Science & Technology AUSTRALIA

POLICY SUBMISSION

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2026–27 PRE-BUDGET SUBMISSION

Science & Technology Australia is the peak body for the nation's science and technology sectors, representing nearly 150 member organisations and more than 250,000 scientists and technologists. We connect science and technology with governments, business and the community to advance science's role in solving some of humanity's greatest challenges.

Australia's STEM capability – the foundation of innovation, economic resilience, and sovereign capability – faces a severe crisis. Without decisive action in the 2026–27 Budget, we risk permanent loss of critical research capabilities, a mass exodus of talent, and the failure of key government priorities including Future Made in Australia, the National AI Plan, and net zero targets.

Key points

- STEM research must stop being viewed as a cost on the public purse – it is an investment in Australia's future economic security and resilience.
- Every dollar invested in R&D returns $3–5 to the economy.
- Commonwealth research funding has flatlined in real terms—CPI-adjusted funding for Commonwealth R&D programs shows stagnation or decline while research costs have surged over recent years.
- 47% of STEM professionals are considering leaving their current roles, with 33% planning to exit the sector entirely.
- STEM jobs are projected to grow 24% by 2035 (550,000 additional roles) – and it's by no means clear that Australia will be able to meet this need.
- Success rates for competitive grants that support university research have collapsed—wasting researcher time and creating workforce instability

Science & Technology Australia recommendations

The 2026–27 Federal Budget must leverage the opportunities provided by the Strategic Examination of R&D and the new Health and Medical Research Strategy processes to deliver on three urgent priorities, with specific recommendations under each:

1. Immediate funding stabilisation through CPI-indexed increases to research grant programs and agencies
    a. Boost Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC) grant funding with CPI-adjusted increases to restore real funding levels and improve success rates.
    b. Index Research Block Grants (RGB) to inflation with sustained uplift proportional to competitive grant growth to stabilise university research infrastructure and protect capability from international student revenue volatility.
    c. Increase Medical Research Future Fund (MRFF) disbursements toward the maximum annual distribution amount, to deliver a major boost to health research at no budget cost, as the funds are already available in the MRFF.
    d. Ensure Australia's publicly funded research agencies (PRFAs) are adequately and sustainably resourced to conduct the STEM research the nation needs.

2. Investment to secure Australia's crucial STEM workforce
    a. Increase PhD stipends to provide genuine financial security to a critical component of Australia's research workforce.
    b. Support workforce mobility and diversity through:
        - fellowships for cross-sector movement
        - improved STEM career pathways in government, including expanding programs like Science Policy Fellows
        - payroll tax concessions for industry employing newly completely PhD candidates, and
        - sustained operational funding for diversity initiatives

3. Strengthen STEM education
    a. Invest in teacher upskilling, improved teacher data collections, Indigenous curriculum programs, and school agreements to reverse declining participation and build the future workforce

Australia's STEM sector is under unsustainable strain

Funding has flatlined while costs have surged

While Commonwealth Government funding for STEM research shows modest increases over time, when adjusted for inflation, funding rates flatline. Meanwhile, research costs have exploded: many essential supplies have seen price increases of around 20–75%, with some materials' cost increases spiking by 400% post-COVID.

The cost of salaries for the research workforce, as well as highly specialised skilled technicians and research support staff have also escalated beyond CPI. Often appropriations only increase by the wage cost index (WCI) which is generally lower than CPI, and fails to reflect that many unavoidable costs of research (e.g. protective clothing, chemicals, metals and gases) are increasing at rates far in excess of CPI. Research organisations face impossible choices about which capabilities to maintain.

The sector is under strain

Compounding the impacts of the increasing costs of research, success rates for the research grant programs Australia's STEM sector relies on – the Australian Research Council (ARC), National Health and Medical Research Council (NHMRC), and Medical Research Future Fund (MRFF) success rates are devastatingly low, and decreasing. As other sources of research funding are also under pressure (e.g. philanthropy and university discretionary funds), increased demand on the competitive grants systems has increased. Low success rates represent thousands of researcher hours wasted on unsuccessful applications and a sector trapped in precarious employment without funding security.

The impacts of stagnating funding and declining grant success rates is that the STEM workforce is reaching breaking point. The 2025 Professional Scientists Remuneration Survey reveals 47% of respondents are considering leaving their current roles (73% of these within 2 years), citing lack of career advancement, poor pay, and insecure work as key concerns. One-third of survey respondents were dissatisfied with workplace culture, 40% were unhappy with their workload, and half of respondents were worried about job security. Most critically, 33% plan to leave STEM entirely – a potentially catastrophic brain-drain.

A large proportion of Australia's STEM research workforce are PhD students. who are primarily supported through stipends (a tax-free scholarship). These stipends, while variable across universities, are generally well below minimum wage.

STEM pipeline

Compounding this loss of talent, the STEM pipeline is drying up. While the overall year 12 student population has grown, the number studying STEM subjects fell from 400,020 in 2013 to 363,842 in 2023 – a 10% decline. Participation in higher level maths dropped from 10.9% in 2021 to 8.4% in 2024, general maths participation declined from 21.5% in 2010 to 16.8% in 2023, and physics participation declined from 14.9% in 2015 to 12.1%. in 2023.

This decline in the STEM pipeline comes in the face of Jobs and Skills Australia projections that STEM jobs requiring a Bachelor degree or higher will grow by 24% by 2035. Australia is going to need more STEM professionals – and current signs indicate we will not be able to meet this need.

It is often perceived that maths and science, especially physics, leads to a career wearing a lab coat, but this is not the full picture of STEM careers available to graduates, nor the full range of STEM skills Australia needs. STEM is critical for high-value industries such as AI, data science, machine learning, mining, telecommunications, finance, and logistics. These areas are essential for a technology-driven economy – and Australia's future productivity and economic resilience.

While there are strong reforms occurring in the education landscape, there are clear and known gaps needing specific attention, especially in out-of-field teaching and building capabilities for culturally relevant and accessible teaching. Notably, we know that 75% of high school students are taught maths at some point during their secondary schooling by a teacher who lacks specialist maths training. This lack of training compromises their ability to support, build confidence and inspire the next generation of maths thinkers.

The Government is currently conducting consultation to develop a new First Nations Education Policy. It is critical that this process and government's subsequent implementation pays due consideration on STEM, as a clear pathway to build engagement and opportunities for First Nations students. While programs to support First Nations students can be delivered in many organisational structures and delivery methods, from Indigenous-led and designed, through to co-design and delivery in mainstream education organisations, these initiatives must be designed and delivered **with, not to,** First Nations people, and be reflective of local needs and context.

Australia's STEM sector spans universities, research institutes, industry and government. To truly leverage our deep STEM capability there must be clear career pathways and mobility opportunities that span all parts of the sector. The Government has an ability to shape such opportunities within through targeted programs, such as the successful Science Policy Fellowship program. This program not only enhances career opportunities for STEM professionals, it also harnesses STEM capabilities and expertise to inform policy domains.

The time is now – Australia cannot wait for action

Australia can no longer afford to keep kicking the can down the road. The sector awaits the final outcomes of the Strategic Examination of R&D and new Health and Medical Research Strategy and next steps for the 2026 National Research Infrastructure Roadmap – all critical processes that should be working in concert to secure Australia's STEM R&D capability, yet appear to be suffering from a lack of Government engagement and ambition. Recent highly publicised funding issues at CSIRO and ANSTO have fuelled sector – and broader community – concern for Government's (lack of) support for science, as an investment and economic multiplier as opposed to a cost. The Government must fully leverage the opportunities these reviews and processes provide and acknowledge the need to make investments in Australia's STEM R&D sector – or risk the nation's economic future.

Australia already lags global competitors in R&D funding, with R&D investment sitting at just 1.7% of GDP – well below the OECD average of 2.7%, and far behind global leaders (3–4%). This gap represents billions in lost annual economic opportunity, including risking missing the boat on emerging technologies and the innovations that will drive future prosperity and economic security.

The numbers are clear. STEM-based R&D delivers strong economic returns. Every dollar in R&D returns $3–5 to the economy; health prevention returns $14.30 per dollar.

Further, the Government's own priorities depend on expanding and deepening our STEM capability. Future Made in Australia, the National AI Plan, AUKUS, net zero targets, and supply chain resilience all fundamentally require a strong domestic STEM workforce and research capability. These priorities cannot be achieved by purchasing technology from overseas – they demand Australia develop and maintain deep expertise. This is also a geopolitical consideration – Australia needs to build its sovereign capability rather than rely on other countries to share new discoveries and technologies. Similarly, Australia must build its domestic STEM workforce, particularly in critical or emerging areas like nuclear capabilities, cyber security and defence-oriented research – we cannot simply import talent from overseas for these crucial capabilities.

Death by a thousand cuts must be prevented. Small cuts – and the impacts of stagnating funding levels – accumulate into systematic dismantling of research capability. Programs supporting early-career researchers, emerging businesses, and translation pathways – precisely what's needed for commercialisation and building new industries – are often first casualties of budget pressure. Once critical mass is lost, the entire innovation system becomes unviable.

And once lost, STEM capabilities cannot be easily restored. When research programs are discontinued, specialised expertise disperses, infrastructure deteriorates, collaborations dissolve, and institutional knowledge vanishes. Rebuilding – if even possible – costs many times more than maintenance. The time lost cannot be recovered.

Further, discovery and curiosity-driven research is often the first to be subject to budget cuts, but without researchers being curious about crystals glowing when electricity is passed through them – electroluminescence – we would not have smart phones, as it was electroluminescence research that led to the development of LED and phone screens. WiFi was the result of pioneering work in radioastronomy, conducted at CSIRO.

The imperative is clear – the 2026–27 Federal Budget must build on the policy work being done across the sector to ensure Australia's crucial STEM capability is secure and supported to drive the innovation the nation needs for future economic resilience.

Please do not hesitate to be in contact for any further information or analysis details.

Jasmine Chambers
President

Ryan Winn
Chief Executive Officer

SCIENCE & TECHNOLOGY AUSTRALIA / PO Box 259 CANBERRA ACT 2601 / 02 6257 2891 /
info@sta.org.au / www.scienceandtechnologyaustralia.org.au / ABN 71 626 822 845