

Energy Skills Australia

Submission to the Australian Apprenticeship Support and Services Discussion Paper

For Department of Employment and Workplace Relations

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INTRODUCTION

Established by industry for industry in 1995, Energy Skills Australia (ESA) has been representing the energy sector for 27 years as an independent, not for profit, bipartite company.

We support high quality training and workforce development activities by providing advice and expertise to industry and government bodies such as electrical regulatory bodies. Additionally, we oversee a suite of learning and assessment resources and accredited courses designed to provide quality and consistent outcomes for apprenticeship and post-trade training.

Our membership and board are made up of various industry bodies such as the National Electrical and Communications Association (NECA), Master Electricians Australia (MEA), the Electrical Trades Union of Australia (ETU) and the Australian Services Union (ASU). Our highly experienced board members provide ESA with the necessary direction, governance and oversight needed to ensure we are well placed to represent the views of industry.

ESA has established strong working relationships with key industry stakeholders, Governments, the Vocational Education and Training (VET) sector and regulatory authorities within Australia and internationally.

Critically, it is these relationships and deep connection to industry that allows us to support employers and workers as they grapple with the current workforce challenges across the growing clean economy.

ESA welcomes the opportunity to provide feedback into the Australian Apprenticeship Support Services (AASS) Discussion Paper led by the Department of Employment and Workplace Relations (DEWR) and look forward to further engagement should the DEWR require.

OVERVIEW

As the AASS discussion paper rightly points out, there are three critical areas of focus:

1. Falling completion rates
2. A lack of diversity
3. Growing skills shortages

These challenges are inherently apparent in the energy industry. As an industry, we are at a critical juncture where a combination of ambitious policy direction, investor confidence, consumer driven expectations as well as rebounding from a global pandemic has created the perfect storm.

The Powering Australia Plan¹, led by the Albanese Government is expected to create up to 600,000 jobs by 2030 and reduce carbon emissions by 43% within the same timeframe on a path to Net Zero by 2050. However, the workforce challenges associated with the Powering Australia agenda are also significant.

Our sector is confronted by technological advancements, increased uptake of small and large-scale renewable energy generation, transmission and distribution networks with ageing infrastructure and the need to rewire the nation as we make progress towards an increasingly electrified economy.

While the Powering Australia Plan presents occupational workforce challenges, it presents far greater opportunities for the economy as a whole - should we get it right. The recent announcement of an Energy, Gas and Renewables Jobs and Skills Council (JSC) is the first step in the right direction and we look forward to providing support to the Energy JSC as the establishment process takes place.

The heart of this submission will focus on what can be done to drive completion rates, increase diversity and ensure we have the highly skilled clean economy workforce needed into the future.

This will only be achieved through partnerships, collaboration and social licence. Working together with industry and communities to ensure we can deliver outcomes and provide avenues for secure employment, including increased female and indigenous participation.

Upskilling and transitioning workers from traditional power generation communities will be critical as we make our way to a recharged economy.

ESA has extensive experience in delivering government funded projects on time and on budget. Some of these programs (listed below), provide specific solutions to the questions being posed in the AASS discussion paper. Aspects of these projects will be referenced throughout this submission, however, for your reference, we have also attached separately, the Final Report from the EIAPMS program published in March 2016.

- Energy Industry Apprenticeship Progression Management System (EIAPMS)
- Industry Specialist Mentoring for Australian Apprentices (ISMAA)
- Workplace English Language and Literacy (WELL) Program
- National Enterprise Based Productivity Places (EBPP) Program
- Business Research and Innovation Initiative (BRII)

¹ <https://www.alp.org.au/policies/powering-australia>

WHAT CHANGES ARE NEEDED TO DRIVE UP COMPLETION RATES?

Electricians have been in demand for many years. The Powering Australia agenda will undoubtedly exacerbate this situation. It is therefore critical that the energy and electrotechnology industries piece together an overarching workforce development plan to address the impending crisis.

With projections of 64,000 direct jobs and up to 600,000 indirect jobs forecast across the growing renewable, electrotechnology and energy sectors by 2030 through the government's Powering Australia plan, maintaining full employment for electricians, line workers, cable jointers and other associated electrical tradespeople is not expected to be difficult for many years to come.

According to the National Centre for Vocational Education Research (NCVER) for the January - March quarter 2022, there were 37,816 apprentice electricians in training. The AASS discussion paper administered by the DEWR², states that electrician commencements are the second highest of all trades. It is our anticipation, that this number will continue to rise.

You may be shocked to know that for the corresponding quarter, there were only 38 apprenticed transmission line workers enrolled across Australia. With the huge amount of transmission infrastructure currently being built as well as future requirements opening up to new Renewable Energy Zones (REZ), this number is completely unacceptable. The boom or bust mentality needs to change, particularly in the renewables sector, which is competing with wages set by an infrastructure boom in capital cities such as Sydney and Melbourne. An opportunity to work in the green economy, must be pitched as a long-term, well-paid career.

With completion rates of apprentices undertaking trade qualifications in steady decline, currently at 55.7%, there is much work to be done. Almost one out of every two apprentices do not end up completing or to put it another way, one out of every two taxpayer dollars invested into apprenticeship training is a wasted investment. Governments have an opportunity to ensure resources are targeted at beneficial programs, and ESA welcomes this as a current area of focus.

There are many reasons for non-completion and they are often nuanced, however our research over many years points to a number of reasons including:

- Lack of mentoring (both technical and pastoral)
- Suitability for the occupation
- Employment related reasons (difficulty with employer, poor working conditions, safety)

² <https://www.dewr.gov.au/australian-apprenticeships/announcements/consultation-underway-apprenticeship-supports>

- Low pay

What is also apparent, is that the current Australian Apprenticeship Support Network (AASN) providers who are entrusted with giving “*personalised advice and support services from pre-commencement to completion*”³, are not as effective as they should be.

The energy sector is highly technical, complex, and high risk. It is therefore difficult to fully understand and navigate if you are not from the industry. Sector specific AASNs who offer meaningful ongoing engagement and support to apprentices and who have established partnerships with industry bodies would greatly and positively impact engagement and therefore completion rates.

A recent survey⁴ has exposed what this means on the ground, showing that 66% of electrical apprentices were unaware who their AASN is and only 11% had received any mentoring from an AASN provider.

We have the opportunity through these reforms to draw on past experiences and outcomes to better prepare us for the future.

From 2013-2015, ESA was funded by the previous Labor Government to deliver a pilot program looking to lift the completion rates of electrical apprentices. Known as the Energy Industry Apprenticeship Progression Management System (EIAPMS), the pilot was successful in increasing the retention rate of electrical apprentices to 93%, at the time up from 62%.

The EIAPMS pilot included 1549 apprentices across 943 employers in every jurisdiction in Australia.

The success of the program can be attributed to the six components of the EIAPMS Project:

1. National Readiness Assessment
2. National Apprentice Register
3. Blended Learning-based training delivery and assessment resources
4. Mentor/Advisor service provision
5. Apprentice profiling
6. Industry Benchmarks for apprentice progression

Critically, parts of industry and Registered Training Organisations (RTO) continue to utilise aspects of the program such as our occupation specific readiness assessment resource, which is a web-based electrotechnology specific aptitude test. This test identifies areas where potential electrical apprentices may need targeted remedial support, prior to apprentice commencement empowering them with the knowledge required to succeed and ultimately increase the likelihood of completion.

³ <https://www.australianapprenticeships.gov.au/about-aasn>

⁴ [Survey results reveal cost of living pressures and lack of mentorship causing apprentices to consider quitting](#)

In combination with our blended learning training and assessment resources, workplace evidence gathering system (Exemplar Profiling which is mapped directly to the training package requirements) and the re-introduction of industry specific mentoring and pastoral care services, we can drive up completions in the energy sectors, but only if the programs are funded, sustained and administered by bodies with clear industry ties and expertise.

Recent research undertaken by the International Labour Organization (ILO) as part of the Apprenticeships Development for Universal Lifelong Learning and Training (ADULT) project⁵, indicates that there are additional benefits from increasing apprentice completion rates – such as raising the status of VET and improving the image of apprenticeships. This in turn, will go some way to finding the workforce needed in the electrotechnology, renewables and energy sectors.

What is fundamentally clear, is that any further investment provided to help drive up completion rates, should be driven by industry partnering with Government. The Powering Australia Plan, should have dedicated Powering Australia resources that specifically relate industry complexities. Dedicated personalised industry advice and support services from pre-commencement to completion and beyond.

To drive up completion rates for electrical apprentices’ consideration should be given to implementation of a Powering Australia Apprenticeship Support Service.

This entity, would have responsibility for:

- Developing clear guidance and careers advice, including positive pathways into the renewable energy sector
- Assist the DEWR with recruitment of apprentices for workforce skills and training procurement policies, including reporting mechanisms
- Administration of pre-apprenticeship aptitude testing through the industry endorsed Readiness Assessment (RA)
- Advice on any remedial action necessary to improve completions based on the RA results
- Administration of training contracts and training plans, including clear advice on electives available to apprentices and employers
- Explanation and administration of workplace evidence gathering tools such as Exemplar Profiling from day one of an apprenticeship, not six months down the track when apprentices first get to their RTO (e.g. TAFE)
- Administration of apprentice and employer incentives
- Provision of pastoral care and industry specific mentoring
- Utilisation of industry endorsed learning and assessment resources

⁵ [ADULT Thematic Paper - Improving the attractiveness and social perception of apprenticeships](#)

Given the experience within ESA of administering programs relating to boosting apprentice completions, we would welcome further opportunity to discuss details around how such a system could be implemented.

HOW CAN THE SERVICES DELIVERED BETTER ENCOURAGE AND SUPPORT APPRENTICES FROM DIVERSE BACKGROUNDS?

In conjunction with a sound skilled migration policy and increasing electrical apprentice numbers, we must also look at providing solutions for workforce participation from female, indigenous and culturally and linguistically diverse (CALD) workers.

Recent programs aimed at increasing participation for females into the electrical industry, such as the Women in Apprenticeships Victoria Electrical (WAVE)⁶ Program are showing signs of success. Female apprentices enrolled in the Certificate III in Electrotechnology Electrician qualification has increased to approximately 5% of the total number of apprentices, up from 2% only a few years ago.

To increase participation from women, Aboriginal and Torres Strait Islander (ATSI) and Culturally and Linguistically Diverse (CALD) workers, consideration should be given to updating procurement policies with targets that make a difference.

We also need to make sure that compliance with the targets is enforced. This reporting mechanism could be established through the Powering Australia Apprenticeship Support Service (PAASS).

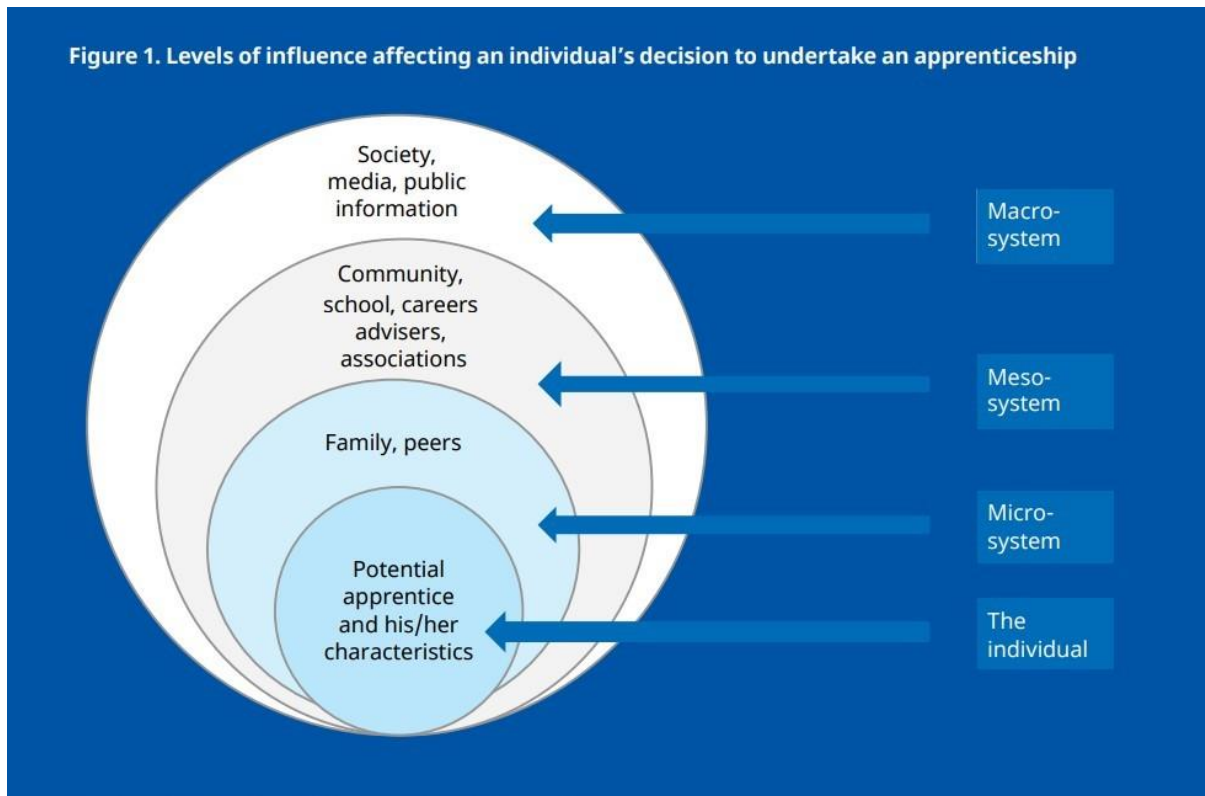
It is of course, not just procurement policy that is needed. Industry also needs to reduce barriers for women by providing basic amenities for workers in workplaces from the beginning of every job. Adequate facilities and access to toilets and sanitation are basic fundamental rights.

Another way to ensure that services can reach diverse sectors is through the implementation of marketing strategies.

Having clearly defined careers guidance and materials that can showcase a journey of lifelong learning in the clean energy sector is critical.

⁶ <https://centreforu.com.au/news/women-in-apprenticeships-victoria-electrical-program/>

To have greater impact, guidance and marketing materials will need to be administered at micro, meso and macro levels⁷. See figure 1 overpage, which was developed by Professor Erica Smith (Federation University) based on Bronfenbrenner's ecological systems theory (1979), which explores the interrelated influences of one system and the subsequent relationship on others.



You can see the many influences affecting the decision to undertake an apprenticeship are varied and why clear guidance materials should be focused at all levels of influence.

This information, may be even more critical when we consider gaining the social licence for new renewable energy projects or transitioning workers from traditional power generation or resource intensive communities to emerging sectors.

Imagery is another important tool, as is practising what you preach. For example, career guidance materials should showcase a diverse range of people from all walks of life.

⁷ [Ibid](#)

HOW CAN THE SUPPORT SERVICES BE OPTIMISED TO MEET THE CURRENT AND FUTURE NEEDS OF APPRENTICES AND EMPLOYERS?

As previously stated, the energy sector and occupations within, are highly technical, complex and high risk. The current AASN model where a limited number of providers service a range of sectors is unfortunately resulting in ineffective provision of some of the services that help completion rates such as mentoring, pastoral care and job matching in the energy sectors.

As a nation, we should be looking at more effective ways to boost completion rates of apprentices. This will increase long term cost savings to the government, provide young people more opportunities to contribute to society and give businesses the skills they need to help transition to net zero by 2050.

We need a network that will provide industry leadership, stewardship and expertise, focussing on mentoring, pastoral care, technical guidance, industry linkages and credible advice to ensure apprentices are well trained and completing their trade.

Better data collection and real time reporting of apprentices in the system and completions would improve data accuracy and in turn, the ability to adjust policy settings in real time. Currently, completion data is skewed if an apprentice changes employers during their apprenticeship. Tracking of the individual apprentice through their qualification from start to finish, not contracts signed, would provide a better indication of completion rates and enable the sector to better prepare for the future.

It is certain that TAFE should play a significant role in developing the skilled workers of the future. Underfunding of the public institutes coupled with marketisation of VET has led to an increase in using unscrupulous practises to monetise the sector by some for-profit training providers.

ESA also believes there is a role to play in industry owned not-for-profit renewable Centres of Excellence, such as Electrogroupp in Brisbane. Jointly owned by Master Electricians and the Electrical Trades Union, this state-of-the-art facility provides a blueprint of what can be achieved at a local level.

This will not come as a surprise to anybody who has been involved in the VET sector in recent times – finding educators to deliver quality training and assessment is challenging. This is no different for the electrotechnology sector, particularly with the disparities that exist between teaching and working on the tools.

The critical work of JSCs in undertaking implementation advice for RTOs will help ease the pressure, as will utilising consistent learning and assessment resources across the landscape.

Consideration should be given to the creation of pilot programs focussing on the recruitment of educators. This will need to be incentivised through upskilling of trade qualified people to become teachers.

It is one thing to have a shortage of skilled electrical workers, but even if we can attract and retain future workers, if they cannot be trained then the situation will become dire.

Summary

Energy Skills Australia appreciates the opportunity to provide input into the Australian Apprenticeship Support and Services Discussion paper.

We hope that our response has provided a pathway to a cohesive, coordinated and efficient apprentice support structure, that meets the challenges of a complex VET system.

Progress has been made in placing industry back at the heart of training. This should be expanded across further aspects as detailed in our response.

We welcome further discussion should you require. The contact for this submission is detailed below.

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