

The Case for Change for the review of Arboriculture qualifications

Administrative information

Name of IRC: Amenity Horticulture, Landscaping, Conservation and Land Management IRC

Name of SSO: Skills Impact

Training Package: AHC Agriculture, Horticulture and Conservation and Land Management Training Package

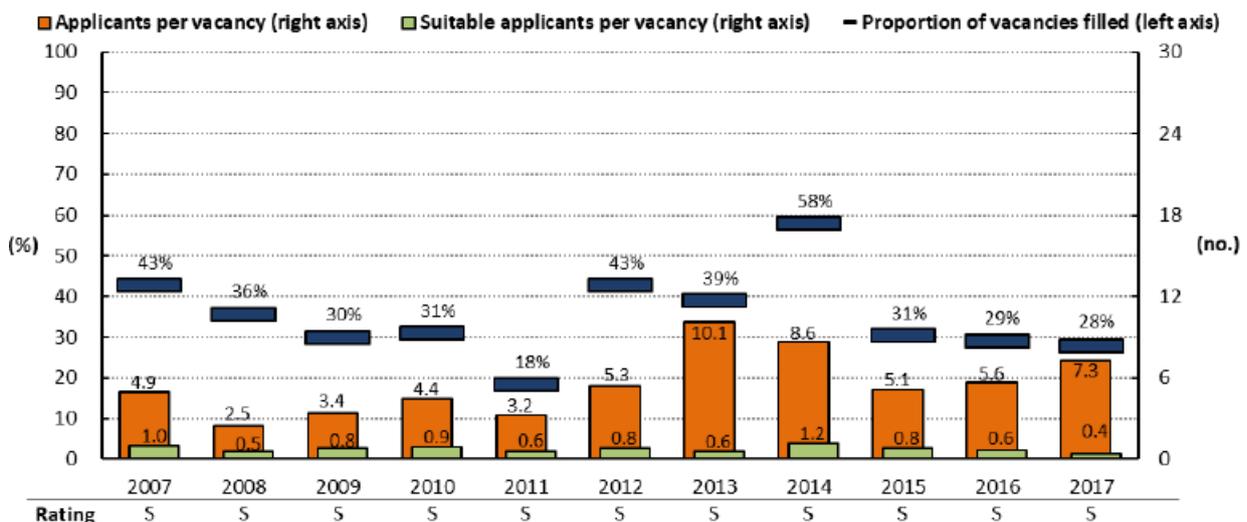
Developing Case for Change: Arborists are currently on the National Skills Needs List and, with falling training enrolment numbers, employers are facing severe challenges in attracting skilled staff. The arborist workforce is aging and, with fewer qualified applicants to take up specialist roles, such as climbing arborists, businesses' services are contracting. Furthermore, arborists are not regulated and so certified companies are losing business to inadequately qualified traders, whose lack of knowledge undermines the industry and can be harmful to trees, plants and the wider environment. Expert members of the *Amenity Horticulture, Landscape, Conservation and Land Management Industry Reference Committee (IRC)* identified that enrolments in the arboriculture training packages are unlikely to rise unless significant barriers to training are removed, both for learners and registered training organisations (RTOs). This Case for Change provides evidence of industry support for the review of the current Arboriculture qualifications to ensure that they are fit for purpose, meet industry needs and satisfy the 2012 *Standards for Training Packages*.

The case for change

Industry Demand

Arborists are currently on the National Skills Needs List. This skills shortage has been evident since 2005 and, due to decreasing enrolments in arboriculture qualifications, employers are projected to continue to experience difficulties attracting suitable applicants. Figures show that only 28 per cent of job vacancies are filled and, on average, only 16% of job applicants are qualified¹ (see Chart 1, below). Industry stakeholder consultation confirmed that this has necessitated sourcing skilled workers from overseas, with the number of arborists with temporary skilled visa 457 doubling since 2012².

Chart 1: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), 2007 to 2017



Source: Department of Jobs and Small Business, *Survey of Employers who have Recently Advertised*
Key: S = Shortage

¹ Department of Jobs and Small Business, 2017, 'ANZSCO 3622-12 Arborist – Australia', Australian Government, viewed June 2018, <https://docs.jobs.gov.au/system/files/doc/other/362212arboristaus_2.pdf>

² Department of Immigration and Border Protection, *Temporary Work (Skilled) visa (subclass 457) Programme: Subclass 457 visa holders pivot table*, June 2017

In 2017, Arboriculture Australia launched an Industry License to promote the benefits of regulation in response to industry professionals' demands for safeguards against unqualified operators harming or removing healthy trees³. Such negligence not only damages the arboriculture industry but has broader consequences for environmental conservation (trees are associated with air quality, carbon sequestration, soil and water management, and the physical and psychological well-being people derive from interactions with nature⁴). To qualify for the Industry Licence, individuals must hold an AQF qualification. They are further categorised in one of eight levels of expertise to promote awareness of the complexity of, and experience required for, certain work.

Entry Requirement and Pathway issues

During consultation for this Case for Change, qualification entry requirements were highlighted as being overly rigid. An Arborist, Michael Byrne (CPD Tree Services), stated that, because his *AHC50510 Diploma of Arboriculture* is superseded by – but *not* equivalent to – the current diploma, he would not meet the entry requirements for the *AHC60516 Advanced Diploma of Arboriculture* despite his 25 years' experience as an Arborist.

Significantly, there are also structural issues prohibiting advancement within the qualification pathway. Table 1, below, displays the number of RTOs with Arboriculture qualifications on scope.

Table 1: RTOs with arboriculture qualifications on scope

Qualification	No. of RTOs with scope
AHC20516 – Certificate II in Arboriculture	9
AHC30816 - Certificate III in Arboriculture	22
AHC41916 - Certificate IV in Arboriculture	1
AHC50516 - Diploma of Arboriculture	12
AHC60516 - Advanced Diploma of Arboriculture	0
AHC80116 - Graduate Diploma of Arboriculture	1

Source: <https://training.gov.au>, viewed June 2018

This table does not show how many RTOs are currently training or enrolling students; however, it does demonstrate that there is no feasible pathway to the *AHC80116 Graduate Diploma of Arboriculture* because the *AHC60516 Advanced Diploma of Arboriculture* – which is an entry requirement for the graduate diploma – is not on any RTO's scope. This is borne out by Table 2, below, which displays all NCVER program enrolment data for arboriculture qualifications. There were no reported enrolments in the *Advanced Diploma of Arboriculture* or *Graduate Diploma of Arboriculture* between 2014 and 2016⁵.

Table 2: Arboriculture program enrolments

	2014	2015	2016	Total
Certificate II in Arboriculture (AHC20510 & AHC20513)	346	350	269	964
Certificate III in Arboriculture (AHC30810 & AHC30816)	1805	1769	1725	5303
Diploma of Arboriculture (AHC50510 & AHC50516)	342	350	351	1050
Total	2496	2476	2351	7316

Source: NCVER VOCSTATS Table Builder TVA program enrolments 2014-2016

³ Arboriculture Australia, 2017, 'Arboriculture Australia Industry Licence', viewed June 2018, <<http://arboriculture.org.au/license>>

⁴ H. Parr, 2007, 'Mental Health, Nature Work, and Social Inclusion', *Environment and Planning D: Society and Space*, Vol 25, Issue 3, pp. 537-561.

⁵ Albeit, the *Graduate Diploma of Arboriculture* was only released in June 2016 (i.e. it did not supersede a previous iteration of the qualification).

In consequence, employers have experienced severe difficulties in attracting arborists with advanced skills to conduct highly technical tree inspections and diagnostic work (as discussed under 'industry demand' above). Expert members of the IRC have concluded that the skills shortage for AQF level 8 arborists will continue if changes are not made to current training and entry requirements.

Delivery Issues

Agrifoods ISC reviewed arboriculture qualifications that were part of the *AHC Agriculture, Horticulture, and Conservation and Land Management Training Package's* 2016 release. Several issues were identified, including barriers to RTOs delivering the new qualifications.

An extensive Range of Conditions can render a unit undeliverable in workplace contexts due to a lack of resources (examples include *AHCARB311 Tie, dress, set and finish arborist knots* and *AHCARB312 Use standard climbing techniques to access trees*). Students' inability to find employers able to meet these conditions has contributed to declining numbers enrolling in apprenticeships and traineeships⁶. Practical requirements are likewise affecting completions. The requirement for 400 hours of recorded climbing is impacting negatively on *AHC30816* completion rates. Students often complete the competency requirements but struggle to log 400 hours of climbing in addition to the hours required for ground based rigging and ground based chainsaw use. To achieve the Climbing specialisation as part of the *AHC30816 Certificate III in Arboriculture (Climbing and EWP)*, students must complete the units below:

- *AHCARB307 - Use advanced climbing techniques*: it is an industry requirement for competency in this unit that assessment must include a log record of 200 hours of advanced climbing.
- *AHCARB312 - Use standard climbing techniques to access trees*: it is an industry requirement for competency in this unit that assessment must include a log record of 200 hours of standard climbing.

Here, the minimum number of climbing hours deemed appropriate by industry generally exceeds what RTOs can deliver due to the cost of training with a high teacher to student ratio. Several RTOs consequently have indicated that they will discontinue enrolling students.

Content issues

Australian Government (Department of Jobs and Small Business) research on the national arborist skills shortage charts a decline in arboriculture enrolments since 2012. Industry experts and RTOs have detailed the qualification *content* issues that are barriers to training, and upon which recommendations for change are based. These include:

- The *AHC20516 Certificate II in Arboriculture* has a core unit that is superseded (*CPCCOHS1001A - Work safely in the construction industry*).
- *AHCARB601 - Examine and assess trees*, a core unit of the *AHC50516 Diploma of Arboriculture*, has three prerequisite units (*AHCARB403*, *AHCARB302*, *AHCARB313*). Unless the student has gained competencies in these previously, they are not permitted to select other electives units (as the packaging rules mandate three elective units only).
- Arboriculture Australia identified that the qualifications *AHC20516 Certificate II in Arboriculture* and *AHC30816 Certificate III in Arboriculture* include units wherein statements and equipment are not current. Conducting a review of the Arboriculture qualifications will uncover the extent of this issue.
- Some equipment listed within the training package is either not approved for industrial use or has been recalled by the manufacturer. For example, in *AHCARB307 Use advanced climbing techniques*, performance criteria 5.4 refers to the use of grigris. A Grigri is an

⁶ <https://docs.jobs.gov.au/documents/anzsco-3622-12-arborist-australia>; ANZSCO 3622-12 Arborist, viewed September 2017.

assisted breaking belay device manufactured by Petzl. Inclusion of a branded product is restrictive and prevents the qualification from being future-proofed. Furthermore, this product is not approved for industrial use.

Enrolment and RTO Information

It is recommended that the following components are proposed for review (see full list in Appendix A):

- Six qualifications;
- 42 units of competency;
- Three to five new units and or skill sets.

Completing a review of the packaging rules, entry requirements, prerequisites and assessment requirements for each of the qualifications as well as functional analysis of the job roles at each qualification level will assist in identifying structural barriers to entry. Addressing these barriers in a new release of these qualifications will result in;

- Students being able to follow complete pathways to the AQF level 8;
- Students trained to current industry standards and using appropriate equipment;
- Removal of barriers for RTO delivery;
- Increased skills through higher availability of the elective options.

Industry support for change

Stakeholder consultation was performed as tabled in Appendix B.

Consultation with stakeholders was undertaken through the forums of workshops, email, phone calls and face-to-face meetings.

A number of issues regarding arboriculture have been raised by stakeholders, including:

- Certificate III qualifications do not cover the skills to operate in an urban environment; e.g. bringing down trees close to buildings
- a core unit in the *Certificate III in Arboriculture, UETTDREL14A Working safely near live electrical apparatus as a non-electrical worker*, prohibits school-based traineeships
- some assessment guidelines in the units for these qualifications refer to specific association resources and contain copywriting issues
- high delivery costs associated with the new specifications and requirements listed in the training package have resulted in some RTOs not delivering these qualifications
- the impact of prerequisites and entry requirements in a number of qualifications will make the delivery too expensive and inaccessible to students
- the packaging rules concerning prerequisites for units in the *AHC30816 Certificate III in Arboriculture* are confusing and require clarification
- there are opportunities where WHS training could be improved within the arboriculture units of competency to improve the safety of qualified arborists into the future

Further details of these issues were provided to the by two expert members, both of whom are on the executive teams of the two peak industry associations, Arboriculture Australia and the Tree Contractors Association Australia.

Impact of change

Stakeholders have indicated the following benefits from the proposed transfer and development:

- Access to a skilled workforce suitably training to industry required standards using industry required equipment

- Updated units and qualifications and the development of new skill sets to more closely address industry skill needs
- Skill shortages addressed within the Australian workforce reducing the reliance of importing skilled workers at the higher AQF levels.

Potential impacts on training providers:

- Ability to deliver qualifications within the current funding models.

Risks of not implementing the changes

- Potentially there will be a further reduction in the number of RTOs with these qualifications on scope
- The industry will have access to fewer graduates leading to a potential skill shortage in the arboriculture sector.

Timeframes

- It is estimated the timeframes to implement the proposed changes to the training package will be eight to ten months from the issue of an activity order.

Implementing the COAG Industry and Skills Council (CISC) reforms for Training Packages

- Removing obsolete qualifications from the training system to make it easier for consumers to find the training relevant to their needs
- The qualifications packaging rules in the current iteration do not meet the Training Package Development and Endorsement Process Policy; Training Quality Principles; Principle 4: Be flexible to meet diversity if individual and employer needs, including capacity to adapt to changing job roles and workplaces and Principle 6: Support interpretation by training providers and others through the use of simple, concise language and clear articulation of assessment requirements.
- Fostering greater recognition of skills sets for industry
- Making industry’s expectations of training delivery to training providers clearer in order to improve training delivery
- Making industry’s expectations of training delivery clearer to consumers to enable them to make more informed course choices.

This Case for Change was agreed to by the Amenity Horticulture, Landscape, Conservation and Land Management IRC

Name of Chair

Signature of Chair

Date

Attachment A: Training Package components to change

Skills Impact

Contact details: Rosalie Staggard, General Manager Operations

Date submitted: [Insert date submitted]

IRC Name: Amenity Horticulture, Landscape and Conservation and Land Management.

Training Package Code/ Name: AHC Agriculture, Horticulture and Conservation and Land Management.

Qualification Code	Qualification Name	Review status	Change Required
AHC20516 AHC30816 AHC41916 AHC50516 AHC60516 AHC80116	Certificate II in Arboriculture Certificate III in Arboriculture Certificate IV in Arboriculture Diploma of Arboriculture Advanced Diploma of Arboriculture Graduate Diploma of Arboriculture	Review qualification including evaluation of appropriateness of imported units. Arboriculture units in this qualification to be reviewed: see table below.	Qualification modification

Below are the 42 units of competency for review.

Unit Code	Unit Name
AHCARB201	Apply a range of treatments to trees
AHCARB206	Operate and maintain stump grinding machines
AHCARB207	Perform ground based rigging
AHCARB208	Recognise trees
AHCARB209	Assist with aerial rescue from the ground
AHCARB210	Work effectively in the arboriculture industry
AHCARB301	Implement a tree maintenance program
AHCARB302	Inspect trees for access and work
AHCARB303	Perform pruning operations
AHCARB305	Dismantle trees
AHCARB306	Undertake aerial rescue

AHCARB307	Use advanced climbing techniques
AHCARB308	Install cable and bracing
AHCARB309	Implement a tree protection program
AHCARB310	Perform aerial rigging
AHCARB311	Tie, dress, set and finish arborist knots
AHCARB312	Use standard climbing techniques to access trees
AHCARB313	Identify trees
AHCARB401	Verify pruning specifications
AHCARB402	Supervise and audit tree operations
AHCARB403	Perform a ground-based tree defect evaluation
AHCARB404	Conduct a safety audit
AHCARB405	Perform geospatial data collection
AHCARB502	Identify, select and specify trees
AHCARB504	Develop an arboricultural impact assessment report
AHCARB505	Document and audit tree work
AHCARB506	Prepare arborist reports
AHCARB507	Generate tree plans using computer-aided design software
AHCARB601	Examine and assess trees
AHCARB602	Diagnose tree diseases
AHCARB603	Interpret diagnostic test results
AHCARB604	Measure and improve the performance of urban forests
AHCARB605	Provide consultation in a legal framework
AHCARB606	Develop an operational tree management plan
AHCARB607	Review and develop strategic tree policy
AHCARB701	Analyse tree biomechanics
AHCARB702	Analyse mycology cultures
AHCARB703	Research urban forest performance
AHCARB704	Conduct an entomology research project
AHCARB801	Contextualise diagnostic tests
AHCARB802	Develop an urban forest management framework
AHCARB803	Analyse edaphic interactions of trees and structures

Attachment B: Stakeholder Consultation Method and Scale

Stakeholder Consultation

Name of Stakeholder	Category	Detail method(s) and Scale of Consultation
Arboriculture Australia	Industry Expert	Subject matter experts identified for the first draft of revised qualifications and units
Tree Contracting Association Australian	Industry Expert	Subject matter experts identified for the first draft of revised qualifications and units.
Arbtrack Australia	Training Provider	Workshop with 30-day consultation period after the first draft released
ARO Educational Services	Training Provider	Workshop with 30-day consultation period after the first draft released
Interlink Training	Training Provider	Workshop with 30-day consultation period after the first draft released
Climb High Training	Training Provider	Workshop with 30-day consultation period after the first draft released
Holmesglen Institute, Holmesglen	Training Provider	Workshop with 30-day consultation period after the first draft released
McLeod Training Organisation	Training Provider	Workshop with 30-day consultation period after the first draft released
Northern Melbourne Institute of TAFE	Training Provider	Workshop with 30-day consultation period after the first draft released
South West Institute of TAFE	Training Provider	Workshop with 30-day consultation period after the first draft released
TAFE NSW	Training Provider	Workshop with 30-day consultation period after the first draft released
TAFE SA	Training Provider	Workshop with 30-day consultation period after the first draft released
TasTAFE	Training Provider	Workshop with 30-day consultation period after the first draft released
Maxima Training Services	Training Provider	Workshop with 30-day consultation period after the first draft released
THOUGHTPLANTERS	Industry Expert	Workshop with 30-day consultation period after the first draft released
Total Height Safety	Training Provider	Workshop with 30-day consultation period after the first draft released
Training for Trees	Training Provider	Workshop with 30-day consultation period after the first draft released
Victoria State Training Authority	STA	Email feedback given 23/3/18 to the Case for Change draft

Wodonga Institute of TAFE	Training Provider	Workshop with 30-day consultation period after the first draft released
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Stakeholders that have submitted feedback	Organisation	Category	Consultation method
Craig Hallam	Arboriculture Australia	Industry Expert	Phone call and emails
Michael Byrne	CPD Tree Services	Industry Expert	Email support for the Case for Change by providing personal experience of the entry barriers, in addition to providing further information on the other drivers.
Kate Bryce	Melbourne Polytechnic	Training Provider	Arborist meeting at Melbourne Polytechnic
Tree Contracting Association Australia	Dan McArdle - Treasurer	Industry Expert	Phone call consultation during the preparation of the Case for Change with respect to industry drivers Email feedback on the Case for Change providing support for the Case for Change
Michelle Lewis	Charles Darwin University	Training Provider	Emails and phone calls
John Douglas	Tafe NSW	Training Provider	Email feedback identifying drivers which provides support for the case for change
Michelle Clayton	Forest Works	Industry Expert	Email
Mick Blake			Email
Nicholas Michael	Foresite Training	Training Provider	Email
Alan Gopal	Australian College of Agriculture and Horticulture	Training Provider	Emails and phone calls
Ian Mcleod	McLeod Training Organisation	Training Provider	Email
Melissa Wortman	NSW Agrifood	ITAB	Email and phone calls
Terry Taylor	Kelyn Training Services	Training Provider	Email and phone calls
David Farmer			Arborist meeting at Melbourne Polytechnic
Kylie Martin	Arbtrack	Industry Expert	Arborist meeting at Melbourne Polytechnic
Liz Janesen			Arborist meeting at Melbourne Polytechnic
Graeme Hughes	Melbourne Polytechnic	Training Provider	Arborist meeting at Melbourne Polytechnic
Joe Harris	Into Trees	Industry Expert	Email

Graham McMahon	Sherbrooke Tree Services	Industry Expert	Email and phone calls Feedback received, will provide more comment as project progresses
Tony Momi	Tafe NSW	Training Provider	Email feedback detailing suggested changes to the qualifications which indicating hi support for case for change.
David Lovell	Tafe NSW	Training Provider	Email feedback identifying drivers which provides support for the case for change
Dianne Werden	Tafe NSW	Training Provider	Email feedback providing support about the barriers to training as documented in the Case for Change
Graeme Hughes	Melbourne Polytechnic	Training Provider	Email feedback identifying drivers which provides support for the case for change
James Huggett	Tas TAFE	Training Provider	Email feedback identifying drivers which provides support for the case for change
Kate Low – TAFE NSW; Head of Skills Team.	Tafe NSW	Training Provider	Email feedback identifying drivers which provides support for the case for change
Pascaline Owers:	South Metropolitan TAFE	Training Provider	Email feedback identifying issue within core unit of Certificate II
Son Ly: NSW STA	NSW STA	NSW STA	Email feedback to support the Case for Change
Tony Woolrich; Vic STA	Vic STA	Vic STA	Email feedback to support the Case for Change.