Mining and Automotive Skills Alliance

Training practices in transition: Current delivery models in the Australian Mining industry



Contents

Executive Summary	3
Introduction	4
How is the workforce being trained?	5
Remote and rural training delivery	5
Why would the industry rely on accreditation?	8
RII compliance across Australia	8
Entry-level requirements	10
The scope of the non-accredited training processes	11
Training model delivery	11
Main modes	11
Challenges of delivering the RII training package	12
Resourcing and learner engagement	12
Trainer and assessor scarcity	12
TAE relevancy	12
Equipment	13
Technology across RII	14
Challenges of delivering in-house training	15
Repetition of training	15
Mapping and deleting	15
ASQA compliance	15
Conclusion	16
Recommendations	17
Methodology	18
Appendix	19



Acknowledgement of Country

We acknowledge the Traditional Custodians of the lands on which we live and work. We acknowledge Traditional Custodians of Country throughout Australia and their connections to land, sea and community.

We honour and respect their Elders, past and present, and extend that respect to all First Nations people.

Executive Summary

This report outlines the key drivers behind the increased uptake in non-accredited or in-house training within the Australian Mining industry. The Mining industry has a high prevalence of in-house training solutions designed to deliver greater flexibility and align more closely with site, organisational, and equipment-specific requirements. Findings indicate that reliance on the Resources and Infrastructure Industry training package (RII) in the Mining industry is high, but reliance on accredited training delivery is declining as RII enrolments (-51%), completions (-39%) and commencements have decreased (-65%) (Figure 1) between 2016 and 2025.

Major employers are increasingly opting for in-house training solutions due to structural, quality, and operational issues associated with delivering accredited training. The majority of Mining training is based on or aligned to the minimum standards endorsed in the accredited training package. Contextualised versions of the national training package are frequently utilised to suit organisational needs and to support the development of employees' progression pathways throughout their careers.

There are several distinct advantages of non-accredited training, which allow employers to:

- tailor training to technological change, equipment, operational scale, and geographic remoteness
- deliver training at the scale and pace needed by industry, as most training providers are unable to afford appropriate Mining equipment that would reflect industry realities. For example, the Liebherr R 9800 excavator, which is an 896-tonne machine, costs around $30 million. Large machinery requires a large parcel of land to operate and train on, as well as the cost of diesel and maintenance
- succession plan the workforce from induction to operational and technical roles
- solve the trainer and assessor shortage by producing qualified trainers from within the existing workforce, rather than relying on the external market
- design and map compliance and integrate the learning activity (for both trainer and trainee) into their day-to-day employment activities – enabling better retention rates for the trainer and better completion rates for the learner (as trainers and learners are paid competitive industry wages while they train/learn)
- train workers to proficiency rather than minimum competency, since non-accredited programs aren't cost-constrained by the fee-for-service model that a Registered Training Organisation (RTO) operates under.

Individual operations report cohorts of 750 to 900 workers in Certificate II and III training, supported by 120 to 150 internal trainers and assessors, with some organisations reporting over 60% reliance on non-accredited training, compared with 40% on external RTOs. One large operation alone has issued more than 143,000 certificates of competency, completed 34,000 practical assessments and recorded over 822,000 site-specific procedure theory completions since establishing its non-accredited training infrastructure in 2008. These numbers span states and sites and depend on the year and the intake of new employees. This volume of accredited-equivalent activity occurs largely outside traditional VET data channels, meaning national enrolment figures substantially understate the industry's actual engagement with the RII framework.

Non-accredited training can have downsides, such as:

- creating a recognition problem when workers transition between employers or move into adjacent industries, limiting labour mobility, which can have productivity-dampening outcomes
- requiring repeated skills verification when workers transfer sites, companies or states, since internal records are not consistently ported or standardised
- requiring significant ongoing investment to establish and maintain, particularly for enterprise RTOs, which carry the cost of RTO registration, ASQA compliance infrastructure and trainer accreditation
- reducing the transferability of skills across the industry, since content, language and assessment evidence are rebuilt around a single organisation's procedures and equipment.

This research incorporates a mixed-methods approach, utilising extensive qualitative stakeholder consultation, quantitative analysis of vocational education and training (VET) and internal industry data and validation through site visits.

The following recommendations are proposed in response to the research findings to both enable RII to better adapt to industry needs and maintain relevancy, but also strengthen the Mining and Automotive Skills Alliance's (AUSMASA) visibility of RII training activity across industry and inform ongoing training package development and workforce planning:

- the establishment of annual structured consultations with mining employers to systematically identify which RII units are actively utilised in non-accredited training
- integrating data-capturing systems with internal industry training data to stay current on actual training activity
- establishing a mechanism to confirm whether low enrolment reflects genuinely reduced demand or a shift toward non-accredited delivery, with open discussions also serving to surface issues in existing training products
- monitoring not just enrolment but TAFE scope and delivery capability, tracking which RII units and qualifications TAFEs can be delivered in non-mine site environments
- developing a mining-specific skill set within RII for workplace trainers and assessors
- conduct an audit of RII units deleted in recent training package updates against current non-accredited training content, to determine whether removed units are still being actively used on-site and should inform future currency reviews.

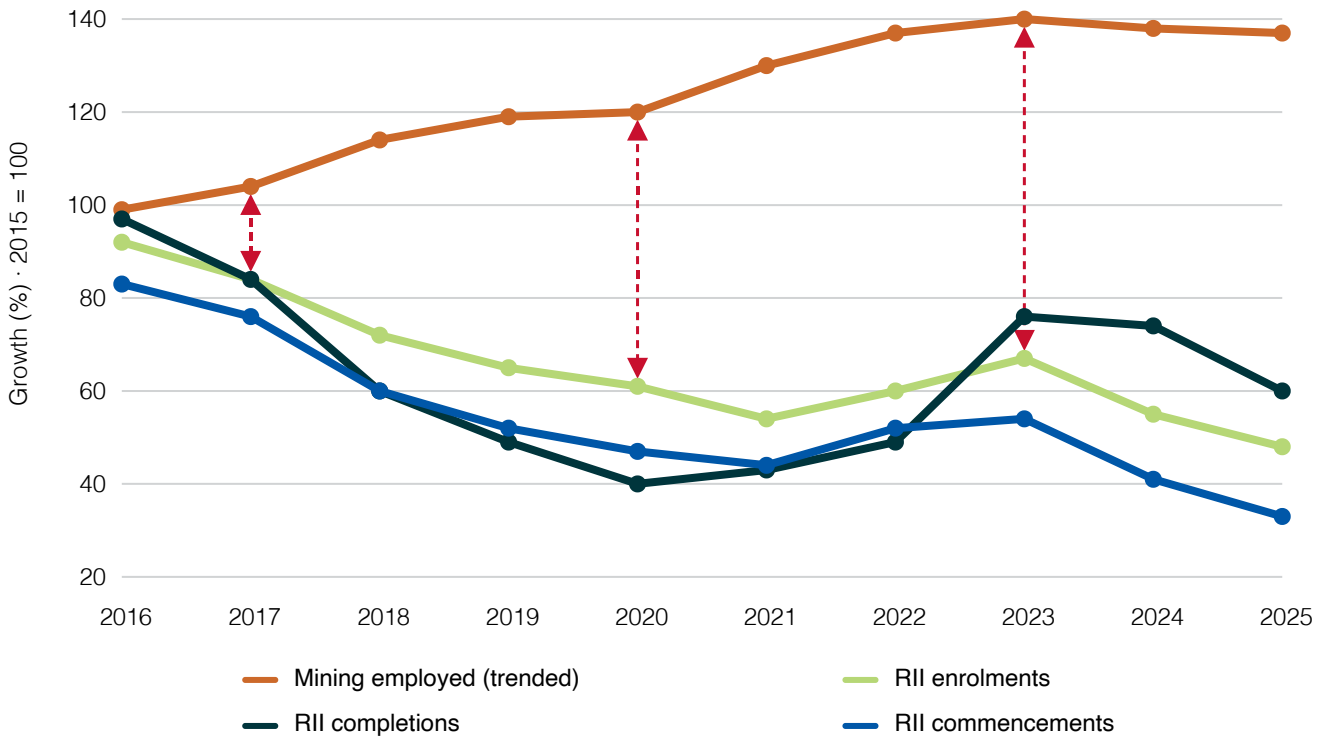


Introduction

The mining industry remains a critical component of Australia's economy, underpinning a broad industry ecosystem that supports 1.25 million jobs nationwide and employs over 300,000 people.[1] Australian mining accounts for 75% of the nation's export earnings, and its economic and employment contributions support income growth, workforce participation and broader national prosperity.[2] Realignment and continual review of workforce skills are essential in response to the industry's evolving technological and technical landscape. The skills pipeline is adapting to trends and pressures from ongoing electrification, technological innovation, and advances in diagnostic technologies.[3] Given the industry's reliance on a skilled workforce, vocational education and training play a crucial role in developing the capabilities needed to meet current and future industry needs.

The Resources and Infrastructure Industry (RII) Training Package is structured to support the development and needs of Australia's mining and civil construction industries.[4] AUSMASA's mining-focused share of RII currently includes 39 active qualifications and 828 units of competency (UoC) .[5] Previous AUSMASA analysis of the RII Training Package has noted the declining activity within the training package, suggesting reduced reliance on accredited training across the mining industry.[6] Mining employment has steadily increased (+38%) between 2015 and 2025; however, RII enrolments (-51%), completions (-39%), and commencements (-65%) have decreased between 2016 and 2025 (Figure 1).[7]

Figure 1: Growth Index: Mining Employment vs RII Activity



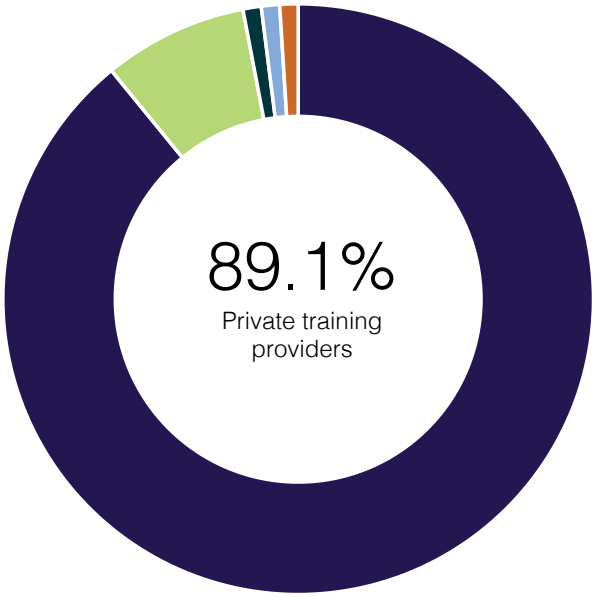
Source: NCVER VOCSTAT, "TVA program enrolments 2015-2025", 2026; NCVER VOCSTAT, "TVA program completions 2015-2025", 2026"; ABS, Labour Force, Australia, Detailed, November 2025; Trended by AUSMASA. Note" the growth index was calculated as (2015 figure)/ figure in each year.

1 Minerals Council of Australia, "Mapped Australian Mining", 2025.
2 IBIS World, "Mining", 2026.
3 AUSMASA, "Workforce Insights Report 2026 – Workforce in Transition", 2026.
4 AUSMASA, "RII Resources and Infrastructure Training Package – Implementation Guide", 2026.
5 AUSMASA, "Workforce Insights Report 2026 – Workforce in Transition", 2026.
6 AUSMASA, "Mining Research Bulletin – September 2025", 2025.
7 NCVER VOCSTATS, "TVA program enrolments 2015-2024", 2026.

How is the workforce being trained?

The vast majority of students recorded as enrolled in RII mining qualifications in the national data set are listed with private training providers. In 2025, there were 22,640 enrolled students at a private training organisation (including accredited fee-for-service delivery), compared to 1,970 at TAFE institutes. Schools and universities make up less than 1% of enrolments (Figure 2).[8]

Figure 2: Percentage of RII Mining Enrolments by Training Provider 2025



Private training providers	**89.1%**
TAFE institutes	**7.9%**
Universities	**1.0%**
Community education providers	**1.0%**
Enterprise providers	**1.0%**
Schools	**0.0%**

Source: NCVER VOCSTAT, "TVA program enrolments – provider type 2025", 2026.

There is no comparable data point for individuals undertaking non-accredited training. Insights from major industry employers suggest that a Tier 1 Mining organisation may have 750-900 individuals in training at any given time, with over 100 trainers and assessors who hold a TAE40122 Certificate IV in Training and Assessment to conduct training. Training delivered will include training-of-trainers, with contextualised material on conducting training on a mine site. All industry respondents reported having non-accredited training programs under different models: fee-for-service, third-party arrangements, and enterprise RTOs. Large mining respondents reported relying 100% on non-accredited training procedures for the entire workforce, except for apprentices.

Remote and rural training delivery

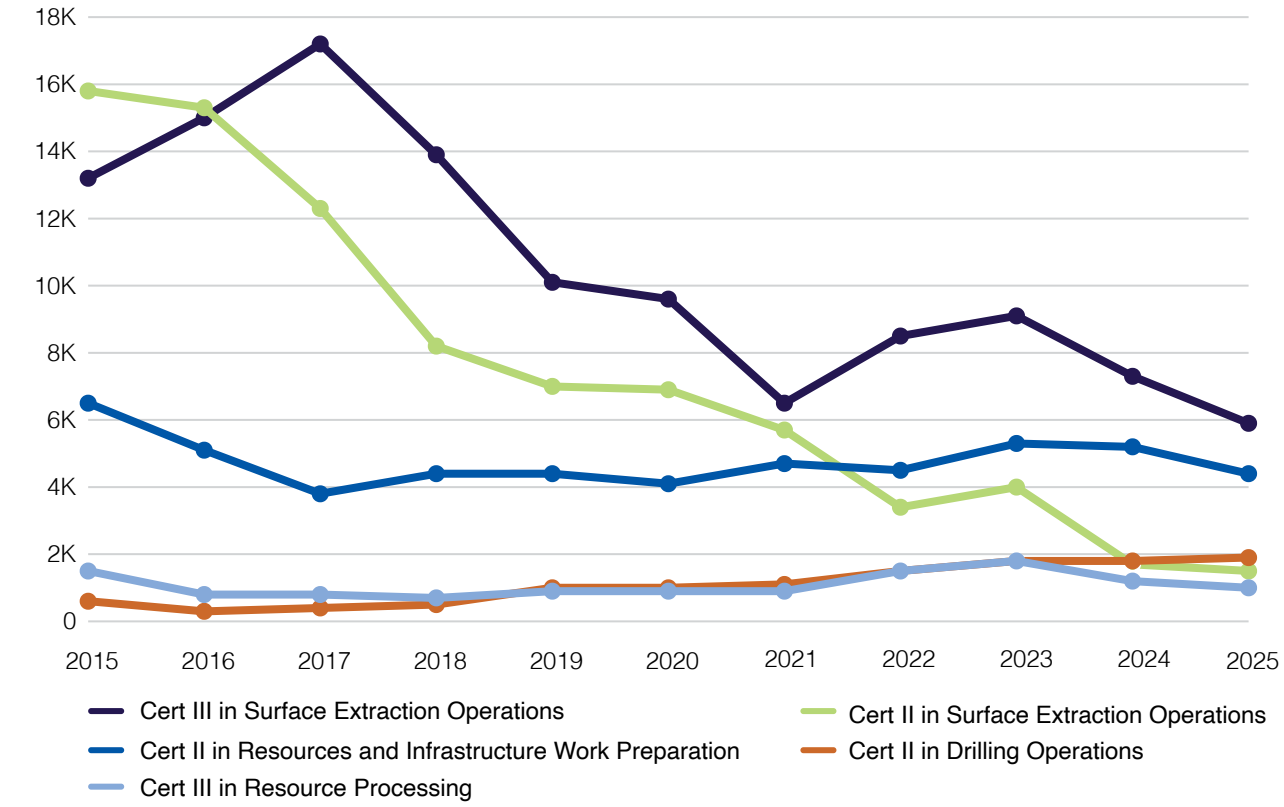
Non-accredited training can overcome delivery barriers between VET and RTO locations by enabling access to remote sites and workforces. On-site training, combined with a digital training platform, can help mitigate such delivery issues.

The geographic concentration of the mining workforce presents one of the most persistent structural challenges to accredited RII delivery through traditional VET channels. Much of the industry is deployed into remote and geographically isolated sites through fly-in-fly-out (FIFO) and other work arrangements. The expansion of traditional VET operations into increasingly remote locations can also be logistically prohibitive and costly for both students and organisations seeking to conduct RII training. An industry respondent noted that most of their operations are not in proximity to towns, identifying cost and remoteness as the primary drivers behind the maintenance of over 150 internal trainers across their sites. Remote regions, on average, face workforce attraction, retention, and recruitment challenges due to their remoteness and limited social amenities.[9]

[8] Vocational Education & Training Delivered to Secondary Students (VET DSS) allows years 10, 11 and 12 to complete nationally recognised vocational qualifications while still attending school.

[9] AUSMASA, "Mining Research Bulletin – April 2025", 2025.

Figure 3: Top 5 Qualifications Timeseries 2015 – 2025

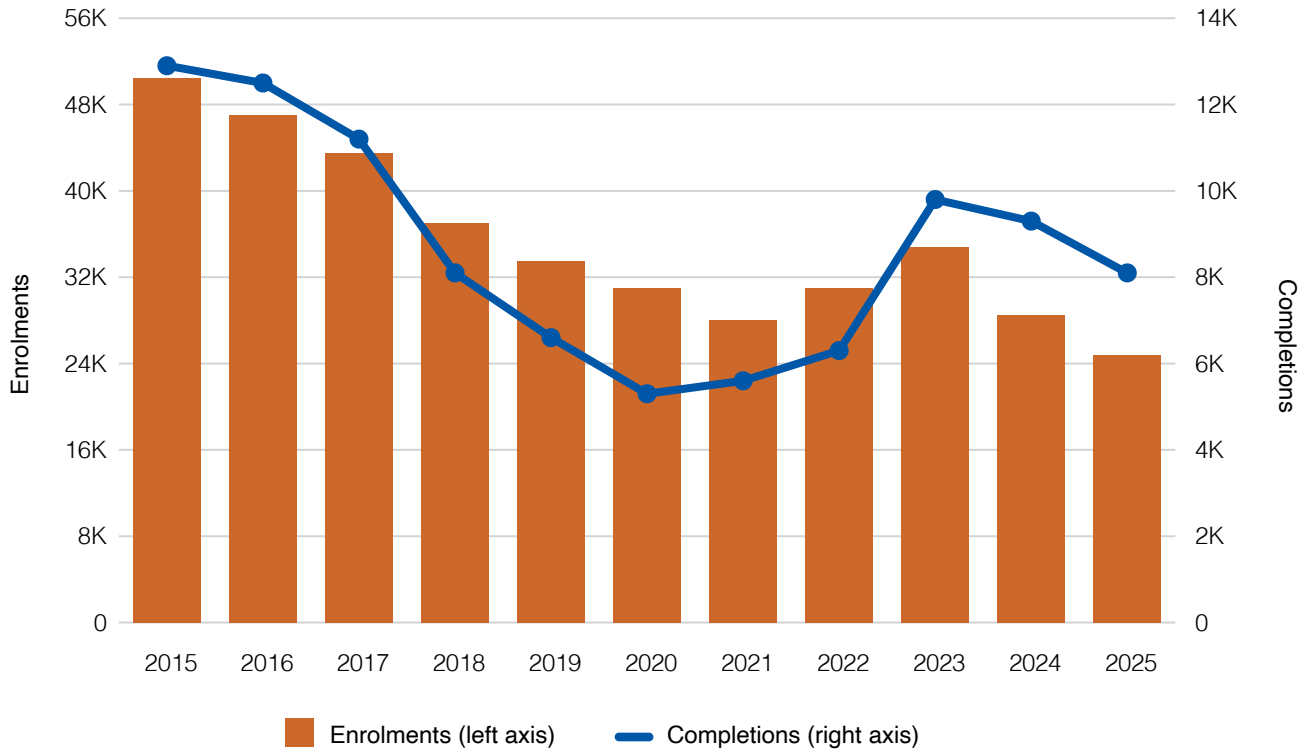


Source: NCVER VOCSTAT, "TVA program enrolments 2015-2025", 2026. Note: the enrolments for the qualification include those from superseded training codes. The top 5 qualifications have been selected based on the sum of enrolments for 2015-2025.

The Certificate III in Surface Extraction Operation has been the most-enrolled qualification in the training package since 2016, yet enrolments have declined by 55% from its 2017 peak to 2025. The decline in all top 5 enrolled accredited qualifications is a package-wide pattern of reduced participation. Enrolment activity for the Certificate II in Resources and Infrastructure Work Preparation remains relatively steady, owing to its availability at most TAFE institutions and its ability to be taught entirely in a classroom environment.



Figure 4: Enrolments vs Completions



Source: NCVER VOCSTAT, "TVA program enrolments 2015-2025", 2026

Within qualification enrolments, RII is increasingly being used selectively as employers extract the required elements for compliance purposes. The remainder of workforce development occurs through internal non-accredited programs that generate no enrolment or completion data. This creates a disparity between enrolment and completion, as significantly fewer completions occur at the rate of enrolment, with full qualification not being highly rewarded relative to individual units.



Why would the industry rely on accreditation?

RII compliance across Australia

Australia's Mining industry operates under a fragmented, state-administered regulatory system. [10] State and territory governments have the power to grant and regulate mining rights and related training within their jurisdictions, such as the Coal Mining Safety and Health Act 1999 in Queensland. However, variations of the Work Health and Safety Acts are enforced nationally to meet each jurisdiction's high-risk and safety requirements. Queensland is the only state to operate Recognised Standards 11 and 22, as it has specific RII units built into its coal competency framework. The standards mandate regular reviews of training plans, the application of competency standards, the completion of technical certifications by suitably certified people, and the recognition of current competencies (RCC) and recognition of prior learning (RPL).[11]

Mining companies typically map and validate their training programs against the relevant state regulatory frameworks, contextualising them to their operations. Many organisations work closely with regulators to ensure that site-specific and contextualised safety training aligns with legislative requirements and industry standards.

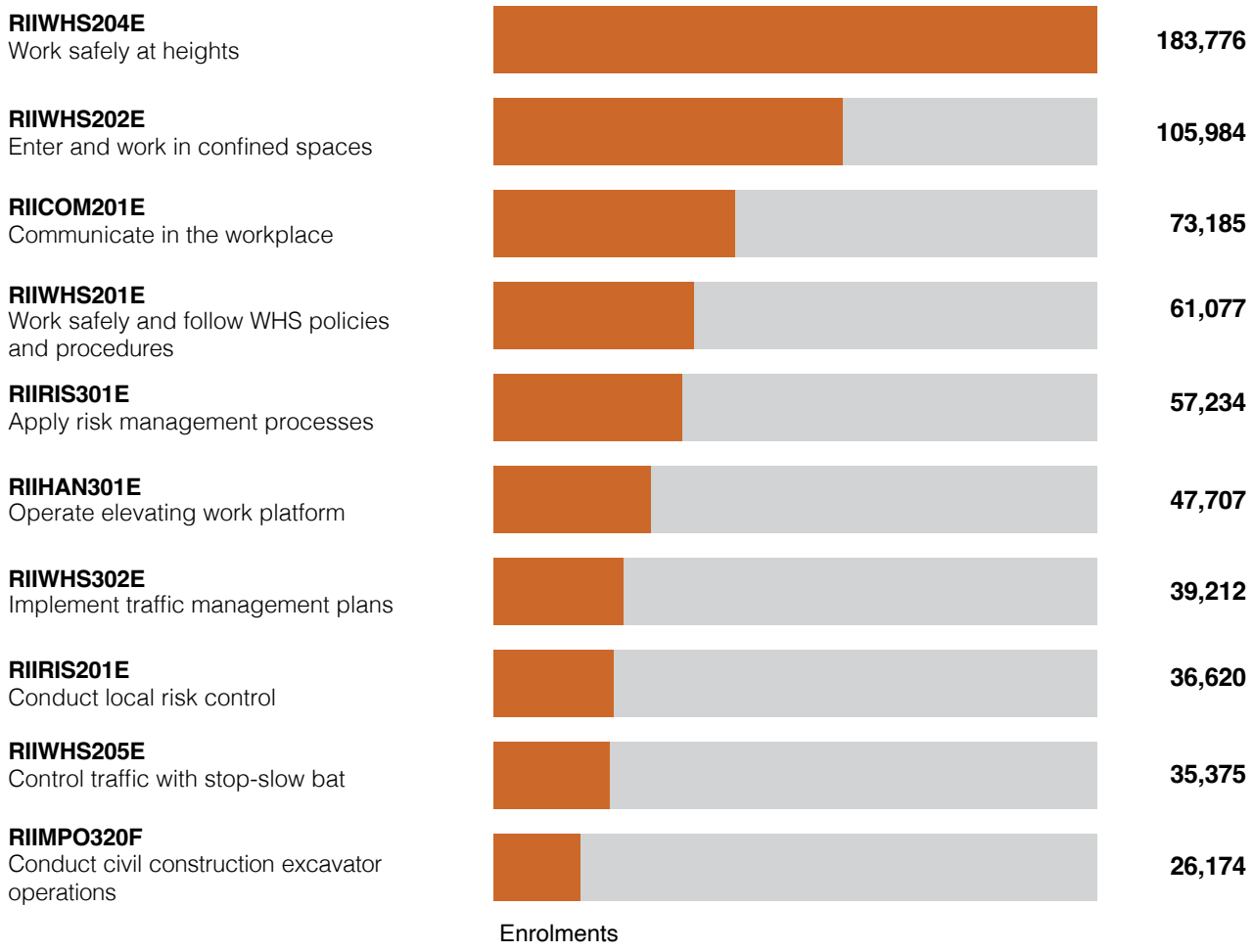
Table 1: Mining Regulation by State

State / Territory	Regulation
New South Wales	WHS Act 2013
Queensland	Mining and Quarrying Safety and Health Act 1999, Mining and Quarrying Safety andHealth Regulation 2017, Coal Mining Safety and Health Act 1999, Coal Mining Safetyand Health Regulation 2017
Western Australia	WHS Act 2020, WHS Act 2022
South Australia	WHS Act 2012, WHS 2022
Victoria	Occupational Health and Safety Act 2004
Tasmania	WHS Act 2012
Northern Territory	Environment Protection Legislation Amendment Act 2023, WHS Act 2011



[10] Safe Work Australia, "Mining", 2026.
[11] Resources Safety and Health Queensland, "Recognised Standard 11", 2023.

Figure 5: Most enrolled Unit of Competency, 2025



Source: NCVER VOCSTAT "TVA subject enrolments 2015-2025", 2026.

Another advantage of non-accredited training models is the ability to develop workers to operational proficiency rather than training to the competency standard required for accreditation, particularly with large equipment. On the other hand, industry will rely on external or accredited training where there is an element of risk/liability or safety measures specific to the jurisdiction, for instance, there are higher enrolments in RIIWHS204E. RIIWHS204E Work Safely at Heights is overwhelmingly the most enrolled in the RII unit since 2017. In 2025, 3,060 enrolments came from the civil side of RII qualifications, while 4,270 were from the mining-dominant side.[12]

Mining and trade-dominant industries operate in higher-risk environments, making work health and safety a significant regulatory obligation for employers. The importance of effective safety training has been reinforced by continuing reforms to WHS laws across Australia, including stronger penalties and the introduction of industrial or workplace manslaughter offences across all states and territories, as well as under Commonwealth legislation. These offences provide substantial criminal penalties for the most serious breaches of health and safety duties that result in a person's death.[13] There are 183,776 enrolments alone in RIIWHS204SE in 2025, underscoring the industry's sustained commitment to safety competency and regulatory compliance across the workforce.[14]

12 NCVER VOCSTAT, "TVA subject enrolments 2015-2025", 2026.
13 Department of Employment and Workplace Relations, "Industrial manslaughter and other work, health and safety reforms", 2023.
14 NCVER VOCSTAT, "TVA subject enrolments 2015-2024", 2026.

Entry-level requirements

Comparative analysis of online job advertisements revealed that none of the listings specified RII as a prerequisite at the state- and territory-wide level.[15] Listings consistently required a driver's licence, national police clearance, a pre-employment medical, drug and alcohol screening and demonstrated physical fitness. The only certifications or licences consistently referenced across job advertisements were First Aid and CPR qualifications and the White Card,[16] both of which were generally listed as either preferred credentials or requirements that could be obtained upon commencement. Advertisements also focused on learning new skills and on-the-job training. On-the-job training also improves monetary outcomes for employees, as they can commence work sooner, get paid competitive industry wages as they train, and eliminates the uncertainty of finding work.

Of the top 30 key qualifications associated with the highest median income, 10 fall within the RII Training Package, with RII50120, RII40220, RII40420, and RII40920 in the top 5.[17] This highlights the ongoing importance and earning potential of RII qualifications in the industry, yet they are not required before gaining employment.



15 AUSMASA appreciates this does not cover the full scope of online vacancy data and other labour hire arrangements

16 A White Card is a nationally recognised certification in Australia that demonstrates you have completed essential workplace health and safety training to work on construction sites.

17 Jobs and Skills Australia, "2019-20 VET graduate outcomes data", 2021.

The scope of the non-accredited training processes

Mining operators are delivering training through non-accredited models either by removing traditional VET organisations from the delivery chain entirely or by using a hybrid model (both internal and external). Organisations often contextualise training package content through internal expertise or by approaching an RTO to map it to the site or organisational requirements.

Stakeholder consultations conducted for this research indicate that this shift is occurring on a significant scale, as a large operation reported cohorts of between 750 and 850 workers enrolled in Cert II and Cert III qualifications in underground metalliferous mining at any given time, with one operation having issued over 143,000 certificates of competency since establishing its non-accredited training infrastructure in 2008. Tier 1 mining employers are recorded as having more than 822,000 site-specific procedure theory completions across their workforce over the past decade, some mapped from RII and others fully developed internally. Another large employer currently has 185 non-accredited units mapped from RII frameworks on scope, with only one offered with national accreditation due to regulatory requirements. They are listed as not requiring a Statement of Attainment (SOA) due to non-accredited systems of training and record-keeping. Unit codes are often changed, but they maintain the structure of an RII unit. These units span the full range of operational domains and functions across mine sites.

Induction programs alone can account for over 1,400 completions per large organisation and multiple sites in a single year, each covering 3 national units of competency, supported by more than 460 simulator sessions for underground equipment. Large mining employers have up to 1000 non-accredited training programs that span technical, non-technical, and leadership roles, with most reporting more than 60% reliance on non-accredited training and 40% on external RTOs. These figures illustrate a volume and continuity of RII-aligned training activity that does not flow through traditional VET organisations and therefore does not appear in national enrolment data as evidence of reliance on the training package.

Across the consultations, between 120 and 150 internal trainers and assessors were reported as active within a single large mining organisation, supported by continuous trainee-to-trainer pipelines that combine operational qualifications with TAE credentials. This system directly addresses the trainer and skill shortage that constrains external delivery by producing qualified trainers from within the existing workforce, along with the corresponding contextualised training. The evidence collectively suggests that the decline in RII enrolments recorded through VET channels reflects not a reduced reliance on the RII framework, but a structural migration of accredited delivery into employer-controlled and non-accredited models.

Training model delivery

Industry consultation revealed that all large and small employers maintain some form of non-accredited or 'in-house' training frameworks to support their workforce's development. These training frameworks typically include entry-level pathway programs designed to prepare individuals for employment in the mining sector and span to ongoing technical, compliance, operational and leadership initiatives.

Induction courses are commonly utilised at the employee's commencement to cover the company's values and behavioural expectations, as well as introducing core units and future training progression. Induction programs improve retention rates and allow the organisation to sort trainees into the appropriate programs.

Main modes

There are 3 main modes of training delivery used within industry: fee-for-service, third-party arrangements and enterprise RTOs.[18]

Larger organisations tend to train 100% internally due to operational and workforce size and capabilities. Training compliance and audits still require these organisations to accredit trainers and assessors to deliver non-accredited training, therefore requiring some capacity for on-site accreditation of RII. Where needed, some of these organisations will seek external providers if there is no internal expertise. Relationships between industry and external RTOs remain constant within these training modes.

[18] Definitions and the associated challenges and opportunities are detailed in the appendix.

Challenges of delivering the RII training package

Resourcing and learner engagement

Public and private RTOs across Australia that offer qualifications not delivered through a fee-for-service model are reporting multiple teaching and resourcing issues regarding RII delivery. The uptake of students enrolling in RII courses is increasingly identified as an issue, leading to the deletion of qualifications or skill sets with low or no enrolments. Respondents also detailed units in various qualifications that had been deleted from the training package but were still in use or relevant to industry practices. Constrained teacher capacity and the difficulty of effectively engaging students from diverse backgrounds contribute to disengagement with VET pathways, reinforcing existing patterns of low participation and completion rates.

One TAFE respondent described how difficulty engaging students and related course costs may be catalysts for declining participation. The main cohorts for courses such as Cert II Work Preparation tend to be school leavers or high school students interested in gaining skills applicable across multiple industries, including resources and mining. The Certificate is delivered in schools and at TAFE institutes, but it relies on support from the wider education system to encourage young people to pursue these career pathways.

These classrooms are reported to have young, diverse student populations with varied needs and challenges, and are served by a single teacher. Training providers noted that participation rates were strongest during periods when schools actively encouraged student engagement with the program, highlighting the role of institutional support in driving enrolment. Furthermore, the responsibility for engaging learners with varying levels of ability and ensuring retention of training content was identified as resting primarily with the assessor rather than the training product itself. Literacy in training materials can be both beneficial and a constraint. Some cases involve teachers informally rewriting or explaining content through different avenues to clarify the task better, while others succeed with the current level of literacy. When combined with improved funding options, a wraparound learner-assistance model was identified as having the potential to meaningfully increase VET participation among cohorts facing compounding barriers to entry.

Trainer and assessor scarcity

Trainer and assessor scarcity at TAFE and external training organisations represents one of the most significant structural barriers to RII delivery. This can be attributed to the pay differential between TAFE trainers and their industry counterparts.

Competing against industry employment conditions and roster flexibility makes it structurally difficult for traditional providers to attract and retain trainers with current operational experience. VET trainers in Australia are experts in competency-based, industry-focused training. Therefore their role is underscored by the need to maintain 'industry currency' for practical, job-ready skills and assessment.[19] Sourcing trainers with current operational experience and expertise in teacher pedagogy for diverse classrooms can be challenging within the mining context. The available pool employed at TAFE and smaller RTOs typically comprises those approaching retirement or transitioning away from site-based work.

TAE Relevancy

The Australian Training and Education (TAE) Training Package is not designed to provide comprehensive coverage of pedagogy or assessment theory, raising concerns about the depth of instructional capability required in mining training environments.[20] The Certificate IV TAE40122 in Training and Assessment provides a foundation in training and assessment and presents opportunities for additional resources to meet workplace delivery requirements.

Gaps in TAE's current delivery model raise concerns that qualifications are not adequately developing the practical instructional capabilities required for the resources and infrastructure workforce, such as breaking tasks into teachable steps, delivering structured demonstrations, facilitating supervised practice, and providing corrective feedback. These are the core of on-the-job instruction in trade and operational settings. Little content on foundational concepts focuses on adult learning principles, questioning techniques, and checking for understanding, which frontline trainers apply daily alongside the limited amount of safety-integrated instruction.[21]

In the absence of a product that delivers teaching and learning theory, non-accredited trainer programs can be developed and therefore utilised more, as they cover more site-specific fundamentals.[22]

19 AUSMASA, "Qualifying the qualifiers – VET trainer preparation and industry needs", 2026.
20 AUSMASA, "Qualifying the qualifiers – VET trainer preparation and industry needs", 2026.
21 AUSMASA, "Qualifying the qualifiers – VET trainer preparation and industry needs", 2026.
22 https://ausmasa.org.au/news-and-events/research-bulletin-august-2026/

Equipment

Access to relevant, up-to-date training equipment is a compounding barrier to delivering accredited RII through RTO providers. Equipment available at TAFE and external training facilities can be outdated, in some cases, by 20 years or more. This creates a significant gap between the training experience and the operational technology workers encounter on-site. Virtual reality (VR) simulations can be highly beneficial training and induction tools, yet they do not accurately simulate the sheer scale of equipment at an actual mine site.

Ultra-class haul trucks deployed across Australian mine sites (such as Caterpillar 793, Komatsu 930E and BelAZ75710) stand over 8 metres tall and can extend 15 metres in length. Such equipment can also weigh in excess of 580 tonnes when fully loaded and carry payloads of up to 290 tonnes per cycle. These vehicles operate in open-cut environments characterised by extreme heat, dust, steep haul-road gradients, restricted visibility and continuous 24-hour production schedules.

Simulation-based training cannot capture the conditions that fundamentally shape the nature of competency and in which it must be developed and assessed. The cab height above ground level and the momentum of a loaded truck on a decline cannot be replicated in a simulator or on aging training equipment. Simulator environments and VR tools are also increasingly central to training delivery, enabling greater flexibility in learning and are typically utilised to expose workers to the scale of equipment before use.

Furthermore, most training providers will have access to at most one-tonne machines, which are suitable for residential construction but not for Mining. Personnel trained on a one-tonne machine cannot independently operate most machines on a mine site, which average 32 to 80 tonnes, with the largest in Australia being 896 tonnes. There are also operational differences; for example, the one-tonne digger can go backwards and forwards, whereas a large excavator on a mine site will rotate 360 degrees, not to mention the nuances of weight inflection points as the excavator spins. Allowing someone trained on a one-tonne machine to operate these excavators without additional training would create liability and OHS risk issues.

Stakeholder consultations confirmed that large operators explicitly design training around specific equipment in operational settings for this reason, with several noting that no external RTO holds equipment of the type or scale required to deliver meaningful competency assessment.

Furthermore, given that RTOs and TAFEs will not have large equipment, they are prevented from delivering training specific to the maintenance, repair, and diagnosis of this machinery, at least, non-simulation-based training.



Figure 6: Height comparison: The Big Merino vs BelAZ75710 vs human



Technology across RII

The integration of advanced technology into mining operations has outpaced the RII training package's capacity or speed to market to reflect current industry requirements. Autonomous vehicles, precision dig systems, and global navigation technologies are now embedded across large mining operations, with stakeholders noting that most technology-specific training is delivered internally for this reason.

Where technology training does occur through accredited channels, it is predominantly OEM-specific rather than the transferable competency knowledge the RII framework is designed to produce. Digital skills and knowledge are also delivered as needed through non-accredited pathways to equip employees with emerging skills faster than the national system. Some of these technological solutions are employer- or location-specific, especially when advanced technologies or autonomous operations are involved.

Challenges of delivering in-house training

Repetition of training

The value of accredited training can be undermined by the routine requirement to verify competency and skills at the site level. Whether the employee holds an accredited qualification or a formal statement of attainment, they often need to undergo a skills verification. Transferring sites, companies, or states will require a verification of skills for both internal trust and further contextualisation, leading to repeated training within the industry. In the absence of standardised digital record-keeping frameworks, documenting and porting an individual worker's accumulated industry experience and competencies remain challenging.

Several stakeholder consultations noted that statements of attainment are frequently withheld for equipment-specific training on this basis, as the credential adds no operational utility beyond the site's own verification process. There may also be limited incentive for employers to pursue formal recognition due to the skills recognition process and rate of OEM-specific and training contextualisation.

RPL can be a complex and resource-intensive process for the employee and the assessor, as it requires tailored evaluation methods to ensure competencies meet the required standards.[23] The process can also be costly for both the RTO and the individual, with prices varying between $1,500 and $4,000 dependant on the qualification.[24] Where employees seek formal recognition over the course of their careers through both non-accredited and accredited channels, the requirement to complete and present evidence of the competency is often not recorded to the extent needed for RPL. One RTO respondent developed an internal online RPL verification platform in direct response to the administrative burden and accessibility challenges associated with the traditional RPL process. The platform offers a more digestible, easier process for the individual wishing to achieve RPL, incorporating an internal mapping system to fast-track the process.

This creates a recognition problem when workers seek to transition between employers, enter adjacent industries such as construction or civil contracting or re-enter the workforce after a period of absence. Workers express the need for a training record across both accredited and non-accredited training.

Mapping and deleting

A challenge consistently identified across stakeholder consultations is the currency and accuracy of mapping in non-accredited training programs. Consultations revealed that sometimes-outdated versions of the RII qualifications have been used as source documents for current contextualised training. Instances of superseded RII versions being mapped to units that no longer exist or have since been removed from the package undermine both the validity of the training received and the worker's ability to demonstrate compliance with current legislative and industry requirements. Stakeholders also indicated that various units of competency used for non-accredited training had been deleted from the RII training package.

ASQA compliance

ASQA's compliance framework, from both RTO and industry perspectives, was identified as a cross-sectoral concern.[25] The framework may be oriented towards meeting minimum regulatory standards rather than developing job-ready capabilities. Respondents mentioned how various unit's risk assessment and compliance requirements are not reflective of what happens within an actual operational environment. Industry also described how adhering to these requirements can be irrelevant to the task. The structure of its requirements may incentivise box-ticking and documentation over the development of practical and operationally relevant competencies. General discourse on compliance-based rather than skill-based training remains a recurring issue raised by respondents.

ASQA can only audit, inspect, and regulate what is delivered and coded within its scope of registration. Non-accredited training, enterprise training without formal enrolments and equipment-specific competency programs fall outside ASQA's jurisdiction. The combined cost of ASQA compliance, including registration fees, audit preparations, trainer accreditation and student management systems, was identified as a disadvantage to industry delivery preferences.

[23] AUSMASA, "Can RPL solve skills shortages?", 2025.
[24] AUSMASA, "Can RPL solve skills shortages?", 2025.
[25] As well as VRAQ and TAC regulators (dependant on the jurisdiction)

Conclusion

The Mining industry has a deep reliance and preference for non-accredited training models for its workforce. The training activity occurring across the mining sector is far greater in volume and sophistication than national enrolment and completion data currently reflect. Non-accredited training allows employers to have direct control over skills development, knowledge transfer, technological change, and succession planning, rather than relying on an external market constrained by trainer shortages.

However, Mining employers prefer to contextualise training for their workforce to meet state requirements and organisational goals and keep pace with changing industry needs. Mining employers do tend to rely on external providers to accredit units required by the state, while also structuring contextualised Certificate II and above to their organisational needs. Findings indicate that workers undertaking this training are developing substantial operational proficiency specific to their organisation and site. Proficiency above the level of competency that the accredited training system is able to deliver, for cost and resource reasons. As a result, collaborative relationships between RTOs, TAFEs, and industry are becoming increasingly common, reflecting the structural limitations that make it difficult for any single provider to deliver full qualifications independently and to the standard the industry requires.



Recommendations

These recommendations are proposed in response to the above research findings to both enable RII to better adapt to industry needs and maintain relevance, and to strengthen AUSMASA's visibility of RII training activity across industry and to inform ongoing training package development and workforce planning.

Recommendation 1: The identification of low or no enrolment activity needs to be verified through regular consultations with industry, TAFE, and RTOs, as enrolment decline should not trigger a review in isolation.

- Establish annual structured consultations with large mining organisations to systematically identify which RII unit codes are actively mapped in non-accredited training programs.
- Integrating data-capturing systems with non-accredited industry training data is integral to staying current in industry training settings, including a mechanism that identifies low-use RII units.
- Maintaining current consultation and data capturing systems will facilitate a reliable mechanism to inform the state of national mining training.
- Establishing a mechanism to confirm whether low enrolment reflects genuinely reduced demand or a shift toward non-accredited delivery, with open discussions also serving to surface issues in existing training products.

Recommendation 2: Regular consultation to enable knowledge of the currency of available equipment, trainer competency and the practical assessment capacity of individual institutions. Early and current knowledge of the training landscape among VET providers informs decisions about how the RII framework can be delivered viably through traditional channels and where support is most needed.

- Monitoring not just enrolment but TAFE scope and delivery capability, tracking which RII units and qualifications TAFEs can deliver in non-mine site environments.

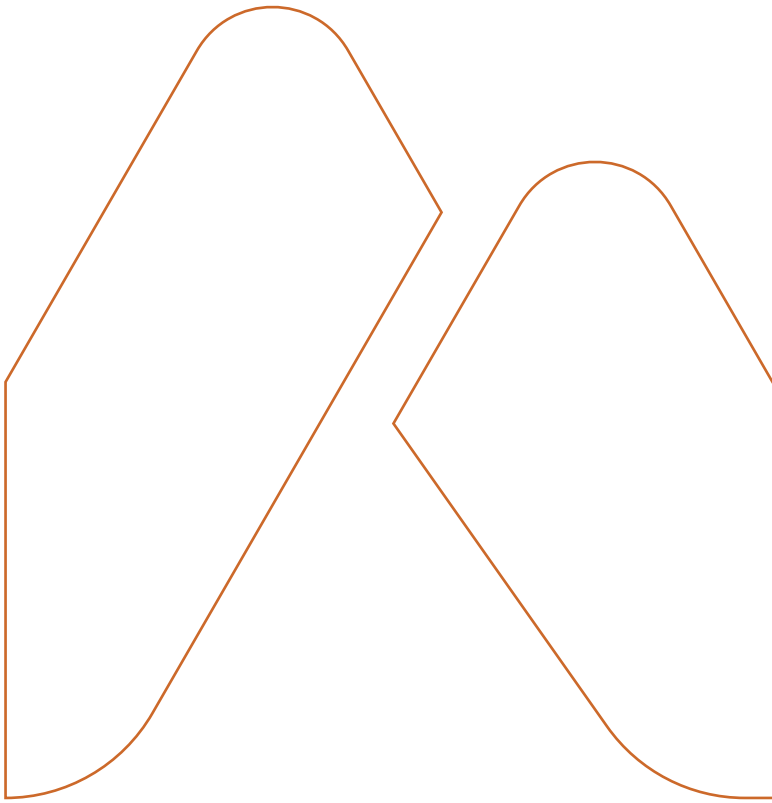
Recommendation 3: A mining-specific trainer and assessor skill set within RII would address delivery gaps by contextualising the core competencies of training design, delivery, and assessment to the mining operational environment. Incorporating the specific legislative frameworks, risk management requirements, equipment assessment contexts, and safety standards that mining trainers work within facilitates more standardised training.

- Developing a mining-specific skill set within RII for workplace trainers and assessors.

Recommendation 4: Identifying where deleted units persist in active use would directly inform future currency reviews, ensuring that training package decisions are made with visibility into their current operational impact.

- Conducting an audit of RII units deleted in recent training package updates against current non-accredited training content, to determine whether removed units are still being actively used on-site and should inform future currency reviews.

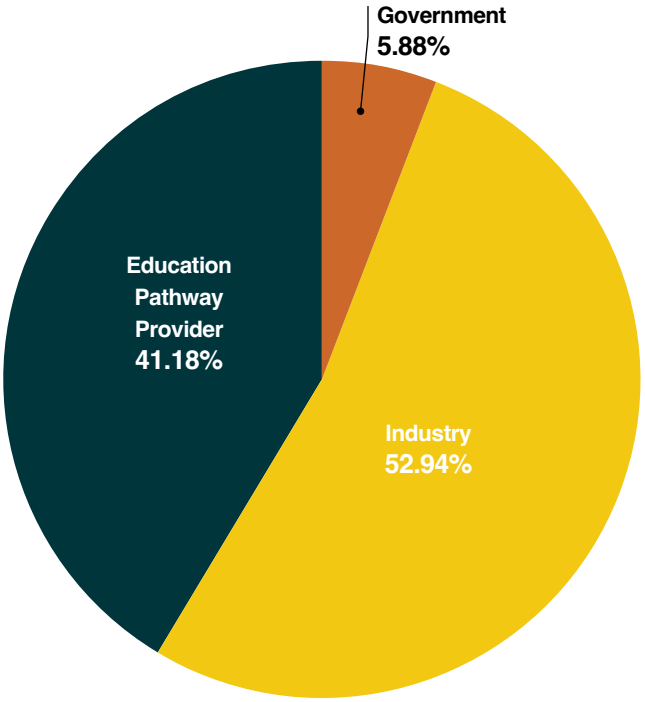
Recommendation 5: Developing a standardised RPL framework and toolkit, including guidance for RTOs and assessors, and a guide to support workers, to enable better portability and recognition of non-accredited training so that experienced workers can gain formal recognition for skills they already hold.



Methodology

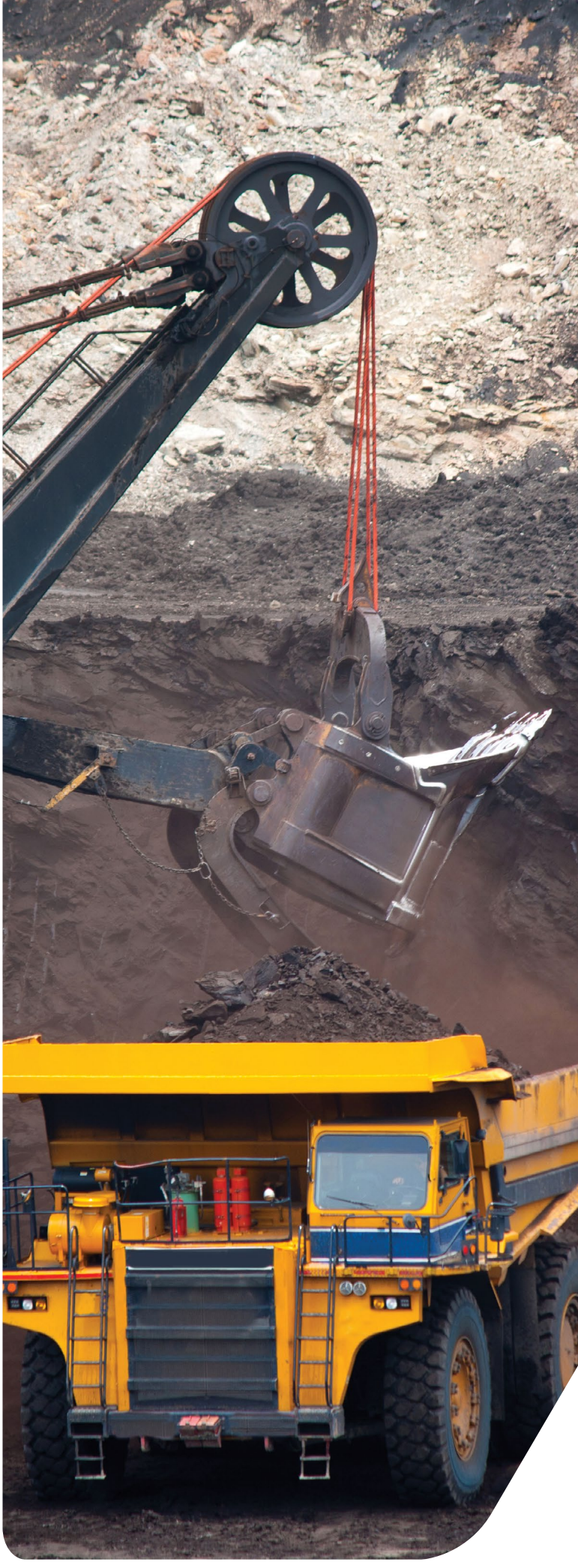
This research utilised a qualitative stakeholder consultation methodology by conducting 34 interviews with industry representatives, registered training organisations, training providers, government representatives, and unions across the Australian Mining sector. Respondents from the interviews spanned the coal, extraction, iron ore, oil and gas, blasting and drilling, critical minerals, heavy machinery, METS, and quarrying sectors to provide an accurate view of all training perspectives. Interviews followed a structured format to preserve continuity across consultations while allowing respondents to provide detailed insights into their experiences and training practices.

Figure 7: Stakeholder Types



Interview responses were analysed thematically to identify recurring themes, areas of consensus and various perspectives across stakeholder groups. Findings were compared across industry sectors and stakeholder types to identify common drivers, barriers and considerations influencing the use of accredited and non-accredited training. All interview respondents were anonymised to protect their privacy and ensure that individual responses could not be attributed to specific perspectives or organisations.

Ten site visits were conducted across a range of mining and related industry settings to provide first-hand observations of training practices. Such visits further supported the broader analysis and validation of industry reliance on accredited and non-accredited training.



Appendix

The following defines and explains the modes of delivery as identified in non-accredited training. It expands on the opportunities and challenges of fee-for-service, third-party arrangements, and enterprise RTOs within the RII training landscape.

Fee-for-service

Fee-for-service arrangements involve employers partnering with private RTOs or TAFE institutions to carry out on-site assessment or verification of skills for accreditation. Employers will typically follow internally developed training programs mapped to RII standards by contextualising content to reflect the specific operational requirements of their site. These arrangements involve engaging external training providers to align relevant Certificate III and IV qualifications to site-specific requirements. Providers and operators typically collaborate on the development and ongoing review of training programs, updating them as required to reflect operational needs. Across these arrangements, training delivery is generally structured around the RII training package framework as the RTO is more heavily involved.

Challenges:

- Commercial incentives reward cost and convenience over training quality and could be a potential tick-the-box exercise for the RTO while not focusing on real learning outcomes.
- Industry may lack the knowledge of training models to evaluate what it is purchasing, creating space for providers to sell inadequate training, such as Standard 11, which can be completed online.
- Training may become compressed due to employers' requests, impacting training outcomes.

Opportunities:

- Provides flexibility for training to be tailored to specific organisational needs
- Arrangement typically relies on ongoing contracts that create a long-term relationship between RTO and industry,
- Allows training to be industry-driven.

Third-party arrangements

Third-party arrangements involve more technical training, which aligns with the use of registered, standardised third-party assessors. This allows for a more assessment-based arrangement, in which the organisation's own trainers deliver all technical training and are then externally assessed. The third party's role is to assess, not to design or deliver the specific training. The employer retains the responsibility for the quality and compliance of the training. The RTO then acts as the registered and compliant body that can then issue statements of attainment or accreditation. Training is conducted through employers' trainers, equipment, procedures, and techniques.

Challenges:

- Employers can have a conditional approach to RTO partnership, which can concentrate content control with the employer
- Quality issues with non-accredited mapping done against outdated versions of RII
- ASQA audits RTO and not the employer.

Opportunities:

- Allows employers to contextualise training to their specific environment while still producing recognised qualifications using their own resources and equipment
- Enable a scale of accreditation that a standalone RTO or employer could not achieve independently
- Allows smaller RTOS to remain operative.

Enterprise RTO

An enterprise RTO is exclusive to its own employees or employees of a related enterprise. It delivers nationally accredited training under its own contextualised version, therefore granting a greater control over training design, delivery and assessment. This facilitates the integration of site-specific requirements within nationally recognised qualification frameworks, with the RII Training Package serving as the primary benchmark for competency standards and training outcomes. Enterprise RTOs can deliver RPL assessments, run multiple pathways from entry to technical and include any soft or digital skills they see fit for their workforce. Numerous consultation respondents note that the use of an enterprise RTO is not a strategic preference but rather a result of a lack of available external training.

Public RTOs and TAFE institutions are constrained in what they can deliver due to a lack of funding, equipment, and resources, as well as geographical location. More technical and equipment-heavy qualifications, such as surface extraction, resource processing and underground coal, can only be fully delivered on-site. There are limited qualifications or units of competency that can be delivered at the RTO or external training location. Qualifications that are run are typically those that can be conducted mainly through classroom-style learning, such as Work Preparation. Many training institutes, however, have extensive virtual reality simulators for drilling, heavy-truck operations, and underground environments.

Challenges:

- Costly to run due to dedicated resources (RTO registration, ASQA compliance infrastructure, trainer and assessor accreditation, and ongoing review cycles)
- Potential structural issues (quality assurance across remote sites, TAE requirements).

Opportunities:

- Can fully control content and directly address skills gaps such as digital literacy, soft skills and technical skills
- Removes dependency on external provider availability
- Allows for full control of employee training.

Mining and Automotive Skills Alliance

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