

**From:** no-reply@mbie.govt.nz  
**To:** [Research, Science and Innovation Strategy Secretariat](#)  
**Subject:** Draft Research, Science and Innovation Strategy submission  
**Date:** Friday, 8 November 2019 5:19:02 p.m.  
**Attachments:** [Online-submission-form-uploadsdraft-research-science-and-innovation-strategy-submissionsubmission-form-research-science-and-innovation-strategy-JL.docx](#)

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Submission on Draft Research, Science and Innovation Strategy received:

**Are you making your submission as an individual, or on behalf of an organisation?**

Individual

**Name**

Joanne Looyen

**Name of organisation or institutional affiliation**

MBIE

**Role within organisation**

Manager Service Design and Reporting

**Email address (in case we would like to follow up with you further about your submission)**

joanne.looyen@mbie.govt.nz

**Which of the below areas do you feel represents your perspective as a submitter? (Please select all that apply)**

Public sector

**If you selected other, please specify here:**

**Gender**

Female

**Ethnicity**

NZ European

**Name of organisation on whose behalf you are submitting, if different to the organisation named above**

**In which sector does your organisation operate: (Please select all that apply)**

**If you selected other, please specify here:**

**How large is your organisation (in number of full-time-equivalent employees)?**

**Please indicate if you would like some or all of the information you provide in your submission kept in confidence, and if so which information.**

no

**Please upload your submission document here**

submission-form-research-science-and-innovation-strategy-JL.docx - [Download File](#)



# Research, Science and Innovation Strategy

## Submission form

The Government is developing a Research, Science and Innovation (RSI) Strategy to set out our vision for RSI in New Zealand and its role in delivering a productive, sustainable, and inclusive future.

We are keen to hear the views of New Zealanders on the draft Strategy so that we can get a better understanding of what our country needs from RSI. We also are looking for feedback on how we can take action to ensure New Zealand's RSI system is optimised for success. These views will inform the direction of Government investment in RSI and the research and innovation areas for us to focus on as a country, as well as help us understand the challenges we need to overcome.

We encourage anyone with an interest to make a written submission.

## How to have a say

We have included a number of questions in the draft RSI Strategy document to highlight issues on which we would like further input. We encourage you to use these questions as a guide when submitting your feedback.

This document provides a template for you to provide your answers. Please upload the completed document using our [online submission page](#).

**You do not have to fill out every section – we welcome submissions on some or all of the questions.**

The closing date for submissions is 10 November 2019.

After the consultation period finishes, we will analyse the submissions received and incorporate the feedback in the final version of the strategy.

## Confidentiality

**Please note:** All information you provide to MBIE in your submission could be subject to release under the Official Information Act. This includes personal details such as your name or email address, as well as your responses to the questions. MBIE generally releases the information it holds from consultation when requested, and will sometimes publish it by making it available on the MBIE website.

If you do not want some or all the information you provide as part of this consultation to be made public, please let us know when you upload your submission. This does not guarantee that we will not release this information as we may be required to by law. It does mean that we will contact you if we are considering releasing information that you have asked that we keep in confidence, and we will take your reasons for seeking confidentiality into account when making a decision on whether to release it.

If you do not specify that you would prefer that information you provide is kept in confidence, your submission will be made public. While we will do our best to let you know that we plan to publish your submission before we do so, we cannot guarantee that we will be able to do this.

## Contribution of Research, Science and Innovation

This strategy is about New Zealand's Research, Science and Innovation (RSI) at a high-level. Its aim is to identify challenges and opportunities that will have the broadest impact on our research and innovation activities. For this reason, it mentions few specific areas or sectors of research and innovation. For this draft version of the Strategy, we are keen to hear from researchers, innovators, businesses, and providers of public services on what the RSI system could be doing to accelerate progress on Government's priorities.

**Question 1:** Where can the RSI system make the greatest contribution towards the transition to a clean, green, carbon-neutral New Zealand?

**Question 2:** Where else do you see it making a major contribution?

**Question 3:** What else could the RSI system be doing to accelerate the progress towards the Government's priorities\*?

\* see list of the Government's twelve priorities included in Part 1 of the draft Strategy.

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

Typically we have taken a broad brush to get the best ideas across a wide range of research endeavours. Given the passing of the carbon neutral bill by all parties voting for it except one we can assume that the transition to a clean, green, carbon-neutral New Zealand is for the long term. The strategy has to pass the test for future governments as well, so the zero carbon bill will help that. Do we have the right funding mechanisms to ensure that at least a proportion of government funding is set aside for a clean, green, carbon-neutral New Zealand. This might mean we have to make sure we have the pipeline of scientists and infrastructure to enable the research.

## Researching and innovating towards the frontier

- Question 4:** Do you agree that the RSI Strategy should be focused on innovation at the “frontier” (creating new knowledge) rather than behind the frontier (using existing knowledge to improve the ways we do things)?
- Question 5:** In which research and innovation areas does New Zealand have an ability to solve problems that nobody else in the world has solved? Why?
- Question 6:** In which areas does New Zealand have a unique opportunity to become a world leader? Why?
- Question 7:** What do you consider to be the unique opportunities or advantages available to the RSI system in New Zealand?
- Question 8:** What RSI challenges are unique to New Zealand, that New Zealand is the only country likely to address?
- Question 9:** What are the challenges of innovating in the public sector? How do they differ from those in the private sector?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

My starting point is the vision “By 2027, New Zealand will be a global innovation hub, a world-class generator of new ideas for a productive, sustainable and inclusive future.” I think this is a stretch that we will be a global hub by 2027 – in less than 8 years is this achievable? My knowledge in this space is probably quite limited but I think we have to consider where the capital comes from to support to enable a global innovation hub. We need creative people with ideas working alongside STEM graduates, design thinkers and entrepreneurs. The prospect is exciting. Many innovation hubs are in exciting locations so architecture plays a role. If the Auckland port was moved in a large part to Whangarei I can imagine an amazing space to an innovation hub to an awe inspiring physical location that is Auckland harbour.

I saw this definition of an innovation hub “At its core essence, an innovation hub is an aggregation of different individuals and organisations that interact and collaborate to surface & take to market new ideas that solve social and commercial challenges” which I think can be achieved but when I think how long it has taken some of the National Science Challenges to start delivering I think we will need some major shifts to get to the 2027 goal.

I agree we need to be ambitious and I think the second part of the vision is what we should be focused on – we can be and in some areas we probably are a world-class generator of new ideas. There is a good alignment between the clean, green, carbon-neutral New Zealand and just transitions work that will lead us to a productive, sustainable and inclusive future.

At its core essence, an innovation hub is an aggregation of different individuals and organisations that interact and collaborate to surface & take to market new ideas that solve social and commercial challenges.

One area I think we have a unique opportunity in the innovation area is our world leading

indigenous people. Around the world NZ Maori show innovation leadership in many areas. Just traveling across the US I once listened to an article on Native American economic development and using NZ Maori as an example they should follow. The Native American tribes already have connections and were wanting to build on this.

Indigenous innovation takes a positive and non-deficit approach to solving often intractable problems for their people that have flow effects to wider society. They look long term and learn from the past. Indigenous knowledge (mātauranga) is growing in importance in research and we need to preserve the mātauranga that exists and build our understanding and use of mātauranga – there is a need to ensure that we understand what excellence in science looks like for mātauranga.

Innovating in the public sector – this is an interesting question. With innovation has to come the acceptance of failure. Public sector organisations need to adapt and be flexible. But we could make room for people to put in their ideas and build on them. We need to have structures in place that enable innovation – to me a key barrier is building in time into people’s work day or week. This work has to be seen as valuable and a core part of our work. In the core public sector it is hard to flex to enable innovative ideas to work through to fruition.

## Our key challenge – Connectivity

**Question 10:** Do you agree that a key challenge for the RSI system is enabling stronger connections? Why or why not?

Please type your submission below.

I think connections are very important. I believe it is a key role of government to be a connector. As a steward of the science system we can see all aspects of the system and can help broker in areas that might need a bit of a nudge or more direction to connect. Connection can bring about the best teams and can help achieve the vision of the strategy.

Connections must include people that help us think differently – e.g. the creative thinkers from the arts and design. The education system needs ensure that there are people educators across a range of subjects to ensure that people's creativity is not blocked by the education system.

How do learn from the National Science Challenges and where do we go next with their research?

## Guiding Policy – Excellence

- Question 11:** Do you agree with the definition of excellence presented here as the best thing possible in its context? Why or why not?
- Question 12:** How can we achieve diversity within our research workforce? What are the current barriers preventing a diverse range of talent from thriving in the RSI system?
- Question 13:** Do you agree that excellence must be seen in a global context, and draw from the best technology, people, and ideas internationally? Why or why not?
- Question 14:** Do you agree that excellence is strengthened by stronger connections?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

I have already mentioned that we need to know what excellence looks like for matauranga. We need to reflect, embrace and nurture diversity. This is more than just words it is about action. Is there a link to the diversity policy?

The link to indigenous cultures world wide should be a key connector and would strengthen excellence and innovation. The best ideas can come from anyone and anywhere.

I agree we need to build closer partnership to Maori, but I think the approach should be we need to it is a must. Coming out of Te Tiriti we must work in partnership with Maori. What does this then look like? It is more than Vision Matauranga. It is entwining matauranga and working with Maori within the whole strategy. One of the articulations of this is the Vision Matauranga work. Diversity must take a partnership approach as well. Instead of resource and protect Matauranga Maori, I would like to see this expanded to respect, protect, resource and utilise Matauranga Maori.

I think words like should must disappear in the strategy when talking about Maori – words like must and will should be used instead e.g. Maori must be able to participate.

There seem to be two levels in the strategy hierarchy. The partnership with Maori upfront and then the co-design comes down to how the partnership plays out in how we articulate the actions to achieve the strategy. This would encompass the Te Arawhiti approach.

## Guiding Policy – Impact

Question 15: How can we improve the way we measure the impact of research?

Please type your submission below.

Transparency in the measurement of impact is important and if we want to measure impact we need to build it into our funding mechanisms. We don't even fund evaluation at the moment. We need to evaluate something....

PROACTIVELY RELEASED



## Guiding Policy – Connections

**Question 16:** Where do you think weak connections currently exist, and what are the barriers to connections at present?

**Question 17:** What actions will stimulate more connectivity between parts of the RSI system?

**Question 18:** How could we improve connections between people within the RSI system and people outside it, including users of innovation, and international experts, business communities, and markets?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

PROACTIVELY RELEASED

## Actions – Making New Zealand a Magnet for Talent

**Question 19:** How can we better nurture and grow emerging researchers within New Zealand and offer stable career pathways to retain young talent in New Zealand?

**Question 20:** How could we attract people with unique skills and experience from overseas to New Zealand?

**Question 21:** What changes could be made to support career stability for researchers in New Zealand? What would be the advantages and disadvantages of these approaches?

**Question 22:** Do you agree with the initiatives proposed in the Strategy to support and attract talented researchers and innovators? Are any changes needed for these initiatives to be successful? Are there any other initiatives needed to achieve these objectives?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

While we want to bring more talent to NZ we need to give NZ scientists opportunities abroad and then attract them back. Once again indigenous people will be supported but their communities to go and learn all they can and bring it back for their people. We should support this through grants. Why not set up an indigenous network of scientists and researchers and creative thinkers.

Stability of funding is crucial. Where is the pipeline of research? I have a successful smart idea that has come to foetation, where do I go next. Where does the VMCF capability funding take me – we need to track and measure what happens to the research,

## Actions – Connecting Research and Innovation

- Question 23:** What elements will initiatives to strengthen connections between participants in the RSI system need to be successful?
- Question 24:** What elements will initiatives to strengthen connections between participants in the RSI system and users of innovation need to be successful?
- Question 25:** What elements will initiatives to strengthen connections between participants in the RSI system and international experts, business communities, and markets need to be successful?
- Question 26:** Are there any themes, in addition to those proposed in the Strategy (research commercialisation and international connections), that we need to take into consideration?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

## Actions – Start-up

**Question 27:** How can we better support the growth of start-ups?

**Question 28:** Do the initiatives proposed in the draft Strategy to support growth of start-ups need to be changed? Are there any other initiatives needed to support start-ups?

**Question 29:** What additional barriers, including regulatory barriers, exist that prevent start-ups and other businesses from conducting research and innovation?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

We need to encourage venture capital. Do we have kiwi saver funds that support start-ups and new ventures and help them grow?

## Actions – Innovating for the public good

**Question 30:** How can we better support innovation for the public good?

**Question 31:** What public-good opportunities should our initiatives in this area be focused on?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

## Actions – Scale up

**Question 32:** What is the best way to build scale in focused areas?

**Question 33:** Do the initiatives proposed in the Strategy to build scale in focused areas need to be changed? Are there any other initiatives needed to build scale?

**Note:** see following page to comment on possible areas of focus

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

PROACTIVELY RELEASED

## Scale up – Choosing our areas of focus

For this draft iteration of the strategy, **we seek input on the selection of possible areas of focus**. We will consider establishing around five focus areas, but, depending on the eventual selection, are likely to introduce them over time, rather than immediately. In addition to the criteria set out in the Strategy document, we invite stakeholders to consider the following factors in their suggestions –

- The ambition of this strategy to focus efforts in the RSI portfolio at the global frontier of knowledge and innovation.
- Ways in which the RSI system can accelerate progress on the government’s goals.
- The focus areas already determined by *From the Knowledge Wave to the Digital Age*.
- Work already underway where we are already seeking to build depth and scale in the RSI system.

The following areas could be a useful start, and are highlighted in *From the Knowledge Wave to the Digital Age*:

- **Aerospace**, including both autonomous vehicles and our growing space industry.
- **Renewable energy**, building on recent investments in the Advanced Energy Technology Platform.
- **Health technologies** to improve delivery of health services and explore opportunities in digital data-driven social and health research.

**We invite comment on these suggestions and welcome input on other possible focus areas.**

**Please type your submission below.**

## Actions – Towards an Extended Vision Mātauranga

This section of the draft Strategy signals our intention to consult and collaborate further with Māori stakeholders to co-design our responses and initiatives. From that perspective, we consider the signals in the draft Strategy to be a start, rather than a set of final decisions. Nonetheless, we are keen on initial feedback in the following areas.

**Question 34:** Does our suggested approach to extending Vision Mātauranga focus in the right five areas? If not, where should it focus?

**Question 35:** How can we ensure the RSI system is open to the best Māori thinkers and researchers?

**Question 36:** How can we ensure that Māori knowledge, culture, and worldviews are integrated throughout our RSI system?

**Question 37:** How can we strengthen connections between the RSI system and Māori businesses and enterprises?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

Partnership at the highest level – resource sharing and role in decision making

Co-design at the lower levels

We could have a matauranga Maori SSIF platform as part of our infrastructure

We have been strengthening our VM assessment. We must assume all funding is relevant to Maori and ask why not if there is a reason. Education and knowledge building across the science system is critical – putting in funding to strengthen those connections and build individual and institutional knowledge to build long term relationships



## Actions – Building Firm Foundations

**Question 38:** Do the current structures, funding, and policies encourage public research organisations to form a coordinated, dynamic network of research across the horizons of research and innovation? What changes might be made?

**Question 39:** Is the CRI operating model appropriately designed to support dynamic, connected institutions and leading edge research? What changes might be made?

**Question 40:** What additional research and innovation infrastructure is necessary to achieve the goals of this Strategy? What opportunities are there to share infrastructure across institutions or with international partners?

**Question 41:** What elements will initiatives in this area need to be successful?

**Please type your submission below. If applicable, please indicate the question(s) to which you are responding.**

PROACTIVELY RELEASED

## Actions – General

**Question 42:** How should the Government prioritise the areas of action, and the initiatives proposed under each area?

Please type your submission below.

Please don't use images of women in high heels

Good luck and you know where I am if something doesn't make sense or needs expanding...

PROACTIVELY RELEASED

## General

**Question 43:** Do you have any other comments on the Strategy which have not yet been addressed?

Please type your submission below.

A small thing but it would be good if using pictures of women that they are not wearing high heels.

I am not a big fan of the vision; I think this is a huge step to say by 2027. I don't know how we can be a global innovation hub – the barriers of distance, size of the science system plus other barriers would seem to be huge things to overcome. This is more an aspirational goal. However I think the strategy and especially the addition of connecting will help us towards the world-class generator of new ideas....