

# SCIENCE & TECHNOLOGY AUSTRALIA POLICY SUBMISSION

19 MARCH 2023

## JOINT STANDING COMMITTEE ON MIGRATION INQUIRY – MIGRATION, PATHWAY TO NATION BUILDING

Science & Technology Australia welcomes this opportunity to offer input to the Joint Standing Committee on Migration's inquiry into the role of permanent migration in nation building.

Science & Technology Australia is the peak body for the nation's science and technology sectors, representing 135 member organisations and more than 115,000 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.

The world is currently locked in a fierce science and technology race for economic advantage. Australia's economic competitors are rapidly scaling up their investments in science, technology, research and development to seize new jobs, national income, intellectual property and stronger sovereign capability for their economies.

This includes a high-stakes competition for the world's best science and technology professionals. These people are the global talent we need to drive Australian innovation and economic growth.



## KEY POINTS AND RECOMMENDATIONS

- Australia must build and maintain a strong STEM-skilled workforce to secure our future economic prosperity.
- Skilled migration is a key component of Australia's STEM workforce and brings world-leading STEM researchers and professionals to Australia.
- We must ensure Australia is an attractive option for great global talent to work and live – with visa settings free of unnecessary bureaucratic barriers.
- To attract the world's top STEM talent, Australia's visa settings must include clear pathways to permanent residence, with easily navigable, efficient and transparent visa processes.
- National security considerations must be diligently upheld in Australia's visa system, while ensuring global collaboration.
- International students and graduates, as well as humanitarian visa holders, are a potential pool of deep talent to boost Australia's STEM workforce.

### **Science & Technology Australia recommendation 1:**

Exempt visa applicants supported by universities and research institutions from the VETASSESS process – this is an unnecessary duplication given the robust process of university recruitment processes. Applicants for subclass 485 visas who already hold an Australian qualification should also be exempted from VETASSESS skills assessments.

### **Science & Technology Australia recommendation 2:**

Ensure Australia's visa settings include and maintain existing options for clear and easily navigable pathways to permanent residency for STEM professionals and researchers.

### **Science & Technology Australia recommendation 3:**

Ensure all visa processing is as efficient and swift as possible, with maximum transparency for both applicants and supporting institutions.

### **Science & Technology Australia recommendation 4:**

Ensure all national security regulatory and compliance requirements are reasonable and proportionate, and do not create unnecessary barriers to Australia recruiting top-class global talent.

### **Science & Technology Australia recommendation 5:**

Reform visa settings to enable the Australian STEM sector to draw more deeply on the talent pool offered by international students and graduates and humanitarian visa holders.



## IMMIGRATION AS A STRATEGIC ENABLER OF VIBRANT ECONOMIES AND SOCIALLY SUSTAINABLE COMMUNITIES IN OUR CITIES AND REGIONAL HUBS

### Australia's science and technology workforce

Australia's science, technology, engineering and maths (STEM) workforce includes people from a vast array of cultural backgrounds. Diversity of perspectives is key to high-performing innovation teams. It creates a strong sector that generates new ideas and research breakthroughs, and applies them to create new developments, tools and products to improve the lives of all Australians.

Data published in 2020 by the Office of the Chief Scientist notes 56% of Australia's university STEM workforce and 26% of our VET STEM workforce were born overseas<sup>1</sup>. In some fields, this percentage is even higher – a mind-focussing 60% of Australia's engineering workforce was born overseas.<sup>2</sup>

This highlights how crucial a strong migration program is to supporting our nation's STEM capability.

Without enough skilled engineers, Australia simply won't be able to build the major infrastructure, building projects, and vast new defence capabilities we need to deliver through the AUKUS partnership arrangements.

A fast visa processing system coupled with smooth migration paths – including to permanent residency and citizenship – are crucial for Australia to beat our economic competitors to the world's best talent in these key skills areas for our economy.

### POLICY SETTINGS TO STRENGTHEN SKILLED MIGRANT PATHWAYS TO PERMANENT RESIDENCY

Despite the critical importance of skilled migration to Australia's STEM research workforce, the current systems can be hard to navigate and cumbersome.

#### VETASSESS skills assessment

Applicants for the Direct Entry stream, Employer Nomination Scheme (subclass 186), Regional Sponsored Migration Scheme (subclass 187) and Graduate Work stream, Temporary Graduate (subclass 485) visas [must undergo a skills assessment](#) as part of their visa application. For many STEM-based professions on the skilled occupation list, this is a [VETASSESS](#) process.

In cases where applicants are being supported by a university, applicants have already undergone a rigorous university recruitment selection process and the VETASSESS skills assessment is an unnecessary extra bureaucratic burden.

For Temporary Graduate visa applicants, they already hold an Australian qualification and having to undergo the VETASSESS skills assessment is also unnecessary and expensive.

Australia is operating in a global context of fierce competition to secure STEM professionals, with other countries offering targeted visas to attract young professionals<sup>3</sup>. Australia must position itself as an attractive career choice and a country that welcomes the world's best researchers to come and work and live in our country – and not put bureaucratic barriers in the way of attracting the world's best STEM talent.

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<sup>1</sup> [www.chiefscientist.gov.au/sites/default/files/2020-07/Australias%20STEM%20Workforce%20-%20Final.pdf](http://www.chiefscientist.gov.au/sites/default/files/2020-07/Australias%20STEM%20Workforce%20-%20Final.pdf)

<sup>2</sup> [www.engineersaustralia.org.au/sites/default/files/2023-01/Engineers-Australia%27s-Budget-submission-v2.pdf](http://www.engineersaustralia.org.au/sites/default/files/2023-01/Engineers-Australia%27s-Budget-submission-v2.pdf)

<sup>3</sup> [www.sbs.com.au/news/article/australia-global-race-to-attract-top-talent/wah66z0vp](http://www.sbs.com.au/news/article/australia-global-race-to-attract-top-talent/wah66z0vp)



### **Science & Technology Australia recommendation 1:**

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### **A clear path to permanent residency**

Not every scientist coming to work in Australia will necessarily opt to stay here, but Australia should create a clear and easily navigated path to permanent residency to make this an attractive option. Retaining highly skilled scientists, technologists and engineers is powerfully in Australia's interests.

World-class research and industry talent can choose to work anywhere in the world, and Australia must make it as easy as possible for them to choose to bring their talents and drive here. This is particularly the case for early- or mid-career researchers who are often looking for stability and a long-term commitment to advance their career.

The university sector commonly uses the Employer Sponsored visa (subclass 198) and Global Talent visa (subclass 858) to provide a clear path to permanent residence for world-class researchers.

The [priority areas](#) for the Global Talent visa are strongly STEM oriented, and more than 10,000 Global Talent visas<sup>4</sup> were granted in the two years of latest available data (the 2019–20 and 2020–21 financial years).

The university sector recruited more than 1000 people using the Employer Sponsored and Global Talent visas in the same two-year period. While these numbers may seem small compared to the total number of visas granted in Australia, the fast processing time and consistency of the Global Talent visa makes this visa category particularly valuable when recruiting top STEM talent for our universities and research institutions.

### **Science & Technology Australia recommendation 2:**

Ensure Australia's visa settings include and maintain existing options for clear and easily navigable pathways to permanent residency for STEM professionals and researchers.

### **Visa processing times and transparency**

Australia's visa processing systems must be as efficient and transparent as possible.

History is littered with examples of Australian universities seeking to recruit top-class postgraduate students or researchers – yet Australia has lost the opportunity to secure world-class talent due to significant delays in visas being granted – with little or no explanations for the delay.

One example – alas one of many – is a university attempting to recruit two PhD students. Both students applied to the same course of study, from the same country of origin and applied for visas in the same fortnight. One student received their visa within two weeks, and the other waited more than a year.

This is damaging not only to Australia's universities and research institutions, but also to Australia's reputation on the global stage. All visa applications must be scrutinised carefully with all due diligence applied, but when decisions are drawn out for months and even years, Australia runs the very real risk of losing talent to our competitor countries.

### **Science & Technology Australia recommendation 3:**

Ensure all visa processing is as efficient and swift as possible, with maximum transparency for both applicants and supporting institutions.

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<sup>4</sup> [data.gov.au/data/dataset/permanent-migration-program-skilled-family](https://data.gov.au/data/dataset/permanent-migration-program-skilled-family)



### **National security**

Science & Technology Australia appreciates the importance of national security and ensuring Australia's universities and research institutions take their national security responsibilities seriously.

At the same time, the world's best research is a global enterprise - and often relies crucially on international collaboration and movement of researchers across borders.

Protecting Australia's capabilities in areas such as critical technologies, cybersecurity, AI, robotics, and defence oriented research is of paramount importance, but this can only be built by maintaining an open and globally collaborative and competitive research workforce.

New layers of regulation add to an already-heavy compliance burden on universities and research institutes. The most recent of these is the [Migration Amendment \(Protecting Australia's Critical Technology\) Regulations 2022](#) (PACT Regulations) which came into force in the second half of 2022. These regulations introduced an additional layer of visa screening for applicants deemed to be working in a critical technology area, as well imposing additional conditions on postgraduate student visa holders whose research is in a critical technology area. It is critical to ensure that these types of regulations are proportionate to risk, and do not place unreasonable barriers to attracting global STEM talent to Australia.

### **Science & Technology Australia recommendation 4:**

Ensure all national security regulatory and compliance requirements are reasonable and proportionate, and do not create unnecessary barriers to Australia recruiting top-class global talent.

## **STRENGTHENING LABOUR MARKET PARTICIPATION AND THE ECONOMIC AND SOCIAL CONTRIBUTION OF MIGRANTS, INCLUDING FAMILY AND HUMANITARIAN MIGRANTS AND THE PARTNERS OF WORKING MIGRANTS**

### **Strengthening participation in the labour market**

Not only does Australia's STEM workforce in both research and industry benefit hugely from attracting and retaining the world's best talent – we desperately need this talent to help fill gaps in Australia's home-grown workforce.

Those skilled labour needs – particularly in some specialised STEM areas – are acute. Data released in October 2022 from the National Skills Commission highlighted a sharp rise in vacancies across the labour market<sup>5</sup>. Several of the top 20 occupations with significant skills shortage are in the STEM sector, and rely on either university or VET trained STEM professionals. Other work indicates potentially critical shortages in cybersecurity<sup>6</sup> and engineering<sup>7,8</sup>.

Several other Australian economic sectors have an urgent need for more STEM-skilled professionals. Our mining and agri-food sectors have an ongoing need for both research and VET-trained STEM professionals. Australia's Defence sector has an ever-growing need for mathematicians, data scientists and physicists, plus people skilled in electronic hardware and software programming, computer science and communications and specialised modelling. The Commonwealth

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<sup>5</sup> [www.nationalskillscommission.gov.au/topics/skills-priority-list](http://www.nationalskillscommission.gov.au/topics/skills-priority-list)

<sup>6</sup> [a.acs.org.au/article/2022/migration-chaos-crippling-australia-s-cyber-industry.html](https://a.acs.org.au/article/2022/migration-chaos-crippling-australia-s-cyber-industry.html)

<sup>7</sup> [www.engineersaustralia.org.au/sites/default/files/2023-02/Australian%20Engineering%20Employment%20Vacancies%20-%20January%20to%20December%202022\\_0.pdf](http://www.engineersaustralia.org.au/sites/default/files/2023-02/Australian%20Engineering%20Employment%20Vacancies%20-%20January%20to%20December%202022_0.pdf)

<sup>8</sup> [www.engineersaustralia.org.au/sites/default/files/2022-08/strengthening-engineering-workforce-australia.pdf](http://www.engineersaustralia.org.au/sites/default/files/2022-08/strengthening-engineering-workforce-australia.pdf)



Government's recent [announcement of the AUKUS nuclear-propelled submarine program](#) foreshadows the need for a new cohort of highly specialised STEM professionals across the government, academic and VET sectors.

Despite this, there are still barriers to skilled migrants entering the workforce in their chosen professions in Australia<sup>9,10</sup>. The 2020 **Australia's STEM Workforce** report noted higher unemployment rates for STEM professionals born overseas compared to people born in Australia. The unemployment rate for VET-qualified people born overseas was 5.9%, compared to 4.8% for people born in Australia; for university-qualified people it was 7.4% for people born overseas, compared to 3.6% for people born in Australia<sup>11</sup>.

Issues in securing recognition of overseas qualifications, or a lack of local work experience, create challenges to the employment of skilled migrants. There are some admirable attempts to resolve these issues<sup>12</sup> – but more progress must be made with industry, education providers and government working together to create regulatory and accreditation systems that remain robust but do not create unnecessary barriers to talented and skilled migrants entering the Australian workforce.

### **International students and graduates**

Science & Technology Australia welcomes the recent changes made by the Australian Government to post-study work rights for international students – extending the time international graduates can stay in Australia if they work in targeted areas. This is a sensible and smart decision. International students make significant contributions – and commitments – to Australia and are a source of deep talent for skilled migration, having studied in an Australian university and lived in Australian society for several years. The most recent data available indicates only 16% of international students transition to permanent residency<sup>13</sup>. There is vast scope to draw on this talent pool more deeply to support Australia's needs.

There is also scope to extend support to humanitarian visa holders who currently cannot access higher education without being considered an international student – and therefore must pay full international student fees. The arrangements that apply to New Zealand students studying in Australia – who are treated as Australian domestic students and eligible to attend university under the same arrangements as Australian students – should be extended to humanitarian visa holders. This would be a significant step to support humanitarian visa holders, harness their potential through access to university and also strengthen diversity in Australia's universities and research workforce.

### **Science & Technology Australia recommendation 5:**

Reform visa settings to enable the Australian STEM sector to draw more deeply on the talent pool offered by international students and graduates and humanitarian visa holders.

Science & Technology Australia would be delighted to give evidence to this inquiry if hearings are held, and please don't hesitate to contact us if we can further assist the Committee in any way.

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<sup>9</sup> <https://onlinelibrary.wiley.com/doi/full/10.1111/imig.13030>

<sup>10</sup> [lens.monash.edu/@politics-society/2021/05/20/1383170/billion-dollar-hit-the-barriers-skilled-migrants-face-in-finding-jobs-at-their-full-capacity-and-the-economic-cost](https://lens.monash.edu/@politics-society/2021/05/20/1383170/billion-dollar-hit-the-barriers-skilled-migrants-face-in-finding-jobs-at-their-full-capacity-and-the-economic-cost)

<sup>11</sup> [www.chiefscientist.gov.au/sites/default/files/2020-07/Australias%20STEM%20Workforce%20-%20Final.pdf](https://www.chiefscientist.gov.au/sites/default/files/2020-07/Australias%20STEM%20Workforce%20-%20Final.pdf)

<sup>12</sup> e.g. the work of [iSTEM Co](#)

<sup>13</sup> [research.treasury.gov.au/sites/research.treasury.gov.au/files/2019-08/Shaping-a-Nation-1.pdf](https://research.treasury.gov.au/sites/research.treasury.gov.au/files/2019-08/Shaping-a-Nation-1.pdf)



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