Productivity Commission
Level 8, Two Melbourne Quarter
697 Collins Street Docklands
Vic 3008, Australia

22 March 2022

Dear Commissioners

gemaker's submission to the Productivity Commission's
5-yearly Inquiry into Australia's Productivity Performance

Introduction
The gemaker team welcomes the opportunity to examine key drivers of national productivity and submit our suggestions for consideration in the Commission's 5-yearly report to the Treasurer.

gemaker Pty Ltd provides expert advice, services and training in research commercialisation and technology transfer. Our senior team members average more than 20 years' experience in this field.

Since 2011, we have helped 33 research organisations and 74 innovative businesses – ranging from start-ups to fast-growth SMEs to ASX-listed companies – to take new knowledge and technology to global markets. (Refer attached capability document).

We agree that Australia needs a more flexible and dynamic economy to respond effectively to domestic and international opportunities and challenges.

Positioning Australia at the forefront of emerging industries that will deliver sustainable productivity requires consistency in long-term government policy settings, promoting:

- **education that drives innovation**
- **collaborative R&D that delivers innovation**, and
- **growth of innovative SMEs into global suppliers.**

gemaker Pty Ltd | ABN 29 154 022 125
info@gemaker.com.au | gemaker.com.au
PO Box 742, Sutherland NSW 1499

Recommendations

1. Education that drives innovation

To become a robust powerhouse of productivity, Australia needs a more skilled, creative, and adaptable workforce. Training in STEM innovation and commercialisation must become core in primary, secondary, tertiary and vocational education – i.e. at every stage along the pipeline for future researchers and industry workers – to drive long-term productivity gains. Specifically, gemaker recommends long-term government support to:

i) introduce students – regularly, from early primary school onwards – to innovative, STEM role-models in diverse (technical and commercial) rewarding careers

ii) incorporate innovation examples into STEM-based subjects to link the course fundamentals with real-life impact

iii) integrate work experiences with innovative, STEM-based businesses into secondary education

iv) incorporate process-based innovation as part of vocational training

i) increase commercialisation training in undergraduate STEM courses

ii) create specialised post-graduate courses to build capacity for translating research outcomes (eg product development and manufacture) into commercial success; and

iii) fund and support direct industry engagement training to help both industry and researchers identify clear pathways for innovation translation. It is important this training be delivered by groups with both industry and research experience.

These recommendations will help build a medium to long-term understanding and appreciation of innovation as a driver for productivity at all levels of the workforce such that it becomes second nature for future researchers and industry workers to be consistently looking to identify and implement technology-based innovation and workplace improvements.

2. Collaborative R&D that delivers innovation

To boost productivity, Australia must increase effective collaboration between academic researchers and business people in solving industry challenges. Therefore, gemaker recommends long-term government support to:

i) extend the University Research Commercialisation Package to fund larger commercialisation teams in universities that will provide more consistent support for researchers in industry engagement and tech transfer

ii) fund a University-Researcher-in-Business / Business-Researcher-in-University program to promote collaboration in, and translation of, innovative research outcomes

iii) extend the Cooperative Research Centre – Project (CRC-P) program to sustain its success in enabling broader participation by SMEs in innovative R&D, building a pathway to their participation in the larger CRC programs, which boost productivity at national scale. The CRC programme has enjoyed continued success for almost 30 years as a facilitator of industry led collaboration in high productivity outcomes. It has led several Australian inventions being commercialised on a global scale in industries such health, mining and digital services

iv) continue the Industry Growth Fund program beyond 2023, to sustain its success in bringing stakeholders together to define roadmaps for prioritised and emerging industries, and encouraging collaboration in discovery and pre-competitive R&D for whole-industry advancement

v) conduct annual benchmarking of collaboration in innovation and productivity impacts, similar to Knowledge Commercialisation Australasia's SCOPR survey (https://techtransfer.org.au/metrics-data/) to understand trends early and develop timely, targeted policies

vi) commercialisation metrics should be normalised and compared year to year to allow for fair comparisons and identification of emerging trends

vii) efficiently map research organisations' capabilities relevant to each industry sector, to enable industry partners to more easily identify collaboration opportunities.

These recommendations aim to provide immediate to medium-term opportunities for businesses and researchers to work closely together in addressing challenges that business face with innovative research outcomes and in a way which maximises the transfer of productive knowledge between the sectors.

3. Growth of innovative SMEs into global suppliers

In terms of employment, most Australian industries are dominated by SMEs. Translation of innovative ideas into products and services involves significant risk for SMEs, which are usually focused on the immediate needs of generating sufficient revenue to maintain their existing workforce. Productivity policies must provide simple, accessible growth pathways for innovative SMEs to reach global markets and become successful Australian-based international businesses, so gemaker recommends long-term government support to:

i) consult regularly so SMEs can plan and implement innovative strategies in a suitable and stable policy environment

ii) include small grants (up to $50,000) in all funding programs for SMEs participate and to undertake critical market assessment and product planning, because recent policy for higher minimum grant amounts has discouraged SMEs that lack resources to complete complex applications or find matching funds

iii) clarify and make readily available deductions under the R&D Tax Incentive for data- and service-based businesses, which are key to emerging innovative industries

iv) expand the Business Research Innovation Initiative (BRII) to include more innovation challenges in a regular, rolling program, rather than *ad hoc* – which hinders business planning and therefore participation by resource-limited SMEs – and commit to being the important first customer for successful SMEs that meet challenge specifications

v) create more innovation hubs for early-stage participants in emerging industries (such as space, hydrogen, theranostics and quantum computing) so that cross-sector collaboration can deliver commercial outcomes sooner

vi) extend more rapidly the Consumer Data Right regime implemented for banking and energy – which has provided a strong basis for citizen trust – into other sectors to promote digital innovations that deliver similar productivity and user benefits.

We would relish the opportunity to expand on these recommendations and outline the context and background in further discussions with the Commission. We look forward to the Commission's final recommendations and a roadmap for implementation that can be pursued by the next government.

Sincerely
Natalie Chapman
Managing Director, gemaker Pty Ltd