
- The roles and organisations that people work for include Government (in policy roles), District Health Boards, education (schools), business or industry (in management roles, or research and development), non-government organisations/not for profits working with communities, charitable trusts, city/regional/district councils, iwi community representatives, Māori organisations, and universities/research institutions.
- Some have very high levels of engagement in that they interact with the leadership team, have long term relationships within a
 Challenge and sometimes across Challenges; others have a low level of engagement or short term engagement e.g. for a specific
 project.
- Those in government policy roles, councils, or research organisations are more interested in establishing knowledge and evidence bases, while those working directly with vulnerable communities are more interested in implementation that will contribute to wellbeing.
 Industry want to establish evidence bases that will help drive innovation and take product to market. They have a productivity and profit incentive.
- There are some stakeholders who have initiated contact with the Challenges, and have sought funding and expertise to carry out purpose driven, proactive research. Others have been approached by Challenge researchers to determine interest in being involved as research partners, and still others are involved more as research participants.
- This diversity of engagement and motivation drives perceptions of the Challenges.



Stakeholders can be viewed as part of an ecosystem. Their objectives and expectations for involvement in the Challenges are closely aligned with where they sit in this ecosystem. This in turn drives their perceptions of the Challenge performance.

People and communities (at the centre of the ecosystem) are more focussed on practical implementation in the here and now. They want to know how they can apply their learnings today, and sustain impact over the longer term. They are also likely to want to take a more holistic or ecosystem view across Challenges – how do all the Challenges interrelate for communities?

Those further removed from working directly with communities (e.g. government policy) tend to be more focussed on a broader, possibly longer term strategic knowledge base. They too are interested in how all the projects within a Challenge and across Challenges come together to contribute to this knowledge or evidence base.



NOTE: KANTAR PUBLIC CREATED THE ABOVE DIAGRAM BASED ON STAKEHOLDER CONVERSATIONS. THE INTENTION IS TO SHOW HOW THE DIFFERENT STAKEHOLDERS ARE INTERRELATED AND WHERE THEIR KEY FOCUS TENDS TO BE.







SECTION 4

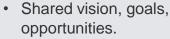
STAKEHOLDER ENGAGEMENT

Stakeholders identify strong working relationships as key to stakeholder engagement

Stakeholders are diverse, and hold different motivations for being involved in the Challenges. Despite this diversity, stakeholders mostly cite very strong working relationships that have been sustained over several years and will continue.

Stakeholders value the tailored (not one size fits all) partnership approach. The key elements of the Challenges' partnership approach are shown in this diagram.

 Action/implementation plan (with resources) that meets the shared vision/goal.



- · Te ao Māori.
- Manage conflicts and risks.

- Identify stakeholders and co-design engagement.
- Build capability and capacity for participation/engagement, especially for Māori.



 Synergies/holistic approach within Challenges and across Challenges.



 Robust evidence/knowledge base exchange that is timely, clear, and easily understood. Strong working relationship = partnership

 Feedback loop that rewards and recognises engagement/ participation.

- Flexible, transparent approach/process.
- Clear, transparent, accessible communication.



- Resources for equitable valued contributions.
- Recognising skills, experience, knowledge, and mātauranga Māori.





Stakeholders' understanding of priorities, and their involvement in priority setting, is varied. This variability can determine the strength of stakeholders' sense of collaboration and purposeful outcomes

- Overall, stakeholders believe the Challenges will have identified the priority science-based opportunities and issues facing Aotearoa.
- However, stakeholders' involvement with priority setting has been variable, with a few taking a collective partnership approach, and more not being involved at all.
- Those stakeholders with limited involvement in setting priorities lack awareness of this process. They are mostly focused on the objectives of the specific project they are engaged with. This narrow focus is particularly true of stakeholders who are closer to the community perspective, where we see high stake/impact on the ground implementation (compared to a government policy perspective, which has more emphasis on the knowledge base).
- There are a number of reasons stakeholders may not have been involved in priority setting. For example, they may not have been in the role at the time.
- Stakeholders who have not been involved are more likely to be critical of some aspects of the Challenges. Shared and clearly articulated visions and goals for the projects are a key determinant of 'ownership' throughout the lifecycle of the project, from priority setting to implementation and sustainability.





Much like perceptions of priority setting, stakeholders have different expectations and perceptions of what 'co-design' is, and to what extent this was collaborative

Stakeholders have different interpretations of what co-design is. This can make it challenging for us to assess how much co-design there has been at a higher level in terms of setting the overall research direction and approach.

Challenge researchers are seen to hold the overall expertise and knowledge, while having flexibility to respond to stakeholder input and feedback. It also depends on the stakeholders' level of knowledge and expertise around research approaches as to how this process will work.

There has been consultation between stakeholders and researchers on how best to engage with research participants, including a strong emphasis on cultural sensitivities and protocols.

From discussions with stakeholders, there seems to be less genuine co-design between <u>communities</u> and research teams. Furthermore, the extent to which co-design is utilised is not only seen to be variable within Challenges, but also across Challenges.

Stakeholders often mention Māori researchers as engaging in co-design. This is because whānau, hapū and iwi are often consulted/involved in projects at multiple levels (there is more on this later).

Stakeholders' comments suggest there has been the full range of research and co-design principles with Māori from:

- little to no specific Māori component
- research relevant (or potentially relevant) to Māori
- research involving Māori
- Māori-centred research
- Kaupapa Māori research.



Stakeholders consider the Challenges have managed and mitigated COVID impacts as best as can be expected

Stakeholders comment the biggest impact has been the loss of kanohi ki te kanohi face-to-face contact, discussion, and networking. They feel this is important for research connectedness with communities (research participants), and for sharing and discussing learnings within Aotearoa and internationally. Research engagement and 'conferences' have shifted online, resulting in associated advantages (sometimes more efficient) and disadvantages (loss of personal connection).

OTHER IMPACTS STAKEHOLDERS COMMONLY CITE ARE:

- timeframes delayed and pushed out
- personal priorities shifting, for example, sickness, loss of income, and work impacts – especially in some sectors such as health, education, and aged care
- funding reprioritised
- priorities for some sectors shifted, especially health.







SECTION 5

RESEARCH TEAM COLLABORATION

As in previous years, stakeholders have very high confidence and trust in researchers' skills and expertise

Researchers are recognised and acknowledged for their:

- research/science leadership, expertise, skills, knowledge, and experience
- academic reputation
- cultural competency and responsiveness
- values, goals, and objectives that are shared by stakeholders
- collaborative, interdisciplinary* approach
- commitment to, and alignment of, te ao Māori and mātauranga Māori with Western science (more on this in the next section)
- good working relationships they have established and maintained (see previous section).

Māori and Pasifika researchers are particularly recognised and acknowledged.

Stakeholders mostly feel researchers value the expertise, skills, knowledge, experience, mātauranga Māori, and cultural competency of stakeholders, communities, iwi, hapū, and Māori. That is, working relationships are based on mutual respect and collaboration.

Stakeholders (including Māori organisations)

Collaboration of knowledge, expertise skills, Western science and mātauranga Māori

Researcher/scientist team (including Māori and Pasifika researchers)

Community, iwi, hapū, tangata whenua





There are continued calls for capacity building, synergies within and across Challenges, and an implementation focus



Building and resourcing capacity of Māori and Pasifika researchers is a recognised priority, and now has urgency.



There continues to be a tension between the necessity of research that takes a robust. academic, evidence, knowledge based approach, and the practicalities of getting things done with an implementation focus. From discussions with stakeholders, this appears to be better managed overall - mainly through open and transparent communication. At this stage of the Challenge, there is a greater call for what the research means for implementation (and resourcing and funding for both in the short term and longer term).



Views on the timeframe for implementation and impact (today/now or in the future 5-10 years) varies by stakeholder type and the nature of the project. Again, it helps if stakeholders have been fully involved right from priority setting through to research outcomes, and what this means for timelines for action plans, implementation, and when impacts might be seen and measured.



At this stage of the Challenge, there is an increased call for learnings and synergies of projects within a Challenge and across all Challenges – what does it all mean? How does it all fit together?



Stakeholders continue to have high confidence in Challenge leadership teams

Those who have some contact with the Challenge leadership team <u>and</u> are on board with the overall strategy, aims, and frameworks have confidence in their skills, expertise, knowledge, leadership, working partnership style, open communication, robust discussions, and focus on outcomes. The contact and knowledge of the leadership team comes from those stakeholders with a more strategic, government, or science-based background/role.

Māori co-directors, and Kahui Māori (Māori advisory board) sends a very strong signal that Māori partnerships, te ao Māori principles, vision mātauranga, Te Tiriti partnership frameworks to foster and develop Kaupapa Māori and Māori research outcomes are highly valued and incorporated. Kahui Māori are highly respected for their knowledge and expertise. It also sends a signal that Western science and mātauranga Māori frameworks can be aligned.

Many stakeholders (particularly those closer to community) have had no contact or knowledge of the leadership and feel unable to make comment but assume leaders must know what they are doing in terms of strategic direction, leadership, funding decisions and research/science expertise. This lack of visibility may link back to uncertainty about priority setting and how the pieces fit together.





Stakeholders generally believe relationships and networks will be ongoing

Stakeholders see an important benefit and outcome of the Challenge is the relationships and networks that will continue and present further or new opportunities for stakeholders, researchers, communities, and Māori to work together.

There are a number of factors stakeholders identify as contributing to the enduring and expanding networks, as shown in the diagram.

Ground-up, interconnectedness, holistic, and sustainable Networks and reputations - Aotearoa is a approaches means key networks small country where many people are are critical and maintained. known to one another through reputation and/or by working together. Relationships with iwi, hapū, tangata whenua, communities. Strong working relationships - people have established a partnership, collaborative, transparent way of working together, and are looking for shared Research community is small - there is a relatively opportunities and learnings. small pool of researchers who are increasingly working collaboratively (less silos) across institutions and Challenges. There is also a willingness and focus to grow research capacity, especially for Māori and Pasifika researchers.







SECTION 6 VISION MĀTAURANGA

Stakeholders easily recognise that the Challenge values mātauranga Māori and has prioritised this

Stakeholders consider the Challenges demonstrate the value of mātauranga Māori by explicitly ensuring:

- Mātauranga is an integral part of the research approach, and not just something that is 'tacked on', 'tick box', or 'token'
- co-governance models
- Māori input critically influences decisions and directions
- cultural competency of the researchers and leaders
- authentic and genuine partnering and engagement with Māori stakeholders
- the integrity of Māori project aspirations and outcomes
- ongoing relationships, networks and trust with kaupapa Māori organisations, iwi, hapū, marae, individuals
- Māori researchers' knowledge and expertise is valued and supported, and they are validated in their mahi
- the funding (and support through application) of mātauranga Māori led projects and/or place-based, community led projects and Māori community researchers

- knowledge of kaumatua, pūkenga, and mātauranga experts is brought into a contemporary context
- knowledge exchange and practical outputs for communities and intergenerational learning
- Māori as end users of research are recognised
- a people focus, not just a science focus
- Māori rights, interests, and innovations are respected, valued, and recognised in intellectual property
- leadership in conversations around transformative change in mātauranga Māori as a science
- commitment to Te Tiriti o Waitangi.



Stakeholders comment there is still more work to do, for example, on resourcing and sustaining partnerships, and what mātauranga Māori and Western science alignment actually looks like 'on the ground'

While stakeholders recognise progress has clearly been made, they identify the following areas where there is still work to be done.

- Further commitment to resourcing and <u>sustaining</u> partnership capacity, and capability with Māori researchers, Māori stakeholders, iwi, hapū, marae, young Māori leaders and individuals. This needs to be long term, not just project by project.
- The development of Western science, te ao Māori, and mātauranga Māori alignment. In particular, how to discuss, describe, and define this both conceptually and practically, as people use a variety of concepts such as alignment, equality, equity, embedded, mātauranga led, centralised te ao Māori, incorporated, prioritised, valued, and strands welded together.
- Clarity of focus on place-based, iwi led or national led issues, aspirations, and models. In considering national scale up, stakeholders identify issues and knowledge held, practiced, and applied specific to place and iwi that couldn't or shouldn't be scaled up. Yet, others argue for a more national approach.

- Focusing on practical outputs that communities own and can sustain intergenerationally.
- Furthering holistic, te ao Māori, ecosystem approaches and outputs within and across Challenges.
- Funding criteria (and support through the application process) for mātauranga Māori projects.
- Deconstructing insititutionalised racism.
- Ensuring whānau data sovereignty it belongs to whānau, while organisations and the Challenges are the kaitiaki of the information.
- Ensuring that engagement with Māori is place based and geographically driven (mana whenua).





SECTION 7

KNOWLEDGE EXCHANGE

Stakeholders identify a number of important outcomes that the Challenges have partly realised (with more progress to be made)

The Challenges have created knowledge and evidence base through:

- Research summaries that are accessible, alongside feedback that has been provided throughout the project, rather than waiting for academic publications.
- The creation of te ao Māori and mātauranga Māori knowledge, and its implementation.
- A very robust, uniquely Aotearoa (as opposed international)
 evidence/knowledge base that has shaped discussions, and informed
 decision-making and practice.
- An awareness and understanding of intervention models.
- An understanding of communities and whānau 'voice'.
- Technological development, especially the Science for Technological Innovation Challenge. However, stakeholders consider knowledge as the main outputs across other Challenges.

The Challenges have enabled implementation through:

- Pathways to market, improved productivity, and opportunities for commercialisation (private sector).
- Outputs that have pathways to application and implementation, and can be sustained.



Stakeholders identify a number of important outcomes that the Challenges have partly realised (with more progress to be made), continued

The Challenges have enabled capability building through:

- Knowledge exchange, capability and capacity building between the Challenge team and stakeholders. However, this needs to be further extended to communities, iwi, hapū, marae, and individuals.
- Shared learnings and discussion (preferably face-to-face) at several levels for different stakeholders – community hui, nationally and internationally.
- Shared learning from other projects within Challenges and across Challenges.
- Enabling cohorts of new Māori and Pasifika researchers coming through.

The Challenges have created networks and collaboration opportunities through:

- Relationships and engagement between Challenge team, stakeholders, communities, iwi, hapū, marae, and individuals.
- The establishment of public/private partnerships.
- Ensuring end user 'ownership' and sustainability, from being fully involved from priority setting through to outcomes.



The accessibility of reporting outputs and confidence in outcomes are critical. While there is consistently high confidence in the researchers, confidence in outputs and the potential for resulting impact seem to be variable within and across Challenges

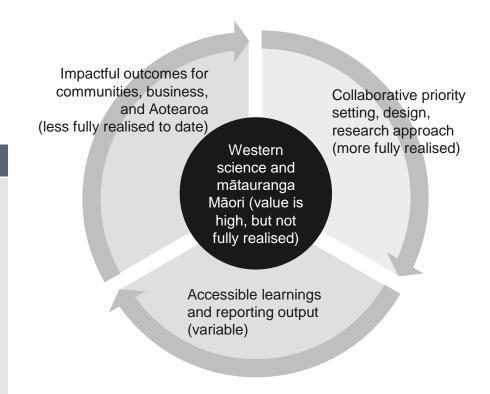
Stakeholders consider accessible learnings as a key Challenge output. Accessible means there is a strong awareness of what is available, and it is easy to find and understand (not technical or academic). Stakeholders hold variable views about how accessible the outputs are.

There is also comment about openness of data and who 'owns' this data.

Importantly, stakeholders believe the outputs need to have <u>direct pathways</u> to application, and potential for impactful outcomes. This has become increasingly a priority for stakeholders and is less fully realised.

Reporting and outcomes are variable within and across Challenges, for example:

- Stakeholders may still be waiting for reporting outputs.
- Some outcomes are not expected to be seen for several years, while others have shorter timeframes.
- Stakeholders who have been more integral in priority setting and design tend to have higher confidence in the implementation of the research.
- The higher stakeholders' confidence in Western science and mātauranga Māori integration throughout the process, the higher their confidence is in the potential for meaningful impact.

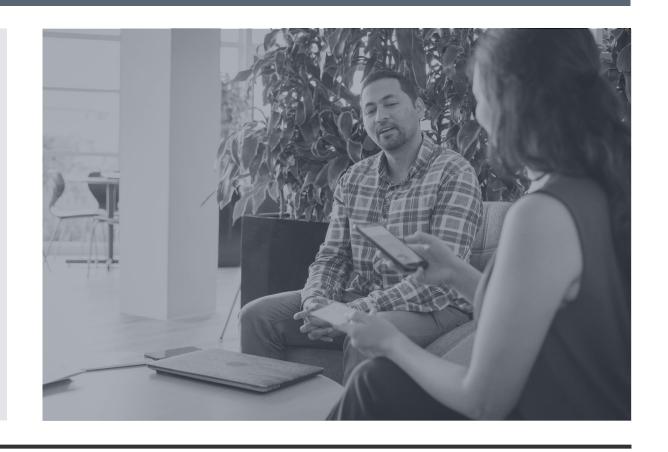




The key question stakeholders have is how progress will be built on and sustained

Not all stakeholders are aware the Challenge model is coming to an end. Those who are aware advocate that whatever funding model comes next (for research and implementation) must build on the:

- work, learnings, and knowledge to date from researchers', stakeholders', and end users' feedback, including looking at the funding/application criteria, systems and processes, priorities, research design, research outcomes, and implementation
- good will, trust, and effort that has been put into relationships, networks, and mahi
- progress in research approaches, especially Kaupapa Māori
- capacity and capability building of researchers and communities
- implementation and meaningful impacts at local levels and also nationally
- accessible sharing of learnings
- app/tool/technology development
- Te ao Māori and mātauranga Māori/Western science integration
- ecosystem understanding within and across Challenges.





Stakeholders believe there is potential to maximise the research resources for regional and national scale up, perhaps less so internationally

The research priorities, issues, and opportunities are considered highly relevant across all of Aotearoa. Stakeholders want to maximise and streamline the research resources and opportunities, and avoid duplication.

Stakeholders think it's unlikely there will be a one size fits all/template approach to national scale up.

Rather, most stakeholders anticipate relevant learnings and knowledge will be accessible and shared. Then pathways to implementation can be adapted to other areas of the country and communities. This will respond to what is unique environmentally, socially, economically, and culturally for each place and community.

Stakeholders comment it is likely that mātauranga Māori and Kaupapa Māori research approaches have some applicable learnings for other countries who have strong partnerships with their indigenous populations, but in other ways Aotearoa is seen as quite unique.

Stakeholders anticipate that researchers will continue to collaborate nationally and internationally with colleagues.



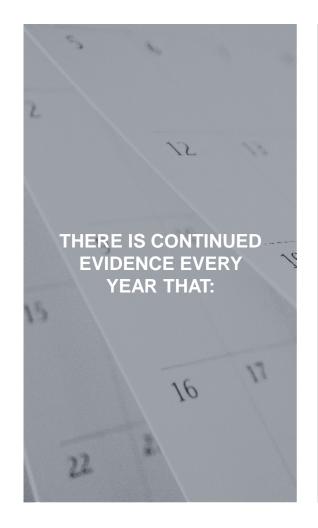






SECTION 8 COMPARISONS OVER THE YEARS

Consistently, over the years, a key outcome (on the whole) of the Challenges is the excellent, mutually beneficial working relationships that have been developed and maintained. Māori involvement, te ao Māori, and mātauranga Māori continues to be valued and is increasingly centralised



- Relationships are based on respect and exchange of skills, knowledge, expertise, and experience.
- Leadership team and researchers (especially Māori and Pasifika) are held in very high regard.
- Stakeholders (on the whole) are very enthusiastic about the Challenge purpose and their involvement.
- Researchers have increasingly engaged well with stakeholders, communities, and end users.
- Te ao Māori and mātauranga Māori is valued and is becoming more central to the Challenges' Kaupapa.
- Priorities and outcomes are now driven more collaboratively with stakeholders, rather than solely researchers' academic interests.
- Outcomes increasingly have a focus on real world impacts and are more accessible (less academic).

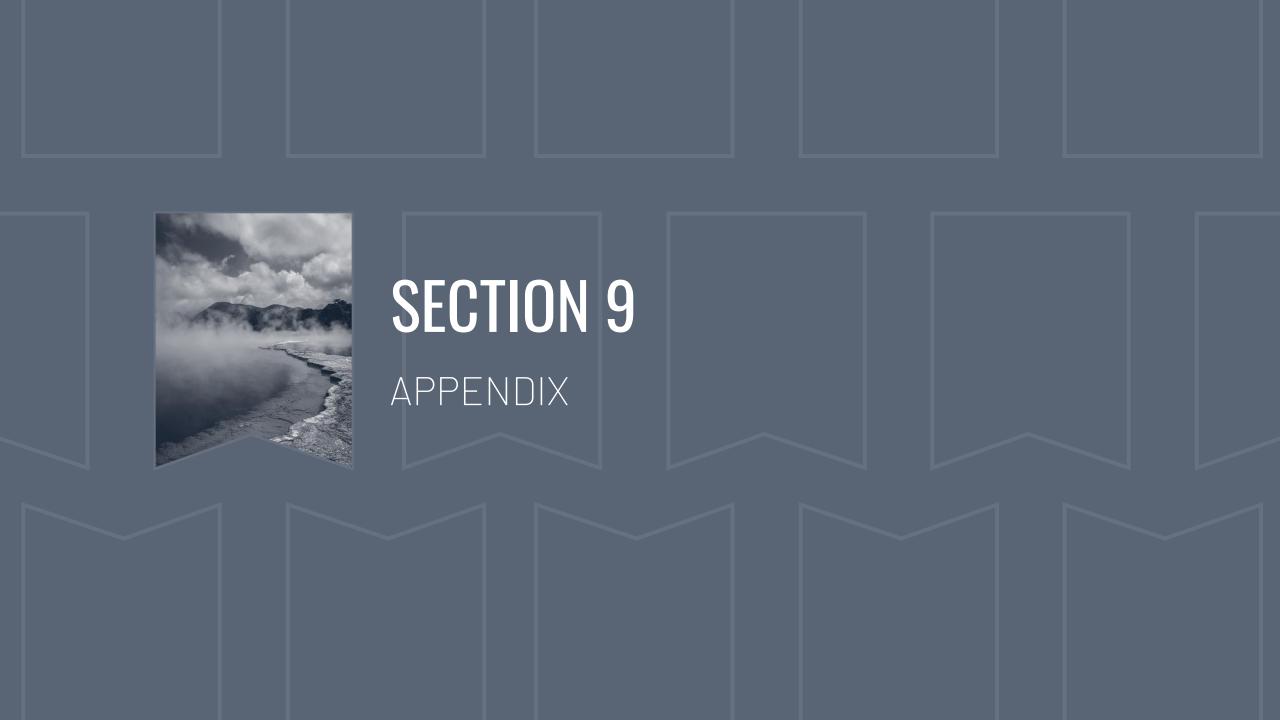


There is consistent critique expressed in 2018, 2020 and 2022. By and large the Challenges have responded well to key feedback since 2018, and there is evidence of innovation and progress. However, there is continued work, robust discussions, and focus required on key areas.



- Communication and discussion of priorities, issues, and opportunities so there is clarity, transparency, and a shared understanding.
- Mātauranga Māori 'integration' and equality with Western science.
- Resourcing, building and sustaining long term partnership relationships with iwi, hapū, marae, Māori organisations, and individuals, from design through to implementation.
- Building capacity and capability of Māori and Pasifika researchers.
- Kaupapa Māori research for Māori, by Māori design and outcomes.
- Funding criteria and ongoing funding sustainability.
- Action plans and implementation (particularly urgent, given the stage of the Challenges).
- Synthesis and ecosystems within Challenges and across Challenges (particularly urgent, given the stage of the Challenges, and the lack of face-to-face discussion and conferences over the last two years of COVID restrictions).
- Learnings that are not only academically robust, but are timely, clear, accessible, applicable, and directly contribute to real world, on the ground impacts. These need to be accessible by both stakeholders and end users.





A QUALITATIVE RESEARCH APPROACH:

We conducted 104 in-depth interviews with stakeholders from all 11 Challenges.

RECRUITMENT

- Each NSC identified at least 15 stakeholders to establish a pool of potential participants.
- From these, MBIE selected at least 15 stakeholders per Challenge, and invited them to participate
 in the research. MBIE sent these stakeholders an initial notification (via email) to introduce the
 research and encourage participation.
- After initial contact from MBIE, Kantar Public (formerly Colmar Brunton) conducted phone and email recruitment to invite stakeholders to undertake a face-to-face or phone interview.
- Once the initial appointment was made, Kantar Public (formerly Colmar Brunton) followed up with an email confirmation that contained project information on the research and details of the research team.
- Stakeholder availability and participation for some Challenges was adversely affected by COVID-19.
- Replacements for stakeholders unable to take part in the research were identified by MBIE from the initial pool of potential participants.

FIELDWORK

- The topic guide for the interviews was designed in collaboration with MBIE and focused primarily on the key research objectives identified.
- Before the start of each interview, Kantar Public (formerly Colmar Brunton) researchers
 obtained consent from stakeholders to record the interview. Kantar Public sought permission to
 use stakeholders' quotes in the reporting. Where relevant, Kantar Public provided stakeholders
 with the opportunity to review and approve their quotes before inclusion in the research.

NATIONAL SCIENCE CHALLENGE	STAKEHOLDERS INTERVIEWED
A Better Start	9
Ageing Well	8
Building Better Homes, Towns And Cities	10
Healthier Lives	10
High-Value Nutrition	10
New Zealand's Biological Heritage	10
Our Land And Water	10
Resilience To Nature's Challenges	9
Science For Technological Innovation	9
Sustainable Seas	10
The Deep South	9
TOTAL	104

All 104 interviews were conducted over Zoom, Teams or on the phone. Each lasted up to one hour. The interviews took place between March and May 2022.







IMPORTANT INFORMATION

RESEARCH ASSOCIATION NZ CODE OF PRACTICE



Kantar Public practitioners are members of the Research Association NZ and are obliged to comply with the Research Association NZ Code of Practice. A copy of the Code is available from the Executive Secretary or the Complaints Officer of the Society.

Confidentiality

Reports and other records relevant to a Market Research project and provided by the Researcher shall normally be for use solely by the Client and the Client's consultants or advisers.

Research Information

Article 25 of the Research Association NZ Code states:

- a. The research technique and methods used in a Marketing Research project do not become the property of the Client, who has no exclusive right to their use.
- b. Marketing research proposals, discussion papers and quotations, unless these have been paid for by the client, remain the property of the Researcher.
- c. They must not be disclosed by the Client to any third party, other than to a consultant working for a Client on that project. In particular, they must not be used by the Client to influence proposals or cost quotations from other researchers.

Publication of a Research Project

Article 31 of the Research Association NZ Code states:

Where a client publishes any of the findings of a research project the client has a responsibility to ensure these are not misleading. The Researcher must be consulted and agree in advance to the form and content for publication. Where this does not happen the Researcher is entitled to:

- a. Refuse permission for their name to be quoted in connection with the published findings
- b. Publish the appropriate details of the project
- c. Correct any misleading aspects of the published presentation of the findings

Electronic Copies

Electronic copies of reports, presentations, proposals and other documents must not be altered or amended if that document is still identified as a Kantar Public (formerly Colmar Brunton) document. The authorised original of all electronic copies and hard copies derived from these are to be retained by Kantar Public (formerly Colmar Brunton).

Kantar Public New Zealand is certified to International Standard ISO 20252 (2012). This project will be/has been completed in compliance with this International Standard.

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