

# **Australian Skills Guarantee Procurement Connected Policy Round 2**

**Exacerbating a problem it is designed to fix.**

Chris Lehmann & Georgia Holmes  
15 December 2023

Master Electricians Australia (MEA) is the trade association representing electrical contractors recognised by industry, government and the community as the electrical industry's leading business partner, knowledge source and advocate. Our website is [www.masterelectricians.com.au](http://www.masterelectricians.com.au)

MEA participated in DEWR's first round of consultations regarding Australia Skills Guarantee Procurement Connected Policy (PCP Guidelines) and highlighted that despite our support for endeavours towards improving female and apprentice participation in construction, we strongly believed the proposed PCP Guidelines were plagued with flaws that could lead them to becoming a resource draining, merit displacing requirement. We still hold this view despite the PCP Guideline's latest updates. Of particular concern to our members, and the broader industry, is the impact these guidelines will have on small businesses who sub-contract for big Government contract suppliers. These entities are likely to be at risk of not winning contracts due to suppliers focusing on working with businesses who can assist in achieving quotas that small businesses do not necessarily have the resources for.

MEA believe that quotas on their own are an ineffective measure towards improving skill shortages and gender diversity in construction. It runs the risk of creating an expensive 'box-ticking' exercise without the foundational support of a skilled and diverse workforce. In the previous round of submissions, we identified issues with the PCP Guidelines including financial burdens, loopholes, sustainability, small business protections and reporting. MEA believe the same issues remain within updated PCP Guidelines being proposed.

We believe introducing Vocational Education Training in Secondary Schools (VETSS) with an equal weighting to Australian Tertiary Admission Ranking (ATAR) is one of the most effective solutions to encouraging and training a greater diversity of cohorts towards Science, Technology, Engineering and Math (STEM) trades. Without laying the foundation towards sourcing more female apprentices, mandatory quotas will exacerbate the problem we are trying to resolve.

### Issues Identified

MEA believe the guidelines place an onerous burden on Government contract suppliers, focusing on fairness and equality above merit and productivity. MEA continues to raise concerns throughout the guidelines which we identified in our previous submission.

Below are concerns we have identified.

#### What if overarching apprentices, or specifically women apprentices, leave their career field during the government contract and cannot be easily replaced?

In our previous submission we raised queries regarding expectations of vacant male and/or female apprentice roles that cannot be replaced due to shortage of available resources, noting that quotas therefore risk stifling workplace efficiency. Notably, the updated PCP Guidelines have added consequences of non-compliance, to which "shortage of apprentices in the supplier's location" can be a mitigating factor and recognises that "some mitigating factors may prevent the supplier from achieving all targets". We noted that female completion rates have been declining over the last decade (appendix E1), despite commencement rates increasing during the same period (appendix D2) highlighting a retention issue as opposed to a recruitment problem that will not be resolved through setting quotas. Whilst we appreciate the PCP Guidelines have taken account of feedback that suppliers may be unable to achieve targets due to unavailable female resources, we do not believe they recognise the realistic significant difference between male and female construction apprentices currently available.

It is believed the PCP Guideline quotas are generating greater gender diversity issues within Government construction contracts as they do not address the core issue. The real problem lies within the unavailable pool of skilled labour workforce available to employers. Gender discriminate hiring processes do not appear to be the main driver preventing greater female participation in the workplace, but rather, unavailable female resources to hire from. To embed sustainable long-term improvement for female participation, DEWR needs to address the route issue; namely insufficient quantity of women choosing to enter trades. MEA advocate that introducing VETSS is the likely solution. Please refer to our discussion under 'VETSS' for further explanation on how we believe to best improve female apprentice rates.

#### What protections are in place for male trade apprentices in the coming decade?

We note that the overarching apprentice target has a flat quota of 10% for the foreseeable future, while female apprentice quotas are to increase annually. Notably, trade-specific apprentice target for women will increase to 10% from 2030 onwards, creating an expectation that the minimum number of all trade apprentices will be female. While we support initiatives which encourage the hiring of more apprentices, we highlight the impact caused by the quotas with respect to finances, time, safety and quality of projects. The quotas have essentially been designed to force employers into hiring additional (male) apprentices over and above the minimum 10% female apprentices which will come at the cost of skilled and qualified tradespeople.

Furthermore, as noted above, we believe this is an unsustainable expectation on employers in the current labour market. The unavailable pool of female apprentices is not going to be resolved by forcing mandated quotas on suppliers, but only continue to push unobtainable targets, adding pressure to suppliers and risking women being hired who are not necessarily pre-qualified but assist in achieving quotas, putting safety of the surrounding workforce at risk. We need to focus on initiatives that build the number of female resources available which we strongly believe can, and will, be achieved through VETSS.

#### What protections are in place for small business contractors?

MEA believe these guidelines are likely to have significant negative impact on small businesses who often fulfil sub-contractor roles for big suppliers. We can expect to see suppliers hiring subcontractors that assist towards providing both the overarching and female apprentice ratio to achieve their targets. Small contractors do not necessarily have enough staff to be of benefit to suppliers in achieving these quotas and therefore lose out on work. Notably, the updated guidelines have not addressed this concern.

Newly added PCP guideline 5.4.2 refers to the Commonwealth Procurement Rules (CPR) as a contributing factor towards being awarded a submission. The Minister of Finance states the following at the beginning of the CPR:

*“Small business is the backbone of the Australian economy and the Government is committed to maximising small business participation in Commonwealth procurement, providing greater opportunities for local businesses to create more jobs for Australians. These Commonwealth Procurement Rules deliver a commitment to help business grow and provides them with more confidence and certainty to plan for the future.”*

As noted above, it is believed the PCP Guidelines do the opposite of this, as they are likely to incentivise suppliers to hire larger sub-contractors who can contribute towards achieving quotas.

The CPR further notes the following, to which we believe the PCP Guidelines are at direct odds with:

*“To ensure that Small and Medium Enterprises (SMEs) can engage in fair competition for Australian Government business, officials should apply procurement practices that do not unfairly discriminate against SMEs and provide appropriate opportunities for SMEs to compete”<sup>1</sup>.*

#### Will the PCP Guidelines or CPR Prevail where Submissions Cause Criteria to Conflict?

PCP Guideline 5.4.2 specifies that “relevant entities will need to consider the prosed Skills Guarantee targets in conjunction with other assessment criteria, to determine, the submission that demonstrates the most value for money in accordance with the [PCR]”. This paragraph is a new addition to the round two PCP Guidelines and appears to negate the necessary condition of quotas being achieved. We question whether the PCP Guidelines or PCR takes prevalence when they are at odds – i.e. will the relevant entities be awarded the contract if they deliver the most value for money and achieve environmental, social and financial benefits but fall short of achieving PCP Guideline quotas? If so, what merit do the PCP Guidelines hold in reality? Under the CPR, “officials **must** comply with [CPR rules] when they procure goods and services”<sup>2</sup>.

While we note that “Non-corporate Commonwealth entities and prescribed corporate commonwealth entities must comply with a procurement-connected policy where the policy indicates that it is applicable to the procurement process”, we believe the PCP guidelines jeopardise the express CPR intent to protect SMEs as noted above, and is therefore at risk of being overridden.

#### Will there be unfair favour given to those submitting quotas above the minimum threshold?

As part of the submission stage, potential suppliers are required to not only submit data towards achieving minimum quotas but are also expected to report “proposed higher targets for women that exceed minimum targets for women” for flagship construction projects. We are concerned favour will be given to those who indicate they will exceed minimum requirements, which we do not believe is an equitable assessment criteria. We strongly suggest that this submission requirement should be removed.

#### Who is funding the following costs?

- Compliance
- The design, implementation and maintenance of the reporting tools.
- Extra hours into reporting from the supplier.

Please refer to our discussion below under ‘Regulations’ for further discussion.

#### What are the consequences for failing to comply with guidelines beyond the supplier being unlikely to win another Government construction contract?

We note the updated PCP Guidelines have added ‘consequences of non-compliance with PCP Guidelines’. Previously, we noted that the guidelines did not imply any consequence for non-compliance beyond it being factored into future applications. Whilst we appreciate the updated PCP guidelines have included ‘7.1.3 Table 2: Consequences of non-compliance with the Skills Guarantee’, we do not believe they address the core issues we raised; namely what is to stop the guidelines from becoming sidelined? In our view, the guidelines continue to lack any real

<sup>1</sup> Australian Government, Department of Finance, ‘Commonwealth Procurement Rules 13 June 2023 Achieving value for money’, (13 June 2023), 14.

<sup>2</sup> (n1), 9.

compliance weight with the chance of becoming a failed mission. As more suppliers fail to comply, the harder review and enforcement will be due to lack of resourcing.

Notably, the added actions/consequences are ambiguous at best. Despite that a lack of available resources can be a mitigating factor towards non-compliance, we argue this is likely to be a regular supplier defence due to the lack of females choosing to enter trades. For serious non-compliance the supplier **may** be penalised from being awarded future procurements, this is not a guaranteed penalty which we believe many suppliers will take a chance on. It follows that we strongly believe these guidelines will eventually become sidelined, justified as unachievable in the current labour market.

**What is to stop suppliers from purposely understating the estimated work hours required to complete the contract to drive down the denominator in the calculating percentage of actual apprentice hours worked?**

By intentionally undervaluing the labour hours required to complete a task, the denominator in calculating the overarching apprentice target becomes smaller, thereby increasing the percentage of total reported apprentice hours.

The following calculation has been proposed in the PCP guidelines:

$$\text{Overarching apprentice target} = \frac{\text{Total reported apprentice labour hours}}{\text{Total estimated labour hours}} \times 100$$

MEA believes this is a loophole which not only enables suppliers to 'cheat' the quotas, but also risks them being awarded a contract based on a false estimation of hours which implies a quicker completion timeframe and reduced costs when in reality far more hours are required.

**What is to stop apprentices identifying as a 'woman' on their working documents at the request of their employer?**

The PCP guidelines define woman as:

*Woman "is a person, who regardless of their sex assigned at birth, identifies as a woman irrespective of age."*

By definition of the guidelines, anyone can identify as a woman. Taken to its extreme conclusion, employers may reward apprentices to identify as female in paperwork to achieve both overarching and female targets in one person. There is nothing defining a woman under the guidelines by their physical appearance to prevent this from happening. This definition therefore puts genuine female participation rates at further risk.

## Reporting Requirements

In our previous submission, MEA noted that validating reports will be necessary for the PCP Guidelines to have any real purpose, which poses inherent problems.

- **Auditing of Evidence Provided.** We maintain our concern regarding validating supplier reports in a timely manner. MEA argue the only true way to confirm the completeness and accuracy of labour hours (whole workforce and apprentices) is through tracing hours reported back to the supplier's payroll expenses. However, third party financial audits are performed retrospectively in the following financial year while the PCP Guidelines require suppliers to submit quarterly reports. There truly is no obvious

solution to verifying reports in a timely manner and without verification the quotas become risk becoming meaningless.

- **Systems Compliance.** Those with manual timesheets are going to have to invest significant costs into transitioning towards electronic reporting. Furthermore, many suppliers have internally designed electronic timesheet systems which are not necessarily compatible with exporting to a government server. While we appreciate minimum reporting requirements operation guidance are yet to be determined, as per 6.2.1, we note this is a logistic to be considered if and when advancing with the PCP guidelines.
- **Funding of Compliance and Review.** The guidelines are going to require significant recruitment in government entities responsible for reviewing and enforcing regulation compliance. This comes at the cost of taxpayer dollars. Additionally, suppliers will need to spend significant time preparing reports. Government construction projects often pay workers by wage, therefore the more time spent on reporting, the more taxpayer money is going to be spent.

### **Vocational Education Training in Secondary Schools (VETSS)**

While we applaud the Australian Government's efforts to resolve the skills shortage crisis and improve diversity in construction, we do not believe guidelines mandating equality quotas to be met are the answer in themselves. Targeting recruitment to increase the number of trade apprentices, and specifically women apprentices, is only effective when there is a skilled pool of labour available to satisfy these objectives. The way to increase apprenticeships in construction (both male and female) is through educational and career advice support at a secondary school level.

Throughout many submissions, MEA have strongly advocated that integrating VETSS with an equal weighting to ATAR rankings is one of the solutions to both gender diversity and skills shortages. The current schooling system moulds students to fit an academic structure, leaving behind those who are unwilling or unable to conform. Providing exposure and targeted training provides all students equal opportunities for future success by providing a supportive and encouraging environment.

The benefits of VETSS include better equipped personnel entering the workforce, enhanced aptitude and competency screening, heightened attraction and retention and greater diversity in the workplace through early exposure in a supportive environment. MEA sees this as a pivotal tool in supporting societal, structural and systemic change with regards to non-traditional cohorts entering trades. There are well established pathways in VET to attain higher qualifications at Diploma and Advanced Diploma level, satisfying pre-requisites and RPL for Tertiary Degree qualifications.

### **Overall Apprentices**

From 2020, trade apprentice commencement and cancellation rates significantly spiked reaching record highs since 1963 (refer to appendices A and C). This highlights that recruitment of apprentices is not the problem, rather the issue lies with retaining them. MEA argues this is largely the result of inadequate aptitude and competency testing before employment. Setting recruitment quotas will not address skill shortage issues and even has the potential to exacerbate the problem. We believe that just imposing quotas without addressing aptitude and suitability of applicants will reinforce the current trend of students enrolling in the wrong courses/apprenticeships. This is why MEA emphasise the important role that VETSS

has in rectifying this. It provides students the opportunity for early exposure to a range of trades and allows for strong competency and aptitude screening. As a result, we would expect to see the trend in appendix A (commencement rates) and appendix B (completion rates) to continue rising while the trend in appendix C (cancellation rates) begin to decrease.

As shown in appendices in D3 and D4, the trend in commencement for different age groups are the same in both genders. The biggest contributing age group towards apprentice commencements are those under 19 years of age. However, we have recently seen males and females aged 25-44 starting to catch up, with significant spikes in commencement rates since 2020 (as per appendix D1). The current average age of commencing STEM trade is 24 years old, meaning that for an increasing number of citizens, there is a six-seven-year gap between finishing secondary school, and starting a well-paid career in a STEM occupation in areas of vital need for the Australian economy. MEA believes that focusing on training a younger and more diverse generation at the later stages of secondary schooling is the most effective use of Government spending on STEM initiatives and addresses both diversity in STEM and skills shortages.

### Female Apprentices

The lack of gender diversity and the skills shortages does not lie predominately within bias hiring procedures, rather the lack of access to VET pathways from a younger age to a wide and diverse cohort. Diversity grows from exposing and curating skills at a young age. Introducing VETSS provides an opportunity for all students, regardless of gender, to become skilled in STEM trades. This is where we can expect to see cultural change towards STEM diversity and relieved pressure on the labour demand shortages.

The guidelines could create an expensive 'box-ticking' exercise if enforced without the foundational support towards creating a pipeline of skilled and diverse trades people. These guidelines are at risk of putting public relations above merit thereby risking safety and competency not only in the workplace, but also in the quality of work provided. MEA is not suggesting prioritising recruitment of diverse labour means the quality will automatically deteriorate; instead we are highlighting that the recruitment process is at risk of becoming too heavily focused on who can be recruited as opposed to setting these cohorts up for the best chance at success by recruiting on aptitude and appropriate foundation skills first and foremost. Embedding awareness training of opportunities in the VET/STEM sector from secondary school, ensures that recruitment quotas become meaningful.

Efforts to improve gender diversity in construction and to resolve the skills shortage should be supported, however, it is necessary to have balance between opportunity and outcome. There is a risk of over-investing in regulatory and compliance initiatives which heavily target underrepresented groups. This is money that would be more efficiently invested in targeting secondary school students that have proven aptitude for occupations.

Despite female trade apprentice commencement rates being relatively static throughout history (as per appendix D2), they have risen to a record high since the 2020 pandemic shutdowns. Conversely, female apprentice completion rates have started declining since 2014 (as per appendix E1) with no sign of improving. The fact that female commencement rates are rising while completion rates are declining indicates a core problem, which recruitment quotas will not fix. We believe that VETSS not only provides early exposure to a wide variety of trades normalising female participation, but also allows for competency and aptitude screening. Through embedded secondary school programs, female apprentices (and other non-traditional cohorts) have a better chance of matching their interests and skills with the correct trade leading to greater commencement and completion rates, as well as addressing diversity.

### MEA's Position for VETSS

MEA's position is for Government to prioritise the investment of precious public funding in a streamlined and integrated VETSS curriculum with an equal weight to ATAR to help address diversity in STEM careers, improve completions, and decrease skills shortages. This naturally creates a larger pool of skilled construction workers that are diverse compared to the guidelines which are pushing an artificial solution that lacks any foundational support to provide sustainable outcomes.

Investing in aptitude and competency at the school level will put many Australians on the first rung of the ladder to success in a rewarding career. All other initiatives and campaigns will potentially be limited in effectiveness and become a less effective use of precious taxpayer money.





## Conclusion

MEA believe the proposed PCP Guidelines continue to be an ineffective tool for addressing the skills shortage crisis and increasing female participation. There seems to be too much focus on public relations which prioritises equality and inclusiveness over actual skills requirements, which has the possibility of doing both male and females apprentices more harm than good if they are being recruited to meet targets as opposed to having the appropriate skills or competency for the job. This is likely to have a negative impact on completion rates, risk quality and safety, and jeopardise small business' ability to compete for jobs as sub-contractors on government projects.

The regulations have raised issues that have no obvious solution, namely –

- Declining trend in female completion rates (despite rising commencement rates) make it harder for suppliers to maintain quotas throughout a Government contract.
- Protecting male apprentices on Government Contracts over the coming decade as minimum per centage of female trade apprentices increases to 10%.
- Small businesses are less likely to win sub-contractor roles as suppliers look to larger sized entities that can assist in fulfilling quotas. The PCP Guidelines appear to be directly at odds with protecting Australian SMEs.
- Risk of unfair favour being given to suppliers tendering apprentice rates higher than the minimum quota.
- Tax-payer money is going to be spent on reporting and compliance costs.
- Weightless consequences inhibiting long term sustainability of the PCP Guidelines.
- Loopholes available to bolster the percentage of hours worked by apprentices, which could result in misleading information that could ultimately win suppliers the contract.

The reporting requirements create further issues. Firstly, suppliers are going to be burdened with costs to implement electronic systems that enable exporting of timesheets to Government servers. Secondly, how are the timesheets provided going to be scrutinised? Leaving their validity to be traced back to payroll in annual financial audits is not timely enough. And finally, significant tax-payer money is going to be spent on compliance and review of the guidelines as more time and personnel resources will be necessary to perform these functions.

MEA strongly advocate that VETSS with equivalent weighting to ATAR subjects is the best move in a suite of solutions to Australia's skill shortage and trade apprentice gender diversity problems. This exposes male, female, and diverse students to a variety of trades encouraging education towards a career in the industry, fostering a supportive environment where trade career is normalised. VETSS enables more effective competency and aptitude screening which will be a key driver towards improving completion rates.

Female and male apprenticeships in trades have both seen an improving trend in commencement rates but retention/completion is the biggest issue. MEA stresses that initiatives such as the proposed guidelines can only be as effective as the available pool of workers. The PCP Guidelines do not increase the pool of workers available to recruit, but VETSS training potentially does, and this is where Government should focus its efforts and invest taxpayer money.

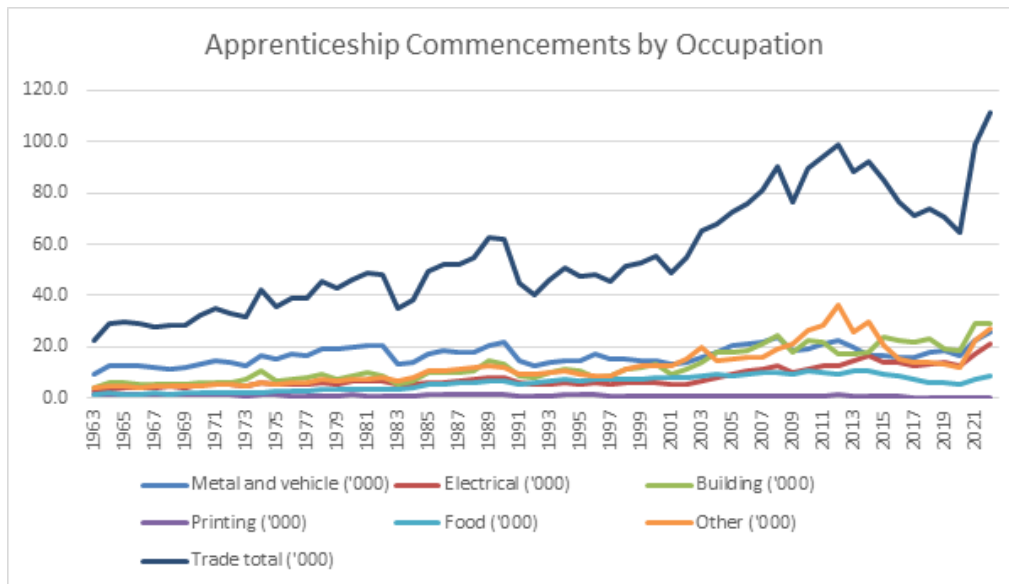
MEA looks forward to seeing the outcome of the proposed PCP guidelines and would like to participate in further discussions regarding their future.

## Appendix A – Trend in Trainee Commencements from 1963 - 2022

MEA has obtained the following data from the National Centre for Vocational Education and Training (NCVER), “the national body responsible for collecting, managing, analysing and communicating research and statistics on the Australian VET sector”<sup>3</sup>.

### A1 – Apprentice Commencements by Trade Occupation

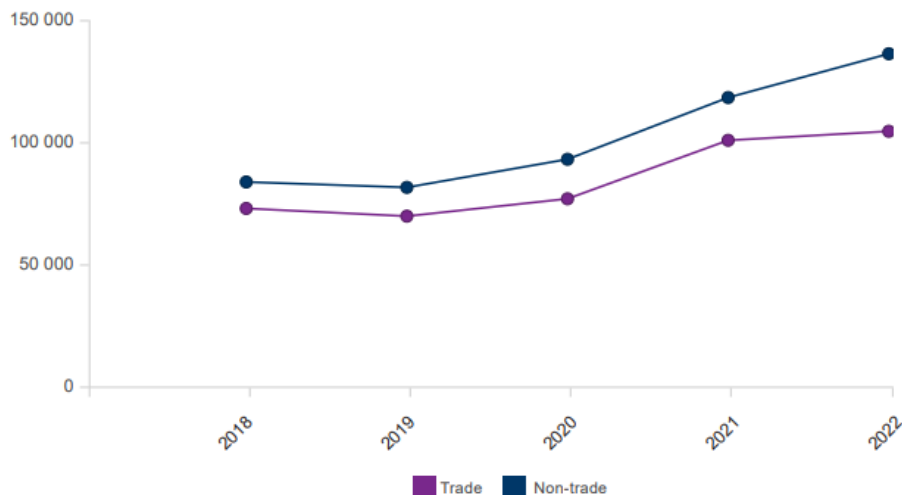
\*Note – MEA created the A1 graph derived from statistics provided by NCVER<sup>4</sup>.



### A2 - Apprentice Commencements From 2018 - 2022<sup>5</sup>

#### Commencements trends for Australia - 12 month series

12 months ending 31 December



<sup>3</sup> 'Getting to know NCVER' NCVER < [Historical time series of apprenticeships and traineeships in Australia from 1963 to 2022 \(Getting-to-know-NCVER-2020\\_0920.pdf\)](#)> (2)

<sup>4</sup> 'Historical time series of apprenticeships and traineeships in Australia from 1963 to 2022' NCVER < [Historical time series of apprenticeships and traineeships in Australia from 1963 to 2022 \(ncver.edu.au\)](#)>

<sup>5</sup> 'Apprentices and trainees 2022 December quarter' NCVER < [Apprentices and trainees 2022: December quarter - Australia \(ncver.edu.au\)](#)> (18)

A3 – Commencements time series for trade occupations, Australia – 12 month series<sup>6</sup>

## Commencements time series for trade occupations, Australia - 12 month series

12 months ending 31 December

Trade occupations	12 months ending 31 December					% change	
	2018	2019	2020	2021	2022	2018-2022	2021-2022
Automotive and Engineering Trades Workers	18 050	18 030	18 415	23 150	25 225	39.7	9.0
Construction Trades Workers	21 665	19 265	21 950	28 810	28 145	29.9	-2.3
Electrotechnology and Telecommunications Trades Workers	13 860	13 535	14 085	18 215	20 450	47.5	12.3
Engineering, ICT and Science Technicians	2 270	2 540	3 480	7 590	7 360	224.3	-3.0
Food Trades Workers	5 910	5 895	5 830	7 050	7 800	32.0	10.6
Other Technicians and Trades Workers	7 445	6 700	8 585	9 820	9 935	33.5	1.2
Skilled Animal, Agricultural and Horticultural Workers	3 670	3 750	4 480	6 110	5 530	50.6	-9.5
<b>Total</b>	<b>72 870</b>	<b>69 710</b>	<b>76 825</b>	<b>100 750</b>	<b>104 450</b>	<b>43.3</b>	<b>3.7</b>

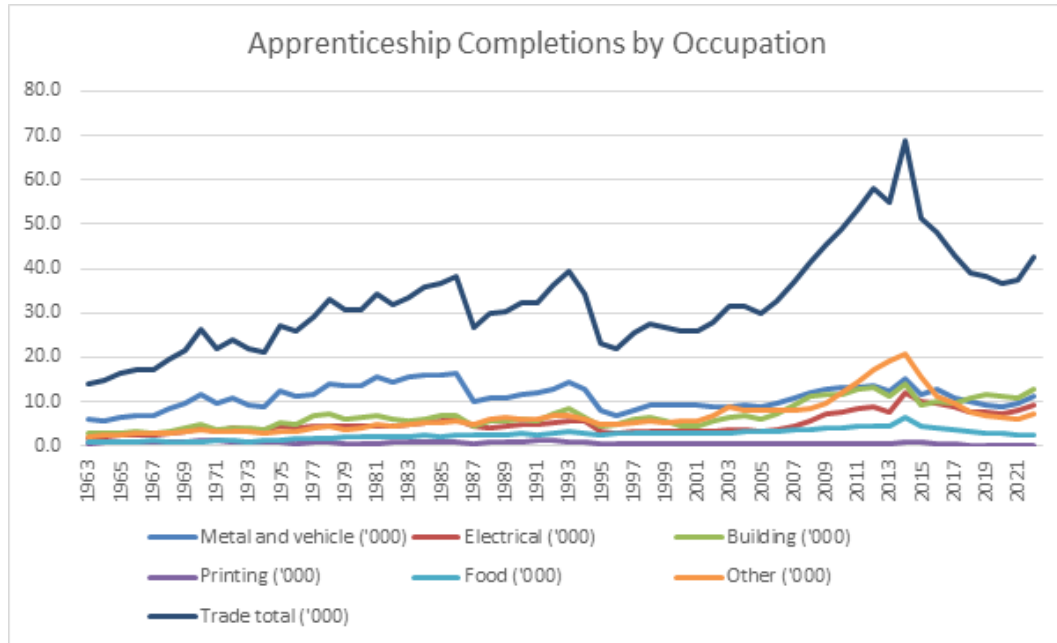
<sup>6</sup> (n4), 19

## Appendix B – Trend in Apprenticeship Completions from 1963 - 2022

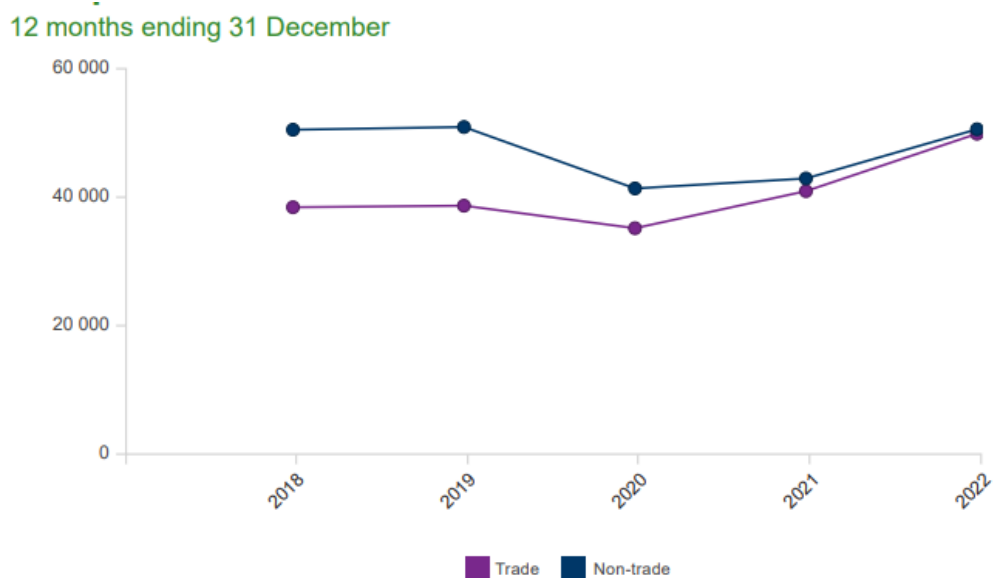
MEA has obtained the following data from the National Centre for Vocational Education and Training (NCVER), “the national body responsible for collecting, managing, analysing and communicating research and statistics on the Australian VET sector”<sup>7</sup>.

### B1 - Apprentice Completions by Trade Occupation

\*Note – MEA created the B1 graph derived from statistics provided by NCVER<sup>8</sup>.



### B2 – Completions trends for Australia – 12 month series<sup>9</sup>



<sup>7</sup> (n2)  
<sup>8</sup> (n3)  
<sup>9</sup> (n4), 24

## B3 – Completions time series for trade occupations, Australia – 12 month series<sup>10</sup>

12 months ending 31 December

Trade occupations	12 months ending 31 December					% change	
	2018	2019	2020	2021	2022	2018-2022	2021-2022
Automotive and Engineering Trades Workers	9 385	9 250	9 075	10 745	12 960	38.1	20.6
Construction Trades Workers	11 035	11 860	10 360	12 245	14 655	32.8	19.7
Electrotechnology and Telecommunications Trades Workers	7 700	7 420	7 395	8 560	10 975	42.6	28.2
Engineering, ICT and Science Technicians	1 515	1 300	1 305	1 425	2 150	42.0	50.7
Food Trades Workers	3 195	2 950	2 210	2 500	2 555	-20.1	2.3
Other Technicians and Trades Workers	3 945	3 995	3 115	3 440	4 160	5.5	21.1
Skilled Animal, Agricultural and Horticultural Workers	1 535	1 775	1 580	1 905	2 290	48.9	20.0
<b>Total</b>	<b>38 310</b>	<b>38 550</b>	<b>35 045</b>	<b>40 820</b>	<b>49 750</b>	<b>29.9</b>	<b>21.9</b>

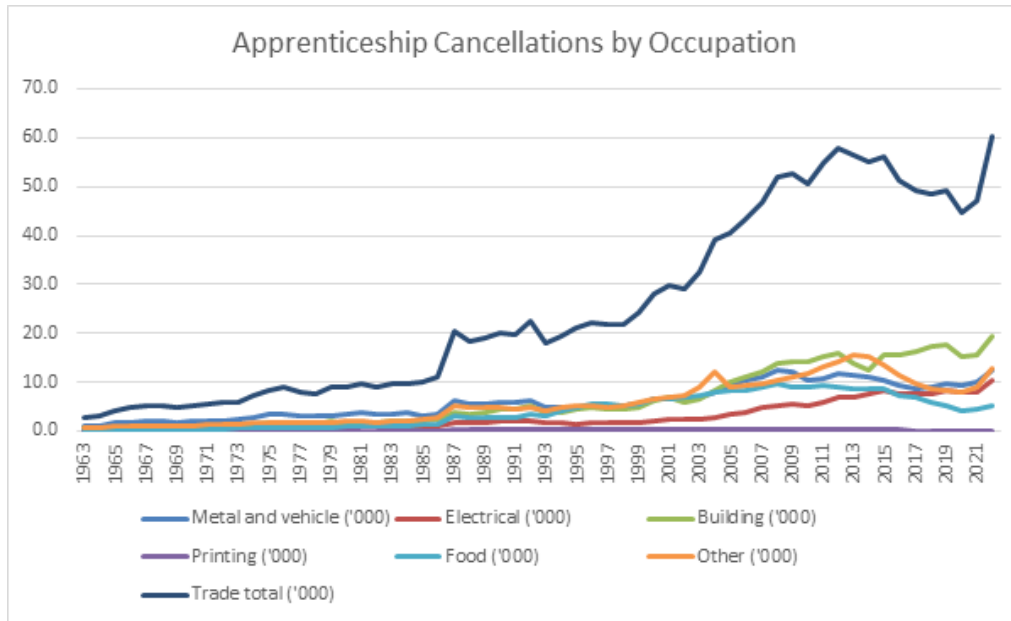
<sup>10</sup> (n4), 25

## Appendix C – Trend in Apprentice Cancellations from 1963 - 2022

MEA has obtained the following data from the National Centre for Vocational Education and Training (NCVER), “the national body responsible for collecting, managing, analysing and communicating research and statistics on the Australian VET sector”<sup>11</sup>.

### C1 - Apprentice Cancellations by Trade Occupation

\*Note – MEA created C1 graph derived from statistics provided by NCVER<sup>12</sup>.



### C2 - Apprentice Cancellations by Trade Occupation<sup>13</sup>



<sup>11</sup> (n2)  
<sup>12</sup> (n3)  
<sup>13</sup> (n4), 21.

**C3 - Apprentice Cancellations and Withdrawals time series for trade occupations, Australia – 12 month series<sup>14</sup>.**

12 months ending 31 December

Trade occupations	12 months ending 31 December					% change	
	2018	2019	2020	2021	2022	2018-2022	2021-2022
Automotive and Engineering Trades Workers	9 140	9 880	9 040	11 500	12 740	39.4	10.8
Construction Trades Workers	17 575	17 240	14 025	17 910	18 955	7.9	5.8
Electrotechnology and Telecommunications Trades Workers	8 105	8 585	7 160	9 420	10 715	32.2	13.8
Engineering, ICT and Science Technicians	840	825	845	2 200	3 350	299.6	52.2
Food Trades Workers	5 285	4 920	3 930	4 910	5 000	-5.4	1.8
Other Technicians and Trades Workers	5 595	5 575	4 700	6 215	7 075	26.5	13.8
Skilled Animal, Agricultural and Horticultural Workers	2 115	2 120	1 865	3 095	3 160	49.5	2.0
<b>Total</b>	<b>48 650</b>	<b>49 145</b>	<b>41 570</b>	<b>55 250</b>	<b>60 995</b>	<b>25.4</b>	<b>10.4</b>

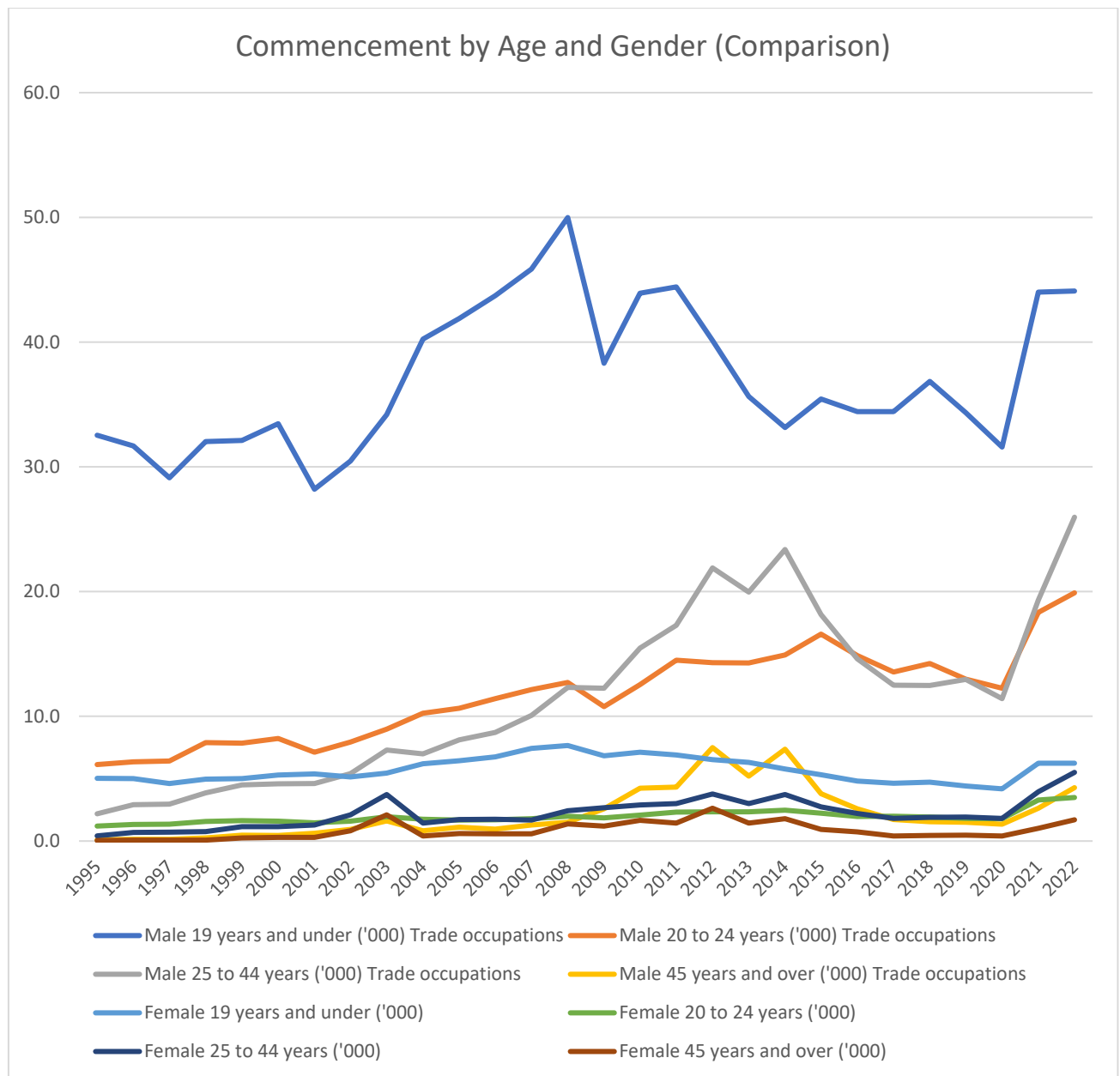
<sup>14</sup> (n4), 22.

## Appendix D – Trend in Apprentice Commencement by Age and Gender 1963 - 2021

MEA has obtained the following data from the National Centre for Vocational Education and Training (NCVER), “the national body responsible for collecting, managing, analysing and communicating research and statistics on the Australian VET sector”<sup>15</sup>.

We have created the below graphs from data derived from statistics provided by NCVER<sup>16</sup>.

### D1 – Commencement by Age and Gender

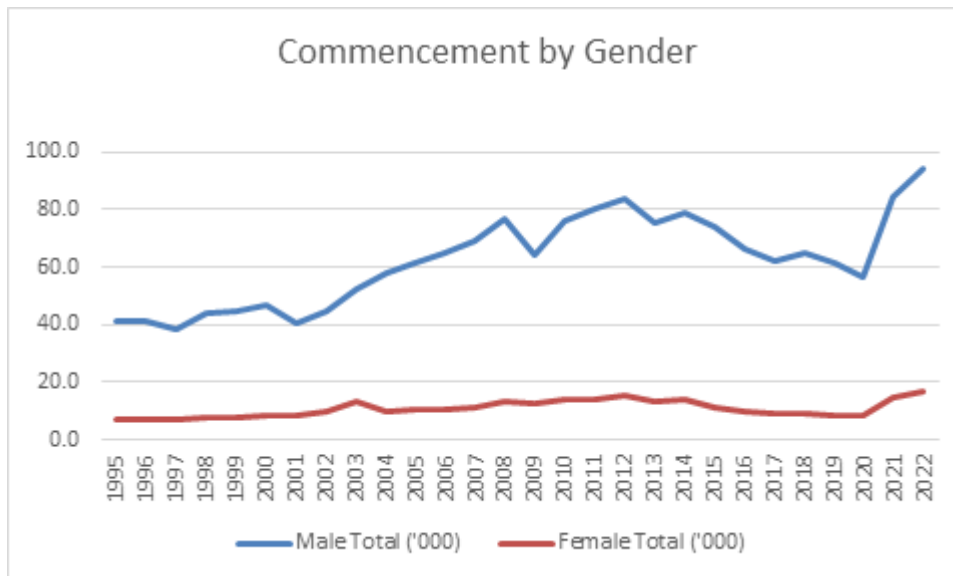


<sup>15</sup> (n2)

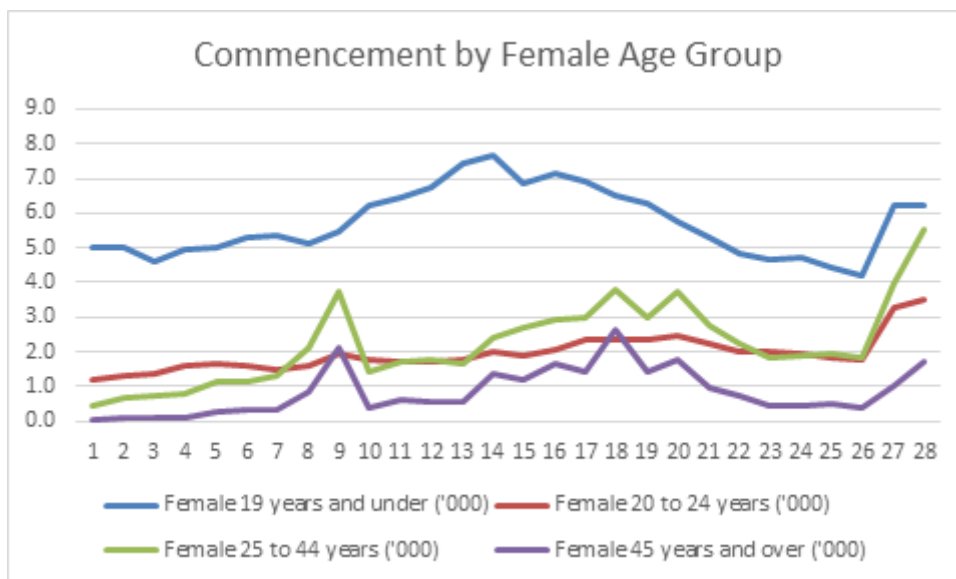
<sup>16</sup> (n3)



## D2 – Apprentice Commencement by Gender<sup>17</sup>



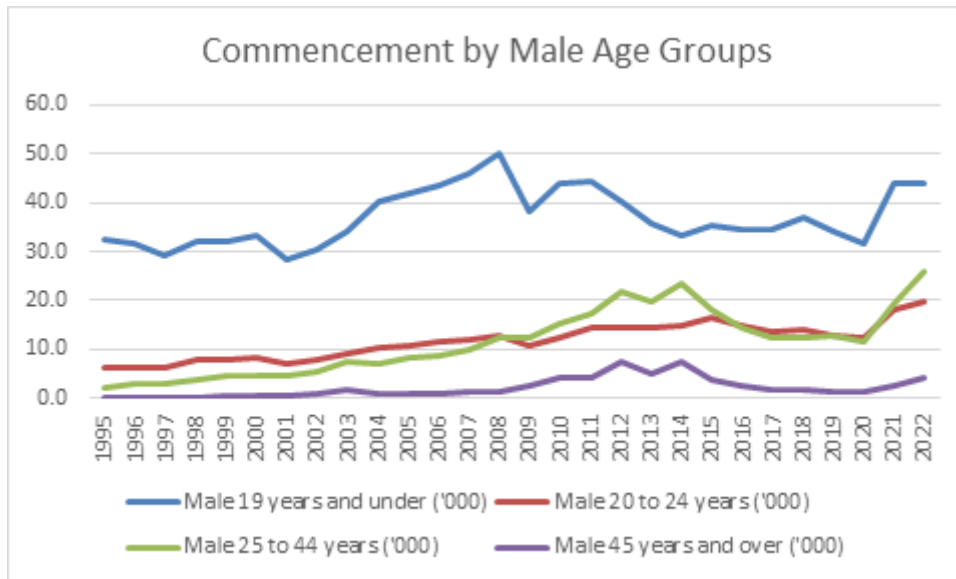
## D3 – Apprentice Commencement by Female Age Groups<sup>18</sup>



<sup>17</sup> (n2)

<sup>18</sup> (n3)

#### D4 – Apprentice Commencement by Male Age Groups<sup>19</sup>



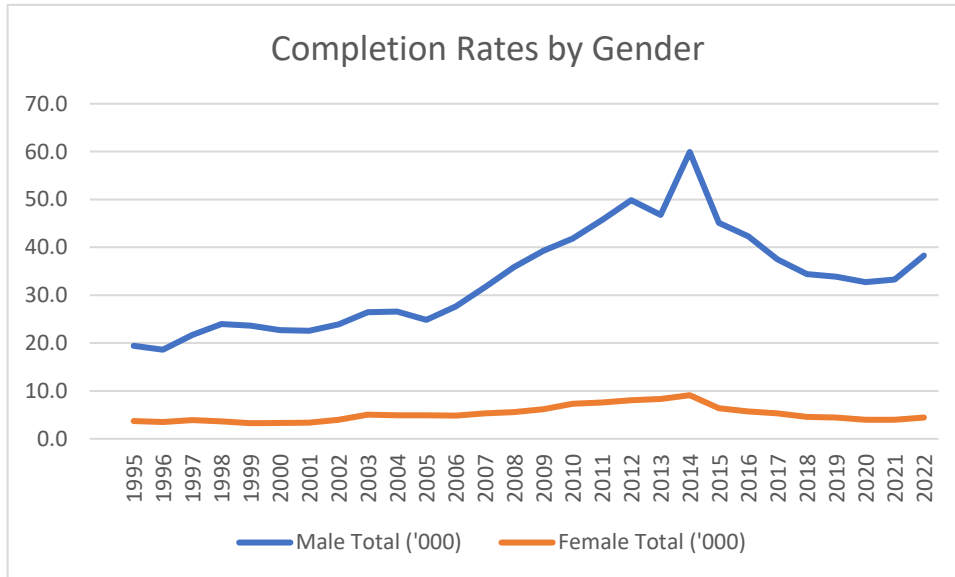
<sup>19</sup> (n2)

## Appendix E – Trend in Apprentice Completion by Gender 1963 - 2021

MEA has obtained the following data from the National Centre for Vocational Education and Training (NCVER), “the national body responsible for collecting, managing, analysing and communicating research and statistics on the Australian VET sector”.

### E1 – Completion rates by Gender

We have created the below graphs from data derived from statistics provided by NCVER<sup>20</sup>



<sup>20</sup> (n2)