

Submission to Ministry of Business, Innovation, and Employment

Te Ara Paerangi Future Pathways Green Paper 2021

1st March 2022

- 1. Seafood New Zealand Limited welcomes the opportunity to submit on Te Ara Paerangi Future Pathways Green Paper. As an industry that has utilized public science research, we know the importance that a well-functioning science and innovation pipeline can have on the economy and on the marine ecosystem.
- Seafood New Zealand is a professional organisation delivering industry-good services for the wider benefit of the seafood industry, an industry which had an annual export earnings of \$1.87 billion in 2021. Seafood New Zealand plays a leading role in developing and presenting the seafood industry's response on legislative and regulatory proposals affecting the industry.

General Comments:

- 3. The New Zealand seafood industry believes that the research priority should also heavily involve the various industries to deepen the connections between private sector and the research institutes.
- 4. We also believe that there needs to be a balance between theoretical and applied research to encourage the growth of New Zealand's economy, increase productivity, solve complex challenges, and ensure that New Zealand can advance world-leading research and innovation.

Specific comments on the proposals:

Question 1: What principles could be used to determine the scope and focus of national research Priorities?

- We believe that areas of research that have been specifically identified as of importance, such as those included in the Chief Science Advisor's The Future of Commercial Fishing in Aotearoa, New Zealand report or Minister Parker's announcements that impact on the fishing industry, MPI's Fit for a Better World strategy is a good start.
- 2. Further engagement with industry, especially all areas of primary industry, will help refine the scope and focus of national research priorities.

Question 2A: What principles should guide a national research Priority-setting process?

- 3. One point we would like to make is the difference between applied and theoretical research. Current science research that is being funded, like the National Science Challenge (NSC), skews towards heavily theoretical research. While the topics covered by the NSC are interesting, we also need research focused on solving the issues that seafood industry are currently facing today or will be facing in the future. We believe that there needs to be a balance between theoretical and applied research.
- 4. Another principle is research that can lift productivity levels in New Zealand. This is an area that the Commerce Commission has identified as an area of interest. In the seafood industry, this type of research can be a way for us to cope with the workforce issues that we have been facing and likely continue to face in the future.
- 5. Another guiding principle could be to ensure that the research conducted enhances New Zealand's environmental sustainability.

Question 3: How should the strategy for each research Priority be set and how do we operationalise and implement them?

- 6. We believe that the implementation of largely independent, industry/research led boards can help to operationalise the strategy for each research Priority. This would be similar to Canada's Innovation Supercluster Initiative, created by Innovation, Science and Economic Development Canada, with each supercluster being industry-led, in order to be as flexible and responsive to industry and market demands.
- 7. Having a largely independent, industry/research led board would mean that there will be a range of key people who understand each specific area of research from both a science and a commercialisation perspective to ensure that the research is achievable and economically viable. The board should not be comprised of only or mostly government officials or politicians to ensure that the research carried out remains autonomous and orientated towards the needs of the sectors represented in each Priority. The board can then report back to MBIE on a regular basis.
- 8. Having the ability to pull back funding from programmes or projects that default on KPIs or contract obligations is also necessary.
- 9. More importantly, the way risk is perceived needs to be different. Within an innovation and research ecosystem, there is always the risk that a project is not viable but that does not necessarily indicate the failure of that the ecosystem.

Question 7: How should we decide what constitutes a core function and how do we fund them?

- As stated earlier, the decision should be made after consulting with levied industries about whether the core monitoring services are still fit for purpose, providing value for money, and providing impact.
- 11. The government could, at the very least, match industry funding to ensure that there is industry buy-in on the research being conducted but also because any research being conducted would ultimately also be for the public good. Furthermore, by matching industry funding, it reduces the risks posed to companies on the Research & Development (R&D) side of things and might also increase the scale of innovation.

Question 8: Do you think a base grant funding model will improve stability and resilience for research organisations, and how should we go about designing and implementing such a funding model?

- 12. We agree with the base grant funding model as it enables research organisations to get on with their research instead of spending resources to ensure that the overhead costs are met. From there, an additional pool of resources can be allocated depending on the projects undertaken.
- 13. This model must be designed with long timeframe in mind, and with enough scale in order for them to produce effective research. The definition of key deliverables to incentivise performance and excellence could help keep the model on track.
- 14. Another point to make is that each sector might need different timelines for development, which increases the need for industry leadership.

Question 9: How do we design collaborative, adaptive and agile research institutions that will serve current and future needs?

- 15. We believe that it is important to ensure that research organisations avoid being threatened by other research organisations 'poaching' clients or moving into research areas that are traditionally associated with a particular organisation. It is good for New Zealand if there are multiple options in terms of who can do particular research and it limits complacency.
- 16. Deepening industry engagement would allow research institutions to increase responsiveness to current and future needs. Encouraging research organisations to have relative autonomy when engaging with industry and with other research organisations to create and take advantage of opportunities that are valuable for New Zealand.
- 17. Incorporate simple Intellectual Property (IP) terms across the research organisations to help support companies with their R&D needs and the commercialisation of research.
- 18. Provide the ability for research organisations to conduct joint research with industry in order to draw in companies and maximise everyone's R&D funding. This will help to get research commercialised quickly and provides opportunities for future engagement.

Question 10: How can institutions be designed to better support capability, skills and workforce development?

- 19. Creating a performance culture that incentivises excellent work and productive outcomes
- 20. Another can be to provide opportunities for researchers to engage with industry to enable them to understand industry drivers and to provide professional development opportunities for the researchers over their science career.
- 21. Providing secondment opportunities for industry to work within the research organisations might prove to be fruitful as this will deepen industry connections and bring about new perspectives on the current and future research projects.

Question 11: How should we make decisions on large property and capital investments under a more coordinated approach?

22. Please see point 9, Question 3 on research being industry/research-led to enable better flexibility. Co-location and capital investments would work better if there is industry buyin.

Question 13A: How do we better support knowledge exchange and impact generation?

23. There needs to be better client engagement with industry within the research pipeline. Streamlining the application and funding process would help as well to avoid duplicating effort. Furthermore, the earlier points have also suggested options such as secondments, measurable deliverables, and simple IP terms.

Question 13B: What should be the role of research institutions in transferring knowledge into operational environments and technologies?

24. Research institutions are crucial in this, but only if the research institutions have a genuine understanding of industry needs. Without it, they risk frustrating industry. They need to understand industry needs in order to produce knowledge that is transferrable. This should ideally create a knowledge transfer loop where companies return for more interactions and technological transfer opportunities.

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