



ACT
Government

What We Heard Report

Skilled to Succeed Implementation

Building and Construction Round Table

5 December 2022

Consultation purpose

Launched in 2022, *Skilled to Succeed* is the ACT Government's skills and workforce agenda that strives to ensure Canberrans have the right skills for in-demand jobs now and into the future. This agenda focuses on four priorities:

- Delivering skills inclusively to provide all Canberrans a foundation for lifelong learning
- Build a more responsive, flexible, and future-focussed skills system
- Assisting employers to build, attract and retain the right workforce
- Strengthening skills sector foundations

To deliver this agenda, the ACT Government is developing Industry Plans for the Care, Technology, Building & Construction, Experience, and Renewables & Sustainability sectors. These Plans will identify actions for government, industry, and training providers to ensure that the training and skills system supports Canberra's future workforce.

To underpin the development of these plans, the ACT Government has been hosting roundtables with industry stakeholders to hear their views on how the skills sector can support the growth of their industry and develop the workforce that they need going into the future.

On 5 December 2022, the Chief Minister, Treasury and Economic Development Directorate hosted an ACT Building & Construction Roundtable with peak bodies, industry associations, training providers, unions, and employers of apprentices. A list of those who attended the Roundtable is provided at [Attachment C](#).

Yellow Edge, a Canberra-based leadership and performance development company was engaged by the ACT Government to facilitate the Roundtable and prepare the following Listening Report. This paper captures the key themes and perspectives of attendees.

What we heard

Participants from across the Building and Construction (B&C) industry had a robust discussion on the opportunities and challenges facing the sector and ideas on addressing the issues. The views recorded in this report were captured from participants on the day.

Four key themes emerged over the course of the discussion. They included:

1. Role of VET to support the changing needs of industry.
2. The changing landscape of apprenticeships.
3. Workplace flexibility and work-life balance.
4. Rising competition for skills and changing worker expectations.

These themes are interconnected and together provide a picture of what the industry is currently experiencing as well as opportunities for improvement in the future.

What are the opportunities and challenges for the building and construction workforce now and into the future?

Theme 1: Role of VET to support the changing needs of industry

- Innovative technologies for the design and construction of commercial and residential builds. This encapsulates:
 - greener building design, new materials, new construction methods,
 - building information, and
 - building performance monitoring.
- The rapid emergence of these technologies can be attributed to supply chain bottlenecks, but also in response to extreme weather events such as floods and bushfires. There is also a demand for climate change-resilient housing and buildings constructed with a lower environmental footprint.
- With sufficient funding and resource procurement, the Vocational Education and Training (VET) sector in the ACT can begin future-proofing training in the building and construction industry, ensuring workforce capability and readiness to match increasing demands. This would require a joint effort between the VET sector and ACT Government. The government should provide sufficient funding, and policy must be paired with skills/implementation (e.g., European Union strategy). Model projects can be used by the industry to highlight technology. Regular reviews of the VET sector will also ensure teaching capability and Canberra Institute of Technology is held to a high standard.
- While the ACT is already leading and innovating in the green building space in some areas of the industry (e.g., HVAC), there is always room to develop sustainable opportunities. The VET sector can play a crucial role in contributing to the ACT's potential of being a leader in Green Building. The administration of quick and flexible training packages will equip the workforce with the skills and knowledge to maintain greener practices. A digital design pathway is needed in between VET drafting and architecture, which in turn will help standardise the approach to scope three emission standards/sustainability.
- Coordination with industries and universities can be fruitful for anticipating emerging skill areas and technology. It is important the VET sector have this foresight to avoid "playing catch-up."

Theme 2: The changing landscape of apprenticeships

- Apprenticeships are a common feature of the skill building pipeline within the industry. However, as young people's expectations change and demand for all forms of talent continues to increase, apprenticeships as a career pathway, face an increasingly competitive environment. Building greater support systems for young apprentices has been identified as a positive strategy to improve well-being and realise better completion rates.
- Young apprentices are facing more problems than ever when starting or continuing their apprenticeships in the ACT. This is in part due to the impact of COVID on young people, causing a great level of disconnect and shifting the work-life balance. Other problems that may impact on apprenticeships include:
 - Parental engagement.
 - Changing perceptions about university versus trades.
 - Funding white card / personal protective equipment / basic clothing and equipment kits.
 - Finding work with a purpose.
 - Limited work experience.

- By providing greater support, infrastructure, and training facilities, we (industry) may see increased rates of completion in apprenticeships. Peer-to-peer career talks about pathways can also offer apprentices clarity, advice, and motivation. Finally, increases in cost of living may force some apprentices to seek more sustainable work opportunities. Wrap-around support (e.g., childcare support, flexibility) and rotations of employers (via a Government Training Organisation) can also help apprentices struggling to balance their work-life relationship. Current measures include the ‘Try-A-Trade’ program, and growing flexibility within courses.
- Completion rates could be improved through introducing trade licensing in the ACT.

Theme 3: Workplace flexibility and work-life balance.

- The impact of the COVID-19 pandemic on employee expectations towards their work-life balance has accelerated the need across all sectors to strengthen efforts to building positive, inclusive, and flexible organisational cultures to support good mental health outcomes, employee engagement, retention, productivity, and access to talent—which may be dispersed geographically.
- System flexibility for people who are struggling to meet conventional training and education regimen can yield positive returns for the industry if implemented appropriately. These include:
 - Opportunities for theory training delivered online (in a workshop environment).
 - Flexible timeframes to complete courses.
 - Digital hubs that provide access to the technology required to complete courses.
 - Technology training for mature learners / digitally illiterate etc.
 - Registered Training Organisations should also have greater flexibility in relation to course and assessment scheduling including delivering training online.
- Measures should also be taken to make training and employment more accessible to underrepresented groups or those with special circumstances. For example, pre-apprenticeship programs can be very successful for providing entry level training for women, helping them get into the industry.

Theme 4: Rising competition for skills and changing worker expectations.

- As attitudes of people to their work lives change and evolve, portfolio careers are becoming increasingly common. People with a broad mix of work experiences and capabilities seek more variety, the opportunity to build on their acquired skills and to have new career experiences in new areas of work, including in the industry.
- The range of qualifications and experience in the industry will only be further exacerbated by post-pandemic migration to Australia. Given the pent-up demand for talent across many sectors, it is expected that competition for skills and the expectation workers will have for their pre-existing experiences and capabilities to be adapted, broadened, and accepted by industry, will increase substantially.
- While recognition of prior learning can contribute to bolstering the supply of skills of those starting or upskilling in the industry, they first need to know which skills are transferable. For example, the Washington Accord allows for skills transfer within Engineering Courses. Some other suggestions to bolster the supply of skills include:
 - Building a pipeline of school leavers.

- Investigating bringing in tradespeople from the UK, Ireland, and South Africa. Understanding the Western Australian Government experience may be useful.
- Providing training for migrants in line with Australian Building Codes.
- Utilise workers that are leaving/retiring from the industry to mentor apprentices.

What actions can industry stakeholders take towards greater success in the next 10 years?

Government	Industry
<ul style="list-style-type: none"> • Investing in high demand skills. • Thoughtful policy development. • Lead by example – invest in future. • Funding should consider better social outcomes not just economic. • Procurement outcomes need to be met – “audit” the outcomes. • Modelling to match skills demand & education for next 5 years. • More funding for pre-apprenticeship programs & VET sector in general based on outcomes of modelling. • Remove barriers including linking workforce needs to skilled migration and packaging qualifications. • Right financial investments <ul style="list-style-type: none"> ○ Funding for priority sectors/cohorts. ○ Being pro-active, not reactive. ○ Understand non-completions (research). ○ Action from Fed Govt. 	<ul style="list-style-type: none"> • Promoting trades in schools. • Promoting work experience in the building and construction industry. • Focusing on safe + inclusive workplaces. • Pathways for growth + opportunities • More women in trades. • More workplace flexibility including part-time. • More job sharing. • Attracting a minimum no. of apprentices into the industry. • Upskilling and investing in workforce training and development. • Flexible working conditions for women. • 4- or 5-day working weeks. • Employers to institute improved supervisory practices for apprentices. • Employers having more of an open mind to employ people of different backgrounds. • Introduce more ‘Try a Trade’ & work experience initiatives.
RTO / GTO (Training Org)	Learners
<ul style="list-style-type: none"> • Flexible delivery models. • Using latest technology. • Workplace skills assessment. • Industry qualifications packaging. • Pre-screening of apprenticeship applicants. • Schools screening students. • Better advice from career advisors. • Virtual delivery from RTOs. • Less compliance regulations on RTOs. • Updated skills packages (i.e., solar) • Upskilling existing workforce. • Continuing Professional Development (CPD) (mandated requirements) • Skills regulations – with appropriate structures. • Subsidised training places. 	<ul style="list-style-type: none"> • Understanding that trades are a worthwhile career. • Greater awareness of the bigger picture. • Invest in their own development. • Clear career pathways and up-skilling / re-skilling options.

What does success look like for the industry?

Participants identified the following desired outcomes for the industry.

- A workforce which is known for being innovative, creative and solutions focused.
- An appropriately sized and qualified workforce.
- The workforce which adapts and engages with emerging technologies.
- Better remuneration packages for apprentices.
- Higher completion rates for apprenticeships.
- Strong regulation and monitoring of trade licenses.
- A workforce with transferrable skills that meet industry/market needs.

Mentimeter crowd-sourcing tool

Of the issues and actions explored in today's roundtable, what are one or two actions, which could be "quick wins," which you believe would have the most impact on the delivery of ACT's skills and workforce agenda?

What do you think are the priorities to action?

Increase the reputation and visibility of CBR as an awesome place to live, study and work

Trade licensing

Set quotas for apprentices on government projects

We shared our intel and heart. Will look forward to the outcomes and output.

Improve knowledge of the construction industry in schools

Create work experience opportunities within the building and construction industry

Promote the building and construction industry positively.

Increase VET funding for the sector.

Finish the long term infrastructure plan update.

National (or international) skills framework

Invest in what is proven: industry led non-profit VET training. It is innovative, closely tied to suppliers of emerging technology and flexible. It is achieving higher quality and completion rates, i.e. better return on investment.

Intent to Action

Is there anything we discussed today you'd like to expand on?

The role of Canberra education organisations to feed into skilled workforce

When looking at skilling and training don't just focus on unemployed – skill shortages exist within fully employed resources

Next steps

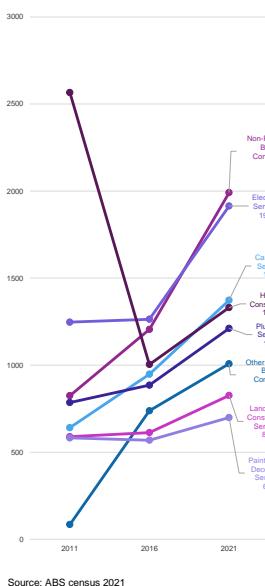
The insights from this roundtable will inform the development of a Building and Construction industry action plan. The ACT Government will stay connected with stakeholders as it progresses the development of the action plan. The plan is expected to be released in 2023.

In the meantime, if you or others from your organisation would like to a further submission, please write to skills@act.gov.au by **Tuesday 28 February 2023**. All input is greatly valued, and we thank you for your participation in this forum.

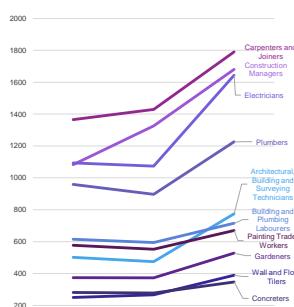
Attachments

Attachment A. Key slides from discussion paper tabled in the session

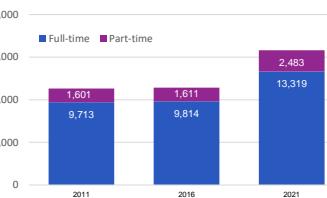
Employment by top sub-industries



Employment by top occupations



Employment by type of employment



Industry snapshot

5,743

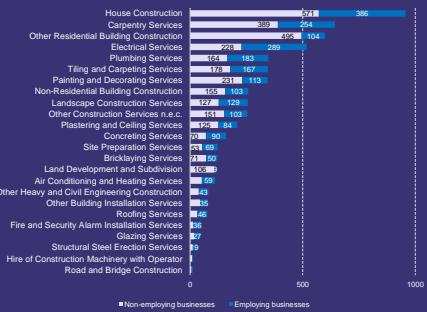
Total number of businesses in the Building and Construction industry in 2021, 2,406 of which are employing businesses

Contribution to ACT economy

6.8% of Gross Value Added

6.3% of total employment

Number of businesses by sub-industry



Online Vacancies September 2022

1,003

Online job vacancies in occupations related to Building and Construction industry

8,155

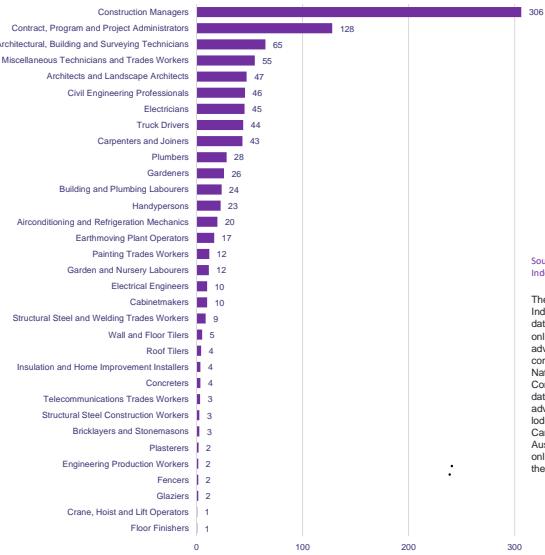
Total online job vacancies in all occupations in the ACT

Source: Internet Vacancy Index (NSC, October 2022)

Online job vacancies in occupations related to the building and construction industry – August 2019 to September 2022



Online job vacancies by occupations related to the building and construction industry - September 2022

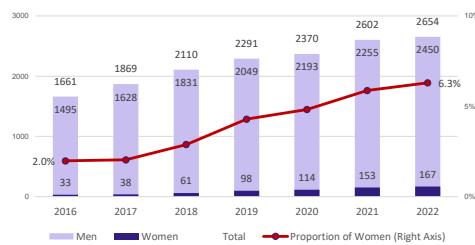


The Internet Vacancy Index (IVI) is a monthly dataset measuring online job advertisements, compiled by the National Skills Commission (NSC). IVI data count job advertisements newly lodged on the SEEK, CareerOne and Australian JobSearch online job boards during the reference month.

Student Commencement (Apprentices and Trainees) – all qualifications by gender

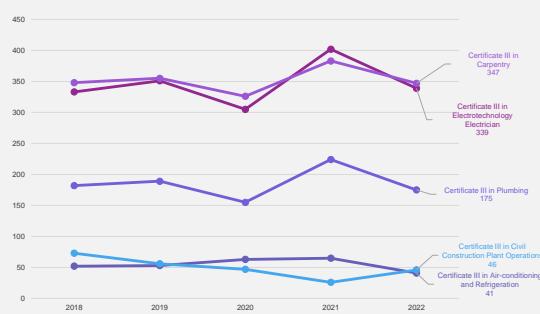


In-training Apprentices and Trainees – all qualifications by gender



Notes:
(a) In-training apprentices and trainees is the average number of apprentices/trainees who are actively being trained and working in any given year
(b) 2022 data is year III to date (1 January to 25 October)
(c) Totals include persons who have not been identified as either gender. Totals may also be different to the sum of categories due to rounding.

Student Commencement (Apprentices and Trainees) by top 5 qualifications



Student Completion by top 5 qualifications

Qualifications	4 year completion rate*
Certificate III in Civil Construction Plant Operations	49%
Certificate III in Air-conditioning and Refrigeration	42%
Certificate III in Plumbing	41%
Certificate III in Carpentry	40%
Certificate III in Electrotechnology Electrician	39%

*students who successfully completed the course as a percentage of students that commenced in 2018

Source: AVETARS

Active Apprentices & Trainees (A&Ts) October 2022

Qualification	Number of A&T
Certificate III in Electrotechnology Electrician	831
Certificate III in Carpentry	610
Certificate III in Plumbing	344
Certificate III in Air-conditioning and Refrigeration	1119
Certificate III in Scaffolding	99
Certificate III in Cabinet Making	88
Certificate III in Landscape Construction	78
Certificate III in Civil Construction Plant Operations	66
Certificate III in Electronics and Communications	42
Certificate III in Construction	37
Certificate III in Painting and Decorating	35
Certificate III in Bricklaying/Blocklaying	33
Certificate III in Roof Plumbing	28
Certificate III in Arboriculture	27
Certificate III in Horticulture	24
Certificate II in Resources and Infrastructure Work Preparation	23
Certificate III in Fire Protection	21
Certificate III in Rigging	20
Certificate IV in Building and Construction (Building)	19
Certificate III in Wall and Floor Tiling	19
Certificate III in Wall and Ceiling Lining	14
Certificate IV in Civil Construction Operations	11
Diploma of Building and Construction (Building)	10
Certificate III in Flooring Technology	10
Certificate III in Glass and Glazing	8
Certificate II in Construction Pathways	6
Certificate III in Stonemasonry (Monumental/Installation)	4
Certificate III in Sports Turf Management	1
Diploma of Arboriculture	1
Certificate II in Horticulture	1
Certificate III in Solid Plastering	1
Grand Total	2620

Short courses (examples)

Provided by CIT
Asbestos Awareness
Working Safely with Asbestos Containing Materials
Crystalline Silica Exposure Prevention
Entry into Working Safely in Construction
Introduction to Construction Planning
Estimating for Builders Basics
Understanding Building Plans

Provided by Private Registered Training Organisations (RTOs)
Civil Construction Operations - skid steer, excavator, wheeled front end-loader, dozer, grader, scraper
Solar-battery system fundamentals, power system fundamentals, solar awareness for tradespeople, utility scale solar, hot water systems
License to perform rigging, perform rigging, erect, alter, and dismantle scaffolding
Scaffolding – various levels
Rigging – various levels
Welding – various levels
Working safely – construction industry, asbestos, bituminous materials, heights, electrical safety, silica exposure
Enter and work in confined spaces
First Aid, CPR

Funded by JobTrainer
Introduction to Construction

What we've heard

As a significant source of employment in the ACT government, the building and construction industry offers pathways for **at-risk youth** through Australian School Based Apprenticeships and supports their **engagement** in and outside of school.

Many apprentices focus on receiving specialised **on the job training** rather than completing their qualification.

The industry has expressed the following needs/issues that could be addressed through the VET sector:

- More courses to **upskill** employees
- Employees often lack essential **non-technical job requirements**, despite having strong technical skills
- There is often poor **language, literacy and numeracy** skills

In general, the industry is currently facing the following pressures

- **Rising costs** due to high price of fuel, imported materials, and higher wages
- **Skills shortages** exacerbated by increased local demand and employee population near retirement age.

Source: Skills Needs Survey

Megatrends



Impactful technology

Technological advances are changing the Construction industry. Building information modelling (BIM) and augmented reality (AR) are adding to improved efficiency. Construction drones are used for site mapping, safety and security purposes. Technological advancement and connectivity are empowering individuals across the world including in the building and construction industry to allow worksite access and real-time inspections.



Urbanisation and demographic change

The world is experiencing rapid and massive demographic change, such as an ageing workforce, which adds a new challenge for businesses. Population growth is driving increased demand for buildings and construction.



Climate and resource security

The megatrend of climate and resource security describe the growing pressure on critical resources especially food and clean water scarcity. This drives the need for climate resilient infrastructure and the growing demand for environmentally sustainable, climate-ready and zero emissions buildings.



Demand for work-life balance

Work-life balance is of increasing importance to the workforce. Trends such as hybrid working has shifted the nature of work in the post-pandemic workplace.



Safety protocols and protective equipment

This trend emphasises the strict safety protocols including replacing human with robots for high risk tasks.

Source: Skills Canberra Research

Attachment B. Roundtable scenarios

Scenario 1

Innovative technologies for the design and construction of commercial and residential builds (such as green building design, new materials, new construction methods, building information modelling, and building performance monitoring) are quickly emerging.

In some instances, these have been driven by supply chain bottlenecks, but also in response to extreme weather events such as catastrophic floods and bushfires. Residents, insurance companies, local governments, and emergency service organisations are also demanding climate change-resilient housing and buildings with a lower environmental footprint.

Discussion points:

- How could the VET sector in ACT future-proof training in the building and construction industry and seek to ensure workforce capability and readiness as demand grows?
- Does the ACT have the potential to be a leader in Green Building? What contribution can the VET sector make to realise this?
- In what ways are/will these future and emerging skills areas be recognised within or outside of traditional trades' categories?
- How can the VET sector anticipate new skills areas as a result of emerging technology and avoid being in "catch-up" mode?

Scenario 2

Apprenticeships have generally been a common feature of skill building and the development of a skills pipeline within the Building and Construction industry. However, as young people's expectations change and demand for all forms of talent continues to increase, apprenticeships as a career pathway face an increasingly competitive environment.

Building greater support for young apprentices has been identified as a positive strategy to improve well-being and realise better completion rates. This "wrap-around support" in some industries includes accommodation, 'local buddies,' and integration assistance for interstate and overseas students, career planning advice, industry internships, professional mentoring, and overseas scholarships.

Discussion points:

- What particular challenges might a young person face starting and continuing their apprenticeship in the ACT?
- What factors have been impacting low completion in apprentice training?
- What approaches could help turn this around in the future?
- What current strategies exist and what potential approaches could be employed in the future to improve participation for women and other under-represented groups?

Scenario 3

The impact of the COVID pandemic on employee expectations towards their work-life has accelerated the need across all sectors to strengthen efforts to build positive, inclusive, and flexible organisational cultures to support good mental health outcomes, employee engagement, retention, productivity, and access to talent-- which may be dispersed geographically.

This has also resulted in more system-wide flexibilities including greater respect for diversity and the inclusion of people from underrepresented groups, greater deployment of virtual service delivery (such as tele-medicine), greater acceptance of virtual degree programs, alternative sources of goods and supply within the global supply chain, and access to external, specialised just-in-time expertise which may be located across geographical boundaries.

Discussion points:

- How can the system work better in the future for people who need flexibility in when and how they participate in training and education or over what period they are able to complete their studies?
- Can the approach taken by some universities be adapted to our VET offerings?
- What changes need to happen for entering the industry and for current staff upskilling to quickly and properly gain recognition for their experience and training?
- How could future training and employment be more accessible to those in underrepresented groups or those with special circumstances?

Scenario 4

As attitudes of people to their work lives change and evolve, portfolio careers are becoming increasingly common. People with a broad mix of work experiences and capabilities seek more variety, the opportunity to build on their acquired skills and to have new career experiences in new areas of work, including in the Building and Construction sector.

Post-pandemic migration to Australia is expected to rise and will potentially bring a broad range of qualifications and experiences which may be relevant to the Building and Construction sector in the ACT. Given the pent-up demand for talent across many sectors, it is expected that competition for skills and the expectation workers will have that their pre-existing experiences and capabilities can be adapted, broadened, and accepted by industry will increase substantially.

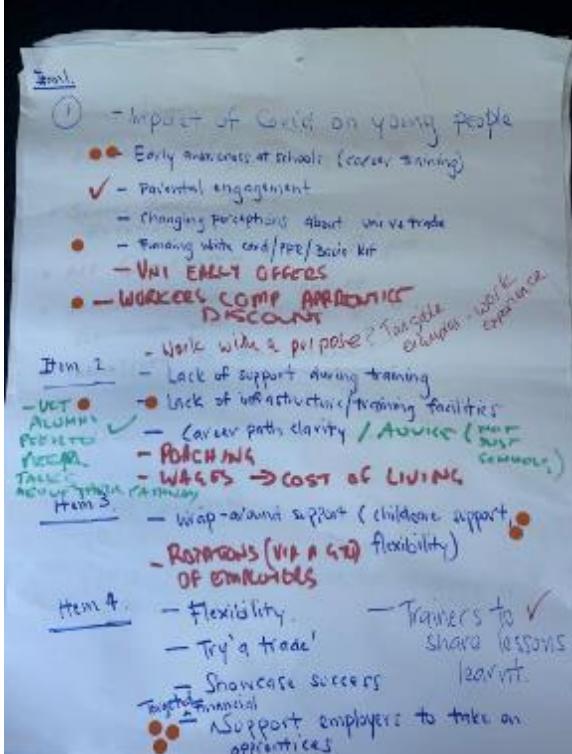
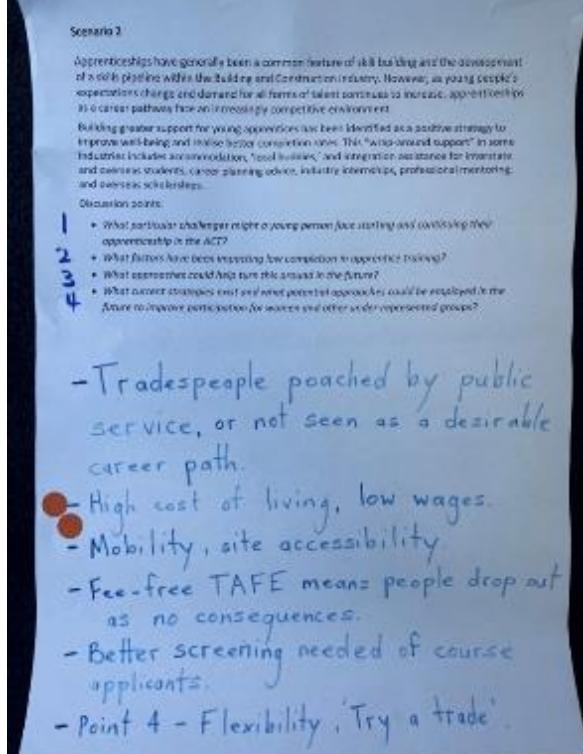
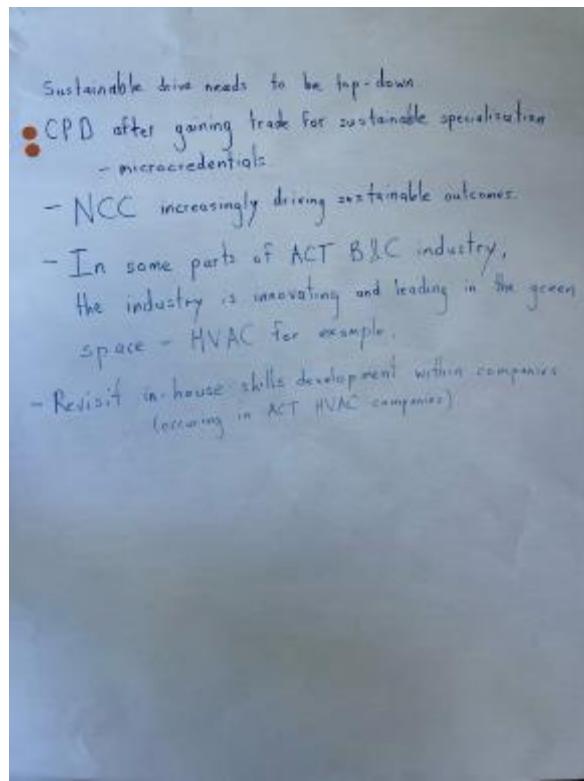
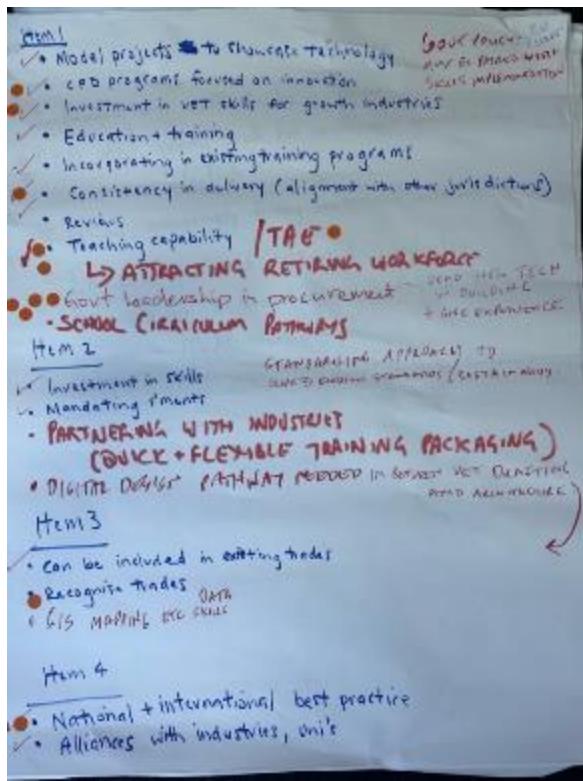
Discussion points:

- For the building and construction industry, what part can RPL play in future years in bolstering the supply of skills of those starting in the industry or those upskilling or broadening their skills and qualifications mix?
- What alternative ways could be developed to acknowledge and tap into the prior experience, capabilities, and qualifications of people so that their potential is not lost?
- What capability pathways could be developed to bring mid-career people, migrants, and underrepresented groups into the Building and Construction sector as part of ensuring a vibrant talent pipeline?

Attachment C. Roundtable attendees

Organisation
Minister for Skills
Minister for Sustainable Buildings and Construction
Apprentice Employment Network NSW and ACT
Australian Construction Industry Forum
Construction Industry Training Council
Master Builders Association of the ACT
National Association of Women in Construction - ACT Chapter
ACT Building and Construction Industry Training Fund Authority
CFMEU
AMWU (Australian Manufacturing Workers Union)
Manteena Group
NECA Training & Apprenticeships
Cardno
Safe Work Australia – ACT Chapter
Senior Advisor to Minister Steel
Advisor to Minister for Sustainable Buildings and Construction
ACT Government attendees

Attachment D. Roundtable notes



Point 1:

- TRADE LICENSING
- AFFORDABILITY (Can Aff. Live and Wage) ✓
- SCHOOL BASED TRADE EXPERIENCES.
- ARE QUALIFICATION FIT FOR PURPOSE.
- APPRENTICES HAVING SECURE
BONDING WITH GTO'S. ✓
- INCENTIVES TO EMPLOYERS ✓

Engagement with Indigenous Community

- Relationships
- Safety (cultural)
- Incentives

• NO CIVIL ENGINEERING DEGREE OFFERED IN ACT UNIVERSITIES

Point 2:

- Yes to digitisation
-

Point 3:

- Greater awareness of RPL skills

Point 4: WAGE ADDITIONAL SUBSIDY FOR PRIORITY COHORTS ATE, DISABILITY / COMPLETION PAYMENT

- Utilise groups who are re-entering the community
- Connecting with organisations who are already in the space (collaboration)

Point 1: Alternative project scheduling (1-5 weeks)
✓ RTOs to have greater training flexibility
Scheduling.

✓ Change National Training Standards
- PACKAGING OF QUALS NEEDS (Retire?)
EVIDENCE

Yes for coursework move to online, but not practical work. Virtual exists in job in the workplace.
Double-courses offered?

Point 3:
Lack of AMR in ACT esp. for licensed trades. (What recognition not law)??

Point 4:
Pre-apprenticeship programs - very successful in getting more women into industry. ✓
Flexible working hours for women (everyone) ✓

Micro Credentials to support Qualified Managers + Staff & Skill Sets.

RPL / Micro Credentials NOT AT THE DETAILMENT OF APPRENTICESHIPS

LLN ISSUES + Aust Build Codes with MIGRANTS
RTO's provide training for new migrants.

Upskilling + Attracting Women

Point 1:
Yes, RPL has a role, but need to know which skills are transferable.
International vs Australian legislation.
Engineering - Washington Accord allows skills transfer.
Build a pipeline of school leavers.
Investigate WA program of bringing in tradespeople from UK, Ireland, South Africa.

