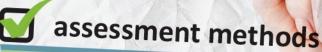


skills	evidence
knowledge	



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About the assessment guide

Aim of the guide

The Sustainability Skills assessment guide will assist Registered Training Organisations (RTOs) to design and contextualise their assessment activities and evidence requirements for the unit of competency MSS017001A Analyse and determine organisational risk areas in sustainability.

In particular the guide demonstrates how:

- Assessment methods can be chosen to suit the learner, for example, if a learner has existing skills
 and experience in the unit of competency a portfolio of evidence is more useful than direct
 observation.
- Assessment methods can be chosen to suit the industry context, for example, where a work place
 has established sustainability policies and procedures direct observation and work place
 documentation / records could be used.
- Specific types of evidence can be identified that relate to the unit requirements and the industry context, for example, if the company has weekly production meetings minutes of these might provide evidence of making recommendations.

These decisions are used to design the assessment activities. For example a work place project might be developed around the aspects of the unit that can be applied and/or demonstrated in the workplace. Portfolio requirements might be designed around evidence that can be found, or generated, from typical day to day activities. An interview or test might be designed around aspects of the unit where knowledge needs to be tested because it is not clearly demonstrated in the practical activities or to test an individual's knowledge in a team environment.

The guide also provides examples that show how:

- a contextualised workplace project can be developed that demonstrates relevant aspects of the unit
- questions can be identified to assist in the authentication of evidence and show understanding of the application of the concepts of sustainability.

The assessment guide uses a fictional scenario as the basis for demonstrating one approach to developing an assessment tool for this unit of competency.

Note that the guide should be read in conjunction with the unit of competency (see training.gov.au).





What the guide does not provide

The guide focuses on selecting assessment methods and evidence and does not provide a complete or validated assessment instrument. It is for guidance only; there are others ways that the unit could be assessed and many ways that an assessment can be contextualised. None of the processes or ideas in this guide is mandatory.

It does not cover everything that an RTO must address to deliver an assessment and meet compliance. For example the RTO will need to address:

- development of assessment instruments and documentation
- validation of assessment tools, processes and outcomes
- consulting with industry and developing a training and assessment strategy
- how the assessment will be 'delivered', for example, scheduling the activities, monitoring and providing support to the learner, and engaging input from enterprise managers
- full mapping of evidence to units of competency.

Each RTO will need to decide whether to follow any of the processes demonstrated here. If so, the RTO will need to amend the evidence and other details to reflect the characteristics of their learner/s and the context of their assessment. This should be based on their consultations with industry and clients, and the other information within their training and assessment strategy.

Focus of the guide

MSS11 Sustainability Training Package Assessment Guidelines

The Assessment Guidelines in MSS11 state that "assessment should be conducted in the workplace or in a in a work-like environment. Many of the units also require the measurement of environmental and other indicators over a period of time and for this reason project based assessment is also preferred."

This unit of competency states that "Assessors must be satisfied that the candidate can competently and consistently apply the skills covered in this unit of competency in new and different situations and contexts."

In addition the Sustainable Operations qualifications are designed for workers experienced in their industry who require an 'overlay' of skills to improve the sustainability of the business.

Therefore the assessment guides focus on assessment methods for experienced workers and workplace assessment.





Contextualising

The guide focuses on contextualising assessment to the participants / learners and the workplace context. It demonstrates how the context of the assessment can be analysed and used to select assessment methods and evidence to meet the requirements of the unit of competency.

Typically the context comprises information about:

- industry or enterprise systems, practices and documentation
- characteristics of the learner/s
- mode of delivery of any training.

The guide outlines one approach to planning and designing assessment activities and evidence that are contextualised.

There are many ways that an assessment can be designed to meet the context and the unit requirements. The approach outlined in this guide is just one way. If an RTO follows this approach they should amend the activities, evidence and other details to reflect the characteristics of their learner/s and the context of their assessment.

Contextualising for different sectors is critical. The sustainability issues that are significant to one industry sector or process might not be found in another. For example the casting and forging sectors use large amounts of energy and produce emissions such as dust and greenhouse gases (GHGs). However, one of the key sustainability issues in furniture manufacture may be sourcing plantation timber.

Additional information is available on the Skills for Sustainability website at http://www.sustainabilityskills.net.au including information about this unit of competency and information about sustainability issues in different sectors.

The website also has information about contextualization, understanding sustainability issues within different sectors, designing an assessment, developing workplace projects and using simulated workplace environments.





What's in the assessment guide

This guide provides:

- a scenario outlining the RTO, learner and enterprise context
- key points drawn out from the scenario
 - o checklists to help link the context to the assessment methods and evidence:
 - o checklists relating to the context for the assessment
- checklists relating to assessment methods, and methods of collecting and submitting evidence
- an evidence planning table, linking the scenario context with evidence and the unit of competency
- a work-based project based on the scenario and unit of competency and contextualised using the identified evidence
- questions based on the scenario and unit of competency and contextualised using the identified evidence.





Assessment planning and design

Planning every aspect of an assessment is a broad process that requires many steps and sources of information. Arguably it can start with industry consultation and developing the training and assessment strategy; and conclude with the assessment decision and feedback to the learner.

This guide focuses on a small section of the process. It targets the steps of analysing the unit of competency and the context of the assessment in order to select appropriate assessment activities and evidence collection. These steps are represented in the flow chart at Figure 1.

Typically the context comprises the industry or enterprise systems, practices and documentation and characteristics of the learner/s and mode of delivery of any training. As an RTO you will collect much of this information from your industry consultation and discussion with clients, and capture it in your training and assessment strategy.

In this guide the context is described in a scenario which includes a fictional RTO, learner profile and an industry sector or enterprise context. It uses this information to identify suitable assessment methods and available evidence that are aligned to the unit of competency. These are used to design the assessment activities linked to the unit requirements.

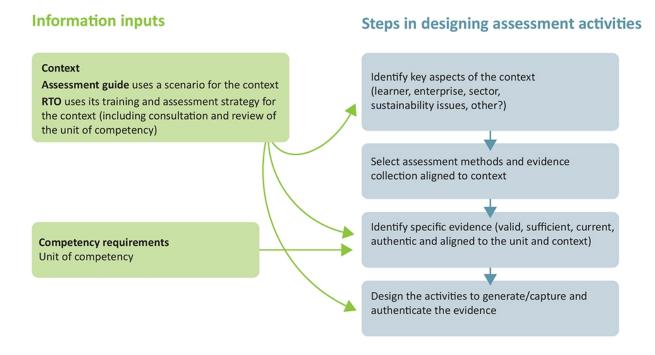


Figure 1 Designing assessment activities





Context: The scenario

The RTO

Toowoomba Institute of Technology is delivering MSS70111 Vocational Graduate Certificate in Sustainable Operations online by distance education using the National Broadband Network. Each learner is self-paced and can join the group at any time during the year.

The learners start with this unit of competency MSS017001A Analyse and determine organisational risk areas in sustainability as it analyses the organisation's sustainability interactions with its environment, determines the risks and applies a risk management approach to responding to the identified risks.

The learner

Helen is a science graduate who previously had area level responsibilities for sustainability and who has now been promoted to a position of general manager - sustainability for Goodluck Fabrics. She has enrolled in the course to support the requirements of her new position.

In her new role Helen is responsible for the economic, environmental and social sustainability of Goodluck Fabrics. The position description says she has responsibility for:

- developing and implementing the business sustainability strategy
- auditing and improving the sustainability performance
- researching and interpreting the regulatory requirements and complex technical documents
- all regulatory reports
- investigating any environmental non-conformances or incidents that may occur
- identifying the corrective actions that are required to prevent their recurrence and ensuring that the actions are implemented.

Helen has had some initial consultations with stakeholders and decided that she will need to:

- oversee the use of techniques, such as mass and energy balancing, to determine and monitor carbon emissions and water usage across the whole site
- develop site operations procedures for reducing carbon emissions and water usage
- implement the voluntary ISO 26000 Guidance on social responsibility
- determine criteria for deciding what is a 'significant' sustainability impact
- explain the implications of any changed procedures to employees





- be closely involved with the training of all workers
- establish and maintain good working relationships with suppliers, some of whom are primary producers, customers, regulators and community groups.

Helen has a team of four people who are responsible for assisting her to implement sustainability initiatives in energy, water, social responsibility, training and compliance.

The enterprise context

Goodluck Fabrics weaves and dyes a wide range of textiles from cotton, polyester and acetate blends. The fabrics are used in manchester, curtains, drapery and apparel, such as military and corporate uniforms. There are 510 employees in Australia and the main manufacturing site is in rural Victoria. Some of the dyeing and printing processes in the value chain are offshore. The customers are increasingly asking about if the offshore operations labour practices are socially responsible.

The Board has decided to implement ISO 26000 Guidance on social sustainability. The business has already implemented the ISO 9000 Quality management systems and the Oeko-Tex Standard 100 Testing and certification system for textiles that tests products for substances that are known to be harmful to health.

The main sustainability issues for Goodluck Fabrics are in the areas of labour practices along the value chain; developing and keeping good relationships with stakeholders; use of energy to heat and cool water; GHG emissions; emissions of dust, fumes and volatile organic compounds into the air; wastewater disposal from wet processing and finishing and dyeing; reducing waste fabric and yarn; and minimising harmful substances in the products.

Key points from the scenario

- The industry sector is textiles fabric making.
- Helen is attending a course and will be implementing the competency in her workplace, so a workplace project is a feasible assessment method.
- Helen has a solid understanding of the goals, processes, procedures and value chain of Goodluck Fabrics.
- Part of Helen's role is to research the sustainability risks of the business so that she can develop and implement the sustainability strategy.
- Helen has access to workplace documents and key performance indicators (KPIs) for sustainability.
- The sustainability risk areas for the business cover all three pillars of sustainability; social, environmental and economic.





What does the scenario tell us about the context for the assessment ☐ Classroom based ☐ Existing worker in this field ☐ Not currently employed in this field ☐ Off the job learning ☐ On the job implementation ☐ RPL ☐ Simulated workplace environment ☐ Single unit of competency ☐ Skill cluster ☐ Whole qualification ☐ Workplace based
Which assessment methods are suitable? Direct observation, for example; ☐ Practical demonstration in the workplace ☐ Real work/real time activities in the workplace ☐ Work activities in a simulated workplace environment
Structured activities, for example; ☐ Activity sheets ☐ Presentation to colleagues ☐ Scenario based project ☐ Simulation exercises such as hypotheticals and role plays ☐ Work based case study ☐ Work based project (and documentation)
Questioning, for example; ☐ Oral or written examinations (typically at higher AQF levels) ☐ Questionnaires ☐ Self assessment ☑ Verbal questioning / discussion / interview



■ Written questions



Portfolios of evidence, for example;
☐ Authenticated prior achievements
lackip Collection of work samples compiled by the learner
☐ Evidence of training courses attended
☐ Historical evidence
☐ Information about life experience
☐ Journal or log book
☑ Photographs or video
☐ Product with supporting documentation
☐ Verified workplace history/CV

hird party feedback, for example;	
Interview with employer, supervisor, or peer	
Letter of support from a work place	
Testimonials and reports from employers and superviso	rs
Third party report from supervisor or technical expert	

How will evidence be collected or submitted?

☑ Workplace documentation / records

☐ Documents - electronically / in person / mail
$oldsymbol{\square}$ Data capture - video / audio / notes /smart pen by assessor / 3^{rd} party / candidate
☑ Data submission - web upload / mail (USB drive / SD card / disc etc)
☐ Online real time - Skype, web conference
☐ Online self paced – online tests, interactive simulation

Evidence: What evidence will be available and suitable?

The evidence planning table shows one way of linking the context of the scenario with the unit of competency. It examines the unit of competency, the context and the selected assessment method in order to identify appropriate assessment evidence.

Based on the scenario, the learner and the context identified above, the following evidence could be expected to be available as part of the assessment. Keep in mind that some evidence might apply to several aspects of the unit or even several units.

Evidence planning table

This table provides an example of identifying evidence that is available in the workplace. The evidence listed here has been selected so that it covers the required skills, required knowledge and critical aspects of assessment for this unit, however, this has not been shown in the table.

The table is not intended as a format for mapping to meet compliance requirements and each RTO needs to determine the type of mapping that may be required by its registering body.





Element	Performance Criteria	Evidence
1. Analyse interactions with organisation's environment	 Process map operation for chosen portion of value chain Determine ecological interactions for each process step Determine social interactions for each process step Determine economic interactions for each process step Analyse overall interactions for chosen portion of value chain 	 Work-based project (and documentation) Project plan and schedule for a work-based project to develop a sustainability strategy Workplace documentation/records Process map for the chosen portion of the value chain showing environmental, economic and social interactions for each step Verbal questioning/discussion/interview Questioning about the workplace project
2. Determine the significance of each impact	2.1 Determine sustainability issues of particular relevance to the chosen portion of the value chain 2.2 Analyse ecological impacts 2.3 Analyse social impacts 2.4 Analyse economic impacts 2.5 Analyse for interactions between individual impacts 2.6 Rank each impact by significance	 Work-based project (and documentation) Records of determining the criteria for significance of impacts, for example, minutes of a formal meeting of stakeholders or notes of informally asking a range of people Spreadsheet of the sustainability impacts ranked by significance based on risk analysis Verbal questioning/discussion/interview Questioning about the workplace project





Element	Performance Criteria	Evidence
3. Develop an appropriate response for each interaction	 3.1 Analyse the causal tree for each significant impact 3.2 Analyse mitigation methods available 3.3 Determine an appropriate response 	 Work-based project (and documentation) Analysis of causal tree of the significant sustainability impacts, including any aggregated non-significant impacts Mitigation responses for each significant impact, for example, project plans, changes to policies and
	for each significant impact 3.4 Determine aggregate impact of all non-significant impacts 3.5 Determine if additional response is required	procedures, and information for stakeholders ■ Benefit/cost analysis of responses ✓ Verbal questioning/discussion/interview ■ Questioning about the workplace project
4. Communicate with relevant stakeholders	 4.1 Identify relevant stakeholders 4.2 Determine stakeholder information needs and wants 4.3 Analyse data which may be appropriate to communicate with stakeholders 4.4 Prepare and disseminate information to stakeholders, as appropriate 4.5 Negotiate solutions with stakeholders, as required 	 ✓ Work-based project (and documentation) Project plan and schedule for a work-based project to develop a sustainability strategy, including stakeholder analysis Evidence of determining stakeholder information needs and wants and negotiating solutions, such as minutes of community meetings, notes of discussions with regulators negotiating solutions to non-compliances, and emails ✓ Collection of work samples compiled by the learner Examples of disseminating information to stakeholders, such as toolbox talks, visual workplace posters, newsletter articles, press releases, community briefings, web pages and sections of the annual report ✓ Photographs or video Evidence of briefing and questions and answers for the community, such as video of presentation at public meetings ✓ Verbal questioning/discussion/interview Questioning about the workplace project





Element	Performance Criteria	Evidence
5. Communicate required responses as appropriate	 5.1 Identify what communications are required and to whom 5.2 Prepare appropriate reports and recommendations 5.3 Pitch reports and recommendations as appropriate 5.4 Brief appropriate persons as required by determined responses 5.5 Finalise appropriate recording 	 ✓ Work-based project (and documentation) Project plan and schedule for a work-based project to develop a sustainability strategy, including stakeholder analysis A draft sustainability strategy detailing the sustainability risks and proposed responses to mitigate the risks ✓ Third-party report from supervisor or technical expert Report from a stakeholder about the communication of responses to sustainability risks ✓ Verbal questioning/discussion/interview Interview by the assessor about the sustainability strategy and mitigation strategies

Assessment activity: Work based project

The work based project defines a project that the learner can do in the work place. This might be part of their normal activities or it could be an additional activity. In this example there is a clear relationship between the unit of competency and a work place activity to 'analyse and determine organisational risk areas in sustainability'.

The project is, of course, based on the unit of competency. The specifics of the project can be developed by bringing together the context and the evidence that is available in the workplace or can be generated by the project. The evidence that has been identified in the evidence planning table helps to define the project.

A work-based project for Helen at Goodluck Fabrics

The project is to develop a sustainability strategy for Goodluck Fabrics.

The purpose of the sustainability strategy is to improve the sustainability performance by determining the sustainability risk areas for the business and developing responses, such as close monitoring or action. This will involve analysing the business' economic, environmental and social interactions and impacts, determining the significance of each impact, developing a response for each interaction and communicating with stakeholders.





Helen will need to complete the following.

- 1. Prepare a work plan and schedule, including:
 - o a description of the overall business
 - the boundaries of the analysis (e.g. the entire business, part of an business or parts/all of the value chain)
 - who the key internal and external stakeholders are (e.g. suppliers, producers, customers, regulators, community groups, senior management and directors, and how she will communicate with them)
 - o timeline
 - o deliverables.
- 2. Develop a process map for the chosen portion of the value chain.
- 3. Determine the environmental, economic and social interactions for each process step.
- 4. Determine the criteria for determining the significance of an impact.
- 5. Determine sustainability impacts and rank by the significance using risk analysis.
- 6. Analyse the causal tree for each significant impact.
- 7. Develop an appropriate mitigation response (e.g. hierarchy of hazard control, eliminating, controlling or reducing for each significant impact and apply benefit/cost analysis to each response).
- 8. Prepare and disseminate information to stakeholders, including analysis of the need (e.g. sustainability strategy, briefings, press releases and text for the annual report).
- 9. Prepare a draft sustainability strategy for presentation to senior management and the Board.
- 10. Upload a portfolio of evidence.

Assessment activity: Questions

In this guide, questioning is used to assess required knowledge and aspects of competency which are difficult to assess in other ways, for example, testing the application of the concepts to the project activities. The questions also help to authenticate the evidence.

Based on the scenario, the assessor will discuss these questions with Helen at pre-determined points during the project, as part of her monitoring and mentoring responsibilities.





Questions for Helen at Goodluck Fabrics

How did you decide what you were going to do and how you were going to go about it?

What are the drivers for sustainability improvements at Goodluck Fabrics?

Outline your role in the process.

Who did you consult with? Why was it important to consult with them?

What existing workplace documentation were you able to use to?

What criteria were used to determine the significance of impacts at Goodluck Fabrics, for example, company reputation, community sensitivity?

What makes a sustainability impact 'significant' at Goodluck Fabrics?

What factors were considered to determine what was an appropriate response for each significant impact? For example cost, risk, synergies with other goals.

Were there any non-significant or positive impacts?

Were there any impacts that were non-significant individually but which aggregated to significant impacts? For example, a small energy loss at each step of the process adding up to a significant loss overall.

Would the process you have gone through apply to other parts of the value chain such as suppliers?

Talk me through your recommendations for Goodluck Fabrics and why you have made them.

Is it always appropriate to disseminate information to stakeholders? Give an example of when it is not appropriate.

How did you ensure support for the recommendations in the sustainability strategy from all of the stakeholders?

