Hi Future Pathways Team

My submission is based on 7 years at Callaghan Innovation; approximately 20 years in private sector senior roles in Innovation/R&D before that; and working closely with MBIE on a number of projects including the Callaghan Innovation lead on the Agritech ITP and a MBIE Endeavour fund impact reviewer.

- NZ R&D spend alignment with global export opportunities. A lot of research is focused on NZ problems and/or is not looking at the opportunity to leverage global commercial returns. A good example is the large investment in Climate Change R&D, especially methane emissions which is focused on solving NZ Farmer problems rather than also looking at global opportunity for returns on IP from this research.
- Commercial expertise for projects with international objectives Commercial experts can be
 undervalued or not sort for projects that have an international commercial objective. Project
 teams may consist of a dozen scientists vs. only one (internal research org) Business
 Development resource who can not possibly understand the complexity of these global
 markets the project says it is targeting.
- Alignment with NZ industry. Looking at the Endeavour fund as an example 'Science
 Excellence' is elevated to the detriment of 'Commercial Impact'. The high hurdle in 'Science
 Excellence' results in many High Impact projects not being supported. Similarly 'lip service'
 can be paid to commercial skill sets within the project team vs. technical skill sets. For
 example 'an industry partner' can be sort (to help get funding) after the R&D project has
 been designed rather than co-designing with industry from the beginning.
- Collaboration within the R&D funding system. Although some informal connections exist, there is no formal collaboration or information sharing between MPI, MBIE, Callaghan Innovation and other funders even though we are often funding (and/or supporting in other ways) the same research organizations and/or companies through their R&D and commercialization journey. This creates silos, replication and means government doesn't provide an integrated service to maximize returns from it's R&D investment
- R&D system engagement with Innovators, Investors and Entrepreneurs The NZ R&D system
 will typically navigate towards established incumbents within industry who generally can
 provide more co-funding. However in some cases these incumbents don't have
 entrepreneurial or innovation skill sets; and/or wish to keep IP to themselves. If the R&D
 system could increase engagement with Innovators, Investors and Entrepreneurs in the form
 of NZ Technology companies we are likely to see more commercialisation success especially
 in global markets

Happy to explain or discuss these furthe	r as required.
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Cheers
Simon