



ENGINEERS
AUSTRALIA

Jobs and Skills Australia

connectwithus@jobsandskills.gov.au

Via [online submission portal](#)

7 March 2025

Re: 2025-26 Work Plan Development Consultation

Dear Professor Glover,

As Australia's national body for engineering, Engineers Australia is the voice and champion of our 130,000-plus members. We provide them with the resources, connections, and growth they need to do ethical, competent and high-value work in our communities. A mission-based, not-for-profit professional association, Engineers Australia is 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, this includes accreditation of undergraduate university engineering programs.

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 determine if they meet the occupational standards needed for employment in Australia.

Our submission is enclosed below. Engineers Australia is available to participate in future opportunities to discuss the issues raised in this submission. Please contact Caitlin Buttress, Head of Advocacy (cbuttress@engineersaustralia.org.au) to continue the discussion.

Sincerely,

Jenny Mitchell

General Manager, Policy and Advocacy

Submission: Jobs and Skills Australia 2025-26 Work Plan Development

Engineers Australia welcomes the opportunity to provide advice regarding Jobs and Skills Australia's (JSA) 2025-26 work plan. Engineers Australia supports the work conducted under previous and existing work plans and endorses this as a model for building future JSA work plans.

Ongoing projects such as the development of the Core Skills Occupations List for temporary skilled migration, the development of a national skills taxonomy, aligning vocational education and training (VET) and higher education datasets to understand better student pathways between the sectors, the development of the Skills Priority List and various labour market updates are of key interest to Engineers Australia. We are enthusiastic to continue our engagement with JSA in these areas.

Engineers Australia presents four recommendations to JSA for consideration to extend existing areas of work or open new areas of investigation.

Recommendations

1. Analyse how overseas STEM qualifications are valued in Australia.
2. Work with the Net Zero Economy Authority and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to forecast and periodically report on net-zero labour market trends.
3. Validate existing and develop new occupational profiles for emergent roles required for Australia's net zero workforce.
4. Investigate the latent engineering workforce.

Responses to consultation questions

Question 1: Considering our existing and ongoing work, what is the highest priority under each of our Commissioner's Outcomes?

Most of the existing and ongoing work of JSA is of high priority to Engineers Australia, with the ranking of work underneath each of the Commissioner's Outcomes proving challenging. Table 1 represents an attempt at prioritisation.

Table 1: Prioritisation of actions under the Commissioner's Outcomes

Commissioner's Outcomes	Highest Priority Action	Justification	Further Reading / Examples of Engineers Australia's input and utilisation of work
Fostering inclusive participation	Exploring the impacts of insecure work	Understanding how insecure work affects underrepresented groups like migrant engineers offers insights into the challenges these engineers face, including job security and skills recognition.	Barriers to Employment for Migrant Engineers
Understanding today's workforce	Examining current and emerging labour market conditions through regular releases	These releases, such as the Skills Priority List and Labour Market Update, provide essential intelligence on skills imbalances and allow Engineers Australia to develop workforce overviews relevant to the engineering profession.	The Engineering Profession: A Statistical Overview, 15th Ed. , see also; Core Occupations Skills List submission
Shaping Australia's future workforce	Developing a forward outlook of workforce and skills needs	Projecting future employment levels and building a national skills supply and demand framework is crucial for ensuring a skilled and productive engineering workforce.	Strengthening the engineering workforce in Australia
Optimising pathways and systems architecture	Driving a connected skills system and supporting delivery of reforms to the national skills architecture	Engineers Australia aims to drive a connected skills system and support the delivery of reforms to the national skills architecture. This includes consulting on the development of a national skills taxonomy	Engineers Australia's participation in the ANZSCO /

		and assisting with developing and reporting against an outcomes framework for the National Skills Agreement.	OSCA consultations ¹ , see also; Regional Migration Settings , see also; The Universities Accord Australian Tertiary Education Commission (ATEC) submission National Skills Taxonomy discussion paper submission
Activating an informed dialogue	Collaborating for impact and workforce capability development	Engineers Australia aims to guide the conversation about current and future engineering workforce and skills needs and values opportunities to collaborate and engage with partners and stakeholders to strengthen this work.	Attracting and retaining engineers from migrant backgrounds – a collaboration between Queensland Government, Consult Australia and Engineers Australia

Question 2: Considering our legislative functions, is there anything we should stop doing or descope under each of our Commissioner’s Outcomes?

Engineers Australia sees immense value in the current scope of JSA’s work. If the need exists to descope, Engineers Australia would advocate for increased support for JSA to continue to deliver on the Commissioner’s Outcomes, and for further partnerships with professional bodies such as Engineers Australia to alleviate resource constraints.

Question 3: Considering our current work plan (2024-25) and legislative functions, are we missing any key areas of focus?

Australia faces significant engineering skills challenges, including skills shortages, that impact national priorities and economic growth. This is exacerbated by a decline in domestic engineering graduates and barriers to employment for skilled migrant engineers in relevant roles. To address this, it is crucial to improve domestic engineering training, attract more under-represented groups such as women and First Nations Australians to the engineering workforce, enhance support for migrant engineers, and implement targeted migration strategies.

Engineers Australia continues to utilise the work of JSA to address the challenges to developing an inclusive and robust engineering workforce in Australia. In addition to ongoing work, we recommend several new focus areas for the 2025-26 work plan (and beyond).

Recommendation 1: Analyse how overseas STEM qualifications are valued in Australia.

For those looking to migrate to Australia as an engineer via the skilled migrant stream, their skills need to be formally assessed. Engineers Australia is authorised by the Australian Government’s Department of Home Affairs to assess migrants’ qualifications, skills and experience. Unlike many other professions, engineering benefits from internationally recognised accreditation frameworks such as the Washington, Sydney, and Dublin Accords, which set global standards for engineering education and facilitate the mobility of engineers and their practice globally. Engineers Australia’s assessment ensures that applicants’ experience and qualifications align with these international benchmarks. Despite this rigorous and internationally recognised assessment process, many migrant engineers still face significant challenges when seeking employment in engineering roles in Australia. Some report that when they do find work, it does not meet their skill and experience level, resulting in underemployment. Research conducted by Engineers Australia highlights the biggest barriers engineers face², including:

- A lack of Australian work experience combined with an undervaluation of international experience
- A lack of local networks
- No local referees
- Jobs are often advertised for Australian citizens or permanent residents only

Engineering has one of the best-established formal skills recognition systems in Australia, yet this alone is not enough to secure employment. Understanding how employers value overseas STEM qualifications in

¹ Available on request.

² Engineers Australia (2022), [Barriers to employment for migrant engineers](#), accessed 27 February 2025.

their hiring decisions could improve the efficiency of our migration architecture, and lead to better employment outcomes for migrant engineers – an important cohort of Australia’s engineering workforce.

Recommendation 2: Work with the Net Zero Economy Authority and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to forecast and periodically report on net-zero labour market trends.

JSA’s Clean Energy Capacity Study was a landmark analysis of the clean energy workforce.³ Since the release of the report in 2023, an explosion of information on net zero workforce needs has manifested, from government-led work such as the development of the Clean Energy Workforce Strategy (led by DCCEEW) to industry-led research such as Engineers Australia’s investigations into the transferability of engineering skills for the clean energy transition.⁴ While these reports have rapidly built the Australian understanding of its labour needs for the net zero transition, the need for ongoing forecasting and periodic reporting of net-zero labour trends is the next logical step from point-in-time evaluations.

Engineers Australia recommends that JSA perform a coordination role for the production and maintenance of up-to-date net zero workforce data, in collaboration with other relevant government agencies (such as the Net Zero Economy Authority and DCCEEW), industry and workforce representative bodies. This could include regular publications on net zero workforce vacancies and skills demand, and how Australia is tracking with its labour supply to meet our future net zero workforce needs.

Recommendation 3: Validate existing and develop new occupational profiles for emergent roles required for Australia’s net zero workforce.

To build the workforce needed for Australia’s transition to net zero, we must identify emerging job roles and support workers in adapting to these changes. Mapping skills and developing standard profiles (in collaboration with the Australian Bureau of Statistics (ABS)) for new and evolving roles will help employers and employees develop a shared understanding of workforce needs and ensure a smoother transition.

Engineers Australia, in partnership with Mott McDonald, has mapped twenty skills profiles relevant to the clean energy transition.⁵ There are many additional roles that could be subsequently analysed by JSA to develop a more thorough understanding of our net zero workforce needs and develop a common language around net zero roles.

Recommendation 4: Investigate the latent engineering workforce.

Engineers Australia’s research indicates that there are a significant number of qualified engineers who are not working in engineering roles, particularly migrant engineers.⁶ JSA should further analyse demographic data on this group to support strategy development to return these workers to engineering roles, particularly in areas of national priority such as infrastructure, clean energy, net zero and digital transformations and in areas of critical sovereign capabilities (such as defence).

³ Jobs and Skills Australia (2023), [The Clean Energy Generation: Workforce Needs for a Net Zero Economy](#), accessed 19 February 2025.

⁴ O’Connell, M., & Deighton, N (2024), [Making a Clean Transition: Transferability of Engineering Skills for the Clean Energy Transition](#), Engineers Australia and Mott MacDonald Australia, accessed 19 February 2025.

⁵ Ibid.

⁶ Engineers Australia (2022), [Strengthening the engineering workforce in Australia: Solutions to address the skills shortage in the short, medium, and long term](#), accessed 21 February 2025, see also; Briggs, P., Mead, N., and Prakash, S., (2023), [The Engineering Profession: A statistical overview](#), 15th ed., accessed 21 February 2025.