Strategic Examination of Research and Development

Committee for Sydney submission

April 2025

Committee for Sydney

Committee for Sydney's submission on the Strategic Examination of Research and Development: April 2025

Introduction

The Committee for Sydney welcomes the Federal Government's Strategic Examination of Research and Development (SERD) in Australia. Research & Development (R&D) is and will continue to be a driving force for innovation and economic diversification across Australia and this review is timely at a point where global geopolitics, national and sub-national industry policies begin to bear fruit, global productivity levels are flatlining and where AI will redefine how R&D is undertaken.

Our submission structures its responses to three of the consultation questions outlined in the SERD, with specific areas of focus and accompanying recommendations. Not all questions have recommendations set against them.

Who we are

The Committee for Sydney is an urban policy think tank. We are a not-for-profit approved research institute. We are advocates for the whole of Sydney, focused on developing solutions to the most important problems we face. We are proud to have over 150 members that represent key business, academic and civic organisations across Sydney.

We advocate for policy and investment outcomes that shape the future of Greater Sydney. Our work has both catalysed and influenced the development of key city-shaping agendas led by the NSW Government, including but not limited to fast rail between Sydney and Newcastle, the State Disaster Mitigation Plan, transport-oriented development and low to mid-rise housing reforms, vibrancy reforms and innovation and industry policy.

The need to broaden from a focus on R&D to one on innovation

The SERD has a clear focus on R&D and recognises the importance of this in shaping the broader national innovation ecosystem. However, we consider that a focus on R&D alone, and not a more expansive examination into the innovation ecosystem within Australia is a missed opportunity for a more comprehensive review.

We recognise that the SERD responds to the Terms of Reference established by the Australian Government but strongly suggest that a future national R&D strategy has an expanded remit to review and make recommendations for Australia's innovation network, capacity and capabilities.

Australia tends to perform relatively well in terms of R&D (although, as the examination presents, there is still significant room for improvement). Where we fall short is in our ability to translate this into commercial opportunities. This requires a more systemic analysis of the capacities of both the private and public sectors to invest in the process of R&D translation, rather than R&D only in and of itself.

Recommendation: The Australian Government develops a more holistic innovation strategy to guide innovation creation and capacity building across institutional, private and public sectors, of which R&D forms a core part.

Notwithstanding this substantive limitation of the SERD, our submission reflects several observations that we believe are important in ensuring Australia remains a globally competitive innovation economy and directly relates to the R&D focus in the SERD.

Question 1. What should an integrated, sustainable, dynamic and impactful Australian R&D system look like?

Align national and state industry priorities with targeted R&D investment

The Australian Government has embarked on an ambitious industrial policy agenda through the Future Made in Australia policies, National Reconstruction Fund and a suite of other industry-specific policies including the Medical Research Future Fund. Combined, these commitments exceed $30 billion in funding and present a significant opportunity for Australia's R&D landscape.

The Committee for Sydney supports the SERD's explicit link between industries and policies of national importance and funding and programs for R&D that align with these objectives.

A key challenge that the Committee has identified in our own work is the lack of alignment between national and state industry policy priorities and funding streams. The current structure lacks a co-ordinating presence between federal and state/territory governments and between states and territories. This fragments our national industry and scientific efforts, creates excessive inter-state competition and, ultimately dilutes our national capacity to attract R&D and industry investment.

Recommendation: The Federal Government should work with State and Territory Governments to help inform their own industry priorities and ensure R&D funding opportunities help achieve both state and national objectives.

Expand place-based approaches to R&D funding

There is an increased understanding of the importance of metropolitan or regional innovation networks that create significant advantages in attracting talent and investment in key industries. Sydney's network of innovation districts is such an example, where the capacity for innovation is amplified beyond that of one district – or one business or institution – alone.

To nurture such innovation ecosystems, a place-based approach to R&D funding should be considered so that industry clusters and value-chain expansion can be intentionally planned for at a regional scale. An example of this is the SEQ Innovation Economy Fund established and co-funded by the QLD and Australian Governments.

To achieve this, the Federal Government should:

1. Identify key place-based clusters and districts of specific industries of globally comparative advantage.
2. Align their broader Industry Policy levers to invest in these locations – including through the Made in Australia and National Reconstruction Authority.
3. Develop mechanisms to integrate R&D incentives to align with investments and programs made in these places. This could be achieved in a number of ways, presented in order of increasing impact:
    a. Undertake promotion of the availability of R&D incentives in these locations/sectors to ensure they are accessing support that they are eligible for;
    b. Create a partnership agreement between the Department of Industry, Science and Resources, the Australian Taxation Office, the National Reconstruction Authority and Made in Australia teams to investigate opportunities to provide R&D incentives to recipients of support;
    c. Design additional incentives, or expanded eligibility for firms that match the identified Industry Policy locations and sectors.

Recommendation: R&D funding should take a place-based approach to understanding where nationally or internationally significant R&D and innovation clusters exist across Australia and, where aligned with national priorities, helps to direct R&D funding.

Question 5. What changes are needed to enhance the role of research institutions and businesses in Australia's R&D system?

It's important to reflect that the intention to boost industry participation and investment in R&D will not happen on its own. Businesses need to be incentivised to invest in innovation and R&D. Without these incentives, Australia risks not realising the aspirations held in industry policy ambitions laid out in a Future Made in Australia or other industry policy vehicles such as medica research.

While our comments pertain specifically to R&D incentives, the broadening of this examination to encapsulate innovation more fully would bring in opportunities to support tax credit measures such as production tax credits deployed as part of the U.S's industry policy frameworks under the Biden Administration.

Increase support for SMEs to access R&D funding and infrastructure

The SERD highlights the significant amount of R&D funding that comes from 'bottom-up funding' that includes deployment of R&D Tax Incentive (RDTI). The RDTI itself accounts for over $4 billion of Australia's $14 billion R&D funding pool.

Many SMEs, however, are not able to fully utilise this and where it is utilised, it is often claimed for business activities that were likely to have happened anyway. This makes it a relatively inefficient incentive mechanism.

At the very least, increasing the ability for SMEs and start-ups to access the RDTI is an important reform. Because it is recouped after the R&D activity has been undertaken, many smaller firms are not able access these funds to support their R&D potential because the RDTI does not provide up-front capital.

Recommendation: Pay RDTI claims quarterly (linked to BAS cycle) for projects that spend the majority of costs with Research Service Providers, or are being actively supported by RSP-affiliated startup programs.

Recommendation: Engage with State and Territory Government to finance RDTI claims in advance, secured by the RDTI refund amount, for projects that spend the majority of costs with state-based Research Service Providers, or are being actively supported by RSP-affiliated startup programs

An additional challenge for startups and SMEs is access to specialised facilities to conduct research. Once R&D leaves university or MRI facilities and before it is embedded in larger organisations, there is a significant gap in terms of access to the facilities needed to undertake R&D. Even larger or more established organisations may not be able to provide specific facilities or equipment. Increasing partnership opportunities between industry and universities is therefore essential to ensure that startups can focus on commercialisation opportunities while using specialised equipment.

Recommendation: Expand access to publicly funded research infrastructure and establish sector-specific incubators in high-growth sectors that align with national and/or state industry priorities.

Increase industry involvement in R&D – particularly in larger organisations

The SERD identifies that there is a continued decline in investment in R&D by large enterprises, presenting a significant missed opportunity to increase the undertaking of R&D in commercial settings. Given the issue of SME's often having limited funding and capacity to undertake R&D, this presents a challenge across sectors at a time when state and federal industry and innovation policy settings are calling for an increase in innovative activity to drive productivity and create new products and services.

Government can also influence firms by incentivising R&D and demonstration of innovative practices or methods through proactive procurement strategies, which reward companies that demonstrate innovative practices or alignment with R&D activities.

Recommendation: Deliver on the 2016 Ferris, Fraser and Finkel Review's recommendation to review the RDTI to more directly incentivise large enterprises to invest in R&D by rewarding industry collaboration with domestic research institutions. This can be of particular focus on areas of state and national priority areas.

Recommendation: Embed weighting criteria in public procurement review frameworks to explicitly reward firms that demonstrate the use of innovative processes or technologies, or which demonstrate R&D partnering opportunities as part of the project.

Increase R&D investment at pre-seed stage

The SERD identifies that there are number of funding streams for R&D at a national level. While these are fragmented and, as the report identifies, are lower than other comparable countries, Australia has managed to perform relatively well globally from an R&D perspective.

Where we fail is in the translation form R&D to commercialisation. The reasons are myriad, but one area that is clear is that funding to enable ideas to bridge the valley of death between university / MRI-led R&D and private capital is limited. The Committee recommends that R&D funding extend also to support ideas and start-ups to bridge this gap through pre-seed funding. Our 2024 Report 'Transforming Sydney's Economy' outlined several recommendations that align with this

Recommendation: Federal Government, along with state partners, establish a co-funded Priority Industries Investment Fund that supports capital investment by public or private organisations in projects that will enhance Australia's capabilities in priority industries. Investment fund would have clear mechanisms to recoup capital over the long term, with funding targeting pre-seed research and commercialisation activities for universities to bridge the gap between early-stage IP development and venture capital attraction.

Engage superannuation

The SERD identifies the potential scale of opportunity within the $4 Trillion superannuation sector, but notes that, to date, this has been limited. The risk profile adds complexities to drawing on superannuation as a significant form of investment for high-risk (from a returns perspective) R&D. However, at the very least, greater transparency in reporting by the Superannuation funds regarding their exposure to R&D funding would be valuable.

The Committee for Sydney addressed this issue in our Transforming Sydney's Economy report in 2024. In that report, we noted:

"*What is not clear in current* [superannuation] *reporting is how the spread of superannuation investment is distributed across their business maturation phase. Superannuation funds regularly report about their spread of investments in domestic and international listed shares, infrastructure and other asset classes. They do not regularly report against their spread of investments in businesses in start-up, early phase and more mature business phases, or where the businesses supported by the venture capital investments are domiciled*'."[1]

Recommendation: Superannuation funds should be required to report on spread of investments across business maturity stages, industry type and investment location to increase transparency and better align with strategic industry priorities. This would be in the same way they currently report on asset type allocation.

[1] Committee for Sydney 2024, Transforming Sydney's Economy

Question 10. What should be measured to assess the value and impact of R&D investments?

Set clear targets to measure success against

When it comes to policy and government funding, what gets measured matters. The SERD identifies a number of metrics where Australia falls short against global comparator countries in terms of R&D investment.

Recommendation: Identify several key metrics by which to measure improvement as reforms begin to be implemented. These may include:

- Total R&D intensity (percentage of GDP)
- R&D activity by sector as a percentage of GDP
- BERD as share of GDP
- Domestic patent filings or share of global citations and impact

Each of these were reported in the SERD and reflect a useful comparative measure when assessed against OECD or other countries. These could be supported by an overarching metric of Economic Complexity, as measured by the Economic Complexity Index (ECI) as a way of tracking whether the more specific measures deliver on an overarching objective of increasing economic complexity.

In conclusion

The Committee for Sydney welcomes the Federal Government's focus on the importance of R&D in the future of Australia. The Strategic Examination of R&D report provides a detailed examination of the strengths and shortcomings of Australia's R&D landscape and broader innovation ecosystem.

We believe that Australia has the potential to be a powerhouse of R&D and innovation in key sectors. Embedding R&D and innovation into organisational and government culture and ensuring that key gaps such as funding to bridge the transition from institutional to private sector innovation are essential if we are to realise our full potential.