

# Enhancing Australia's migration program

## Engineers Australia submission to the Department of Home Affairs

December 2022



ENGINEERS  
AUSTRALIA

# Introduction

## About Engineers Australia

Engineers Australia is the peak body of the engineering profession in Australia with over 115,000 individual members. Established in 1919, Engineers Australia is a not-for-profit organisation, constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineers Australia maintains national professional standards, benchmarked against international norms. As Australia's signatory to the International Engineering Alliance (IEA), this includes accreditation of undergraduate university engineering programs. Furthermore, Engineers Australia manages Australia's largest voluntary register for engineers, the National Engineering Register (NER). Under the Migration Regulations 1994, Engineers Australia is the designated assessing authority to perform the assessment of the potential migrant engineering professionals' skills, qualifications, and/or work experience to ensure they meet the occupational standards needed for employment in Australia.

To discuss the details raised in this submission further please contact Michael Bell, Senior Policy Advisor at [mbell@engineersaustralia.org.au](mailto:mbell@engineersaustralia.org.au) or on +61 8 6214 6321.

## Data sources

Unless otherwise referenced, the data included in this submission is pulled from the following sources. Engineers Australia recommends the two reports mentioned be reviewed in conjunction with this submission.

- Engineers Australia's analysis of 2021 census data (report forthcoming).
- [Strengthening the engineering workforce in Australia report](#) (August 2022).
- [Barriers to employment for migrant engineers research report](#) (October 2021).

## Key Statistics

There are over

**433,000**

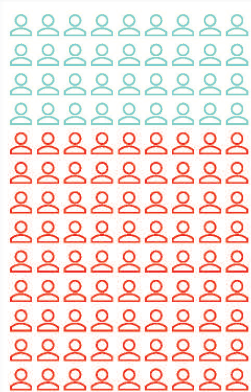
qualified engineers in  
Australia's labour force



Overseas Born\*

Australian Born

\*are much more likely to work  
in non-engineering roles



Between 2016  
and 2021,  
qualified engineers  
in Australia grew  
by over

**115,000**

Around **70%**  
of those were  
born overseas.



2014

2023

Higher education commencements in  
engineering study in Australia, for domestic  
students, **has been declining** since 2014.

Science, technology, engineering and  
mathematics occupations are **predicted  
to increase** by more than **12%** over the  
coming years.



Australia's engineering capability  
will **continue to be reliant** on  
migrant engineering skills in the  
**short to medium term.**



# Response to consultation questions

## 1. What challenges and opportunities does Australia face in the coming decades?

The Department of Home Affairs discussion paper (November 2022) does a good job at identifying many of the challenges and opportunities facing Australia. These include an aging population, geopolitical events, changes to how and where we work as well as our migration system currently.

Engineers Australia would like to emphasise the challenges facing the engineering profession. Australia has experienced a cyclical shortage of engineering skills every decade since the 1980s. This topic has been the focus of both a Parliamentary inquiry and other government supported papers. Preliminary analysis of the 2021 census data shows between 2016 and 2021 there has been an increase of over 115,000 engineers in Australia. Of these additional engineers, nearly 82,000 were born overseas. This means on average, Australia produced just under 6,800 engineers domestically each year. A lack of awareness of the profession early in a student's life and a decline in mathematics and science subjects taken at school has resulted in less domestic students taking up engineering study. Of those who do graduate with an engineering qualification, around 35 per cent do not enter the profession, further reducing Australia's supply of engineering skills. Australia has a structural issue in the supply of engineers domestically which makes migrant engineers critical to ensuring Australia has the skills needed to deliver on current and future projects. The magnitude of this challenge cannot be underestimated. With just under half of all overseas born qualified engineers, in the labour force, not working in engineering roles, continuing large scale intakes of qualified engineers through Australia's skilled migration program will not significantly develop Australia's engineering capability. Australia's migration program needs to focus on employment outcomes and once here, skilled migrant engineers need to be supported to find engineering work.

## 2. How can migration contribute to these challenges and opportunities?

### How can we best use the migration program to grow our economy?

To grow our economy through Australia's migration program, it needs to be more adaptable to changing needs. Currently, visas such as the skilled independent visa 189 or skilled nominated visa 190 require an applicant to be assessed and provided an ANZSCO occupation. If we need skills which are not directly associated with an ANZSCO occupation, they cannot be on the skills occupation list (or state/territory equivalent), therefore, immigrants with these skills cannot migrate to Australia through these visas.

- Engineers Australia supports the work being done by the Australian Bureau of Statistics to update ANZSCO codes in Australia. Consideration should be given as to how occupation classifications can be more agile to account for skills shortages and examined in more detail for specific engineering skill sets (below ANZSCO six-digit codes).

In addition, improving Australia's migration program has the potential to encourage and attract global investment through organisations coming to Australia. The result of this is important migratory flow which in turn helps to boost productivity and economic diversity. Attracting global businesses will also help to facilitate more innovation in Australia.

### Should we take a different approach to identifying and counting the number of skilled migrants?

Critical to this is understanding the definition of 'skilled.' The Department of Home Affairs website states 'The skilled stream of the Migration Program is designed to attract migrants who make a significant contribution to the Australian economy, and fill positions where no Australian workers are available...'<sup>1</sup>

While the domestic supply challenge facing Australia are due to limited uptake of tertiary engineering study, shortages within the profession are mainly for experienced engineers. Australia's migration policy needs to be more focused on employment outcomes of the skilled migrants entering the country. Therefore, the definition of 'skilled' needs to include both qualification and experience.

### How can we better prevent the exploitation of migrant workers?

Support needs to be provided to migrants once they arrive in the country. The Australian Government should develop resources which provide basic information to migrants such as how to write a resume for the

<sup>1</sup> 'Skilled migration program' Australian Government, Department of Home Affairs, Immigration and citizenship (accessed 6 December 2022) <https://immi.homeaffairs.gov.au/what-we-do/skilled-migration-program>

Australian context and address selection criteria. There also needs to be resources available to help migrants understand workplace expectations, conditions and entitlements. In addition, skilled migrant engineers need access to networking and internship opportunities to improve employment outcomes.

### **How do we address the specific needs of regional Australia?**

Supporting regional Australia is an important consideration, however many of the challenges are not directly linked to migration. Policies need to be implemented to develop regional hubs, increasing employment opportunities. Under the current program, visa classes exist which enable migration if the applicant agrees to remain in a regional location for two to four years. This obligation can pose barriers to finding a job which matches the migrant's skills and experience. For engineers, this is mainly because the great majority of engineering roles are in metropolitan areas, particularly Sydney and Melbourne.

- More information needs to be provided to migrants as to the employment opportunities in each region. The obligation to remain in a regional area should be reduced to a shorter period, such as six months, if employment opportunities do not exist.

### **3. What are the current and potential barriers in allowing migration to play these roles?**

Barriers include:

1. Uncertainty of pathway to permanent residency.
2. Lengthy processing times and delays restricting engineers from moving into new roles.
3. High costs for both employers and applicants.
4. Information on migration lacking or unclear.
5. Lacking a focus on the support that migrants need once in Australia to ensure positive employment outcomes.

### **How can we make the migration system more accessible to small employers and start-ups?**

Small employers and start-ups often don't understand the system, have the time to navigate it or the financial resources required to fund it (such as paying the Skilling Australians Fund levy). Reducing these barriers is critical. In addition, incentives should be provided to migrants to join a small employer or start-up and stay with them for over two years.

### **What are the barriers to the participation of migrants in the labour market?**

Research commissioned by Engineers Australia identified seven main barriers to engineering workforce participation for migrant engineers:<sup>2</sup>

- |   |  |
|---|--|
| 1. A lack of local knowledge and experience.      | 4. A lack of people who can 'vouch' for them locally.          |
| 2. Perceived cultural differences in soft skills. | 5. Certification queries.                                      |
| 3. Visa or sponsorship working rights issues.     | 6. 'Flight risk' concerns.                                     |
|   | 7. Tendency to hire from personal 'networks' for senior roles. |

Addressing these barriers will help to increase participation in the engineering workforce for this cohort of engineers.

A further obstacle exists for migrant engineers on student or temporary visas working for companies which do a substantial amount of work for the Commonwealth Government. In many instances, companies are not able to use migrant employees on government work until they have attained permanent residency and as a result are less interested in employing migrant engineers on temporary visas. Consideration should be given to how migrants from allied and neutral countries can work on Commonwealth Government projects, subject to appropriate security checks.

<sup>2</sup> Please see *Barriers to employment for migrant engineers* report referenced under data sources for more information.

## 4. What reforms are needed to ensure the migration system can meet the challenges and opportunities that lie ahead?

### FOCUS ON EXPERIENCE

Australia's migration program needs to be more focused on employment outcomes of the skilled migrants entering the country. As it stands, there are several areas where the system can be skewed away from experience, limiting the employability of skilled migrant engineers.

- The Government should review the points-based system to ensure it does not create unintended consequences in the supply of migrants or their employment outcomes onshore.

Many jurisdictions in Australia have or are introducing registration requirements for engineers. These requirements generally include an experience component meaning an engineer is not eligible for registration (and thus independent practice) until they have accrued five years of relevant experience unless working under the direct supervision of a registered engineer. Australia's migration program should consider the connection to registration eligibility both the qualification and experience needed.

- The allocation of points should be reformed to better reflect the balance between qualifications, the experience they have gained within the occupation and other requirements to improve employment outcomes.

A review of all subclass visas should be undertaken to ensure they are meeting the objective of attracting migrants who can make a significant contribution to the economy. For example, the subclass 476 visa. This subclass visa appears to be targeted to students who have graduated internationally, wanting to come and work in Australia. Applicants for the 476 visa have little to no experience, and in some cases, are eligible with an engineering qualification that does not align to international accords. Information obtained through a Freedom of Information request to the Department of Home Affairs shows in the 2019-20 financial year 2,423 subclass 476 visas were granted. When considering the size of Australia's migration program, this is a small contribution. While the 476 visa may increase Australia's labour force, it provides little benefit to enhancing Australia's engineering capability as the applicants lack experience, local or otherwise. In addition, it creates the potential for inconsistent outcomes with other classes of visas.

- All visas should be reviewed against the objectives of Australia's migration program. If no substantial benefit can be ascertained resources should be redirected to more efficient visa classes.

### SUPPORT PROGRAMS TO INCREASE EMPLOYABILITY ONCE IN AUSTRALIA

Improving the employment outcomes of migrant engineers is critical as global demand for engineers increases and other developed nations start to rely more on migrant engineers to shore up their supply. Without these support systems, increased skilled migration may start to harm Australia's reputation as a country with good employment prospects for migrant engineers.

In Australia the recruitment process operates in several ways, however, most have the same characteristics - does the candidate have the skills, experience, capability, networks and will they fit within the team. The recruitment, and in particular the interview process, is more difficult for migrants than it is for Australians. For example, the traditional application for a graduate Nepalese engineer would be a page long and would highlight the grade achieved when they attained their degree. It would be accompanied by a CV. They have no experience in writing applications that address selection criteria. Whereas for local applicants, it is often assumed that they will be able to fit into a team and that their written and oral skills are acceptable, migrant applicants may be subject to detailed scrutiny on all these issues. Initiatives are needed to bridge this gap and address the seven barriers mentioned in section three.

Engineers Australia has developed a *Global engineering talent* program designed to address the issues identified through the research. A pilot of the program will be running mid 2023 with a small cohort of skilled migrants and industry partners participating. This pilot will deliver the necessary business case and measured employment outcomes required as we seek funding to increase the scale of the program to meet market needs.

- The Government should support upscaling this program which can then be used as the basis for other professions that are facing similar issues.

### INTERNATIONAL STUDENTS

Difficulties in student visa processing times have diminished Australia's attractiveness to international students, leading to less opportunity to accept/retain engineers qualified within Australia.

International students have the added benefit of having Australian experience developed through their qualification (and work integrated learning requirements of engineering courses).

- International students who are applying for permanent residency should receive more points if they have studied in Australia and are working locally in their field.

This will make it easier for them to reach the required points threshold but will also encourage overseas students to study in Australia.

Greater engagement is also needed with industry to help business understand the visa system and view international students as viable employees.

Migrants on student visas are restricted to limited hours of employment and time spent in Australia which make them less attractive employees. Consequently, organisations will be less willing to invest in training graduate migrant engineers on temporary visas who are only guaranteed three years in the country. The outcome is that in addition to language and cultural difficulties, migrant engineers are facing additional barriers related to limitations on their time availability and uncertainty in the longer-term prospects when they do apply for a job in competition with an applicant born in Australia.

- Increase the time an international student can stay in Australia after completing their studies.
- Providing clearer pathways to permanent residency for international students.
- Support industry with the process to retain these employees and remove barriers such as labour market testing.

The Department of Home Affairs may find it worthwhile to examine the number of migrant professional engineers who move through the pathway of student visas while they undertake a master's degree, then temporary visas while they gain points for permanency and then obtain permanent residency. By taking a systems view of the pathway and acknowledging that those migrants are not merely on a visa but are on a particular path leading to employment as a professional migrant engineer in Australia, will help to identify reforms to support these engineers.

### **How can we better identify and respond to future labour market needs?**

Engineer's Australia's research has identified the need for increased data across all sectors to help understand the current and projected demand for engineering skills. This will help in identifying the skills needed to be targeted through Australia's migration program. A good example of Government demand forecasting is Infrastructure Australia's Market Capacity Report, which identifies the needs of the infrastructure sector over the coming years.

### **How do we further strengthen and maintain Australians' public confidence in the migration program?**

Engineers Australia would like to reinforce the importance of multi-lateral agreements for qualification recognition. For the engineering profession, these multi-lateral agreements are those facilitated by the IEA accords. Ensuring skilled migrants entering Australia have qualifications which align to international accords is critical to maintaining public confidence in the immigrant's skill level and therefore the program. It is also the benchmark qualification for registration to practice independently as an engineer in Australia.

An example of where this lacks, is the subclass 476 visa mentioned above. To be eligible for this visa there is variability in the qualification required. While Washington Accord qualifications are eligible, applicants will also be accepted with an engineering degree from one of 36 listed tertiary institutions. Setting an arbitrary list of institutes not aligned with the Washington Accord can reduce confidence in the migrant's qualifications. It may also have a negative impact on the applicant, if they try to transfer to another visa class which requires them to undergo a Migration Skills Assessment, and they receive an occupational category not aligned to the Washington Accord. This can also lead to confusion within the community about how Engineers Australia, as the assessing authority, is benchmarking engineering qualifications internationally compared with how the Government is benchmarking them.