

Comment – National Electrical and Communications Association

Comment

Queensland faces a mounting shortage of skilled electrical tradespeople, driven by falling apprenticeship completion rates and intensified by fierce competition for talent across sectors. This skills gap poses a real risk to the delivery of critical infrastructure, energy, and construction projects—directly affecting the State’s economic growth and capacity to meet future demand.

The National Electrical and Communications Association (NECA) welcomes the Queensland Productivity Commission’s focus on addressing construction sector productivity through improved workforce development. NECA contends that targeted reform of apprenticeship pathways, with an emphasis on evidence-based retention strategies, is vital to rebuilding Queensland’s skills pipeline.

NECA’s recommendations focus on practical, proven solutions. These include mandatory readiness assessments before apprenticeship entry, the universal adoption of structured, industry-led mentoring, stronger recruitment of mature-age apprentices, and the piloting of electro-technology campuses in regional areas. NECA also urges greater investment in targeted marketing to attract young Queenslanders to the trades and to ensure all communities—urban, regional, and remote—have access to high-quality training and support.

By embedding these reforms, Queensland can boost productivity thru apprentice retention, lower training attrition costs, and secure a workforce ready for the challenges of tomorrow’s economy.

Queensland Productivity Commission

**Essential Requirements for Improving
Electrical Apprenticeship Retention in
Queensland's Construction Sector**

JUNE 2025

About NECA

The National Electrical and Communications Association (NECA) is the peak body for Australia's electrical and communications industry, representing over 6,500 businesses that employ nearly 241,600 people. The industry generates more than \$80 billion annually and spans a diverse range of sectors, that includes building and construction in residential commercial, industrial and large scale infrastructure, as well as mining, air conditioning, refrigeration, manufacturing, communications, defence and renewable energy.

NECA plays a critical role in fostering the next generation of electrical and communications tradespeople, contractors, and subcontractors. As the industry's advocate, NECA represents the interests of its members at all levels of government, in regulatory bodies, legislative arenas, and industry development forums.

Our members are integral to Australia's economy, facilitating essential business connections, powering homes, and supporting infrastructure projects. They are also key to driving investment and enhancing the security and reliability of the nation's energy network, which is central to achieving affordable, environmentally sustainable outcomes.

NECA's National Footprint

With a national presence and strong collaboration between industry and government, NECA is the leading voice for the electrotechnology sector in Australia. Through its associated Group Training Organisations (GTOs) and Registered Training Organisations (RTOs), NECA provides valuable employment and training opportunities for apprentices and tradespeople across the country.

New South Wales, Australian Capital Territory, and Queensland

NECA Electrical Apprenticeships (NECAEA), wholly owned by NECA, is a leading not-for-profit Group Training Organisation. It supports over 800 apprentices across NSW, Queensland, and the ACT. **NECAEA's apprenticeship completion rate is 90%**, significantly higher than the industry average, it also employs **double the industry average of First Nations apprentices**, and with **15% of its current apprentices being female**—well above the industry average. NECA Training, also owned by NECA, offers a range of training programs tailored to the electrical, communications, and energy industries.

South Australia and Northern Territory

Electro Careers & Apprenticeships (Electro) is a not-for-profit organisation established by NECA South Australia/Northern Territory. Electro provides employment and training for

apprentices in various trades, including Electrical, Refrigeration, Air Conditioning, and Data Communications. It also offers Australia's first dual trade in Electrical/Refrigeration and Air Conditioning. Electro is dedicated to developing skilled tradespeople to meet the demands of today's industries.

Victoria and Tasmania

NECA Education and Careers has been supporting apprentices, trainees, and electrical contractors across Victoria and Tasmania for over 25 years. As a Registered Training Organisation (RTO), it specialises in pre-apprenticeship, apprenticeship, and post-trade training, and offers a wide range of industry short courses. The organisation adheres to the highest standards, including the National Standards for GTOs, the Australian Qualification Training Framework (AQTF), and the Victorian Registration and Qualifications Authority (VRQA) RTO Standards. NECA Education and Careers also partners closely with employers to recruit, employ, train, and mentor apprentices, ensuring their ongoing development and success within the industry.

Introduction

As Australia transitions to a low-emissions, technology-driven economy, we must ensure that our most critical asset, our people are equipped with the skills and support to meet the future with confidence.

Our economy is under increasing pressure from skills shortages, productivity challenges and shifting industry demands. According to Jobs and Skills Australia, the sector is projected to face a shortfall of up to 32,000 electricians by 2030, putting critical national infrastructure and energy transition projects in jeopardy. At the same time, rapid advancements in digital technology, energy infrastructure and service delivery are creating new and exciting opportunities for workers across the country. To fully realise these opportunities, we must strengthen our education and training systems, invest in people, and remove the barriers that limit career mobility and workforce participation.

Meeting these challenges requires immediate reform. We must improve access to high-quality vocational training, increase apprenticeship and traineeship completion, and deliver lifelong learning options that allow Australians to reskill and upskill as industries evolve. In doing so, we can unlock the full potential of every worker—across every community and region.

NECA welcomes the Queensland Productivity Commission's inquiry into construction industry productivity, focusing on reforming and strengthening apprentice pathways to address the state's urgent skills shortages.

As the peak body representing Queensland's electrical and communications sector, NECA is well placed to advise on the policy and practice reforms required to secure a pipeline of skilled tradespeople and promote higher completion rates—supporting Queensland's long-term economic growth.

The persistent decline in trade training completion rates is sharply worsening existing skill shortages in Queensland. Unless addressed, this skills gap threatens the timely delivery of major infrastructure, energy, and construction projects across the state. NECA supports the Queensland Government's strategic review as an opportunity to improve commencement and completion rates, modernise training, and deliver a workforce ready to meet both today's and tomorrow's challenges.

This review should broaden the uptake and successful completion of apprenticeships and traineeships, with a deliberate focus on talent identification, skills development, and the creation of real opportunities for Queenslanders in all communities—urban, regional, and remote. High-quality support, best practice training, and ongoing workforce development (including reskilling and upskilling) must underpin Queensland's approach, and be tightly aligned with the Employment White Paper's net zero, care, and digital skills objectives.

Recommendations

As the peak industry body for Australia's electrical and communications industry, NECA provides the following recommendations on behalf of its members nationally:

1. Mandatory Readiness Assessment (RA) for Apprenticeship Entry
2. Structured Mentoring Support System
4. Greater Utilisation of Group Training Organisations (GTOs)
5. Enhanced Pathways into Trades
6. Industry-Led Centres of Excellence and Modern Training Facilities
7. Streamlined Mentoring Requirements for GTO Apprentices
8. Targeted Marketing of Apprenticeships and Traineeships
9. Establishment of Pilot Electro-Technology Campuses in Regional Queensland
10. Streamlining the Transition from Apprentice to Licensed Tradesperson

Response

Reducing Red Tape in the Transition Process

In Queensland, electrical work can only be legally performed by two categories of individuals:

- A licensed electrical contractor (qualified tradesperson), or
- A registered apprentice.

Upon reaching the end of their formal apprenticeship contract, which is managed by the Department of Education (DESBT), apprentices are no longer legally permitted to perform electrical work. Until they receive formal recognition from the Electrical Safety Office (ESO)—which includes publication on the ESO website and, eventually, issuance of a blue coloured License Card—they may only undertake non-electrical tasks.

The transition period between the nominal completion date of the apprenticeship and the official issuance of the licence involves two key steps:

- TAFE Queensland has 10 business days from the apprentice's nominal completion date to confirm successful completion and forward the documentation to ESO.
- ESO then has up to 21 business days to process the paperwork and issue the licence.

Although this process should take a maximum of 31 days, in practice, delays—particularly at the TAFE stage due to administrative workload—often extend this timeline. As a result, apprentices are left in limbo, unable to work in their trade, forced to seek non-electrical work, or simply remain idle.

NECA proposes a collaborative approach involving TAFE, ESO, and employers to streamline the administrative process. Specifically, we recommend that:

The ESO be authorised to provisionally acknowledge the apprentice's successful completion as of the nominal completion date.

A conditional licence be granted under the employer's licence, provided the apprentice has submitted all required documentation to the ESO prior to the completion of their apprenticeship.

This change would:

- Minimise downtime for newly qualified tradespeople,
- Enable employers to retain skilled workers without interruption, and
- Alleviate pressure on the electrical industry caused by unnecessary administrative delays.

Streamlining this process is essential for improving workforce continuity and ensuring that newly qualified tradespeople can transition into full employment without delay.

Mature-age Apprentice Subsidy Scheme

It is widely recognised that the Australian energy industry is suffering the most severe skills shortages of all industries.

The National Council for Vocational Education Research (NCVER) forecasts electrical trades will be the number one skills shortage vocation over the coming decade, with no less than 35,000 additional electrical industry workers required by 2030.

If the Industry's unprecedented skills shortages are to be addressed, employers recognise that a more diverse technical workforce is needed.

However, priority social cohorts, including women, are more likely to pursue a trade career later in life, when adult wages become a barrier to employment as an Apprentice.

Adult apprentices are significantly more expensive to employ and, hence, significantly more difficult to justify, particularly for small businesses.

While people over the age of 21 constitute less than 5% of NECA Apprenticeships' annual intake, they comprise up to 50% of applicants.

The wage barrier significantly disadvantages women, who are more likely to apply for an apprenticeship when over the age of 21. Funding is required to bridge this gap.

As a practical example, in Western Australia the single biggest change in ECA female apprentice numbers came when the WA Construction Training Fund (CTF) provided 100% of the wage gap allowing Group Training Organisations (GTOs) to provide industry with adult apprentices at the same rate as the junior apprentices for normal time hours.

During the period that the fund was operational, ECA WA doubled the number of female apprentices. In its most recent pre-budget submission to the federal government, NECA proposed the introduction of a Mature Apprentice Subsidy Scheme (MASS).

NECA believes the introduction of such a scheme, through a pilot program within the energy sector, and particularly electrotechnology, offers an excellent opportunity to address skills shortages in the longer term, this will in our experience increase the level of participation by women, First Nations, and other priority group members in trade-based employment.

Pathways to Trade careers

Attracting young people to Apprenticeships is an ongoing challenge. Many young women and men think they may be interested in the Electrical trades but do not have the conviction needed to commit to a 4-year Apprenticeship.

Pre-Apprenticeship programs have proven a particularly successful means of addressing this inherent reservation as they provide program participants with a 'taste' of the industry, provide them with basic hand and power tool skills and, in doing so, assist them to decide if a trade career is for them.

Cohort specific initiatives, such as female and indigenous-only pre-apprenticeship programs can also assist to develop the skills, knowledge and confidence required for young people from these sections of the community to compete on a level playing field for

Electrical Apprenticeship positions.

The Pre-Apprenticeship programs implemented must be relevant to the industry and create meaningful pathways to employment.

Greater Utilisation of GTOs

NECA recommends strategies, including financial incentives, be implemented to encourage businesses, particularly SME's and businesses new to the apprenticeship system, to utilise GTOs.

This will substantially raise the recruitment, retention, and completion rates of Apprentices in the trades for the following reasons:

Businesses, particularly small and micro businesses, often lack the infrastructure and resources for comprehensive apprentice mentoring and support. GTOs provide invaluable assistance to both apprentices and host employers. This support translates to improved completion rates.

GTO's employ robust recruitment practices, ensuring that apprentices are matched with host employers based on their skills and potential for success.

GTO's provide job security. If a business faces financial difficulties or ceases operations, the GTO steps in to secure an alternative placement for the business's apprentices, safeguarding their employment and, therefore, their apprenticeship.

GTO's ensure well rounded training and ensure full compliance with WHS practices.

An important consideration here is that businesses be directed to high performing industry led GTO's with a long and strong track record in the provision of high quality services to the industries they cover. Not for profit GTO's are strongly recommended as they are industry led and focus on industry needs and apprentice welfare.

Exemption of GTO apprentices from additional mentoring under AASN arrangements

GTOs offer comprehensive mentoring and support, surpassing what other entities typically provide. Thus, exempting GTO apprentices from additional mentoring requirements under AASN arrangements would ensure effective, considerably more streamlined support.

There may be funding re-allocation to the GTO commensurate with the cost of providing the mentoring that is currently being provided.

Quality Training Provision

Across Australia there are fewer than 50 Registered Training Organisations (RTOs) currently delivering the electrical sector's trade qualification (UEE30820) and fewer than 20 RTOs delivering the Electricity Supply sector's trade qualifications (UET30621 & UET30821).

Not surprisingly, the RTOs who are servicing the industry are at capacity and Industry

members across Australia are adamant that “we need more tradespeople, but we need more trade schools as well”.

Funding to support the establishment of dedicated industry-led Centres of Excellence, equipped to train apprentices using the latest technology and educational tools are urgently required.

NECA is aware of many public TAFE facilities and other Government-owned buildings, particularly in regional centres and in Brisbane, that are considerably under-utilised. Arrangements supporting the use of these facilities by Industry RTO's to deliver qualifications and skill sets in severe skills shortage areas are needed immediately.

Additionally, in response to the considerable lack of available training places, particularly in regional areas, NECA is currently trialling a ‘pop up’ RTO campus model, utilising a Community Hall as a trade school facility on the NSW South Coast. Under this model, NECA moves in and out of the Hall two days per week to deliver the Certificate III in Electrotechnology – Electrician qualification.

From this initiative the NECA Training's presence on the South Coast NSW has seen the employment of nearly 40 new electrical apprentices in less than 12 months.

NECA has also implemented a Block Release training model to accommodate Apprentices working for organisations with shift rotation and fly-in-fly out employment models, such as the mines, utilities and other large infrastructure construction works. Under this model, training is delivered over 2 full weeks, full time every 2-3 months. The successes have been substantial for both the Apprentices and their employers.

NECA further notes that the industry's skills shortages include technical trainers. NECA would recommend support, including incentives, for ‘Trade to Trainer’ programs to encourage and support experienced workers seeking less labour-intensive work, or carer or lifestyle changes, to transition into technical training roles. That said, industry-led non-profit RTOs must be adequately supported to deliver the training that is required to upskill from the trade to the classroom.

Targeted marketing of Australian apprenticeships

Modelling has shown that after three to four years of university studies, the HECS debt can be around \$40,000, excluding cost of study materials and ancillaries, whereas over the same period an apprentice will earn between \$110,000 and \$240,000, accumulate four years of superannuation and long service entitlements, overtime, and other allowances, while studying one day per week towards a nationally, often internationally, recognised qualification.

Targeted marketing and communication of the benefits of an apprenticeship will encourage more individuals to see apprenticeships as a viable pathway to a qualification and a career with equal or greater earning potential than many tertiary qualification avenues.

Readiness Assessment (RA)

NECA recommends the introduction of a national Readiness Assessment (RA) for all prospective apprentices. The RA is designed to ensure that candidates possess the fundamental skills, motivation, and understanding required to commence and complete a trade apprenticeship. Too often, apprentices enter training without the necessary preparation, resulting in high attrition and lost opportunity for both industry and candidate.

A formal RA would typically involve an evaluation of Language, Literacy, and Numeracy (LLN) skills, practical dexterity, and a basic understanding of the trade environment. This process should also identify individual learning or support needs at the outset, enabling targeted intervention and tailored support plans. By setting a clear standard for entry, the RA not only supports higher completion rates but also increases employer confidence when engaging new apprentices.

Implementation of a standardised RA across Australia would create a level playing field for all entrants, regardless of background. It would also send a clear message that electrical and electrotechnology trades are skilled, professional vocations requiring appropriate preparation. NECA stands ready to work with government and industry partners to develop and implement a best practice RA framework.

Structured Mentoring Support System

NECA proposes the formal adoption of a Structured Mentoring Support System for all apprentices, with priority for those at greatest risk of non-completion. Evidence shows that structured, industry-specific mentoring is among the most effective interventions to increase retention, completion, and overall apprentice wellbeing. While GTOs and NECA's own programs have demonstrated the success of this approach, coverage across the broader industry remains inconsistent.

A Structured Mentoring Support System should include regular scheduled check-ins, clear escalation pathways for workplace or personal issues, and access to trained mentors who understand both the trade and the realities facing apprentices. The system must be embedded from commencement and maintained throughout the apprenticeship, not just in response to emerging problems.

Such a system is especially vital for mature-age apprentices, women, First Nations people, and other priority cohorts, who may face unique barriers to success. The mentoring programme should be resourced to provide mental health first aid, career planning, and personal development support, as well as technical guidance.

Government funding should be directed towards the implementation and evaluation of these structured systems, with performance benchmarks linked to retention and completion. NECA believes a national approach, led by industry and supported by policy, will ensure every apprentice has access to the support needed to achieve success in Australia's critical energy and electrotechnology sectors.

NECA and its network of GTOs and RTOs remain committed to partnering with the Queensland Government to deliver these productivity improvements. By embedding readiness assessment and structured mentoring, alongside targeted support for mature-age apprentices and regional training pilots, Queensland will be equipped to tackle its skills shortage, enhance workforce quality, and maintain its competitive advantage in the construction sector.

To arrange a meeting or discuss this proposal further, please contact:

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